

City of
Worthington
Active
Living Plan

May

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Prepared by
the Southwest
Regional
Development
Commission

WORTHINGTON ACTIVE LIVING PLAN

Why Active Living?

“When you are trying to build a street, you really have to look at the place you are designing and say: Is the function of this place to create wealth or is the function of this particular roadway to move cars quickly?...”

*The highest returning types of building form--are the kind that were built prior to WWII. It's where you've got the line of shops with a second story of apartment or living unit. The kind of stuff that you see on Main Streets all over this country. There's a reason our ancestors built that way. It's really, really financially productive. Some of the obstacles to doing that today: one of them includes the fact that we've just over-engineered and over-built our streets. A lot of that comes from national standards that have been established; a lot of it comes from the way that funding comes down through the Feds and the state and the mandates that come with that in terms of what the design capacities have to be. But one of the simplest solutions to getting these neighborhoods back is just to go out and narrow up the street lanes. When you narrow up the street lanes, cars drive slower, people feel more comfortable there. They walk across the streets, to a store across the street. And in a real subtle and cheap way you get a lot more pedestrian traffic, a lot more retail, a lot more people. And people spend money, and that's what makes a place wealthier. **When people are there, people invest more.**”¹*

Active Living is a way of life that integrates physical activity into your daily routine. It starts with choosing to walk or bike instead of taking the car. This choice is influenced by the built environment.

Goal: To enable the City of Worthington to become a more walkable community through strategic pedestrian improvements outlined in the Worthington Active Living Plan.

Objective: Identify destinations, gaps, areas of concern, and prioritize projects for addressing pedestrian infrastructure in the City of Worthington.

A Proposal: Think about walkability and bikeability when considering decisions that influence the built environment.



¹ Econ Talk. Charles Marohn on Strong Towns, Urban Development, and the Future of American Cities. Accessed: 5/13/15. Available: http://www.econtalk.org/archives/2014/05/charles_marohn.html

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CHAPTER 1: INTRODUCTION

I Introduction

Active Living Plans are community plans to promote an active lifestyle for all residents. The focus of this Active Living Plan was on identifying destinations, gaps in pedestrian infrastructure (sidewalks and trails), areas of concern, and prioritizing projects to make the community more pedestrian friendly. Through the implementation of this plan, the City of Worthington will become more walkable and bikeable, and this will encourage the community to be more physically active. By promoting a more active lifestyle, there are a number of positive externalities that include: economic benefits, reduced traffic congestion, better air quality, and an overall healthier community.

“In 1969, approximately 50 percent of children in the US walked or bicycled to school, with approximately 87 percent of children living within one mile of school walking or bicycling. Today, fewer than 15 percent of schoolchildren walk or bicycle to school. As a result, kids today are less active, less independent and less healthy.”²

Benefits

There are a number of individual and community benefits of creating a more pedestrian friendly community.

Economic Development Benefits

Economic Development does not have one singular definition. Attracting businesses is only one strategy for economic development. Another strategy is to concentrate on attracting and retaining residents. Part of that strategy is planning for pedestrians and developing community facilities. Supporting walking and biking can have a positive impact on attracting and retaining residents, businesses, and workers. Compact, walkable developments provide economic development benefits through increased property values, enhanced marketability, and faster sales than conventional developments.³

Livability is a primary economic development strategy. A significant element of livability is creating a pedestrian friendly community. The City of Worthington does have a trail around the lake that attracts rural residents and residents from neighboring communities. The City of Worthington also has sidewalks on the majority of the busier streets, but there are gaps, connectivity issues, and some of these sidewalks are not in the best condition.

Property values are one of the more significant variables impacting where people want to live. If you build or buy a house you want to have a return on your investment. Another element of the economic benefits of a more walkable community is their effect on property values. “Houses with the above-

² Safe Routes to School National Partnership. Accessed: 12/26/14. Available: <http://saferoutespartnership.org/about/history/what-is-safe-routes-to-school>

³ Transportation Policy Institute: Accessed: 1/22/15. Available: <http://www.vtpi.org/walkability.pdf>

average levels of walkability command a premium of about \$4,000 to \$34,000.”⁴ Higher property values can help to increase the tax base for your city. In the City of Worthington, higher property values could help to entice new housing construction. Currently, the cost of building a new home in some areas of Southwest Minnesota may not generate a positive net return when trying to sell the new house. The construction costs of a new home are higher than the market price of a house in the region. This is only one of the reasons why several cities in Southwest Minnesota are facing housing shortages.

The National Realtors Association points to the changing behavior of home buyers, “people prefer to live in communities that allow them to walk to shops, parks and other destinations and will pay more for a home that allows them to do just that.”⁵ First time home buyers are looking for neighborhoods and cities that are more walkable. “Millennials, though, are just part of the picture. As baby boomers get older, many are opting to live in places where they don’t have to drive as much to get to services and where they can age in place.”⁶ This is a national trend and Southwest Minnesota needs to recognize livability, walkability, and bikeability as economic development tools.

Southwest Minnesota has had difficulties attracting workers to move to the region. Southwest Minnesota has some of the lowest unemployment rates in the state. Southwest MN has about as many people unemployed as there are jobs available; however, factors on both the supply side and the demand side come into play. On the supply side, hiring difficulties are generally caused by a mismatch between job requirements and the training, skills, and experience of the applicant. On the demand side, hiring difficulties are generally caused by candidates’ preferences such as work hours, compensation, geographic location, etc.

How can the City of Worthington and other cities in southwest Minnesota attract people to their city?

- ▶ Concentrate on livability as an economic development strategy.
- ▶ Make land use decisions that encourage compact efficient developments that are pedestrian friendly and increase connectivity.
- ▶ Promote regional activities to highlight everything southwest Minnesota has to offer. A livability strategy needs to be regional, since it is difficult to market a smaller population city on your own.

⁴ National Realtors Association. The Value of Walkability. Accessed: 5/13/15. Available: <http://www.realtor.org/newsroom/real-estate-story-ideas/the-value-of-walkability> Source: Brookings Institute: <http://www.brookings.edu/research/papers/2012/05/25-walkable-places-leinberger>

⁵ National Realtors Association. The Value of Walkability. Accessed: 5/13/15. Available: <http://www.realtor.org/newsroom/real-estate-story-ideas/the-value-of-walkability> Source: Brookings Institute: <http://www.brookings.edu/research/papers/2012/05/25-walkable-places-leinberger>

⁶ Builder Magazine. Why Smart Builders Care About Walkability. Accessed: 5/29/15. Available: http://www.builderonline.com/land/development/why-smart-builders-care-about-walkability_o

Health Benefits

Walking and biking are two of the most popular ways to integrate regular physical activity into your daily routine. Physical activity is one of the most important things you can do for your health. Physical activity can help:

- ▶ Control your weight
- ▶ Reduce your risk of cardiovascular disease
- ▶ Reduce your risk for type 2 diabetes and metabolic syndrome
- ▶ Reduce your risk of some cancers
- ▶ Strengthen your bones and muscles
- ▶ Improve your mental health and mood
- ▶ Improve your ability to do daily activities and prevent falls, if you're an older adult
- ▶ Increase your chances of living longer

Transportation Benefits

Communities that have pedestrian scale infrastructure and programs promoting walking and biking tend to be more physically active. “People who live by trails are 50 percent more likely to meet physical activity guidelines.”⁷ Adding pedestrian infrastructure and promoting walking and biking will help to reduce:

- ▶ Roadway congestion
- ▶ Time wasted stuck in traffic
- ▶ Driver frustration
- ▶ Pollution

“Roadway improvements to accommodate pedestrians and bicyclists also can enhance safety for motorists. For example, adding paved shoulders on two-lane roads has been shown to reduce the frequency of run-off-road, head-on, and sideswipe motor vehicle crashes.”⁸

⁷ Active Living Research. Accessed: 1/22/15. Available:
http://activelivingresearch.org/files/ALR_Brief_ActiveTransportation_0.pdf

⁸ University of North Carolina Highway Safety Research Center. Accessed: 1/22/15. Available:
<http://www.pedbikeinfo.org/data/factsheet.cfm>

Environmental Benefits

Newer developments in cities have moved away from sidewalks on both sides of the street, having garages facing the alleyway behind the house, and having similar sized lots. This creates a disincentive to walk and bike and decreases the interconnectedness of the community. A study conducted by the University of British Columbia found that lowering neighborhoods' walkability increases the use of motor vehicles and, therefore, raises the air pollution and body mass index per capita.⁹ Cul-de-Sacs were also found to decrease the walkability of a neighborhood.

Motor vehicle traffic generated by the travel to and from school adds 20 to 30 percent more traffic volume to the roads.¹⁰ Replacing short trips with walking or biking can help reduce air pollution and energy consumption. There are also a number health benefits (refer to health benefits above).

Geographic Location

City of Worthington

The City of Worthington is located in southwestern Minnesota at the intersection of Interstate 90 and Highway 60. The City of Worthington is a regional hub in Southwest Minnesota. With a population of 12,764, Worthington is the largest city in Nobles County.¹¹

"Home to research companies and several manufacturing, processing and shipping companies, Worthington also boasts an excellent school system and technical college, two clinics, and a hospital. And don't forget the various recreation activities including bike paths around Lake Okabena, nineteen city parks, a disc golf course and much more. There are also art and entertainment shows at the Memorial Auditorium, plus the many festivals that our city hosts throughout the year."¹²

Cottonwood County

Nobles County is located in southwest Minnesota. The county is bordered on the north by Murray County, on the south by the State of Iowa, on the east by Jackson County, and on the west by Rock County. Cities within Nobles County include: Adrian, Bigelow, Brewster, Dundee, Ellsworth, Kinbrae, Lismore, Round Lake, Rushmore, Wilmont, and Worthington (county seat).

⁹ Environmental Health Perspectives. Healthy Neighborhoods: Walkability and Air Pollution. Accessed 1/22/15. Available: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2801167/>

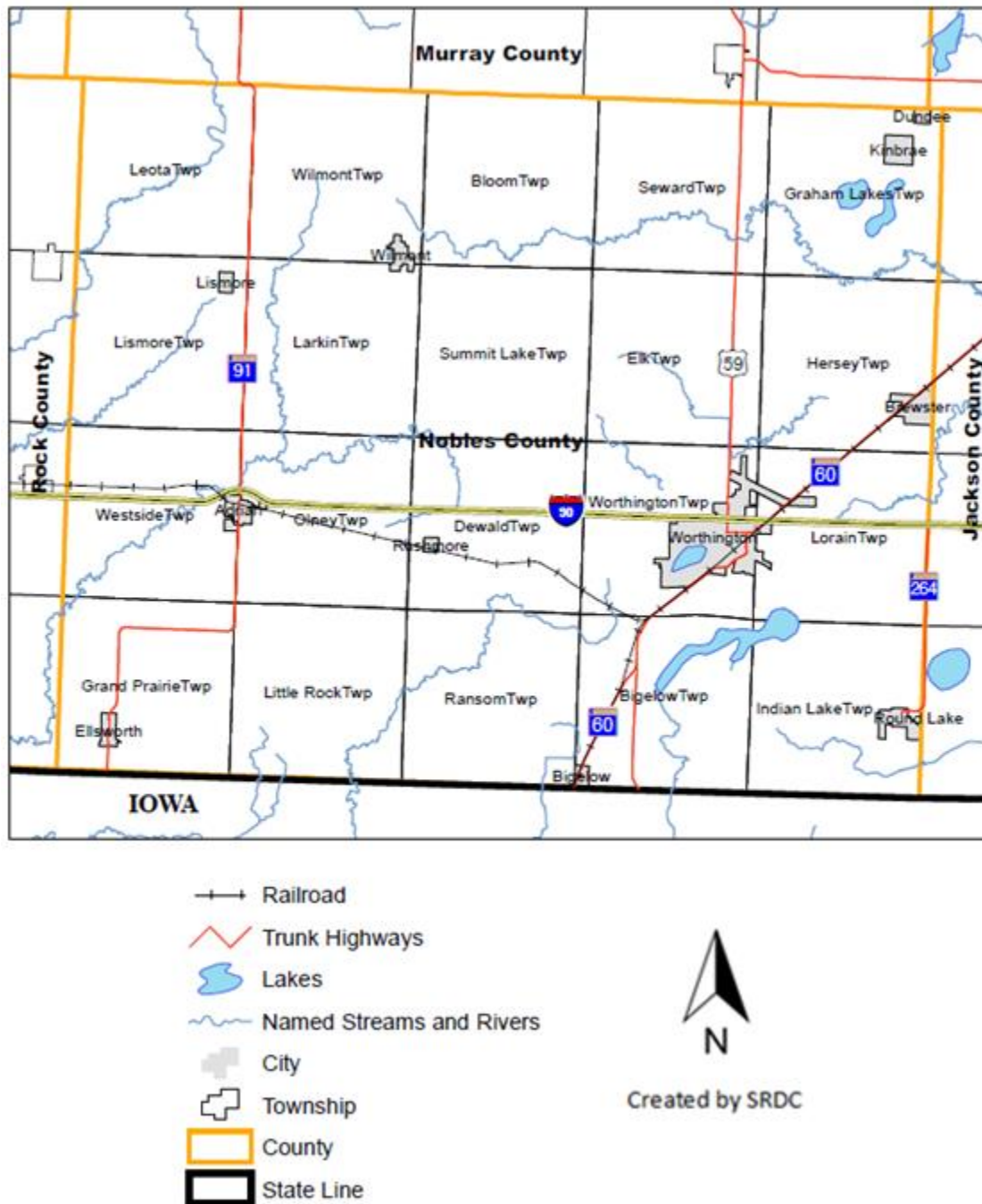
¹⁰ Safe Routes to School Guide. Accessed: 1/22/15. Available: http://guide.saferoutesinfo.org/pdf/SRTS-Guide_Introduction.pdf

¹¹ American Fact Finder. 2010 Census. Accessed: 5/29/15. Available: http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml

¹² City of Worthington. Accessed: 6/17/15. Available: <http://www.ci.worthington.mn.us/>

Table #1

Nobles County Jurisdiction Map



II Planning Process

The City of Worthington Active Living Planning Process was an efficient planning process that was based on identifying destinations, gaps, areas of concern, and potential projects. The Planning Team consists of community members and city staff who attended the two community meetings.

Planning Process

- Wikimapping (continuous...)
- Community Meeting #1
- Community Survey
- Community Meeting #2
- City Council will rank projects

Wikimapping

Wikimapping is an online public input tool community members can use to identify issues regarding walking and biking in the City of Worthington. Community members can provide input by adding a point or route on an interactive map or by commenting on existing posts. Wikimapping was an effective way of engaging community members who were not able to attend the two community meetings.

Community members could add points on an interactive map regarding: barriers to walking and biking, bus and transit stops, existing bike parking, lighting is poor, need bike parking, places I go, problem intersection, school, driving issue, traffic and congestion, and trash is an issue. Community members could add a route on the interactive map regarding: existing on street bike route, high stress area (speed/ traffic), no sidewalk, on street bike route needed, recreational route, routes I'd like to use, route to and from after school activity, route to and from school, shortcut I use (not a trail or road), sidewalk in poor condition. When a community member clicks on a point the user can select one of these categories and a box will appear. The user can then write a description of the issue in the box. Other users can click on the point or route and agree, disagree, or abstain with the comment. Other users can also comment on the existing comment.

Community Meeting #1

The first community meeting was held at the Worthington Fire Hall on March 19th, 2015, from 5:15pm to 6:45pm. The agenda for the meeting was to discuss the local issues and concerns that were identified via Wikimapping and conversations with community members. Community members were also able to identify additional issues and concerns that were not identified before the meeting. The first meeting was an opportunity to discuss the existing conditions and voice opinions and concerns regarding walking and biking in Worthington.

Community Survey

A community survey was distributed between the first and second community meeting. The survey was distributed along with the City's monthly utility bill. The survey was another tool to engage community members who were not able to attend the two community meetings. The survey asked community members eight questions. Five of these questions had community members quantify the category on a scale of one to 10. The Worthington Community Assessment Survey can be found in the Appendix to this plan.

The quantitative and qualitative questions include:

- Did you have room to walk?
- Was it is to cross the street?
- Did drivers behave well?
- Could you follow safety rules?
- Was your walk pleasant?
- General atmosphere (summary of all the categories)

The qualitative questions included:

- Are there any routes you would like to walk and currently cannot due to safety issues, existing gaps in the sidewalk network, or other pedestrian infrastructure that discourages you from walking or biking?
- Please highlight on the map the route you walked or biked in Worthington.

Community Meeting #2

The second community meeting was held at City Hall on April 22nd, 2015, from 5:15pm to 6:30pm. The agenda for the meeting was to discuss potential goals and strategies regarding walking and biking in Worthington. There were a number of issues that were identified and discussed at the first community meeting on March 19th. At the second meeting, community members were still able to discuss existing conditions that were not identified at the first meeting.

Traffic and Safety Committee Meeting

Southwest Regional Development Commission staff presented a Pedestrian Functional Classification System to the Worthington Traffic and Safety Committee on April 28th, 2015. The proposed Pedestrian Functional Classification System would be one way of implementing the City of Worthington's Complete Streets Policy. The Pedestrian Functional Classification System would have the City of Worthington classify every street in regards to pedestrian transportation needs.

Pedestrian transportation need would be based on a three tier classification system. Different streets require different pedestrian amenities to make it safe to walk and bike. A Complete Street does not have a singular definition. A Complete Street is any street you feel safe walking or biking on. A Complete Street does not have to have a sidewalk on both sides of the street, but you have to consider all users when deciding if it is safe for pedestrians.

The Traffic and Safety Committee formally supported establishing a Pedestrian Functional Classification System in the City of Worthington. An example Pedestrian Classification System is outlined in the Goals and Strategies Chapter. This system may be modified for implementation in the City of Worthington.

City Council Meeting

A draft Worthington Active Living Plan was presented to the Worthington City Council on July 13th, 2015. The City Council was asked to rank the goals and strategies and provide feedback regarding the plan. The Pedestrian Functional Classification System was also presented to the City Council as a way of implementing their Complete Streets Policy. An example Pedestrian Functional Classification System is outlined in the Goals and Strategies Chapter of this plan. A Draft Pedestrian Functional Classification Map can be found in the Appendix to this plan.

III Existing Conditions

Existing Health Issues

Research conducted by the USDA shows that one in three American children are overweight or obese, putting them at risk of preventable disease like diabetes, high blood pressure, and heart disease.¹³ In 2010, the obesity rate in Nobles County was 28 percent while the state average was 26 percent. In 2014, the obesity rate in Nobles County was 28 percent while the state average was 26 percent.¹⁴

According to the 2013 Minnesota Student Survey, on a typical day 29 percent of Nobles County 5th graders reported that they spend zero hours going outside, taking a walk, or going for a bike ride. Only 41 percent of 5th graders reported being physically active for at least 60 minutes per day.¹⁵ In 2013, 32 percent of Nobles County 8th grade students reported being overweight or obese.¹⁶

¹³ Kuphal, Kyle and Fodness, Mavis. New school meal standards target obesity. Accessed 12/26/14. Available at: <http://www.pipestonestar.com/Stories/Story.cfm?SID=38130>

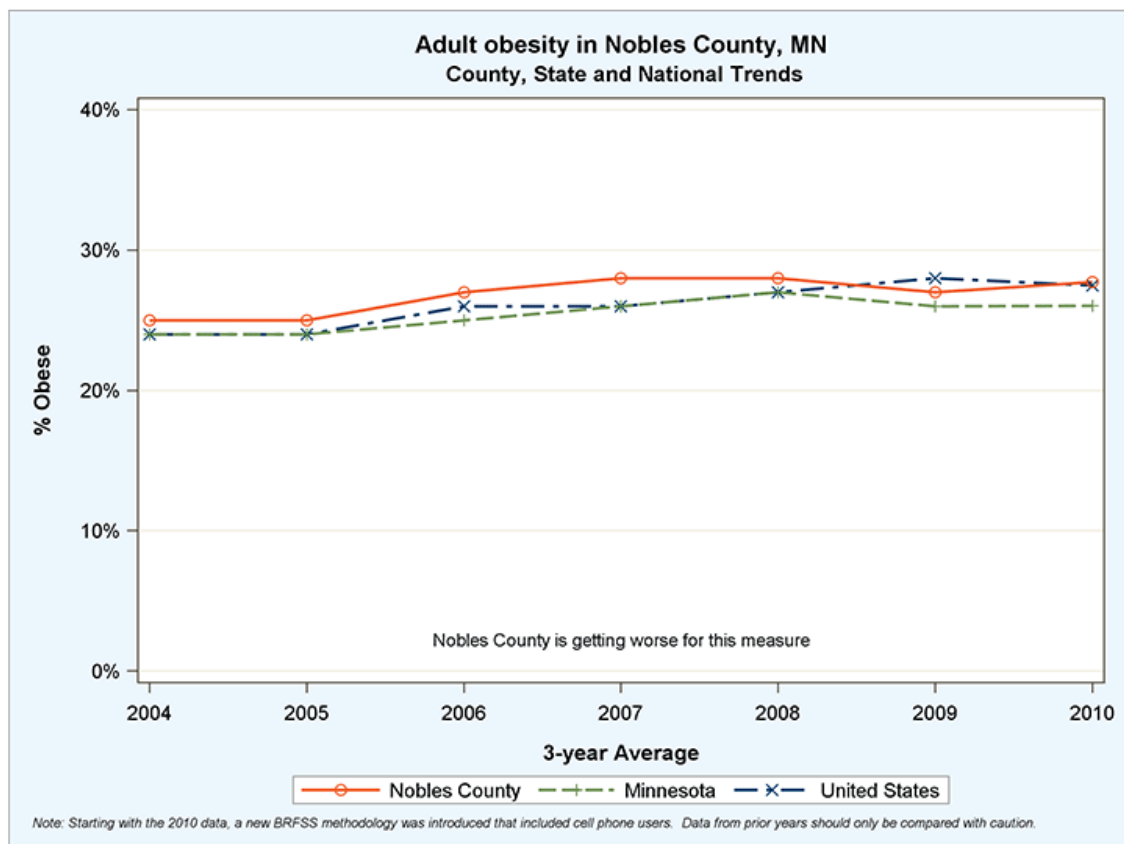
¹⁴ Robert Wood Johnson Foundation. County Health Rankings. Accessed 12/26/14. Available: <http://www.countyhealthrankings.org/app/minnesota/2014/rankings/nobles/county/outcomes/overall/snapshot>

¹⁵ Minnesota Department of Health. Minnesota Student Survey. Accessed: 12/29/14. Available: <http://www.health.state.mn.us/divs/chs/mss/countytables/nobles13.pdf>

¹⁶ Minnesota Department of Health. Minnesota Student Survey. Accessed: 12/29/14. Available: <http://www.health.state.mn.us/divs/chs/mss/countytables/nobles13.pdf>

Table #2

Adult Obesity in Nobles County



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Being overweight or obese not only increases the risk of premature death and many other diseases and health conditions, but there are substantial economic costs as well. There are both direct and indirect costs associated with being overweight or obese. Direct costs are the higher medical costs associated with diagnosing, treating, and trying to prevent conditions related to being overweight or obese.

Indirect costs of being overweight and obese include morbidity and mortality costs such as lost productivity, absenteeism, and premature death. “Based on national estimates, the overall financial burden of obesity in Minnesota in 2006 was estimated at \$2.8 billion.”¹⁸ The medical costs associated with obesity nationally were estimated at \$147 billion in 2008. This translates into a \$1,429 higher yearly medical cost for people who are obese over those of normal weight.¹⁷

Since the late 1960’s, there has been a dramatic decline in the percentage of students who walked or bicycled to school. Nationally, only 13 percent of students grades Kindergarten through 8th grade reported usually walking or bicycling to school in 2009, while 48 percent of kindergarten students

¹⁷ Robert Wood Johnson Foundation. County Health Rankings. Accessed: 12/30/14. Available: <http://www.countyhealthrankings.org/app/minnesota/2014/rankings/nobles/county/outcomes/overall/snapshot>

¹⁸ Minnesota Medicine. The Obesity Challenge. 12/26/14 Available at: <http://www.minnesotamedicine.com/PastIssues/December2012/theobesitychallenge.aspx>

through 8th grade reported usually walking or bicycling to school in 1969. Distance is a strong indicator associated with how children get to school, but only 35 percent of kindergarten through 8th grade students nationally, who lived within a mile of school, reported usually walking or bicycling to school once a week. In 1969, 89 percent of kindergarten through 8th grade students, who lived within a mile of school, reported usually walking or bicycling to school once a week.¹⁹

Table #3

Trends in Childhood Obesity & Overweight



CDC, Nation Center for Health Statistics

Just a decade or two ago, a large number of children were free-range children. These children walked or bicycled around the neighborhood and community being more independent. Increasingly children are dependent on their parents for transportation. Instead of walking or bicycling children are getting rides. Five to seven percent of vehicle miles traveled and 10 to 14 percent of all personal vehicle trips made in high traffic times in the morning are personal vehicles taking Kindergarten through 8th grade students to school.²⁰

Reducing the number of vehicle trips would create a more efficient, safe, and connected community. Getting children walking and bicycling again is one way to combat inactivity and the dramatic rise in obesity. Addressing obesity through Safe Routes to School and promoting an active lifestyle has a number of positive externalities.

¹⁹ The National Center for Safe Routes to School. How Children Get to School: School Travel Patterns from 1969 to 2009. Accessed: 12/26/2012. Available:

http://saferoutesinfo.org/sites/default/files/resources/NHTS_school_travel_report_2011_0.pdf

²⁰ The National Center for Safe Routes to School. How Children Get to School. Accessed 12/31/2014. Available:

http://saferoutesinfo.org/sites/default/files/resources/NHTS_school_travel_report_2011_0.pdf

The Worthington Active Living Planning Process analyzed traffic volumes from 2013.

City of Worthington, Traffic Volumes, 2013



The Worthington Active living Planning Process analyzed crash data within the City of Worthington. Within the City of Worthington, there were 1676 reported crash occurrences from 2004 through October 2014. Thirty-four of the outlined crashes involved a pedestrian or bicyclist (none of the crashes were fatal). There were no reported crashes involving pedestrians.

Table #5

City of Worthington Crash Data, 2004 through October 2014

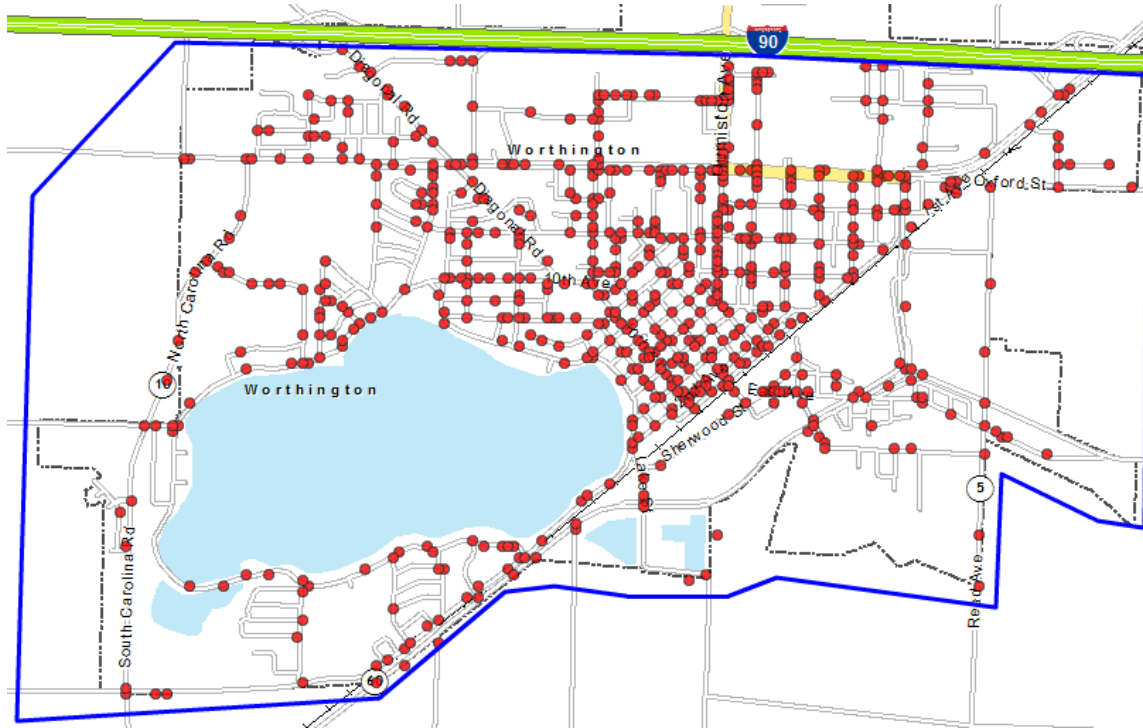


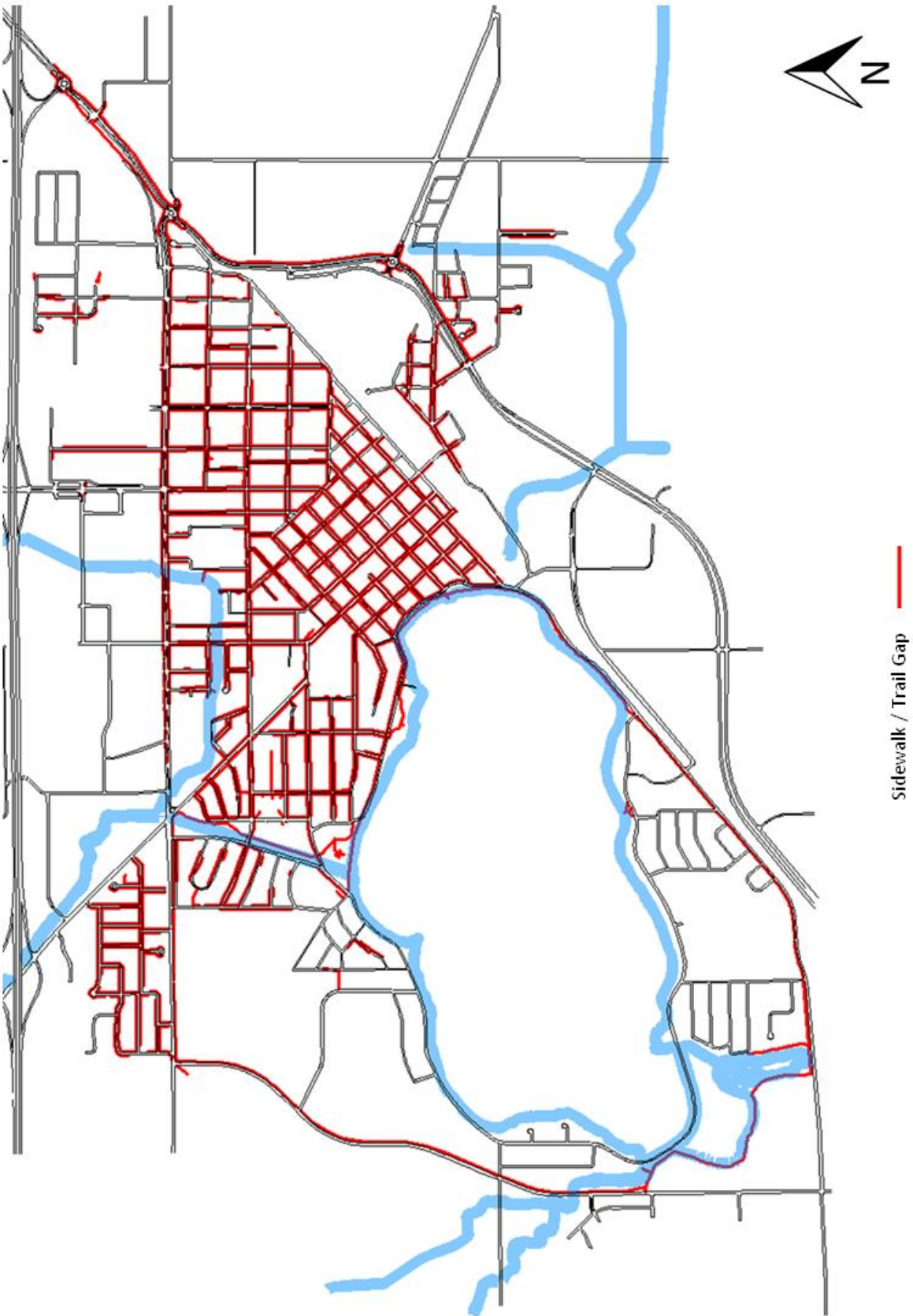
Table #6

Crash Data - Bike



Table #7

City of Worthington Sidewalk Map



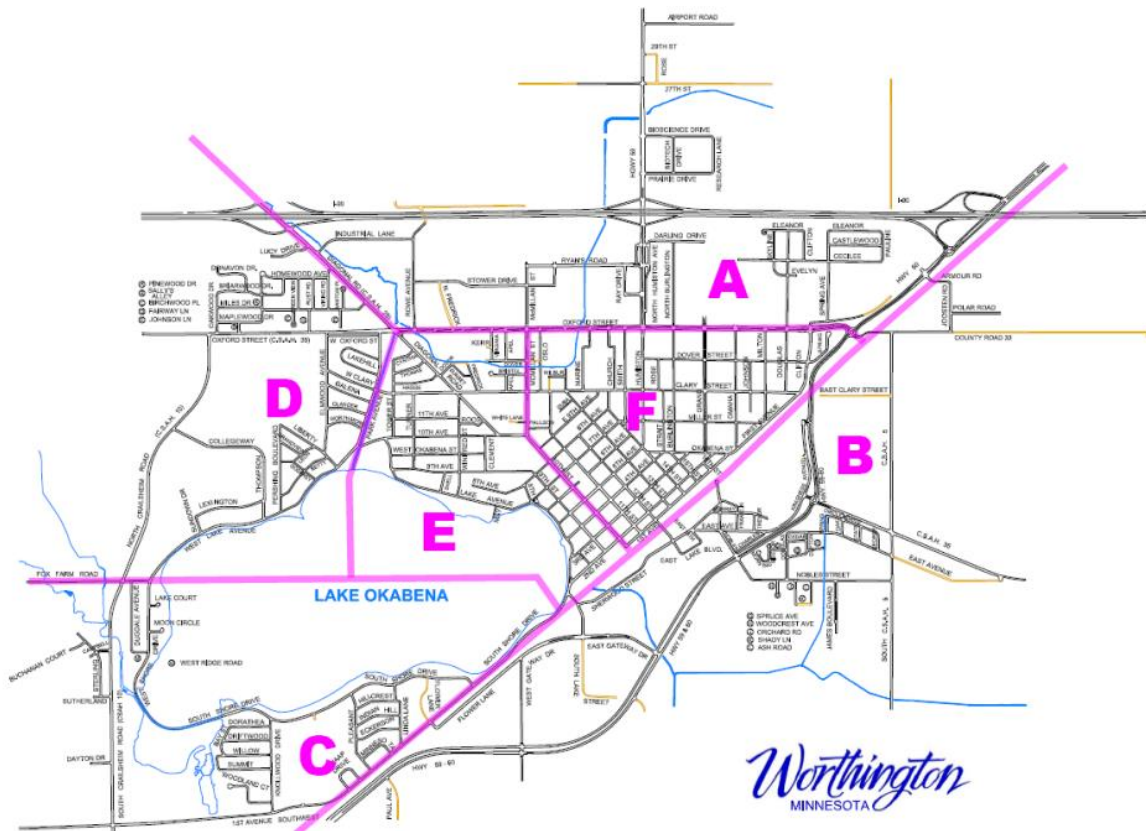
Walkability & Bikeability

Community members in the City of Worthington had an opportunity to rank the existing conditions in regards to walking and biking on a scale of one to 10 (10 being best and 1 being the worst). The categories that were ranked include: general atmosphere, did you have room to walk, was it easy to cross streets, did drivers behave well, could you follow safety rules, and was your walk pleasant. Refer to Appendix for the survey and the variables that impact each category. Below is a summary of the ranking for arrival and departure.

Table #8 A Community Survey Summary

Section of City	1. General Atmosphere	2. Room to walk	3. Easy to cross street	4. Drivers behave well	5. Follow safety rules	Average 1,2,3
A	4	3	3	4	5	3
B	6	4	5	6	7	5
C	8	8	8	7	8	8
D	7	6	7	7	8	7
E	8	7	7	7	8	7
F	7	6	7	6	9	7
Average	7	6	6	6	8	

Table #8 B City of Worthington - Neighborhood Sections Map



Main Themes

- Section A of Worthington is underserved in regards to pedestrian infrastructure (Oxford / I-90 / Highway 59 Corridor).
- Trail is an asset.
- Gaps in the sidewalk network - "Can't walk on sidewalks, they are too sporadic, don't go to curbs and people don't shovel snow," Community Survey.
- Lack of esthetic appeal / curb appeal - "It is not nice to walk around most of Worthington," Community Survey.
- Sidewalks:
 - Need to be cleared of snow.
 - Need to be repaired when in poor condition
- Parked cars blocking sidewalks.
- Vehicles not stopping for pedestrians in crosswalks.

Below is a summary of comments – this is not an exhaustive list of comments. The list of comments highlights issues and needs that were identified in the Community Survey.

General Atmosphere:

- "I feel safe walking in my neighborhood and other places I walk," Community Survey.
- "There is definitely room for improvement throughout Worthington in all areas," Community Survey.

Room to walk:

- Ryan's Road – "We need sidewalks to Walmart / Ryan's Rd," Community Survey.
- Snow removal – "People on Oxford don't clear away their snow," Community Survey. "Have her enforce the clearing of snow on sidewalks," Community Survey.
- Grade / Causeway – "We love our walk around Sunset Bay but are concerned about safety on the grade," Community Survey. "We walk along the grade and would like a wider shoulder," Community Survey.
- Trail – "Love the new bike path - More access points needed to it," Community Survey.
- South Shore Drive – "Difficult to drive along S. Shore due to many walkers/etc./run/here - no place for car to move over," Community Survey.

- Cars often park blocking the sidewalk – “Some driveways have too many cars that block sidewalk - have to walk through or into street around them,” Community Survey.
- Branches and Debris – “Some places no sidewalks, also branches and debris on walks,” Community Survey.
- Homewood Hills Neighborhood – “Sidewalks in Homewood Hills Addition don't all extend to street. You have to walk on the grass boulevard to enter street to cross to next block,” Community Survey. “Lots of missing sidewalks, sidewalks don't go to curbs, sidewalks not shoveled, and sidewalks start and stop abruptly. No ramps, People have to walk in the street mostly. More bikes on sidewalk than walkers. Six cars parked in driveways over sidewalks.”
- Cracked and crumpled sidewalks need to be repaired – “Lots of toe catchers,” Community Survey. “Mostly cracked, broken, or uneven - Hard to push a stroller,” Community Survey.
- Incomplete sidewalk network – “We cannot take a 20 minute walk in our area without using the street for part of it,” Community Survey. “Children are walking on the street many times, which is not safe,” Community Survey.
- Bridge over Whisky Ditch on 10th Avenue – “Bridge has been closed forcing people to walk in the street,” Community Survey.
- Roundabouts – “I work @ JBS & would like to walk/bike to work but I have trouble navigating the roundabouts since there are no space,” Community Survey.

Easy to Cross Street:

- “Congestion by auditorium & St. Mary's Church low visibility - high traffic,” Community Survey. People don't pay attention to signs, kids driving too fast in warm months.
- 5th Avenue – “Crossing 5th Ave is sometimes difficult due to traffic/traffic speed,” Community Survey.
- Ramps – “Ramps needed at all crossing,” Community Survey.
- Drivers not stopping for pedestrians – “I walked once & a car let me walk across & the next car the man yelled at me for making him stop,” Community Survey. “Cars do not stop for pedestrians,” Community Survey.
- Crosswalks – “Need crosswalks to be marked on the street,” Community Survey. “There should be a crosswalk for people to take Nursing Home residents across South Shore Drive to Freedom Park,” Community Survey.
- “Corner of Pinewood & Miles Drive - Very Dangerous for Kids!” Community Survey.
- “Hard to cross by post office,” Community Survey.

- It is difficult to cross on the north side of the lake.
- Crailsheim Road – “It’s very scary crossing Crailsheim when cars travel fast,” Community Survey.
- 10th Street – “This is especially true by Johnson Eye Clinic trying to cross 10th Street & the next block down by the Atrium & appt. buildings,” Community Survey.
- Lake Avenue & Tower Street – “Crosswalk needed at corner of Lake Ave & Tower Street. Signs are ignored. Lot of pedestrian traffic heading to park/beach. Cars speeding around corner at 40 mph+,” Community Survey.
- Crossing McMillan Street at Clary Street is dangerous.
- Visibility is an issue – “Too many cars allowed to park on street,” Community Survey.

Drivers Behave Well:

- Drivers not stopping for pedestrians – “I walked once & a car let me walk across & the next car the man yelled at me for making him stop,” Community Survey. “Cars do not stop for pedestrians,” Community Survey.
- Bikers – “Bicycles on wrong side of road most of the time, don’t stop, yield, or signal,” Community Survey.
- Traffic speeds – “Driving a little fast on Maplewood & Miles Drive,” Community Survey. “Cars are always driving way to fast in Homewood Hills. Sometimes it gets real scary out here. There are a lot of children and pets,” Community Survey. “Drivers speed up a bit; especially by Slater Park,” Community Survey.
- Sharing the road – “As a driver comment - walkers walking down middle of road around lake & down the road on the grade. None want to move out of the way. I feel road is for drivers. Paths & sidewalks for walkers. Sometime 3 & 4 wide blocking whole lane,” Community Survey. “(Some) Drivers (not all!) Do not move over for people walking around lake Okabena (specifically by the ----Farm on West Lake Avenue),” Community Survey.
- “No one stops at stop signs!” Community Survey.
- “People don’t pay attention to signs, kids driving too fast in warm months,” Community Survey.
- Licenses – “Too many without licenses!” Community Survey.
- “Races down Lake Ave & young people tearing out of park,” Community Survey.
- Alleys – “Drivers from alleys don’t look for pedestrians,” Community Survey.
- Distracted driving – “Have to assume that all drivers are either texting or talking on cell phones. Most are,” Community Survey.

- Grade / Causeway – “Drivers are courteous but often have to swerve into the other lane to make room for us on the grade,” Community Survey.
- Lake Avenue – “Cars drive way too fast,” Community Survey. “Speed limit around the lake is not obeyed,” Community Survey.

Follow Safety Rules:

- “Have to watch for my own safety,” Community Survey.
- Crosswalks needed – “No crosswalk from Olson Park bicycle to grade,” Community Survey. “No crosswalks in Homewood Hills Neighborhood,” Community Survey. “South Shore Drive where the walking path crosses along 1st Ave. Need to mark the crosswalk area,” Community Survey.
- “It's unclear who has the right of way where the bike path crosses 10th St. at Centennial Park,” Community Survey.
- “Can’t walk on sidewalks, they are too sporadic, don't go to curbs and people don't shovel snow,” Community Survey.
- “Some people don't look before crossing the street! They expect drivers to see them. A lot of jay walking downtown,” Community Survey.
- “Cannot walk on shoulder. Too many cars allowed to park on street. This makes Grand Ave a one lane road on both sides,” Community Survey.
- Pedestrian education – “People need instruction on which side to walk & bike,” Community Survey.
- Clearing sidewalks of snow – “whoever is in charge of supervising the sidewalk clearing of snow is doing a poor job of it.”

Walk Pleasant:

- Trash – “Trash in the streets and yards! It looks shabby,” Community Survey. “Individuals can't make it to garbage containers just a few yards away,” Community Survey. “Always pile of trash at east end of Miles Drive and Viking where stop signs are at intersection of old Highway 266,” Community Survey.
- Yards & lawns - “Not pleasant with all the garbage, junk cars and run down houses,” “Some homes not well cared for and yards not kept up,” Community Survey. “Some people are not mowing their yards – eyesore,” Community Survey.
- “These Issues could be resolved if we had a police presence in the neighborhood,” Community Survey.

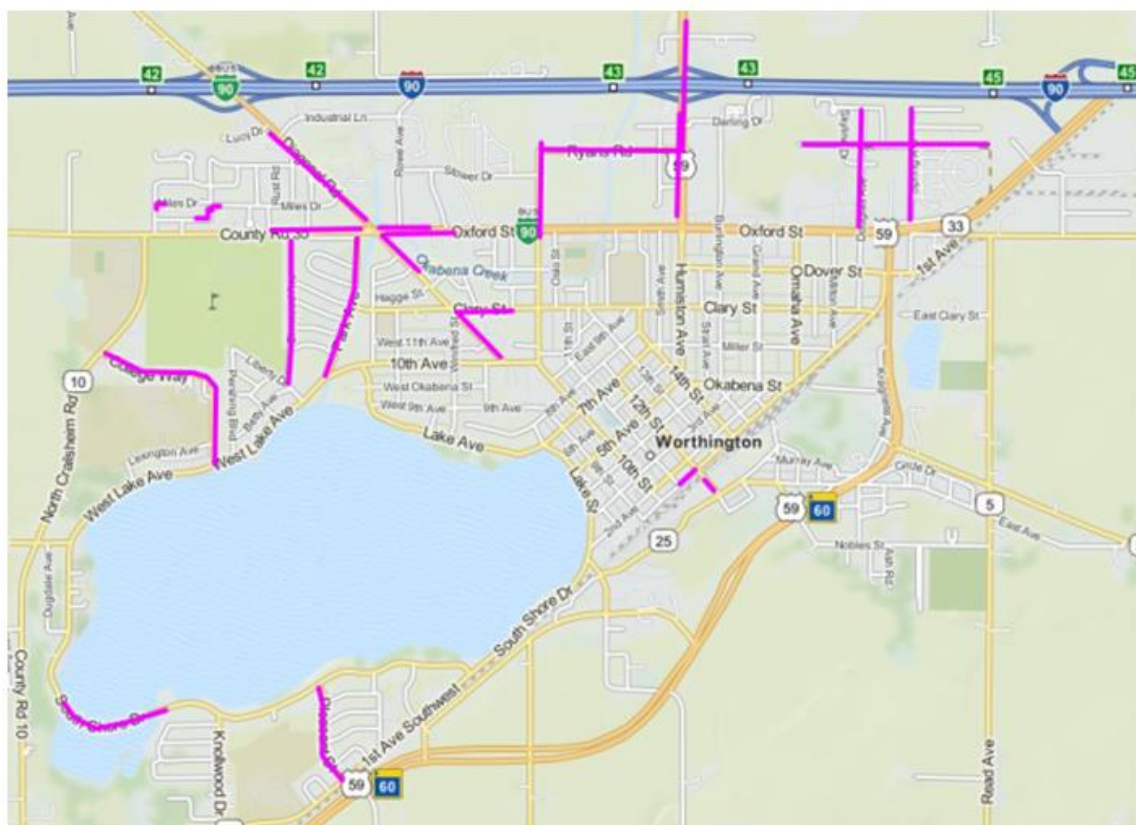
- “The only good walking path is around the lake. To get to it you have to drive,” Community Survey.
- “People want to walk around lake not out away from lake,” Community Survey.
- Lighting is needed in some spots to make it safe.
- Clean up after pets – “Get people to pick up their dog poop!” Community Survey.
- Trail – “Beautiful trail around the bay!” Community Survey. “The route around the lake and the new bike path is beautiful,” Community Survey.
- Dogs – Need to have dogs on a leash.
- Lighting – “Not well lit through Olson Park or on edge of town on the path so we chose to stay by the lake,” Community Survey. “Not well lit - especially the neighborhood around East Ave (Franklin, Murray, Trevor, etc.) Scary!!” Community Survey.

Gaps in the Sidewalk / Trail Network

A number of gaps in the sidewalk / trail network were discussed as part of the Worthington Active Living Planning Process.

Table #9

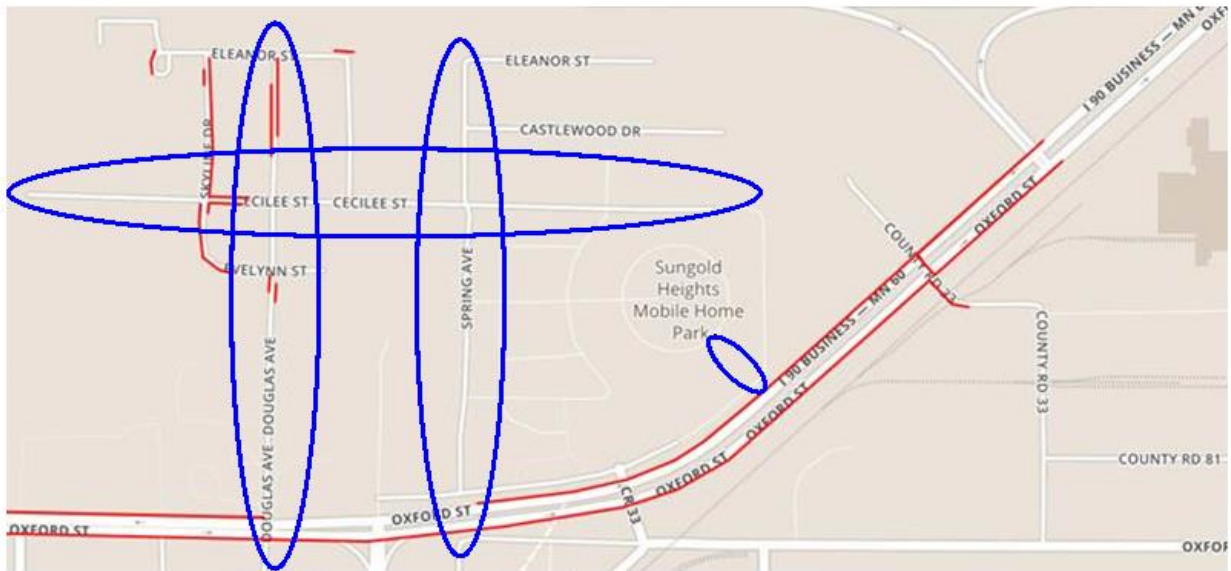
Input from Wikimapping – Sidewalk Gap



No Sidewalk

Table #10

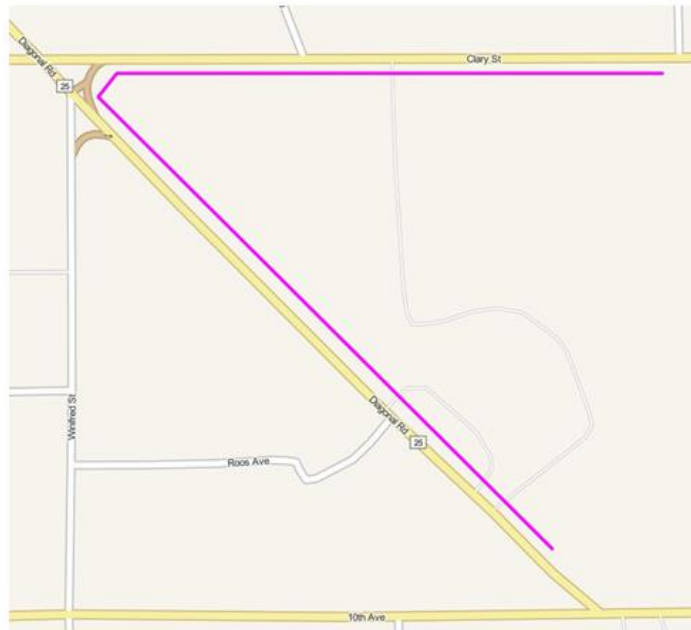
Cecilee Street Neighborhood Sidewalk / Trail Gap



Sidewalk / Trail Gap ○

Table #11

Input from Wikimapping – Sidewalk Gap



No Sidewalk —

Table #12

Oxford Street / Diagonal Road Sidewalk Gap

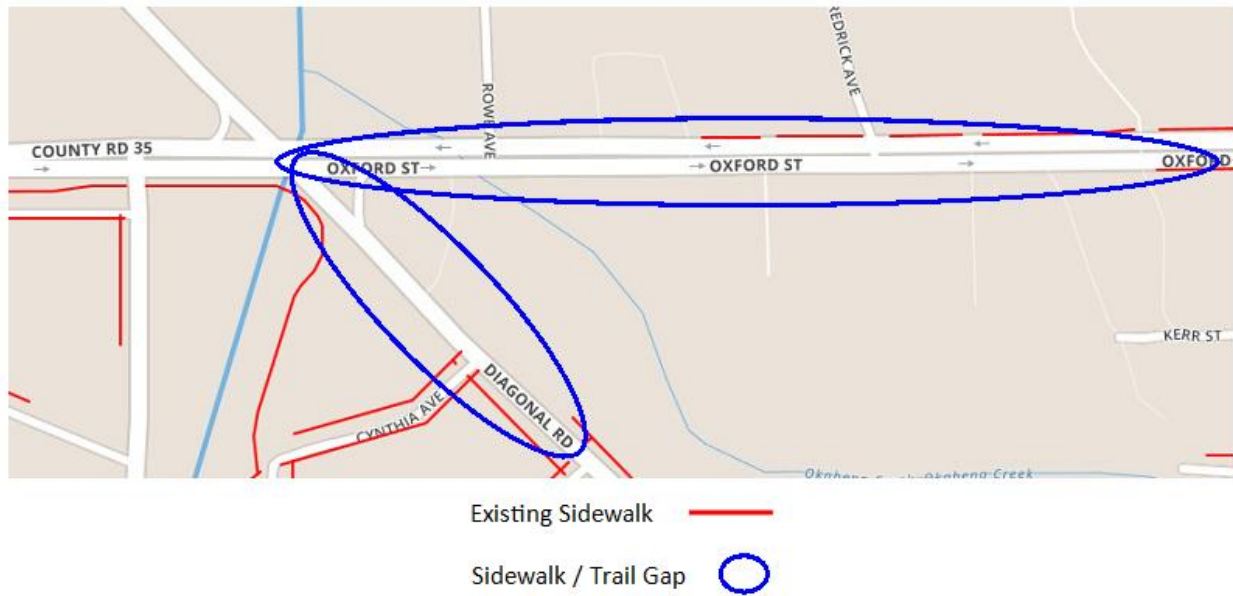


Table #13

Elmwood Avenue & Park Avenue Sidewalk Gap

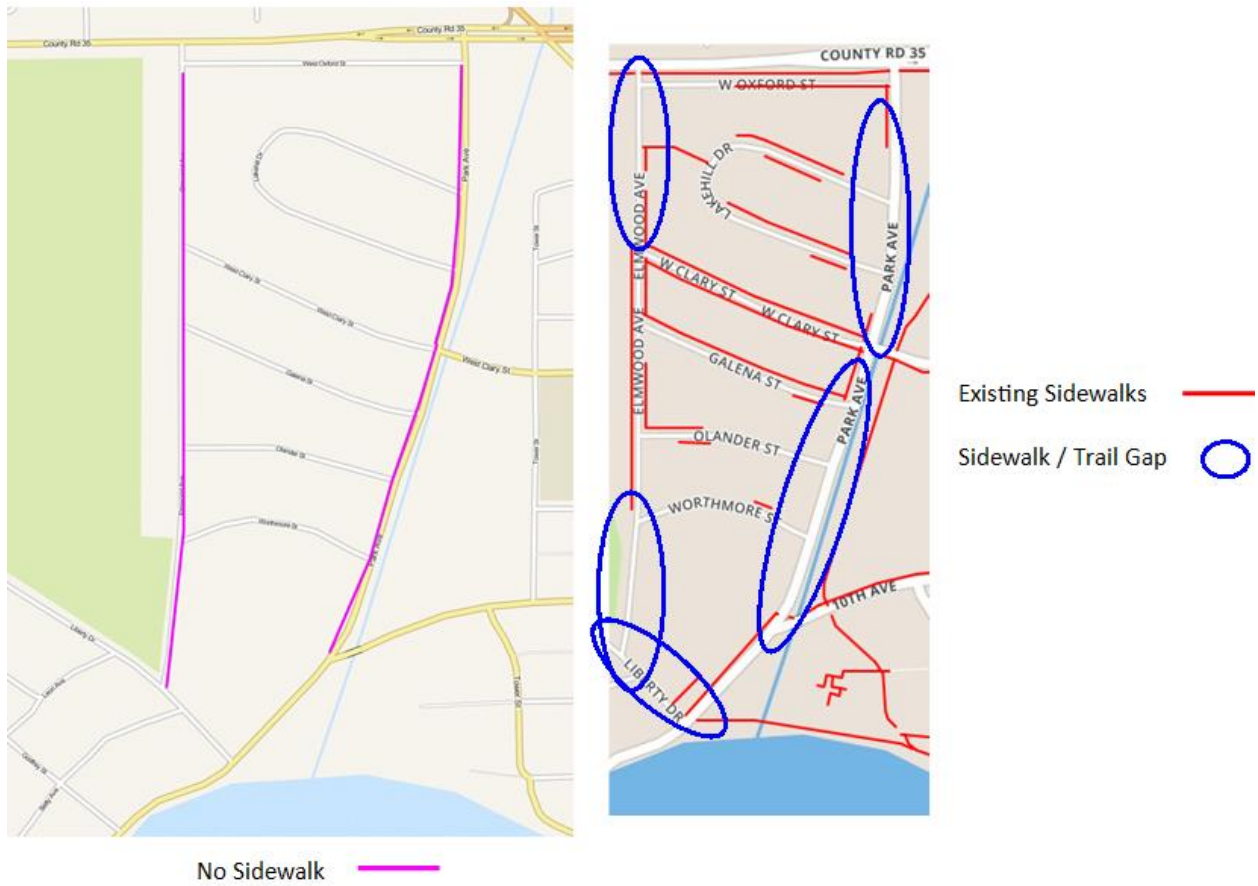


Table #14

College Way & Thompson Avenue Sidewalk Gap

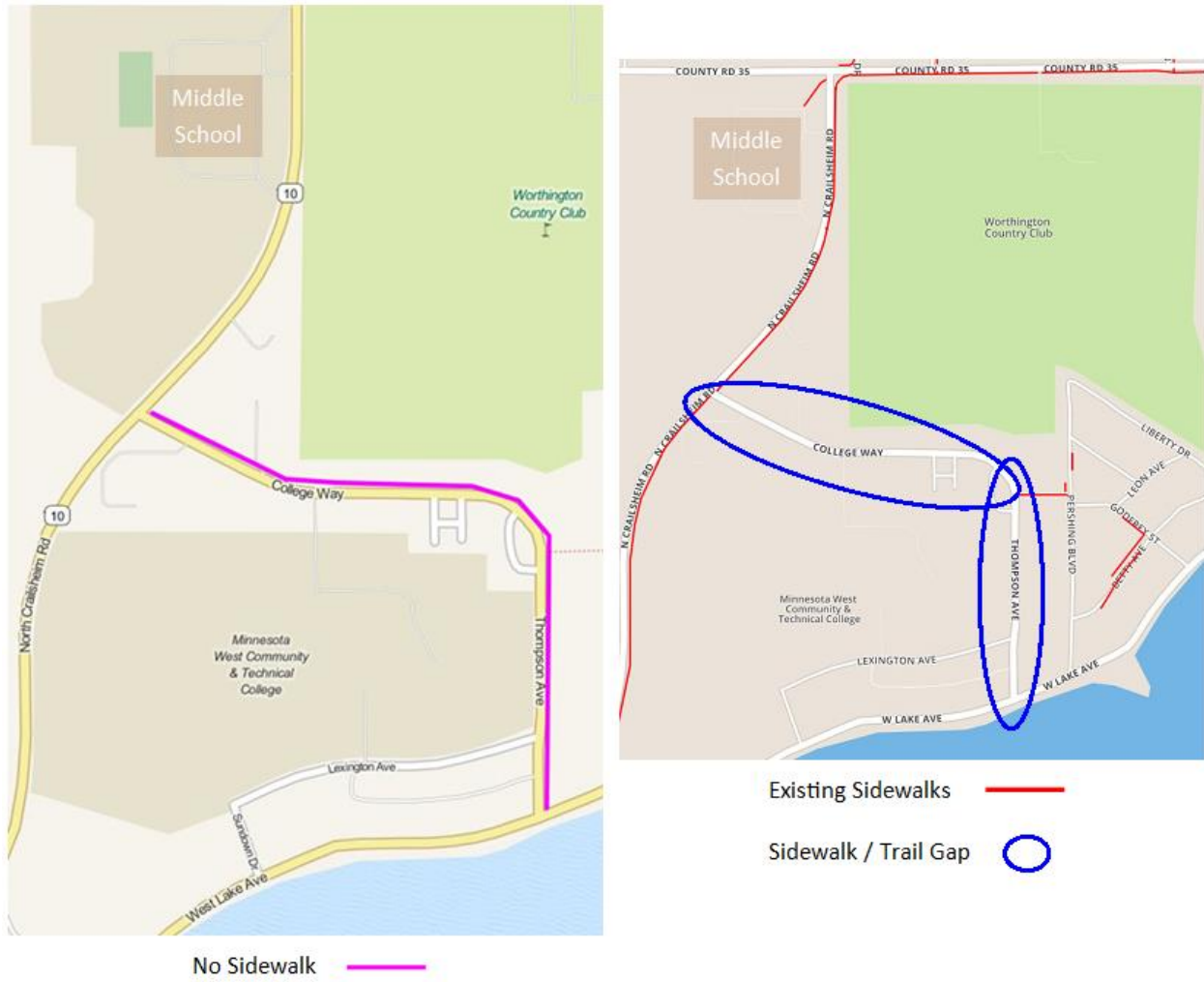


Table #15

Homewood Hills Sidewalks

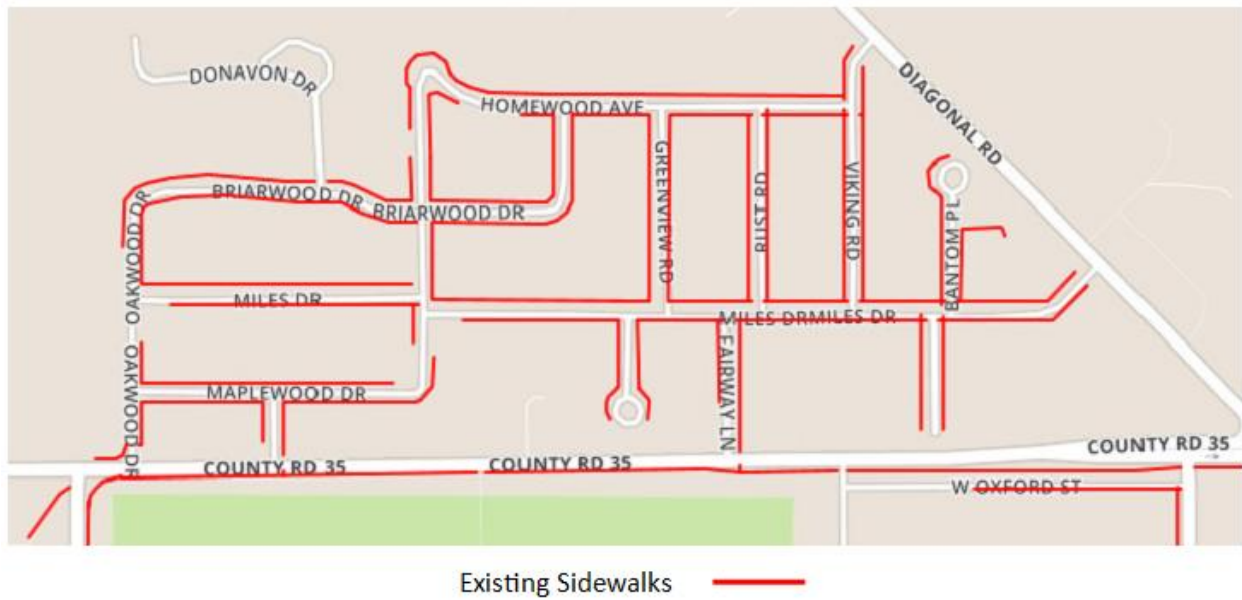


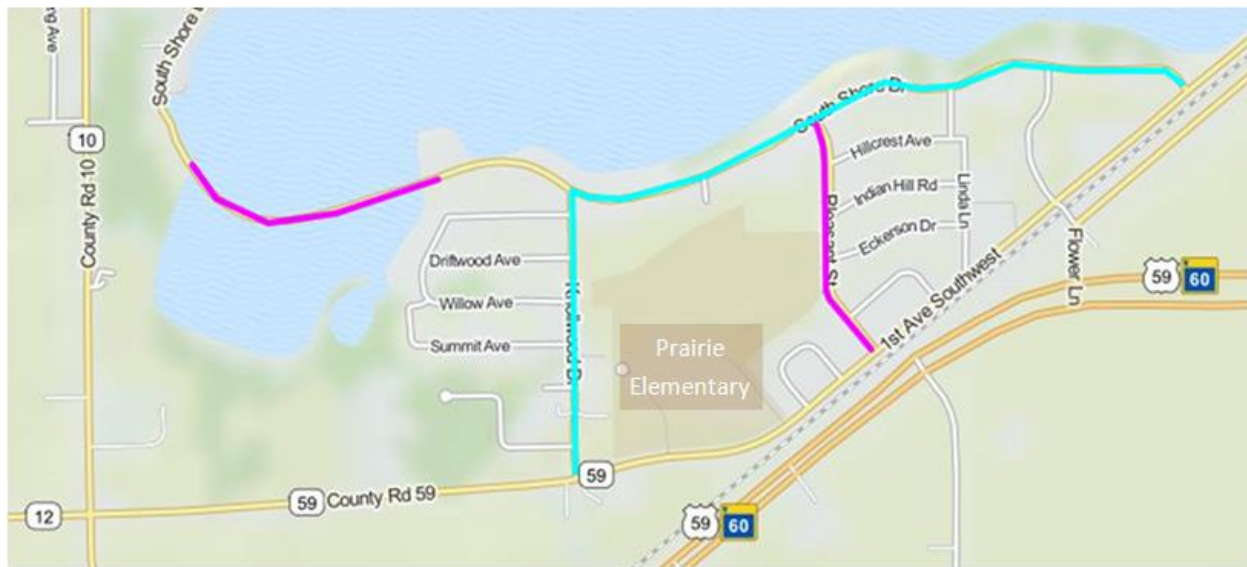
Table #16

South Lake Okabena – Existing Sidewalks



Table #17

South Lake Okabena – Route I'd Like to Use





No Sidewalk 
Route I'd
like to use 

Table #18

Sally's Alley – Connectivity Issue



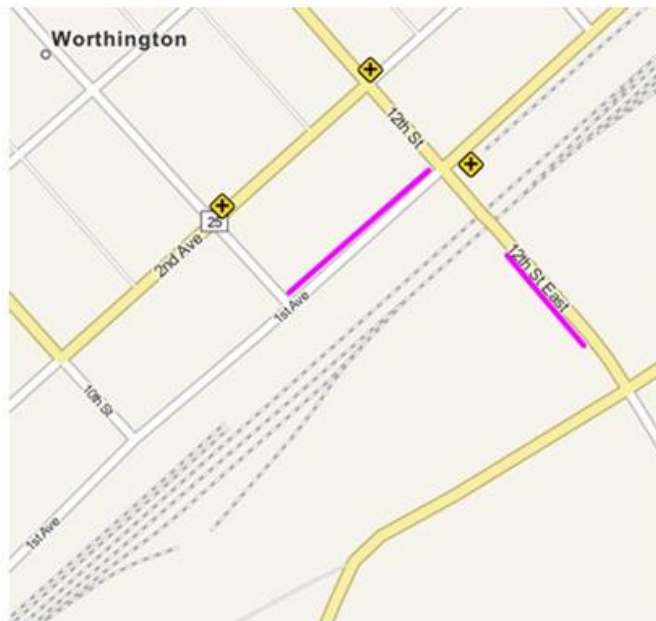
Sally's Alley—Connectivity Issue



Oakwood Drive—Example

Table #19

1st Avenue & 12th Street East Sidewalk Gap

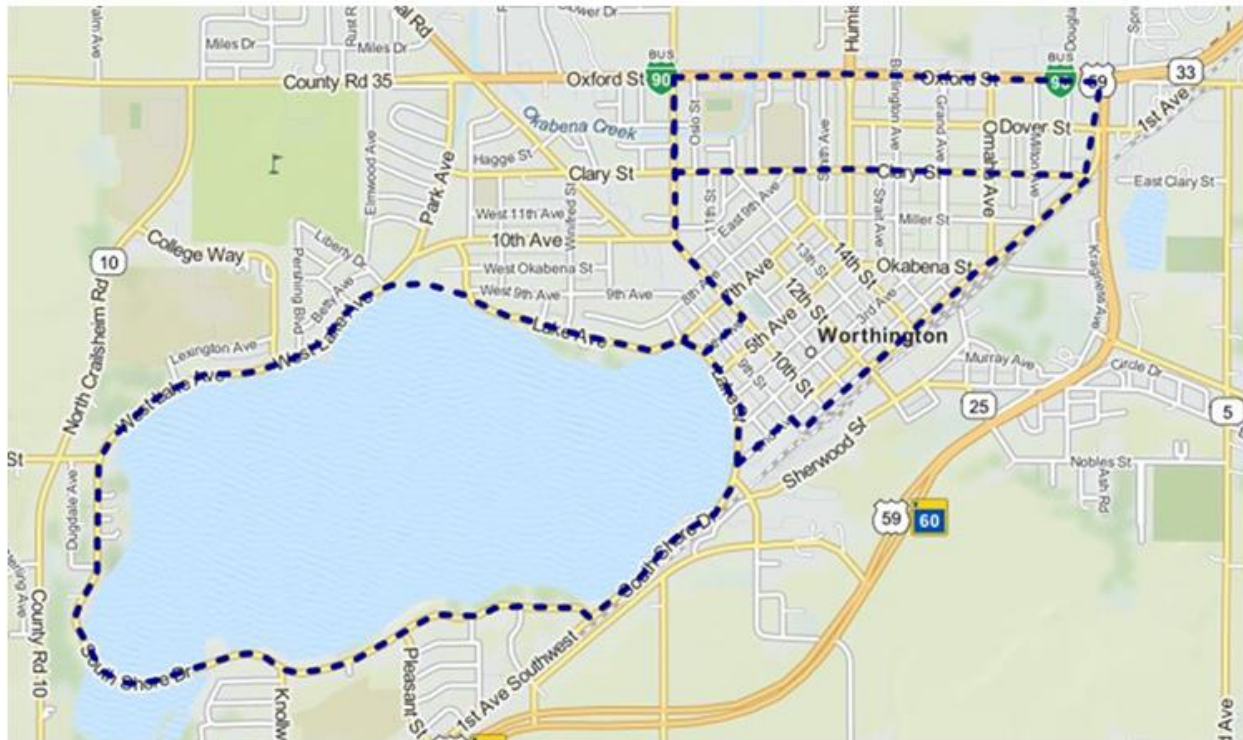


1st Avenue

No Sidewalk ———

Table #20

Proposed On Street Bike Route



Proposed On Street Bike Route — — —

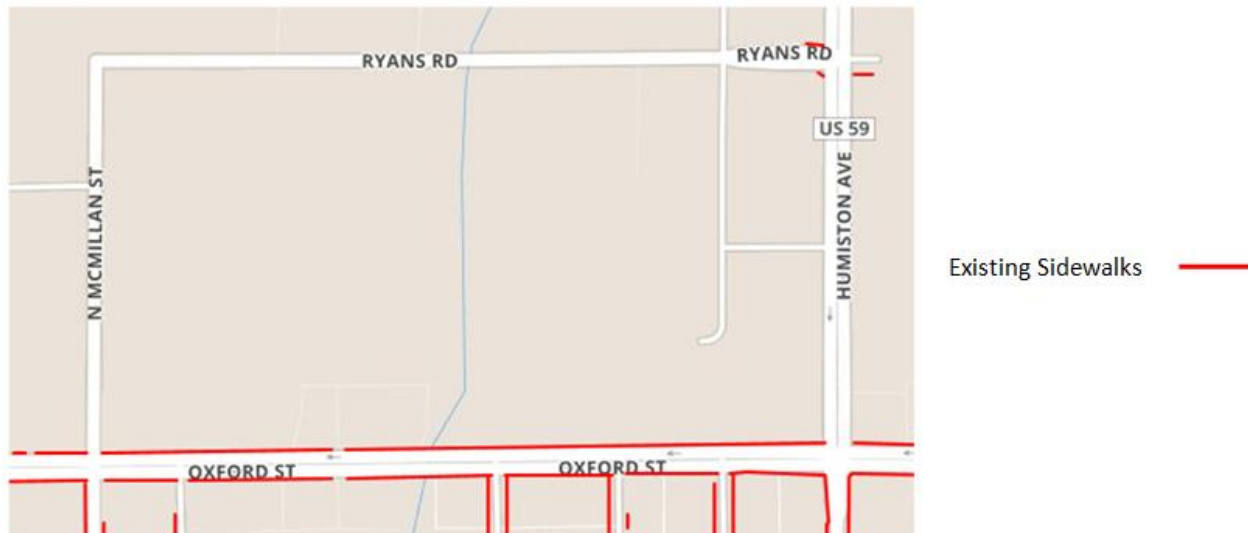
Table #21

Ryan's Road to Oxford Street – Route I'd Like to Use



Table #22

Ryan's Road to Oxford Street – Sidewalk Map



Community Input – Ryan's Road to Oxford Street Corridor:

- This area is not safe for people who do not have a car.
- No sidewalk or trail to Wal-Mart - lots of foot traffic.
- Something needs to be done in this area to make it safer.
- Trail along Okabena Creek would be a safe route to business on Ryan's Rd.
- I should be able to walk to those businesses, but there is not a safe route for walkers now. The sidewalk on Oxford has light poles in the middle of them.

A number of other pedestrian issues were discussed as part of the Worthington Active Living Planning Process.

- Park Avenue and 10th Avenue
- West Oxford Street and North Crailsheim Road
- Clary Street and McMillian Street
- This is not an exhaustive list

Map of Worthington, Ohio, showing pedestrian lighting issues. Orange dots indicate locations where pedestrian lighting is needed. The map includes major roads like I-90, I-75, and US-59, as well as local streets like Oxford St, Clary St, and Lake Ave. A large lake is visible on the left side of the map.

IV Goals & Strategies

Goals are general guidelines that explain what the City of Worthington wants to achieve. Strategies narrow the general guidelines and define in more detail how the goal will be achieved. Strategies are the actual steps to be taken to achieve the goals. A strategy may just be the first step, but the general need for the project is outlined.

The identified Goals and Strategies were created throughout the planning process with input from the community residents. It should be noted that not every existing issue identified within the Existing Conditions Chapter has a goal outlined below. Goals were only developed for certain existing conditions and some issues did not have a definite solution. Identifying the existing condition is the first step in working towards a solution.

The city council ranked the infrastructure projects and the non-infrastructure. This ranking or prioritization will help with directing time and money. Prioritization does not mean that the first goal has to be accomplished before moving onto another goal.

The purpose of the prioritization is to show that there was a discussion about the possible options and with unlimited resources this is what they would choose to accomplish first. Due to scarce resources, it may be necessary to start with a goal that has less upfront costs and is relatively easier to implement. The goals and strategies being outlined in the Worthington Active Living Plan are recommendations, so during implementation modifications can take place. Additional engineering work may also be needed before implementation can take place.

Goal

To enable the City of Worthington to become a more walkable community through strategic pedestrian improvements outlined in the Worthington Active Living Plan.

Objective

Identify destinations, gaps, areas of concern, and prioritize projects for addressing pedestrian infrastructure in the City of Worthington.

Proposal

Think about walkability and bikeability when considering decisions that influence the built environment.



Worthington Goals & Strategies

Complete Streets

Goal: Ensure all streets in Worthington are Complete Streets.

Strategy:

Implement a Pedestrian Functional Classification System.

When constructing a new street or resurfacing an existing street, consider and discuss the function of that street and the pedestrian amenities needed to make that street safe for pedestrians.

5 E(s): Engineering and Encouragement

Existing Conditions:

Some community members may not have access to a motor vehicle, so walking, biking, and transit are their primary transportation modes. Sidewalks and trails have a community benefit and help to increase connectivity within the community. If there are gaps in the sidewalk and trail network, it is not convenient to walk and bike.

Different streets require different pedestrian amenities. A Complete Street does not have a singular definition. A Complete Street is any street you feel safe walking or biking on. A Complete Street does not have to have a sidewalk on both sides of the street, but you have to consider all users when deciding if it is safe for pedestrians.

Younger children may need a sidewalk to separate them from vehicle traffic. Younger children may be learning how to ride a bike, so it is not safe for them to share the road with vehicle traffic. When making a decision whether a street needs sidewalks or not, the function of the street needs to be considered.

The City of Worthington adopted a Complete Streets Policy on March 25th, 2013. During the planning process for the Worthington Active Living Plan the Complete Streets Policy was discussed. The discussion centered on how to implement the Complete Streets Policy.

A Pedestrian Functional Classification System was discussed and proposed as one way to implement Worthington's Complete Streets Policy. A Pedestrian Functional Classification System would provide direction regarding consistence implementation of pedestrian infrastructure. Pedestrian infrastructure would be based on the function of the street, traffic volumes, and traffic speeds. Pedestrian infrastructure decisions will no longer be on a case by case basis.

The Worthington City Council should classify streets in Worthington, so a discussion will occur around the function of the street. Below are three classifications that can be used to identify the pedestrian amenities a street needs.

- ▶ Connector Streets
 - Connects primary destinations

- Highest traffic volumes streets
- Require the highest level of pedestrian amenities - Sidewalks on both sides of the street or a trail conveniently located along the corridor that connects key locations.
- ▶ Neighborhood Connector Streets
 - Connects Residential Streets to Connector Streets
 - Medium level traffic volume streets
 - Require some pedestrian amenities – A sidewalk on one side of the street or the other is required or a trail conveniently located that connects the neighborhood to key locations. The sidewalk needs to have continuity throughout, so the route is not jumping back and forth from one side of the street to the other.
- ▶ Residential Streets
 - All other streets
 - Lower traffic speeds
 - Lower traffic volumes
 - Sidewalks are encouraged but there is no sidewalk requirement

New Developments

For new developments the developer should have to get an exemption from the Worthington City Council for why a sidewalk is not needed (street is wide, low traffic volumes, it is reasonable to walk on the street...).

Existing Sidewalks

To remove an existing section of sidewalk the landowner should be required to get approval from the Worthington City Council. This will help to prevent gaps in the sidewalk and trail network.

There was support at the Worthington Active Living Community Meetings for the Pedestrian Functional Classification System. This Pedestrian Functional Classification System was also discussed at the Worthington Traffic and Safety Committee Meeting on April 28, 2015. The Traffic and Safety Committee officially approved to move forward with the Pedestrian Functional Classification System.

It is recommended that City of Worthington Engineering and Planning staff finalize the Pedestrian Functional Classification Map with the Planning and Zoning Committee. This map will serve as a vision of sidewalk and trail implementation in the City of Worthington. Once the Pedestrian Functional Classification Map is finalized, the Pedestrian Functional Classification System will be presented to the

It is recommended that the Worthington Pedestrian Functional Classification System be implemented by need and project basis. There are Connector Streets and Residential Connector Streets within the City of Worthington that have no pedestrian infrastructure. It is not safe to walk or bike along these streets.

Table #24 A **City of Worthington - Neighborhood Sections Map**

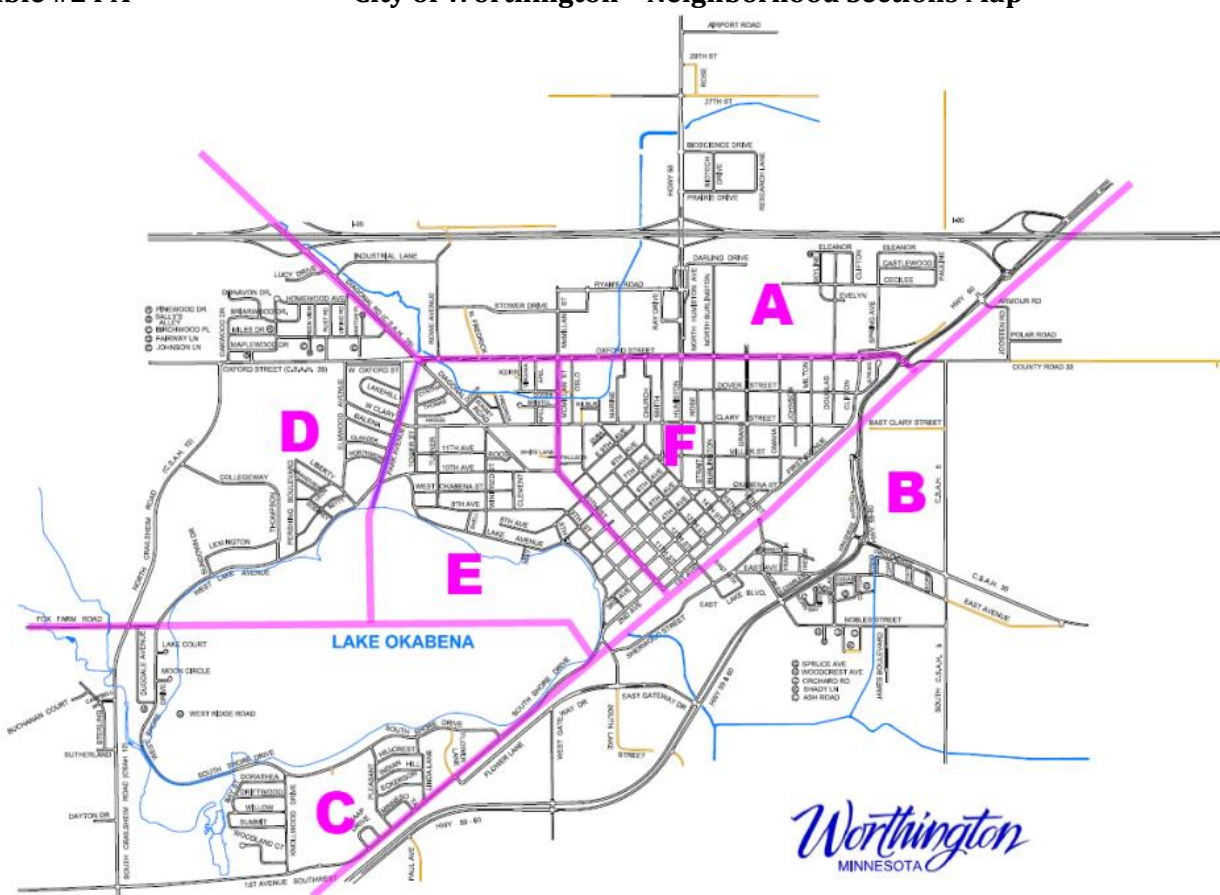


Table #24 B**Community Survey Summary**

Section of City	1. General Atmosphere	2. Room to walk	3. Easy to cross street	4. Drivers behave well	5. Follow safety rules	Average 1,2,3
A	4	3	3	4	5	3
B	6	4	5	6	7	5
C	8	8	8	7	8	8
D	7	6	7	7	8	7
E	8	7	7	7	8	7
F	7	6	7	6	9	7
Average	7	6	6	6	8	

Worthington Infrastructure Goals & Strategies

Lake Okabena Loop Segment #1 – South Shore Drive

Goal: Increase pedestrian safety and access around Lake Okabena.

Strategy:

Long Term – Establish sidewalks along South Shore Drive, West Shore Drive, and West Lake Avenue.

Short Term – Paint fog lines and allow additional space for pedestrians and bicyclists.

Complete a safe pedestrian and bicyclist route around Lake Okabena.

5 E(s): Encouragement and Engineering

Existing Conditions:

Space is the main issue along Lake Okabena. There were multiple comments in the Community Surveys regarding safety along the lake and how it is only a matter of time before a pedestrian gets hit. Community input generally indicates that it is not safe to walk and bike on the road due to vehicle traffic and the narrower width of the streets.

The Streets around Lake Okabena have both residential traffic and through traffic. These streets function as Neighborhood Connectors. Separated pedestrian infrastructure is needed to provide a safe space for pedestrians. A continuous sidewalk or trail is needed to provide adequate pedestrian infrastructure.

► **Neighborhood Connector Streets**

- Connects Residential Streets to Connector Streets
- Medium level traffic volume streets

- Require some pedestrian amenities – A sidewalk on one side of the street or the other is required or a trail conveniently located that connects the neighborhood to key locations. The sidewalk needs to have continuity throughout, so the route is not jumping back and forth from one side of the street to the other. (Refer to the Complete Streets Goal for a description of the function of different streets and the pedestrian amenities needed to make that street safe for pedestrians).

Table #25

Segment #1 – South Shore Drive



Short Term Option

During the summer of 2014, local public health and the City of Worthington implemented a tactical urbanism demonstration project. The demonstration project showed how shifting the center line and eliminating parking on one side of the South Shore Drive could provide a safer space for pedestrians and bicyclists. Fog lines were painted to allow for more space for pedestrians and bicyclists. Below are two pictures of the demonstration project.

Table #26

Tactical Urbanism Demonstration Project – South Shore Drive



South Shore Drive is 40 feet wide. The road dimensions change as you drive around the lake, so the demonstration project as conducted on South Shore Drive will not be feasible all the way around the lake. Lane widths will have to change as you move clockwise around the lake. Below is a StreetMix example of South Shore Drive. Additional engineering work will be needed to finalize lane widths and parking.

Table #27

Example -South Shore Drive – 40' Width (11' Vehicle Travel Lane)



Our short term solution is to paint fog lines and establish an additional space for pedestrians and bicyclists. Since we are encouraging pedestrian and bicyclists to share the road with vehicle traffic,

traffic calming measures should be discussed. Vehicle traffic lane widths can help to calm traffic and create a safer environment for pedestrians and bicyclists. An 11 foot vehicle travel lane is one option and an 11 foot vehicle travel lane is narrower than most streets in Worthington. A 10 foot vehicle travel lane could also be discussed as an option to further calm traffic and increase pedestrian safety. A narrower travel lane acts as a traffic calming device by visually making the road feel smaller.

“Lane widths of 10 feet are appropriate in urban areas and have a positive impact on a streets safety without impacting traffic operation.”²¹

Lake Okabena Loop Segment #2 –Causeway / Grade

Goal: Increase safety for all users on the Causeway.

Strategy:

Implement one-way only traffic on the Causeway.

Complete a safe pedestrian and bicyclist route around Lake Okabena.

5 E(s): Encouragement and Engineering

Existing Conditions:

Space is the main issue along the Causeway. Currently, there are two travel lanes, a parking lane on the south side of the street, and virtually no shoulder on the north side of the street. There are walkers, bikers, people fishing, and motor vehicle traffic. A compromise is proposed to be made to make it safer for all users.

Public comments regarding the Causeway

- ▶ “Need bike/sidewalk around the grade”
- ▶ “Grade - This needs to be wider. When it's nice you have lots of foot/bicycle traffic along with everyone fishing here. Add all the people driving around the lake in the summer and it's very dangerous.”
- ▶ “Add a partitioned path the entire length of the grade.”
- ▶ “Every time I have to pass through this area, I think, ‘Are they going to wait until someone dies here to fix this?’ Please make improvements to allow for safe use of road by PEDs, cars, and people fishing. It's only a matter of time.”

²¹ NACTO. Urban Street Design Guide. Accessed: 6/18/15. Available: <http://nacto.org/usdg/street-design-elements/lane-width/>

- “Drivers are courteous but often have to swerve into the other lane to make room for us on the grade.”

Table #28

Causeway / Grade



Making the Causeway a one-way street will help to increase safety for all users. Pedestrians will have space to walk and fish. There will be space for parking, so elderly community members can drive out onto the Causeway and park where they would like to fish.

Space for emergency vehicles will be less of an issue. There will no longer be a chance of getting backed up behind motor vehicles that are three wide. A current issue affecting emergency vehicles is having space to get through along the Causeway. An emergency vehicle can be blocked by a vehicle traveling the same direction, meeting another vehicle traveling the opposite direction, and a parked vehicle along the Causeway. Have three vehicles side by side leaves no extra room for a vehicle to pull over.

If the Causeway is one-way only, there will be more space for emergency vehicles. There is only the possibility of having two vehicles side by side with pedestrians. Pedestrians can easily step off of the pedestrian lane onto the parking lane between parked cars and on the shoulder and wait for emergency vehicles to pass.

It is recommended that one-way traffic flow be established on the grade. The direction of the one-way traffic has to be discussed. There will be a turnaround loop established in Slater Park or in the parking lot by the boat landing. The location of the turnaround loop depends which way the one-way traffic flows.

Table #29 A

One-way Turn Around Loop in Slater Park



Curb or Painted Turn Around Loop ———

Table #29 B

One-way Turn Around Loop by Boat Landing



Curb or Painted Turn Around Loop ———

Lake Okabena Loop Segment #3 – West Shore Drive (Causeway to Foxfarm Road)

Goal: Increase pedestrian safety and access around Lake Okabena.

Strategy:

Long Term – Establish sidewalks along South Shore Drive, West Shore Drive, and West Lake Avenue.

Short Term – Paint fog lines and allow additional space for pedestrians and bicyclists.

Complete a safe pedestrian and bicyclist route around Lake Okabena.

5 E(s): Encouragement and Engineering

Existing Conditions:

Space is the main issue along Lake Okabena. There were multiple comments in the Community Surveys regarding safety along the lake and how it is only a matter of time before a pedestrian gets hit. It is generally not safe to walk and bike on the road due to vehicle traffic and the narrower width of the streets.

The streets around Lake Okabena have both residential traffic and through traffic. These streets function as Neighborhood Connectors. Separated pedestrian infrastructure is needed to provide a safe space for pedestrians and bicyclists. A continuous sidewalk or trail is needed to provide adequate pedestrian infrastructure.

► **Neighborhood Connector Streets**

- Connects Residential Streets to Connector Streets
- Medium level traffic volume streets
- Require some pedestrian amenities – A sidewalk on one side of the street or the other is required or a trail conveniently located that connects the neighborhood to key locations. The sidewalk needs to have continuity throughout, so the route is not jumping back and forth from one side of the street to the other. (Refer to the Complete Streets Goal for a description of the function of different streets and the pedestrian amenities needed to make that street safe for pedestrians).

Short Term Option

During the summer of 2014, local public health and the City of Worthington implemented a tactical urbanism demonstration project. The demonstration project showed how shifting the center line and eliminating parking on one side of the South Shore Drive could provide a safer space for pedestrians and bicyclists. Fog lines were painted to allow for more space for pedestrians and bicyclists. Below are two pictures of the demonstration project.

Table #30

Tactical Urbanism Demonstration Project – South Shore Drive



West Shore Drive is 42.5 feet wide from the Causeway to Foxfarm Road. The road dimensions change as you drive around the lake, so what will work along South Shore Drive will not be feasible all the way around the lake. Lane widths will have to change as you move clockwise around the lake. Below is a StreetMix example of West Shore Drive. Additional engineering work will be needed to finalize lane widths and parking.

Table #31

Example -West Shore Drive – 42.5' Width (11' Vehicle Travel Lane)



Lake Okabena Loop Segment #4 – West Shore Drive (Foxfarm Road to Sundown Drive)

Goal: Increase pedestrian safety and access around Lake Okabena.

Strategy:

Long Term – Establish sidewalks along South Shore Drive, West Shore Drive, and West Lake Avenue.

Complete a safe pedestrian and bicyclist route around Lake Okabena.

5 E(s): Encouragement and Engineering

Existing Conditions:

Space is the main issue along Lake Okabena. There were multiple comments in the Community Surveys regarding safety along the lake and how it is only a matter of time before a pedestrian gets hit. It is generally not safe to walk and bike on the road due to vehicle traffic and the narrower width of the streets.

The Streets around Lake Okabena have both residential traffic and through traffic. These streets function as Neighborhood Connectors. Separated pedestrian infrastructure is needed to provide a safe space for pedestrians. A continuous sidewalk or trail is needed to provide adequate pedestrian infrastructure.

► Neighborhood Connector Streets

- Connects Residential Streets to Connector Streets
- Medium level traffic volume streets
- Require some pedestrian amenities – A sidewalk on one side of the street or the other is required or a trail conveniently located that connects the neighborhood to key locations. The sidewalk needs to have continuity throughout, so the route is not jumping back and forth from one side of the street to the other. (Refer to the Complete Streets Goal for a description of the function of different streets and the pedestrian amenities needed to make that street safe for pedestrians).

Short Term Option

West Shore Drive is 23.5 feet wide with four foot paved shoulders from Foxfarm Road to Sundown Drive. The road dimensions change as you drive around the lake, so what will work along West Shore Drive will not be feasible all the way around the lake. This section of the loop does not have a short term solution.

West Shore Drive from Foxfarm Road to Sundown Drive does have a five foot paved shoulder. Without a complete road reconstruct there are no short term painting solutions. Below is a picture of this segment of the loop around the lake.

Table #32

Foxfarm Road to Sundown Drive – paved shoulder



Lake Okabena Loop Segment #5 – West Shore Drive (Sundown Drive to Thompson Avenue)

Goal: Increase pedestrian safety and access around Lake Okabena.

Strategy:

Long Term – Establish sidewalks along South Shore Drive, West Shore Drive, and West Lake Avenue.

Short Term – Paint fog lines and allow additional space for pedestrians and bicyclists.

Complete a safe pedestrian and bicyclist route around Lake Okabena.

5 E(s): Encouragement and Engineering

Existing Conditions:

Space is the main issue along Lake Okabena. There were multiple comments in the Community Surveys regarding safety along the lake and how it is only a matter of time before a pedestrian gets hit. It is generally not safe to walk and bike on the road due to vehicle traffic and the narrower width of the streets.

The Streets around Lake Okabena have both residential traffic and through traffic. These streets function as Neighborhood Connectors. Separated pedestrian infrastructure is needed to provide a safe space for pedestrians. A continuous sidewalk or trail is needed to provide adequate pedestrian infrastructure.

► Neighborhood Connector Streets

- Connects Residential Streets to Connector Streets
- Medium level traffic volume streets
- Require some pedestrian amenities – A sidewalk on one side of the street or the other is required or a trail conveniently located that connects the neighborhood to key locations. The sidewalk needs to have continuity throughout, so the route is not jumping back and forth from one side of the street to the other. (Refer to the Complete Streets Goal for a description of the function of different streets and the pedestrian amenities needed to make that street safe for pedestrians).

Short Term Option

During the summer of 2014, local public health and the City of Worthington implemented a tactical urbanism demonstration project. The demonstration project showed how shifting the center line and eliminating parking on one side of the South Shore Drive could provide a safer space for pedestrians and bicyclists. Fog lines were painted to allow for more space for pedestrians and bicyclists. Below are two pictures of the demonstration project.

Table #33 Tactical Urbanism Demonstration Project – South Shore Drive



West Shore Drive is 42.5 feet wide from Sundown Drive to Thompson Avenue. The road dimensions change as you drive around the lake, so what will work along South Shore Drive will not be feasible all the way around the lake. Lane widths will have to change as you move clockwise around the lake. Below is a StreetMix example of South Shore Drive. Additional engineering work will be needed to finalize lane widths and parking.

Table #34 Example -West Shore Drive – 42.5’ Width (11’ Vehicle Travel Lane)



Lake Okabena Loop Segment #6 – West Shore Drive (Pershing Boulevard to Liberty Drive)

Goal: Increase pedestrian safety and access around Lake Okabena.

Strategy:

Long Term – establish sidewalks along South Shore Drive, West Shore Drive, and West Lake Avenue.

Short Term – Paint fog lines and allow additional space for pedestrians and bicyclists.

Complete a safe pedestrian and bicyclist route around Lake Okabena.

5 E(s): Encouragement and Engineering

Existing Conditions:

Space is the main issue along Lake Okabena. There were multiple comments in the Community Surveys regarding safety along the lake and how it is only a matter of time before a pedestrian gets hit. It is

generally not safe to walk and bike on the road due to vehicle traffic and the narrower width of the streets.

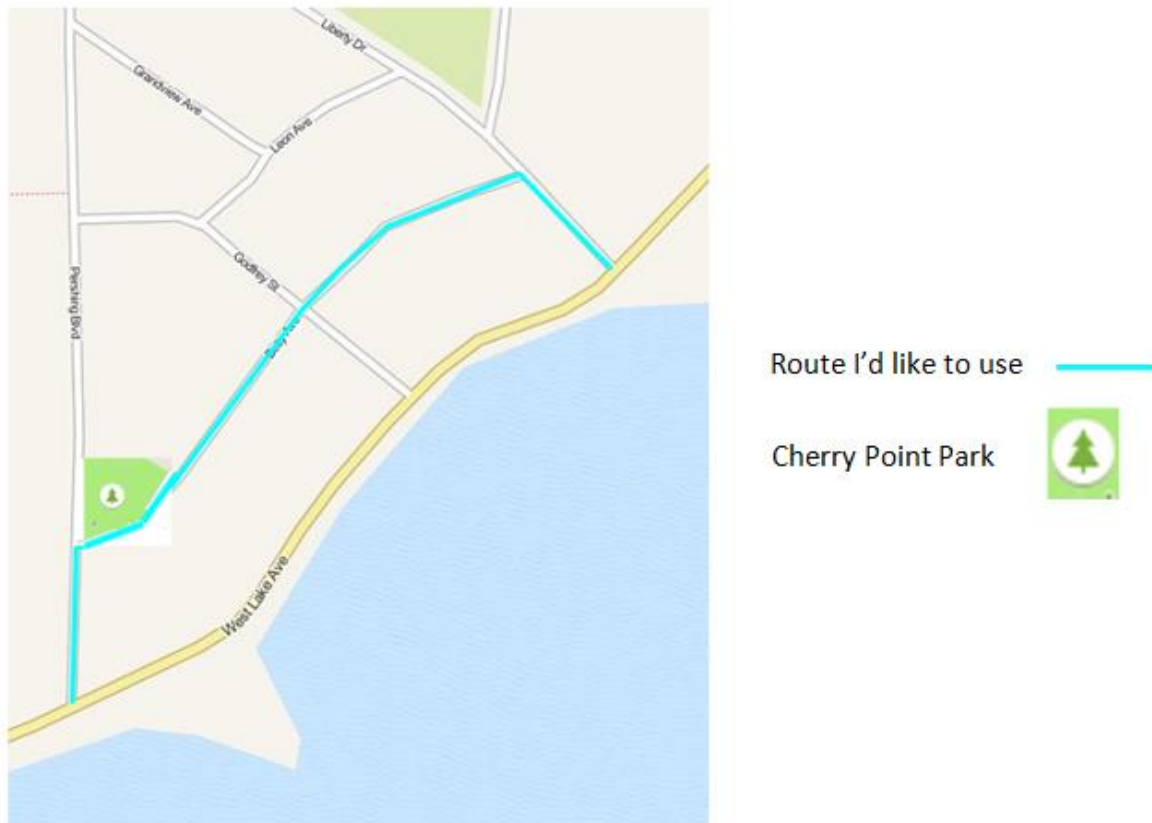
The Streets around Lake Okabena have both residential traffic and through traffic. These streets function as Neighborhood Connectors. Separated pedestrian infrastructure is needed to provide a safe space for pedestrians. A continuous sidewalk or trail is needed to provide adequate pedestrian infrastructure.

► Neighborhood Connector Streets

- Connects Residential Streets to Connector Streets
- Medium level traffic volume streets
- Require some pedestrian amenities – A sidewalk on one side of the street or the other is required or a trail conveniently located that connects the neighborhood to key locations. The sidewalk needs to have continuity throughout, so the route is not jumping back and forth from one side of the street to the other. (Refer to the Complete Streets Goal for a description of the function of different streets and the pedestrian amenities needed to make that street safe for pedestrians).

Possible Sidewalk Route

Due to limited space along West Lake Avenue, a possible sidewalk route could be to connect to Cherry Point Park. This would provide a convenient resting place along the western stretch of the loop around the lake. Below is the possible route. A walk does appear to be feasible on the south side of West Lake Avenue from just east of Pershing Boulevard to Liberty Drive. The most difficult segment to fit a walk in is between Thompson Avenue and Pershing Boulevard.

Table #35**West Lake Avenue – Route I'd Like to Use****Short Term Option**

During the summer of 2014, local public health and the City of Worthington implemented a tactical urbanism demonstration project. The demonstration project showed how shifting the center line and eliminating parking on one side of the South Shore Drive could provide a safer space for pedestrians and bicyclists. Fog lines were painted to allow for more space for pedestrians and bicyclists. Below are two pictures of the demonstration project.

Table #36**Tactical Urbanism Demonstration Project – South Shore Drive**

West Shore Drive is 32 feet wide from Pershing Boulevard to Liberty Drive. The road dimensions change as you drive around the lake, so what will work along West Shore Drive will not be feasible all the way around the lake. Lane widths will have to change as you move clockwise around the lake. Below is a StreetMix example of South Shore Drive. Additional engineering work will be needed to finalize lane widths and parking.

Table #37 **Example -West Shore Drive – 32’ Width (11’ Vehicle Travel Lane)**



Lake Okabena Loop Segment #7 – Centennial Park (10 Avenue)

Goal: Increase pedestrian safety and access around Lake Okabena.

Strategy:

Complete a safe pedestrian and bicyclist route around Lake Okabena.

Establish a trailhead at Centennial Park.

5 E(s): Encouragement, Education, and Engineering

Existing Conditions:

There is a sidewalk and trail in Centennial Park. The sidewalk starts by the intersection of West Lake Avenue and Liberty Street and navigates along the lake. The trail runs along Whisky Ditch and connects to the sidewalk along Lake Avenue.

The City of Worthington is developing plans to improve the bridge crossing on 10th Avenue by the intersection with Park Avenue. Part of this project is improving the trail crossing and pedestrian infrastructure connections. It is recommended to create a trailhead in Centennial Park that connects the two trails and provides information regarding walking, biking, and destinations in Worthington.

It is essential that trail users and potential trail users have access to information regarding trails to enhance their experience. Trail information can be disseminated in a wide variety of formats, including kiosks, brochures, websites, guidebooks, and on-trail signs and blazes. Trail and trailhead signage is an indispensable part.

A brochure is also useful in directing people to other attractions in the City of Worthington.

A trailhead in Centennial Park will help to promote the trail along Whisky Ditch and the loop around the lake. As part of the trailhead a kiosk will be built. The kiosk will display promotional brochures for city parks, downtown businesses, walking routes, Olson Campground, and other annual events in Worthington, like the National Windsurf Regatta.

A balance regarding the appropriate level of signage must be reached between providing adequate signage for users to find their way and avoiding sign pollution. The objectives of trail signing are to:

- Improve the trail user experience
- Attract new trail users
- Enhance the safety of pedestrians
- Increase comfort and confidence in navigating the trail or trail network
- Promote recreational trail use;

Table #38

Trail Head Kiosk Examples



Lake Okabena Loop Segment #8 – Lake Avenue

Goal: Increase pedestrian safety and access around Lake Okabena.

Strategy:

Complete a safe pedestrian and bicyclist route around Lake Okabena.

Improve pedestrian crossing along Lake Avenue and Lake Street.

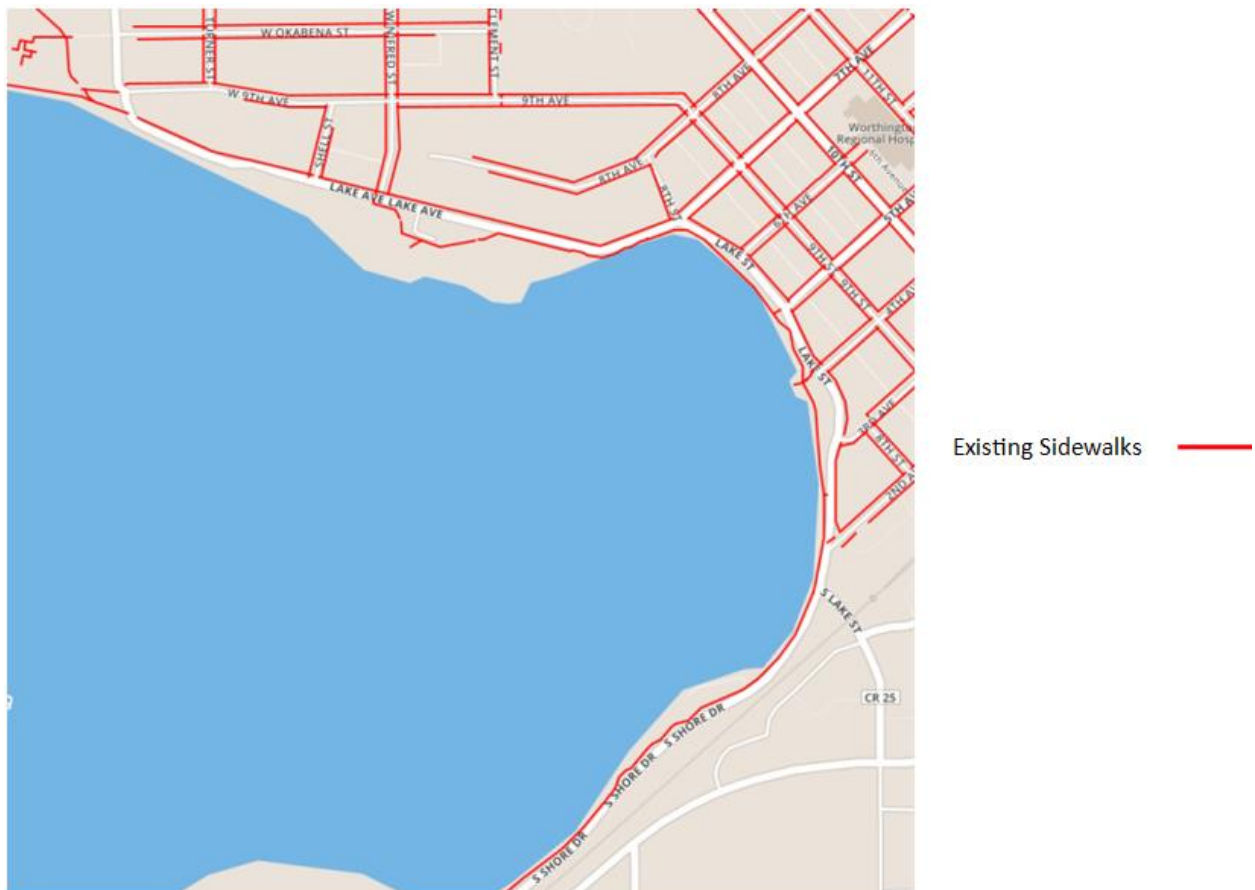
5 E(s): Encouragement, Education, and Engineering

Existing Conditions:

There are existing sidewalks along Lake Avenue and Lake Street that connect to the trail along South Shore Drive. This is where a number of users access the trail. Lake Street is only two blocks from the downtown business district, so this is a very busy area for pedestrians and motor vehicles.

The intersections along Lake Street from 7th Street to 2nd Avenue should be treated the same as intersections in the downtown area. Crosswalks along Lake Street from 7th Street to 2nd Avenue should be established and maintained at the same level as crosswalks in the downtown area. This will help to increase safety and access to the trail and loop around the lake.

Table #39 Lake Avenue & Lake Street – Existing Sidewalks



Prairie Elementary School - Safe Routes to School

Goal: Increase pedestrian safety around Prairie Elementary School.

Strategy:

Construct a sidewalk or trail connecting the trail along 1st Avenue Southwest and the sidewalk leading to the main entrance to Prairie Elementary.

5 E(s): Encouragement and Engineering

Existing Conditions:

As of the 2014-15 school year, students at Prairie Elementary were not allowed to walk or bike to school. This informal policy was established due to the lack of pedestrian infrastructure around the school. Since this informal policy was enacted, a trail along 1st Avenue Southwest was constructed.

The trail provides a safe place for students to walk and bike to school, who live along or within a convenient distance to 1st Avenue Southwest. Connectivity between the trail and Prairie Elementary is still an issue. There is no sidewalk or trail that connects the main entrance to the school and the trail.

This is the most critical gap around Prairie Elementary. This gap needs to be filled in before other connections to nearby neighborhoods are developed. Below is an outline of the pedestrian infrastructure around Prairie Elementary and the critical sidewalk gap.

Table #40 A Existing Pedestrian Infrastructure - Prairie Elementary School



Table #40 B

Prairie Elementary – Pedestrian Connections



Curb Extensions

Goal: Increase safety at higher pedestrian volume intersections.

Strategy:

Research curb extensions as a possibility to increase safety at higher traffic volume intersections.

Install a curb extension on the west side of Humiston Avenue at the intersection with Clary Street.

Install curb extensions on Diagonal Road at the intersection with Clary Street.

Install curb extensions in the downtown business district.

Add landscape to curb extensions to increase neighborhood feel and the aesthetic characteristics of the City of Worthington.

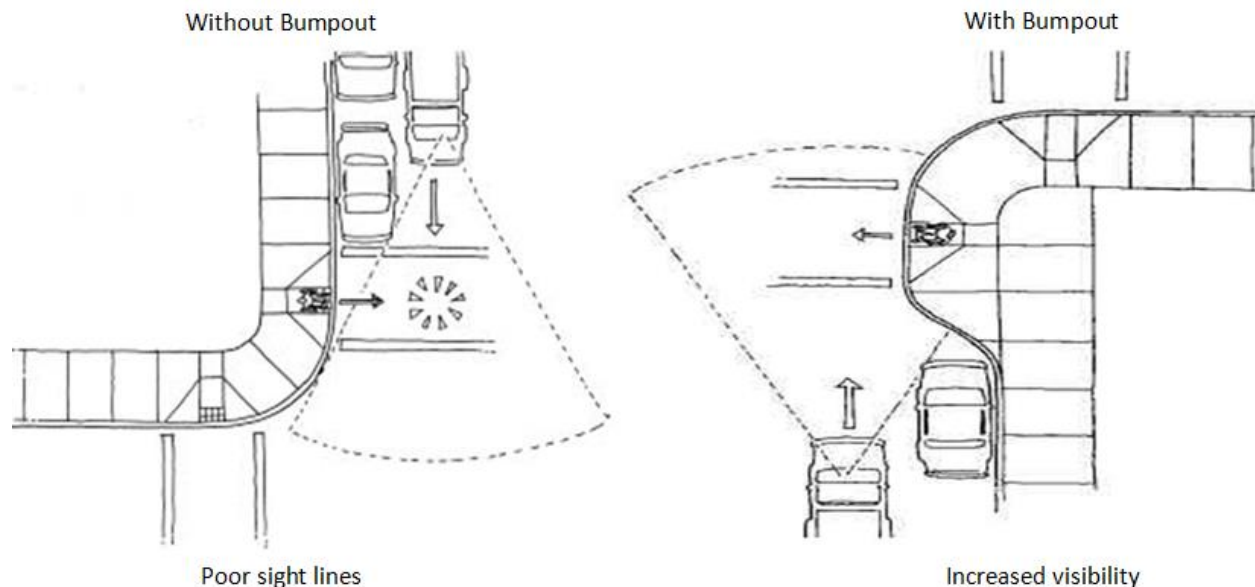
5 E(s): Engineering and Encouragement

Existing Conditions:

Curb extensions are a traffic calming device that helps to slow traffic speeds, increase visibility, and reduce crossing times. Curb extensions narrow the street crossing distance for pedestrians. This helps

to increase safety at the crossing, since pedestrians are in a better position to look past parked vehicles to see oncoming traffic.

Table #41 Bumpout (Curb Extension) Visibility Comparison



Curb extensions can be permanent or removable. Removable curb extensions can be put in to test their effectiveness of slowing traffic and making the environment safer for pedestrians. Removable curb extensions give the city time to evaluate this action before installing permanent curb extension. If the removable curb extension is effective, a more permanent curb extension can be installed.

Curbs and storm water drainage do not have to be altered with removable curb extensions. Rebuilding curbs and modifying storm water drainage can be very expensive. A removable curb extension is an add-on to the existing street.

Installing removable curb extensions, in the form of planters, not only makes it safer for pedestrians, but they help to make the street more aesthetically pleasing. During the summer months these planters will be green and in winter months the planters can be removed for easy snow removal. The area within the bump-out and the crosswalk can also be dyed red to make the area stand out.

Table #42 A Removable Curb Extension - Planters



Table #42 B

Removable Curb Extension



Humiston Avenue and Clary Street

Humiston Avenue has been identified as a higher risk area due to the higher traffic volumes. The intersection of Humiston Avenue and Clary Street is a higher pedestrian traffic area, since it is a primary crossing to get to the Worthington High School. A curb extension on the west side of Humiston Avenue will help to make the crossing safer for pedestrians. An example of a curb extension on only one side of the street is below.

Table #42 C

Curb Extension –One Side Only



22

²² City of Shoreview, MN. Accessed: 6/18/15. Available: <http://www.shorelinewa.gov/government/departments/public-works/transportation-services/traffic-calming-and-pedestrian-bicycle-safety-in-shoreline>

Diagonal Road and Clary Street

Diagonal Road has been identified as a higher risk area due to the higher traffic volumes. The intersection of Diagonal Road and Clary Street is especially difficult for vehicle traffic and pedestrians, since Winfred Street also contributes to congestion in this area. Winfred Street intersects with Diagonal Road just south of Clary Street. Curb extensions in this area could help to increase safety for pedestrians.

Downtown Worthington

Downtown Worthington is a very busy area with higher volumes of vehicle traffic and pedestrian traffic. There are four way stops at a number of intersections in the downtown area, but crossing the street can be difficult for pedestrians. Streets in the downtown business district are wide and on street parking can reduce visibility. Curb extensions will decrease crossing times and will help to increase visibility.

Landscaping

Curb extensions can help to increase the aesthetic characteristic of the City. Curb extensions can also provide a place to increase drainage for water. It is recommended that different landscape designs be considered as part of curb extension projects. Refer to the goal Adopt a Curb Extension for information regarding the maintenance of curb extension landscaping. Below are examples of landscaping that can be considered.

Table #42 D Curb Extension – Landscaping Examples



Oxford-59 – I-90 Corridor

Goal: Increase pedestrian safety in the Oxford – 59 – I-90 Corridor

Strategy:

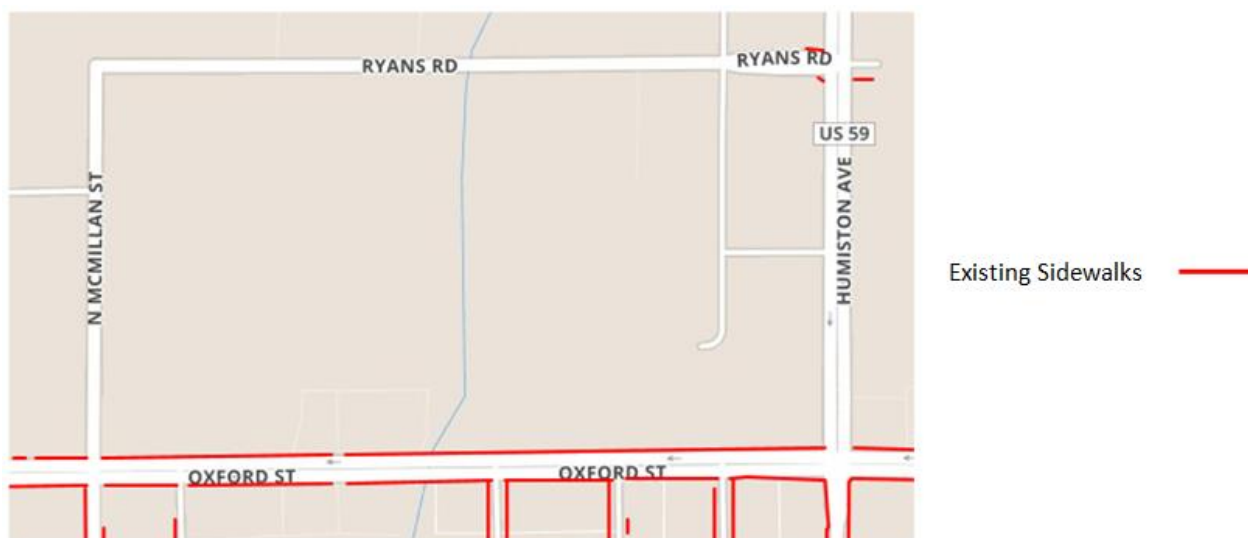
Add pedestrian infrastructure to the Oxford – 59 – I-90 Corridor

5 E(s): Engineering and Encouragement

Existing Conditions:

The Oxford – 59 – I-90 Corridor is the area between Oxford Street, Humiston Avenue (Highway 59), Interstate 90, and McMillian Street. This area was developed to serve motor vehicle traffic only. There is little or no pedestrian infrastructure in this corridor. There is no pedestrian connectivity in this corridor. Below is a map of the existing pedestrian infrastructure around the Oxford – 59 – I-90 Corridor.

Table #43 Oxford – 59 – I-90 Corridor – Existing Sidewalks



During the spring of 2015, Short Elliott Hendrickson Inc. (SEH) completed a Pedestrian and Trail Assessment for the Oxford – 59 – I-90 Corridor. The assessment outlined multiple possible paint and pedestrian infrastructure projects. Since there are multiple options for adding pedestrian infrastructure in this corridor, a public meeting is needed to finalize the plan regarding pedestrian infrastructure in the Oxford – 59 – I-90 Corridor.

Through the Planning Process for the Worthington Active Living Plan, there was support for adding pedestrian infrastructure in the Oxford – 59 – I-90 Corridor. The Community Survey highlighted that Section A, the area north of Oxford Street, was severely underserved in regards to pedestrian infrastructure. Section A averaged a three out of 10 for the survey categories: general atmosphere, did you have room to walk, and was it easy to Cross Street. The results of the community survey suggest

that the first section of the city to address is A. Below is the map identifying the different areas of the city and survey results.

Table #44 A City of Worthington – Neighborhood Sections Map

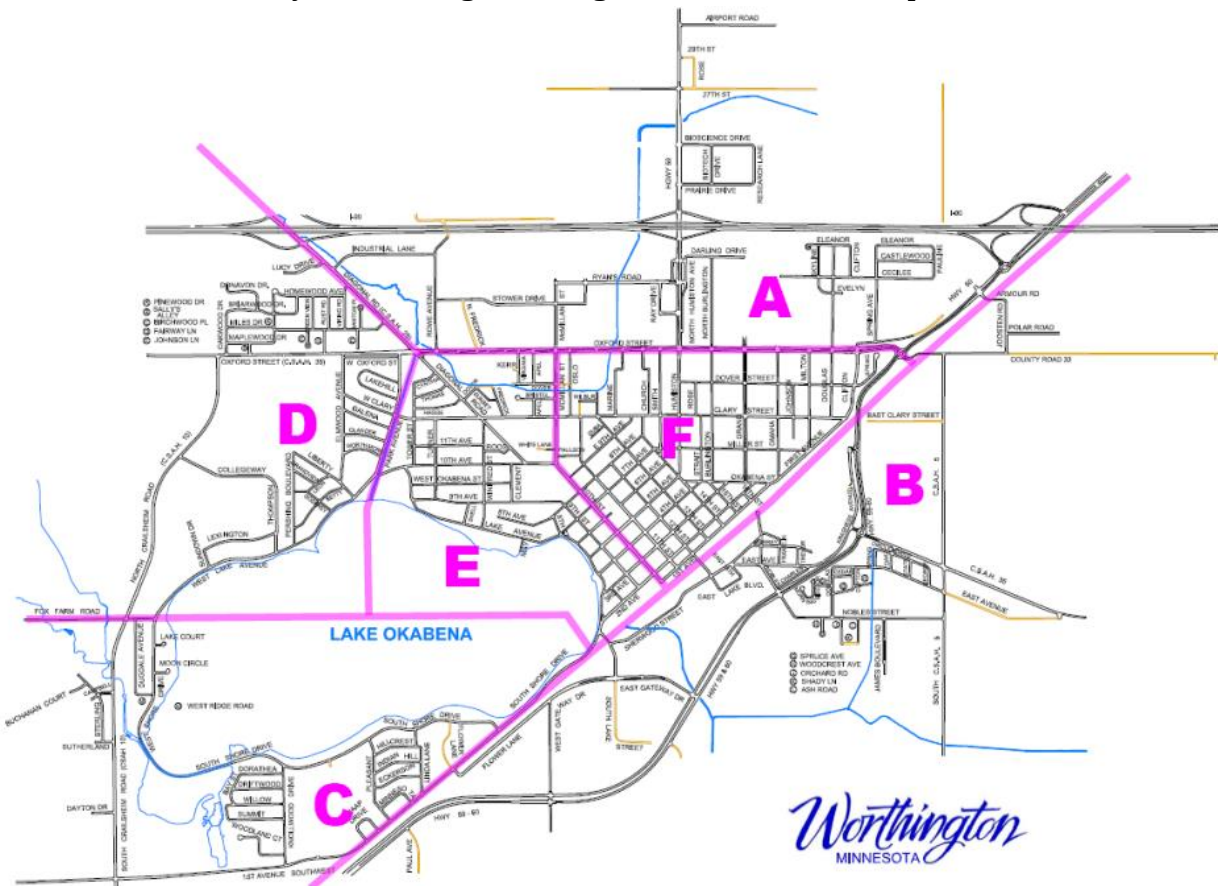


Table #44 B Community Survey Summary

Section of City	1. General Atmosphere	2. Room to walk	3. Easy to cross street	4. Drivers behave well	5. Follow safety rules	Average 1,2,3
A	4	3	3	4	5	3
B	6	4	5	6	7	5
C	8	8	8	7	8	8
D	7	6	7	7	8	7
E	8	7	7	7	8	7
F	7	6	7	6	9	7
Average	7	6	6	6	8	

One of the main themes of the Worthington Active Living Plan Planning Process was:

- Section A of Worthington is underserved in regards to pedestrian infrastructure (Oxford – 59 – I-90 Corridor).

There are a number of community members in Worthington whose primary modes of transportation are walking and biking. When discussing and analyzing primary destinations in the City of Worthington, a number of the primary destinations are in the Oxford – 59 – I-90 Corridor. Community members are walking in the Oxford – 59 – I-90 Corridor, but it is not safe or convenient. Community members are walking on shoulders, on boulevards that are covered by snow in the winter, and between destinations through parking lots and open greenspace.

Oxford Street, Humiston Avenue (Highway 59), and McMillian Street all function as a Connector Street or a Neighborhood Connector. There are a number of destinations in the Oxford – 59 – I-90 Corridor that are traffic generators, so some of the highest traffic volume streets in Worthington are in this corridor. It is generally not safe to walk and bike on the road in the Oxford – 59 I-90 Corridor due to vehicle traffic and traffic speeds. Below is a description of a Connector Street and Neighborhood Connector.

- ▶ Connector Streets

- Connects primary destinations
- Highest traffic volumes streets
- Require the highest level of pedestrian amenities - Sidewalks on both sides of the street or a trail conveniently located along the corridor that connects key locations.

- ▶ Neighborhood Connector Streets

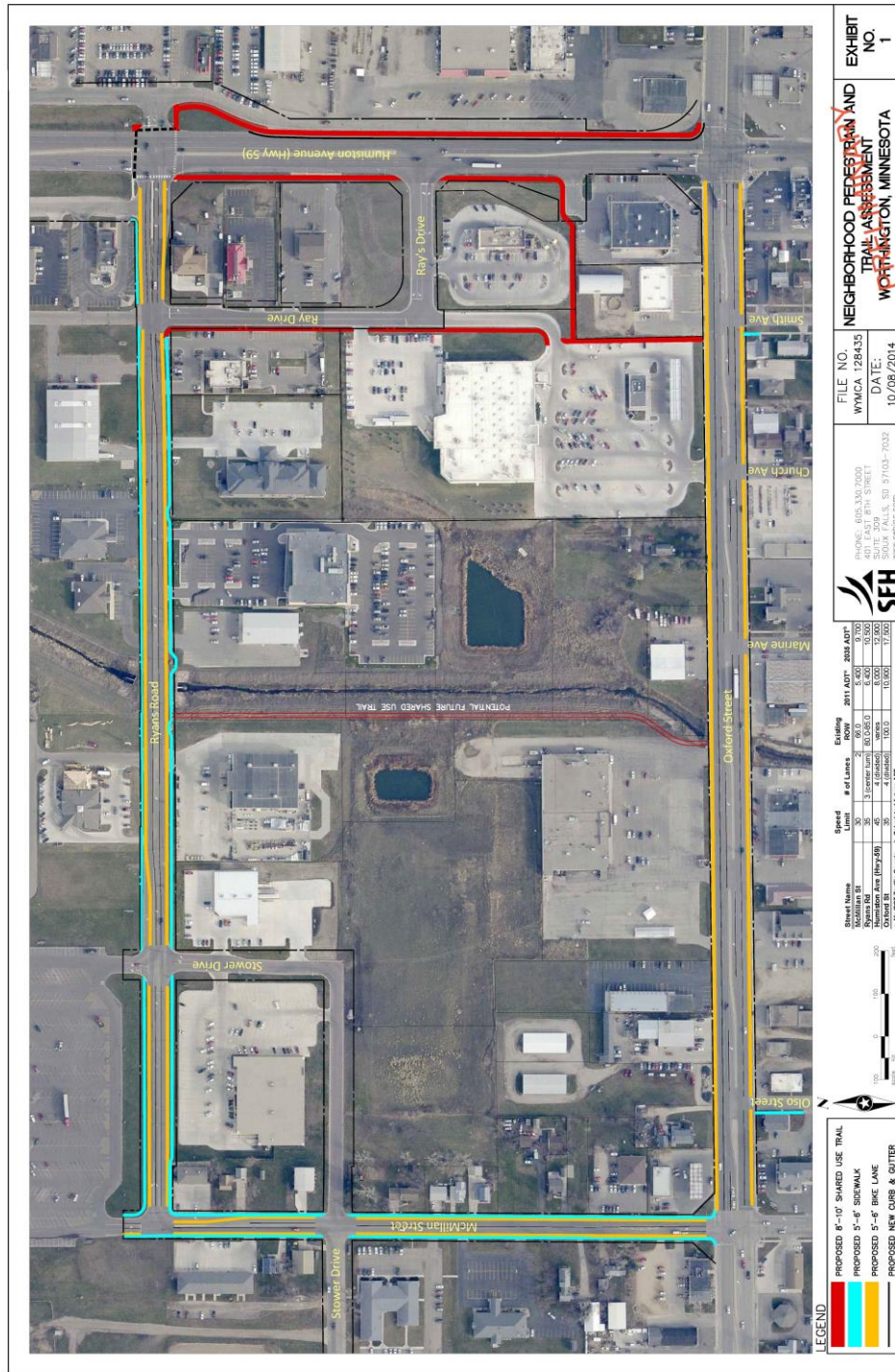
- Connects Residential Streets to Connector Streets
- Medium level traffic volume streets
- Require some pedestrian amenities – A sidewalk on one side of the street or the other is required or a trail conveniently located that connects the neighborhood to key locations. The sidewalk needs to have continuity throughout, so the route is not jumping back and forth from one side of the street to the other.

Safety for pedestrians is the primary concern. Pedestrian connections need to be made to Walmart, Fareway Grocery, and other destinations. Community members are walking and biking, so it is only a matter of time before there is a serious incident.

Public input throughout the Planning Process for the Worthington Active Living Plan shows that there is a need for safe pedestrian connections to destinations in the Oxford – 59 I-90 Corridor. There has been an engineering study showing possible pedestrian infrastructure improvements. The Worthington City Council, Community Development Department Staff, Engineering Department Staff, and Public Works Staff need to hold a public hearing to discuss possible pedestrian infrastructure improvements to make

walking and biking in the Oxford – 59 – I -90 Corridor safe and convenient. Below is a map summarizing the SEH Pedestrian and Trail Assessment for the Oxford – 59 – I-90 Corridor. All of the SEH Pedestrian and Trail Assessment maps can be found in the Appendix to this plan.

Table #45 SEH Pedestrian & Trail Assessment – Oxford -59 – I-90 Corridor



Cecilee Street Connection

Goal: Improve walkability in the neighborhood around Cecilee Street.

Strategy:

Establish sidewalks on Neighborhood Connectors in the Cecilee Street neighborhood.

Create a sidewalk or trail connection between Sungold Heights Mobile Home Park and the trail along Oxford Street.

5 E(s): Encouragement and Education

Existing Conditions:

There are currently no sidewalk or trail connections between the sidewalks along Oxford Street and the neighborhoods around Cecilee Street. There are a number of residents who live in the neighborhoods around Cecilee Street who walk on the street to get to work and to other destinations along Oxford Street. Cecilee Street, Douglas Avenue, and Spring Avenue all function as Neighborhood Connectors. It is generally not safe to walk or bike on Neighborhood Connectors.

► Neighborhood Connector Streets

- Connects Residential Streets to Connector Streets
- Medium level traffic volume streets
- Require some pedestrian amenities – A sidewalk on one side of the street or the other is required or a trail conveniently located that connects the neighborhood to key locations. The sidewalk needs to have continuity throughout, so the route is not jumping back and forth from one side of the street to the other.

Douglas Avenue and Spring Avenue are the only two routes into the neighborhoods around Cecilee Street. Cecilee Street is the main connection to the majority of residential streets in this area. Cecilee Street, Douglas Avenue, and Spring Avenue have higher traffic volumes and traffic speeds, since they function as Neighborhood Connector Streets. There are also a number of businesses in this area that generate semi-truck traffic.

Cecilee Street, Douglas Avenue, and Spring Avenue are narrower streets, so there is not a safe place for pedestrians. A sidewalk is needed to create a safe place for pedestrians. A sidewalk would provide a safe and convenient place for pedestrians.

“North Douglas Avenue at Oxford by Jay Cox is a very busy intersection,” Community Survey.

“Some drivers coming out of Jay Cox don’t even look,” Community Survey.

Table #46

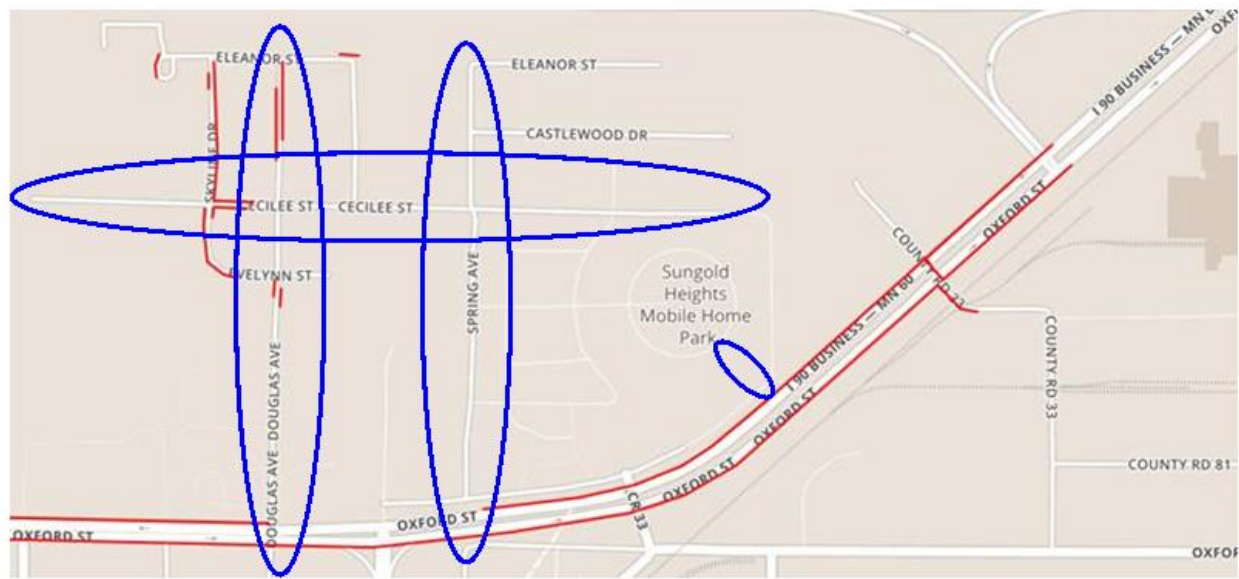
Douglas Avenue – Narrow Street



There are a number of destinations within walking distance of Cecilee Street. JBS is one of these destinations. There is a trail leading to JBS, but a convenient connection is needed. A connection between Sungold Heights Mobile Home Park and the trail leading to JBS would vastly increase the connectivity in this area. Below is a map outlining the key sidewalk gaps in the Cecilee Street neighborhoods.

Table #47

Cecilee Street Sidewalk Connection



Sidewalk / Trail Gap ○

Oxford Street & Diagonal Road Sidewalk Connection

Goal: Improve walkability along Oxford Street.

Strategy:

Fill in sidewalks along Oxford Street leading to Diagonal Road and the trail along West Oxford Street.

5 E(s): Engineering and Encouragement

Existing Conditions:

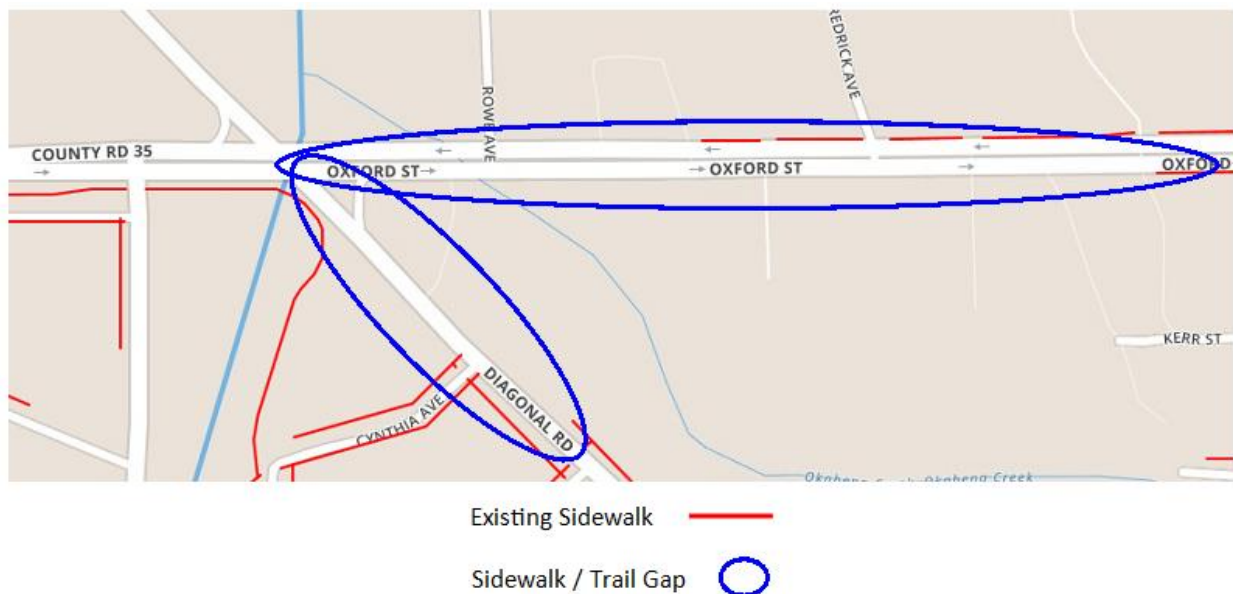
Oxford Street and Diagonal Road are two of the busiest streets in Worthington. Oxford Street and Diagonal Road both function as Connector Streets. Connector Streets require the highest level of pedestrian infrastructure, since it is generally not safe to walk and bike on the street.

► Connector Streets

- Connects primary destinations
- Highest traffic volumes streets
- Require the highest level of pedestrian amenities - Sidewalks on both sides of the street or a trail conveniently located along the corridor that connects key locations.

Below is a map outlining the sidewalk gaps along Oxford Street and Diagonal Road. These are two critical connections. Not having pedestrian infrastructure in this area decrease connectivity and discourages walking and biking.

Table #48 **Oxford Street & Diagonal Road Sidewalk Connection**



Oxford Street Sidewalks – Walkability

Goal: Improve walkability along Oxford Street

Strategy:

Address the sidewalk access issue along Oxford Street.

5 E(s): Engineering and Encouragement

Existing Conditions:

There are sidewalks along the majority of Oxford Street. These sidewalks are generally in good condition, but access is an issue. There are street light poles that block the sidewalk. A person in a wheelchair would not be able to stay on the sidewalk and get around the light poles.

There are a number of community members in Worthington whose primary mode of transportation is walking and biking. Oxford Street does function as a Connector Street. There are higher volumes of through traffic and Oxford Street connects destinations in Worthington. Generally it is not safe to walk on Oxford Street, so sidewalks or a trail is needed to provide a safe place for pedestrians.

► **Connector Streets**

- Connects primary destinations
- Highest traffic volumes streets
- Require the highest level of pedestrian amenities - Sidewalks on both sides of the street or a trail conveniently located along the corridor that connects key locations.

When the sidewalk access issue is addressed, a buffer should be established between the sidewalk and vehicle traffic along Oxford Street. A grass buffer helps to increase the safety of pedestrians. A grass buffer along with street trees and landscaping also helps to increase the aesthetic character.

Table #49

Oxford Street Sidewalk Walkability



Light Pole Blocking Sidewalk



High Number of Driveways on Oxford Street

Oxford Street – Midblock Crossing

Goal: Improve safety and connectivity along Oxford Street.

Strategy:

Add a midblock crossing on Oxford Street by the football field Pizza Ranch area.

Add midblock crossings where needed along Oxford Street.

5 E(s): Engineering and Encouragement

Existing Conditions:

There are sidewalks along the majority of Oxford Street. There are also controlled crossings at the following intersections with Oxford Street:

- Diagonal Road – four way stop
- McMillian Street – stop light
- Humiston Avenue – stop light
- Omaha Avenue – stop light

There are several blocks between these controlled crossings, so it may not be convenient to walk to one of these crossings. People may decide to cross midblock, which can be a safety risk. Additional midblock crossings should be considered along Oxford Street to make crossing safer and in turn walking more convenient.

What are Mid-Block Pedestrian Crossings?

“Mid-block pedestrian crossings are marked crosswalks placed between intersections. They look similar to intersection crosswalks, but often incorporate several design features to increase safety. Mid-block crossings frequently include pedestrian islands, which provide a safe refuge for pedestrians crossing two-way traffic. Users can check traffic one way, cross to the island, and check traffic in the other direction before continuing to cross. Yield lines can be set back to require vehicles to stop farther away from the intersection. Bulb-outs (curb extension / bumpout) that narrow the roadway can be used to calm traffic by slowing speeds, and can make pedestrians more visible to drivers. Where traffic volumes are heavy, mid-block crossings can be signalized to further increase safety and comfort.”²³

Why Use Mid-Block Pedestrian Crossings?

“Many people do not go out of their way to cross at established intersections. Instead, they choose to cross the street using the most direct route, even if that means crossing several lanes of busy traffic. Mid-block pedestrian crossings decrease random and unpredictable crossings associated with a high risk

²³ Michigan Complete Street Coalition. Mid-Block Pedestrian Crossings Explained. Accessed: 6/24/15. Available: <https://michigancompletestreets.wordpress.com/2014/01/21/mid-block-pedestrian-crossings-explained/>

of collisions, especially in areas that are heavily travelled by pedestrians or where block lengths are long.”²⁴

When to Use Mid-Block Pedestrian Crossings:

“An engineering study should be completed to determine the need for a mid-block crossing, which incorporates roadway width, traffic volume, traffic speed and type, desired lines for pedestrian movement and adjacent land use. Heavily traveled areas that have high incidences of random crossings are good candidates for mid-block crossings, including schools, shopping centers, transit centers, and college campuses.”²⁴

Table #50 **Oxford Street – random crossing by football field area**



Safety Benefits:

“Mid-block locations account for more than 70% of pedestrian fatalities. Mid-block pedestrian crossings increase safety by decreasing random and unexpected pedestrian crossings. As stated before, people tend to cross where it is most convenient for them to cross, creating a high risk of collisions. Mid-block pedestrian crossings consolidate pedestrian traffic and allow drivers to predict and expect pedestrian traffic. Around 83% of pedestrians surveyed in an East Lansing, MI study changed their crossing behaviors where mid-block crossings were present. Where pedestrian islands have been included in the crosswalk design, pedestrian crashes were reduced by 46% and vehicle crashes were reduced by 39%.

²⁴ Michigan Complete Street Coalition. Mid-Block Pedestrian Crossings Explained. Accessed: 6/24/15. Available: <https://michigancompletestreets.wordpress.com/2014/01/21/mid-block-pedestrian-crossings-explained/>

Because mid-block crosswalks can be difficult to use for individuals with visual impairments, adding a crosswalk signal to the crossing will help make the treatment safer for all users.”²⁵

Table #51 **Mid-Block Crossing – Example**



Elmwood Avenue & Park Avenue Neighborhood Connection

Goal: Improve walkability in the Elmwood and Park Avenue neighborhood.

Strategy:

Fill in sidewalk gaps along Elmwood Avenue and Park Avenue.

5 E(s): Engineering and Encouragement

Existing Conditions:

Elmwood Avenue and Park Avenue are the primary connector streets to Oxford Street and West Lake Avenue from the residential streets in this area. There is also through traffic from Oxford Street to West Lake Avenue. Elmwood Avenue and Park Avenue function as Neighborhood Connectors. It is generally not safe to walk or bike on Neighborhood Connectors.

- ▶ Neighborhood Connector Streets
 - Connects Residential Streets to Connector Streets
 - Medium level traffic volume streets

²⁵ Michigan Complete Street Coalition. Mid-Block Pedestrian Crossings Explained. Accessed: 6/24/15. Available: <https://michigancompletestreets.wordpress.com/2014/01/21/mid-block-pedestrian-crossings-explained/>

- Require some pedestrian amenities – A sidewalk on one side of the street or the other is required or a trail conveniently located that connects the neighborhood to key locations. The sidewalk needs to have continuity throughout, so the route is not jumping back and forth from one side of the street to the other.

There are sidewalks along segments of Elmwood Avenue and Park Avenue. There are also sidewalks along some of the residential streets in this area. To create a safe and convenient place for pedestrians, a continuous sidewalk should be established along Elmwood Avenue and Park Avenue.

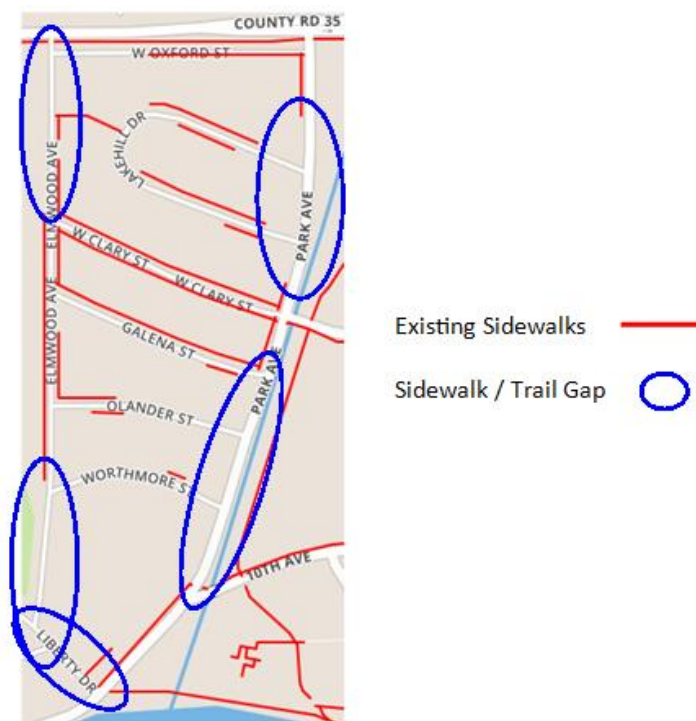
Elmwood Avenue and Park Avenue are within a walkable distance to the Middle School. Establishing a sidewalk along Elmwood Avenue and Park Avenue will increase the connectivity in this area to the existing pedestrian infrastructure. Providing a safer place for pedestrians will help to encourage students to walk and bike to the Worthington Middle School.

The Worthington Middle School is within walkable distance of the neighborhoods along Elmwood Avenue and Park Avenue. There is also a trail along Oxford Street that connects to Elmwood Avenue and Park Avenue. Providing a safe route to the trail will help to create a complete safe route to school, which will encourage walking and biking to school.

There are also a number of people who walk and bike around Lake Okabena. There is also a goal in this plan to improve the pedestrian loop around Lake Okabena. Since there is anticipation of increased pedestrian traffic around Lake Okabena, Elmwood Avenue and Park Avenue are and will be key connections to the lake and pedestrian infrastructure and amenities around the lake. Below is a map outlining the sidewalks gaps along Elmwood Avenue and Park Avenue.

Table #52

Elmwood Avenue & Park Avenue Sidewalk Gaps



College Way & Thompson Avenue Connection

Goal: Improve walkability and connectivity in the College Way and Thompson Avenue neighborhood.

Strategy:

Establish sidewalks along College Way and Thompson Avenue.

5 E(s): Engineering and Encouragement

Existing Conditions:

College Way and Thompson Avenue are primary routes to the Worthington Middle School, the YMCA, and the Minnesota West Community and Technical College Campus. College Way and Thompson Avenue are also the key connection between the trail along North Crailsheim and West Lake Avenue. There are higher traffic volumes and traffic speeds along College Way and Thompson Avenue.

College Way and Thompson Avenue function as a Neighborhood Connector and a Connector Street. College Way and Thompson Avenue are connecting neighborhoods and destinations that generate higher levels of vehicle and pedestrians traffic. Generally, it is not safe to walk and bike on and Connector Streets and Neighborhood Connectors.

► **Connector Streets**

- Connects primary destinations
- Highest traffic volumes streets
- Require the highest level of pedestrian amenities - Sidewalks on both sides of the street or a trail conveniently located along the corridor that connects key locations.

► **Neighborhood Connector Streets**

- Connects Residential Streets to Connector Streets
- Medium level traffic volume streets
- Require some pedestrian amenities – A sidewalk on one side of the street or the other is required or a trail conveniently located that connects the neighborhood to key locations. The sidewalk needs to have continuity throughout, so the route is not jumping back and forth from one side of the street to the other.

Since College Way and Thompson Avenue connect to a number of destinations and neighborhoods, sidewalks or a trail should be established. Sidewalks or a trail along College Way and Thompson Avenue would provide more of a community benefit. There were a number of comments via Wikimapping and the Community Survey regarding the lack of pedestrian infrastructure in this area and the need for it.

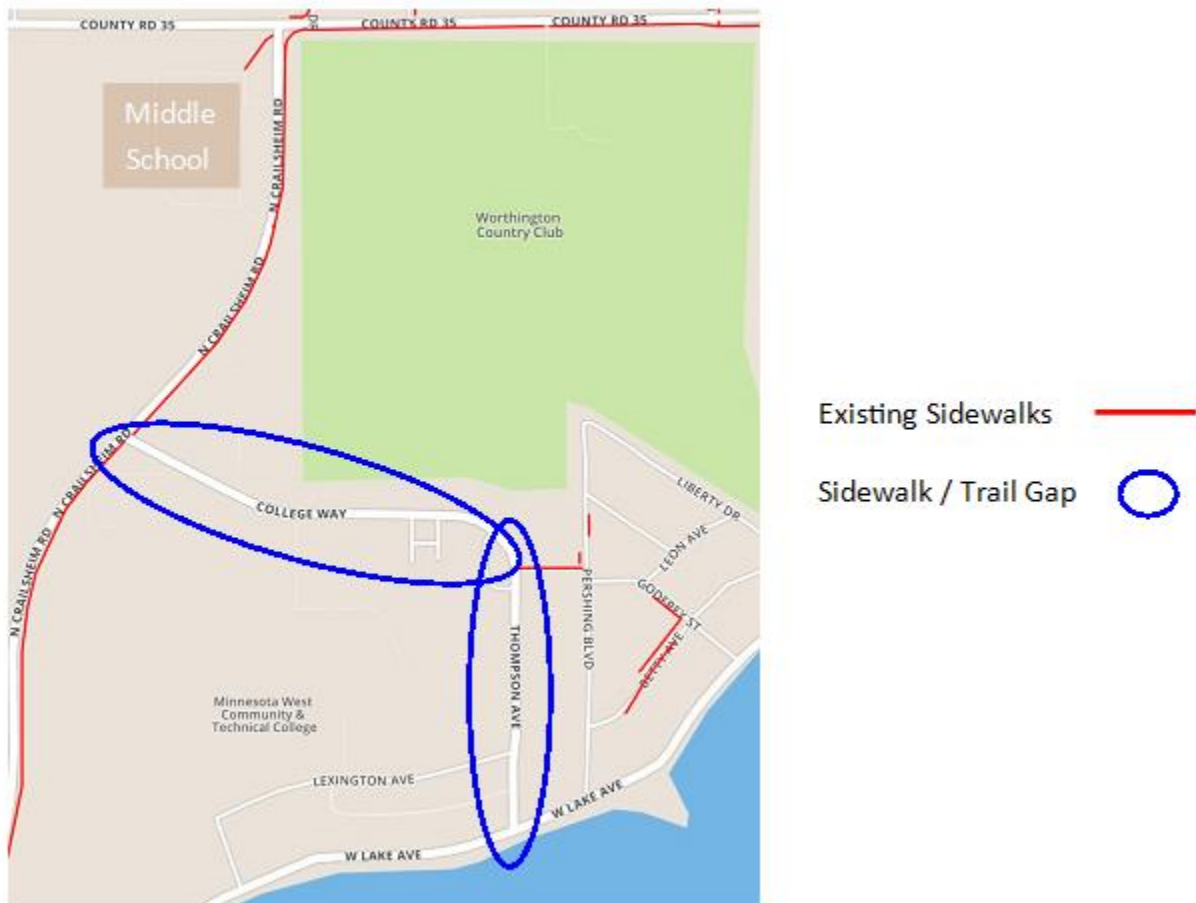
“Children have to walk on the street to get to school and the lake,” Wikimapping.

“This is primary route that should be filled in with sidewalks,” Wikimapping.

“From Centennial Park up the hill to Thompson Avenue, someone is going to get killed,” Community Survey.

“No sidewalk to the YMCA. Is this some kind of a joke?” Wikimapping.

Table #53 **College Way & Thompson Avenue Sidewalk Gap**



Homewood Hills Pedestrian Connections

Goal: Improve walkability and connectivity in the Homewood Hills neighborhood.

Strategy:

Establish sidewalks along Neighborhood Connectors in the Homewood Hills neighborhood.

Improve access between the sidewalk along Salley's Alley and the trail.

5 E(s): Engineering and Encouragement

Existing Conditions:

Homewood Hills has a number of streets with sidewalks, but there are a number of sidewalk gaps and areas where the sidewalks do not connect to the street. The Homewood Hills Neighborhood is within walking distance of the Worthington Middle School, but there are only a few walkers and bikers from this area. Key connections need to be filled in to provide a safe place for pedestrians.

“Need sidewalks where none exist in random areas in the newer addition of Homewood hills,” Wikimapping.

“Not all properties have sidewalks and sidewalks end at boulevard and have to walk on grass before getting to street to cross,” Community Survey.

The Complete Streets Goal in this plan discusses one way of implementing Worthington’s Complete Streets Policy. The proposal is to classify streets in Worthington into three different categories. The top two categories require some pedestrian infrastructure. The purpose of this classification system is to research the function of each street and determine the necessary pedestrian infrastructure to make it safe.

Pedestrian infrastructure improvements need to be made in Homewood Hills to create safe connections to the trail and the Middle School. Filling in the sidewalk gaps on Neighborhood Connectors is the first step. Streets that connect neighborhoods and have both residential traffic and through traffic are most likely Neighborhood Connectors. Separated pedestrian infrastructure is needed on streets classified as Neighborhood Connectors and Connector Streets to provide a safe space for pedestrians.

Neighborhood Connector Streets

► Connector Streets

- Connects primary destinations
- Highest traffic volumes streets
- Require the highest level of pedestrian amenities - Sidewalks on both sides of the street or a trail conveniently located along the corridor that connects key locations.

► Neighborhood Connector Streets

- Connects Residential Streets to Connector Streets
- Medium level traffic volume streets
- Require some pedestrian amenities – A sidewalk on one side of the street or the other is required or a trail conveniently located that connects the neighborhood to key locations. The sidewalk needs to have continuity throughout, so the route is not jumping back and forth from one side of the street to the other.

► Residential Streets

- All other streets
- Lower traffic speeds
- Lower traffic volumes
- Sidewalks are encouraged but there is no sidewalk requirement

Classifying the streets in Homewood Hills will help to create a plan in filling in sidewalk gaps and areas where the sidewalks do not connect to the street. The streets that are functioning as Neighborhood Connectors need sidewalks to provide a safe place for pedestrians. These streets serve more of a community benefit, so they should be addressed first.

Sidewalk gaps on Residential Streets should be discussed with homeowners in Homewood Hills to create a plan for the neighborhood. Different streets require different levels of pedestrian infrastructure to create a safe place for pedestrians. Discussing and classifying the streets in Worthington is the first step in creating a consistent sidewalk and trail network throughout the city. Below is a map outlining the existing sidewalks in the Homewood Hills neighborhood.

Table #54 A Homewood Hills Sidewalks

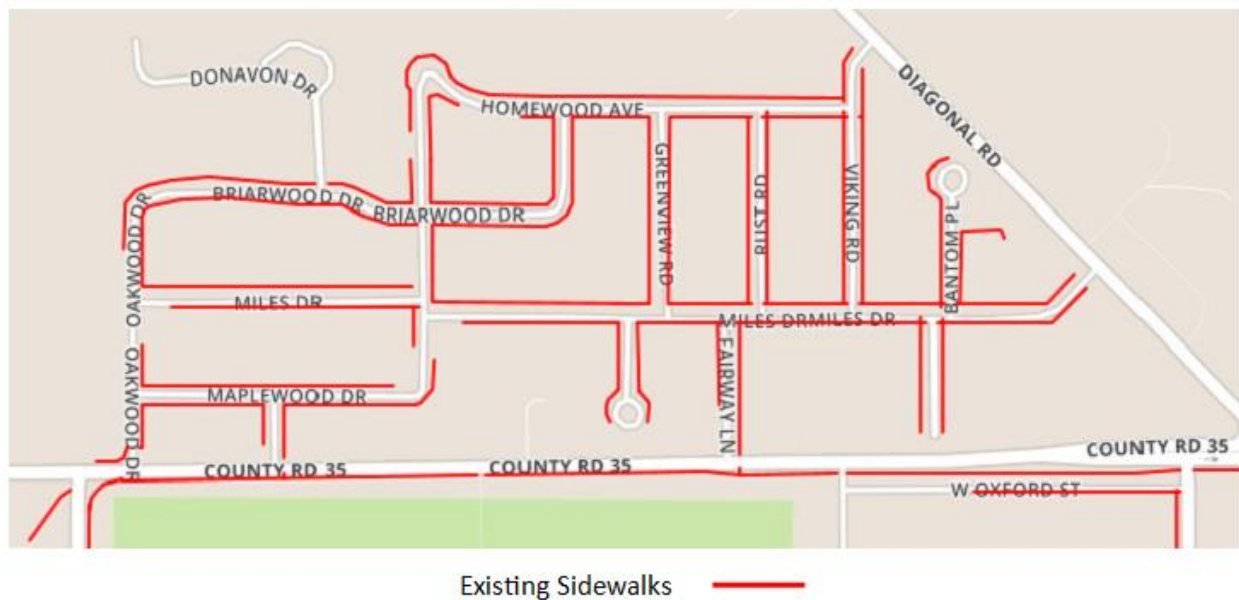


Table #54 B

Homewood Hills Sidewalks – not extending to the street



Sally's Alley—Connectivity Issue



Oakwood Drive—Positive Example

Downtown Walkability - 12th Street East & 1st Avenue

Goal: Improve connectivity between the downtown business district, the neighborhoods east of downtown around Sherwood Street, and the trail along Highway 60.

Strategy:

Fill in the sidewalk gap along 12th Street East between 1st Avenue and Sherwood Street.

Improve the aesthetic along 12th Street East to encourage walk and biking.

Fill in the sidewalk gap along 1st Avenue between 11th Street and 12th Street East.

5 E(s): Engineering and Encouragement

Existing Conditions:

The downtown business district in the City of Worthington is a destination for eating, shopping, and leisure. There are a number of community members who walk and bike to the downtown business district. Businesses in the downtown business district range from restaurants to the Sanford Worthington Medical Center to auto repair.

Twelfth Street is the main connection between the downtown business district and neighborhoods around Sherwood Street. There is a sidewalk gap along 12th Street East, so this connection is incomplete and is not a pleasant place for pedestrians. There are higher traffic volumes and traffic speeds along this route.

Twelfth Street functions as a Connector Street or a Neighborhood Connector, since there is through traffic, and residential traffic, and a higher traffic volume. It is generally not safe to walk and bike on the

road due to vehicle traffic and traffic speeds. Below is a description of a Connector Street and Neighborhood Connector.

► Connector Streets

- Connects primary destinations
- Highest traffic volumes streets
- Require the highest level of pedestrian amenities - Sidewalks on both sides of the street or a trail conveniently located along the corridor that connects key locations.

► Neighborhood Connector Streets

- Connects Residential Streets to Connector Streets
- Medium level traffic volume streets
- Require some pedestrian amenities – A sidewalk on one side of the street or the other is required or a trail conveniently located that connects the neighborhood to key locations. The sidewalk needs to have continuity throughout, so the route is not jumping back and forth from one side of the street to the other.

There is a paved driveway along 12th Street East where the sidewalk gap exists, but the driveway is cracked and is not in great condition. This sidewalk and paved driveway along 12th Street East is a busy pedestrian route. There are a number of community members in Worthington whose primary modes of transportation is walking and biking. The sidewalk gap along 12th Street East is a critical gap to address. Filling in the sidewalk gap will help to create a safer and more convenient space for pedestrians.

Improving the aesthetic character of 12th Street East will also help to encourage walking and biking. Additional trees could be planted in the public right-of-way. There are a number of businesses in this area, so outreach could be done with these businesses to discuss ways to increase the aesthetic character of 12th Street.

Table #55

12th Street East & 1st Avenue Sidewalk Gap



Table #56

12th Street East Sidewalk Gap – Paved Driveway



Table #57

12th Street East Sidewalk Gap – Pedestrian & Vehicle Traffic



Table #58

1st Avenue Sidewalk Gap – Pedestrian Traffic



First Avenue also has high volumes of pedestrian traffic, since it is a primary route to the downtown. People tend to walk and bike using the most direct route. It is natural for pedestrians to use 1st Avenue as the primary route when walking or biking from neighborhoods around Sherwood Street to the downtown business district. Filling in the sidewalk gap along 12th Street East and 1st Avenue will create a safe and convenient connection between the neighborhoods around Sherwood Street to the downtown business district.

Highway 60 Trail & Lake Trail Connection

Goal: Improve connectivity between the trail along Highway 60, the neighborhoods east of downtown around Nobles Street, and the trail along Lake Okabena.

Strategy:

Engineer a trail connection between the trail along Highway 60 and the trail along Lake Okabena.

Construct a trail connection between the trail along Highway 60 and the trail along Lake Okabena.

5 E(s): Engineering and Encouragement

Existing Conditions:

There is an existing trail along Highway 60 and Lake Okabena. The existing route between these two trails is to use the sidewalks along 12th Street, which connect to sidewalks in the downtown business district. There is a sidewalk gap along 12th Street, so this connection is incomplete and is not a pleasant place for pedestrians.

Twelfth Street functions as a Connector Street or a Neighborhood Connector Street, since there is through traffic and residential traffic. Twelfth Street is the primary connection between the downtown business district and the neighborhoods around Sherwood Street. There are higher traffic volumes and traffic speeds.

Providing a convenient connection between the two trails will increase the connectivity of the trail network and encourage trail use. Providing a more scenic route between the two trails around Buss Field will also encourage trail use and enhance recreational opportunities at Buss Field.

There are currently three soccer fields at Buss Field. On weekends this is a very busy area, with multiple soccer games going on at once. Providing a convenient trail connection to Buss Field may encourage families to walk and bike to the weekend soccer games.

Buss Field is primarily used by minority populations. Creating a connection between the two trails and the soccer fields will directly benefit minority populations in Worthington. There are a larger percentage of the minority populations that rely on walking and biking as a primary mode of transportation, so this connection will provide a safer place for pedestrians and make it more convenient to attend soccer games and other activities at Buss Field.

The route of a connection trail has not been discussed extensively. There is an existing railroad bridge the trail could utilize to pass underneath the railroad tracks. The trail could loop around all three of the soccer fields or around one side of the fields or the other.

“There is a beautiful new path on east side of Hwy 60. How does zone F get there? Suppose a walkway attached to the railroad bridge is too far out of reality?” Community Survey.

Table #59 A Highway 60 Trail & Lake Trail Gap

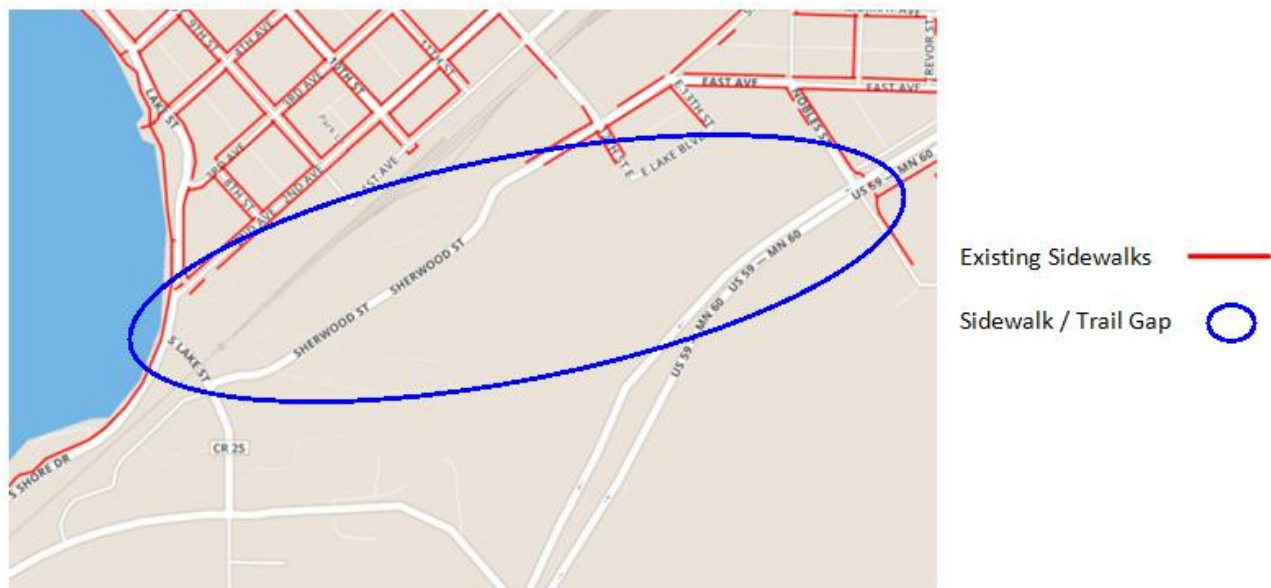
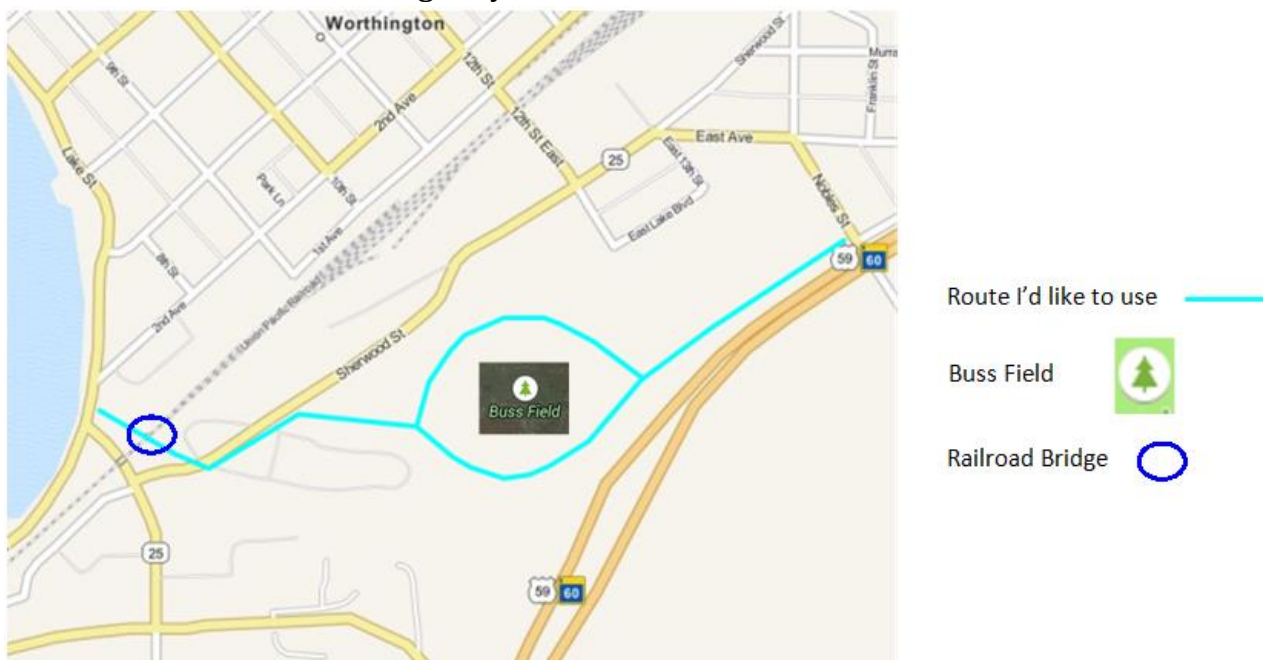


Table #59 B Highway 60 Trail & Lake Trail - Possible Connection



Worthington Non-infrastructure Goals & Strategies

Bike Parking

Goal: Increase biking within the City of Worthington.

Strategy:

Make biking more convenient within the City of Worthington by installing bike racks at key locations.

5 E(s): Encouragement and Engineering

Existing Conditions:

Bike racks make it convenient and safe to ride, store, and lock your bike. Not having bike racks in convenient locations discourages biking and leads potential bikers to not ride their bike. During the Worthington Active Living Plan Planning process locations were identified that need bike parking. These locations are major destinations in the community.

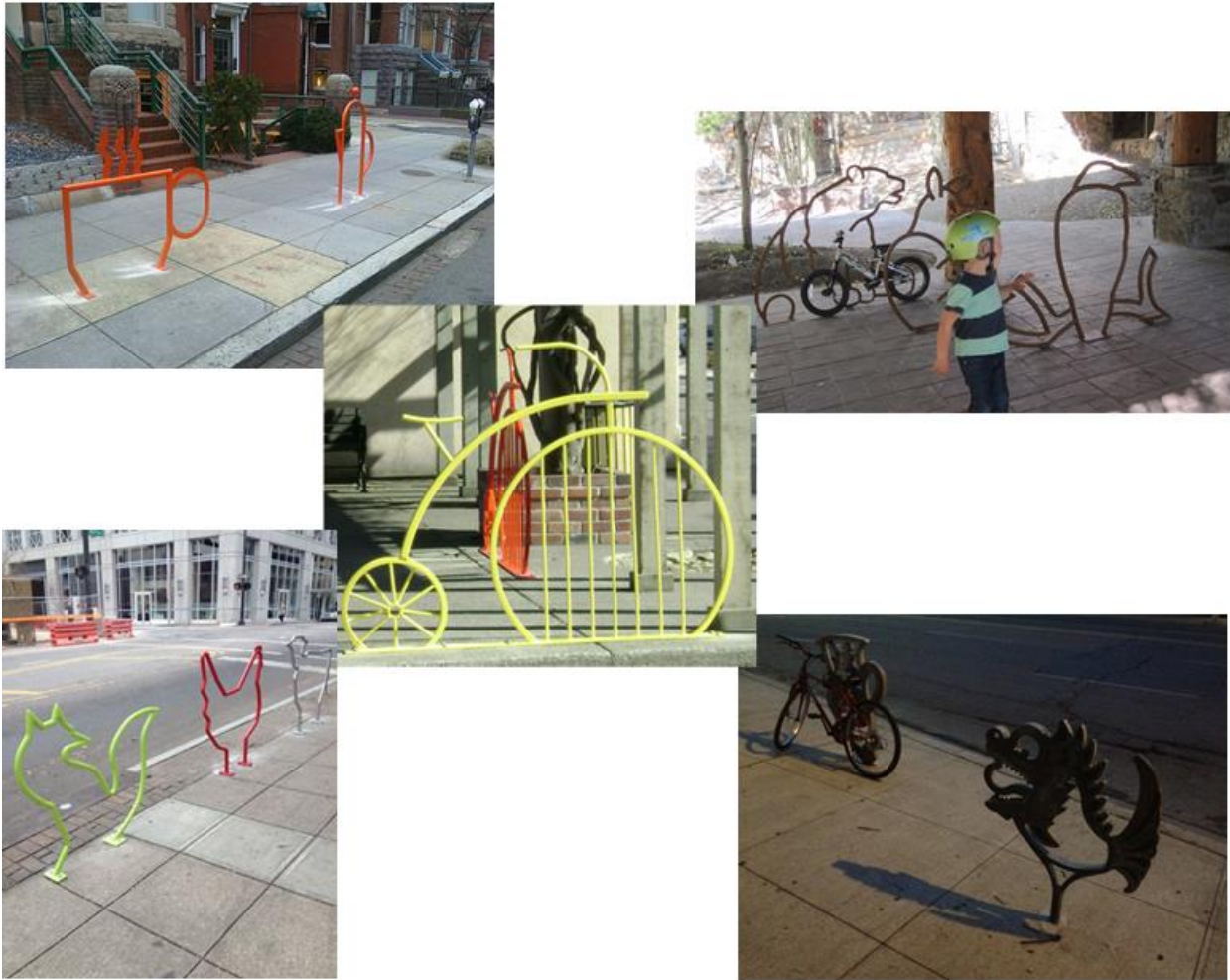
1. Downtown business district
2. Library
3. Prairie Elementary School
4. Parks around the lake
5. Center for Active Living
6. YMCA
7. Ball fields and tennis courts by the Worthington Middle School
8. Movie Theatre



Larger bike racks are great for schools, libraries, and other places that see higher volumes of bike traffic. It is also important to think about locations that need bike parking but a larger bike rack is not needed. Main Street may be one of these locations. The picture below shows animal outlines that work well for one or two bikes. You can have a few of these smaller bike racks along Main Street or in other shopping areas.

Table #60 A

Bike Rack - Examples



The bike racks could be unique and double as art in the community at the other identified locations. Having unique bike racks will increase the community feel and promote biking. Bike rack use may increase, since children may be more likely to use a bike rack shaped like a fish than a plain metal bike rack. The Planning Team did not choose a specific bike rack. Below are a few examples of larger bike racks.

Table #60 B

Bike Rack – Examples: Nautical



Pedestrian Benches

Goal: Increase the walkability within the City of Worthington.

Strategy:

Make walking more convenient by adding benches along higher pedestrian traffic routes and in key locations.

5 E(s): Education and Encouragement

Existing Conditions:

Not having pedestrian benches along higher pedestrian traffic routes and in key locations around Worthington discourages walking. Not having benches also discourages older adults from visiting the parks and using the trail. Older adults may need to rest along a route or in a park before continuing their walk.

Pedestrian amenities help to encourage use. Installing a bench along higher pedestrian traffic routes and in key locations will make it more convenient to visit the park. Below are a few locations that were identified as needing a pedestrian bench.

- Olsen Park by the trail under a tree
- Along the trail by the golf course on West Oxford Street

- Along the trail by the golf course on Crailsheim Road

Stop for Pedestrian Signs

Goal: Increase awareness of driver's responsibility to stop for pedestrians.

Strategy:

Purchase 7 'Stop for PED' signs that the city can rotate around the city at high pedestrian traffic intersections.

5 E(s): Encouragement and Engineering

Existing Conditions:

Drivers in Minnesota are supposed to stop for pedestrians in a crosswalk, but the majority of drivers do not stop for pedestrians. 'Stop for Pedestrian' signs will help to educate drivers on their responsibility to stop for pedestrians. Seeing more of these signs will help to make all crosswalks safer for pedestrians.

The Active Living Planning Team identified a need for 'Stop for PED' signs. These signs help to make drivers aware of their responsibility to stop for pedestrians. The City of Worthington can rotate these signs between high pedestrian traffic intersections. These signs can also be used during community events.

Identified intersections include:

- On 10th Street at the intersection with 5th Avenue
- On 10th Street at the intersection with 5th Avenue
- On 10th Street at the intersection with 2nd Avenue (farmers market)
- On Lake Street at the intersection with 7th Avenue and 8th Avenue
- On 5th Street at the intersection of 11th Street
- On Diagonal Road at the intersection of 10th Avenue

Input from the Active Living Community Survey

- "Drivers often do not yield to pedestrians."
- "Never know if cars are going to let me cross."
- "Very impatient drivers who do not yield to pedestrians or who do not even stop at stop sign."

The Minnesota Crosswalk Law

- Drivers MUST stop for crossing pedestrians at marked crosswalks and at all intersections without crosswalks or stop lights.
- Pedestrians MUST obey traffic signs and signals at all intersections that have them.



- Vehicles stopped for pedestrians can proceed once the pedestrian has completely crossed the lane in front of the stopped vehicle.
- Pedestrians MUST NOT enter a crosswalk if a vehicle is approaching and it is impossible for the driver to stop. There is no defined distance that a pedestrian must abide by before entering the crosswalk; use common sense.
- When a vehicle is stopped at an intersection to allow pedestrians to cross the roadway, drivers of other vehicles approaching from the rear MUST NOT pass the stopped vehicle. Failure to obey the law is a misdemeanor. A second violation within one year is a gross misdemeanor.²⁶

Center Line on Trails

Goal: Increase safety for walkers and bikers on the trails within the City of Worthington.

Strategy:

Stripe a center line on the existing and future trails in the City of Worthington.

5 E(s): Encouragement and Education

Existing Conditions:

The trails in the City of Worthington are shared use trails. Along with a shared use trail comes conflicts between users. Safety is impacted by the number of meetings (opposite direction encounters) and passes (same direction encounters) along the trail. Trail safety is also impacted by trail etiquette. The number of meetings and passes impact how wide a trail should be. The graph below outlines recommended trail widths based on the number of trail users.²⁷

²⁶ Minnesota Safety Council. Accessed: 4/17/15. Available: <http://www.minnesotasafetycouncil.org/facts/factsheet.cfm?qs=BD3BE1A6DFA3335E>

²⁷ Federal Highway Administration. Evaluation of Safety, Design, and Operation of Shared-Use Paths. Accessed: 5/1/15. Available: <http://www.fhwa.dot.gov/publications/research/safety/05139/>

Table #61**Trail Width Chart**

Trail users per hour in each direction	Trail width (feet)			
	8	12	16	20
25	B	B	A	A
50	D	B	A	A
75	D	B	B	A
100	D	B	B	A
150	E	C	B	B
200	F	D	C	B
250	F	D	C	C
300	F	E	D	C
400	F	F	E	E
500	F	F	F	F

Trail etiquette is a major component of trail safety. Striping the trail can also impact the safety of the trail. Users will be more aware of their responsibility to share the trail, if the trail is striped. Below is a quote from a Worthington trail user emphasizing the importance of striping trails.

- “I am mostly a biker and worked for a while in Worthington. Went around that lake hundreds of times. Having been on a number of trails, the biggest problem of course is sharing the trails with walkers and pets. Of course this is necessary but one thing that I think helps is to have a "center line". I think this simple thing helps to send the message to keep to the right and always be aware of oncoming traffic. It also helps bikers who, going faster, need to pass on those ahead.” Community Survey.

Table #62

Trail Center Line - Examples



Driver Education Campaign

Goal: Increase safety for walkers and bikers in the City of Worthington

Strategy:

Implement an annual Worthington Towards Zero Death (TZD) Coalition safety campaign targeting drivers and sharing the road with pedestrians.

5 E(s): Encouragement and Education

Existing Conditions:

Drivers in Minnesota are supposed to stop for pedestrians in a crosswalk, but the majority of drivers do not stop for pedestrians. Walkers are not sure if vehicles are going to stop. Bikers feel that they are invisible on the roadway and that the majority of drivers do not see bikers until it is too late.

The culture around sharing the roadway needs to be improved in southwest Minnesota. As more people are biking, drivers may become more aware of bikers, but etiquette towards sharing the road is still an issue. Annual education around sharing the road will help to raise awareness and safety for pedestrians.

Table #63

Share the Road / Towards Zero Deaths Graphics



Trail Etiquette Campaign

Goal: Increase safety along the trails in the City of Worthington.

Strategy:

Create a share the trail campaign that targets youth and adults.

5 E(s): Education and Encouragement

Existing Conditions:

All community members may not be aware of proper trail etiquette. On a trail the walker is the smallest, slowest object, so it is the responsibility of joggers and bikers to yield to walkers. It is also the responsibility of bikers to yield to joggers. Bikers are fast and can stop quickly, but bikers have to be in control and be able to stop and yield to walkers and joggers.

Walkers do have a responsibility to stay to the right and provide space for joggers and bikers to pass. Walkers should not be 3 or 4 wide and take up the entire trail. Below are other trail etiquette best practices to follow to keep the trail safe for all users.

Trail Etiquette

- Yield to pedestrians.
 - Pedestrians always have the right-of-way.
- Keep right and pass on the left.
 - The trail is like a roadway.
- Announce yourself; for example, “On your left!”
 - Warn trail users as you approach from behind.
- If you stop, get off the trail.

- Always allow other trail users to pass on the left.
- Report maintenance problems to city.
 - Please assist with minor maintenance – clearing sticks and other debris.
- Obey all signs and rules.
 - Stop at intersections.
 - Travel at safe speeds.
 - Keep right.
 - Keep the trail clean.
 - Don't litter.
 - Recycle trash on the trail.
- Keep animals under control.
 - Keep pets on a short leash.
 - Walk pets on the right-hand shoulder.
 - Clean animal waste from the trail.

Crosswalk Painting

Goal: Increase the visibility of pedestrian crossings in the City of Worthington

Strategy:

Maintain crosswalks along Collector Streets and Neighborhood Connector Streets.

5 E(s): Encouragement and Engineering

Existing Conditions:

A number of crosswalks are painted and well maintained within the City of Worthington. The Complete Streets Goal in this plan discusses one way of implementing Worthington's Complete Streets Policy. The proposal is to classify streets in Worthington into three different categories. The top two categories require some pedestrian infrastructure. The purpose of this classification system is to research the function of each street and determine the necessary pedestrian infrastructure to make it safe.

Generally, it is not safe to walk and bike on Connector Streets and Neighborhood Connectors. Additional pedestrian infrastructure is needed to create a safe space for pedestrians and bicyclists. It is

generally not safe since there are higher traffic volumes and speeds. There is also through traffic and residential traffic. Below is a description of Connector Streets and Neighborhood Connectors.

► Connector Streets

- Connects primary destinations
- Highest traffic volumes streets
- Require the highest level of pedestrian amenities - Sidewalks on both sides of the street or a trail conveniently located along the corridor that connects key locations.

► Neighborhood Connector Streets

- Connects Residential Streets to Connector Streets
- Medium level traffic volume streets
- Require some pedestrian amenities – A sidewalk on one side of the street or the other is required or a trail conveniently located that connects the neighborhood to key locations. The sidewalk needs to have continuity throughout, so the route is not jumping back and forth from one side of the street to the other.

Intersections along Connector Streets and Neighborhood Connectors need to be researched in regards to maintaining and painting crosswalks. Intersections along Connector Streets and Neighborhood Connectors that have higher pedestrian volumes need to have well maintained crosswalks. Crosswalks around schools, the downtown business district, and other higher pedestrian volume areas also need to be researched and maintained. The Worthington Safe Routes to School Plan outlines a number of crosswalks that should be painted and maintained.

- “Crosswalk needed at corner of Lake Avenue and Tower Street,” Community Survey.
- “There should be a crosswalk for people to take Nursing Home residents across South Shore Drive to Freedom Park,” Community Survey.
- “There should be a crosswalk at the intersection of Pinewood Drive and Miles Drive in Homewood Hills,” Community Survey.

Trail Adoption Program

Goal: Ensure trail maintenance during warm weather months.

Strategy:

Implement a trail adoption program.

5 E(s): Encouragement and Engineering

Existing Conditions:

To help ensure a clean and attractive looking trail network in and around the City of Worthington, you can adopt a section of the trail. Adopting a section of the trail provides an opportunity for community members to be actively involved in helping to maintain and enhance existing trails for all to enjoy.

When you adopt a trail, you are making sure trail users will always have a well-maintained trail to walk or bike. Managing the trail entails: keeping the trail surface clear of sticks, rocks, and other debris; picking up litter; reporting vandalism, large debris, and safety issues to the City. You are asked to visit the adopted trail section at least twice a month. You can visit the section of trail at your convenience, choosing the days and times you would like to visit the trail.

Who can adopt a trail?

1. Schools
2. Youth Groups
3. Church, Community and Service Organizations
4. Businesses
5. Families, Individuals or Groups of Individuals

Table #64

Adopt a Trail Signage



Adopt a Curb Extension or Street Corner

Goal: Enhance the aesthetic character of the City of Worthington.

Strategy:

Implement a curb extension, street corner, or island adoption program.

5 E(s): Encouragement

Existing Conditions:

To help ensure a clean and attractive looking public right-of-way around the City of Worthington, a curb extension or street corner adoption program should be established. Adding landscaping to the right-of-way will help to increase community feel within the City. Adopting a curb extension, street corner, or island will provide an opportunity for community members to be actively involved in helping to maintain and enhance existing trails for all to enjoy.

When you adopt a curb extension, street corner, or island, you are helping to create a visually more appealing community. The curb extension, street corner, or island adoption program will specify the height plants can be, so they do not decrease visibility. A sign can be displayed to highlight the individual, business, or service organization that adopted the curb extension, street corner, or island.

There are multiple examples landscaping adoption programs nationwide. The City of Randolph is one example that worked with the local Garden Club and the Department of Public Works to establish a landscaping adoption program. Below are pictures showing the size of recommended plants and signage highlighting who is responsible for the landscaping.²⁸

Table #65 A

Landscaping – Examples



²⁸ City of Randolph. Accessed: 6/24/15. Available:
http://www.townofrandolph.com/Public_Documents/RandolphMA_Pics/adopt-an-island

Table #65 B

Landscaping Signage – Example



Bike Education

Goal: Improve bike safety within the City of Worthington.

Strategy:

Maintain the partnership between the Worthington Police Department and Worthington Public Schools.

Support the Walk! Bike! Fun! Pedestrian and Bike Safety Curriculum.

5 E(s): Enforcement

Existing Conditions:

Bike safety education is a critical component to ensure children know traffic laws and how to be safe while biking. Prairie Elementary hosted a Walk! Bike! Fun! Curriculum training in the spring of 2015. Worthington Public School is planning on integrating the curriculum into their physical education department.

The Worthington Police Department plans on supporting Worthington Public Schools in implementation of the Walk! Bike! Fun! Curriculum. Current Worthington Police Department staff is assisting with implementing the curriculum. This partnership is critical to improving bike safety in the City of Worthington.

Walk! Bike! Fun! is a pedestrian and bike safety curriculum that was developed specifically for Minnesota. "WALK! BIKE! FUN! is a comprehensive curriculum that teaches safe traffic behavior through classroom activities and on-the-bike skills practice. The goals of the extensive lesson plans teach

skills to children to walk and bicycle safely — building confidence and helping them stay safe, active, and healthy.”²⁹

Six benefits to walking or biking to school:

- To increase academic achievement — research shows that students who exercise before school concentrate better in class.
- To increase happiness — children that engage in physical activity are more likely to be happy.
- To lower your carbon footprint — a whole school committed to walking and biking can make an enormous impact on reducing carbon dioxide emissions and harmful pollutants.
- To help reduce traffic accidents — the benefit of schools that teach walking and bicycling skills result in up to a forty-nine percent decrease in childhood pedestrian and bicycle collision rates.
- To foster independence — children who walk or bike to school are more likely to walk to other destinations in the neighborhood.
- To increase physical activity — the CDC recommends that children get sixty minutes of physical activity every day.



Sidewalk Education & Enforcement Campaign

Goal: Maintain sidewalk access for pedestrians in the City of Worthington.

Strategy:

Implement an education and enforcement campaign to target illegal blocking of sidewalks.

5 E(s): Encouragement and Education

Existing Conditions:

A sidewalk being blocked by a parked car, truck, trailer, or anything else can be a safety issue. A pedestrian may have to backtrack along the sidewalk and walk on the street, which may not be safe. It is illegal in the City of Worthington to block a sidewalk.

²⁹ Walk! Bike! Fun! Curriculum. Accessed: 4/29/15. Available: <http://www.dot.state.mn.us/saferoutes/pdf/toolkit/walk-bike-fun-curriculum.pdf>

Sidewalk accessibility can also be an issue in the wintertime. Snow is a major barrier to walking in the wintertime. The City of Worthington does have a sidewalk maintenance policy that includes the clearing of snow, but it is not always enforced.

Not having consistent sidewalk connections decreases the walkability of the community and can be a safety issue if the pedestrian is forced to use the street. The Active Living Planning Team recommends an education and enforcement campaign to be implemented and maintained by the Worthington Police Department.

Educate the public that it is illegal to block a sidewalk and on their responsibility to clear snow and debris from sidewalks on their property. Outreach can be done by issuing press releases and by issuing written warnings. Having well maintained sidewalks will increase safety and connectivity within the City of Worthington. There are already policies in place to address these issues. An educational campaign followed by enforcement and continued enforcement can be effective.

On Street Bike Route

Goal: Increase biking within the City of Worthington

Strategy:

Create a signed bike route with painted bike lanes within the City of Worthington.

Market the Worthington bike routes via maps.

5 E(s): Engineering and Encouragement

Existing Conditions:

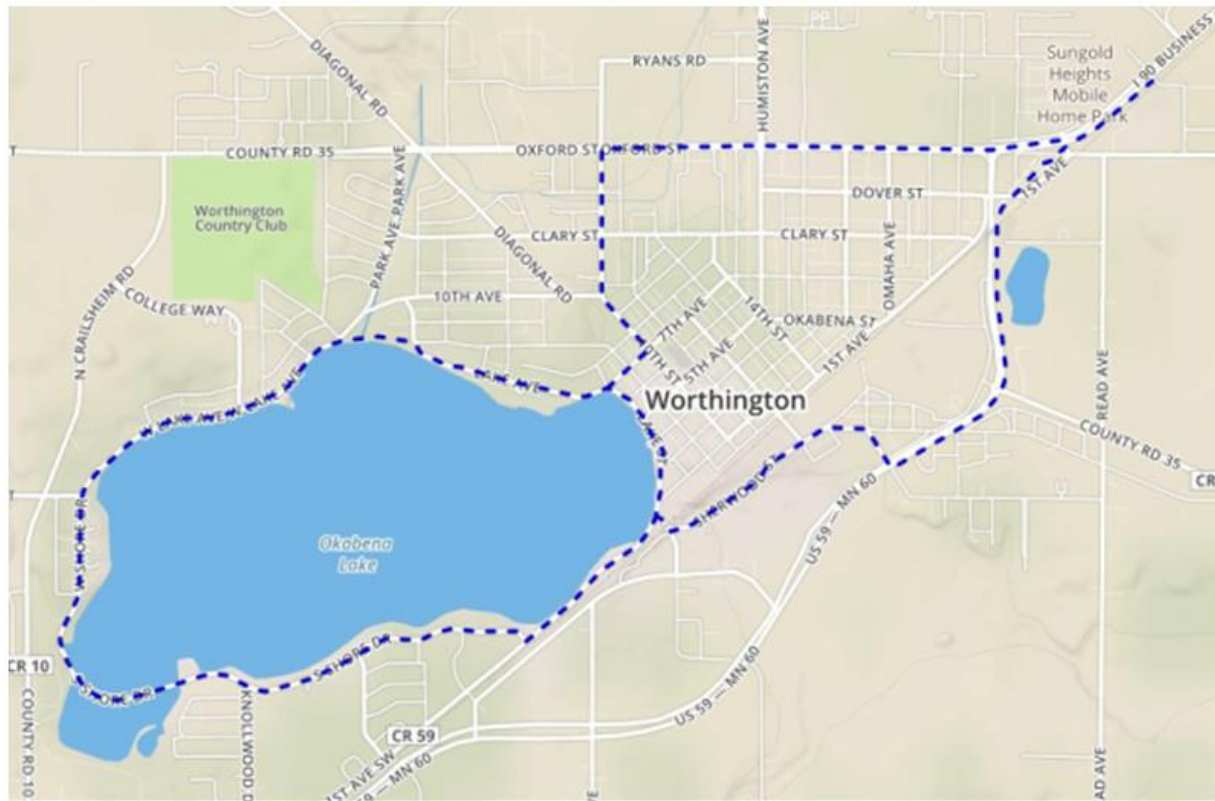
Mapping a bike route encourages greater use, so bikers can be directed to a specific route and safety improvements can be made along the route. A designated route helps to direct users and inform drivers of increased bike traffic in this area. Outlining the route will also show users and potential users how long the route is, so they know what to expect. As usage increases, visibility will also increase, making the loop safer.

The Planning Team identified a need of connecting the neighborhoods to JBS and other large employers. A bike path along Highway 59 / Oxford Street has been proposed by the Minnesota Department of Transportation (MnDOT). The City of Worthington is also willing to extend the bike lanes west of Oxford towards Diagonal Road, but the road dimensions change when you get closer to Diagonal Road. Additional engineering will have to take place to extend the bike lanes on Oxford Street from the trail along highway 60, which connects to JBS, and Diagonal Road.

During the bike route discussions at the two community meetings, a general bike route map was created. This map needs to be finalized by the City of Worthington Engineering Department. The map would have to be approved by the Traffic and Safety Committee and then the City Council before the bike route would be established.

Table #66 A

Proposed On Street Bike Route



Proposed On Street Bike Route — — —

Table #66 B

Proposed On Street Bike Route - Oxford Street



Marketing – Active Living

Goal: Increase walking and biking within the City of Worthington

Strategy:

Create a separate Active Living tab on City of Worthington's website under Parks & Campground.

5 E(s): Encouragement and Education

Existing Conditions:

Marketing is a critical role in getting people active. Visibility plays a big role in promoting walking and biking and increasing safety along primary routes. As more people walk a route, the visibility and culture changes. Drivers become more aware of walkers and bikers and safety improves. This process takes time, but it starts with promoting existing routes.

The City of Worthington does have a trail and a well-developed network of sidewalks. There are some sidewalk gaps, but hopefully over time the critical sidewalk gaps will be filled. Outlining routes and ways to be active will help to increase walking and biking and the health of the community.

Being active does not only affect physical health, but it also affects emotional health, community safety, and community health. Community members that walk and bike interact with other community members. This helps to increase cooperation and safety in the community. Community members are eyes and ears for law enforcement, so routes can become safer for all users.

Having an Active Living tab under Parks and Campground can be used to highlight:

- Trails
- Bike Routes (distance of the routes)
- Walking Routes (distance of the route)
- Community Events (ways to be active)
- Trail Etiquette
- Worthington Active Living Plan
- Worthington Safe Routes to School Plan

Sidewalk Maintenance

Goal: Keep sidewalk clear of debris and snow

Strategy:

Work with land owners to keep sidewalks clear of debris and obstructions.

Enforce the snow removal policy.

5 E(s): Encouragement and Engineering

Existing Conditions:

A vehicle or branch blocking a sidewalk can be a major obstacle for an elderly person or someone with a disability. It is important to keep sidewalks cleared of debris and snow. A sidewalk is public right-of-way and so is the space along a street where a sidewalk could be.

It is illegal to block a sidewalk with a vehicle parked in a driveway. The Worthington Police Department should work with land owners to not block sidewalks with parked cars. A written warning should be issued when a sidewalk is blocked and a ticket should be written for repeat offenders.

It is the responsibility of the land owner to remove branches and other debris that can block a sidewalk. A written warning could be issued when a sidewalk is blocked and a ticket should be written for repeat offenders. It is important to work with property owners, since the majority of residents will comply if asked.

The City of Worthington has a snow removal policy for sidewalks. This policy needs to be enforced. A written warning could be issued when a sidewalk is not cleared of snow and a ticket should be written for repeat offenders.

Keeping sidewalks cleared helps to encourage walking in Worthington. If sidewalks are not maintained, pedestrians will have to walk on the street. Some streets in Worthington may not be safe to walk on due to higher traffic volumes and traffic speeds. Not maintaining sidewalks creates a potential safety issue.

During the Active Living community meetings, a specific section of sidewalk by the library was identified. The sidewalk by the library is partially blocked by bushes. These bushes need to be trimmed back to provide adequate clearance. It may be difficult for a person in a wheelchair to navigate this section of sidewalk.

- Cars often park blocking the sidewalk.

Pedestrian Lighting Issues

Goal: Improve pedestrian lighting in the City of Worthington.

Strategy:

Install pedestrian scale lighting along the trail leading to JBS.

Install pedestrian scale lighting on trails within the City of Worthington.

Improve lighting on Highway 59 just south of Interstate 90.

Improve lighting on North McMillan Street between Oxford Street and Stower Drive.

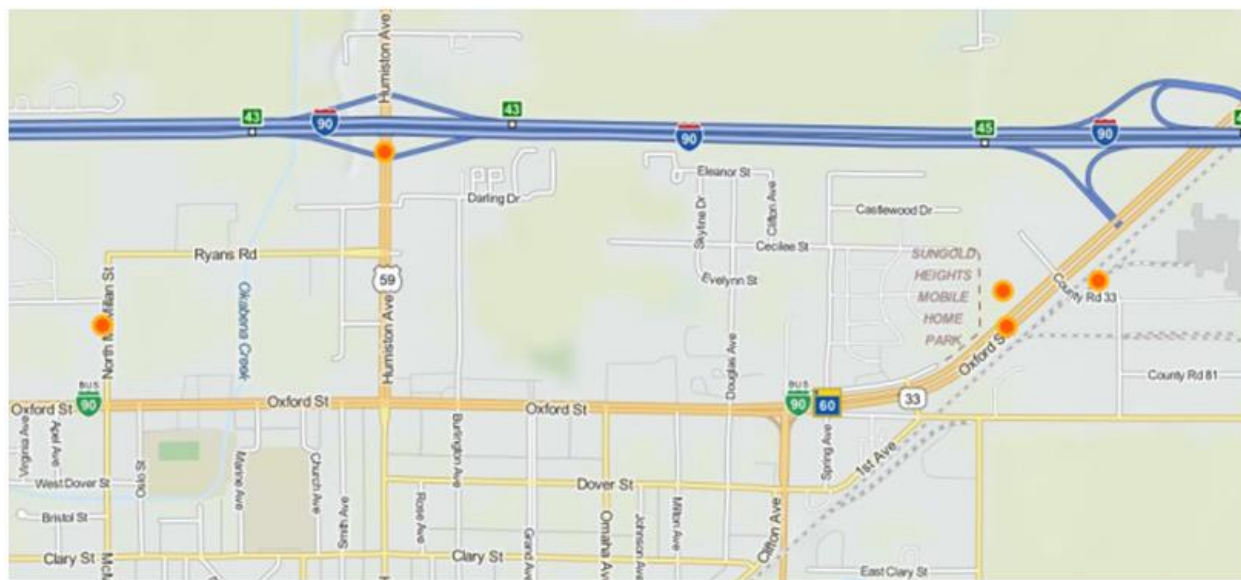
5 E(s): Encouragement, and Engineering

Existing Conditions:

Pedestrian scale lighting helps to encourage walking and biking. With work and school some people may only have time to walk or bike in the morning or in the evening. Evening shifts also result in some people having to walk or bike to and from work when it is dark outside. It is important to have good visibility, so pedestrians can see where they are going and vehicles can see pedestrians. Well lit trails and streets also make pedestrians feel safer from harassment and abduction.

“Need trail lighting for JBS employees who walk or bike to work. They come or go in the dark due to shift work hours. Need safe lighting in order for JBS to encourage employees to walk and bike.” Wikimapping.

Table #67 **Locations with Poor Lighting – Wikimapping**



Pedestrian Lighting Issue ●

The locations above were identified via Wikimapping or at the Active Living community meetings. These locations have poor pedestrian lighting. Below are examples of pedestrian scale light and street lighting.

Table #68 A **Pedestrian Lighting Examples**



Table #68 B

Pedestrian Lighting Examples – Sizing Scale



Trail Safety

Goal: Improve bike safety along the trails in the City of Worthington.

Strategy:

Add pedestrian scale stop signs along the trails, so pedestrians have to stop and look for crossing vehicle traffic.

5 E(s): Encouragement, and Engineering

Existing Conditions:

Pedestrian scale stop signs along trails help to alert users of a busy intersection and the need to stop and check for crossing vehicle traffic. Stop signs are critical at crossings where cross traffic does not stop. These crossings and other busy trail crossings need to be identified and pedestrian scale stop signs need to be posted.

Additional signage along with the pedestrian scale stop sign could include:

- Cross traffic does not stop
- Cyclist Dismount (helps to ensure cyclists look carefully for cross traffic before crossing).

Table #69

Pedestrian Scale Stop Sign – Cross Traffic Does Not Stop



Table #69 B

Pedestrian Scale Stop Sign – Cyclist Dismount



V Plan Maintenance

The Worthington Active Living Plan is a working document. The City of Worthington will maintain the plan. The City of Worthington will continue to make updates to the plan with assistance and recommendations from local organizations and groups.

Monitoring, Evaluation, & Updating the Plan

As community planning occurs, additional goals and strategies will be added in Chapter VI, Additional Goals and Strategies. It is critical to allow for public input regarding additional goals and strategies. Community residents and the Worthington City Council should be asked to provide input regarding infrastructure projects.

Continued Public Involvement

Future trails and pedestrian projects will be discussed at city council meetings and open community meetings. It is recommended that a trails committee be formed in the City of Worthington or in Nobles County. A trails committee will help to ensure continued planning occurs. Continued planning and public involvement will ensure proposed projects have been vetted.

VI Additional Goals & Strategies

The Worthington Active Living Plan is a working document. The City of Worthington will continue to make updates to the plan. As planning continues, additional recommendations should be made to the Additional Goals and Strategies Chapter.

Conclusion

When making a land use decision and an investment in the future, it is critical to consider all the costs, not just the construction costs. There are costs associated with sprawl, inactivity and negative health outcomes, and the loss of community. Decision makers need to consider the function of every street, road, and plot of land. Is the function of this place to create wealth or is the function of this particular roadway to move cars quickly. If it is to move cars quickly, do not try and generate developments that will decrease walkability and connectivity in the community.

When you are rebuilding a street, ask yourself if this street can be narrow. The cost savings of narrowing the street could be used to install sidewalks and create a more livable community. On existing streets consider other higher return investments, like painting crosswalks or putting in striping on the streets to narrow the lanes and slow down traffic.

*"When you narrow up the street lanes, cars drive slower, people feel more comfortable there. They walk across the streets, to a store across the street. And in a real subtle and cheap way you get a lot more pedestrian traffic, a lot more retail, a lot more people. And people spend money, and that's what makes a place wealthier. When people are there, people invest more."*³⁰

³⁰ Econ Talk. Charles Marohn on Strong Towns, Urban Development, and the Future of American Cities. Accessed: 5/13/15. Available: http://www.econtalk.org/archives/2014/05/charles_marohn.html

Table #70

Decision Makers Checklist: Built Environment

Ask Yourself and the Decision Making Group

- How will my decision impact health?
- How will my decision impact connectivity?
 - Compact efficient development vs. sprawl (which decreases connectivity)
- Will my decision make the community more inviting (more walkable and bikeable)?
- Were all users considered when making the decision?