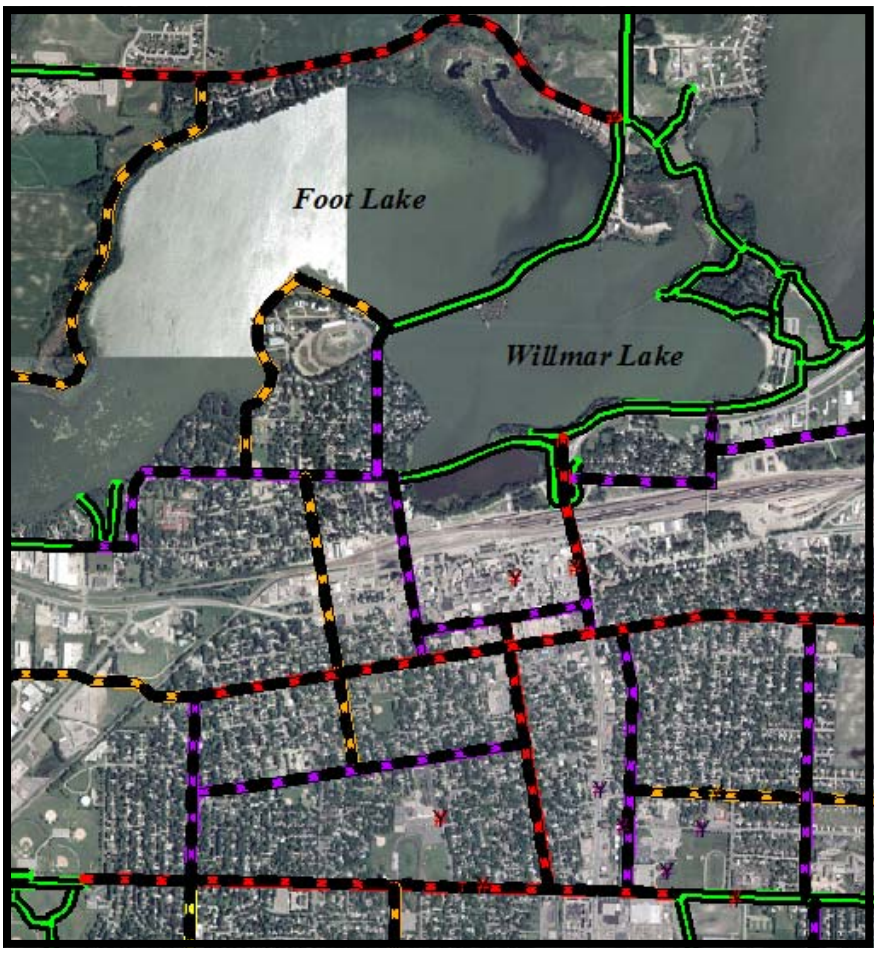
City of Willmar Comprehensive Plan:

Trails & Pedestrian Plan Addendum



Draft Date: August 2011

Prepared by the City of Willmar and the Mid-Minnesota Development Commission

Willmar Trails & Pedestrian Plan

August 2011

Lead City Department:	Willmar Community Education and Recreation
Assisting City Departments:	Planning and Development
	Public Works
	Willmar Police
Passage by:	Willmar Planning Commission: August 21, 2011
	Willmar City Council: August 23, 2011
Prepared by:	Mid-Minnesota Development Commission (MMDC)
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Willmar Trails & Pedestrian Plan:
Table of Contents

List of Maps

List of Tables

List of Figures

CHAPTER ONE:

INTRODUCTION

There are many reasons to plan for non-motorized transportation. Walking, cycling, and jogging are increasingly popular for transport and recreation. Safe and convenient non-motorized travel provides many benefits, including reduced traffic congestion, user cost savings, road and parking facility savings, economic development, a better environment, and better health to those who participant. The ultimate goal of transportation is to provide access to goods, services and activities. In general, the more transportation options available, the better the access.

Walking and cycling are very efficient ways to make short trips in urbanized areas. A built environment that is hostile to non-motorized transport, however, reduces travel choices. This results in less biking and walking activity and creates more "automobile dependency." One of the primary purposes of this plan will be to help find solutions to problems and gaps in the overall system that will encourage bicycling and walking. It is also important to remember that a significant number of the community's population are unable to drive, and thus, are very dependent on a good non-motorized public transportation system. To be a more livable community, it is vital that everyone, regardless of age or ability, has a means to travel safely.

In 2009 the City of Willmar completed updating its Comprehensive Plan. The Plan's Goals, Objectives, and Policies called for future action in regards to pedestrian and bicycle planning needs. ***As a result, the Willmar Trails & Pedestrian Plan has been developed as an Addendum to the Willmar Comprehensive Plan.*** Some of the key objectives that were stated in the Willmar Comprehensive Plan in regards to bicycle and pedestrian planning are:

- Provide a transportation system (street, rail, air, pedestrian & bike trails) which complements land use development and reinforces a staged growth approach to future development.

- Encourage street and trail systems which maximize accessibility to places of employment, recreation, shopping, entertainment, and all developed portions of the City.

- Cultivate a healthy City that is walkable and bikeable.

- Plan street, pedestrian, and trail systems that provide access to all developed portions of the City, connecting parks and open spaces.

Besides the direction given by the City Comprehensive Plan, there have been other recent bicycle and pedestrian activities and plans from different City departments and various other

groups within the city. The City wants to bring together these ideas and plans into one cohesive planning document. With the approval of the City, the Willmar Community Education and Recreation (WCER) has taken on the responsibility to take the lead in the preparation of this bicycle and pedestrian system planning process. The services of the Mid-Minnesota Development Commission have been retained to assist the WCER with the plan preparation. WCER also formed a citizen's task force to help guide this Plan's preparation. The members of this Task Force are listed below in Table 1A:

Table 1A:
Willmar Trails & Pedestrian Plan
Task Force

Andrew Bjur, AIA, LEED AP Architect

Bonnie Pehrson, Citizen

Brad Bonk, Recreation Coordinator Willmar Community Education & Recreation

Bobbi Jo Berg, SHIP Kandiyohi County Public Health

Bruce D. Peterson, AICP, City of Willmar Director of Planning and Development

Carol Laumer, Executive Director Rice Home Medical

Donn Winckler, Mid-Minnesota Development Commission

Jarrett Hubbard, MnDOT Senior Transportation Planner

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Lynn Stier, Department Director Rice Rehabilitation Services

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Mark Klema, P.E. Bolton & Menk

Matthew Johnson, Planning Director Mid-Minnesota Development Commission

Megan M. Sauer, AICP, City of Willmar Planner/Airport Manager

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Steve Brisendine, Director Willmar Community Education & Recreation

Stephanie Volk, PT Rice Memorial Hospital

The Benefits of Developing a Bicycle and Pedestrian Plan

There are many reasons why the City of Willmar should promote bicycling and walking. Through integrating bicycling and walking as part of a balanced transportation system, the overall quality of life for residents and visitors alike will improve in Willmar. Communities with a high quality of life are desirable places to live, work, and do business. Bicycling and walking are healthy, non-polluting forms of personalized, human powered transportation. They both are forms of transportation available to all segments of society and to people of all ages and socio-economic levels. Moreover, communities that encourage walking and biking experience economic, health and environmental benefits. By creating a safe environment for people to walk and bike, residents will be encouraged to incorporate walking and bicycling into their daily lives.

Economic Benefits

- Property values tend to be higher in communities that have well designed facilities for walking and biking. Houses near trails and parks have higher resale values. As property values increase, tax revenues increase.

- By providing accessible and efficient pedestrian and bicyce connections between neighborhoods and retail, municipal, dining, and office destinations, customer trips are increased, resulting in business growth.

- Well designed bicycle and walking facilities are an important quality of life benefit that will make the community a more desirable place to conduct business and to live. It will also benefit the City's tourism efforts.

- Walking and bicycling are affordable means of transportation. Reducing vehicle trips will reduce the associated costs of vehicle operation. Fewer vehicle trips will also lower congestion and pollution levels, and save on road maintenance.

Health Benefits

- An important goal of the plan is to increase both pedestrian and bicycle usage in the community. Through encouraging these activities, persons will increase their level of physical activity, resulting in better health. By increasing the physical activity of persons in the community, health problems (such as obesity, heart disease, strokes and diabetes) will likely be reduced.

- A 2008 survey NHTSA showed that 84 percent of people polled agreed (strongly or somewhat) that bicycling is a "great form of exercise" for them, 70 percent said they would like to bike more than they do now, but less than half of the surveyed respondents said they were satisfied by how their communities were designed for bicycling.

- Enhancement of the City's pedestrian and bicycle facilities will improve the safety of persons choosing this means of transportation in the community.

Environmental Benefits

- Walking and bicycling get you where you need to go without burning fossil fuels, keeping pollutants out of the air and lessening green house effects.

- A shift in more non-motorized transportation will lower water and noise pollution.

Other Benefits:

- Pedestrian and bicycle facilities are important for non-drivers (including elderly and children).

- Increased pedestrian and bicycle use leads to increased community interaction, which can result in safer streets and opportunities to meet neighbors.

The Plan's Components

A Vision Statement developed by the Task Force was used as the guiding vision in the preparation of this Plan. The vision statement reads as follows:

> ***"The City of Willmar will develop and maintain an interconnected bicycle and pedestrian system where residents and visitors have safe, accessible, and convenient options to meet their needs."***

Chapter Two of the Willmar Trails & Pedestrian Plan contains a community profile, including information on the City's demographics, existing trails, and major destinations. Chapter Three outlines some of the best management practices when it comes to designing bicycle and pedestrian facilities. The Plan's short, medium, and long-term priority recommendations are discussed in Chapter Four. Chapter Five contains the Plans Goals, Objectives, and Policies, and Chapter Six identifies implementation steps and possible funding sources. The Appendix includes definitions for key words and concepts used in the document and also provides links to some additional information on bicycle and pedestrian issues.

This Plan is intended to be used cooperatively by the City of Willmar and various stakeholders as they pursue future improvements to the community's bicycle and pedestrian network.

CHAPTER TWO:
COMMUNITY PROFILE

This chapter provides background demographic information on the City of Willmar and the current status of the community's bicycle and pedestrian facilities. The chapter will also discuss the major destinations in the city that both bicyclists and pedestrians need to be able to access.

Section One:
Demographics

The City of Willmar serves as a regional center for a large geographic area in west central Minnesota. The community is located near the center of Kandiyohi County and shares borders with Willmar, Dovre, Green Lake and Kandiyohi Townships. U.S. Highways 12, 71, and State Highway 23 are the three major roadways. Willmar is situated near numerous lakes, with Foot, Willmar and Swan Lakes all being located inside the City's corporate limits.

According to the 2010 Census, the City of Willmar had 19,610 residents, which was approximately a 6.4 percent increase from the 2000 Census. Since 1960, the City's population has grown by over 88 percent. Typically, the primary users bicycle and pedestrian facilities are children and their parents, and the elderly as many of them eventually give up driving. The 2009 American Community Survey shows an estimate of 3,118 children between 5 to 17 years of age living in the city, and an estimated population of 1,315 residents 80 years old and older. The 2009 American Community Survey also shows that an estimated 16.14 percent of Willmar's population had incomes below the poverty level. In addition, 2,414 of the community's 7,458 households had incomes below $25,000.

The 2000 Census shows that the disability status of the non-institutionalized population, over the age of four totaled 3,568 Willmar citizens. Of this, 487 disabled persons were aged 5 to 20 years; 2,031 were aged 21 to 64; and 1,050 people were over 65 years old.

The large majority of persons who worked in 2000 either drove alone or carpooled. The Census showed that 89.7 percent (7,997 persons) living in Willmar traveled to work in a private motor vehicle. In 2000, there were only 32 persons that indicated that they used a bicycle to get to work. In the 2009, the American Community Survey showed that number increased to 60 persons. The 2000 Census also showed that 351 (3.9%) walked to work, 247 Willmar residents worked at home, and 258 workers used public transportation to get to work.

The Census also collects data on the time it takes commuters to get to work. This is important to look at to see the potential of encouraging more persons to either bicycle or walk to work. If a person takes nine minutes or less to drive to work, they would have a fairly reasonable commute time if they decided to ride a bicycle instead. In 2000, for persons who did not work at home, 3,061 Willmar workers had a travel time of 5 to 9 minutes to their employment, and 712 workers had less than a 5-minute commute. The mean travel time for Willmar workers was 13.5 minutes in 2000.

The 2000 Census also shows that a considerable number of persons living in occupied housing units did not have a motor vehicle available. There were 783 occupied housing units that had no vehicle available in Willmar in 2000. This large number supports the need to have a well connected and safe pedestrian and bicycle facilities in the city.

Section Two:
Existing Trails & Projects
~ Please refer to Maps 2A and 2B ~

Glacial Lakes State Trail

The City of Willmar is fortunate to be the terminus of the Glacial Lakes State Trail. The trail is paved with asphalt for the first 22 miles, from Willmar to Hawick, before it continues unpaved for another 22 miles where it ends just north of the City of Richmond. Located on a former Burlington Northern Railroad grade, the trail travels northeast from Willmar on a relatively flat terrain. The trail also travels through the Cities of Spicer and New London on its way to the unincorporated community of Hawick, and the Kandiyohi/Stearns County line. The trail is handicapped accessible, and thus, wheelchair accessible. The ten mile segment of the trail between Willmar and New London has a parallel, grass treadway for horseback riding. From New London to the Kandiyohi/Stearns County line the trail accommodates horseback riders through the use of grass shoulders.

The Minnesota Department of Natural Resources (DNR) owns and operates the trail. Their informational literature of the trail states the following: "The gently rolling topography of Central Minnesota was created by glacers retreating 10,000 years ago. The trail cuts across the border between Minnesota's western tallgrass prairie and eastern deciduous forest. Though much of the area has been cultivated, remnants of virgin prairie, wetlands, and scattered woodlots can still be found along the railroad right-of-way. Whitetail deer, numerous small mammals, birds, reptiles and butterflies can be seen along the trail."

The state trail adds an additional facility to Northern Kandiyohi County's tourism industry, with the many recreational lakes in the area. The communities along the route provide access points, rest stops, and other trail services for the trail users. The trail also accesses other side trials to the north. County Road 148 has a shoulder trail facility that leads to Sibley State Park four miles West of the City of New London. There is also a two-mile spur trail that leads into The City of Paynesville, which connects to a trail that extends around Lake Koronis.

In Willmar, parking is available for trail users near the Civic Center, just off of County Road 9. At the parking lot there is a kiosk with information about the trail. There is also one bench. What is lacking is the availability of water for users, and information of how to access and find your way around the City's bikeway system. It would be handy to seek permission to add information at the site on how to proceed into the City from this trailhead. Possibly the near-by Civic Center could be used by trail users for bathroom facilities and for drinking water. If this is can be allowed, information on the use of the facility would need to be added to the trailhead location.

The Willmar Design Center's "Downtown Connections Committee" has been in contact with the DNR about officially extending the trailhead into the central business district of Willmar. It is hoped that this would be done in conjunction with the improved pathway segment from the First Street Bridge to Robbins Island Park, scheduled to be completed in 2013, through a successful Enhancement Program application.

The Glacial Ridge State Trail is a significant asset to the City of Willmar, which needs to be fully connected to the Willmar trail system. The facility is not only greatly utilized by residents of the community, but also by many tourists and bicycle enthusiasts from around the state and beyond come to enjoy the trail.

Glacial Lake Trail Head in Willmar

Downtown to Robbins Island Connection

In 2008, the Willmar Design Center was given approval by the Willmar City Council to submit an Enhancement Application to the Southwest Minnesota Area Transportation Partnership for a shared use path that will connect downtown Willmar to Robbins Island and other destination points further to the north. The project was selected for funding, and was placed on the Minnesota State Transportation Improvement Program for construction in 2013. The total cost of the project is $177,017 with federal Enhancement Program funds paying $135, 064 towards the project.

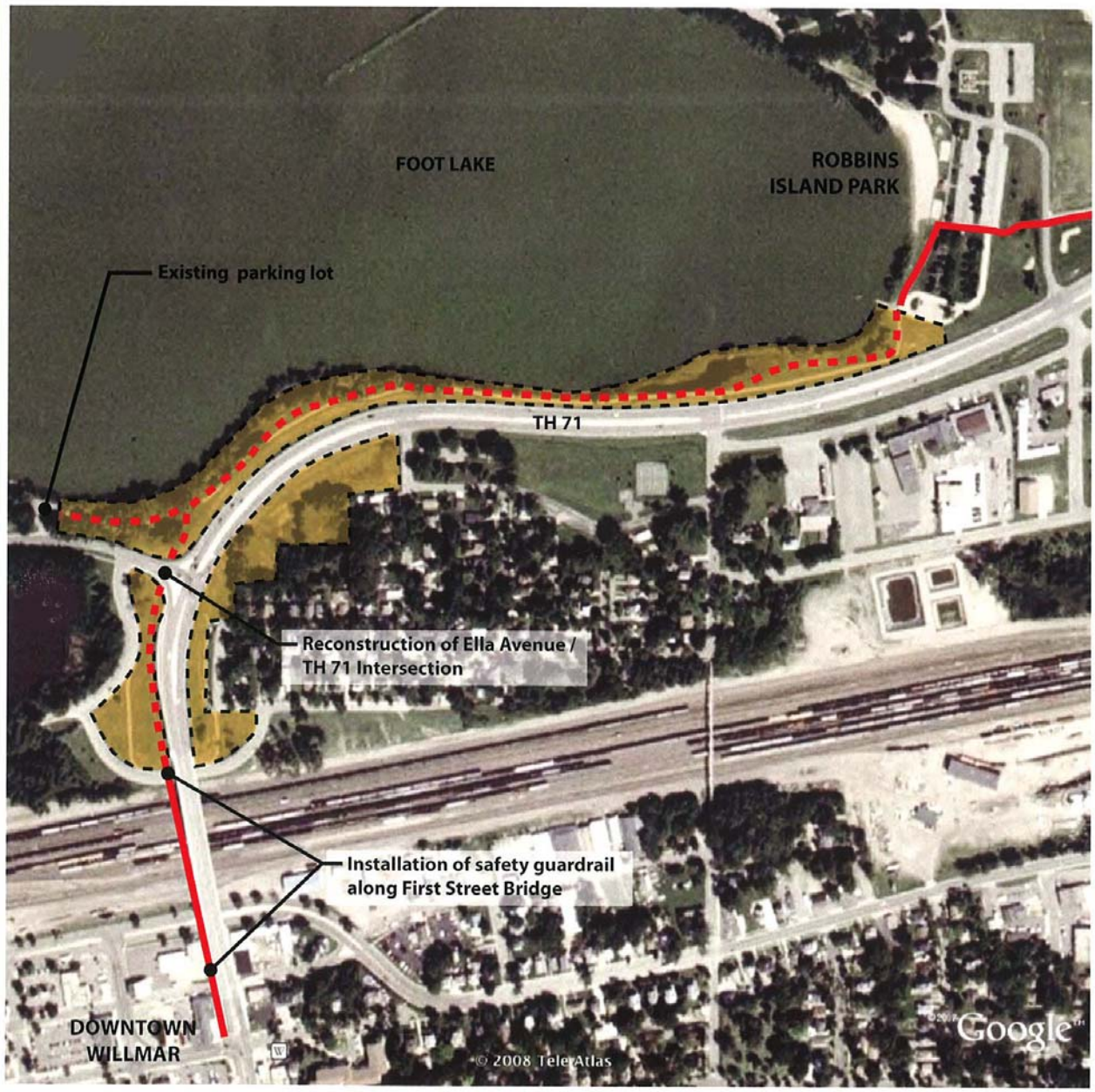
The project will close the remaining gap in the trail system that will connect downtown Willmar to the Glacial Lakes State Trail. When completed, this corridor will allow persons using the facility to access the downtown to the south and such destinations to the north as Robbins Island Park, Willmar lakes, the MinnWest Technology Campus, and the High School. The project's Enhancement application states:

> ***"The Downtown-Robbins Island Trail Connection Project will originate at the downtown approach of the First Street Bridge. The bridge has an eight foot wide concrete sidewalk that will be upgraded with the addition of a metal guardrail between the walkway and the vehicular traffic lanes. Beginning at the northern abutment of the bridge, the project will completely reconstruct an existing eight foot wide asphalt trail, instead creating a ten foot wide multi-use trail that will run approximately ¾ mile to Robbins Island Park."***

At Ella Avenue, improvements will be made to the at-grade crossing. "An existing mid-block crossing will be replaced with a new pedestrian striping, signals, curb cuts, and refuge islands at the signalized intersection of Ella Avenue and TH 71, which will make this crossing safer and more accessible." The trail will be built to standards outlined in AASHTO's "Guide for the Development of Bicycle Facilities" and the Mn/DOT Bikeway Facility Design Manual. When completed, along with another short gap to the north, (which is discussed elsewhere in the plan), the route will connect Willmar's downtown commercial district with the Glacial Lakes State Trail. Construction is scheduled to begin in May of 2013, and should be completed by November 2013.

The Minnesota Department of Natural Resources has approved, in principle, the extension of the Glacial Lakes Trail into downtown Willmar. The downtown trailhead will be Salvig Park. The City and DNR have plans to develop an agreement to construct this trail extension. The DNR, with this agreement would at the very least help pay for signage and trail promotion. The project will also include plans to restore approximately 1.5 acres of native savanna. "This grassland restoration will reduce long-term maintenance demands on the park and trail area, recreate habitat generally rare in Southwest Minnesota, and establish a unique, high quality gateway to the city from the north."

Application for 2013 Transportation Enhancements Funding
Downtown-Robbins Island Connection, Willmar, MN



PROJECT SCOPE

LEGEND

- Proposed 10' asphalt bike/ped trail
- Existing city trail/sidewalk
- Savanna restoration area

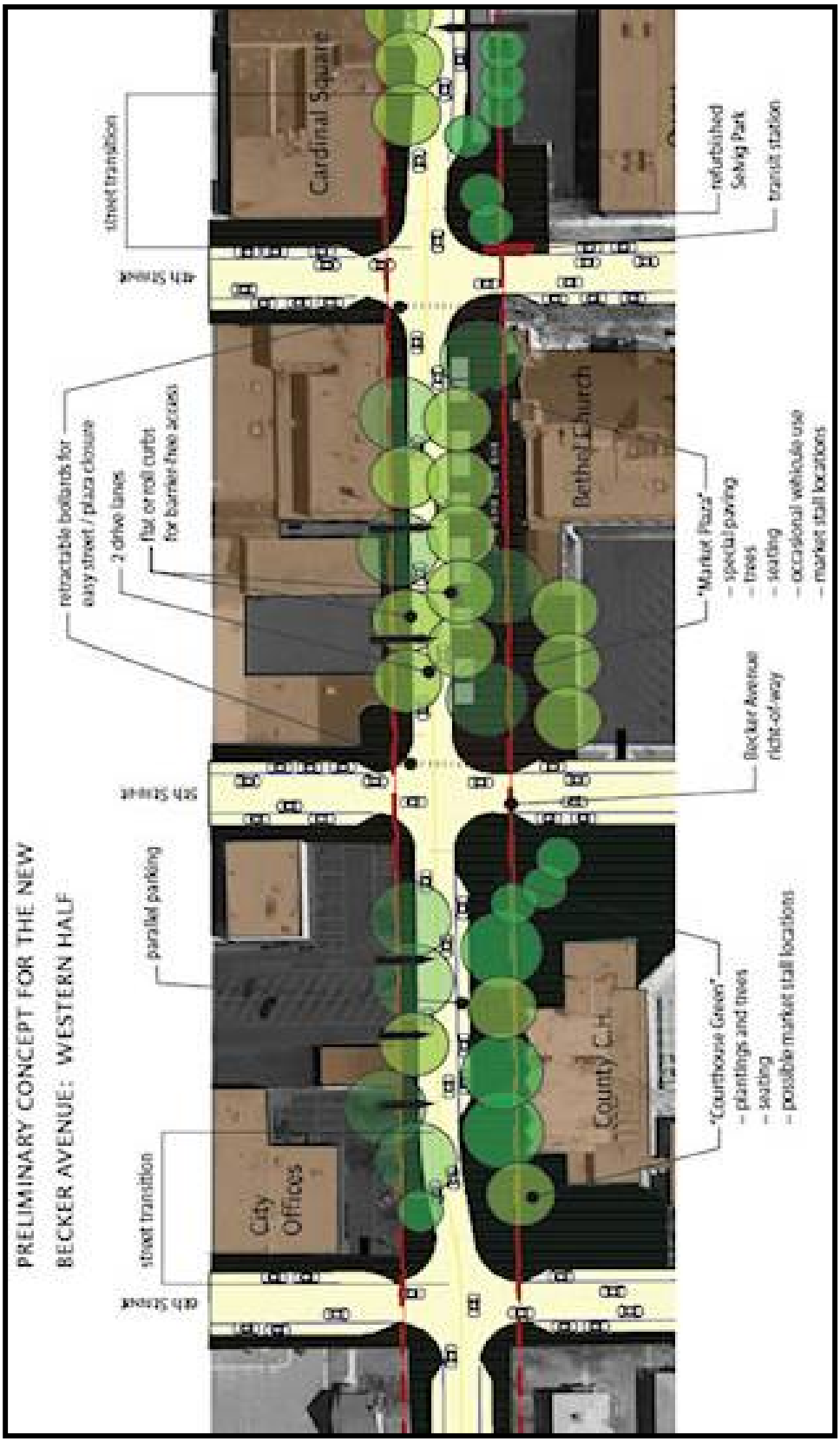
Downtown Becker Avenue Complete Streets Project

The Willmar Design Center, with approval of the City, has prepared plans for the reconstruction of four blocks of Becker Avenue from 1st Street South to 5th Street South using Complete Streets principals. The project was part of a 2010 Minnesota Tiger Grant II Application that, unfortunately, did not receive funding. This project was designed before this grant program became known, and it is hoped that there will be new funding opportunities in the future. The project includes having a convertible section of the street for markets and festivals; a multi-use trail segment that will help connect the downtown with the Glacial Lakes Trail, with hopes that this trail segment will become part of the state trail; stormwater planters, curb pump-outs, street trees, and an improved pedestrian environment.

The project, when constructed, can be utilized as a downtown commons. Currently the downtown lacks such a facility. A portion of the street will be designed to be easily closed to traffic for events, such as the current downtown Becker Street Market. The project has a three-block green corridor, the trail segment and stormwater management facilities placed within the right of way.

One of the principal reasons for the planning of this project is to increase the safety of both bicyclists and pedestrians in downtown Willmar. Through this plan, the City seeks to connect the downtown to a network of bicycle and pedestrian facilities that will be located throughout the community. The Becker Street Complete Street concept will be an important segment of the downtown designed network. Besides the trail segment, the project will include traffic calming measures, such as bump-outs, colored intersections and plantings. In addition the street may be closed off to traffic for safe pedestrian movement during planned events. The project will also upgrade the new transit stop at the corner of Becker Avenue and 4th Street. When the Becker Street Plan was prepared the estimated cost of the trail along Becker Avenue from First Street to 4th Street SW was $146,375. Costs will obviously be higher when construction does occur in the future. This project has been placed in the Bicycle and Pedestrian Plan's mid-term project priority list.

This project overview is not intended to give the reader a complete detail of this project. Further information can be attained by contacting the Willmar Design Center or the City of Willmar. When completed, the project will provide an attractive facility that will foster economic competitiveness, community livability, environmental sustainability and for improved safety.

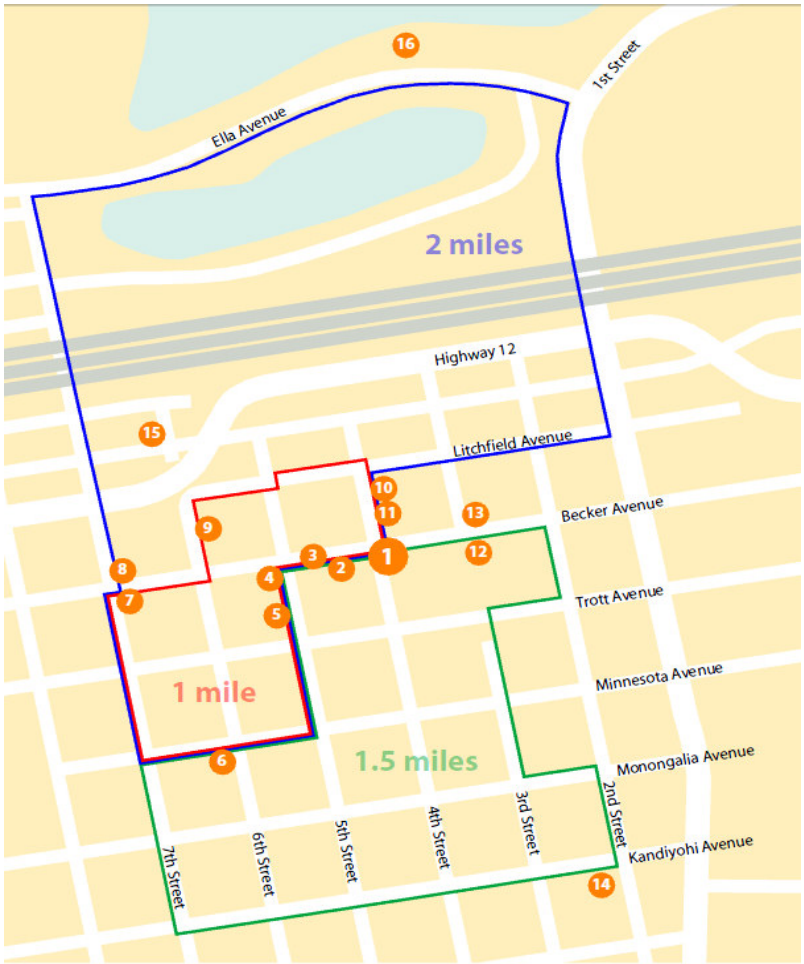

PRELIMINARY CONCEPT FOR THE NEW
BECKER AVENUE: WESTERN HALF
Cardinal Square
refurbished
Selvig Park
transit station
street transition
4th Street
retractable bollards for
easy street / plaza closure
2 drive lanes
flat or roll curbs
for barrier-free access
Bethel Church
"Market Plaza"
- special paving
- trees
- seating
- occasional vehicular use
- market stall locations
Becker Avenue
right-of-way
5th Street
parallel parking
County C.H.
"Courthouse Green"
- plantings and trees
- seating
- possible market stall locations
City
Offices
street transition
6th Street

Willmar Walks Routes

In the Fall of 2010, the Willmar Walks project will be completed. Willmar Walks includes three routes for walking that wind through the downtown area. There is a 1 mile route, a 1.5 mile route, and a 2 mile route. These routes have been designed to encourage more persons walking for exercise in the downtown. The flyer developed for the program will also be educational for both citizens and visitors by highlighting and discussing eighteen points of interest along the routes. Most of the points of interest highlight Willmar's historic buildings in the central business district.

Willmar Walks utilizes a map flyer and sidewalk route identifiers to guide persons on the three routes. Selvig International Park is the designated route head for each of the three routes. Willmar Walks is a project that was developed through the joint efforts of Rice Memorial Hospital, Kandiyohi County Public Health, The Willmar Design Center, the Willmar Lake Area Chamber of Commerce, and the Kandiyohi County Historical Society.

Figures 2A:
Willmar Walks
Signage & Routes



Section Three:
Key Bicycle & Pedestrian Stakeholders

Willmar Community Education and Recreation (WCER)

The WCER, while heading the efforts of the Willmar Bicycle and Pedestrian Plan, continue to play a major role in bicycle and pedestrian facility development. The WCER is a joint venture of the Willmar School District and the City of Willmar. They provide a wide range of educational and recreational activities. In 2010, WCER held the first annual "Ride for the Trails" event, which is an organized bike ride throughout the community of Willmar. The event raises funds that will be used to help offset the costs to complete the city's trail system, as well as raises awareness of the city's current trail facilities.

Willmar ACHIEVE Team

ACHIEVE (Action Communities for Health, Innovation, and EnVironmental changE) is sponsored by the Centers for Disease Control and Prevention (CDC). Headed by the YMCA of Kandiyohi County, the City of Willmar was chosen as one of the ACHIEVE communities. Besides the YMCA, other local partners include the WCER, Kandiyohi County Public Health Department, Rice Hospital and Ridgewater College. The mission of the Willmar ACHIEVE team "is to transform the community so that healthy choices are easy choices." Their vision is to "create a community where people move naturally, eat wisely, live with purpose, and connect with others by advocating for policies that promote healthy behavior."

Willmar Design Center

The Willmar Design Center is a local nonprofit organization that helps lead city improvements, particularly within the city's central business district. The Willmar Design Center grew out of the community working with the Minnesota Design Team in 2005. Their primary mission is "renewing the heart of the city."

One of the Center's activities is to be sure the downtown is well connected to the city's transportation system. The Center's Downtown Connections Committee has given their input to this Plan by providing a list of their priority projects for bicycle and pedestrian facilities. This Committee has also been instrumental in leading the efforts on the successful Enhancement Application that will fund trail improvements from the First Street Bridge to Robbins Island Park. The Committee has volunteered to assist with the implementation of this Plan by studying the need for bicycle racks within the community and mapping out where bicycle racks are located. The Committee helped lead a successful implementation of "Willmar Walks." This walking route project within the downtown is highlighted further down in this Chapter. The Committee has also organized family bicycle events.

Kandiyohi County Public Health

Kandiyohi County Public Health (KCPH) has received two significant grants to promote active communities and increase physical activity through policy, systems, and environmental changes. Benefits of regular physical activity include: a lower risk of developing chronic health diseases; growth and maintenance of strong bones, muscles, and joints; improved mood; and weight control. The physical environment (the neighborhood) has a strong effect on whether or not members of a community walk or bike (Public Health Law and Policy). People tend to walk and bike where they have pleasant and safe places to do so. Sidewalks, bike paths, and crosswalks, as well as, trees, adequate street lighting, benches, water fountains and trash removal can make a difference (Public Health Law and Policy).

Kandiyohi County Public Health works with many organizations to encourage, enhance, or improve opportunities to be physically active. KCPH staff has been involved with the Connections Committee (originally known as the Connections to the Lakes Committee) since it was a component of the newly established Willmar Design Center's vision. KCPH staff currently Chair the Connections Committee. KCPH has recently began working with two more groups, GreenStep Cities and ACHIEVE. GreenStep Cities is an action-oriented program offering a cost-effective, simple pathway to implementation of sustainable development best practices that focus on greenhouse gas reduction & other positive environmental outcomes. A city that has implemented or that implements best practices in five categories: building and lighting; land use; transportation; environmental management; and economic & development will be recognized as a GreenStep City. Cities in Kandiyohi County are working towards this. Kandiyohi County Public Health also works with schools and local organizations to promote physical activity.

Policies and practices in community design and land use have been proven effective to increase levels of physical activity. In the Steps to a Healthier Willmar project coordinated through KCPH, funding supported bike racks, the creation of the downtown "Willmar Walks" walking routes and maps, and other Willmar Design Center activities that encourage physical activity. The Statewide Health Improvement Program (SHIP) is also coordinated through Public Health. Its goal is to help Minnesotans live longer, better, healthier lives by reducing the burden of chronic disease. One strategy is to encourage non-motorized transportation. Non-motorized transportation features can be addressed through community design and land use policies and practices that include street and community design standards, ordinances, zoning regulations, form-based codes, building codes, builders' practices, and Complete Streets policies. Non-motorized transportation is generally defined as walking and biking; however, it also includes the use of wheelchairs, strollers, and other forms of wheeling like in-line skates and skateboards. Local SHIP funding has contributed to the development of the Willmar Bicycle and Pedestrian Plan.

Through these funding streams, KCPH has been able to assist with grant writing for transportation funding, implement programs that increase physical activity, create awareness of the importance of physical activity, promote local opportunities for physical activity like runs/walks, bike rides, and the creation of the Willmar Walks maps.

Section Four:
Major Destinations

The City of Willmar has a number of major destination sites that need to be connected into the City's network of bikeways and sidewalks. These facilities are important for all Willmar residents to be able to access safely by both motor vehicle and by non-motorized means of travel. Many of these major destinations are frequented by children and other persons without access to motorized travel. While it is best if bikeways are directly connected to these major community destinations, there is the goal of having the bikeway network be at least within a quarter mile from each of these identified destinations. The advisory committee for this plan has determined that the following destinations shall be defined as a "major destination" points. These facilities have been factored into the planning for the community's network of bikeways and sidewalks. Maps 2A and 2B show the location of these major destinations.

Schools and Primary Parks and Recreation Facilities:

- **Willmar Civic Center Arena** (2707 NE Arena Drive)
- **Swansson Field Recreational Complex** (Willmar Avenue SW & 22nd Street)
- **Bill Taunton Stadium – Baker Field** (1401 22nd Street SW)
- **Dorothy Olson Aquatic Center** (1601 SW 22nd Street)
- **Hodapp Field** (Seventh Street SW and Willmar Avenue)
- **Swansson Recreational Complex** (Willmar Avenue SW)
- **Robbins Island Park** (North Hwy 71 between Foot and Willmar Lakes)
- **Hedin Park** (Seventh Street NW & 15th Avenue)
- **Rice Park** (Third Street SW & Kandiyohi Avenue)
- **Thompson Park (**Highway 71 NE)
- **Garfield Park** (Monongalia Ave. & Eighth Street SW)
- **North Side Park** (12th Street SW & Ella Avenue)
- **Gesch Park** (12th Street SE & Irene Avenue)
- **Hilltop Park** (Seventh Street SW & Parkview Road)
- **Vos Park** (CSAH 5 & First Ave. NW)
- **Miller Park** (Kandiyohi Ave. SW & 11th Street)
- **East Side Park (Linclon Park)** (Trott Ave. SE)
- **Sunrise Park** (23rd Street SE & CSAH 23)
- **Glacial Lakes State Trail** (The trailhead in northwest Willmar is located on Arena Drive near the intersection of County Hwy 9)
- **Willmar Senior High School** (2701 30th Street NE)
- **Willmar Middle School** (209 Willmar Avenue SE)
- **Kennedy Elementary School** (824 7th Street SW)
- **Roosevelt Elementary School** (1800 19th Avenue SW)
- **Jefferson Learning Center** (1234 Kandiyohi Ave. SW)
- **Willmar Education & Arts Center (WEAC)** (611 SW Fifth Street)
- **Community Christian School** (1300 SW 19th Avenue)
- **Ridgewater College** (2101 NW 15th Avenue)

Government Centers:

- **Willmar City Offices** (333 SW Sixth Street)
- **Willmar Municipal Utilities Building** (700 SW Litchfield Avenue)
- **Kandiyohi County Health and Human Services Building** (2200 23rd Street NE)
- **Kandiyohi County Courthouse** (505 Becker Avenue SW)
- **Kandiyohi County Benson Avenue Office Building** (400 SW Benson Avenue)
- **Willmar City Auditorium** (311 SW Sixth Street)
- **Willmar Community Center** (624 Highway 71 NE)
- **Willmar Public Library** (410 SW 5th Street)

Primary Medical Facilities:

- **Rice Memorial Hospital** (301 SW Becker Avenue)
- **Rice Rehabilitation Center** (311 SW Third Street)
- **ACMC Main Clinic** (101 SW Willmar Avenue)
- **ACMC Skylark Clinic** (1604 South First Street)
- **Family Practice Medical Center** (502 SW Second Street)

Commercial Centers and Primary Employment Centers:

- **Willmar Central Business District**
- **Kandi Mall/ Skylark Mall/ South First Street Commercial District**
- **Willmar Industrial Park** (General area of 28th Street SW & Trott Avenue SW)
- **MinnWest Technology Campus** (1550 Highway 71 SW)
- **Willmar Conference Center** (2100 East Highway 12)
- **West Central Industries** (1300 22nd Street SW)
- **Jennie-O Turkey Store Inc. Plant** (2505 SW Willmar Avenue)

Grocery Stores

- **Cash Wise Foods** (1300 SE 5th Street)
- **Cub Foods** (2201 1ST Street South)
- **Wal-Mart Supercenter** (700 SW 19th Avenue)

Other Major Destination Centers:

- **Kandiyohi County Fair Grounds** (907 7th Street NW)
- **Kandiyohi County Historical Society Museum** (610 Highway 71 NE)
- **Willmar Post Office** (401 SW Trott Avenue)
- **Willmar YMCA** (1000 Lakeland Drive SE)
- **Eagle Creek Golf Course** (1000 26th Avenue NE)
- **Valley Golf Course** (1900 Becker Avenue SE)

CHAPTER THREE:

BICYCLE & PEDESTRIAN FACILITY

STANDARDS AND GUIDELINES

This section of the Plan is to provide community groups, bicyclists, staff professionals and the general public with some information on how to plan and design bicycle and pedestrian amenities. This chapter, however, is not intended to be the complete informational source for the information that is provided. The design guidelines used in this chapter draw heavily from the design standards developed by the American Association of Highway and Transportation Officials (AASHTO), the Minnesota Department of Transportation (Mn/DOT), and the United States Department of Transportation (USDOT). Many of these standards and guidelines can be found in much greater detail in other publications.

Section One:
Prioritizing Projects

It is important to keep in mind that while the City of Willmar will have the jurisdictional authority for the majority of bikeways in the community, there will be other governmental jurisdictional responsibilities as well. The goal of extending the Glacial Lakes State Trail to the central business district will need to follow standards set by the DNR for their trail systems. If bikeways are developed in the right-of-way of either Kandiyohi County's or Mn/DOT's jurisdictional control they will need to agree with the plans that are developed. Ultimately, the decision on what projects will be designed and built will come from the City or another governmental jurisdiction that has authority over their right-of-way. Detail design considerations will come from the jurisdiction's engineers or hired professionals.

The users of the City's bicycle facility network will be at different skill levels. Different skill levels require different bicycle treatments. These facilities should be placed in a regularly spaced corridor grid so that users of all skill levels can utilize the system that is in place. There are some criteria that should be established before a bicycle or pedestrian facility is added to the City's capital improvement program. First, the facility's scope must be technically and economically realistic based on existing or proposed conditions, and should not conflict with the City's transportation goals and policies. The City will also examine and determine the following factors before a project proceeds:

- Maintenance responsibility is determined
- Design standards are met
- Right-of-way is established
- Funding is secured
- Community is generally in favor

With limited resources available, it is unrealistic that the City can afford to proceed immediately with all the proposed projects discussed in this plan. It will take many years for the community to implement its project goals that have been laid out. For that reason the City needs to look at what criteria will be utilized in determining how to prioritize the identified bicycle and pedestrian facility projects. To even be placed on the future project list a candidate project should meet at least one of the following criteria:

- The project is needed to improve safety
- The project enhances, improves, or replaces an existing facility
- The project closes an existing gap in the existing bikeway or pedestrian system
- The project will remove a significant barrier to bicyclists and/or pedestrians
- The project is needed to meet the Plan's for a city-wide bicycle and pedestrian system that connects (or is in reasonable proximity) the identified key destination spots in the community.

In determining priorities the following list of factors need to be made part of the decision process:

- Use/demand (Will enough users utilize the facility to justify the project)
- Barrier/gap importance
- Safety and security
- City-wide significance
- Regional connectivity
- City-wide equity
- Cost
- Multi-modal connections (accessibility to other modes)
- Community support
- Outside funding potential
- Project readiness
- Employment and population density
- Bikeway spacing
- Made more affordable as part of a road construction or major rehabilitation project

Section Two:
Fostering and Planning for
Safe Bicycle Facilities

The following section provides some insights on what is needed to have a safe and accessible bicycle transportation network that fosters bicycling. It is important to note up front that while this plan will discuss various bicycle facilities, Minnesota law gives bicyclists the right to operate on all Minnesota streets, roads and highways, except where restricted. Bicyclists have as much right travel in a traffic lane as a motor vehicle. Persons riding bicycles have all the same rights as all other vehicles. Given this right, bicyclists must also obey all traffic control signs and signals just as a motorist. Bicyclists have all the same responsibilities as drivers of motor vehicles.

Types of Bicyclists

To be a bicycle friendly community, the City must ensure safe bicycle access for cyclists of all skill levels. The American Association of State highway and Transportation Officials (ASSHTO) classifies bicyclist into three categories: A, B and C.

A – Advanced or experience riders generally use bicycles as they would a motor vehicle. They are typically comfortable riding in traffic.

B – Basic or less confident adult riders may use their bikes for transportation purposes, but prefer to avoid roads with fast and busy motor vehicle traffic. They prefer designated facilities.

C – Children, riding on their own or with their parents, and may not travel as fast as their adult counterparts, but still require access to key destinations in their community.

Planning Facilities

The easiest way to implement planned improvements to the bikeway system is to detail plan and construct the facilities while new or major reconstruction of roadways is taking place. When such construction is being planned in the community, there needs to be strong thought given for the needs of bicyclists during the planning stage. It is more complex to implement bicycle improvement changes on existing streets. These streets have fixed widths, which will likely mean improvements will be restricted to signage and restriping. It is important to remember while some minor design treatments will assist group A bicyclists, it may not be the case that these treatments will bring a route up to the standards that group B/C bicyclists would feel comfortable using the facility. That is not to say that these minor design treatments should not be undertaken.

Safety Is a Top Priority

Safety should be considered a top priority, and should be the most important aspect of bicycle facility design. When a facility improves safety along a corridor it should be given a higher priority than a proposed facility that does not. If land is available and costs can be justified, studies show that separating bicyclists from motor vehicle traffic improves safety and the perception of safety. Separating bicyclists from traffic makes persons feel more comfortable, thus tending to attract more bicyclists to use the corridor. The lack of available land and the costs involved make placing bicycle facilities off of roads in an already developed urban setting very difficult. Thus, using urban streets as part of the bikeway system is necessary in order to have the necessary bicycle network in place. To minimize accidents, special attention must be given to maintaining standards and guidelines, including, but not limited to, maintaining good sightlines, using appropriate traffic control devices, and following geometric standards. The other side of accident control is with education and enforcement, which are discussed elsewhere in this plan. Some of the most common types of bicycle-motor vehicle crashes include:

- Motorist's and Bicyclist's failure to yield right-of-way (Both motorists and bicyclists have an equal responsibility to yield the right-of-way. A Bicyclist must act and be treated as if they are another motor vehicle in terms of right-of way along the roadway and at intersections.)
- No lights and reflective gear and clothing at night
- Wrong way riding or riding facing traffic (This behavior puts bicyclists in a position where motorists are not expecting them to be. For example, a motorist turning right on red is primarily looking left for a gap in traffic and may not see a bicyclist riding against traffic.)
- Being hit from behind
- Opening car doors (Bicyclists are encouraged to maintain a three-foot clearance from motor vehicles, including parked cars.)
- Improper/unsafe lane use
- Illegal or unsafe speed
- Driving left of center
- Improper turn
- Improper or no signal
- Not obeying traffic control signs and signals (Bicyclists and motorists)
- Following too closely
- Improper passing/overtaking
- Bicycles riding on sidewalks (Studies show that riding on a sidewalk is more dangerous than traveling on the street. The risk climbs with more driveways and higher ADTs. Motorists are not expecting the speedier than pedestrian bicyclist when the sidewalk is used. Also, riding against traffic on sidewalks has the same risks as riding against traffic on the street)

The Pedestrian & Bicycle Information Center out of the University of North Carolina Highway Safety Research Center provides the following information about younger bicycle riders. "Bicycle crashes affect all age groups, but the highest injury and fatality rates (per population) are associated with younger riders. The 10 to 15 age group has both the highest fatality rate and the highest injury rate. This age group is more associated with ride-outs from driveways and intersections, swerving left and right, riding in the wrong direction and crossing midblock."

Section Three:
Bikeway Facilities and Design Considerations

Bikeways can either be located off the streets or be placed on streets. As described in the AAHSTO Guide for the Development of Bicycle Facilities ("AASHTO Bicycle Guide"), selection of bicycle facility type is dependent on many factors, including the ability of users, specific corridor conditions, and facility cost. Bikeways that are established need to be well maintained.

The bicycle network needs to be reasonably accessible to all Willmar households, and no high priority destination should be denied reasonable access by bicycle. The ease of travel on the established bikeways is also a priority in establishing the bicycle network in the community. To get to destinations, bicycle routes need to be fairly direct or bicyclists will not use them. The degree to which the bicycle route is direct between destination points and comfort and perceived safety of the route could require some tradeoffs. The designed routes should present as few conflicts as possible between bicyclists and motorists. The design of facilities needs to have good visibility and sightlines. The bikeway system needs to take access management into consideration. It is important, as much as possible, to limit the number of driveways, midblock crossings, and access points along an on-street bike route or a trail corridor. Limiting access will lower conflict zones that will improve both safety and mobility.

The City of Willmar has done a good job over the past several years of adding bicycle paths throughout the city. Currently the community has 15.78 miles of hard surface bicycle paths that have, or programmed to be constructed. In addition the city has a couple of unpaved trails that total close to one mile in length. The community needs to work on closing gaps in the system that has been developed as continuity of the system is another important factor in establishing the network. If gaps need to exist for some time, the traffic environment needs to such that Group B/C riders can find their ways safely through these gaps.

The FHWA's report "Selecting Roadway Design Treatments to Accommodate Bicyclists" discusses six key factors that need to be taken into consideration when choosing a bicycle facility. They are: traffic volume, average motor vehicle operating speed, traffic mix, on-street parking, sight distance, and number of intersections.

The above factors need to be taken into consideration in both designing and prioritizing the projects within the bicycle network plan. The number of bicyclists that are estimated to use a planned bikeway, and the public demand for the facility are other important factors that need to be taken into consideration in project prioritization. The attractiveness of the route is another

significant factor. This includes how comfortable and safe a rider is on the facility, and the visual aesthetics the route travels through. The City of Willmar is fortunate to provide recreational travel around its lakes, greenways, and parkland. Lastly, in factoring priorities, the cost of building and maintaining the facility needs to be taken into consideration, as does the degree of how difficult it will be to implement the plan.

Bicycle Lane (Bike Lane)

Mn/DOT defines a bicycle lane as "a portion of the roadway or shoulder designated for exclusive or preferential use by people using bicycles." Striping, marking, or similar techniques are utilized to distinguish bike lanes from the rest of the roadway. Bicycle lanes help define the road space for bicyclists and motorists, reducing the chance that motorists will stray into the bicyclists' path. Bike lanes can provide for more predictable movements of both the motorists and the bicyclists. It also helps remind motorists that cyclists have the right to be on the road.

Figure 3A:
Bike lane in Hutchinson, MN

At a minimum bike lanes need to be four feet in width when alongside curbs (exclusive of the of gutter pan), but if parking is permitted on the street, five feet is recommended. If space permits, six feet bike lanes have also being designed. Bike lanes should almost always be used as one –way facilities that carry bicycle traffic in the same direction as adjacent motor vehicle traffic. There are special rare circumstances where a two-way bike lane for a short distance can be utilized to having to avoid bicyclists needing to double cross a busy street or travel on a sidewalk. On one-way streets bike lanes are generally placed on the right side of the street.

Figure 3B:
Door Zone Danger

Bicycle lanes are best used on wide streets, especially where street parking is permitted. While AASHTO has designs for bike lanes on standard 44 foot wide streets, with allowed parking, it is probably better to use another type of bicycle facility. To be truly safe, a bike lane needs to be located outside of the "door zone" of parked cars. Problems can occur when parked car doors fling open at unpredictable moments, causing accidents with bicyclists. Streets with only 44 feet widths, with parking allowed on both sides, cannot meet this safety need, especially in an area where larger vehicles are often used.

If a community decides to utilize bicycle lanes, it is best if they also provide education to the community's motorists. An unfamiliar

motorist may think that a bicyclist will stay within the bike lane, not knowing they need to leave the bike lane to properly position themselves to turn left. Beginning bicyclists also need to be trained. Some beginners may turn left from a bike lane without first merging the left turn lane and without yielding to overtaking traffic.

Paved Shoulders

The definition of a shoulder is the edge or boarder of a roadway that is contiguous with, and on the same level as, the regularly traveled lane. Only paved shoulders should be used for bicycle facilities. Where a road is located in a rural setting, a paved shoulder can often be the best way of accommodating bicyclists. Designating a shoulder as a bikeway can be useful to provide guidance to cyclists following a particular route. For example paved shoulders can be used between two trails or to get to popular destination.

It is important that a shoulder be of a proper width if it is to be designated a bicycle route. A aved shoulder should be a minimum of four feet wide if it is designated a bicycle route. On roads that have speed limits that exceed 40 miles per hour and have and ADT above 2000, shoulder widths would be best be increased to six feet. In urban areas, wide curb lanes are usually more preferable for bicycle travel than shoulders. The one exception is on urban arterials with speed limits more than 50 mph. Usually only more experienced bicyclists are comfortable in such a setting. It is important that if shoulders are used as bicycle facilities that they are maintained at the same surface standard as the regular traveled lanes, and that they are kept free of debris.

Figure 3C: Paved shoulder on paved Kandiyohi County CSAH 24

Wide Curb Lanes (Wide Outside Lanes)

Wide curb lanes, which are also called wide outside lanes is defined as the right-most through traffic lanes that are substantially wider than a typical 12 foot wide lane. FHWA's "Selecting Roadway Design Treatments to Accommodate Bicyclists" indicates that "most practitioners agree that 14 feet is the minimum width necessary to allow a bicyclist and motorist to share the same lane without coming into conflict, changing lanes, or potentially reducing the motor vehicle capacity of the lane." The lane is usually measured from the lane stripe to the edge of the gutter

pan. The width of the lane needs to increase to 15 to 16 feet where speeds exceed 40 mph and ADT exceeds 10,000.

The FHWA's report gives the following three accepted advantages of using wide curb lanes for bicycle facilities:

- "They can accommodate shared bicycle/motor vehicle use without reducing the roadway capacity for motor vehicle traffic.
- "They can minimize both the real and perceived operating conflicts between bicycles and motor vehicles.
- "They can increase the roadway capacity by the number of bicyclists capable of being accommodated.

A couple of other advantages given for wide curb lanes are assisting the turning of large vehicles onto the roadway without encroaching into another lane, better accommodating large buses and trucks. When considering other bicycle facilities, wide outside lanes require the least amount of additional maintenance.

Type A riders often favor this type of bicycle facility. Type B/C riders typically do not, unless the facility is on residential streets with low speeds and ADT. In such a case, however, there is usually no need to have any additional facility at all to accommodate bicyclists. Wide curb lanes are most applicable on major streets where group A riders will likely be operating, and there are alternate routes that can be used by Type B/C bicyclists.

Shared Lanes

There are two major types of shared lanes. First is a lane on a street that has no markings or signs indicating that the street is an established bicycle route. The majority of streets in any community will not be designated as a bicycle route, however, they are also streets where a bicyclist can legally be on the travel lane of the street. As was mentioned above, the majority of low volume residential streets with 30 mph or less do not require any special treatment to be safe to use. A standard travel lane is typically 11 to 12 feet wide, but this may vary.

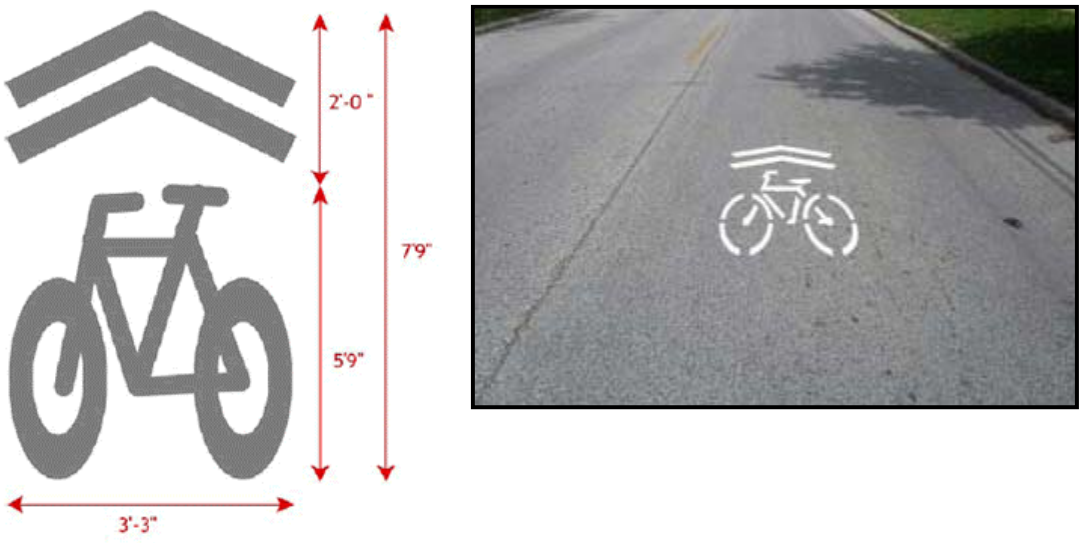
The second type of shared lane is a street that is intended to be part of the city's bike route system, (a **designated bike route**). In such circumstances, the route should be signed as a bikeway to direct bicyclists and inform motorists that the street will likely have bicycle traffic on it. Signed shared roadways inform bicyclists that they are on a preferred bike route. It is recommended that bike route signs include destination information. Some communities place route numbers on these signs that correspond to route maps. Signed bicycle routes are designated by the jurisdiction having authority over the roadways included in the bicycle route system. When choosing a bicycle route it is important to choose roadways with minimal traffic hazards. Signed bicycle routes can be helpful in directing bicyclists away from high-traffic arterial streets to less-congested streets that also lead to desired destinations. There are some key design considerations when selecting designated bicycle routes. There needs to be adequate road width with fewer dangerous intersections. Routes should try to avoid steep grades and curves

with poor sight lines. Routes with high quality of pavement are desirable, as is lower ADT's, especially low truck traffic. These streets should have low posted speed limits. Routes chosen need to be as direct as possible to destination points. Choosing scenic routes, where possible, is also a way to encourage bicyclists to use the facilities. Overall, designated signed bicycle routes need to fit into the city's overall comprehensive bicycle system.

Shared Lane Markings ("Sharrows")

Shared lane markings (also known as "sharrows") are high-visibility pavement markings that help position bicyclists within the travel lane. They are often used on street where a bicycle lane is desirable, but are not advised due to physical constraints of the road, such as street width. Sharrows (see picture) are placed strategically in the travel lane to alert motorists of bicycle traffic, while also encouraging bicyclists to ride at an appropriate distance from the "door zone" of adjacent parked cars. The sharrows are typically placed on the roadway every 100-250 feet in a linear pattern. A minimum distance of 13 feet from the face of the curb is recommended for placement. The markings should be placed immediately after an intersection and spaced appropriately thereafter. Sharrows should not be used in streets with over 40 mph, and work best if the speed limit is 30 mph or under. At such low speeds a lane width of 12 feet is adequate.

Figure 3D:
Sharrow Dimensions and Picture



Bicycle Signage

Bikeway signage is used for both wayfinding and safety purposes, and is a relatively cost-efficient treatment to improve the bicycling environment. Bicycle route guide signs should be provided at decision points along the designated route. These signs should inform bicyclists of bicycle route direction changes, and confirmation of route direction, distance and destination. The signs need to be placed at regular intervals so that bicyclists entering from side streets know they are now on the bicycle route.

On bicycle routes are located on busy streets, or when bicycle volumes are high, the use of additional warning signs becomes more critical. These signs provide motorists with additional awareness that they are likely to encounter bicyclists on this street. Minnesota and AASHTO have sign and pavement marking guidelines/standards that should be followed.

Figures 3E:
Bicycle Signage Examples

Bicycle Intersection Treatments

Intersections represent one of the primary collision points for bicyclists. Generally, the larger the intersection, the more difficult it is for bicyclists to cross. Bicyclists that want to make left turns at busy intersections can face a challenge. The riders need to act like a motorist by crossing travel lanes to seek refuge in a left-turn lane. The other option for a cyclist is to act like a pedestrian by dismounting and walking their bikes across the crosswalk.

When faced with multiple directions and increased turning movements can add to the difficulty for oncoming vehicles to see non-motorized travelers. Bicyclists can be confused of where they should be at intersections that bike lane and other pavement markings are not carried through within the intersection. Some cities have adopted using colored bike lanes to guide bicyclists through major vehicle/bicycle conflict points. There use is not within official standards at this time, but they have been successful where they have been used.

An important factor in determining bikeways is to choose streets that do not have numerous stops at intersections. A reduced number of stop signs on a designated bikeway enables riders to maintain their momentum and exert less energy with fewer stops and starts. The negative side to choosing streets with fewer stops is that such streets can increase the potential of higher vehicle speeds, thus proper enforcement should be in place. It is also important that appropriate traffic control measures should be used where bikeways intersect major streets.

There are some optional treatments available at signalized intersections that should be considered to streamline bicycle travel. There are bicycle loop detectors that can sense a bicyclist's presence, the same way a vehicle loop detectors sense motorists, and trigger the signal to provide a "green" phase for the cyclist. The sensitivity level of vehicle loop detectors can also be adjusted to levels to sense bicycles. The detectors need to be placed within the bicyclist's expected path. Another option at signalized intersections are bicycle activation buttons, that work similar to pedestrian activation buttons. It is important that the buttons are placed such that the bicyclist does not need to dismount or make unsafe leaning movements. If such devices are used, they should be placed as close to the street as possible in a location that is unobstructed by parked vehicles or motorists making right-hand turns.

Separate Bike Paths/Multi-Use Trails

The AASHTO Guide defines a bicycle path or bike path as: "A bikeway physically separated from motorized vehicular traffic by an open space or barrier and either within the highway right-of-way or within an independent right-of-way." Some of these facilities are also referred to as multi-use trails or paths. The City of Willmar has an excellent start to serving the community with a number of shared-use pathways, but additional facilities are needed to have a complete bikeway network system in the City. The specific needs for these additional trail facilities are found elsewhere in this plan. The minimum standard width for a multi-use paved trail/path is ten feet. Where possible such facilities are best designed to be twelve foot wide. The City of Willmar has a number of multi-use trails that are currently eight foot in width. Although they do not meet current standards it would be too expensive to bring them all up to standard in the time-

frame of this plan. These eight foot wide trails should be brought up to ten feet wide at the time when there is a need to make major rehabilitative work on them.

Separated bike paths generally are favored by the wide range of bike riders for both transportation and recreational purposes. If properly design, and adequately maintained can be very safe environments to ride a bike. However, a facility that has its continuity destroyed by frequent motor vehicle cross flows and intersections with highways becomes a less safe environment to travel. Bicyclists (especially group A riders) do not like continuously losing their momentum and tend to avoid such bikeways.

Section Four:
Fostering and Planning for
Safe Pedestrian Facilities

The following section provides some insights on what is needed to have a safe and accessible pedestrian transportation network that fosters walking. While it is a goal of this plan to promote and encourage more walking throughout the community, it is also important to remember that a significant portion of the population utilizes the pedestrian transportation network as their primary form of transportation. It is vital that everyone, regardless of age or ability, has the means of traveling safely throughout the community.

Sidewalks and shared use paths are the basic infrastructure that is used to safely separate pedestrians from motor vehicle traffic. Pedestrian safety is a shared responsibility among motorists, pedestrians and bicyclists. Improving pedestrian safety involves a combination of engineering solutions along with education and enforcement.

"Walkability" Deterrents

Before discussing what steps can be taken to improve the walkability of the City of Willmar, it is helpful to discuss what are obstacles and major deterrents for persons walking. The Bicycle Federation of America's guidebook entitled "Creating Walkable Communities: A Guide for Local Communities" highlighted the deterrents for people walking:

- Lack of sidewalks
- Narrow walkway widths
- Missing curb cuts
- Poorly constructed and/or maintained walking surfaces
- Difficult street crossings (e.g., too wide, too fast)
- Inadequate bridge design (e.g., no place to walk)
- Physical features (e.g., rivers, railroad tracks, major arterial streets lacking pedestrian crossings.

- Inadequate facilities for access to transit services
- High-speed, high volume traffic adjacent to schools, parks, shopping, and residential areas
- Inadequate sidewalk maintenance (including snow/ice removal and repair).

Through the implementation of this plan it is hoped that these deterrents for pedestrian travel in the community can be significantly improved upon.

Sidewalk Design

Currently there is no one standard width of a sidewalk in the City of Willmar. The basic sidewalk width range in residential areas is from three feet in width to five feet in width. It is recommended that when sidewalks are reconstructed or are placed in as new, their widths should be five feet as standard in residential neighborhoods. This meets new national design standards. It is found that four-foot wide sidewalks are not wide enough for two people to walk comfortably abreast. It also calls for a six-foot width in cases where the sidewalk directly abuts a roadway curb (that is, where there is no buffer). For commercial districts sidewalks need to have widths greater than the 5 feet standard discussed above.

In addition the City of Willmar has developed some extra wide sidewalk/paths that are designed to be shared with bicyclists. These shared used paths have been to date mostly constructed at eight feet in width. It is recommended that similar shared paths be designed as ten-foot widths in the future, as long as there is room to accommodate such a width.
The Design Manual's standard details for paving do not specify a minimum buffer width between roadway and sidewalk. Generally a five-foot landscaped buffer is adequate where motor vehicle traffic is light, but a buffer wider than five feet may be needed along busy streets. Shoulders, bicycle lanes, or on-street parking can also assist buffering pedestrians from vehicle travel lanes.

Intersections/Crosswalks

Legal crosswalks, whether marked or unmarked, exist at all legs of all intersections where sidewalks normally exist, including T-intersections, except where closed by ordinance and appropriately signed. Legal crosswalks also exist at marked midblock crossings. Most accidents between pedestrians and motor vehicles occur at intersections. It stands to reason than that a primary area to look at for a safer pedestrian environment is to focus much attention to intersections and crosswalks. The needs of pedestrians deserve equal consideration with the needs of motorists at intersections.

The Pedestrian Facilities Guidebook from the State of Washington Department of Transportation gives the following basic principles of intersection design to better accommodate pedestrians:

- Intersections that function well for pedestrians are typically compact.
- Free-flowing motor vehicle movements are either eliminated or vehicles are forced to a significantly slower speed through the intersection.
- All legs of an intersection should be available for pedestrian use; closing a crosswalk doesn't necessarily prevent pedestrians from crossing in that direction.
- Pedestrians need to be able to travel in a direct line across the intersection leg and the direction of travel needs to be clearly identified for all pedestrians, including those with sight impairments.
- Avoid increasing potential conflicts or the level of pedestrian exposure to motor vehicles.

Education of motorists and pedestrians is a primary concern at crosswalks. There is clearly a problem with both persons not knowing the law, or deciding not to comply with the law. Failure of a motorist to yield to pedestrians is one of the most citied barriers for pedestrian travel. Minnesota state law requires motorists to stop for a pedestrian who has entered the crosswalk (stepped off the curb) at marked or unmarked crosswalk, provided the pedestrian has not suddenly walked into the path of a vehicle that it is so close that the driver cannot stop. It is important than for improved safety not just occurring do to new designed infrastructure, but as important is the need for the City to investigate opportunities to improve enforcement of traffic violations as well as strong steps to increase traffic safety education programs.

Crosswalk pavement markings are used at some intersections to direct pedestrians to safe crossings and to alert drivers to the potential presence of pedestrians. They are also utilized to indicate school walking routes. The City of Willmar currently does not have a written policy in place to determine where marked crossings should be utilized. It is recommended that the City develop a written policy on when marked crossings can be utilized. Marked crossings are often seen by the public as a low-cost solution to improve the safety and convenience of street crossings, but other factors influence the safety of crosswalks, including visibility between pedestrians and drivers, traffic speeds, traffic control, crossing distance, number of traffic lanes, and the use of other warning devices. To be affective, marked crossings should not be over utilized. Where there are too many marked crossings in a community, drivers may become desensitized to their use. In fact, studies have shown that a marked crosswalk alone is no safer – and in some cases, even less safe – than an unmarked crosswalk at the same location. An important reason for this is that pedestrians can get a false sense of security using marked crosswalks at uncontrolled intersections. However, a marked crossing combined with other safety improvements can increase the safety of pedestrians.

The City of Willmar needs to continue its good job of limiting marked crosswalks. Crosswalks at lighted intersections are appropriate, as are marked crosswalks within commercial business districts, and at identified intersections that are part of key routes to school or are in the school zone.

The U.S. Safe Routes To School Guide recommends that a marked crosswalk at an uncontrolled crossing "only when a crossing is on a school route on a two lane road or on a multi-lane road with average daily traffic (ADT) less than 10,000 motor vehicles per day and where speed limit

is 40 mph or less." The shorter and straighter a paved crosswalk can be, the safer they will be for pedestrians. The minimum marked crosswalk width is six feet wide, but school related crosswalks, for example, may call for a crosswalk width of ten to fifteen feet in width, depending on the number of pedestrians.

The PEDSAFE web site found at www.walkinginfo.org/pedsafe/ gave the following guidelines/conditions and caveats for marked pedestrian crosswalks:

1. At locations with stop signs or traffic signals. Vehicular traffic might block pedestrian traffic when stopping for a stop sign or red light; marking crosswalks may help to reduce this occurrence.

2. At non-signalized street crossing locations in designated school zones. Use of adult crossing guards, school signs and markings, and/or traffic signals with pedestrian signals (when warranted) should be used in conjunction with the marked crosswalk, as needed.

3. At non-signalized locations where engineering judgment dictates that the number of motor vehicle lanes, pedestrian exposure, ADT, posted speed limit, and geometry of the location would make the use of specially designated crosswalks desirable for traffic/pedestrian safety and mobility.

There are a few other considerations in determining if a marked crosswalk should be used. Connecting to significant retail activity or to an important transit connection may trigger the need for a marked crosswalk. A marked crosswalk may also be needed if the distance to a better crossing point is more than 300 feet, or if the majority of persons served by the crossing have a more difficulty crossing the street in an average amount of time.

Marked crosswalks should be supplemented with other treatments (i.e. without traffic-calming treatments, traffic signals, and pedestrian signals when warranted, or other substantial crossing improvement) when any of the following exist:

- Where the speed limit exceed 40 mph.
- On a roadway with four or more lanes without a raised median or crossing island that has (or will soon have) an ADT of 12,000 or greater.
- On a roadway with four or more lanes with a raised median or crossing island that has (or will soon have) an ADT of 15,000 or greater

This PEDSAFE report also warns that the spacing of marked crosswalks should not be placed too close together. The report suggests that in situations where marked crosswalks alone are acceptable "that a higher priority be placed on their use at locations having a minimum of 20 pedestrian crossings per peak hour (or 15 or more elderly and/or child pedestrians per peak hour)." Obviously, good engineering judgment must be applied. It is best that marked crossings not be placed in close proximity to traffic signals, as it is best if pedestrians cross the street at the signalized location in most instances.

Safety of pedestrians at intersections is better when the street has tight right-angle intersections. Such a simple design has the fewest conflicts. Skewed intersections are always a higher safety problem as they often promote greater motorist speeds, need longer crosswalk length and potentially cause sightline problems. There is a correlation to large turning radii and crashes. When engineers design new or reconstruct intersections, they need to keep these principals in mind. The use of medians and refuge islands should be made part of street design where it makes sense to do so.

Another engineering tool that is used for improved pedestrian safety at some locations is the use of curb extensions (also called bulb-outs). Curb extensions, where there is curb parking allowed, has some benefits at busy pedestrian areas. There is obviously a shorter crossing distance of pedestrians, which lowers the amount of time in the roadway, thus improving safety. Curb extensions also increase visibility, tend to help calm traffic, allow traffic signs to be moved in for better visibility, and increase room for sidewalk furniture or vegetation. Studies have shown that drivers are more likely to yield to pedestrians where there are curb extensions. Another major tool designers and engineers utilize for pedestrian safety at intersections is raised pedestrian islands. Benefits of well designed islands include the separation of conflicts and decision points, reduce crossing distance, improve signal timing and reduced crashes. The City needs to thoroughly investigate these type of facilities and incorporate them in their street designs when it is applicable to do so.

The City has the opportunity to increase safety at traffic signal intersections by improving traffic signals for pedestrians. The City should look to install countdown timers at traffic signal locations. Countdown timers show the number of seconds remaining in the signal for pedestrians to cross the street and help pedestrians to safely decide if they have enough time. It is almost certain that the new version of the Manual on Uniform Traffic Control Devices will move to require these countdown timers at all signalized intersections with pedestrian crosswalks in the future. The City should also examine if there is proper signal timing to allow pedestrians to cross intersections safely. It should also be investigated that push buttons be accessible for all pedestrian users. In some locations these push buttons may not be actuated, causing confusion and frustration for pedestrians.

Accessibility for All Pedestrians

Safe and convenient travel by foot is important for all Willmar residents, regardless of age or ability level. It is important to keep in mind that there are a variety of users needing good accessibility, including people that have temporary or permanent disabilities, children on bicycles, senior citizens, and adults with wheeled luggage, strollers grocery carts, wagons, etc. The Americans with Disabilities Act (ADA) requires infrastructure in the public right-of –way be made accessible to all users. This includes the need for installing curb ramps at nearly all intersections. When possible, at an intersection corner it is best to have two ramps installed perpendicular to the face of the curb.

This design helps facilitate the direction of travel for the visually impaired. Also for the visually impaired, truncated domes are now a standard design requirement of ADA regulations at locations where sidewalks transition to street crossings. These flattened domes provide a surface that is distinguishable underfoot and by cane.

Willmar has done a good job in implementing the ADA policies, however, there are still opportunities to work on improving the system and remove barriers that remain. The City needs to continue its efforts to identify and remove accessibility barriers on pedestrian facilities. It should also look to improve and institutionalize best design practices for accessibility. The ADA requires local governments of 50 or more employees to have an updated self evaluation and ADA Transition Plan. The intent of this plan is to identify, prioritize and schedule improvements to remove accessibility barriers, including for pedestrian facilities.

Potential accessibility barriers on the pedestrian system include curb ramps, sidewalks, and pedestrian signals. Pedestrian signals need to be accessible to all users, including the WALK and DON'T WALK visual indications, as well as the design and placement of push buttons at actuated signals. The pedestrian system needs to be maintained and operated to be accessible to all users. The City should have a plan in place that whenever there are redevelopment projects, utility repairs, or other projects that alter pedestrian facilities, the replacement of these facilities need to meet the current design standards for pedestrian accessibility needs.

Considerations at Intersections with Stop Lights

There have been many comments from the public about being uncomfortable crossing Willmar's busy streets. The safest places to cross busy streets are at locations where there are traffic lights. There are still concerns about safety even at these intersections, as shown be the return comments. Below are a couple of inexpensive measures that can be taken at traffic signal intersections to make pedestrians safer.

Modify signal timing to allow more time for pedestrian crossing

The clearance interval is based on the street width and pedestrian walking speed. If there ia a large number of very young or old pedestrians using a crossing, the walking speed may be reduced. Depending on the amount of time required to allow pedestrians to clear the intersection, the timing of the vehicular signals may have to be modified. This may have negative impacts on increasing traffic delay.

"The MUTCD standard identifies a 'normal' walk speed as 1.22 m/s (4 ft/s). However, research indicates that the majority of pedestrians walk at a speed that is slower than this and that 15 percent of pedestrians walk at speeds less than 1.065 (3.5 ft/s). The latter group includes a large

proportion of people with ambulatory impairments and older adults. As the population ages, the number of pedestrians traveling slower walking speeds is increasing. Therefore, it is recommended that the calculation of crossing times be based on a walking speed of no more than 1.065 m/s (3.5 ft/s). The City of San Francisco calculates pedestrian crossing times based on walking speed of 855 mm/s (2.8 ft/s)."

Utilizing a Leading Pedestrian Interval and No Right Turns on Red

A "leading pedestrian interval" (LPI) changes signal phasing that allows pedestrians to start walking across the intersection (walk signal) a few seconds (3 to 4 seconds) before the green phase for motor vehicle traffic. The LPI gives pedestrians an opportunity to start walking and establish a presence in the crosswalk before motorists can begin their turn. It allows pedestrians more time to cross the intersection, It provides more visibility to those crossing, and it alerts motorists to the existence of pedestrians in the crosswalk.

Using this technique is best if you prohibit right turns on red at these intersections. Some cities use an illuminated sign on the overhead signal post reminding motorists to "yield to peds." In the crosswalk while the signal is green. When the signal is red the sign changes to read "no turn on red." No turn on red can reduce pedestrian conflicts in the near-side crosswalk, but may increase conflicts in the adjacent crosswalk. LPI can help with these conflicts, but prior to deciding to restrict RTOR, the advantages and disadvantages must be carefully considered.

Countdown Pedestrian Signals

They cost about $300 to $800 per signal. Countdown signals help by giving pedestrians information on how much crossing time remains. The flashing Don't Walk signal is confusing to some pedestrians. Studies show countdown signals reduce the number of stragglers in the street when the light changes. The wider the street the more beneficial are countdown signals.

Bright Reflective Pavement Markings

Bright reflective pavement markings and warning signage are also recommended to alert drivers of pedestrian crossings.

Other Pedestrian Design Considerations

Street corridors and corners need sufficient space not only for walking, but this space is additionally needed to buffer pedestrians from traffic lanes. Such space may also provide space for traffic control, bus shelters, trees, utilities, trash receptacles and street furniture. The space between the face of the curb and the property line is commonly referred to as the "Pedestrian Zone." This zone is made up of subzones: Curb zone, planting and furnishing zone, through walk zone and the frontage zone. Design standards recommend a minimum 12 foot pedestrian

zone width exist on all streets functionally classified as "local" streets. For collectors and arterial streets, the minimum pedestrian zone width recommendation is 15 feet. Achieving the recommended width can be a challenge, given demands for traffic lanes, parking lanes, bike lanes, retaining walls or landscaping behind the sidewalk. The lack of needed pedestrian zone width can contribute to problems such as:

- Lack of buffer from moving traffic
- Insufficient space for snow storage
- Insufficient space for accessibility clearance around utilities
- Difficulty in fitting accessible curb ramps at corners
- Difficulty in maintaining an accessible sidewalk grade, particularly at driveway crossings
- Insufficient space for trees and street furniture.

To guard against such potential problems, the City of Willmar needs to utilize proper design guidelines for streets providing sufficient sidewalk and boulevard width for all required uses of the pedestrian zone. The City also needs to identify those corridors where it desires to have additional sidewalk/path width to adjust the recommended pedestrian zone as needed.
Street lighting is another important consideration for pedestrian needs. Street lighting contributes to personal safety, traffic safety and a high quality pedestrian environment. Design standard recommendations should be followed with street lighting so that sidewalks are uniformly well lit.

Street furniture, such as benches, trash containers, newspaper racks, bicycle racks, kiosks, and public art, are positive infrastructure to the pedestrian experience. However, if poorly managed, street furniture can clutter the sidewalk and become an accessibility barrier. For key pedestrian destinations and business districts there should be sufficient trash receptacles placed.
Comfortable places to sit are also a very important consideration in fostering walking. This is especially true for the growing numbers of elderly that call Willmar home. The City should also encourage the well designed vibrant public spaces for street life and public art. Trees and other natural landscaping is another important consideration to help encourage walking. Pedestrians like to walk along streets where there are trees. Boulevard trees visually and physically buffer pedestrians from traffic lanes. Trees provide shade on sidewalks, and provide a host of other benefits to the community such as a reduction in air pollution, and helping to manage stormwater runoff.

Section Five:
Policy Considerations

The City of Willmar needs to continue to have in place strong policies in regard to snow and ice clearance for pedestrians. Poor snow clearance discourages walking, creates barriers to accessibility, and can create a safety concern if pedestrians find it easier to walk in the street. The City should review its snow and ice removal policies to see if they meet the needs of pedestrians. Additionally the City needs to communicate/educate private property owners of their responsibilities for snow and ice clearance on sidewalks.

Policies need to be in place to ensure that sidewalks remain in good shape. The inspection of sidewalks and following up with timely repairs is an important component of having a sidewalk network. Inspections should also highlight accessibility needs and problems. The management of sidewalk encroachments is an important part of the sidewalk maintenance program. Poorly placed pedestrian furniture and overgrown vegetation can create accessibility barriers. Overgrown vegetation can also create safety visibility concerns.

Besides making sure the physical infrastructure is properly in place and maintained is the effort to change citizens' personal habits in fostering walking in the community. Most people rely on motor vehicles for travel to destinations that are walkable in Willmar. The City needs to have in place programs that promote a culture of walking for both youth and adults. The School District and YMCA need to continue to play an important role with implementing policies to encourage walking. The City is fortunate to have an active County Health Department that, through its STEPS Program, has funded projects to encourage walking and other physical activities of county residents. The WCEA should continue to work with these entities in carrying out promotional and educational programs to foster a better culture of walking in the community.

Bicyclists Using Sidewalks

The City needs to further develop and educate citizens on its rules for bicycles using sidewalks. Unless restricted by City ordinance, state law allows bicyclists to ride on sidewalks and have the same rights and duties applicable to pedestrians on sidewalks unless posted otherwise. Bicyclists must yield right-of-way to pedestrians on sidewalks and may not ride sidewalks in business districts. State law defines business districts as street frontages that have at least half of the frontage occupied by buildings in use for business for at least 300 feet. Some communities further restrict adults on bicycles from utilizing sidewalks. The City policies for bicyclists utilizing sidewalks needs to be reviewed to determine if changes should be implemented. The City has constructed a number of wider sidewalk/paths that have been designed to accommodate both pedestrian and bicycle use.

Standard size sidewalks are generally unsuitable for adult bikeways for the following reasons:

- Standard width sidewalks are not designed for cycling speeds. Cyclists must either reduce their speed or travel too fast for conditions.
- There is generally insufficient width for shared bicycle and pedestrian travel.

- Bicyclists face conflicts with motor vehicles at driveways and intersections. It is more likely that a motorist will not expect a cyclist to cross their path when they are on the sidewalk, and traffic rules, such as obligations to yield, are less known when a cyclist rides on the sidewalk, creating confusion and safety risks between pedestrians, bicyclists, and motorists.

The Minnesota "Share The Road" Bicycle Safety Education Program indicated in their "Rules of the Road" fact sheet that "bicyclists are 25 times more likely to experience an accident when riding on a sidewalk than riding on a major street – even one that neither has a designated bike lane nor is designated as a bike route."

If children ride bicycles on standard size city sidewalks, it is best if they are supervised, and it is done in a light traffic streets in conditions that are not crowded. In these circumstances children should be able to ride their bikes on the sidewalk at close to walking speeds. As speed increases, the more hazardous it is to be crossing driveways and intersections.

The Complete Streets Concept

The National Complete Street Coalition (www.completestreets.org) defines complete streets as streets that "are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and transit riders of all ages and abilities must be able to safely move along and across a complete street." The Minnesota Department of Transportation (Mn/DOT) defines complete streets as the "planning, scoping, design, implementation, operation, and maintenance of roads in order to reasonably address the safety and accessibility needs of users of all ages and abilities. The complete streets concept considers the needs of motorists, pedestrians, transit users, and vehicles, bicyclists, and commercial and emergency vehicles moving along and across roads, intersections, and crossings in a manner that is sensitive to the context and recognizes that the needs vary in urban, suburban, and rural settings." The special needs of older people, children and people with disabilities need to be considered under the complete streets concept.

For the concept of complete streets to succeed, responsible road authorities need to consider designing and building roads not just for motor vehicles, but for all users. Pedestrian, bicycle, and transit accommodations should no longer be just seen as amenities to be included if possible. In both road design and implementation, complete street accommodations need to be given core considerations, being left out of design only if there is a truly compelling reason. A number of Minnesota communities have begun to institute complete street policies to ensure their new and reconstructed streets take all users into consideration at the time of designing and planning. The discussion above in this chapter on pedestrian and bicycle standards are important elements of complete street planning and design.

By implementing complete street policies a community can benefit in a number of ways. The primary benefits of creating complete streets are:

- To improve the safety for all road users.
- Building roads that encourage more walking and bicycling to provide better public health.
- Provide better access, and foster transportation equity to those who do not drive, including those people with disabilities.
- Allowing for options other than using motor vehicles will provide more affordable transportation options that help communities be more resilient to gas price spikes.
- It is often a tool for encouraging economic development by making the developed area more attractive to businesses and customers.
- It helps the environment by encouraging more alternative means of transportation, which lowers the air pollution and greenhouse gas emissions.
- It can be a cost effective approach for the transportation system. The concept makes sure roads are designed correctly the first time, so that expensive retrofits are not necessary. Complete street planning also can improve traffic flow and remove gaps in the transportation system.
- Improve the quality of life by helping calm traffic on residential streets, creating more walkable neighborhoods that increase community interaction.

CHAPTER FOUR:

PLAN RECOMMENDATIONS

Public Input

The proposed projects highlighted in this chapter have been determined through a thorough process of information gathering from a variety of sources. One of the primary ways that both needs and recommendations to address these needs were addressed was by selecting committee members that represent a wide array of interests within the community. The Willmar Bicycle and Pedestrian Plan Steering Committee has members that represent the Willmar Education and Recreation Committee and staff, YMCA's ACHIEVE Team, the Downtown Connection's Committee of the Willmar Design Center, Kandiyohi County's Public Health, bicycle enthusiasts, a Senior Planner with District 8 Mn/DOT, City Planning staff, and a representative of the Willmar Police Department. In addition, City, School District, and Kandiyohi County Engineering Departments were visited to gain their views.

All the public were presented with opportunities to comment on pedestrian and bicycling needs within the community through a well advertised public informational meeting that was held early into the needs gathering process. In addition the public was invited to answer a questionnaire to gather further input on where investment priorities should be made and what safety concerns they thought should be addressed. The Appendix highlights the comments from the public questionnaire. A meeting was held with an official with the Willmar Public Schools was held to help determine pedestrian/bicycle needs surrounding the school buildings in the community.

Officer Marilee Dorn provided insight to the Willmar Police Department's areas of concern for people's safety regarding bicycle and pedestrian travel. The Willmar's Downtown Connections Committee met to discuss the needs for connecting the downtown business district to the greater city transportation system. They provided the Plan's Committee with a list of their priorities. It is important to note that the City of Willmar has previously identified some trail expansion needs that are shown in this plan. The City's previously designated trail expansion needs are trail segments that help complete the outer ring around much of the community.

Section One:
Process Used In Determining Priority Projects

Two Primary Categories of Projects

To better determine priorities, identified needs were separated into two primary categories. The first category of identified needs is projects that will enhance the current city trails system that is in place. Besides determining where trails need to be expanded, on street bicycle routes where also identified as solutions to create an overall network system to travel throughout the community.

The second category of identified needs where those needs that highlight safety needs for pedestrians and/or bicyclists. The identified needs were such concerns as areas lacking sidewalks, certain intersections that are dangerous to cross, locations with a history of poorly functioning or dangerous pedestrian crossings, and other highlighted safety concerns.

In addition to these two primary categories for project needs, the Committee also looked at a variety of elements that will enhance the usability of the bicycle and pedestrian system network. Such items as bicycle racks, benches, kiosks, and maps are important components to further encourage persons to use non-motorized transportation. Public education and enforcement measures have also been discussed and are highlighted as needed provide a safe environment for bicycling and pedestrian travel.

Further Engineering Analysis Needed

While this chapter highlights locations of need and often makes suggestions for possible solutions for the identified needs, these recommendations for transportation improvements need to have proper engineering analysis to determine what will be the official designed solution to each identified need. The City Engineering Department will be responsible to determine what a project will consist of to meet the project's goals/needs. The affordability of the project will be an important consideration in determining which project solution to choose.

It is also important to point out that the Minnesota Department of Transportation and Kandiyohi County own some of the streets where projects have been identified. In such circumstances, they will need to approve any improvements that are planned. In most instances it will still be the City's responsibility to finance the project, however.

Project Prioritization

Projects identified in this plan are prioritized. Specific prioritization shall be given to projects determine to be needed in the near-term (0 -5 years out). Projects that are not shown within the near-term category shall either be placed in the mid-term priority list (6 -10 years out), or the long term category (longer than 10 years out). The cost of constructing and implementing all the identified project needs are very substantial. It is for this reason that it is realistic to estimate that the entire list of identified projects will not be realized for up to 20 or more years. The completion of the identified projects will be impacted on the success of utilizing outside funding sources as well as the City determining overall city priorities.

Priorities may change over time. It is recommended that at least every two to three years the City re-evaluates the project priority list to determine if changes and additions are needed. This process will also assist the City keep track of the success in implementing the plan. The priority order in which projects will be undertaken may change by a number of circumstances. One primary determination when a project should be constructed is if a street reconstruction project is planned for a particular segment a trail is planned for. Lower costs can be obtained by working on preparing the base of the trail and with paving the trial at the same time the street is being re-

constructed. The ability to work with outside groups, particular funding opportunities, and connecting to new county trail segments are other examples of circumstances where it makes logical sense to move a particular project forward in priority. In some circumstances a project may also be needed to be move further back due to these same circumstances, as well as learning after engineering analysis that the proposed project has more complexity and costs that are involved.

Lastly, the new projects that are prioritized need to fit into a budget that also needs to finance the upkeep of the current system of trails, sidewalks, on street routes, and other bicycle/pedestrian infrastructure currently in place. The City will need to schedule periodic seal coats to their current system of trails to help stretch out how long a trail can go before more substantial work needs to be completed. Some trails are becoming of an age where major repairs costs up to complete reconstruction may be necessary. It will be an important implementation step to give proper analysis to future maintenance needs and costs. These future maintenance costs need to be factored into the overall budget when determining what, if any new projects can be afforded in a given year. High priority should go towards seeing that the current bicycle/pedestrian system is kept in a decent, usable condition.

Measures to Determine Priorities of Trails and On-Street Bicycle Routes:

Below are various factors that need to be weighed together to determine the priority the various identified projects for the transportation network will be given. Different factors may be weighed more heavily than others as their importance may vary.

- **Safety:** How much will the Project Impact Safety? Will the project maintain adequate safety levels for all users?

- **Project Impact on City Transportation Network, both Motorized and Non-Motorized:** A project could potentially help non-motorized transportation while hurting motorized transportation. Will the project decrease the operations of the motorized transportation system? Will adequate levels of capacity be maintained? Will the new project provide additional capacity to the system and improve the operating conditions at deficient locations? Will the project have any positive impact on the city's transit program?

- **Connections of Origins and Destinations:** How well does the proposed project help potential users get from origins to the identified key city destinations? Does the route assist in getting to multiple destinations?

- **Connecting Existing Trails - Filling Gaps:** Is the project important in connecting a missing link to the current bicycle and/or pedestrian system? Connections to trail systems outside the municipal limits should also be an important factor in prioritizing the potential project.

- **Potential Usage:** Given the location of the project, how much usage will there be when compared to other potential projects will the project likely to generate?

- **Project Readiness, Timing Issues, and Community Support:** Does the project have barriers that may affect the ability to proceed? Is there a planned road construction job planned for the segment that makes it appropriate to accomplish both projects together, saving both effort and dollars? What degree of community support for the project is there? Are persons opposed to the project?

- **Cost and Potential for Outside Funding Sources:** How expensive is the project? Will it be difficult to come up with funding in the short term? How likely can outside funding sources be obtained to assist with project costs? If outside funds can be committed towards funding a given project, its prioritization should be changed to reflect these new source of funds.

- **Coordination of Efforts:** Will this be a city project alone, or will this be a coordinated effort involving other assistance? Who else is committed to assist in the project, and to what degree?

- **Environmental Impacts & Difficulties Likely with Construction:** Will the project harm, help, or be neutral in its environmental impact and to what degree? What is the likelihood that the project may have difficulty getting environmental clearances? Are there other construction issues that are likely with the project? How hard will it be to overcome these difficulties?

- **Recreational Value/Asset to Overall Community:** Besides the benefit to the transportation system of the city, to what degree will the project have positive social and/or economic impacts? Will the project have a significant impact in increasing the likelihood that the community will be seen in a more positive light as a place to live and work? Will the project be an important resource with expanded tourism efforts?

Section Two:
The Plan's Recommendations on Project Needs

Below are the identified needs for trails, bicycle routes, and pedestrian safety projects within the City of Willmar. As discussed above, near-term projects are ranked in order of perceived importance, while mid-term and long-term projects are **not** in any priority ranking. Following the list of short, mid, and long-term projects are short descriptions of each of them.

Prioritization of Short-term Projects

1. Enhancement Project - 1st Street Bridge to Robbins Island Trail - This Project includes addressing safety issues at Ella Avenue and Bus.71intersection; and safety on the First Street Bridge.

2. Kennedy Elementary Safety Improvements

3. Willmar Avenue – From 2nd Street SE to 22nd Street SW

4. CR 24/15th Ave. NW – College Road shoulder signage and possible striping

    - 4(b). Includes CR 41/North First Street Intersection with CR 24/15th Ave.

5. 23rd Street SE Trail Gap – From Sunrise Park to Willmar Ave. SE

6. Lakeland Drive Trail – From Civic Center Drive to Trail start at Olena Ave.

    - 6(b). Includes safety crossing issue at Civic Center Drive
    - 6(c). Includes Lakeland Drive SE and Trott Ave. SE Intersection
    - 6(d). Includes Lakeland Drive SE and Olena Ave. SE Intersection

7. 30th Street NW Trail – From Highway 12 to Gorton Ave. NW, which includes safety of crossing railroad tracks.

8. 5th Street SE at Willmar Ave. SE

9. 4th Street SW Bicycle Lane From Becker Ave. SW to Willmar Ave. SW

10. 3rd Street SW at Litchfield Ave. SW (2-way stop to a 4-way stop)

11. Willmar Ave. SE at 9th Street SE

12. Trott Avenue Bike Route from Lakeland Drive to 15th Street SW

13. First Street and Litchfield Avenue.

14. Willmar Ave. Trail Extension from 22nd Street SW to 30th Street SW

15. High School Trail that is tied to County's CR 9 Trail Project

NOTE: Just because a project is ranked before another project, it does not necessarily mean it will automatically be done before projects lower on the list. Timing with other projects, costs, etc., will also be factors that come into play in determining when a project is completed.

Mid-Term Projects:

- Business Hwy 71 Crossing to Robbins Island Park – two possible locations
- First Street & Olena Ave. Intersection (include quarter block island)
- First Street & 19th Ave. Intersection
- 19th Ave. SE & 9th St. SE/Pleasant View Drive Intersection
- Highway 12 & Lakeland Drive Intersection and lacking sidewalks, curb cuts
- 11th Ave. SE Sidewalk Project
- Willmar Middle School – extend sidewalk to align with Willmar Ave. and 5th St. SE Intersection.
- Crossing 19th Ave. SW at Roosevelt School (1900 Block) (Children currently walking through private property.
- 22nd Street SW by Taunton Stadium – Either a Trail or sidewalk is needed from Willmar Ave. SW to 15th Ave. SW
- 2nd Street SW by Middle School has ADA corrections, a couple curb cuts are needed.
- Downtown Becker Avenue Trail
- Highway 12 Trail from Lakeland Dr. to 25th Street SE
- Pheasant Run Trail from Highway 12 to Sunrise Park/Willmar Ave.
- 7th Street NW Bike Route from Fair Grounds to Trott Ave. SW
- Ella Avenue Bike Route from 7th St. to 17th St. NW at Berquist Park
- 15th Street SW Bike Route from Trott Ave. to Richland Ave. SW
- Ramblewood Trail connection to either 19th Ave. SW or 9th St. SW
- 19th Avenue Trail from Trail Start at abt. 22nd St SW to 5th Street SE
- 19th Avenue SE Trail from 5th Street SE to Lakeland Drive and Lakeland Dr. to Willmar Ave. SE.
- 2nd Street SE Bike Route from Trott Ave. to Willmar Ave.
- 9th Street SE Bike Route (one block through park is a trail) from Trott Ave. to Willmar Ave. and from Willmar Ave. to 19th Ave. (last part of route on Pleasant View Dr. SE)

- High Avenue NE Bike Route and/or Trail Connecting Trail end in the Sperryville neighborhood to Lakeland Drive.
- 23rd Street NE Trail from Bus. 71 Trail to Civic Center Dr. Trail

Long–Term Projects:

- Bus. Hwy 71 & County Road 24 Intersection
- First Street & 24th Ave South Intersection Street Lights Project
- 19th Ave. SW (CR 15) & SW 6th Street Intersection
- Highway 12 East sidewalk facilities from Ferring St. to Lakeland Drive (note: Lakeland Dr. to 25th Street calls for a trail- see mid-term projects)
- Olena Ave. missing sidewalks project
- Swan Lake Trail Loop
- Willmar Lake Loop Trail from Trail end on County Road 24 to Civic Center Dr.
- Foot Lake Loop Trail following lake through Fair Grounds
- 10th Street West Bike Route from Ella Ave. NW to Kandiyohi Ave. SW
- Trott Avenue SW Bike Route in Industrial Park
- South Loop Trail from 30th St. SW Trail, going on 28th Ave. SW to 5th St. SE
- 9th Street SW Bike Route from Willmar Ave. to 19th Ave.
- Olena Avenue SE Bike Route from 2nd St. SE to Lakeland Drive.
- East Side Cross Country Trail from Civic Center Drive to Highway 12
- 15th Street SW from Richland Ave. SW to 28th Ave. SW (after 28th Ave. Trail is completed)

Section Three:
Description of Trail and Bicycle Project Priorities

The trail and bicycle project priorities are displayed in Map 6A. The priority ranking of short-term projects is found elsewhere in this chapter, thus the list below is not in priority order. Mid-term and long-term projects are not placed in priority order.

Short-Term Trail & Pedestrian Priorities:

First Street Bridge to Robbins Island Trail Project

This trail project is already been approved for funding through the State Transportation Improvement Program. The City has been awarded Enhancement Program Grant dollars for the project, and the city has agreed to provide the necessary match. The project will improve safety crossing Ella Avenue, meet ADA requirements, and increase trail width from current 8 feet to 10 feet. First Street Bridge will be addressed with a guard rail to keep pedestrians from falling into the traffic lane and also signs to tell bicyclists that they must walk their bikes across the bridge if they choose to use the sidewalk. The project was a top priority for the Willmar Design Center efforts to connect the lakes to the downtown commercial district. Estimated costs for this project are $177,017, with Enhancement grant funds paying for $135,063 toward the total costs.

15th Avenue NW/County Road 24

This is the road that Ridgewater College is on. Currently there is a trail segment from County Road 5 to the campus. To the east of the trail the road has an eight foot paved shoulder that was design for bicycle use. There is a need to post signs that the paved shoulders are a bicycle route. City and County Engineering Departments will also need to determine if stripping is advised. The project also needs to address a safety concern with trail users crossing County Road 41 (North First Street) at the intersection with County Road 24 (15th Avenue NW). The intersection needs crosswalks and signs warning motorists that the trail crosses at this intersection.

Lakeland Drive from trail end at Olena Avenue SE to Civic Center Drive

This is a trail expansion project that is a necessary north to south route on Willmar's East side. The street has a high average daily traffic, with some portions of the road with a 40 mph designated speed limit. This project needs to include several safety projects along the route. Special concern is needed to the crossing of Civic Center Drive. It will be best if the trail angles at the end to have the crossing at the intersection with the street that enters into the MinnWest Campus facility. Another safety need that should be done in conjunction with this project is the intersection of Lakeland Drive and Trott Avenue. Curb cuts and sidewalk extensions on the east side of Lakeland are needed to establish crosswalks. Lastly, a safety project is needed at Lakeland Drive and Olena Avenue. There needs to be crosswalks established across Lakeland

Drive with markings and signs. With the YMCA located at this corner it is important that residents can cross Lakeland Drive safely.

30th Street NW from Highway 12 to Gorton Avenue

30th Street NW is also known as County Road 5. This section represents a short gap in the current trail system with a trail segments south of State Highway 12 and north of Gorton Avenue NW. Currently bicyclists and pedestrians are forced to use the side of the road to travel across this segment, which is a large safety issue. This project will be more expensive than the relatively short distance of the segment would suggest. The trail will need to cross the railroad tracks as well as Highway 12. The intersection with Highway 12 is a lighted intersection.

Trott Avenue from Lakeland Drive SE to 15th Avenue SW

This project is recommended as an on street bicycle route. Engineering shall determine if there should be just signage, the use of "sharrows," or have a stripped bike lane. The route is necessary to connect the downtown commercial district to both the east and west. The downtown section of this route will eventually have a business loop when the downtown Becker Avenue Complete Street Design is completed.

Willmar Avenue from 2nd Street SE to 22nd Street SW

Willmar Avenue is a primary travel route for motor vehicles, pedestrians, and bicyclists in the center part of the community. The Task Force believes this project is necessary for safety and for the total concept of the city bicycle system. There have been a number of pedestrian and bicycle related accidents on this street. From First Street South to 7th Street SW, Willmar Avenue is currently designed as a 4-lane road, however, all four lanes are rarely used due to the outer lanes being relatively narrow. The initial thought by the Task Force was that an on-road bicycle lane could be designated in the outer lanes in both directions, with motor vehicles still being able to use a right turn lane at the intersections. This could be accomplished with a "Right Turn Yield to Bicyclists" signs which commonly have been used in similar bicycle route situations.

Another possible option for this section of road is to have a road design similar to Trott Avenue SW where there is a center lane left turn lane. This design would also allow room to have bicycle lanes on both sides of the road. Past Seventh Street SW, Willmar Avenue is designed adequately currently for having it designated and signed as a bicycle route. A decision for this western portion of the bicycle route will need to determine if bicycle lanes should continue, or if "sharrows" or just signage will be adequate. Another part of this project would be to have an off road trail in front of the Willmar Middle School, that will connect to the already off road trail to the east, starting at 5th Street SE.

Fourth Street SW from Becker Avenue to Willmar Avenue

This project will be an on road bicycle route. The street's wide width makes it ideal to be Willmar's first striped bicycle lane route. The route will be an important link in the city bicycle system in connecting the downtown commercial district to the south. The Willmar Design Center's Downtown Connections Committee has ranked this project second only to the Enhancement project that has been funded.

High School Trail Extension North to Kandiyohi County Trail Project

Kandiyohi County has plans to apply for funding to have a trail on the right-of-way of County Road 9. If they are successful in their efforts in 2012, there will be a gap in connecting this trial to Willmar's trail system. The trail will need to be extended to County Road 90 at County Road 9. North of Highway 90 will be the County's responsibility. If the County fails to move forward in their plans for this trail, this project will no longer be a priority project.

23rd Street SE from Sunrise Park to Willmar Ave. SE

This segment is a very short gap in the current trail system. From the trail end on Willmar Avenue to the beginning of the trail on 24th Street SE at Sunrise Park. The gap in the trail is approximately a little over a block in length.

Willmar Avenue Western Extension from 22nd Street SW to 30th Street SW

The City plans on extending Willmar Avenue to 30th Street SW in the near future. The City is currently waiting for the land to be released at the old airport site. It is appropriate timing to extend the current trail on Willmar Avenue to connect to the trail on 30th Street SW when road construction occurs.

Medium-Term Trail & Pedestrian Priorities:

Becker Avenue and First Street Trail from the First Street Bridge to 4th Street SW

The Becker Avenue trail is part of a larger planned concept for Becker Avenue in the downtown commercial district. Plans are in place for a "complete street" design. A more detailed discussion of this plan is found in Chapter Two. The project would connect the downtown to the trail starting on the north side of the First Street Bridge. It is an important project for the Willmar Design Team. This project could become a higher priority if outside funding can be secured for it.

State Highway 12 Trail from Lakeland Drive to 25th Street SE

There is currently no sidewalk or trail in this section of right-of-way. The Highway has 45 mph speed limit and carries large volumes of traffic. A trail could accommodate both pedestrians and bicyclists that live in eastern part of the city, as well serve the Conference Center (an identified destination location in the plan) and the several hotels in that part of the community. Mn/DOT has no plans to reconstruct this section of highway for at least 20 years, thus the expensive for the project to be done earlier would likely be entirely a City cost. As this project is within Mn/DOT's jurisdiction, there approval of the project and the design would be necessary. There should be enough right-of-way to accommodate a trail.

Pheasant Run Trail from State Highway 12 to Sunrise Park

An exact location of this section of trail would need to be determined. The trail would connect to the planned Highway 12 trail as discussed above, and would connect to the trail system that begins at Sunrise Park. The trail would allow the Pheasant Run neighborhood to be connected to the trail system on Willmar Avenue, and thus connected to the entire Willmar trail/bicycle route system.

Seventh Street from Fairgrounds to Trott Avenue SW

Seventh Street is envisioned as an on street bicycle route. The type of bicycle route will need to be determined. The project will have the railroad tracks crossing to contend with. The route is important to connect the north side residents to downtown. It also is an important link from the downtown to the trail starting at the fairgrounds and going north between Willmar and Foot Lakes from there. The intersection of Ella Avenue and 7th Street is an important safety concern with this route. The intersection is off-set and no easy answers come to mind on how to address the problems that exist there. Engineering should study this intersection and recommend solutions. The intersection portion of this project should possibly be considered in the short-term.

Ella Avenue from 7th Street NW to 17th Street NW

Ella Avenue is envisioned as an on street bicycle route. The type of bicycle route will need to be determined. The project is important to connect the trail beginning on Ella Avenue at Foot Lake to the trail that begins at the Berquist Nature Area and proceeds west along Gorton Avenue.

Fifteenth Street SW from Trott Avenue SW to Richland Avenue SW

Fifteenth Street SW is envisioned as an on street bicycle route. The type of bicycle route will need to be determined. The bicycle route is important north to south route on Willmar's west side. Bicyclists will likely use the route from traveling from the Downtown and west side

neighborhoods to the Swansson Field Recreational Complex, the Dorothy Olsson Aquatic Center and to Roosevelt Elementary School.

Ramblewood Trail Connection

Ramblewood trail is a is a non-paved nature trail. A connection is needed to better gain access to the trail from either 19th Ave. SW or 9th Street SW. An exact route would need to be determined. Whatever route for the trail segment is chosen, it will be a relatively short distance.

22nd Street SW from Willmar Avenue SW to 15th Avenue SW

This is a trail section that was identified on the City plans for trail needs prior to this plan's completion. It is a short segment that will connect to the trail system that is already developed in that area of the community. The segment is likely to be utilized by students going to Roosevelt Elementary School.

19th Avenue from trail start near 22nd Street SW to 5th Street SE

This project will likely need to be a trail facility due to the streets high level of traffic at 40 mph. The road is a four-lane facility. The street has good sight lines, however, so an on route bicycle route is not to be totally discounted. Engineers will need to determine the best solution. The route is a major east/west arterial street, and would be heavily utilized by the neighborhoods in the southern portion of the community.

19th Avenue & Lakeland Drive from SE 5th Street to Willmar Avenue

This section of roadway has a high ADT and speeds of 40 mph. A portion of the road is four-lanes on the west side. It will need to be determined if a trail or an on-road bicycle route is the proper fix to this segment. The timing of this project should be done at the same time or after the 19th Avenue project mentioned directly above is completed.

Second Street SE from Trott Avenue SE to Willmar Avenue SE

Second Street SE is envisioned as an on street bicycle route. The type of bicycle route will need to be determined. The street is narrow, thus bike lanes will likely not be chosen as an alternative. It is an important segment of the overall system plan connecting the planned facility on Willmar Avenue to the planned facility on Trott Avenue. This street is a much safer alternative for bicyclists than utilizing the busy and dangerous First Street.

Ninth Street SE from Trott Avenue SE to 19th Avenue SE

All but the north one block of this project is envisioned as an on street bicycle route. The type of bicycle route will need to be determined. A trail is needed for one block that goes through East Side Park, which is also known as Lincoln Park. The south side of the project will also utilize Pheasant View Drive SE to connect to 19th Avenue. The facility will be used by the large neighborhood in east-central portion of the community.

High Avenue

The western portion of this project (West of Porto Rico Street) is envisioned as an on street bicycle route. The type of bicycle route will need to be determined. The route will connect to the trail that crosses under First Street to the Sperryville neighborhood. The exact route the bicycle route will use to High Avenue starting at Porto Rico Street needs to be determined. High Avenue east of Porto Rico Street to Lakeland Drive could be either an on road bicycle route or a trail segment. There is not a sidewalk on this segment currently. The facility would be utilized by bicyclists going to the Willmar Community Center. Another important aspect of the project is access to Robbins Island Park across First Street. This need will be discussed at further length on discussions about spot safety needs for pedestrians. A small portion of High Avenue is scheduled for reconstruction within the next five years. It is possible the City could complete a portion of this project at the same time, bringing the work done into a short-term project.

23rd Street NE from the trail off of Business 71 to Civic Center Drive

A trail is envisioned for this segment due to the street being narrow and busy. The street is the curved road in front of the County Health and Human Services Building. When it is completed, there would be a good trail loop that would be created around the MinnWest Campus.

Kandiyohi Ave. SW from Rice Park to 15th Street SW

Kandiyohi Avenue SW is envisioned as an on street bicycle route. The type of bicycle route will need to be determined. The Street is already heavily utilized by bicyclists and the route fits well into the planned grid system of trails and bicycle routes.

Olena Avenue SE from 2nd Street SE to Lakeland Drive

Olena Avenue is envisioned as an on street bicycle route. The type of bicycle route will need to be determined. There is also the need to place sidewalks along the route, but that discussion is elsewhere in this plan. The Avenue provides the neighborhoods around it access to the Willmar Middle School and to the YMCA.

Long-Term Trail & Pedestrian Priorities:

North Willmar Lake Loop

If not for the high expense and possible difficulties to overcome, this would be a shorter term priority project for its attractiveness as a route for bicycle enthusiasts in the community and tourists. The project would begin at the trail ending at Country Club Drive on County Road 24 (26th Street NE, also known as the golf course road) and follow the road to Willmar lakes east side. The trail would than travel along the east side of Willmar Lake until reaching the Lighted crossing of Business 71 at Civic Center Drive. The trail is completed south of Civic Center Drive and also on Civic Center Drive. While ideally the trail would be more attractive on the lake side of County Road 24, the engineering needs may make it necessary to have the trail along the north side of the road. If the north side of the road is chosen, it is likely some right-of –way will need to be purchased from the golf course. The trail on the east side of Willmar Lake to the junction with Civic Center Drive will have its own potential environmental and engineering concerns. If the option to head on the east side of Willmar Lake is determine unwise, it would leave a second, very expensive option of crossing Business 71 by either going over or under the highway.

Swan Lake Loop

The long term vision of the Task Force is to have a trail extended on County Road 41 and looping around the north and east side of Swan Lake. Much of the trail would be in land that is undeveloped currently. The trail would be a scenic trail connecting into either current trails or trails that are also on the list to be built in the future.

Another consideration is to possibly tie into the long term goal of Mn/DOT to build an interchange across the Highway at the Sun Ray intersection just north of the City. This would be a natural location in crossing the 4-lane highway and the state should be encouraged to make such a possibility part of their Environmental Impact Statement (EIS) whenever in the future such a document is prepared.

Northwest Foot Lake Loop

This would be a scenic trail along Foot Lake's northwest side. The trail would begin on County Road 24 and head south and west along the north shore of Foot Lake ending at the trail along County Road 5. While being an attractive route for persons to take, it is also more about recreational use than designed for transportation need, and thus, is determine to be a long-term project. No exact route has been selected at this time.

Fairgrounds Foot Lake Loop

Another opportunity to have some lakeshore trails in Willmar would be to develop a trail along Foot Lake within the County Fairgrounds. The loop would also include some on-street bicycle routes to tie the trail back into the bicycle route system. . No exact route has been selected at this time.

Tenth Street West from Ella Ave. NW to Kandiyohi Ave. SW

Tenth Street is envisioned as an on street bicycle route. The type of bicycle route will need to be determined. The street crosses State Highway 12 with a lighted intersection, thus is a good candidate for a bicycle route connecting northern neighborhoods to the southern parts of the city. It also provides good access to the trail on Gorton Avenue NW.

Trott Avenue SW within Industrial Park

The section of Trott Avenue located in Willmar's Industrial Park is is envisioned as an on street bicycle route. The type of bicycle route will need to be determined. The route will assist biking commuters who work within the area.

South Loop on 28th Avenue SW and 30th Street SW from Willmar Ave. SW to 5th Street SE

This would be the most southern east/west route in the plan. This is envisioned as a trail. It would connect the trail on 30th Street SW at Willmar Avenue to the Trail on 5th Street SE. It is in the long range plan because the project needs to wait until part of 28th Avenue is constructed. The City has no plans to construct the road segment for some time.

Fifteenth Street SW from Richland Ave. to 28th Ave.

This section of the 15th Street bike route needs to wait until the 28th Avenue trail is completed. The on street bike route would join with on-street bike route at Richland Ave. North of Richland Avenue the bike route is shown as a mid-term project.

Ninth Street SW from Willmar Ave. to 19th Ave.

Ninth Street SW is envisioned as an on street bicycle route. The type of bicycle route will need to be determined. The project needs to wait until the bicycle system projects on Willmar Avenue SW and 19th Avenue SW are completed. The route will provide access to the neighborhood in which it is located, and fills a gap as a north /south route in the community.

Eastern Loop connecting Civic Center Drive to 25th Street SE

This long range goal would be to have a trail that would provide a loop on the City's most east side. The exact route is not established, but it is envisioned that it would be placed near the Highway 23 bypass right-of-way. This project would need to wait until the Highway 12 trail is completed. The trail would need to overcome probable expensive crossings of Highway 12 and the railroad tracks. The trail would not be next to a road, thus there is no current railroad crossing for the trail to go on. This would call for going over or under the rail line.

Section Four:
Description of Pedestrian Project Priorities

The priority ranking of short-term projects is found elsewhere in this chapter, thus the list below is not in priority order. Mid-term and long-term projects are not placed in priority order. Some of the safety projects identified are part of a trail or bicycle route projects that are discussed above. In such circumstances, these safety needs are discussed with the discussion of the overall trail or bike route project. Willmar Police Officer Marilee Dorn assisted with the discussions of Safety projects below.

Short-Term Pedestrian Priorities:

Intersection at 5th Street SE and Willmar Avenue SE

The recent construction project on 5th Street has prohibited legal pedestrian travel south along the west side of 5th Street, and crossing east-west to gain access to the Cashwise grocery store or the Kandi Mall area. This is a particular problem for persons with mobility disabilities. Currently there is no crossing of 5th Street into the Kandi Mall at any point. A disability-accessible sidewalk on the west side of 5th Street SE from Willmar Avenue to at least the Cashwise driveway is needed.

Intersection at 3rd Street SW and Litchfield Ave. SW

This intersection currently has a two-way stop, with 3rd Street traffic not needing to stop. Almost all the other downtown intersections have a 4-way stop. As a result, there is much confusion of motorists at this intersection. Some motorists do not pay attention and think it is a 4-way stop. The result is an unsafe intersection for both pedestrians and motorists. This intersection is no longer the Emergency Room approach to Rice Hospital as they have moved to 2nd Street SW. This means that the city is free to establish a 4-way stop at the intersection, which is this plan's recommendation.

Intersection at Willmar Avenue SE and 9th Street SE

This intersection is offset, with the north leg of 9th Street being approximately 200 feet west of the south leg of 9th Street. There is no clear pedestrian crossing at this location due to the offset T intersections from north to south. There is a large gap (11 blocks) in available crossings for pedestrians along Willmar Ave. SE. This plan is seeking consideration be given to signage and pavement markings at the existing north-south crosswalk along the east side of the north leg of 9th Street sidewalk to the curb ramp on the south side of Willmar Avenue. A pedestrian activated flasher system is another possible addition for safety at this crossing. It is also recommended to investigate lowering the speed limit on Willmar Avenue to 30 mph at 12th Street instead of west of 9th street.

Intersection at First Street and Litchfield Avenue

There have been several complaints about not enough time to cross this intersection, especially for some persons with disabilities that are known to use this as a primary route they utilize. It is recommended that the east-west street light and pedestrian signal be checked for timing. It is also recommended that a countdown timer be installed and that the Mark Stop line for east bound traffic be placed further back from the crosswalk.

Medium-Term Pedestrian Priorities:

Business 71 Crossing to Robbins Island Park

If not for the likely expense and time to design a solution for this problem, this project would have been designated as a need for the short-term. It is seen as a very important need. The topic of this crossing has been discussed for around 20 years at Community Oriented Policing and Problem solving meetings. In the past there was a civilian crossing guard hired during the summer months to assist pedestrians cross over to the park, but this position was eliminated do to budget cuts. There are two possible solutions for the pedestrian crossing over to Robbins Island Park that need to be studied to determine the best solution. The first possible solution is a "HAWK" (High-intensity Activated Crosswalk) or other pedestrian activated signal at the intersection with Porto Rico Street. The second possible solution for a pedestrian crossing is at the High Avenue/10th Street location. At this location, there could be a full traffic signal (semaphore) with Business 71, including pedestrian/bicycle activation for crossing.

Intersection of First Street and Olena Avenue

First Street and Olena Avenue is a T-intersection. It is in the middle of a six block stretch of First Street which has no east-west crossing. All intersections with First Street from Minnesota Avenue to Willmar Avenue are T style. Olena Avenue is part of a bicycle route system laid out in this plan, and the Willmar Middle School is located two blocks southeast of this intersection. To have a crosswalk at this location would require a HAWK, or similar pedestrian activated

signal on the south side of Olena Avenue crossing First Street. The sidewalk upgrade along Olena Avenue is also an important step.

Intersection at First Street and 19th Avenue South

There currently are no count-down timers or auditory indicators for pedestrian crossing signals at this intersection. It is recommended that these safety improvements be installed.

Intersection of 19th Avenue SE and 9th Street SE/Pleasant View Drive

This intersection is offset, with poor sight lines and incomplete sidewalks. The east-west sidewalks are heavily used. The Dana Heights area residents utilize this route to walk to Wal-Mart and other business locations. No sidewalk exists on the south side of 19th Avenue east of 9th Street. There are also large lilac bushes east of Pleasant View Drive on the north side of 19th Avenue that can encroach on the sidewalk and the sight line of vehicles at the Southbound Stop sign. There is the need for a marked pedestrian crossing west of the intersection.

Intersection of Highway 12 and Lakeland Drive

The only sidewalks at this intersection are north-south, although the semaphore does allow east-west crossing when activated by a pedestrian. Highway 12 does have concrete medians at the intersection, but they are not wide enough for pedestrian safety zones. Traffic turning right from northbound Lakeland Drive is a hazard to any pedestrian crossing the south or east legs of the intersection. There is a history of crashes relating to the South Service Drive access at Lakeland Drive just south of the intersection, which some have involved pedestrians. The sidewalk north of Highway 12 along Lakeland Drive ends at the railroad crossing on the west side and at Litchfield Avenue on the east side. Neither side was cleared of snow this past winter.

11th Avenue SE Sidewalk Project

There are currently no sidewalks on 11th Avenue SE behind the Willmar Middle School. The street is heavily used to drop off and pick up children, thus children are walking on the road to get to their parent's vehicle. Also, there are no marked crosswalks crossing 11th Avenue at the school location.

2nd Street SE on Block with Middle School

The sidewalk on the west side of 2nd Street SE next to the Willmar Middle School is in need of some ADA improvements. There are two locations where curb cuts are needed in this block.

Crossing 19th Avenue SW at Roosevelt School (1900 Block)

Children currently walk through a private yard from 20th Street cul-de-sac off 20th Avenue to crossing directly in front of school. The nearest intersections are 15th Street and 22nd Street SW. The community should explore putting in a path with property owners.

22nd Street SW by Taunton Stadium

There should either be a sidewalk or trail from Willmar Avenue SW to 15th Avenue SW. many persons park along this street that are attending ballgames at Taunton Stadium. This project has been identified previously by the City for a trail section.

Long-Term Pedestrian Priorities:

Intersection of Business Highway 71 and County Road 24

Evan though the expense of this project would be very high, and thus may be difficult ever to fund, the Plan's Committee decided to add this as a long range project because it would make the north side overall bicycle and pedestrian system in the city much improved. A number of persons that answered the plan's questionnaire mentioned this location for crossing Business Highway 71. The recent redesign of this intersection means that the cost of going over or under the highway would likely be necessary to come up with a safe solution for bicyclists and pedestrians.

Intersection of First Street South and 24th Avenue South

Whenever in the future that the City decides that this intersection is in need for a semaphore, there will be the need to be sure that bicycle and pedestrian facilities are addressed also.

Intersection of 19th Avenue SW and 6th Street SW

This intersection on 19th Avenue SW is the only intersection from 5th Street SW (which is a dead end street) and 15th Street SW which is a straight through crossing. With a large gap in crossing opportunities on this very busy street, it was determined that this could be a location of a marked pedestrian crossing on the west side of the intersection. As this is a multi-lane, 40 mph speed facility on 19th Street, the marked crosswalk could not be placed alone without further safety designed facilities that would be planned for this crossing.

Highway 12 East Sidewalk Facilities from Ferring Street to Lakeland Drive

This stretch of Highway 12 does not have any pedestrian facilities. Persons taking this route are forced to walk on the road's shoulders. The plan calls for a trail facility on the east side of Lakeland Drive out to 25th Street SE in the mid-term priorities.

Olena Avenue SE Missing Sidewalk Sections

The plan calls for adding sidewalks in places where they are missing from First Street to Lakeland Drive. This route has been identified as a primary pedestrian route with direct access to the YMCA, and other nearby city destination points. It is also a major east-west through route in the middle of the city. Olena Avenue is also planned to become a bicycle route. Sidewalks need to be installed on the south side of the street from 1st to 2nd Street; on the north side from 1st to 6th Street; on both sides of the street from 9th Street to 12th Street; and on the north side from 12th Street to Lakeland Drive.

CHAPTER FIVE:

VISION STATEMENT, GOALS & OBJECTIVES

Vision Statement

The City of Willmar would like to work towards having all residents travel more safely throughout the community by bicycle, on foot, and by various means of mobility equipment (i.e., wheelchair, scooter, etc.). The following Vision Statement is in recognition by the City of the need to fully accommodate all bicycle and pedestrian travel in order to provide equitable opportunity to all residents:

> ***The City of Willmar will develop and maintain an interconnected bicycle and pedestrian system where residents and visitors have safe, accessible, and convenient options to meet their needs.***

This will be accomplished by developing a bicycle and pedestrian network that improves bicycle access and mobility throughout the City by implementing bicycle support facilities and by maintaining existing facilities; by enforcing laws related to bicyclist, pedestrian, and motorist travel; by educating the public on how to bicycle and walk safely; and by promoting and encouraging greater pedestrian and bicycle use in the community.

Based on the Vision Statement above, the following goals, objectives, and strategies will help guide the City of Willmar in implementation of this plan.

Goals, Objectives, and Strategies

Goals and objectives are an integral part of a bike and pedestrian plan because they provide direction or focus to the community's vision statement.

> *Goal:* A "goal" is the long-term end toward which programs or activities are ultimately directed. It broadly addresses a desired outcome that supports the Plan vision.
>
> *Objective:* An "objective" is a specific, measurable, intermediate end that is achievable and allows measurement of progress toward a goal.
>
> *Actions and Strategies:* "Actions" and "Strategies" are specific tasks that will be or could be done to implement the goals and policies in the Plan. In some cases, actions refer to a one-time plan or project; in others, the action is on-going and will occur over a period of years.

GOALS

Goal 1: Create and maintain a transportation network in Willmar that encourages and accommodates bicycling and walking for all users as transportation modes and for recreation.

Goal 2: Improve bicycle and pedestrian safety by improving and creating new biking and walking infrastructure.

Goal 3: Improve education and enforcement that will lead to safer conditions for pedestrians and bicyclists.

Goal 4: Recognize bicycling and walking as a means of transportation and recreation by demonstrating such activities are healthy, safe, convenient and pleasant means of travel.

Goal 5: Indentify policies and funding options to properly implement this Plan.

Objectives and Strategies for Goal 1:
Create and maintain a transportation network in Willmar that encourages and accommodates bicycling and walking for all users as transportation modes and for recreation.

1. Integrate bicyclists' and pedestrians' needs in all phases of transportation planning, roadway design, roadway construction, capital projects, transit projects, and in the operation and evaluation of transportation projects and programs. All new and redesigned street projects shall be designed to accommodate and promote safe use by bicyclists and pedestrians.

2. Conduct an inventory of key pedestrian facilities and routes to identify missing or deficient links and roadway crossings, focusing initially on high pedestrian use areas. Identify those facilities which will receive designated priority for year-round accessibility.

3. The City shall maintain an inventory of sidewalk gaps.

4. Expand the bicycle and pedestrian network by closing existing gaps in the system. This includes using on- and off-street bicycle facilities to connect schools, primary parks and nature areas, government, commercial districts, historic and cultural sites and other key identified destinations and points of origin within the community. It should also include continuing to plan for and build a ring of shared pathways around Willmar while land is still more readily available.

5. The City will seek to fill gaps as opportunities arise, including through new development and street reconstruction projects.

6. Establish sidewalks as standard infrastructure. The City should consider sidewalks and/or trials on both sides of (collector and arterial) streets that provide access to properties as basic infrastructure.

7. Consider the provision of pedestrian site access for all new and redevelopment projects.

8. Ensure that new development provides connections to, and does not interfere with, existing and proposed bicycle and pedestrian facilities.

9. Improve street crossings and complete gaps in the sidewalk system through development review and capital improvement projects.

10. To the extent possible accommodate all users within the bicycle and pedestrian network, encompassing a wide range of abilities and travel objectives. The bicycle and pedestrian system should be designed so it can be used safely by all groups, regardless of age or ability.

11. All hard-surface bicycle and pedestrian facilities should conform to the most recent design standards set by ASHTO and the State of Minnesota.

12. The bicycle and pedestrian network shall conform to the requirements of the Americans with Disabilities Act (ADA) and the requirements of the Proposed Right-of-Way Accessibility Guidelines (PROWAG).

13. Construct off-road facilities where appropriate and link them with on-road facilities.

14. Connect the local bicycle and pedestrian network to state and county bicycle and pedestrian trail systems.

15. Shore lands should be protected and encouraged for trail development.

16. Incorporate segments of the bicycle and pedestrian network into new and redeveloped commercial, tourist, multi-family, public service and recreation projects consistent with the City of Willmar Bicycle and Pedestrian Plan.

17. Provide parking facilities and support services for bicycles at locations with high bicycle parking demands such as multi-family housing, shopping, employment, and recreation centers.

18. Encourage Kandiyohi Area Transit (KAT) to integrate bicycling into their local transit system, including bicycle racks on busses and at bus stops.

19. In addition to those bicycle and pedestrian facilities shown in this plan as "priority needs", consider shared-use paths and sidewalks where a connection to the existing network is needed to provide improved safety or convenience.

20. Prioritize constructing pedestrian and bicycle facilities which increase the connectivity of the bicycle network and facilities which can be constructed concurrently with other projects.

21. Projects should go forward, regardless of where they are on the priority list, when an opportunity or eminent loss of an opportunity makes implementation favorable or necessary.

22. Prioritize sidewalk improvements that provide pedestrian access to transit and school bus stops.

23. Ensure that new development provides connections to, and does not interfere with, existing and proposed bicycle and pedestrian facilities.

24. Recommend standards for new development to create more pedestrian and bicycle-friendly subdivisions, using modified grid system with minimal cul-de-sacs or dead end streets wherever possible.

25. Maintain the street grid, reconnecting it where possible, and discourage creation of superblocks that isolate pedestrians and increase walking distances.

26. Application of traffic calming measures will be primarily on residential and collector streets. Traffic calming techniques should be planned and designed in keeping with sound engineering and planning practices.

27. Conduct regular scheduled sweeping, vegetation management, and re-marking of pavement on designated on-road bikeways.

28. Fund and perform regular maintenance on all public bicycle and pedestrian facilities.

29. Whenever feasible, maintain the year-round condition and use of identified priority sidewalks and bicycle routes.

30. Consider creative funding mechanisms for bicycle path and sidewalk maintenance. Examples include, but are not limited to, Adopt-a-Trail, non-profit maintenance partnerships, business sponsorships, renting conduit space under shared-use paths to utility companies.

31. Design and construct all portions of the bicycle and pedestrian network in manners that reduce long-term maintenance needs and costs and which encourage efficient operation.

32. Maintain and upgrade infiltration devices along paths and designated bicycle routes as appropriate over time. Special attention will be given to the construction and maintenance of drainage ditches, manhole covers, sewer and drainage grates, railroad crossings, speed humps, and asphalt/concrete/gravel interfaces to reduce hazards to bicyclists and pedestrians.

Objectives and Strategies for Goal 2:
Improve bicycle and pedestrian safety by improving and creating new biking and walking infrastructure.

33. Make bicycle and pedestrian safety improvements at street crossings a high priority.

34. Design roadway corridors and bridges with sufficient space for pedestrian needs.

35. The City shall develop a written policy to determine where marked pedestrian crossings should be utilized. As a minimum, safe and appropriately-designed marked crosswalks will be provided around school facilities, other public institutions, and in areas determined to have high pedestrian use.

36. The City shall consider using medians and pedestrian refuge islands when one or more of the following conditions are met:

    - Where there are wide, two-way streets with high traffic volumes, high travel speeds, and large pedestrian volumes;
    - Where there are wide streets where children, people with disabilities, or elderly people cross regularly;
    - Where there are wide two-way intersections with complex vehicle movements and/or long signal phase cycles.

37. Investigate whether traffic signal improvements are needed for pedestrians and bicyclists. As financially feasible, at signalized intersections install ADA-compliant pedestrian-activated switches with crossing countdown timers which provide adequate time given for safe crossing by persons with disabilities. Consider installation of signal switches which may be activated by bicyclists at the right-hand curb of high-traffic intersections.

38. New and rehabilitated sidewalks should be at minimum five feet in width, when feasible.

39. New and rehabilitated trails should be at a minimum ten feet in width, when feasible.

40. The City shall discourage using standard-width sidewalks as designated bicycle routes.

41. Use signage and traffic control devices consistent with the Manual on Uniform Traffic Control Devices (MUTCD) and those established by federal, state, and local standards to ensure a high level of safety, understandability, and consistency for pedestrians, bicyclists and motorists.

42. Provide adequate lighting in high pedestrian use areas, including at all marked crosswalks.

43. Any traffic calming devices and tactics implemented in the City will be designed to accommodate and promote safety of pedestrians and bicyclists.

44. Efforts shall be made to minimize the number of motorized vehicle access points on roadways which are part of the bicycle route network or are heavily used by pedestrians.

45. The City will institute best design practices for accessibility. When pedestrian facilities are altered due to redevelopment projects, utility repair, or other projects, they will be replaced with facilities that meet pedestrian accessibility standards, including pedestrians using wheelchairs and other assistive devices.

46. The City will identify, inventory for priority, and make corrections to accessibility barriers on pedestrian facilities.

47. Streets surrounding schools should have sidewalks or trials on both sides.

48. The City will develop a sidewalk inspection program to determine where repairs are needed. These inspections will not only focus on sidewalk condition, but will also identify ADA concerns, overgrown vegetation, personal safety risks, and poorly placed outdoor furnishings which may obstruct pedestrian progress.

Objectives and Strategies for Goal 3:
Improve education and enforcement that will lead to safer conditions for those walking and bicycling.

49. Raise public awareness of bicycle and pedestrian traffic laws through repeated education efforts. Promote safe behavior for drivers, bicyclists and pedestrians of all abilities and types. Raise public awareness of proper trail and pedestrian etiquette.

50. Encourage all law enforcement agencies to enforce parking restrictions at recreation destinations, especially where nearby bicycle or pedestrian facilities provide a convenient alternative to driving.

51. Encourage helmet use among all bicyclists.

52. Request an annual bicycle and pedestrian report from the Willmar Police Department to the City Council's Public Safety / Public Works Committee.

53. Promote the distribution of information about traffic laws, bicycle safety, bicycle theft, and primary collision types and prevention through schools, bicycle and sport shops, public information sites and events.

54. Property owners should be required to keep trees, bushes, and other obstacles from encroaching on or blocking sidewalks and paths, and from obstructing visibility at corners.

55. The City shall periodically review its policies to be sure there is strong language to ensure that property owners are required to keep sidewalks clear and to remove snow and ice from sidewalks within a specific time period. The City shall also publicize and educate property owners of these responsibilities.

Objectives and Strategies for Goal 4:
Encourage and promote bicycling and walking as a means of transportation and recreation by demonstrating such activities are healthy, safe, convenient and pleasant means of travel.

56. Support bicycle and walking encouragement programs, such as Bicycle Commuter Week, Safe Routes to School, International "Walk and Roll to School" day, and other events which may be initiated locally or regionally. Support tourism efforts to promote non-motorized movement and trails use.

57. Encourage and recognize Willmar area employers who install more bicycle- and pedestrian-supportive facilities and who implement incentives to facilitate bicycling and walking.

58. Develop and maintain city or regional designated bike and pedestrian routes maps.

59. Publicize existing bikeways and recommended travel routes throughout the community.

60. Provide clear and consistent signage to help bicyclists identify the best routes to reach their destination safely, quickly, and easily.

61. Encourage public amenities, such as drinking water facilities and public seating, when feasible.

62. Provide safe and easily accessible public restrooms wherever feasible.

63. Encourage the placement of easily-used locking facilities for bicycles and pedestrian assistive devices.

64. Work with public and private education facilities to encourage more students and employees to walk and bicycle to school.

Objectives and Strategies for Goal 5:
Indentify policies and funding options to properly implement this Plan

65. Research, apply for and obtain available funding for bicycle and pedestrian improvements.

66. Utilize a creative variety of measures to fully implement all projects and programs of this City of Willmar Bicycle and Pedestrian Plan. Promote public/private partnerships in the development, implementation, operation and maintenance of bicycle and pedestrian facilities.

67. Pursue innovative funding that covers the costs of ongoing and long-term maintenance, and that increases as the mileage of facilities to be maintained increases.

68. Continue to solicit and review progressive ideas from other communities and organizations.

69. Prior to the City selling or otherwise disposing of public rights of way, the City should consider the use of those lands as part of the overall walkway, path, and trail system and the land's use by nearby residents for walking and bicycling.

70. The City should continue to monitor issues related to bicycling and pedestrians, both within the existing transportation network and with regard to development or redevelopment.

71. To help ensure the implementation of this Plan, the City will continue to use the Community Recreation Joint Powers Board to examine the community's short and long-term bicycle and pedestrian needs.

72. Review and update, as necessary, the City of Willmar Bicycle and Pedestrian Plan at a minimum once every five years.

CHAPTER SIX:
PLAN IMPLEMENTATION &
POTENTIAL FUNDING SOURCES

This chapter discusses a number of implementation steps that should be carried out by the City and other participants to fully implement the Plan's desired goals and objectives. These are additional planning steps and activities that will help ensure success of the plan, but are not listed in sequential order or ranked by priority. Potential funding sources for the projects identified within this Plan are also identified.

Section One: Implementation Steps

- ***Step 1: Plan Approval, Implementation, and Annual Review***

The Willmar Trail & Pedestrian Plan is an official planning document for the City of Willmar. The Plan was officially adopted by the City Council on (Date) after a public review and hearing process was administered by the Willmar Planning Commission. As a result, the Plan Goals, Policies and Objectives identified in Chapter Five will be followed to help guide day-to-day activities, including guiding land use decisions and properly pursuing the number of key implementation steps identified.

The Plan includes a list of needed and desired projects broken down into short-term, mid-term, and long-term goals for accomplishing. Efforts will need to be made to seek out funding and implement the construction of these bicycle and pedestrian facilities. There needs to be an annual review of the Plan's progress, as well as a structured means to move projects from mid-term to short-term and from long-term to mid-term. As projects are completed, possible new projects may also be identified and placed on the future project list. As situations change in the community, there may be the desire to change the priority order of the projects listed. The Willmar Community Education and Recreation (WCER) Joint Powers Board, or a sub-committee appointed from this board, should act as the Plan's champion to ensure progress is made in achieving its goals. This group should also stay informed about the ever-changing funding/grant opportunities and see that such opportunities are pursued.

The Goals and Objectives Chapter of this Plan recommends a number of changes and new text to be added to the City's zoning and subdivision ordinances. City staff and the Willmar Planning Commission should review these recommendations and give serious consideration to making the changes to the City's policies. If an update is made to the Willmar Comprehensive Plan, this document should be reviewed for possible revisions relative to the Comprehensive Plan.

- ***Step 2: Investigate the Passage of a "Complete Streets" Policy and Plan***

  The City of Willmar will examine implementing a "Complete Streets" Policy. The Minnesota Complete Streets Coalition has defined "Complete Streets" to mean "that our roads are planned and designed to be safe and accessible for drivers, pedestrians, transit riders, and bicyclists – all users, regardless of age or ability." Newly passed State statutes have instructed Mn/DOT to utilize a Complete Street policy. Numerous Minnesota cities have passed resolutions to implement a Compete Streets policy. These communities' have formed a committee or task force to assist with the necessary planning steps in implementing such a policy.

  While this Trail and Pedestrian Plan would play an important part in developing a Complete Streets policy plan, there are important differences as well. The policy that would be developed would instruct the city planning and engineering departments to give early consideration of all types of users when planning and designing new and reconstructed street projects. There are many written documents and sample policies to utilize when developing such a policy for the community.

- ***Step 3: ADA Transition Plan***

  The Americans with Disabilities Act (ADA) was enacted on July 26, 1990. The ADA extended civil rights legislation to people with disabilities, and is a companion of the Civil Rights Act of 1964 and Section 504 of the Rehabilitation Act of 1973. The ADA has broad application to public agencies and private businesses in its protections against discrimination for people with disabilities.

  Title II of the Americans with Disabilities Act prohibits state and local governments from discriminating against persons with disabilities or from excluding participation in or denying benefits of programs, services or activities to persons with disabilities. This title also requires public entities with 50 employees or more to create and regularly update an ADA Transition Plan. The plan is intended to have communities identify where structural modifications are required to achieve program accessibility, and to take steps necessary to make structural modifications to remove these identified barriers. "The Transition Plan should cover at a minimum:

  - List of physical barriers in facilities
  - Detailed outline of methods to remove barriers and costs
  - Time schedule for taking steps to comply and report on status of implementation
  - Name of official responsible for implementing."

This ADA requirement impacts Willmar's transportation system. All new transportation projects need to be ADA compliant. "For existing transportation facilities, an ADA Transition Plan is required by Department of Justice Rules to address the following:

1. For a public entity with responsibility or authority over streets, roads or walkways, its ADA Transition Plan shall include a schedule for providing curb ramps or other sloped areas where pedestrian walks cross curbs, giving priority to walkways serving entities covered by ADA, including state and local government offices and facilities, transportation, places of public accommodation, and employers, followed by walkways serving other areas.

2. The ADA Transition Plan shall identify physical obstacles in the public entity's facilities that limit the accessibility of its programs or activities to individuals with disabilities.

3. The ADA Transition Plan shall describe the methods that will be used to make the facilities accessible.

4. The ADA Transition Plan shall specify the schedule for taking the steps necessary to achieve compliance with the ADA and, if the time period of the ADA is longer than one year, identify steps that will be taken during each year of the transition period."

- ***Step 4: Investigate Creating a City Sidewalk Policy***

While the City of Willmar has some policies concerning sidewalks, there is currently no policy to determine if a sidewalk on a future planned street will be required or not. Such a policy should be discussed and implemented. It is also important to combine all policies on sidewalks together into one document. It may be necessary to prepare other parts of a city sidewalk policy plan that are currently lacking. In addition the policies need to be written to meet ADA requirements. In preparing a comprehensive sidewalk policy, the city should consider implementing policy on the following:

- Establishing the requirement for sidewalks, where they will or will not be required.
- Establishing who will be responsible for these sidewalks.
- Establishing construction, repair, and maintenance standards for sidewalks.
- Establish a priority repair policy.
- Determine what exceptions to policy will be allowed.
- Snow removal requirements.
- Establish a policy on the removal of unwanted sidewalks.
- Establish a review of policy procedure.

- ***Step 5: Create a Sidewalk Inspection and Maintenance Policy***

In coordination with the broader sidewalk policy discussed above, Willmar should develop and adopt sidewalk inspection and maintenance policies. The League of Minnesota Cities has information about such a policy and recommends such action. Sidewalk inspection and maintenance policies have a number of useful purposes, including providing guidelines to city staff, conveying information to city residents, and preventing and/or minimizing lawsuits and exposure. LMC states that a good written Sidewalk Maintenance Policy contains several critical components, including "(1) identification of defective conditions; (2) development of an inspection procedure and schedule; (3) prioritization of replacement and repair; (4) development of cost recovery mechanisms; and (5) response to resident complaints and concerns."

When developing maintenance policies for sidewalks, the City should also develop detailed maintenance plans for the trail system. Besides making sure the trails are in safe, usable condition, proper maintenance needs to be performed on the trails to ensure that the investment in them will last as long as possible before reconstruction is necessary. By working out a schedule of when seal coating and other maintenance steps should be undertaken, the city will extend the life of the trails, saving money in the long term.

- ***Step 6: Develop Guidelines for Crosswalk Installation***

In September of 2005, the U.S. DOT, Federal Highway Administration published a report entitled "Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations – Final Report and Recommended Guidelines." The report shows that there needs to be great care given to decisions on placing marked crosswalks. Data shows that, in some cases, marked crosswalks at uncontrolled intersections can be more dangerous to pedestrians than if the marked crosswalk was not there. Among other factors, pedestrians can be given a false impression of safety at such intersections. For this and other reasons, the City of Willmar should develop a policy establishing guidelines for marked crosswalk installation. The policy should spell out what conditions need to be present for allowing marked crosswalks and also what conditions would result in determining that a marked crosswalk is inappropriate. Within this policy, the City may also wish to consider expanding the scope to include establishing criteria for traffic control signals and pedestrian traffic signals. Installation guidelines could also be made part of this written policy, which would be taken from the most recent engineering manuals.

- ***Step 7: Annual Inspection of Pedestrian Crossings and Signage***

  To be sure that all pedestrian crossing devices are in good working order, City staff should inspect the equipment at least once per year. Crossing timing should be inspected to be sure proper time is given to pedestrians crossing these signalized intersections. In addition, traffic signs, and directional signs for trails should also be inspected annually to ensure they continue to meet design standards. The City should continue to re-paint marked-crosswalks on a regular basis. If bike routes will include "sharrows" or marked lanes, these will also need to be re-painted on a regular basis.

- ***Step 8: Education and Promotion Activities***

  It is recommended that Willmar Community Education and Recreation (WCER) develop and carry out a comprehensive plan to both promote the bicycle and pedestrian system, and to educate the public about safety concerns to help protect both pedestrians and bicyclists. Education of motorists, bicyclists, and pedestrians must be done in a coordinated manner as a critical safety step. Educating the public on laws and regulations is just as important as designing proper facilities when it comes to the safety of the public. The Willmar Police Department should also play an important role in this educational process, as should the Willmar Public Schools in teaching students about transportation safety matters.

  Besides WCER, the YMCA, the Kandiyohi County Public Health Department, and other groups should assist with promoting use of the system. Promotional activities will also help keep the motor vehicle drivers more aware of the likely presence of bicyclists on city streets. Promotional efforts should also focus on educating the public on all the reasons it is important to have a well developed bicycle and pedestrian system. The public needs to understand the degree to which many citizens rely on non-motorized forms of transportation for everyday travel. This will improve public support for the needed investments to carry out the goals and objectives of this plan. Additionally, overall public health will improve as more persons choose to routinely walk or ride bicycles.

  As part of the promotion of the bicycle system it is important to let both citizens and visitors know about the facilities that are in place. A map handout should be developed, and updated when feasible, which shows the current bicycle route system (both trails and on-street bicycle routes). The map should also highlight the location of the major destination spots for pedestrians and bicyclists that are highlighted on Maps 2A and 2B of this plan. On the reverse side of the map, it is recommended that an educational piece be displayed showing "rules of the road."

The WCER should consider forming sub-committees that will focus on both promotion activities and on the educational activities for the community. Current efforts need to be documented, and then a plan developed to expand on these efforts. As mentioned above, it is important to enlist the assistance of other relevant groups and organizations to educate the public and promote bicycling and pedestrian activities.

- ***Step 9: Enforcement Measures***

The Willmar Police Department does a very good job in providing enforcement of the traffic laws within the community. The Department should, however, review what they currently do, and see where added enforcement could assist in helping ensure the safety of bicyclists and pedestrians. Enforcement of laws can be seen as one of the three legs of a stool to provide a safe pedestrian and bicycle network, along with education and the construction of properly designed facilities. Besides motorists, the bicyclist and pedestrian must also adhere to the laws that are in place to help ensure their safety.

- ***Step 10: Key Added Elements to Complete the Trails & Pedestrian Network***

To increase the satisfaction of bicyclists and pedestrians in the community, it is important to have the needed support infrastructure in place. In commercial areas there needs to be benches for people to sit and rest. This is becoming more important as the number of senior citizens in the community increases. Bicyclists need to be able to park their bicycles at bike racks. All identified destination points should be encouraged to have bike racks, as should other commercial locations, apartment housing, and other locations throughout the community.

The Willmar Design Center Downtown Connections Committee has volunteered to map out where bike racks are currently located in the community. They will also determine where it would be helpful to have them. The Committee will encourage the placement of bicycle racks where it would be helpful to add them. They will also see what funding is available to assist with adding bike racks in the community.

To integrate the Glacial Lakes State Trail into the Willmar Bicycle Network, it is important that an informational kiosk with current trails and bike routes be placed at the State Trailhead in northeast Willmar. Other community information could also be part of the kiosk display. Future plans call for another State Trailhead to be placed downtown at Selvig International Park. When that occurs, a kiosk should also be added at this location.

Section Two: School Recommendations

While this Plan cannot, and does not want to, impose policy or actions on the public and private schools in the city, it does have recommendations for the schools to consider.

Willmar Public Schools should strongly consider applying for a "Safe Route to School" grants or similar funding as they become available. These types of programs address high priority needs involving student safety. If the Safe Routes to School funding is not continued under the new Federal Transportation Act, then schools should investigate other funding opportunities to take measures to improve pedestrian and bicycle safety at their facilities, and on primary routes used by children off-site of their facilities.

The schools should develop and annually educate students on both pedestrian and bicycle safety. This could be done in conjunction with the education provided each year on bus safety measures. It is also recommended that the schools look at what policies are in place for students walking or bicycling to school, and determine if such policies need to be strengthened and see if new policies should be included. Pedestrian access should be treated as the highest priority for access to and on the school site. School priorities should be coordinated with City sidewalk, traffic calming and bicycle facilities policies. Some suggestions for specific policies to consider include:

- Routes should be identified that students utilize in walking and bicycling to elementary and middle high schools. From this information, each school should officially designate walking and bicycling routes. The schools will encourage the City to have sidewalks on both sides of the street on the identified routes, and encourage that other facilities be in place for safe travel to school.

- Bicycling and walking should be included in physical education and other curriculum programs in cooperation with other community organizations.

- The schools should work with the City to ensure that all crossings within the school zone will be provided with safe crossings designed in compliance with the *Manual of Uniform Traffic Control Devices* and the ADA, including pavement markings, signage, signals and curb ramps.

- Traffic calming designs should be considered, where appropriate, to manage speed and traffic volume in school zones.

- School crossing guards should be used at appropriate locations, and these individuals should receive technical training and have proper safety clothing/equipment.

- The schools should support efforts to promote walk and bike to school events and programs.

- Streets surrounding a school site should include sidewalks and marked crosswalks.

- Trails and pathways should be considered for providing direct links between the school site and surrounding neighborhoods. Internal pathways should be designed to channel children to the safest connections to the City's pedestrian and bicycle facilities. Pedestrians should be clearly directed to crossing points and access ways by directional signing, fencing, bollards (barrier posts) or other elements.

- Pedestrian travel zones (sidewalks, crosswalks) should be clearly delineated from other modes of traffic through the use of striping, colored and/or textured pavement, signing and other methods.

- Bus drop-off zones should to be separated from auto drop-off zones to minimize confusion and conflicts.

- Buses, cars, bicycles, and pedestrians should be separated on the site and provided with their own designated areas of travel.

- Any identified view obstructions that can be readily removed should be removed so that there is clear visibility of pedestrians throughout the school area.

- Adequate bicycle parking should be provided at each school site for both students and staff.

- Promoting the use of Walking School Bus, which encourages parents to volunteer in their neighborhoods.

Section Three: Funding Opportunities

There are a variety of bicycle and pedestrian funding programs and other opportunities that are currently available to assist the City with helping pay for the Plan's identified short-term projects. It is important to note that, in today's economic climate, it is likely that some of the government funded grant programs may be cut back or eliminated. It is also possible, however, that other new funding programs may be created in the future. For those reasons, the following list of funding opportunities will need to be updated annually. Please note that this list of possible funding opportunities is not intended to be a comprehensive listing of all possible funding opportunities. The community should keep vigilant to other funding opportunities.

Some projects may present better grant opportunities than other projects, thus the City needs to pursue grants where there is a strong likelihood that the project will score well competitively. Each grant will have different priorities and scoring methods. Even if grant dollars can be found to help offset project costs, these programs almost always include a matching dollar requirement. It is also important to realize that not all grant funds will be found for all the identified projects. Grant programs typically spread their funding around to multiple communities, thus it is unlikely that the same sources of funding will be available to fund new projects year after year. Non-grant sources of funding also need to be identified.

There are some sources of available funding which do not fund trails or other large facility type projects. Some programs need to be used to assist with planning, educational opportunities, and smaller facility projects, such as helping pay for bicycle racks or other supporting infrastructure. These opportunities should be investigated, and used where it is possible.

U.S. Department of Transportation/Minnesota Department of Transportation

Transportation Enhancement Program - Transportation Enhancement funds are available for communities to help expand transportation choices such as safe pedestrian facilities and trails. When the new Federal Transportation Act is passed this program may continue or may be cut. Enhancement Program decisions are made at the Area Transportation Partnership (ATP) level. Willmar is part of the Southwest Minnesota ATP. Currently approximately $400,000 per year is available for Enhancement projects within the ATP's 12-county region. On average, two projects are funded with these dollars each year. Projects are selected to be constructed four years out. There is an annual competition for these funds. Contact the Mid-Minnesota Development Commission for further details. General information about the Enhancement Program can be found at http://www.enhancements.org/.

Safe Routes to School Program - The Safe Routes to School Program is another current program that may or may not be discontinued when the new Federal Transportation Act is passed. Funding decisions are made at the state level through competitive rounds. The program provides funding to enable and encourage children to walk to school safely. Included in this program are infrastructure funds, which are used to assess and make improvements to the walking and bicycling physical environment around schools, and non-infrastructure funds, which are used to educate or encourage children to walk or bike to school. More information can be found at: http://www.dot.state.mn.us/saferoutes/.

Minnesota Department of Natural Resources Programs

The current programs offered through the DNR are briefly described below. As with any source of funding, the availability of these programs are subject to change.

Parks and Trails Legacy Grant Program - This program provides grants to local units of government to support parks and trails of regional or statewide significance. Funding for this grant program is from the Parks and Trails Fund created by the Minnesota legislature from the Clean Water, Land and Legacy Amendment passed by voters in 2008. Eligible projects include acquisition, development, restoration, and maintenance of park and trail facilities that are considered to be of at least regional significance. Grant amounts range between $20,000 and $500,000, and grants will pay up to 75 percent of eligible costs on a reimbursement basis. More information can be found at: http://www.dnr.state.mn.us/grants/recreation/pt_legacy.html.

Solar Energy Legacy Grants - The Solar Energy Legacy Grant Program is a special grant program within the Parks and Trails Legacy Grant program. Local units of government can apply for grants for solar energy projects within parks and on trails of regional or statewide significance. "Eligible projects include the purchase, installation, and subsequent interpretation of solar energy projects within parks and on trails. This includes projects for solar electric, hot water, and space heating, including air heat." Grant amounts range from $10,000 to $150,000. The grant may pay up to 75 percent of eligible costs. More information can be found at: http://www.dnr.state.mn.us/grants/recreation/pt_legacy.html.

Outdoor Recreation Grants - This program is designed to provide grants to local units of government for park projects. Trails are an allowable expense if they are internal park trails. The grant pays for 50 percent of eligible expenses. More information can be found at: http://www.dnr.state.mn.us/grants/recreation/outdoor_rec.html.

Local Trail Connections Program - The purpose of this Program purpose is to provide grants to local units of government to "promote relatively short trail connections between where people live and desired locations, not to develop significant new trails. Eligible projects include acquisition and development of trail facilities. Projects must result in a trail linkage that is immediately available for use by the general public. Trail linkages include connecting where people live (e.g. residential areas within cities, entire communities) and significant public resources (e.g. historical areas, open space, parks, and/or other trails)." The minimum grant award is $5,000, and the maximum award amount is $100,000. The grant will pay up to 50 percent of eligible costs. More information can be found at: http://www.dnr.state.mn.us/grants/recreation/trails_local.html.

Regional Trail Grant Program - The purpose of this program is to provide grants to local units of government to promote development of regionally significant trails outside the seven-county

metropolitan area. Eligible projects include acquisition and development of trail facilities that are considered of regional or statewide significance. Grants reimburse up to 50 percent of eligible costs. The minimum grant is $5,000, and the maximum grant amount is $250,000. More information can be found at: http://www.dnr.state.mn.us/grants/recreation/trails_regional.html.

Other Non-Local Funding Opportunities

Minnesota Council on Foundations **-** The Minnesota Council on Foundations produces a directory of foundation and corporate grant programs entitled "Guide to Minnesota Grantmakers." Their web site is www.mcf.org.

Bikes Belong Grant Program **-** The Bikes Belong Coalition sponsors the Bikes Belong Grant Program. The Coalition was formed in 1999 as the national coalition of bicycle retailers and suppliers. Since that time they have given out more than $1.6 million in grants to more than 190 projects in 46 states. Bike paths are one type of facility they will help fund. Contact Bikes Belong Coalition at (303) 449-4893 or visit their web site at www.bikesbelong.org.

Prevention Minnesota from Blue Cross and Blue Shield of Minnesota **-** While not a source for infrastructure funding, Prevention Minnesota puts out RFPs to help communities create policies, environments, and opportunities that improve the health of their residents. The program was established to "address root causes of heart disease and cancer by promoting smoke-free policies, healthy eating, and walkable and bikeable communities." The community should pay attention to announcements of funding opportunities from this program. Prevention Minnesota's web site is www.preventionminnesota.com; click on the Community Funding tab.

State Bonding **-** Every other year there are a number of trail related projects that state legislators submit for inclusion into the state bonding program. Very few make it onto the list, but it is a source of possible funding that should at least be investigated for the more high profile projects on the priority funding list.

Other Local Funding Opportunities to Consider

Time Projects to Coincide with Road Construction Project **-** Timing certain projects that are along road corridors to be built or reconstructed should help save on the cost of placing a trail beside the road. The bid of adding additional work for the trail should be lower than if it were a stand-alone trail project.

Developer Dedications and payment-in-liew-of dedications - Developer dedication requirements are among the more common techniques used to fund trails and greenways in cities. In such cases developers are required to dedicate open space or parkland on which trails can be developed, or donate money in lieu of land based on the density/intensity of development.

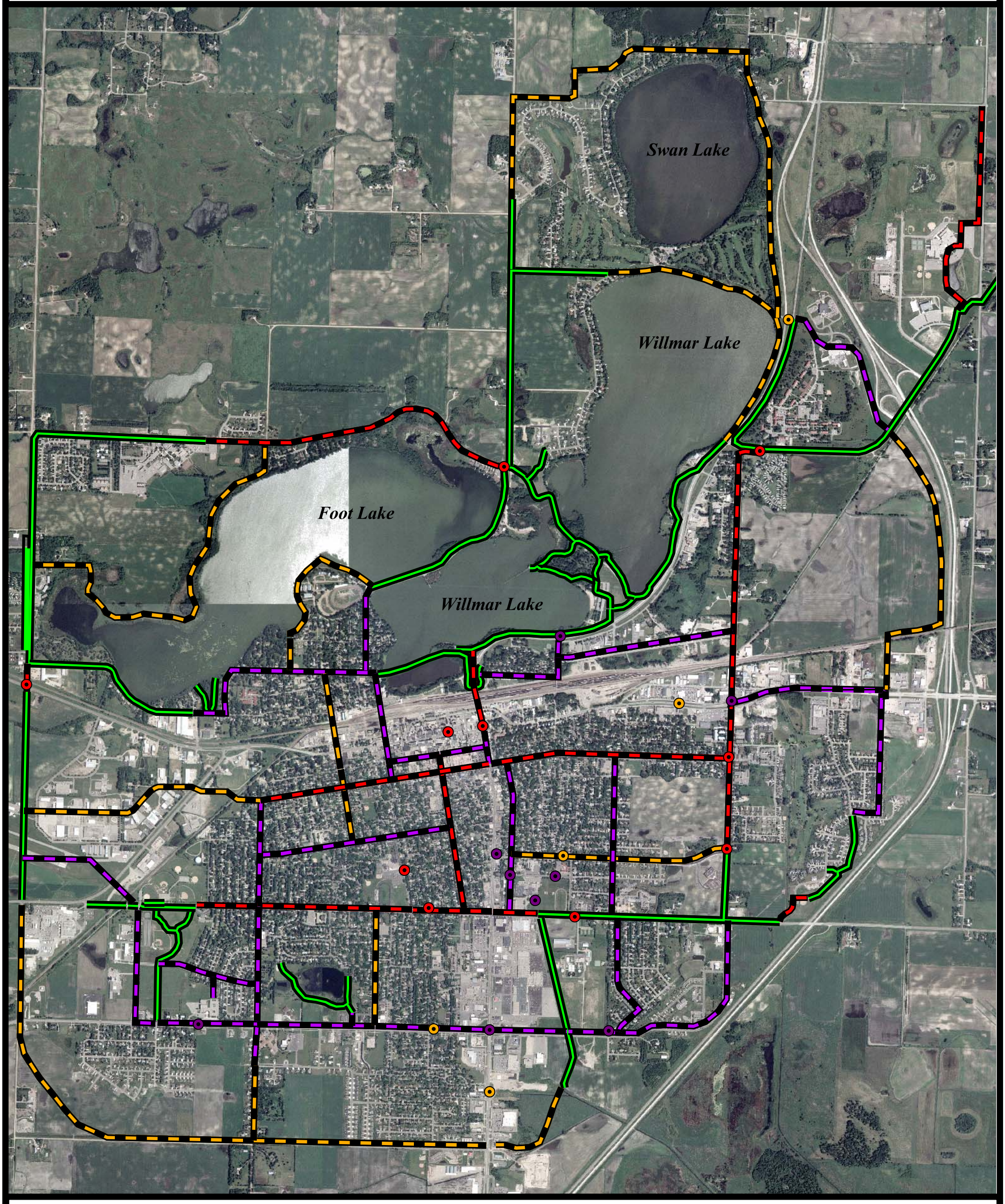
Local Sales Tax - The City of Willmar previously included funds for trail development in their local sales tax plan. If the City decides to approach the state legislature in the future to be allowed to have the local sales tax again, bicycle and pedestrian projects highlighted in this plan should be considered for such funding.

City funding through typical financing - The City can look at its normal budgeting process to determine if some of the projects are worthy of funding, regardless if other sources of financing are found. Property taxes, borrowing, and incoming transportation dollars can all be sources for funding projects and providing the necessary match for projects where outside funds are received.

Local Fundraising - Costs for projects can be offset by looking locally for donations and conducting fund raising events. Willmar Community Education and Recreation has done some fundraising in the past and will continue efforts in the future. Local businesses may be willing to donate some funds for projects that will benefit their employees and/or customers.

Adopt-A-Trail Program –
The City should consider creating an Adopt-A-Trail Program where businesses and individuals have the opportunity to sponsor a trail or bike path segment. For a price, either a one-time fee or annual payment, the interested party would have a sign created indicating their sponsorship. Adopting a trail could simply mean donating money or agreeing to periodically maintain a designated portion of a trail.

Map 6A:
City of Willmar Trails & Pedestrian Plan



Existing Trail*

N
W E
S

0.25 0 0.25 0.5 Miles

Trail* & Safety Projects**

- Short-Term Trail
- Medium-Term Trail
- Long-Term Trail
- Short-Term Safety
- Medium-Term Safety
- Long-Term Safety

* Trails can also be on-street bicycle routes.

**Please refer to the text for trail and safety project descriptions.