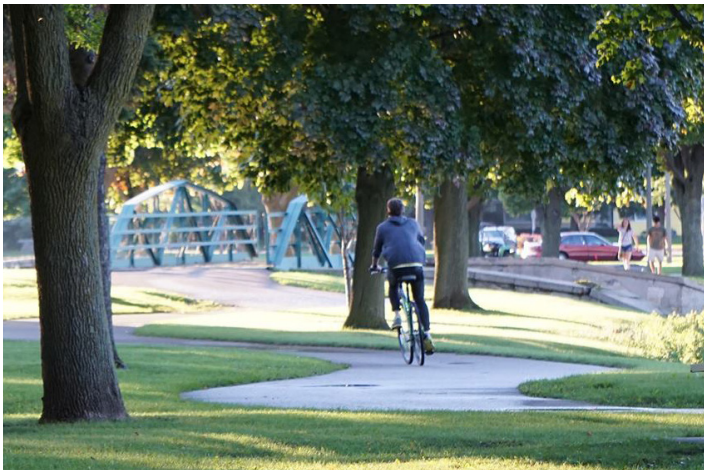
CITY OF OSHKOSH

BICYCLE AND PEDESTRIAN MASTER PLAN 2019

ADOPTED
2019



ACKNOWLEDGEMENTS

OSHKOSH COMMON COUNCIL

Mayor Lori Palmeri
Deputy Mayor Steve Herman
Bob Poeschl
Debra L. Allison-Aasby
Matt Mugerauer
Jake Krause
Bill Miller

BICYCLE AND PEDESTRIAN ADVISORY COMMITTEE

James Michelson, Chairperson
Adam BellCorelli
Brad Brown
Vicky Redlin
Benjamin Rennert
Jay Stengel

2011 PLAN
Adopted by the Oshkosh Plan Commission
August 16, 2011

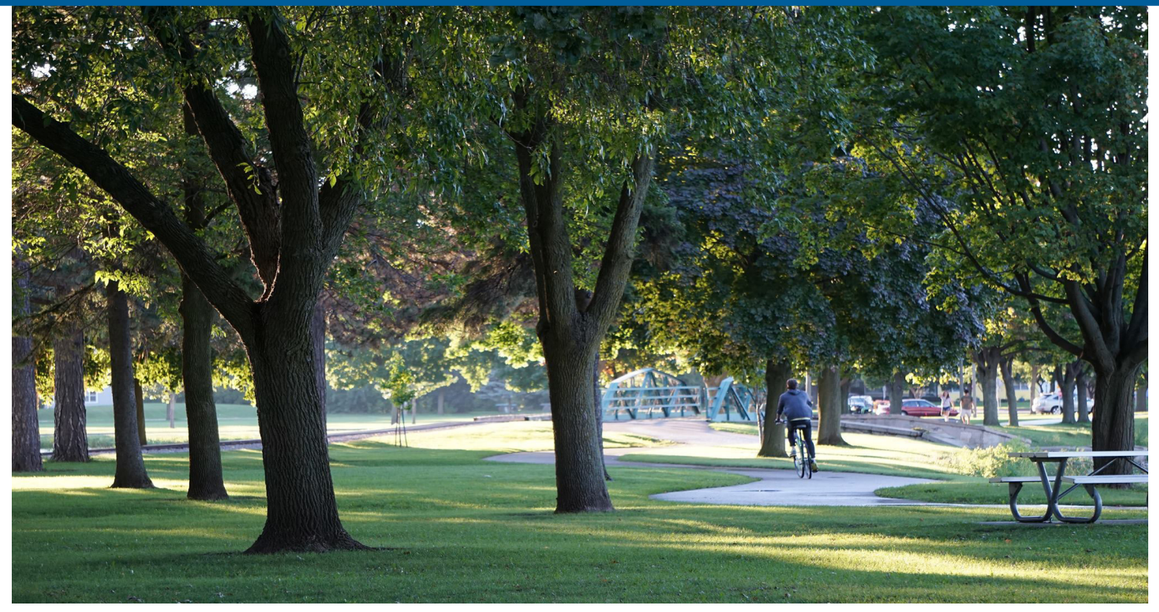
Approved by the Oshkosh Common Council
September 27, 2011

2019 PLAN UPDATE
Adopted by the Oshkosh Plan Commission
November 5, 2019

Approved by the Oshkosh Common Council
November 12, 2019

TABLE OF CONTENTS

CHAPTER ONE



1 EXECUTIVE SUMMARY

1.1 INTRODUCTION

The City of Oshkosh has prepared this 20-year Bicycle and Pedestrian Master Plan to develop sound strategies for improving pedestrian and bicycle transportation throughout the Oshkosh area. The plan was originally developed in 2011 with an update of the plan in 2019. The planning area includes the City of Oshkosh with connections to surrounding areas within Winnebago County.

During the 2011 plan development, oversight was provided by the Pedestrian and Bicycle Plan Stakeholder/Steering Group, a working team formed of interested citizens, representatives from various organizations and city departments. The group was responsible for providing direction and review of plan components through an extensive series of workshops. The process also included multiple public information meetings and public hearings. And in 2019, the Bicycle and Pedestrian Advisory Committee provided oversight to the update of the 2011 plan.

1.2 EXISTING CONDITIONS

The Oshkosh area consists primarily of a grid pattern street system that is altered by the area's waterways, primarily Fox River and Lake Winnebago. As a result, the river requires several bridge crossing to maintain a complete transportation network, the bridges are not built with all users in mind. The prevalent transportation pattern evident in Oshkosh is the use of all of the street width for motorized traffic on most major collectors and arterials. In some cases, the street is divided into four travel lanes, with no terrace and with the sidewalk, if present, abutting the street.

The Oshkosh urbanized area is connected to the surrounding rural areas by a system of State and County highways. Interstate 41 (I-41) provides the primary north- south route through the area. Travel east to west is accommodated through Highway 21, Witzel Avenue, 9th Avenue, West 20th Avenue and South Park Avenue. Bicycle and pedestrian travel is prohibited on I-41; however, the Tribal Heritage Crossing of the Wiouwash Trail runs adjacent to I-41 over Lake Butte des Morts and allows for bicycle and pedestrian travel.

Connections between places of residence to places of employment are integral to increasing mode share. Providing safe and adequate facilities along these "commuter routes" creates opportunities for commuters who want to bike to work. Similarly, connections to area trails, such as the Wiouwash Trail and the Tribal Heritage Crossing increases comfort levels for bicyclists of all abilities.

Transportation systems and land use patterns have a well-documented reciprocal relationship. As Oshkosh has grown, the demand for transportation system improvements has also grown. However, these transportation improvements have also provided more convenient access to areas outside city limits, thus spurring outward growth. More than any other transportation system, the road network and the prevalence of the automobile has impacted land use patterns over the past half-century.

Notable land use patterns or issues for the City of Oshkosh and Winnebago County include:

- Water divides the urbanized area between north and south and to a lesser extent from east and west.
- Development is often not contiguous; in general, Oshkosh has its distinct areas of both residential and commercial development. In many cases, water, or undeveloped land separates Oshkosh from neighboring communities.
- Development, as it exists today, directly corresponds to the freeway system.

Walking is often overlooked and undervalued as a transportation mode. Yet, in the Oshkosh area, 3.4 percent of commuters reported regularly walking to work. These percentages do not include other pedestrian activity, such as walking to schools and universities, commercial areas or for recreation. Many of these pedestrians are children, seniors and persons utilizing wheelchairs or mobility devices who require special consideration regarding facility design.

Gaps in the bicycle and pedestrian system include any place there is a lack of biking or walking facilities, maintenance issues, or areas where bike paths and major routes should connect to other routes, recreational areas, residential areas, commercial centers or employment centers. Noteworthy gaps include the difficulty of bicycle and pedestrian travel under or over I-41 and through roundabouts. General comments from the public about these gaps include the usability of these areas on a year-round basis. The quick and effective removal of snow can be an issue when not done with respect to crosswalk locations or curb lanes.

1.3 RECOMMENDATIONS AND IMPLEMENTATION

Recommendations in this update were developed using an inventory and analysis of existing facilities, ordinances, other local plans, review of recommendations in the 2011 Pedestrian and Bicycle Circulation Plan, and through feedback from the City of Oshkosh Bicycle and Pedestrian Advisory Committee. This plan includes recommendations for programs as well as facility enhancements/improvements.

Bicycle and Pedestrian Program Recommendations

Bicycle and pedestrian program recommendations include education, encouragement, and outreach programs; enforcement; facility maintenance and policy recommendations. Education, encouragement, and outreach programs are designed to foster a safe bicycling and walking environment and increase the prevalence and enjoyment of walking and bicycling. Successful encouragement and outreach efforts largely rest on a foundation of extensive and effective educational programs. Educational programs include identifying safe routes for bicyclists and pedestrians, teaching bicycling techniques, disseminating information regarding regulations that govern bicyclists and pedestrians, and instructing bicyclists and pedestrians how to handle potentially dangerous situations. Encouragement activities are valuable because they promote biking and walking through incentives (such as rewards) or provisions (such as safe and convenient parking facilities). Outreach activities are among the easiest and cost effective initiatives that advance bicyclist and pedestrian safety. Consistent enforcement of traffic laws also plays an important role in advancing bicyclist and pedestrian safety. Likewise, maintenance is important for all types of transportation facilities. Periodic and consistent removal of debris and resurfacing/patching of deteriorated surfaces are important procedures for ensuring that users are provided with safe and reliable transportation facilities.

General Facility Improvements

While useful to encourage and sustain walking and bicycling, operational programs and policies are futile without adequate facilities. Too often, facility planning is synonymous with planning separate trail systems. However, separated bike/pedestrian paths and bike lanes are the most costly of all facility improvements. Because of these costs and the amount of public right-of-way needed to accommodate these systems, separate bikeways seldom form a complete bicycle and pedestrian system. For the City of Oshkosh, it is most efficient and cost effective to make use of established transportation right-of- ways, especially within the older developed areas of the City. Trails and side paths are mainly utilized in newer areas of Oshkosh, at natural corridors and where physically and economically feasible. Signed bike routes direct pedestrians and bicyclists to the preferred routes and also help to direct visitors from outside the community to desired destinations safely and efficiently. These routes also increase the likelihood that motorists will encounter bicyclists which may heighten driver attentiveness and bicyclist confidence. All bike routes within Oshkosh are recommended to be signed, whether they have bike lanes, sharrows, wide curb lanes, or are simply shared-use roadways.

As important as bicycle facilities are for increasing mobility, it is also critical to maintain a comprehensive vision for creating a "walkable" and "bikable" Oshkosh, which includes bike lanes, shared roadways, multi-use trails, side paths and sidewalks. Not only does this plan recommend specific facility improvements, it sets policy priorities and offers guidance and tools to help promote bicycling and pedestrian safety, efficiency and effectiveness.

The overriding principle for bicycle and pedestrian friendly streets is to create public right-of-ways that work effectively for and benefit all modes of transportation. Regardless of whether streets and roads are included in this plan's designated bicycle network, bicyclists will use all available roads. The recommended bicycle network has been developed to formalize safe routes from "origins" to "destinations", eliminate gaps within the current network, continue the expansion of the existing off-road facilities utilizing natural and other areas of opportunity, and improve access and connectivity for the bicyclist and pedestrian within the Oshkosh community.

Best facility practices must be considered when any transportation network is developed, reconstructed or augmented. Policy and project priorities for pedestrians are much more programmatic while those for bicycles tend to be more physical in nature.

Pedestrian Facilities

Oshkosh's pedestrian framework is partially in place as sidewalks or trails are required for new subdivisions and other developments. Sidewalks form the backbone of the physical portion of the pedestrian transportation network, however, what constitutes a "pedestrian-friendly" or "walkable" community is much more than merely having sidewalk facilities in place. High quality, navigable, appropriately sized sidewalks are one part of the equation; however, other elements such as crosswalks, signalization, traffic calming, pedestrian-scale lighting, street furniture, and space separating vehicle traffic lanes from sidewalks are also extremely important. Best facility practices for Oshkosh pedestrian facilities include three primary facility types:

• Sidewalks - facilities located within a right-of-way along the side of a road and are normally separated from the vehicular section by a curb, and paved with concrete.

• Sidepaths - segregated facilities located next to or alongside a roadway separated from motor vehicle traffic by a physical barrier and/or increased greenspace.

• Multi-use trails - segregated trails or paths located within their own right-of-way or easement area not closely associated with a roadway.

• Shared Use Path - all encompassing federally used term for all accessible routes.

Bicycle Facilities

Suitably designed bikeways can be identified formally as "Bike Routes." These routes indicate a major route that most bicyclists will feel comfortable using.

This plan recommends a comprehensive and interconnected bicycle network by suggesting a facility type (bike lane, sharrow, multi-use trail) throughout the Oshkosh area.

Design Approach

The design consideration behind route determination is best described as "what type of bicyclist is best served by the City's bicycle facility network". The Bicycle and Pedestrian Stakeholder/Steering Group made the decision that all network route and facility choice decisions be made with the basic bicyclist in mind, not the novice or advanced rider. To this end, the design approach contained the principal of locating designated bicycle routes off unsafe, high traffic volume streets and truck routes, wherever possible. Furthermore, the group also focused on route placement as it related to existing traffic controlled intersections and the separation of bicycle travel from vehicular traffic such as the utilization of park properties, greenways and rail corridors

The proposed recommended improvements are delineated into three sections that correlate with facility recommendations:

•Signed and striped roadways - a portion of the roadway which has been designated by striping, signing and other pavement markings for preferential or exclusive use by bicyclists.

•Signed and/or shareways - also known as stripeless bike lanes, do not have corridors reserved for bicyclists, but signs and pavement symbols indicate that they are bike routes and heavily used by bicyclists.

•Multi-use path - segregated trails or paths located within their own right-of- way or easement area and are not closely associated with a roadway.

1.4 FUNDING OPPORTUNITIES

The Plan recommends that the City of Oshkosh appropriate annual funds for bicycle and pedestrian improvements as it does for other roadway projects. Bicycle and pedestrian projects may be eligible for state or federal funding. Pedestrian improvements that benefit public health and safety should be funded through the general fund and included in the Capital Improvement Plan, supplemented by available state and federal grants, rather than through assessment.

1.5 APPENDICES

The plan is supplemented by four appendices referenced within the document and help to provide information that is readily accessible and/or would potentially be "lost" within the body of the document. These appendices are described below:

Appendix A:

Bicycle and Pedestrian Master Plan Survey Results- A survey to solicit information regarding biking and walking within Oshkosh by Oshkosh residents and visitors. Posted on the City of Oshkosh website as well as provided at bicycle and run/walk events.

Appendix B:

Existing Bicycle Facilties Map - Depicts facilities which have been implemented since this plan was adopted.
Existing and Recommended Bicycle Facilities Combined Map - Depicts a combined version of recommended and implemented facilities.

Appendix C:

Bicycle Count Locations - displays locations where usage counts were conducted.

Appendix D:

Crash Map

CHAPTER TWO

2 INTRODUCTION & PLANNING PROCESS

The City of Oshkosh has prepared this master plan to develop sound strategies for improving bicycle and pedestrian transportation throughout the Oshkosh area for users of varying abilities. The planning area includes the Oshkosh metro area and is illustrated in Appendix B.

This document incorporates recommendations from existing planning documents including the 2017 Winnebago County Bicycle and Pedestrian Plan, Comprehensive Plan 2005-2025, the Oshkosh Area Safe Routes to School Plan, the 2007 Oshkosh MPO Long-range Transportation/Land Use Plan and the 1998 and 2011 Pedestrian and Bicycle Circulation Plan.

The recommendations are designed to increase transportation safety for pedestrians, bicyclists and motorists. Infrastructure improvements such as sidewalks, marked crosswalks, bike lanes, paved shoulders, multi-use trails and traffic and informational signs are among the type of facilities recommended to improve conditions for the non-motoring public. Opportunities to educate bicyclists about safety and promote bicycling as a viable mode of transportation are discussed. Additionally, recommendations to improve enforcement, equity, and education regarding traffic laws effecting bicyclists and pedestrians are also presented.

2.1 WHY IS THIS PLAN IMPORTANT?

Before the 1900's, bicycling and walking were common modes of transportation in the United States. Transportation infrastructure and land use patterns reflected the need to accommodate these travel modes. Compact communities allowed people to walk to most destinations. Early urban roads were originally paved to help bicyclists reach their destinations. As the pace of life changed and vehicles were made affordable, bicycling and walking gradually dropped in priority as modes of transportation. Since the late 1940's, motor vehicles have been the dominant influence on transportation and land use patterns and subsequently, these land use patterns have changed behavior patterns. The convenience and flexibility of the automobile are easily recognized; however, automobiles are not the most efficient mode of travel for many types of trips. The benefits of alternative modes of travel such as bicycling and walking are particularly significant for short urban trips. Arguments for encouraging these modes of travel are both functional and philosophical:

- **Bicycling and walking are two of the most cost efficient modes of transportation with regard to operation, development and maintenance of facilities.**

- **Bicycling and walking are two of the best forms of physical exercise and therefore can effectively enhance the health of the citizens of Oshkosh.**

- **Bike and pedestrian facilities developed for transportation purposes can simultaneously enhance recreation and tourism opportunities in Oshkosh.**

- **Bicycling and walking do not contribute to noise or air pollution and thus contribute to the health of the community. Off-road facilities developed for bicycling and walking can protect and enhance our natural resources.**

- **Bicycling and walking promote social interaction of families and community members.**

The premise of "multi-modalism" is simple: to create a transportation system that offers not only choices among travel modes for specific trips, but more importantly, presents these options so that they are viable choices that meet the needs of individuals and the Oshkosh community as a whole.

As part of the federal initiative to encourage multi-modal transportation in general and bicycle transportation in particular, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) requires that long range planning of transportation systems include provisions for bicycling and walking. This legislation builds on the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21) to supply funds and a programmatic framework for investments in transportation infrastructure. SAFETEA-LU also provided funding for all fifty states to initiate a Safe Routes to School program to enable and encourage school children (K-8) to walk and bicycle to school.

In Wisconsin, bicycling and walking have been promoted through WisDOT's TransLinks 21 Plan. This transportation initiative is a twenty-five year plan that was developed through two years of planning and public involvement. The TransLinks plan calls for bicycle and pedestrian provisions on state highway projects, inclusion in Metropolitan Planning Organization's (MPO) plans and recommends the development of a State Bicycle Pedestrian Plan.

Nearly eight million Americans enjoy bicycling and all are pedestrians, only 5.5% of all urban trips in the United States are by walking and 0.9% by bicycling. Safety, distance and traffic conditions are reasons often cited for the infrequent use of these travel modes. In this fast-paced society, time and distance are perhaps the greatest impediments to non-motorized travel. Nearly 40% of trips made in the U.S. are less than two miles. Trips of this length are very easily accomplished by average bicyclists, and when compared to driving, require little additional time.

Walking and bicycling are underutilized modes of transportation in the Oshkosh area. While mean travel time to work in Oshkosh was under 16.5 minutes in 2006-2008, very few chose to commute by bicycle (0.2%) or by walking (3.8%) (US Census 2006-2008). The relatively small number of walking and bicycling trips can be attributed to impediments such as traffic conditions, safety concerns, transportation infrastructure and topography. This plan is designed to increase levels of bicycle use by making recommendations to reduce these impediments, and to change the prevailing attitude that using an automobile is easier and more convenient than bicycling or walking.

2.2 HOW WAS THE PLAN DEVELOPED?

Development of this plan was administered by city planning staff with oversight from the Pedestrian and Bicycle Stakeholder/Steering Group. It was initially prepared by Schreiber/Anderson Associates, a consulting firm out of Madison, Wisconsin and had multiple portions rewritten using their draft as a base. The stakeholder/steering group included representatives from various organizations and reflected a broad cross-section of biking and walking interests which provided guidance and met regularly over an 24 month time period to review the work to date. There were also two public informational meetings held during the planning process.

2.3 DEFINITION OF TERMS

The language used within this plan document is meant to be easily understandable, however many of the terms used are not common place and are specific terms used primarily by engineers, planners, bicycle enthusiasts and pedestrian advocates. Although all the concepts within this plan are described and defined within the body of the text, below is an alphabetical list of terms with definitions that may not be clearly or fully understood by the general public.

Bicycle Facility- A general term denoting improvements and provisions that accommodate and encourage bicycling, including but not limited to parking and storage facilities, and shared roadways not specifically defined for bicycle use.

Bike Box (Also known as an Advanced Stop Line)- Road markings at signalized road interesections allowing bikes a "head start" when the traffic signal changes from red to green.

Bike Lane - A portion of a roadway that has been designated by pavement markings and signs for preferential or exclusive use by bicyclists.

Bumpout (also known as curb extensions, chokers or neckdowns) – A traffic calming measure, primarily used to extend the sidewalk, reducing the crossing distance and allowing pedestrians to cross and approaching vehicles to see each other when vehicles parked in a parking lane would otherwise block visibility.

Chevron- A double directional arrow used with a bicycle symbol as pavement marking painted on the roadway to designate a sharrow and remind motorists and cyclists that they are sharing the roadway.

Chicane- Curb extensions that alternate from one side of the roadway to the other, forming S-shaped curves.

Complete Streets- Roadways designed and operated to enable safe, attractive, and comfortable access and travel for all users, including pedestrians, bicyclists, motorists and public transport users of all ages and abilities.

Crosswalk- Any portion of a roadway at an intersection or elsewhere distinctly indicated as a pedestrian crossing by pavement marking lines on the surface, which might be supplemented by contrasting pavement texture, style, or color.

Cul-de-sac- A dead end, closed, no through road/court. Street with only one inlet/outlet.

Designated Bicycle Route– A system of bikeways officially designated and including appropriate directional and informational signs.

Diverter- Barriers placed diagonally across an intersection, blocking certain movements.

Easement- A right given to another person or entity to trespass upon or use land owned by somebody else.

Gutter Pan- A depression which runs alongside a city street, usually at the curb and diverts rain and street-cleaning water away from the street and into a storm drain.

Intermodel- The use of more than one mode of transportation, including but not limited to automobile, mass transit, bicycling, walking.

Manual of Uniform Traffic Control Devices (MUTCD)- A document that defines the standards used by road managers nationwide to install and maintain traffic control devices on all public streets, highways, bikeways, and private roads open to public traffic. The MUTCD is published by the Federal Highway Administration (FHWA).

Median- A reserved area that separates opposing lanes of traffic on divided roadways, such as divided highways.

Median Barrier- Raised islands located along the centerline of a roadway and continuing through an intersection to block cross traffic.

Motor vehicle- A vehicle whose propulsion is provided by an engine or motor. The internal combustion engine is the most common motor choice, although an electric motor, a combination of the two (hybrid electric vehicle), or other types are also included.

Multi-use trail- A lane separated from facilities in the right-of-way which are physically separated from motorized vehicle traffic by an open space or barrier. Multi-Use paths are typically used exclusively by pedestrians, bicyclists, and other nonmotorized users.

Nonmotorized Vehicle- A vehicle whose propulsion is provided by means other than an engine or motor. These include but are not limited to bicycles, skateboards, and animals.

Park-and-ride- A parking lot that allows drivers to transfer to other transportation choices such as walking, bicycling, mass transit, or carpooling. The vehicle is stored in the parking lot and retrieved when the owner returns.

Pedestrian- A person on foot, in a wheelchair, on skates or on a skateboard.

Pedestrian Facilities- A general term denoting improvements made to accommodate and encourage walking.

Right-of-way (ROW) - A portion of land that is granted, through dedication, easement or other mechanism, for public purposes including transportation purposes, such as for a trail, driveway, rail line or street. A public right of way is not restricted by land ownership and grants access to all.

Road Diet- A technique in transportation planning whereby a road is reduced in number of travel lanes and/or effective width in order to achieve systemic improvements. A typical road diet technique is to reduce the number of lanes on a roadway cross-section. One of the most common applications of a road diet is to improve safety or provide space for other users in the context of two-way streets with 2 lanes in each direction. The road diet reduces this to 1 travel lane in each direction. The freed-up space is then used to provide sidewalks, landscaping strips, bicycle lanes, wider lane widths on remaining traffic lanes, or a two-way turn lane or center turn lane. Additional information is located in Appendix G.

Roundabout- A circular intersection with yield control at entry, which allows a vehicle to travel counter-clockwise around a central island.

Rumblestrip- a series of intermittent, traverse areas of rough textured, slightly raised, or depressed road surface typically located across travel lanes, on a roadway shoulder or centerline/islands to alert road users of unusual or special road conditions.

Safe Routes To School (SRTS)- The SRTS Program empowers communities to make walking and bicycling to school a safe and routine activity. The Program makes funding available for a wide variety of programs and projects, from building safer street crossings to establishing programs that encourage children and their parents to walk and bicycle safely to school.

Shared Roadway- A roadway that is officially designated and marked as a bicycle route, but which is open to motor vehicle travel and upon which no bicycle lane is designated.

Sharrow- An design painted on a roadway to mark a bicycling route placed in the center of a travel lane to indicate that a bicyclist may use the full lane. The name “sharrow” is a contraction of “shared roadway”.

Shoulder- The edge or border running on either side of a roadway. It can be dirt, grass, gravel or pavement typically intended for emergency stops. In most places there is a solid white line separating the shoulder and the road.

Sidepath- Segregated travel facilities located next to or alongside a roadway that are separated from the roadway and divided from motor vehicle traffic by a physical barrier and/or increased greenspace.

Sidewalk- That portion of the street between the curb line or lateral line of the roadway, and the adjacent property line or on easements of private property that is paved or otherwise improved and intended for use by pedestrians.

Speed Hump/Speed Bump- Rounded raised pavement devices placed across roadways to slow and/or discourage traffic.

Speed table- Flat topped speed bumps often constructed with a brick or other textured material to slow traffic.

Traffic calming- a way to design streets to encourage people to drive more slowly that is self-enforcing.

Traffic Circles - Barriers placed in the middle of an intersection, directing all traffic in the same direction.

Trailhead- A point a trail or path begins often intended for hiking, biking, horseback riding, or off-road vehicles. Modern trailheads often contain rest rooms, maps, sign posts and informational brochures about the trail and its features, as well as parking areas for vehicles and trailers.

Transit (Public)- A shared passenger transportation service which is available for use by the general public, as distinct from modes such as Taxicab, car pooling or hired busses which are not shared without private arrangement.

Wisconsin Department of Transportation (WisDOT)- State Agency responsible for planning, building and maintaining Wisconsin’s network of state highways and Interstate Highway System. The department shares the costs of building and operating county and local transportation systems.

2.4 PLANNING PROCESS

The planning process began with the formation of a vision, goals and objectives that were the basis for evaluating and guiding the overall plan. Plan goals were refined through the planning process to suit the local conditions as determined by an inventory and analysis of existing data. Inventories of conditions included historical data, field observations (conducted by traveling the planning area), research of local and county planning documents and meetings with the public and municipal staff.

Planning and design criteria derived from Wisconsin Bicycle Planning Guidelines, Wisconsin Bicycle Facility Design Handbook, AASHTO Guidelines for Developing Bicycle Facilities, AASHTO Guidelines for the Planning, Design, and Operation Pedestrian Facilities, and The National Bicycling and Walking Study were used as general analysis criteria. Following the analysis of planning considerations, city staff, the Bicycle and Pedestrian Stakeholder/Steering Group and the public reviewed the interim plan.

2.5 BICYCLE AND PEDESTRIAN STAKEHOLDER/STEERING GROUP MEETINGS

The genesis for the development of this plan began with the formation of the City of Oshkosh Bicycle and Pedestrian Stakeholder/Steering group. Membership included advocates, municipal representatives, recreation groups, and other members of the Oshkosh community. The steering group was the direct oversight authority regarding creation of this plan and shaped its vision, content and recommendations. They met approximately 18 times over a 24 month period and created the draft plan from beginning to finalization. It was recommended that a form of this body become formalized as an official City of Oshkosh commission/board and remain intact after adoption of this plan to act as a clearinghouse and resource for the City of Oshkosh to help grow bicycle and pedestrian mobility within the Oshkosh metro area. Hence the Oshkosh Bicycle and Pedestrian Advisory Committee was established.

2.6 SURVEY

The public process used for the preparation of this plan included multiple opportunities to gather stakeholder feedback. One opportunity was the creation of an online survey posted on the City Planning Department’s website. Notification of the survey was provided via word of mouth, the Tour-de-Titan ride, the University of Wisconsin-Oshkosh website and various media outlets. Results from the survey are included in Appendix A.

2.7 PUBLIC MEETINGS

There were two public information meetings held during the planning process positioned to “bookend” the plan creation prior to review and recommendation by the interested/affected city boards/commissions and the City Council. The first public information meeting was an introductory Kick-Off meeting to outline the process and solicit input; the second unveiled the draft plan to the public as an open house. Following the public information open house, the draft plan was brought before multiple city boards and commissions for formal review and recommendations. Once reviewed by individual commissions and boards, a workshop before the Common Council took place for presentation of the plan and in-depth discussion on its elements. Formal public hearing and adoption of the draft plan by the Common Council took place following the Council workshop. The schedule of public meetings and workshops as well as a description of each are as follows:

Public Informational Meeting Kick-Off - August 30, 2009
This meeting was held at City Hall, 215 Church Avenue, Oshkosh WI. It was attended by approximately 35-40 people. The purpose of this “open house” was to display maps (bicycle audit, etc.), draft goals and objectives, and to allow participants to discuss their preferences about biking and walking in the Oshkosh area. The meeting provided an informal opportunity for community members to discuss issues and aspirations with members of the Stakeholder/Steering group and the consultant. Some of the discussions included:

- Highway 41 as a barrier to safe access around and out of the city.
- Significant origin and destinations.
- Preferred routes (east/west and north/south connections).
- Safety of existing routes as major areas of concern.
- Connections to the WIOUWASH Trail.

Additional information gathering took place through a Pedestrian and Bicycle Plan informational kiosk/display manned at the Tour De Titan, UWO Transportation Day, multiple running-walking events, special interest group presentations such as the League of Women Voters, Winnebago County Healthy Recreational Opportunity Committee and the State of the City.

Government Body Workshop - July 12, 2011
A workshop for City of Oshkosh Boards/Commissions including a joint board/commission presentation and discussion sponsored by the Traffic Review Advisory Board and including members from the Sustainability Advisory Board, Advisory Parks Board, the Plan Commission and the Common Council was held at City Hall, 215 Church Avenue, Oshkosh WI. It was attended by a majority of individuals serving on the specific boards/commissions as well as six of the seven Common Council members. The primary purpose of the workshop was to introduce the key concepts and recommendations included in the draft plan well before it went to a public open house or the individual boards/commissions for formal review and recommendation.

Public Informational Meeting: Open House - August 11, 2011
A second public meeting was held at the Oshkosh Seniors Center, 200 North Campbell Road, Oshkosh, WI. It was attended by 80-90 people. The open house included a presentation of the plan to the general public, discussion and opportunity for community comment. Questions were fielded by city staff and Stakeholder/Steering group members and comments and suggestions were provided by attendees.

Sustainability Advisory Board - August 1, 2011
A formal review of the plan was held during their regularly scheduled meeting at City Hall, 215 Church Avenue, Oshkosh WI. Questions were addressed and comments/suggestions provided resulting in recommendation for approval by the Sustainability Advisory Board to the Common Council.

Advisory Parks Board - August 8, 2011 - City Hall, 215 Church Avenue, Oshkosh WI
A formal review of the plan was held during the regularly scheduled meeting. Questions were addressed and comments/suggestions provided resulting in a recommendation for approval being made by the Advisory Parks Board to the Common Council.

Traffic Review Advisory Board - August 9, 2011 - City Hall, 215 Church Avenue, Oshkosh WI
A formal review of the plan was held during the regularly scheduled meeting. Questions were addressed and comments/suggestions provided with the result being a recommendation for approval being made by the Traffic Review Advisory Board to the Common Council.

Plan Commission - August 16, 2011 - City Hall, 215 Church Avenue, Oshkosh WI
A formal review of the plan was held during the regularly scheduled meeting. Questions were addressed and comments/suggestions provided with the result being a recommendation for approval being made by the Plan Commission to the Common Council.

Common Council Workshop - August 23, 2011 - City Hall, 215 Church Avenue, Oshkosh WI
A workshop/presentation of the plan was held by the Oshkosh Common Council prior to their regularly scheduled meeting. All recommendations, comments and suggestions received by the general public and the individual boards/commissions were provided including the staff response to them.

Common Council - September 27, 2011 - City Hall, 215 Church Avenue, Oshkosh, WI
Public Hearing and final review was held at the City of Oshkosh Common Council meeting.

CHAPTER THREE

3 VISION & GOALS

3.1 VISION STATEMENT

Develop and maintain a pedestrian and bicycle friendly transportation system that is safe, equitable, increases physical activity and recreational options, and is an economic asset to the community.

3.2 SIX E'S

Education: Increase public and political awareness of the need for, and benefits of, bicycle and pedestrian facilities and a well-interconnected multimodal transportation network.

Encouragement: Encourage more residents to walk and/or bike as a means to reduce dependence on the automobile, conserve energy, and increase physical activity

Enforcement: Improve safety, reduce conflicts, and built mutual awareness and respect between motorists, bicyclists, and pedestrians by improving enforcement of all multimodal transportation laws.

Engineering: Improve the connection between bicycle, pedestrian, automobile and transit networks within the City of Oshkosh by identifying gaps, barriers, and needed multimodal facilities and connections.

Evaluation: Establish criteria to evaluate the education, encouragement, enforcement, and engineering components of existing and future bicycle and pedestrian planning efforts, programs, and facilities.

Equity: Work to support safe, active, and healthy opportunities for all members of the community. Incorporate equity concerns throughout all other goals and activities to identify barriers and ensure equitable results.

Table 1: Trail Mileage by Type 2019

Trail Type	Mileage Totals
Total Existing	45.50
Bicycle Lane	16.63
Off Road Bike Route	16.50
Sharrow	9.31
Signed Bike Route	3.05
Recommended Facility	94.56
Total Existing and Recommended	94.56

3.3 GOALS AND OBJECTIVES

Goals are statements that describe a desired condition or outcome. Objectives state the rationale for achieving a goal.

3.3.1 Maintain a permanent Bicycle and Pedestrian Committee within the City of Oshkosh governmental structure.

a. Oversee implementation of the Bicycle and Pedestrian Master Plan.

b. Encourage widespread, safe, and responsible use of walking and bicycling as forms of transportation.

c. Have an ongoing, working relationship with City Departments and other committees.

d. Act as a liaison for Oshkosh in regard to pedestrian and bicycle issues with outside agencies and government bodies.

3.3.2 Develop a well-connected bicycle route system that links a variety of facilities into a cohesive transportation system (both on and off-road).

a. Promote safe bicycle and pedestrian travel modes by linking pedestrian and bicycle systems throughout Oshkosh.

b. Capitalize on the availability of easements and access corridors to enhance the existing linear trail network throughout and beyond the city limits.

c. Improve the overall quality of life for both residents of, and visitors, to the City of Oshkosh by providing a variety of opportunities for safe walking and biking.

d. Ensure adequate bicycle parking, intermodal coordination and connectivity.

3.3.3 Increase the utilization and availability of funding for bicycle and pedestrian improvements.

a. Target resources for bicycle and pedestrian improvements to areas of greatest transportation need.

b. Use this plan as a project guide when applying for all funding sources.

c. Promote public-private partnerships to compete for funding sources for which Oshkosh is not eligible.

3.3.4 Design roads to be compatible with surrounding uses as well as pedestrian, bicycle and transit friendly.

a. Integrate the trail system into a bicycle and pedestrian transportation network which supports linkages to mass transit facilities.

b. Identify priority origins and destinations and increase access to these locations by bicycle and pedestrian travel modes.

c. Minimize the number and severity of vehicle-bicycle and vehicle-pedestrian conflicts.

d.Ensure sufficient road capacity for areas with high amounts of pedestrian and bicycle traffic.

3.3.5 Provide adequate education, encouragement, evaluation, and enforcement programs.

a. Increase educational opportunities for pedestrians, bicyclists, and motorists about rights and responsibilities on roadways and shared-use facilities.

b. Promote incentives for walking or biking.

c. Increase the usability of shared transportation facilities by placing additional emphasis on enforcing speed limits, rights of way, etc. along pedestrian and bicycle corridors.

d. Promote and provide dedicated facilities for public and private developments such as connecting walkways, transit stops and bicycle parking.

e. Educate riders on bike registration.

3.3.6 Enhance intergovernmental cooperation and coordination for improving multimodal transportation.

a. Engage elected officials and residents in development and utilization of bicycle and pedestrian facilities.

b. Work cooperatively in developing grant-writing workshops, maintenance seminars, and training sessions.

c. Guide outside agencies such as Winnebago County, the State of Wisconsin, metropolitan planning agencies, etc. to utilize and adopt this plan's elements in their projects and plans.

3.3.7 Develop shared-use transportation standards to include in the development review process for development planning.

a. Ensure "complete streets" are constructed or reconstructed to prevent costly future retrofitting.

b. Promote connectivity to destinations and alternative methods of transportation within neighborhoods.

c. Interconnect all areas in the community, especially neighborhoods to the transportation network

CHAPTER FOUR

4 CURRENT CONDITIONS AND SAFETY

The inventory and analysis of factors affecting bicycle and pedestrian transportation in Oshkosh include an assessment of access, population patterns, transportation patterns, existing facilities, destination identification, and a review of state and local ordinances and plans.

4.1 ASSESSMENT OF BICYCLE AND PEDESTRIAN FRIENDLINESS

BRIDGE ACCESS

The Oshkosh area consists primarily of a grid pattern street system that is traversed by the area's waterways and highways. As a result, bridges are a major consideration for bicycle and pedestrian travel. There are 5 bridges that cross the Fox River and roughly divide the City between north and south. All of the following bridges are located within the planning area.

The major bridges along arterial and collector streets that have been assessed for active transportation include (from east to west):

1. **USH 45 (Main Street Bridge):** provides a raised, separated sidewalk for pedestrians. There are four travel lanes for motorized traffic and are wide-

enough to accommodate bicycles. However, the decking surfaces of all of the travel lanes on the bridges can be treacherous for bicyclists, and most riders prefer to use the sidewalk.

2. **Jackson/Oregon Street Bridge:** four traffic lanes are wide enough to accommodate bicycles.
3. **Wisconsin Street Bridge:** good pedestrian facilities, four travel lanes for motorized traffic with a bike lane on the deck with special bike friendly plates on the lift spans. The newly constructed bridge has wide sidewalks to accommodate both bicyclists and pedestrians but the transition areas from the bridge sidewalk to the adjacent streets are lacking.
4. **Congress Avenue/Oshkosh Avenue/STH 21 Bridge:** lacks off-street options for bicycles and has narrow sidewalks. This bridge needs improvements for pedestrian and bicycle accommodations.
5. **USH 41 overpasses and underpasses:** Recently reconstructed and current plans for reconstruction of USH 41 call for bicycle and pedestrian improvements on all overpasses and underpasses to varying degrees from wider outside lanes to bike entrance/exit ramps for sidewalk use. See Appendix C.

STREET AND HIGHWAY SYSTEM ACCESS

The Oshkosh urbanized area is connected to the surrounding suburban and rural areas by a system of State and County highways. I-41 provides a north-south route through the area. Travel east to west is primarily accommodated through a number of county and state highways. Bicycle and pedestrian travel is prohibited on I-41; however, the Tribal Heritage Crossing of te WIOUWASH runs adjacent to I-41 over Lake Butte des Morts allows for bicycle and pedestrian travel. The County Highway (CTH) system and state highway system (STH) are a primary linkage between extraterritorial areas and Oshkosh urbanized areas and provide limited bike facilities.

BICYCLE AND PEDESTRIAN SYSTEM ACCESS

This section includes a discussion on the importance of connectivity of transportation facilities, identifying origin/destination points, and understanding the function of bicycles and pedestrian facilities for both transportation and recreation.

Connectivity

The importance of connectivity cannot be overstated. If a segment of road, path, or sidewalk does not link a user's origin with their intended/desired destination it may not be a viable transportation option for that trip. However, if linkages are available from this segment to other segments, facilities, or destinations, the whole system is improved. For example, many bicycle commuters will use a series of on-road facilities (e.g. bike lanes), off-road facilities (multi-use paths), and other connections (local paths to buildings or structures) during a typical trip. Ensuring these facilities are "connected" in some way increases the likelihood they will be considered as a regular transportation option.

Within Oshkosh's urbanized area there are a few trails, such as the developing Riverwalk and the WIOUWASH State Recreation Trail, that provide important linkages between commercial centers, recreation areas, and environmental resources. Enhancing the usability of existing trails by increasing the number of connections to priority destinations is vital to creating a bicycle and pedestrian friendly transportation system.

Intergovernmental linkages are just as important. American Community Survey 5-year data from 2010-2014 indicates 82.8 percent of workers residing in the City of Oshkosh work within Winnebago County. Connections between places of residence to places of employment are integral to increasing mode share. Often, bicycle commuters who reside in suburban or rural areas use county highways to access the urban transportation network. Providing safe and adequate facilities along these routes creates opportunities for commuters who bike to work the opportunity to do so. Similarly, connections to area trails, such as the WIOUWASH State Recreation Trail, can increase comfort levels for bicyclists of all abilities.

Transportation versus Recreation Function

A facility serves a transportation purpose when it is used to get people from Point A to Point B, and could substitute for motor vehicle trips. The Stakeholder/Steering Group addresses this issue by linking bike routes to Oshkosh area destinations (such as commercial, religious, educational, recreational, employers and community buildings). Recreation trips also may occur on the same facility. For example, a backcountry hiking trail is a recreational facility because its intent is not transportation. All of the trails, routes, and facilities in the Oshkosh area are transportation facilities that may also serve a recreation or tourism function.

Origins and Destinations

Generally, motorized and non-motorized transportation users share similar origins and destinations - but use different modes to accomplish their goal of arriving at a destination safely and efficiently. Arterial and collector roads that effectively deliver many motorists also provide the most direct and continuous routes for many bicyclists. These systems, however, are not always designed to accommodate the special needs of the average bicyclist. When roadway conditions are unsuitable for bicyclists, infrastructure design treatments may be used to improve the roadway or an alternative corridor may be selected. To reduce the potential of bicycle–vehicle conflicts where possible, the Stakeholder/Steering Group chose to use alternate street networks for the bicycle facility routes to improve overall safety and comfort of riders.

Potential use patterns are not always reflected by the existing transportation system, but can be estimated by locating trip generators (origins and destinations) and projecting areas of population growth and future land use patterns.

Generally speaking, people are less willing to commute to work by bicycling and walking if the travel time is more than 20 minutes. Directness of the route, physical condition of the bicyclist, number of stops, and availability/proximity of bicycle parking facilities all affect how far one is able to bike in 20 minutes. The average adult bicyclist commonly travels 3 to 4 miles in 20 minutes. From a bicyclist's standpoint, this 3-4 mile trip defines the service area of each destination and helps to define commuting use patterns.

Recreational riders will ride much farther in a day - trips of 30 to 40 miles are not unusual and tours of 80 to 100 miles are offered regularly during the biking season in Wisconsin. Fitness riders and bike racers will travel 30 to 50 miles in a typical training ride. At the regional level, other communities and major recreational destinations are the prime trip generators. Within the urban and suburban areas, these destinations also include local shopping, employment, and government centers.

TRANSIT INTERFACE

The City of Oshkosh Transportation Department provides public transportation services, GO Transit, in the Oshkosh area. Owned by the City of Oshkosh, limited service is also provided to the City of Neenah. Most transit users access the bus system on foot and rely on pedestrian facilities. Inadequate pedestrian facilities not only make it more difficult to use the bus, they can also pose safety hazards to riders. Increasing the number of shelters or street furniture for pedestrians waiting for buses may improve comfort levels for transit users. Transit users who access the bus system via bike must rely on the availability of an adequate location to lock their bike once arriving at the bus stop, or must bring their bicycle with them. All of the GO Transit buses are equipped with front-end bicycle racks so users can transport their bicycles to their destination.

Existing Facilities

The City of Oshkosh, Winnebago County, and the State of Wisconsin have been installing bicycle and pedestrian infrastructure throughout the City of Oshkosh. These facilities include sharrows, bike lanes, sidewalks, paths and trails. A map of current facilities are found in appendix b.

4.2 COMMUNITY AND USER CHARACTERISTICS

This section includes Census and American Communities Survey (ACS) data.

The 2010 Census differs from previous censuses in two ways: 1. The 2010 Census only included the short-form, whereas previous Censuses collected short-form data from all households and long-form data from a sample of households (about one in every six for the 2000 Census); 2. The long-form was replaced with the American Community Survey, which is a nationwide, continuous survey every year rather than just once a decade. While ACS data can be compared to 2000 Census data, it should be noted that there are differences in question wording and the ways data is tabulated.

SOCIOECONOMIC DATA (2000, 2010 Census, and 2015 5-Year American Communities Survey Data)

This analysis is based on the information gathered from the 2010 Census and American Communities Survey.

Population

In 2010, approximately 66,083 people lived within the City of Oshkosh. The population has grown by 5% since the 2000 Census and continues to grow, with an estimated population growth of 11.7% from 2010-2040.

Table 2: Population Estimates, 2010-2014

Population Estimates, 2010-2040								
Municipality	2010	2015	2020	2025	2030	2035	2040	% Change 2010-2040
City of Oshkosh	**66,083**	**66,900**	**69,250**	**71,250**	**72,900**	**73,620**	**73,800**	**11.70%**
Winnebago County	166,994	169,925	177,050	183,230	186,680	191,710	193,130	15.70%
Wisconsin	5,686,986	5,783,015	6,005,080	6,203,850	6,375,910	6,476,270	6,491,635	14.10%

Source: WDOA, Wisconsin Demographic Services Center, Vintage 2013 Population Prc

Table 3: Percent of Population by Age Cohort, 2000 and 2010

Percent of Population by Age Cohort, 2000 and 2010								
2000	% Under 5	% 5 to 19	% 20 to 24	% 25 to 44	% 45 to 64	% 65 & older	Total	Age
City of Oshkosh	**5.4%**	**20.7%**	**12.7%**	**29.7%**	**18.4%**	**13.1%**	**62,916**	**32.4**
Winnebago County	6.9%	23.5%	6.1%	31.9%	20.7%	10.9%	156,763	35.4
Wisconsin	6.4%	22.2%	6.7%	29.5%	22.2%	13.1%	5,363,675	36.0
2010	% Under 5	% 5 to 19	% 20 to 24	% 25 to 44	% 45 to 64	% 65 & older	Total	Age
City of Oshkosh	**5.5%**	**18.4%**	**13.4%**	**26.7%**	**23.0%**	**12.9%**	**25,501**	**33.5**
Winnebago County	5.9%	19.1%	8.5%	26.0%	27.1%	13.4%	166,994	37.9
Wisconsin	6.3%	20.1%	6.8%	25.5%	27.7%	13.7%	5,686,986	38.5

Source: U.S.Census 2010, DP-1

Population by race provides information regarding the social and cultural characteristics of an area. It also provides information regarding population dynamics. Access to education and economic opportunities differ by race. Differences also exist in age structure, language barriers and risks for various diseases and health conditions.

Since new immigrants are more likely to settle in areas with existing populations from their country of origin, race and ethnicity, existing populations may also influence migration patterns. National population trends indicate that persons of color (includes African Americans, Native Americans, Alaskan Natives, Pacific Islanders, Asians and persons declaring two or more races) and persons of Hispanic Origin are growing faster than non-Hispanic whites[1]. As the population of the City, Winnebago County and Wisconsin continues to grow, it is likely that the minority proportion of the population (persons of color and whites of Hispanic Origin) will also continue to grow. If this occurs, communities may need to compensate for the changing demographic composition. Communities may also find it beneficial to promote opportunities for positive interaction between cultures. An increase in understanding of differences and similarities in expectations and cultural values may help reduce friction between groups.

1 U.S. Census.

Racial Distribution

The population in the City is less diverse than that of the state and more diverse than the county. In 2010, whites comprised 90.5% of the City population compared to 92.5% in the county and 86.2% of the state's population.

Table 4: Population by Race and Hispanic Origin, 2000 and 2010

Population by Race and Hispanic Origin, 2000 and 2010

	City of Oshkosh				Winnebago County				Wisconsin			
	2000		2010		2000		2010		2000		2010	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
White	58,886	92.7%	59,812	90.5%	148,900	95%	154,445	92.5%	4,773,553	89%	4,902,067	86.2%
African American	1376	2.2%	2051	3.1%	1,729	1.1%	2,975	1.8%	300,355	5.6%	359,148	6.3%
American Indian-Alaskan Native	331	0.5%	510	0.8%	781	0.5%	1,036	0.6%	49,661	0.9%	54,526	1.0%
Asian or Pacific Islander	1940	3.1%	2143	3.2%	2,480	1.6%	3,880	2.3%	84,654	1.6%	131,061	2.3%
Other Race	346	0.5%	475	0.7%	1,192	0.8%	2,188	1.3%	84,281	1.6%	135,867	2.4%
Two or More Races	621	1.0%	1092	1.7%	1,681	11.0%	2,470	1.5%	71,171	1.3%	104,317	1.8%
Total Persons	63,500	100%	66,083	100%	156,763	100%	166,994	100%	5,363,675	100%	5,686,986	100%
Hispanic or Latino	1074	1.7%	1770	27%	3,065	2.0%	5,784	3.5%	192,921	3.6%	336,056	5.9%

Source: U.S. Census 2000,2010, DP01

Poverty Status

The state poverty level is determined by the U.S. Census Bureau based on current cost of living estimates adjusted for household size. In 2000, the poverty threshold for a family of four with two children was a household income of $17,463. By 2010, the poverty threshold for a family of four with two children had increased to $22,113[2].

In 2010-2014, 18.9% (+/-1.8%) of the City's population was living below the poverty line according to American Community Survey 5-Year Estimates (Table 2-12). This is slightly less than Winnebago County (12.5%+/-0.9%) and the State of Wisconsin (13.3%+/-0.2%). Between 1999 and 2010-2014, the percentage of people living below the poverty line increased for the City, Winnebago County and the State of Wisconsin. In 1999, 10.2% of the City's residents were living below the poverty line, while 6.7% of Winnebago County residents, and 8.7% of residents of the State of Wisconsin were living below the poverty line.

2 U.S. Census Bureau, 2000 and 2010 Poverty Thresholds

Table 5: Poverty Status, Total Persons - 1999 and 2010-2014 ACS 5-Year Estimates

Poverty Status, Total Persons - 1999 & 2010-2014 ACS 5-Year Estimates

	Total Persons			Total Persons Below Poverty Level					
	1999	2010-2014 5-Yr Est.		1999		2010-2014 5- Yr Est.			
	No.	Estimate	MOE +/-	No.	%	Estimate	MOE +/-	%	MOE +/-
City of Oshkosh	**62,916**	**58,660**	**909**	**5,672**	**10.2%**	**11,090**	**1,057**	**18.9%**	**1.80**
Winnebago County	148,696	159,429	1,109	9,940	6.7%	19,961	1,414	12.5%	0.90
Wisconsin	5,211,603	5,571,083	1,287	451,538	8.7%	738,557	10,521	13.3%	0.20

Source: U.S. Census 2000 SF 3, 2010-2014 American Community Survey 5- Yr Estimate, S1701

Approximately 10% (+/-1.9%) of families lived below the poverty level in the City, according to 2010-2014 American Community Survey 5-Year Estimates (Table 2-13). This was more than the share of families in Winnebago County (7.1%+/-0.8%) and more than the share of families in the state (8.9%, +/-0.2). Between 1999 and 2010-2014, the percentage of families living below the poverty level increased in the City, County and the State. In 1999, 5.2% of families lived below the poverty level in the City compared to 3.8% of the families living in Winnebago County and 5.6% of the families living in Wisconsin.

Table 6: Poverty Status, Total Families - 1999 and 2010-2014 ACS 5-Year Estimates

Poverty Status, Total Families - 1999 and 2010-2014 ACS 5-Year Estimates

	Total Persons			Total Persons Below Poverty Level			
	1999	2010-2014 5-Yr Est.		1999		2010-2014 5- Yr	
	No.	Estimate	MOE +/-	No.	Percent	Percent	MOE +/-
City of Oshkosh	**13,653**	**13,426**	**488**	**718**	**5.2%**	**10.1%**	**1.9**
Winnebago County	39,788	41,260	767	1,517	3.8%	7.1%	0.8
Wisconsin	1,395,037	1,469,359	4,843	78,188	5.6%	8.9%	0.2

Source: U.S. Census 2000 SF 3, 2010-2014 American Community Survey 5- Yr Estimate, S1702

Household Composition

In 2000, (56.7%) and 2010 (52.9%), just over half of the households in the City were family households. During both years, the City had a lower percentage of family households compared to the County (64.7%, 61.2%). The state had a slightly larger share of family households compared to the City in 2000 (66.5%), and in 2010 (64.4%). Individuals living alone, age 65 years old and older, made up about 12 percent of the households in the City in 2000 (11.7%) and in 2010 (11.4%). This was a larger share of the total households compared to the county (9.9%, 10.3%) and the state (9.9%, 10.2%) during both time periods. By 2010, the portion of households with individuals 65 years old and older living alone stayed about the same in the city and increased in the county and state.

Households are composed of family households (married couple and male or female, no spouse present) and nonfamily households. In 2000, the percentage of married couple families was lower in the City (44.3%) than in the county (53.0%) and the state (53.2%). Between 2000 and 2010, the percentage of married couples decreased in all jurisdictions, as the percentage of single parent families increased. During this time period, the largest decrease was experienced by the City (5.6%), in comparison the percentage of married couples decreased by 5.2% in the county and 3.6% in the state. Married couple families made up 38.7% of all households in the City in 2010, compared to 47.8% in Winnebago County and 49.6% in the state.

Household Forecasts

Total population figures include not only persons in households, but also persons in group quarters[3]. As the population ages during the projection period, it is likely that the persons in group quarters will increase over time. This increase will come from not only the elderly component of the population, but also from the disabled component of the population as aging parents will no longer be able to care for disabled offspring. It is important to remember that the actual growth rate and the amount of future growth a community will experience will be determined by local policies which can affect the rate of growth within the context of county, state, and national population growth trends. Migration is expected to play a part in the City and Winnebago County's growth patterns in the coming decades. Therefore growth rates and trends outside the county will influence the pool of potential residents the county can attract.

Based on anticipated growth trends, the City's population is expected to continue to increase through 2040 (Table 6). During this same time period, the number of households is expected to increase by about 16.0% from 26,138 in 2010 to 30,309 in 2040 (Table 2-9). The increase in the number of households is expected to result from a decrease in household size and an increase in population. Between 2010 and 2040 it is anticipated that the household size will decrease from 2.24 persons per household to 2.15.

3 Group Quarters, as defined by the 2010 U.S. Census, "is a place where people live or stay, in a group living arrangement, that is owned or managed by an entity or organization providing housing and/or services for the residents. This is not a typical household-type living arrangement. These services may include custodial or medical care as well as other types of assistance, and residency is commonly restricted to those receiving these services. People living in group quarters are usually not related to each other. Group quarters include such places as college residence halls, residential treatment centers, skilled nursing facilities, group homes, military barracks, correctional facilities, and workers' dormitories."

Table 7: Household Projections, 2010 – 2040

Household Projections, 2010 – 2040						
	City of Oshkosh		Winnebago County		Wisconsin	
Year	No. HH	Person/HH	No. HH	Person/HH	No. HH	Person/HH
2010	26,138	2.24	67,875	2.34	2,279,768	2.43
2015	26,796	2.22	69,784	2.32	2,371,815	2.38
2020	27,965	2.21	73,211	2.30	2,491,982	2.35
2025	28,936	2.19	76,221	2.29	2,600,538	2.32
2030	29,742	2.18	78,920	2.28	2,697,884	2.30
2035	30,190	2.16	80,713	2.26	2,764,484	2.28
2040	30,309	2.15	81,611	2.25	2,790,332	2.26
Percent Change						
2010 to 2015	2.5%	-0.9%	2.8%	-0.9%	4.0%	-2.2%
2015 to 2020	4.4%	-0.5%	4.9%	-0.9%	5.1%	-1.2%
2020 to 2025	3.5%	-0.9%	4.1%	-0.4%	4.4%	-1.0%
2025 to 2030	2.8%	-0.5%	3.5%	-0.4%	3.7%	-1.0%
2030 to 2035	1.5%	-0.9%	2.3%	-0.9%	2.5%	-1.0%
2035 to 2040	0.4%	-0.5%	1.1%	-0.4%	0.9%	-0.8%

Source: WDOA, Wisconsin Demographic Services Center, 1/1/2015
Final Estimates and Vintage 2013 Population Projections

TRAVEL TO WORK

Means of Travel

Table 7 reflects how workers aged 16 years or older in the City of Oshkosh travel to work on a daily basis. It should be noted that this question asks the respondent how they usually got to work in the last week.

Table 7: Means of Travel to Work for Workers 16 Years or Older (2010-2014 ACS 5-Year Estimate)

Means of Travel to Work for Workers 16 Years or Older		
	City of Oshkosh	
Means of Travel to Work	Number	Percent
Total Population 16 and over	42,274	-
Drove Alone	36,484	86.3%
Carpooled	3,252	7.7%
Taxicab, motorcycle, bicycle or other means	742	1.8%
Walked	1,148	2.7%
Public Transportation (excluding taxicab)	648	1.5%

Source: Table B08534, 2010-2014 American Community Survey 5-Year Estimates

LAND USE CONNECTION

Transportation systems and land use patterns have a well-documented reciprocal relationship. The importance between land use and transportation should not be underestimated. Land use patterns and development decisions are often seen as controlled solely by market forces, leaving public agencies to respond to the transportation demand created in their wake. However, public land use policies directly affect private land use decisions such as zoning regulations and minimum parking requirements. Therefore, land use policies need to be considered in relation to the impact of transportation just as transportation policies need to be considered in relation to land use.

As communities have grown, the demand for transportation system improvements has also grown. However, these transportation improvements have also provided more convenient access to underdeveloped land farther from center city, thus spurring further growth. More than any other transportation system, it has been the road network and the prevelance of the automobile that has impacted land use patterns over the past half-century.

Notable land use patterns or issues for the City of Oshkosh include:

- Water divides the urbanized area
- The majority of city arterials are four lane with no on-street parking and if sidewalks are present they are immediately adjacent.
- Development as it exists today directly corresponds to the freeway system.

4.3 BICYCLE AND PEDESTRIAN STATUTES AND ORDINANCES

In the 1960s, the national Institute of Transportation Engineers produced a publication titled Recommended Practice for Subdivision Streets. This publication contained a set of recommended standards for residential street design. These included: a 60 foot ROW; 32-34 feet of pavement; a 6-7 foot planting strip; and a 5 foot sidewalk on both sides of the street. Typical front yard setbacks were set at 40-60 feet. These standards have been widely used as the basis for many of today's subdivision regulations and are reflected in some of the local codes.

Many modern subdivisions continue to build the right-of-way for motorized transportation at the expense of walking and biking. Wide, curvilinear streets are thought to be appealing by many developers engaged in designing new housing projects and sidewalks are included as an afterthought, if at all. Unfortunately, it isn't until after these neighborhoods are built that residents begin to question street width and speeding that comes with wide lanes, and the lack of pedestrian facilities such as sidewalks.

In response to traffic congestion and neighborhood concerns, many planners and engineers are looking to the past for answers. A key component of neo-traditional neighborhoods is creating neighborhoods that people enjoy walking around in. The minimum requirement is to provide sidewalks and safe street crossings. However, providing shade trees, planter strips, landscaping, benches, and other amenities can make an enormous qualitative difference in the pedestrian environment. Similarly, bicycle facilities can greatly enhance the usability of a transportation network. The best strategy for accommodating bicycle trips is to provide adequate bicycle lanes and to educate the driving public on the need to share the road with bicyclists.

Wisconsin Statutes

The State of Wisconsin does not require municipalities to provide sidewalk facilities, but does require clearing of sidewalks after snowfall. Statutes are written to provide guidance for the use and enforcement of rules governing pedestrian activities and facilities. Likewise, rules for bicycles regulate the proper use of facilities including roadways. Local communities are provided a great deal of discretion in the placement and usage of bicycle and pedestrian facilities under state law.

City of Oshkosh Municipal Code

The City of Oshkosh Subdivision Ordinance (Chapter 30) includes regulations for the development of sidewalk facilities or shared paths. Chapter 25 deals with street and sidewalk regulations, including snow removal. Residents are expected to remove snow and ice within 24 hours of the cessation of the snowfall event. If found in violation of the ordinance, property owners can be assessed fines that range from $20 to $100 per day. Chapter 30 is the Zoning Ordinance, which addresses required private property walkways connecting businesses and multiple-family developments to pedestrian networks and also includes an incentive of reducing required automobile parking for providing bicycle parking. Municipal Code Chapter 27, Appendix A 10.1 lists all designated bicycle routes.

4.4 EXISTING PLANS

City of Oshkosh Comprehensive Plan 2005-2025

Chapter Five of the Comprehensive Plan, Transportation Element, briefly touches on bicycle and pedestrian circulation and accommodations within the city of Oshkosh. The Transportation element lays out policies, goals and maps to guide future development of the transportation system. The recommendations put forth in this plan should supersede those of the comprehensive plan, as they are bicycle and pedestrian specific.

Winnebago County Comprehensive Plan 2016-2035

Chapter Three of the Winnebago County Comprehensive Plan is the Transportation Plan Element. It addresses overall County and locality specific transportation elements with the goal "[t]o achieve a safe, efficient, and environmentally sound transportation system that provides personal mobility for all Segments of the population and supports the economy of the County."

University of Wisconsin Oshkosh Campus Master Plan 2010-2020

UWO Master Plan summarizes various planning documents into one concise reference. Supporting documents include Campus Development Plan, Long Range Maintenance Plan, Campus Parking Plan, Residence Life Master Plan and Space- Use Plan. Specific attention is given to the transportation and parking conditions and needs which identify potential changes to campus for vehicle parking, bike parking, bus service, pedestrian facilities and programs/policies on campus user's transportation choices.

Oshkosh Area Safe Routes to School Plan 2008

The Oshkosh SRTS plan developed recommendations using the five E's : Engineering, Education, Encouragement, Enforcement and Evaluation.

The recommendations of the plan not only include crosswalk and traffic calming elements but also address a number of educational and encouragement activities to provide incentive for walking and bicycling to school.

Wisconsin Pedestrian Policy Plan 2020

WisDOT published the Wisconsin Pedestrian Policy Plan 2020 in March 2002. The plan outlines statewide and local measures to increase walking and to promote pedestrian safety. The plan establishes state goals and objectives and identifies action steps for WisDOT to take toward achieving these goals and objectives. The plan provides some pedestrian planning guidance for municipalities and recommends that governments set specific pedestrian objectives, develop sidewalk inventories, and review existing ordinances regarding the installation and retrofitting of sidewalks. Other planning elements to consider include reviewing cost assessment practices for financing pedestrian projects, analyzing pedestrian crashes, reviewing snow removal issues relating to pedestrian travel, and developing pedestrian improvement recommendations.

Wisconsin Bicycle Transportation Plan 2020

WisDOT acknowledges the importance of bicycling as a legitimate transportation mode and clarifies its role by encouraging bicycling in the Wisconsin Bicycle Transportation Plan 2020. This plan presents a blueprint for improving bicycling conditions and encouraging bicycling in the state and calls for the implementation of metropolitan area bicycle plans prepared by Metropolitan Planning Organizations or local governments.

Wisconsin Bicycle Planning Guidance & Wisconsin Bicycle Facility Design Handbook

WisDOT has published two documents related to bicycle planning and bicycle facility design. Wisconsin Bicycle Planning Guidance was published in June 2003 and provides guidelines for metropolitan planning organizations and communities in planning bicycle facilities. The document is available on the Internet at: http://www.dot.wisconsin.gov/projects/state/docs/bikeguidance.pdf

The Wisconsin Bicycle Facility Design Handbook was published in January 2004 and provides a wealth of detailed information for designing a range of bike facilities, from on-road bike routes to dedicated paths.

Appleton (Fox Cities) Transportation Management Area and Oshkosh Metropolitan Planning Organization Bicycle and Pedestrian Plan, 2014

This plan was passed by East Central Wisconsin Regional Planning Commission in 2014 to address gaps in the bicycle and pedestrian network for the urbanized areas of Calumet, Winnebago, and Outagamie counties.

Connecting People and Places: Winnebago County Bicycle and Pedestrian Plan

In 2017, the Winnebago County Board approved this plan, which addresses the rural areas of Winnebago County not covered in the Appleton TMA and Oshkosh MPO Bicycle and Pedestrian Plan.

City of Oshkosh Sustainability Plan, 2012

The City of Oshkosh Sustainability Plan addresses items to move the City's objectives of sustainability forward. The Transportation and Mobility section discusses bicycle and pedestrian facilities, including placing a high priority on completion of the Riverwalk, assessing neighborhoods for walkability, and Safe Routes to School.

4.5 CRASH STATISTICS

Roadway and bicycle safety specialists now use the term "crash" instead of "accident" to emphasize that most automobile and bicycle interactions are predictable and preventable occurrences. Bicycle crashes include both falls and collisions. A bicyclist may fall due to slippery conditions or an unexpected impediment to travel; or a bicyclist might have a collision with a car, another bike or a pedestrian. These are all considered "crashes" and in a perfect world, "crash" data would be available for all crashes no matter what the cause.

Understanding bicycle and pedestrian crash data helps to identify methods for preventing future crashes. Detailing statistics, such as who is typically involved in a crash (children or adults), where crashes occur (specific intersections or streets) and what time of day crashes occur allows bicycle and pedestrian planners and engineers to more accurately implement safety programs and roadway design enhancements.

National Data

Nationally, 818 bicyclists and 5,376 pedestrians were killed in 2015 as a result of crashes with motor vehicles, according to the National Highway Traffic Safety Administration. These two modes accounted for 17.7% of the total U.S. fatalities, and both witnessed increases in deaths from the previous year (10% increase for pedestrians and 12% increase for cyclists). Additionally, an estimated 70,000 pedestrians and 45,000 bicyclists were injured in traffic crashes in the United States the same year.

Wisconsin Data

In Wisconsin, 1,289 pedestrians were injured in crashes in 2016, resulting in 1,181 injuries and 49 fatalities. Additionally, there were 918 bicycle crashes resulting in 849 injuries and 11 deaths.

Oshkosh Data

From 2013 to 2017, there were 90 crashes involving a bicyclist in the City of Oshkosh, four of those crashes were deemed to be incapacitating. During that same time period, there were 63 crashes involving a pedestrian, fifteen of these were incapacitating and one was fatal. Appendix d shows the crashes in the City of Oshkosh from 2012-2016 involving bicyclists or pedestrians.

BICYCLE CRASHES AND COUNTERMEASURES

The most common types of bicycle crashes in Wisconsin involve the following :

- Motorists failing to yield the right of way to a straight-through bicyclist when making a left turn
- Motorists failing to yield at a controlled intersection
- Bicyclists failing to yield at controlled intersections
- Motorists turning right on a red traffic light
- Bicyclists riding the wrong way in traffic

Children are particularly susceptible to causing an error that results in a crash. According to the Wisconsin Department of Transportation, child-error accounts for more than 90% of all child bicycle crashes. However, 60% of all adult bicycle crashes are the result of a motorist error; the most common is a left turn across the path of an oncoming bicyclist .

Countermeasures include:

- Educate people that sidewalk riding has hazards and how to avoid them.
- Educate bicyclists about the hazards of wrong-way riding both on the street and on the sidewalk.
- Encourage drivers to be on the lookout for sidewalk bike riding, especially around schools, in residential neighborhoods and in other areas of high bicycle volumes.

PEDESTRIAN CRASHES AND COUNTERMEASURES

Common characteristics of pedestrian collisions include:

- Driver distraction and inattention.
- Struck by vehicle while crossing at intersection (failure to yield right-of-way).
- Struck by vehicle while crossing midblock (failure to yield right-of-way).
- Struck from behind while walking in the roadway in the same direction as traffic.
- Motorist exceeding safe speed.
- Darting out into the street at midblock (most common for children).
- Vehicles backing up (difficult to see people walking behind).
- Collisions in urban areas (approximately 70% of all pedestrian crashes).

Effective countermeasures include the following:

- Improvements to the walking environment.
- Improvements in the road design.
- Intersection treatments.
- Traffic calming measures.
- Traffic management.
- Signs and signals.
- Other measures, including school zone improvements, speed monitoring, parking changes (add, remove, restrict), school crossing guards, ordinances, education programs, and enforcement.

CHAPTER FIVE

5 BEST FACILITY PRACTICES

5.1 ALTERNATIVES FOR IMPROVED BICYCLE AND PEDESTRIAN FACILITIES

It is generally understood that bicycle and pedestrian facilities enhance the usability of an entire transportation network. Unfortunately, for decades transportation engineering trends focused on designing roadways and transportation networks for motor vehicles. Facilities for bicycles and pedestrians have been minimal or nonexistent.

Bicyclists and pedestrians must be included as a matter of course in the planning and design of roadway plans and facility selection of transportation networks. This includes reconstruction, repaving, and retrofits of existing streets. By comprehensively integrating bicycle, pedestrian, transit, and motor vehicle facilities the transportation system will work in totality for our community.

Some elements of roadway design pertain specifically to bicycles, such as bike lanes and bike parking while others pertain exclusively to pedestrians, such as sidewalks and crosswalks. However, the overall design and operational elements of the roadway are just as important.

Designers, planners and engineers have a diverse array of design elements and ever-developing technologies at their disposal. This chapter is a source of information on design, engineering tools and facility alternatives that promote “walkability” and “bikeability”.

To enable safe and efficient bicycle and pedestrian movement throughout the City of Oshkosh; on-street, off-street and other infrastructure improvements are addressed in this chapter. The transportation network and physical improvement recommendations are broken into bicycle facilities and pedestrian facilities. They include signed and striped roadways, signed and/or shared roadways and multi-use paths as well as additional facility considerations associated with each.

Choosing the best facility alternatives for any of the network recommendations within the plan must be done on a case-by-case basis, factoring in such things as location, right-of-way width, number of lanes, traffic speed, presence of on-street parking, traffic volumes, pedestrian volumes, pedestrians with disabilities, snow removal, etc. It is important to understand that the facilities chosen for any given segment of the overall network may not be either static or open to debate and discussion because what may be feasible and desirable in one instance may not be in all instances.

The following recommendations are presented as a means to address the goals and objectives identified by the Stakeholder/Steering Group, the public, Oshkosh city staff, and the consultant in previous chapters. The recommendations were developed using an inventory and analysis of existing facilities, ordinances, and plans, and rely on suggestions from the local system users and the Oshkosh Pedestrian and Bicycle Advisory Committee. This chapter recommends specific bicycle and pedestrian facility improvement recommendations to create an interconnected/comprehensive bicycle route system, costs associated with facilities.

5.2 CROSSWALK MARKING AND SIGNAGE

Cost Rating: Low
Effectiveness Rating: Moderate

Description:
Crosswalks are an extension of the sidewalk into the street. Pavement markings and signage are used to increase the visibility of crosswalks.

Benefits	• Increases the visibility of crosswalks and encourages motorists to yield to pedestrians crossing
	• Helps pedestrians know where to cross and can direct pedestrians to cross at the best location
	• Serves as a visual reminder for motorists to expect pedestrians in the area
Considerations	• Careful consideration should be given when marking a crosswalk, marking every crosswalk can desensitize motorists and minimize their effectiveness
	• Marking crosswalks can give pedestrians a false sense of security
	• Ladder style crosswalks are more visible to motorists than single lines
Application	• Crosswalks are commonly marked at controlled intersections which are used by pedestrians
	• Any high volume pedestrian crossings
	• School zones where a high volume of students cross
	• Areas where there are issues with motorists yielding to pedestrians crossing

5.3 CURB RAMPS

Cost Rating: Low
Effectiveness Rating: Moderate/ High

Description:
Curb ramps serve as the connection from the sidewalk to the street.

Benefits	• Provide a safe connection from the sidewalk to the street • Improve sidewalk accessibility for people with mobility restrictions
Considerations	• Separate curb ramps for each crosswalk at an intersection should be provided instead of one curb ramp that includes both crosswalks, these curb ramps tend to direct pedestrians into the center of the intersection rather than into the crosswalks • Curb ramps need to provide accommodations for all types of pedestrians and meet ADA requirements, including the least running slope possible and detectable warnings (such as dome-shaped bumps) • Texture patterns should be implemented for visually impaired pedestrians
Application	• Appropriate curb ramps should be implemented at all crosswalks and intersections where sidewalks are present, priority locations include downtown business districts, and streets near transit, schools, medical facilities, and shopping destinations

5.4 CURB EXTENSIONS

Cost Rating: Moderate/High
Effectiveness Rating: High

Description:
An extension of the curb line into the street.

Benefits	• Reduces the crossing distance for pedestrians • Improves the visibility of pedestrians to motorists and the visibility of motorists to pedestrians • Improves the visibility of the crosswalk • Calms traffic speeds
Considerations	• Where on-street parking is available curb extensions will potentially take the place of multiple parking spaces • Forces bicyclists into vehicle travel lane which may be uncomfortable for novice riders • Creates usable sidewalk space, which can be used for events • Extends pedestrian space
Application	• Commonly implemented where on-street parking is available, often in downtown business districts • Can be used at intersections to reduce the speeds of turning vehicles

5.5 PEDESTRIAN SIGNALS

Cost Rating: Moderate/High
Effectiveness Rating: High

Description:
Devices that communicate to pedestrians when to walk and also alert motorists that pedestrians are crossing.

Benefits	• Informs pedestrians when they should begin crossing • Countdown timers inform pedestrians how much time they have to cross • Certain types of pedestrians signals also alert motorists that pedestrians are crossing which increases the percentage of vehicles that yield to pedestrians
Considerations	• If the pedestrian signal is user activated the “push button” should be easily accessible • It is important to allow sufficient crossing time for vulnerable users • Special considerations should be included for visually and hearing impaired pedestrians
Application	• Countdown timers are now the preferred pedestrian signal at signalized intersections • Rapid Flash Beacons or Pedestrian Hybrid Signals can be very effective at high volume pedestrian crossings but installation of these treatments should be thoroughly evaluated to maximize their effectiveness




5.6 PEDESTRIAN REFUGE ISLANDS

Cost Rating: Moderate/High
Effectiveness Rating: High

Description:
A raised island placed in the roadway providing a physical barrier between pedestrians and vehicle traffic.

Benefits	• Allows pedestrians a place to stop before continuing to cross the remaining distance which allows pedestrians to focus on one direction of traffic flow at a time • Improves the visibility of pedestrians to motorists, particularly at uncontrolled crossings • Helps calm traffic speeds • Reduces the rate of both pedestrian and vehicle crashes
Considerations	• Refuge island should provide sufficient space for pedestrians to stop and be protected from traffic and must be ADA compliant • Only painting refuge islands provides little to no benefit to pedestrians, a physical barrier from vehicle traffic must be provided.
Application	• Commonly implemented on multi-lane roadways with higher traffic speeds and other high volume pedestrian crossings • Used for pedestrian crossings at single and multi-lane roundabouts

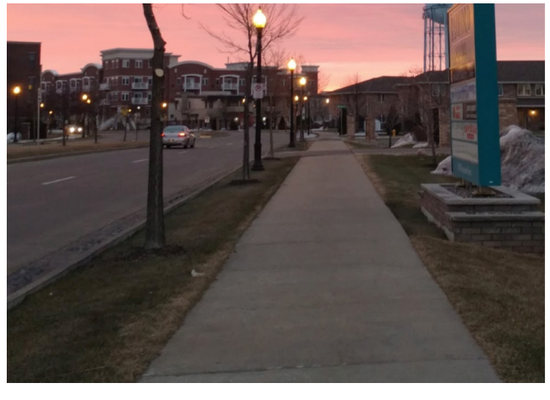


5.7 SIDEWALKS

Cost Rating: Moderate/High
Effectiveness Rating: High

Description:
Sidewalks create a separated space for pedestrians. Sidewalks should be designed to accommodate pedestrians of all ages and abilities and must comply with all ADA requirements. Per City of Oshkosh ordinance, sidewalk minimum width is five feet.

Benefits	• Provides a safe space for pedestrians, separated from vehicular traffic
	• Increases access to local businesses
	• Increases mobility for non-drivers
	• Creates healthier communities by providing options for people to safely walk for recreation and transportation
Considerations	• Space requirements during reconstruction projects when adding sidewalks
	• Buffer (terrace) width between sidewalk and street
	• Maintenance/Snow Removal
	• Sidewalks are generally not acceptable for bicycling
Application	• Sidewalks are the preferred accommodation for pedestrians, the addition of sidewalks will increase pedestrian safety more than any other type of treatment



5.8 SHARED-USE PATH

Cost Rating: High
Effectiveness Rating: High

Description:
Shared-use paths are physically separated from vehicular traffic and can be used by both bicycles and pedestrians.

Benefits	• Shared-use paths can be used for recreation and active transportation
	• Attract novice bicyclists and are ideal for families with young children
	• Provide safer active transportation options along streets with very high traffic speeds/volume
	• Provide accommodation for bicyclists and pedestrians
Considerations	• Driveways create conflict points with users of shared-use paths and should be taken into consideration during design, particularly for shared-us paths that are parallel to streets
	• All users should be encouraged to stay right, in cases with very high volume it may be necessary to separate bicycle and pedestrian traffic on the path
Application	• Shared-use paths can enhance active transportation in your community but should be used as an addition to, not a substitute for, bike/ped accommodations on streets

5.9 SIGNED/SHARED LANE MARKINGS (SHARROWS)

Cost Rating: Low
Effectiveness Rating: Moderate

Description:
Pavement markings and signage alert motorists that bicycles may use that shared space on the street and give guidance to bicyclists.

Benefits	• This treatment reinforces an existing law that bicycles have the same rights as motorists • Helps bicyclists take the appropriate position on a street • Can be used to connect other bicycle facilities and complete a larger network of facilities • Sharrows can raise awareness and can be implemented in a short time period
Considerations	• Adequate space should be given to bicyclists to safely interact with vehicle traffic • Novice/intermediate bicyclists may not feel comfortable using the facility depending on traffic volume/speeds • Maintenance of signage and pavement markings along with snow removal
Application	• Sharrows are best implemented on low/moderate volume/speed streets (no more than 35mph) that have a wider outside lane providing space for bicyclists

5.10 BICYCLE BOULEVARD

Cost Rating: Low/ Moderate
Effectiveness Rating: High

Description:
Streets with low volume/speed motor vehicle traffic that are modified to be optimized for bicycles and gives bicycles priority over motor vehicles.

Benefits	• Create a very comfortable riding environment for bicyclists • Can provide connections to other facilities • Can be relatively low cost for a high benefit • Provide alternatives to streets with high volume/speed motor vehicle traffic
Considerations	• Careful consideration and analysis should go into selecting streets and developing bicycle boulevards • Creating connectivity and giving bicycles priority over motor vehicle traffic are key • Signage, pavements markings, and other traffic calming treatments are all potential components of design included in bicycle boulevards
Application	• Bicycle boulevards are ideal on streets with low vehicle traffic volumes and speeds that provide connectivity to the bicycle network

5.11 ROAD DIET (LANE RECONFIGURATION)

Cost Rating: Low/ Moderate
Effectiveness Rating: High

Description:
Changing the lanes on a street to increase the level of safety. Road diets can vary but a common application is changing a street from four travel lanes to two travel lanes with a center turn lane and often allows the addition of bicycle lanes.

Benefits	• Improves the safety of the street for all users • Reduces rear-end vehicle collisions by allowing left-turning vehicles to use the center turn lane • Allows for the addition of bicycle lanes without large infrastructure changes • Reduces excessive speeding by vehicles increasing safety for vulnerable users
Considerations	• Traffic volume is a big factor for implementing a road diet, streets with an average daily traffic (ADT) count of less than 20,000 vehicles are ideal candidates • Streets with 20,000—30,000 ADT counts are potential candidates but further analysis is necessary • Multiple access points may cause conflicts between left-turning vehicles and should be taken into consideration
Application	• Ideally implemented in commercial/residential areas on four lane streets that have an ADT of less than 20,000 and a need for bicycle/pedestrian accommodations or safety improvements

5.12 BICYCLE LANE

Cost Rating: Low/ Moderate
Effectiveness Rating: High

Description:
A marked space along a length of street designated for use by bicyclists. Bike lanes create a separate space for bicycles and vehicles.

Benefits	• Provides bicycle access to streets with higher traffic volumes • Designates space on the street for bicyclists and vehicles • Increases bicyclist's comfort level and encourages novice/intermediate bicyclists to use facility • Encourages bicycles to not use sidewalks
Considerations	• Space requirements for bike lanes may cause conflicts with parking and/or vehicle travel lanes or there may not be enough right-of-way available
Application	• Streets with a average daily traffic of 3,000 vehicles per day or more • Any street with adequate or excessive width curb-to-curb

5.13 ONE/TWO-WAY CYCLE TRACKS

Cost Rating: Low/ Moderate
Effectiveness Rating: High

Description:
Physically separated bike lanes. Two-way cycle tracks allow bicycle movement in both directions on one side of the road.

Benefits	• Dedicates and protects space for bicyclists
	• Reduces risk of a bicyclist being hit by a car door
	• Reduces out of direction travel on one-way streets (for two-way cycle tracks)
	• More attractive to a wide range of bicyclists at all levels and ages
Considerations	• Space requirements for bike lanes may cause conflicts with parking and/or vehicle travel lanes or there may not be enough right-of-way available
Application	• Streets with a average daily traffic of 3,000 vehicles per day or more
	• Any street with adequate or excessive width curb-to-curb

5.14 BICYCLE BOX

Cost Rating: Low/ Moderate
Effectiveness Rating: High

Description:
A marked space at signalized Intersections that allows bicyclists to get ahead of vehicles at red lights and gives them priority to get through the intersection first.

Benefits	• Reduces conflicts between bicyclists and vehicles at intersections
	• Improves the visibility of bicyclists
	• Gives bicyclists priority at the intersection and allows them a “head start” when the signal turns green
	• Make bicyclist’s movements more predictable
Considerations	• Bicyclists only get priority at the intersection when the signal is red and vehicles are cued behind the stop bar
	• Painting the colored bike lane straight through the intersection may be necessary to reduce the risk of “right hook” collisions with vehicles
Application	• Best implemented at intersections with a high volume of bicyclists
	• Most often used in conjunction with bike lanes

5.15 PROTECTED BICYCLE LANE (CYCLE TRACK)

Cost Rating: Moderate
Effectiveness Rating: High

Description:
A marked space along a length of street designated for use by bicyclists which is protected from vehicular traffic by a physical barrier.

Benefits	• Provides bicycle access to streets with higher traffic volumes and/or traffic speeds
	• Physically separates space on the street for bicyclists and vehicles
	• Increases bicyclist's comfort level and encourages novice/intermediate bicyclists to use the facility
	• Encourages bicycles to not use sidewalks
Considerations	• Space requirements and potential conflicts with on-street parking
	• Extra considerations needed to protect bicyclists at intersections and driveway access points
	• Snow removal should be considered when choosing type of barrier to be used
Application	• Streets with a high volume of bicycle and vehicle traffic and/or high traffic speeds are ideal candidates for protected bicycle lanes
	• The use of landscaping can add to street beautification and increase the appeal of protected bicycle lanes to non-bicyclists

5.16 BICYCLE PARKING

Cost Rating: Low
Effectiveness Rating: Moderate/ High

Description:
Bicycle parking can include racks, lockers, and bicycle stations and provide a secure and convenient place to park your bicycle.

Benefits	• Can increase bicycle use by providing secure, convenient parking
	• Helps keep pedestrian zones clear by designating areas for bicycle parking
Considerations	• Bicycle parking should be provided in a convenient location for bicyclists
	• Bicycle racks should support the bicycle at two points
	• Long-term vs. short-term bicycle parking will have different requirements for design and security
	• Covered bicycle parking should be considered where possible
Application	• Bicycle parking should be provided at locations such as schools, public buildings, workplaces, and other buildings and should not be overlooked during the site design

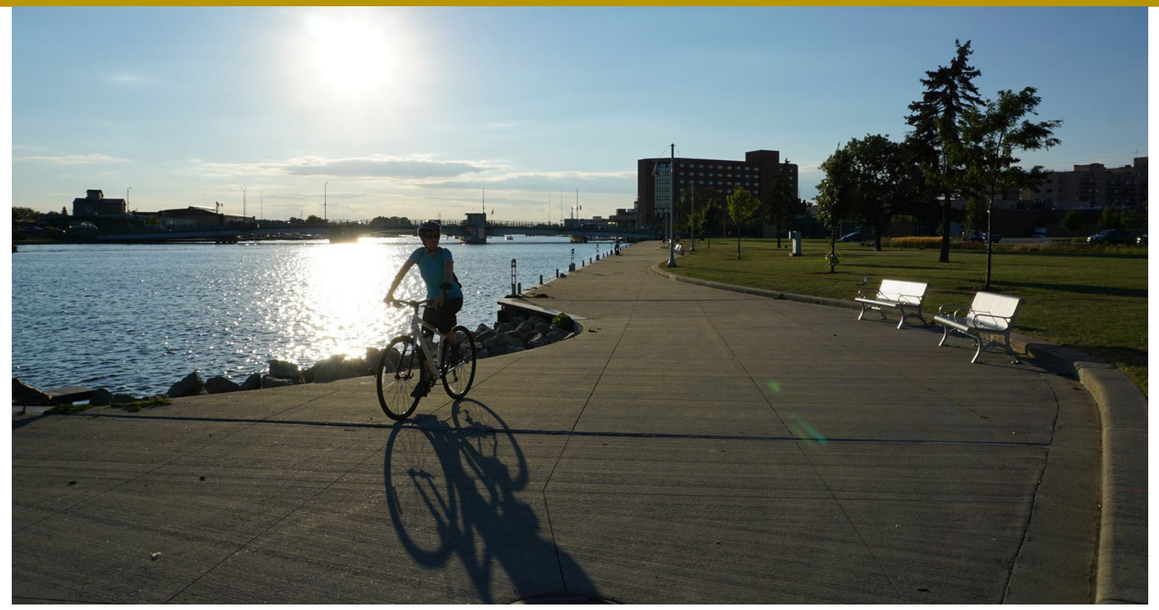
5.17 BICYCLE WAYFINDING

Cost Rating: Low
Effectiveness Rating: Moderate

Description:
A bicycle wayfinding network for bicyclists can include signage and pavement markings which are placed at decision points along bicycle routes.

Benefits	• Direct bicyclists on the best routes • Provide connections to destinations • Relatively low cost and quick implementation
Considerations	• Careful consideration, analysis, and public input should go into selecting routes and developing a wayfinding system • Confirmation signs, turn signs, and decision signs should all be a part of a wayfinding system to insure bicyclists can easily navigate the route • Colors, logos, or symbols can be used by a local municipality to brand their bicycle network
Application	• Bicycle wayfinding systems should be implemented on bicycle friendly streets and involving the public to determine destinations is a key component in developing a successful network

CHAPTER SIX



6 RECOMMENDATIONS

6.1 THE SIX E'S

Drawing from the goals outlined in Chapter 3, this chapter outlines recommendations that will assist in achieving these goals.

Education

Education programs include identifying safe routes for bicyclists and pedestrians, teaching bicycling techniques, disseminating information regarding regulations that govern bicyclists and pedestrians, and instructing bicyclists and pedestrians how to handle potentially dangerous situations.

1. Hold, participate in, and support annual events that promote walking and bicycling including the provision of bicycle-training, such as "Bike rodeos", Slow Roll, Safety Fairs, and helmet campaigns.

- BikeOsh is an event that strives to educate riders on the existing bike routes and introduce them to local businesses and amenities.
- Pedestrian Safety Day can be held during pedestrian safety month to educate drivers and pedestrians on safety.
- Bike Rodeos are used to educate parents and children about the safety aspects of riding a bicycle on streets and roads.
- Safety Fair through a partnership with the Winnebago County Health Department, ReThink, and/or the Transportation Department.

2. Publish maps of current walking and bicycling conditions with routes.
- Maps can be made available at locations such as convenience stores, motels/hotels, visitor information centers, and public libraries, social media, application, City of Oshkosh website.

3. Continue to collaborate and partner with Fox Valley Technical College, private schools, neighborhood associations, Oshkosh Area School District and UW Oshkosh to educate students on bicycling and walking.
4. Partner with businesses on bicycling and walking programs (i.e. Bicycle Benefits program) to educate the community.
5. Educate motorists and bicyclists through marketing and advertising campaigns like a "Share the Road" Campaign and use promotional materials to promote bicycle and pedestrian safety such as a "Myths and Facts" pamphlet, etc.
6. Assist in the implementation of the Wayfinding Guide through East Central Wisconsin Regional Planning Commission.
7. Establish a partnership (local agencies, Oshkosh Chamber of Commerce, Oshkosh Convention and Visitors Bureau, DNR, DOT, and others) to develop educational materials promoting bicycle and pedestrian safety as well as detailing walking and bicycling routes for fitness, recreation, and transportation.
8. Reinforce the idea of bicycling as a form of transportation at all outreach events and opportunities.

Encouragement

Encouragement activities are valuable because they enable or promote biking and walking through incentives or provisions.

1. Promote public and private bicycle rides, events, and bicycle advocacy group campaigns such as bike to work week, bike swaps, club rides, fundraising events, and competitive sporting events.
2. Encourage and assist employers to provide incentives for employees and customers to bicycle and walk to work, such as reducing the amount of vehicle parking required if bicycle and pedestrian facilities are included or the Bike Benefits Program.
3. Support the Safe Routes to School program and Safe Routes to Parks program. Encourage the walking school bus program.
4. Increase use of multimodal transportation options by employing the use of items such as bicycle racks on buses, at park and rides, at public parking lots, and at trailheads.
5. Market and brand a route that follows the riverwalk creating a connected loop.

Enforcement

Consistent enforcement of traffic laws is vitally important for creating a safe pedestrian and bicycling environment. Enforcement programs target unsafe driving behaviors, such as speeding and a police presence serves to reinforce safe bicycling and walking behaviors. The presence of more "eyes on the street" helps make everyone feel safer, and drivers and cyclists alike are on their best behavior.

1. Continue and enhance police bicycle patrols throughout the city, especially on designated bicycle routes.
2. Collaborate with the Safe Routes to School and Safe Routes to Parks program to educate and train law enforcement personnel in the enforcement of laws concerning bicyclists' and pedestrians' rights and responsibilities. Train crossing guards to report motorists who violate crosswalk regulations.
3. Continue efforts to improve safe driving in school zones.
4. Work with residents, schools, neighborhood associations, and law enforcement agencies to identify crosswalks where motorists fail to yield to pedestrians.
5. Collaborate with neighorhoods groups to create a volunteer winter snow removal program.

Engineering

1. Ensure that bicycle and pedestrian infrastructure is included in the annual City of Oshkosh Capital Improvement Program.
2. Coordinate with Winnebago County and adjacent townships to provide access on County and town roads through minimum Wisconsin Bicycle Facility Design Handbook standards, especially when those roadways have been identified as a bicycle route.
3. Implement bike trail connecting the Tribal Heritage Crossing to the riverwalk and Rainbow Park.
4. Develop strategies to partner with Winnebago County to pave unpaved Wiouwash trail sections within Oshkosh.
5. Review and meet with the Transportation and Public Works Departments annually regarding road design guidelines for inclusion of bicycle and pedestrian facilities.
6. Improve Oshkosh Avenue/Sawyer Street intersection to accommodate multimodal transportation.
7. Work and coordinate with other jurisdictions to close gaps in the network.
8. Review policies and maintenance schedules to ensure bicycle and pedestrian facilities are adequately maintained, including during the winter months.
9. Incorporate the bicycle and pedestrian plan into future updates to local planning documents, such as the Comprehensive Plan, transportation plans, and park and open space plans.
10. Ensure planning and construction of river loop route.

Equity

1. Create a proceedure to ensure that equity is considered in all transportation related activities.
2. Evaluate infrastructure projects and activities through the lens of equity.

Evaluation

1. Commit to becoming a recognized bicycle and pedestrian friendly community with designation sponsored by the League of American Bicyclists, the Federal Highway Administration, and America Walks.
2. Incorporate the bicycle and pedestrian plan into future updates to local planning documents, such as the Comprehensive Plan, transporation plans, and park and open space plans.
3. Coordinate with East Central Wisconsin Regional Planning Commission to track counts.

6.2 GENERAL BICYCLE AND PEDESTRIAN FACILITY RECOMMENDATIONS

While useful to encourage and sustain walking and bicycling as transportation, operational programs and policies are enhanced with adequate facilities. Too often, multimodal facility planning is synonymous with planning separate paths. However, separate bike lanes and bike/pedestrian paths are the most costly of all facility improvements. Because of their direct costs and the amount of public right- of-way needed to accommodate these systems, separated bike paths seldom form a complete bicycle and pedestrian system. For the City of Oshkosh, it is most efficient and cost effective to make use of established transportation right-of-ways, especially within the older developed areas of the City. Path and shared use paths are mainly utilized in newer areas of Oshkosh, at natural corridors and where physically and economically feasible.

Network Priorities

It is critical to maintain a comprehensive vision for creating a "walkable" and "bikable" Oshkosh, which includes bike lanes, shared roadways, multi-use paths, and sidewalks. Not only does this plan recommend specific facility improvements, it sets policy priorities and offers guidance and tools to help promote bicycling and pedestrian safety, efficiency and effectiveness.

The overriding principle for bicycle and pedestrian friendly streets is to create public right-of-ways that work effectively for and benefit all modes of transportation. A transportation system that works for pedestrians will

In order to form a well-connected non-motorized transportation system, the bicycle network was planned to utilize both on-street and off-street facilities. The routes and facilities recommended within this plan have been determined by keeping established transportation right-of-ways and rider safety in mind.

Regardless of whether streets are included in this plan's designated bicycle network, bicyclists are allowed use of streets. Therefore, the recommended bicycle network has been developed primarily to formalize safe routes from "origins" to "destinations", eliminate gaps within the current network, continue the expansion of existing off-road facilities utilizing natural and other areas of opportunity, and improve access and connectivity for the bicyclist within the Oshkosh community.

In order to prioritize future pedestrian improvements and bicycle facilities, the following section sets forth recommended project priorities. Best facility practices must be considered when any transportation network is developed, reconstructed or augmented. The policy and project priorities for pedestrians are more programmatic while those for bicycles tend to be physical in nature.

6.3 NETWORK AND FACILITY INTERCONNECTIVITY IMPROVEMENTS

Preferred bicycle and pedestrian routes are determined by the geography and planned growth patterns of the city. While the City of Oshkosh consists primarily of a grid street system, the grid is significantly altered by the area's waterways, lakes and I-41. As a result, the location and condition of bridges affect bicycle and pedestrian travel. Additionally, the nature of modern day development helps to create disconnected pockets of residential and commercial development, which affect decisions to walk, bike, or drive. In some areas, past planning decisions preclude interconnectivity of the transportation system. The State of Wisconsin's Highway system and Winnebago County's freeway system also affect routes available to bicyclists and pedestrians.

Suitably designed bikeways can be identified formally as "Bike Routes." Bike routes are segments of a system of roads that are designated with appropriate directional and informational markers. These routes indicate a major route that most bicyclists will feel comfortable using. The routes are not intended to link all possible locations, and bicyclists are not required to use these routes. New bicyclists and bicyclists new to the Oshkosh area will find these routes useful for getting to know the City of Oshkosh and Winnebago County by bicycle.

The purpose of the proposed bicycle network is to safely link identified "origins" and "destinations" for residents and visitors of the city as well as to provide a connection with current or planned facilities outside the city.

Design approach

The fundamental design consideration behind route selection is based on the type of bicyclist most practically and best served by the city's bicycle facility network. For our purposes, bicyclists can be fit into one of three generalized groups:

- **Advanced Bicyclists** – These users are "strong and fearless" cyclists. They log long hours on their bicycles and may be everyday bicycle commuters who often belong to a cycling club and take part in organized rides. Advanced riders tend to know best bicycling practices and operate on existing roadways. This group is best served by making every street bicycle friendly.

- **Intermediate Bicyclists** – This group of bicyclists are casual riders who tend to be interested in cycling but concerned with safety. Intermediate riders typically understand the basics of best bicycle riding practices but limit themselves to low speed, low traffic streets and prefer well-defined separation of bicycles from automobiles such as riding on sidewalks This group is best served by identifying key travel corridors, determining what type of facility best serves their needs and where new or additional facilities are needed.

- **Novice Bicyclists** – Novice bicyclists tend to be people new to bicycling. These riders have very little understanding of what it takes to safely operate a bicycle in most circumstances and often require monitoring with complete physical separation from vehicles or other transportation modes. This group of riders is best served through education programs and experience in order to move them to an intermediate bicyclist.

It is recommended that facilities are designed with the intermediate bicyclist in mind, not the novice or advanced rider. The design approach focuses on locating designated bicycle routes off unsafe, high traffic volume streets and truck routes, wherever possible. The group focused on route placement as it related to existing traffic controlled intersections and the separation of bicycle travel from vehicular traffic such as the utilization of park properties, greenways and rail corridors. Similar to bicycle facilities, designing pedestrian facilities with the most vulnerable users in mind ensures accommodations that are usable for everyone, regardless of ability.

Facilities and Routes

The Implementation Table lists recommended roadways to include facility improvements. This table coincides with the map in Appendix b. The proposed recommended improvement is broken down into two geographic areas divided by the Fox River and designated as the Northside Oshkosh and Southside Oshkosh. It is further delineated into four sections that correlate with facility recommendations detailed in Chapter 5 – Best Facility Practices:

- Signed and striped roadways
- Signed and/or sharrows
- Multi-use path

The map in appendix c highlights sections of roadways identified for repair or improvement in the City's Capital Improvement Plan. It is recommended that priority be put on the facilities in this plan that overlap with the City's five-year Capital Improvement Plan.

Implementation

The Oshkosh Bicycle and Pedestrian Advisory Committee will continue to meet as necessary and they will select recommendations and projects from the plan to implement. The advisory committee will continue to provide guidance and feedback to City staff as it relates to bicycle and pedestrian programs, issues, and the bicycle and pedestrian network. It was recommended that the Oshkosh Bicycle and Pedestrian Advisory Committee develop an implementation plan.

6.4 FINANCING

Financing the recommendations in this plan should be a joint effort between stakeholders outlined in the recommendations chapter. Funding and financing of a bicycle and pedestrian infrastructure project depends on the individual project and if it coincides with a reconstruction or resurfacing project. Typically it is more efficient at a local level to build in the cost of bicycle and pedestrian accommodations into a reconstruction project. While state and federal programs can help finance bicycle and pedestrian accommodations, the administration of state and federal grants may increase the cost of the entire project.

Local Capital Improvement Programs (CIPs)

As local streets are scheduled for reconstruction or resurfacing, bicycle and pedestrian accommodations should be considered by the local municipality. It is much more cost efficient to include bicycle and pedestrian accommodations as part of the project versus trying to retrofit once the project is completed. The costs of the bicycle and pedestrian accommodations can then be built into the cost of the project.

Surface Transportation Program – Urban (STP-Urban)

The Surface Transportation Program – Urban (STP-Urban) allocates federal funds to complete a variety of improvements to federal-aid-eligible roads and streets in urban areas. All projects must meet federal and state requirements. Communities are eligible for funding on roads that are functionally classified as a major collector or higher.

Transportation Alternatives Program (TAP)

The Transportation Alternatives Program (TAP) is a legislative program that was authorized in 2012 by federal transportation legislation, Moving Ahead for Progress in the 21st Century Act (MAP-21). Projects that meet eligibility criteria for the Safe Routes to School Program, Transportation Enhancements, and/or the Bicycle and Pedestrian Facilities Program will be eligible TAP projects. The funding ratio is usually 80% federal funds, 20% local matching funds.

Highway Safety Improvement Program (HSIP)

The Highway Safety Improvement Program (HSIP) is to develop and implement, on a continuing basis, stand-alone safety projects designed to reduce the number and severity of crashes on all streets and highways (both state and local). The federal funding ratio for the HSIP funds is usually 90% federal and a 10% match of state and/or local funds. The HSIP Program currently prioritizes sites that have experienced a high crash history with an emphasis on low-cost options that can be implemented quickly.

Website: http://www.dot.wisconsin.gov/localgov/highways/hsip.htm

Recreational Trails Program (RTP)

The Recreation Trails Program provides funds to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. The Fixing America's Surface Transportation (FAST) Act reauthorized the Recreational Trails Program (RTP) for Federal fiscal years 2016 through 2020 as set-aside funds from the Transportation Alternatives (TA) Set-Aside under Surface Transportation Block Grant Program (STBG).

U.S. Department of Housing and Urban Development (HUD) Community Development Block Grants (CDBG)

The CDBG program provided eligible metropolitan cities and urban counties (called "entitlement communities") with annual direct grants that they can use to revitalize neighborhoods, expand affordable housing and economic opportunities, and/or improve communities facilities and services, typically to benefit underserved communities (low- and moderate-income communities). Eligible activities include building public facilities and improvements, such as streets, sidewalks, sewers, water systems, community and senior citizen centers, and recreational facilities.

Public / Private Partnerships

As federal and state funds become more competitive for local communities, it is recommended that local municipalities work with the private sector to help secure funds for various types of bicycle and pedestrian projects. The private sector could help to provide the 20% local match for state grant programs, making the local grant application more competitive for funding. Additionally, local businesses have a vested interest in bicycle and pedestrian accommodations, as healthy active employees help to reduce the businesses health insurance costs and employees are also more productive. Local health insurance companies are interested in having healthy residents, as it reduces the health insurance claims related to chronic diseases. Private and public partnerships should be explored by local municipalities as the built environment has a direct correlation with the health of local residents.

Wisconsin Department of Transportation (WisDOT) Highway Safety Improvement Program (HSIP): http://www.dot.state.wi.us/localgov/highways/hsip.htm

U.S. Department of Housing and Urban Development: http://portal.hud.gov/hudportal/HUD?src=/program_offices/comm_planning/communitydevelopment/programs

Additional Resources

•Wisconsin Bicycle Planning Guidance and Wisconsin Bicycle Facility Design Handbook—WisDOT published two documents relating to bicycle planning and bicycle facility design. Wisconsin Bicycle Planning Guidance was published in June 2003 and provides guidelines for metropolitan planning organizations and communities in planning bicycle facilities. http://www.dot.wisconsin.gov/projects/state/docs/bikeguidance.pdf

•Wisconsin Pedestrian Policy Plan 2020 –WisDOT published the Wisconsin Pedestrian Policy Plan 2020 in March 2002. The plan outlines statewide and local measures to increase walking and to promote pedestrian safety. The plan establishes state goals and objectives and identifies action steps for WisDOT to take toward achieving these goals and objectives. The plan provides pedestrian planning guidance for municipalities and recommends that government set specific pedestrian objectives, develop sidewalk inventories, and review existing ordinances regarding the installation and retrofitting of sidewalks. Other planning elements to consider include reviewing cost assessment practices for financing pedestrian projects, analyzing pedestrian crashes, reviewing snow removal issues relating to pedestrian travel, and developing pedestrian improvement recommendations. https://wisconsindot.gov/Documents/projects/multimodal/ped/2020-plan.pdf

•Appleton (Fox Cities) Transportation Management Area and Oshkosh Metropolitan Planning Organization Bicycle and Pedestrian Plan 2014—this plan was passed by East Central Wisconsin Regional Planning Commission in 2014 to address gaps in the bicycle and pedestrian network for the urbanized areas of Calumet, Winnebago, and Outagamie counties. http://www.ecwrpc.org/wp-content/uploads/2013/06/Appleton-TMA-and-Oshkosh-MPOBikePed-Plan-2014.pdf

•National Association of City Transportation Officials (NACTO) Urban Bikeway Design Guide—this document provides information on treatments for various bicycle facilities. https://nacto.org/publication/urban-bikeway-design-guide/

•American Association of State Highway Transportation Officials (AASHTO) Guide for the Development of Bicycle Facilities—this guidebook provides information on how to accommodate bicycle travel in most riding environments. https://nacto.org/wp-content/uploads/2015/04/AASHTO_Bicycle-Facilities-Guide_2012-toc.pdf

•Manual on Uniform Traffic Control Devices (MUTCD)—the MUTCD contains national standards governing all traffic control devices to improve safety and mobility of all road users. https://mutcd.fhwa.dot.gov/

•US Federal Highway Administration's Small Town and Rural Multimodal Networks—this guide, published in 2016, is a resource for small towns and rural communities, and it addresses opportunities to make improvements for bicyclists and pedestrians. https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/small_towns/fhwahep17024_lg.pdf

Bicycle and Pedestrian Circulation Plan
2011 Acknowledgements

2011 OSHKOSH COMMON COUNCIL

Burk Tower, Mayor
Steve Herman, Deputy Mayor
Steve Cummings
Bob Poeschl
Debra Allison-Aasby
Thomas Pech, Jr.
Jeff Hall

2011 PEDESTRIAN AND BICYCLE PLAN
STAKEHOLDER/ STEERING GROUP

Robert Breest, Oshkosh Sustainability Advisory Board
David Buck, Oshkosh Community Development Department
Steven Gohde, Oshkosh Department of Public Works
Matt Halada, Wisconsin Department of Transportation
James Kaprelian, Oshkosh Traffic Review Advisory Board
Brian Kienert, Oshkosh Cycling Club
Sandy Knutson, Oshkosh Health Department
Michael Lizotte, University of Wisconsin Oshkosh
Fred Luebke, Oshkosh Area Friends of Recreational Trails
Shirley Brabender Mattox, Oshkosh Landmarks Commission
Ray Maurer, Oshkosh Parks Department
James Michelson, Oshkosh Advisory Parks Board
Ann Rumbuc, Safe Routes to Schools
Jean Stebbins, Oshkosh Area School District
Chris Strong, Oshkosh Transportation Department
Jeffrey Thoms, Oshkosh Plan Commission
Rob Way, Winnebago County Parks
Mark Ziemer, Oshkosh Senior Center

2011 PLAN AUTHORS:
David Buck, Principal Planner
City of Oshkosh

Jeffrey Nau, Associate Planner/GIS
City of Oshkosh

Schreiber/Anderson Associates Inc.
Madison, Wisconsin

TITLE: City of Oshkosh
Bicycle and Pedestrian Master Plan 2019

CONTACT: Alexa Naudziunas, Associate Planner
Oshkosh Planning Division
PH: 920.236.5059
anaudziunas@ci.oshkosh.wi.us

Jim Collins, Director
Oshkosh Transportation Department
PH: 920.232.5342
jcollins@ci.oshkosh.wi.us

2019 UPDATE CONTRIBUTORS:

Alexa Naudziunas, Associate Planner
City of Oshkosh

Kim Biedermann, Associate Planner
East Central Wisconsin Regonial Planning Commission

Melissa Kraemer Badtke, Principal Planner
East Central Wisconsin Regonial Planning Commission

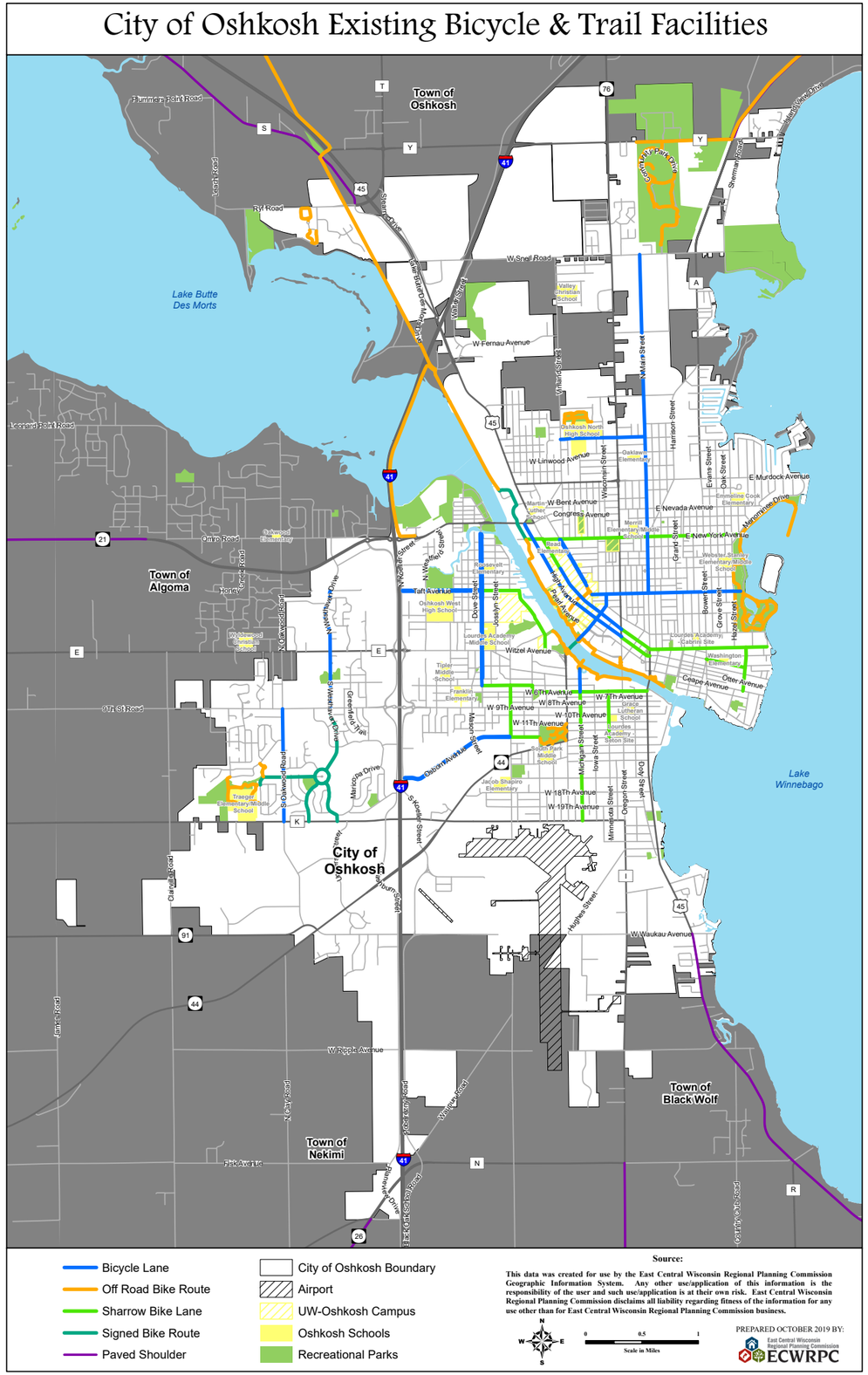
Tanner Russell, GIS Assistant
East Central Wisconsin Regonial Planning Commission

SOURCE OF COPIES: City of Oshkosh Planning Division
215 Church Avenue
Oshkosh, WI 54901
PH: 920.236.5059

City of Oshkosh Transportation Department
PH: 920.232.5342

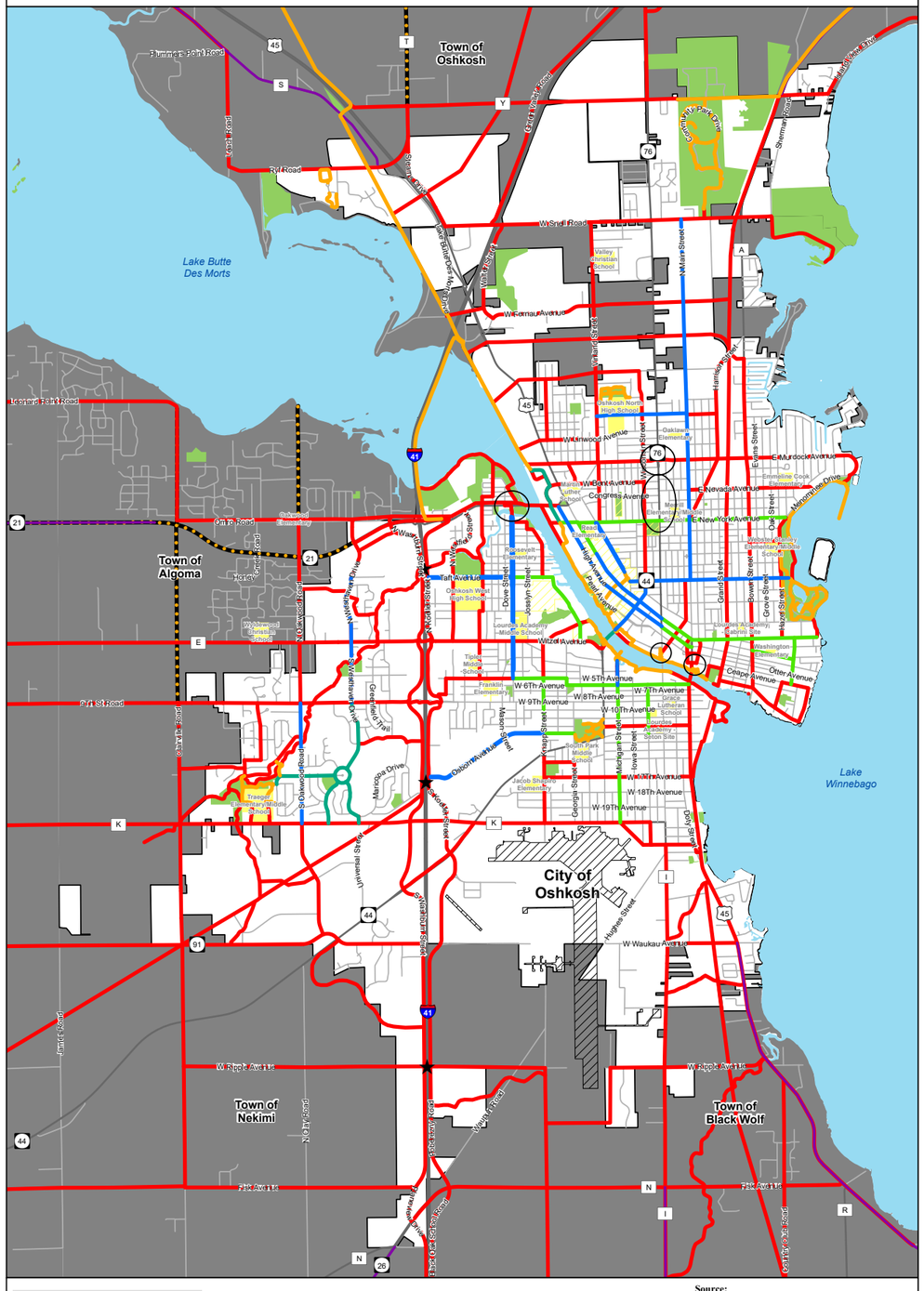
City of Oshkosh Web Page
www.ci.oshkosh.wi.us/Community_Development/Planning_Services/plans.asp

APPENDIX A: EXISTING FACILITIES MAP



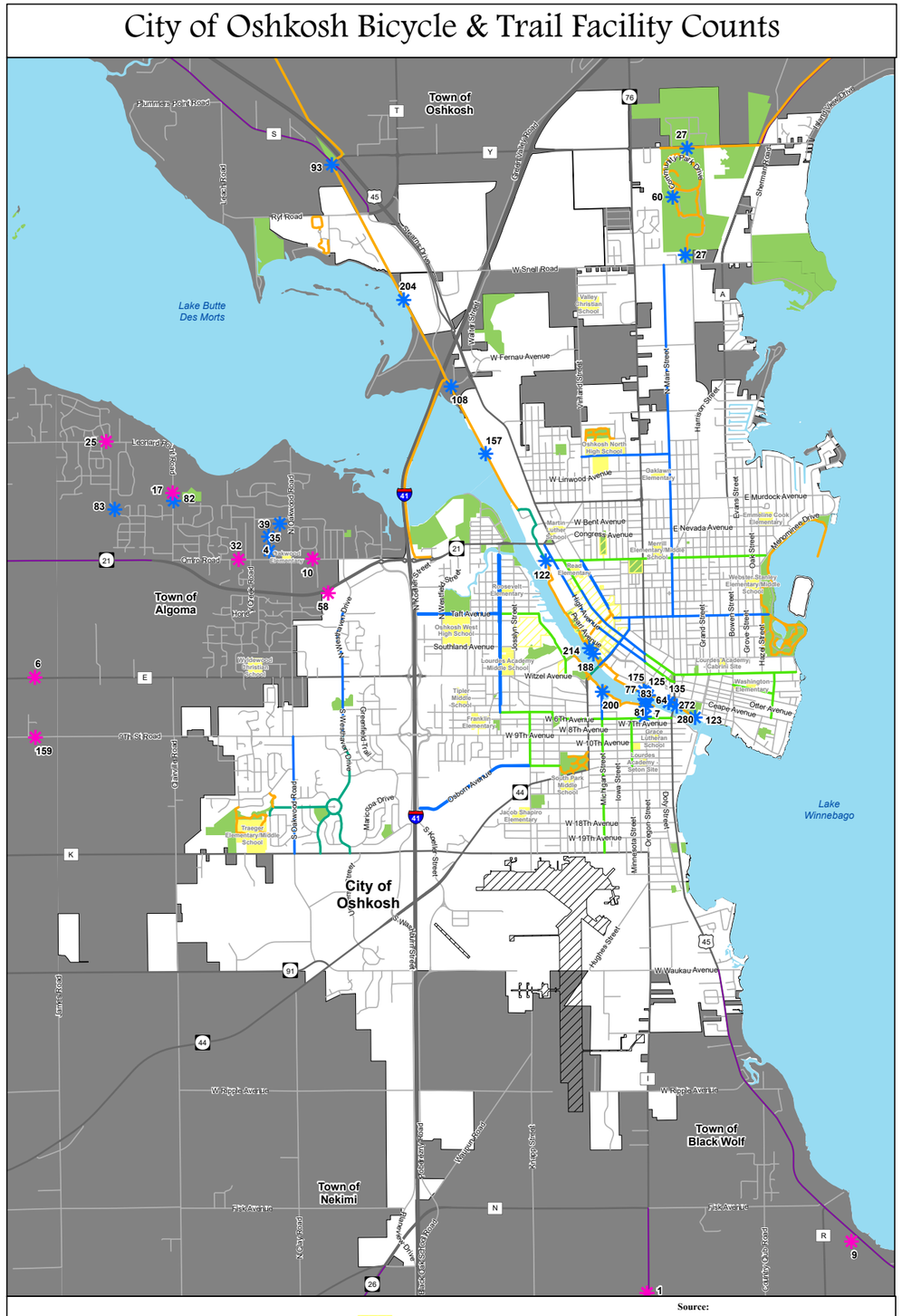
APPENDIX B: RECOMMENDED AND EXISTING MAP

City of Oshkosh Existing and Recommended Bicycle & Trail Facilities

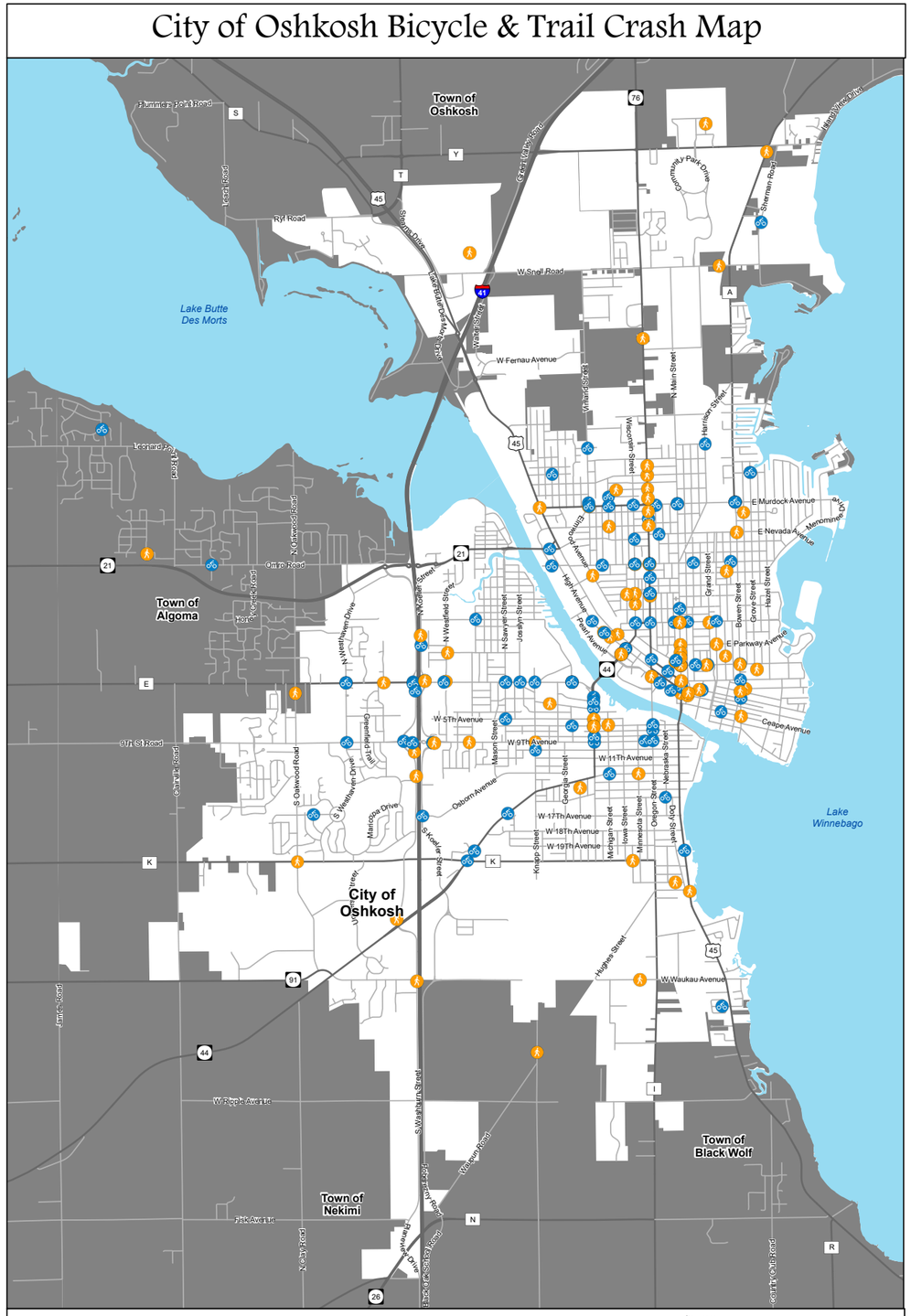


KM: O:\Tanner\MapRequests\CityOshkosh_BikePedPlan\OshBikeTrail.aprx

APPENDIX C: ROUTE USAGE COUNT MAP



APPENDIX D: CRASH MAP



KM: O:\Tanner\MapRequests\CityOshkosh_BikePedPlan\OshBikeTrail.aprx