CHIPPEWA FALLS
BICYCLE AND PEDESTRIAN PLAN

Chippewa Falls, Wisconsin

Prepared By:
Schreiber/Anderson Associates
  Landscape Architecture
  Site Planning
  Urban Design
Madison, Wisconsin

In Conjunction With:
Chippewa Falls Bicycle and Pedestrian Plan Advisory Committee
# Table of Contents

**INTRODUCTION**  
Page 1

**PLANNING PROCESS**  

<table>
<thead>
<tr>
<th>Purpose of the Plan</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Process</td>
<td>5</td>
</tr>
</tbody>
</table>

**Goals and Objectives**  

<table>
<thead>
<tr>
<th>Planning Goals and Objectives</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operational Goals and Objectives</td>
<td>7</td>
</tr>
</tbody>
</table>

**INVENTORY AND ANALYSIS**  

<table>
<thead>
<tr>
<th>Transportation and Land Use</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

**PRIMARY PLANNING CONSIDERATIONS**  

<table>
<thead>
<tr>
<th>Potential and Historical Use Patterns</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Census Data</td>
<td>12</td>
</tr>
<tr>
<td>Accident Data</td>
<td>14</td>
</tr>
<tr>
<td>User Surveys</td>
<td>14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Directness and Continuity</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor Arterial and Collector Streets</td>
<td>15</td>
</tr>
<tr>
<td>Miscellaneous Travel Corridors</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Safety and Traffic Conditions</th>
<th>Page</th>
</tr>
</thead>
</table>

**SECONDARY DESIGN CONSIDERATIONS**  

<table>
<thead>
<tr>
<th>Costs and Ease of Implementation</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aesthetics</td>
<td>20</td>
</tr>
</tbody>
</table>

| Security                         | 21   |

<table>
<thead>
<tr>
<th>Roadway or Travel Corridor Conditions</th>
<th>Page</th>
</tr>
</thead>
</table>

**PLANNING RECOMMENDATIONS**  

<table>
<thead>
<tr>
<th>BICYCLE TRANSPORTATION PLAN</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bicycle Facility Definitions</td>
<td>22</td>
</tr>
<tr>
<td>Bicycle Facilities Map</td>
<td>29</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Implementation Plan</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Priorities</td>
<td>34</td>
</tr>
</tbody>
</table>

**PEDESTRIAN TRANSPORTATION PLAN**  

<table>
<thead>
<tr>
<th>Sidewalks</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Crossings</td>
<td>46</td>
</tr>
<tr>
<td>Street Furnishings</td>
<td>48</td>
</tr>
<tr>
<td>Priority Pedestrian Plan Recommendations</td>
<td>48</td>
</tr>
<tr>
<td>Americans with Disabilities Act</td>
<td>49</td>
</tr>
</tbody>
</table>
OPERATIONAL RECOMMENDATIONS
FOR BICYCLE AND
PEDESTRIAN TRANSPORTATION

EDUCATION AND ENFORCEMENT
Bicycling Education and Enforcement  51
   Educating Child Cyclists  52
   Educating High School Age Students  53
   Educating Adult Cyclists and Motorists  53
Pedestrian Safety  54
Maintenance  55
Policies and
  Landuse Planning  56
SUMMARY  57
APPENDIX
BIBLIOGRAPHY
The Congress recognizes that bicycles are the most efficient means of transportation, represent a viable commuting alternative to many people, offer mobility at speeds as fast as that of cars in urban areas, provide health benefits through daily exercise, reduce noise and air pollution are relatively inexpensive and deserve consideration in a comprehensive national energy plan."

INTRODUCTION

Bicycling and walking are increasingly viewed as viable, healthy, cost efficient and environmentally compatible modes of transportation. Yet the benefits of bicycling and walking to the health and well-being of individuals and society in terms of physical activity and displaced automobile use are not fully realized. An estimated eighty million Americans enjoy bicycling, and all of us are sometimes pedestrians, but only 7.2% of all trips made in the United States are by walking and 0.7% by bicycling. Safety and traffic conditions are reasons often cited for infrequent use of these travel modes. A 1991 Harris Poll suggests that twice as many people would walk or bicycle as a primary means of transportation if better facilities were available. Time and distance are also reasons cited for not walking or bicycling, yet nearly 40% of all trips made in the United States are two miles or less, well within the distance most people are willing to bicycle or walk.

The National Bicycling and Walking Study, Transportation Choices for a Changing America, 1994, summarizes several national studies that support the potential to increase bicycle and pedestrian transportation and the subsequent benefits. This document describes a vision:

.... to create a changed transportation system that offers not only choices among travel modes for specific trips, but more importantly presents these options so that they are real choices that meet the needs of individuals and society as a whole. pp xvii

The study also describes nine "action items" aimed at promoting non-motorized transportation, improving facilities and making bicycling and walking more viable and attractive transportation options.

As part of the federal initiative to encourage multimodal transportation, in general, and bicycle and pedestrian transportation, in part, the Federal Intermodal Surface Transportation Efficiency Act (ISTEA) provides funding and planning guidelines for states and municipalities. The program requires states and metropolitan planning organizations to address human-powered transportation needs within the overall local transportation plans. The Wisconsin Department of Transportation has responded by channeling ISTEA funds for bicycle and pedestrian facility development and planning.

Wisconsin's support for enhancing bicycle and pedestrian transportation is declared within WisDOT's TransLinks 21 Plan. This transportation initiative
is a comprehensive, twenty-five year transportation plan that was influenced through two years of planning and public involvement. This plan creates statewide provisions for bicycle and pedestrian facilities on state highway projects that are included in MPO’s bicycle and pedestrian plans; and calls for the development of a comprehensive State Bicycle Plan.

Local municipalities, too, recognize the transportation value of bicycling and walking to individuals and their community, and have facilitated plans to encourage bicycling and walking as viable, attractive transportation choices.

While the northern climate of Chippewa Falls does not favor year-round bicycle and pedestrian transportation, the Spring, Summer and Fall seasons are characterized by a rich landscape that attracts bicyclers and walkers. Cultural, and natural amenities, and high retail and residential land-use densities, make Chippewa Falls conducive to bicycle and pedestrian modes of transportation. Although current levels of bicycling and walking for utilitarian transportation purposes appears to be below national averages there are many opportunities to improve conditions within the city. For example, census data for the city shows that nearly 36% of all trips to work are within ten minutes drive or less. In general, the city’s infrastructure system provides good accommodation for pedestrian circulation, however, a lack of bicycling facilities and concerns of high traffic on the many of the local highways has not encouraged bicycling. The need for improved bicycling in the community is documented in the City of Chippewa Falls Outdoor Recreation Plan 1992-1997:

*It would seem that a need exists for Chippewa Falls to consider how it can work with the various parties to, not only develop an internal bike system, but also to be a participant in connecting the bike trail systems from the Red Cedar Trail to Cornell.*

Primary considerations leading to the development of this plan and affecting the viability of bicycling and walking activities include:

- What facilities and operations would improve the safety of bicycling and walking?
- What bicycle and pedestrian facilities should be considered for new highway and bridge construction?
- What should be the alignment of the Chippewa Valley Trail through the community?

These issues are, in part, the focus of this plan that was prepared by Schreiber/Anderson Associates in conjunction with the Chippewa Falls Bicycle and Pedestrian Plan Advisory Committee. This plan is intended to guide the development of bicycle and pedestrian facilities and operations in order to help achieve the city’s vision for multimodal transportation.
Members of the Plan Advisory Committee who helped direct the planning effort include:

Virginia O. Smith, Mayor
Rod Pike, City Engineer
Jayson C. Smith, City Planner
Bill Faherty, Director Parks and Recreation Dept.
Don Kush, Planner West Central Regional Planning Commission and MPO
Jean Rygiel Wisconsin DNR
Mike Reese, Wisconsin DNR
Terry Peterson WisDOT - District 6
Mark Ploderer, WisDOT - District 6
Ken Grothe, President Main Street, Inc.
Kathy LaPlante, Director and Main Street Coordinator
Roger Maurer, President Park Board
Dorothee Sommerfeld Local Bicyclist
Pete Drogemuller
David Flanagan

Public involvement was also an important component in the development of this plan. Public involvement was facilitated through newspaper articles and requests for written comments given to the parents of school age children. Further public input will be gathered at the February 28th public information meeting where preliminary plans will be discussed.

This report incorporates findings and recommendations of several other recent local planning studies that relate to bicycle and pedestrian activities in Chippewa Falls, including:

• Jayson C. Smith, July 1991. Chippewa Valley Recreation Trail Concept


• Yan Xu, Spring 1994. City of Chippewa Falls Riverfront Bicycle Corridor Project, Senior Thesis

References


PLANNING PROCESS

Purpose of the Plan

This bicycle and pedestrian plan completes an important step in Chippewa Falls' transportation system by proposing safe and convenient bicycling and walking opportunities. The purpose of this plan is to guide the development of bicycle and pedestrian facilities and operations to create viable and attractive transportation choices for the community.

This plan proposes the development of facilities, education and enforcement programs, and maintenance procedures to enhance bicycling and walking in Chippewa Falls. Planning recommendations are intended to be integrated into the city's overall transportation and land use planning activities with the goal of improving bicycle and pedestrian transportation. The focus of this plan is on transportation planning; however, the overlapping recreational uses of these systems are also recognized.

Process

Project goals and objectives were developed to direct a planning process unique to the vision of the City of Chippewa Falls. The goals and objectives were adopted by the Plan Advisory Committee and used to evaluate and recommend planning options. Inventories of conditions included historical data, field observations (conducted by bicycling and walking most of the corridors), secondary literature and meetings city staff. Primary and secondary planning criteria derived from State Bicycle and Pedestrian Planning Guidelines and national AASHTO Guidelines for Developing Bicycle Facilities were used as general analysis criteria. Following the analysis of planning considerations, preliminary travel corridors were mapped and reviewed with city staff, the Plan Advisory Committee and the public. Long range and priority plans were developed along with cost estimates of recommended facility improvements and finally this report was drafted with recommendations for operating and enhancing bicycling and walking activities.

Goals and Objectives

Project goals and objectives were developed for two purposes: 1. to guide the planning process and 2. to guide the future operation and enhancement of bicycle and pedestrian activities.

The following goals and objectives guided the planning process:

Planning Goals and Objectives

• Minimize the environmental impacts and enhance natural and cultural resources along bicycle and pedestrian corridors.

  a. Recommend alignments for the Chippewa Valley Trail and other regional bicycle and pedestrian travel corridors through Chippewa Falls.
b. Identify and recommend specific corridors that could be enhanced or protected with bicycle and pedestrian transportation land uses.

• Develop a cost efficient bicycle and pedestrian system that enhances the local economy by increasing transportation choices and enhancing recreation opportunities.

  a. Promote the economic impacts of bicycle and pedestrian transportation by effectively linking employment centers, recreational areas, business districts, neighborhoods, educational centers and cultural destinations.

  b. Integrate bicycle and pedestrian transportation modes into Chippewa Falls’s overall transportation system and make recommendations for highways currently being planned for reconstruction including CTH "J," STH 124 and STH 29 bypass.

  c. Recognize financial constraints and obligations of bicycle and pedestrian systems and develop an implementation plan.

  d. Build upon local knowledge and existing information.

  e. Identify funding sources for enhancement of bicycle and pedestrian transportation options.

  f. Recommend bicycling and walking travel corridors that will link Chippewa Falls’ retail center to regional recreation opportunities.

• Develop a safe and convenient bike and pedestrian system for diverse user types and abilities.

  a. Design for utilitarian and recreational transportation uses.

  b. Design a system that accommodates the needs of various types and abilities of users.

  c. Recommend design treatments for on and off road travel corridors.

  d. Increase bicyclist and pedestrian safety by planning suitable routes within 1/4 mile of all urban homes.

• Use bicycle and pedestrian transportation systems to enhance local and regional aesthetic resources.

  a. Establish construction, design and maintenance guidelines that can be used consistently throughout Chippewa Falls to create a unifying system.
b. Identify and recommend aesthetically pleasing destinations and routes for bicycle and pedestrian corridors.

The following goals and objectives are intended to guide future operations and enhancement of bicycle and pedestrian systems.

- To meet State and National objectives for bike and pedestrian transportation
  
a. Double the local percentage of bike and walking trips by the 1999.

b. Reduce the current number of bicyclist and pedestrian accidents by ten percent by 1999.

c. Promote increased use of bicycling and encourage planners and engineers to accommodate bicycle and pedestrian needs in designing transportation facilities for rural, urban and suburban areas.

- Encourage and promote local education programs that focus on the rights, the responsibilities and the safety of bicyclist and pedestrians.
  
a. Publicize safety requirements on city bicycle transportation maps.

b. Increase safety education programming for school children and average adult cyclists.

c. Promote enforcement of laws and regulations for all transportation users to maintain safe bicycle and pedestrian transportation systems.

- Maintain bicycle and pedestrian systems and facilities so that they are attractive, convenient and safe. Also, pursue alternate strategies to fund maintenance.

- Promote land-use planning that is responsive to a balanced transportation system, particularly planning that fosters bicycling and walking such as mixed use development or higher density housing.

- Monitor bicycle and pedestrian accidents, evaluate causes and conditions of accidents.
INVENTORY AND ANALYSIS

The inventory and analysis of the factors affecting bicycling include safety, motor vehicle travel characteristics, aesthetics, maintenance of travel corridors. Personal fitness, time to work, weather, and facilities also affect transportation decisions. While several of these variables cannot be changed with this plan, the location, operation and type of facilities that influence bicycling and walking can be improved through proper planning.

Transportation and Land Use

Chippewa Falls is within the Eau Claire metropolitan area, 5 miles north of the City of Eau Claire via USH 53. The city's population is 12,746 with an additional 4,500 more people in surrounding Lake Wissota region. The city is linked to the Eau Claire urbanizing area via USH 53 and STH 124. Other highways that connect this community to the region include STH 178, STH 29 and numerous County trunk highways. The region's state highways are generally not designed to accommodate bicycling; however, the STH 124 sidepath is the only locally designated bicycle facility within the city's transportation system. Beyond city limits several county trunk highways have been identified by the Wisconsin Bicycle Map¹ and/or the recently published Bicycle Transportation Plan for the Eau Claire Urbanized Area, 1995 - 2020². These identified regional linkages include county trunk highways Q, N, P, J, S and I. Linkages to these proposed and existing facilities are recommended in this plan.

Figure 1. Location Map

¹ Wisconsin Bicycle Map
² Bicycle Transportation Plan for the Eau Claire Urbanized Area, 1995 - 2020
The Chippewa Valley Trail is another proposed regional connector. This proposed trail will be approximately 70 miles long, link the cities of Menomonie, Eau Claire, Chippewa Falls and Cornell and join two State Parks; Lake Wissota State park near Chippewa Falls and Brunct Island State Park in Cornell. This overall trail concept will include other the completed Red Cedar Trail from Menomonie to the Chippewa River, the partially completed Chippewa River Trail to Eau Claire and Chippewa Falls and the Norma - Cornell Trail. The concept for this regional system is documented in the Chippewa Valley Trail Concept Report, prepared by Jayson Smith. The report reveals "... the weakest link in the overall trail concept was located at Chippewa Falls." The City of Chippewa Falls' segment of this regional trail system has significant recreation and transportation value and therefore trail alignment options through the city will be addressed in this plan report.

Figure 2. Proposed Chippewa Valley Trail, From Chippewa Valley Trail Report, 1991
Segments of the Chippewa River and Duncan Creek within the City of Chippewa Falls have carved a steep and wooded landscape that give the city much of its natural character. These waterways provide scenic beauty, recreational opportunities and unique recreational destinations such as Irvine Park and Lake Wissota State Park. They have also created steep topography that negatively affects bicycling safety, particularly at roadway intersections located in and around the downtown region. The effects of topography on bicycling and walking will be a primary consideration in this study.

![Image]

Figure 3. View overlooking Chippewa Falls, 1994

Chippewa Falls' historic downtown and historic residential districts are located north of the Chippewa River. These historic districts have many cultural, retail and aesthetic amenities. Over 200 stores, restaurants, pubs and other business are located within the downtown - making this area a strong destination for commuting business people and visitors. The central business district is Chippewa Falls' primary retail area, and therefore pedestrian activity is strong. Across the Chippewa River to the south a new retail area includes the Chippewa Mall, Kmart Plaza and several other businesses that also attract people. Currently, most people travel to these new retail establishments by motor vehicle.

Industry is also strong in Chippewa Falls. Leinenkugels Brewery is located just north of the downtown and several large industrial parks are located in the southeast and northeast quadrants of the city. These industrial areas are home to industries like Mason Shoes, and CRAY Research.
A third large mixed use development is being planned for the area known as the Chippewa County Farm site. This site is identified in the City of Chippewa Falls Land Use Plan, 1982 as one of the highest employment growth areas. This land use plan also projects high employment growth in the Second Riverside Industrial Park. Likewise, several projected dwelling unit growth areas are identified. These include the "flats" north of Pumphouse Road, residential areas surrounding the Chippewa Mall, and the residential area west of USH 53.

The school system that services residents of Chippewa Falls includes seven grade schools, one middle school and one high school. Four Catholic schools are also within the community.

In addition to area schools, residential areas and retail employment centers, Chippewa Falls has a number of other significant destinations. From a transportation perspective these destinations are considered "trip generators" and include:

- Cook-Rutledge Mansion
- Northern Wisconsin State Fairgrounds
- Christmas Village
- Bernard F. Willi Pool
- Rose Garden
- Chippewas County Historical/Genealogical Society
- St. Joseph’s Hospital
- YMCA

Primary bicycle and pedestrian travel corridors between these major community destinations will be located by an analysis of the following considerations.
PRIMARY PLANNING CONSIDERATIONS

Several primary planning considerations are used to select potential travel corridors and secondary planning considerations are used to evaluate corridors and make recommendations for design treatments.

Potential and Historical Use Patterns.

Determining the potential use of travel corridors for bicycling and walking is perhaps the most important planning consideration. Methods to determine potential use include inventory and analysis of historical use patterns, determining locations of trip generators (origins and destinations) such as schools, residential areas, employment centers, retail areas, recreational destinations, etc.; determining service areas; and projecting areas of population growth and future land use.

Historical use patterns are determined by "Means of Travel to Work" census data, mapping accident data, field observations, and secondary literature research.

Census Data

The 1980 and 1990 Bureau of Census Data provides useful information about the primary mode of travel for individuals over age 16. The major limitation of this data for Chippewa Falls is that it was collected in March when snow and other northern weather conditions may have dramatically affected bicycling and walking activities. Other limitations of census data are that it does not represent: young walkers or bicyclers, occasional bicycling and walking trips to work among people over 16 years or travel for purposes other than work (only 1/5 of all trips are work related").

With these limitations in mind census data was used to help estimate levels of bicycle and pedestrian activity. Review of the 1990 census data shown in Table 1 reveals that the city's level of walking to work is consistent with State and national averages. The level of bicycling to work is well below average, but "Time to Work" census data for Chippewa Falls shows that 36% of all trips to work are less than 10 minutes drive - well within the distance most people are willing to bicycle or walk (See General Characteristics of Different types of Bicyclists, Appendix A).
### Table 1. National Bureau of Census Data

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Means of Travel to Work</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total number 16 and over</td>
<td>115,070,274</td>
<td>2,349,691</td>
<td>21,406</td>
<td>26,500</td>
<td>4,857</td>
<td>5,498</td>
</tr>
<tr>
<td>Drove alone</td>
<td>84,215,298</td>
<td>1,750,791</td>
<td>17,489</td>
<td>19,732</td>
<td>3,030</td>
<td>4,427</td>
</tr>
<tr>
<td></td>
<td>73.2%</td>
<td>78.3%</td>
<td>81.7%</td>
<td>74.5%</td>
<td>62.4%</td>
<td>80.5%</td>
</tr>
<tr>
<td>Bicycled</td>
<td>466,856</td>
<td>11,802</td>
<td>33</td>
<td>279</td>
<td>NA*</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>.4%</td>
<td>.5%</td>
<td>.2%</td>
<td>1.1%</td>
<td></td>
<td>.1%</td>
</tr>
<tr>
<td>Walked</td>
<td>4,488,886</td>
<td>130,132</td>
<td>1,089</td>
<td>2743</td>
<td>473</td>
<td>255</td>
</tr>
<tr>
<td></td>
<td>3.9%</td>
<td>5.8%</td>
<td>5.1%</td>
<td>10.4%</td>
<td>9.7%</td>
<td>4.6%</td>
</tr>
<tr>
<td><strong>Travel Time to Work</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 5 minutes</td>
<td>NA</td>
<td>130,968</td>
<td>1670</td>
<td>1409</td>
<td>NA</td>
<td>370</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5.9%</td>
<td>7.8%</td>
<td>5.3%</td>
<td></td>
<td>6.9%</td>
</tr>
<tr>
<td>&lt; 10 minutes</td>
<td>18,257,921</td>
<td>517,076</td>
<td>5,858</td>
<td>5723</td>
<td>NA</td>
<td>1936</td>
</tr>
<tr>
<td></td>
<td>15.9%</td>
<td>22.0%</td>
<td>27.4%</td>
<td>21.6%</td>
<td></td>
<td>36.0%</td>
</tr>
</tbody>
</table>

* Reported as "other means" of transportation.

A review of census data also included comparisons of individual tracts within Chippewa Falls. Together these data show several significant patterns for Chippewa Falls:

- Bicycle and pedestrian activity dropped dramatically from 1980 to 1990. (weather conditions may have influenced these data)
- Nearly 36% of all trips to work are 10 minutes or less.
- The highest level of bicycle or pedestrian commuting is from the Northeast quadrant of the city (census tract 105).

**Primary Planning Implications:**

1. **Within the city 255 people over 16 years old reportedly walked as a primary means of transportation in 1990; however, only 4 people reported bicycling as their primary transportation mode.**

2. **On the other hand "Time-to-Work" data shows a significant potential to increase bicycling and walking transportation modes throughout Chippewa Falls.**
Accident Data

Studies have shown that the actual number of bicycle and pedestrian accidents are more than twice the number of police reported accidents. Although many unreported accidents are minor, the levels of bicycle and pedestrian accidents is cause for measures to increase safety for these travelers. In Chippewa Falls 17 reported accidents involved pedestrians and 23 involved bicyclists between 1991 and 1993 (see Table 2).

**Table 2. Police Reported bicycle and Pedestrian Accidents 1991-1993**

<table>
<thead>
<tr>
<th>Bicycle and Pedestrian Accidents for Chippewa Falls</th>
<th>Number Bicyclist Involved Accidents</th>
<th>Number Pedestrian Involved Accidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>5</td>
<td>8</td>
</tr>
<tr>
<td>1992</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>1993</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>1994</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

The times and locations of these were used to locate possible facility problems and to determine historical patterns of use. Several patterns were documented as a result of plotting accidents for Chippewa Falls including:

- Bicycle involved accidents were widely distributed through the city but pedestrian accidents were highly concentrated along Bridge Street within the downtown region.
- Bicycle accidents occurred most frequently between 7:00 a.m. and 8:00 a.m. and 3:30 p.m. to 5:30 p.m., indicating conflicts before and after school and work and during peak travel times.

**Primary Planning Implications:**

1. **Recommendations for improving pedestrian safety should focus on Chippewa Falls’s Central Business District**

2. **Bicycle safety issues are universally concerning throughout the city and will require improving facilities and programs to educate bicyclists and motor vehicle users.**

User Surveys

Responses to a newspaper article (news release and article shown in Appendix H) and "requests for comments" that were distributed by Dorothee Sommerfeld, of the Plan Advisory Committee were used to determine the existing and potential use of bicycle and pedestrian facilities in Chippewa Falls. The City Planner’s office received 23 letter responses from individuals
and families living in and around Chippewa Falls. All of these letter responses supported provisions for bicyclist and pedestrians. Many of the responses focused on the recreational benefits and several called for the bicycle routes and off-street paths for utilitarian transportation purposes.

*Primary Planning Implications: 1. Off-street bicycle and pedestrian facilities will be recommended wherever feasible to serve the secondary purpose of recreation.*

**Directness and Continuity**

Although a major objective of this plan is to establish a primary bicycle and pedestrian facility system that is within less than 1/4 mile of all urban homes, the destinations of bicyclist and pedestrian are as varied as the users. All Chippewa Falls’ streets, with the possible exception of several of the local state trunk highways, will be used at one time or another by bicyclists, but facilities cannot be planned for the entire transportation system. Facility improvements will be recommended where they provide the most direct link between traffic generators.

Generally, motorized and non-motorized transportation users share similar origins and destinations - merely using different modes to accomplish their goal of arriving at a destination safely and efficiently. The arterial and collectors that effectively deliver many motor vehicles provide the direct and contiguous routes that could potentially deliver people using other modes of transportation. These systems, however, are not always designed for accommodating the special needs of the average bicyclist. Many of Chippewa Falls’ minor arterial streets and collector streets effectively connect the community’s prime destinations and therefore serve the existing bicycling population. These corridors include:

**Bridges**

Main St. Bridge  
S.T.H. 124 Bridge

**Minor Arterial and Collector Streets**

1st Ave.  
Bridge St.  
Bridgewater Ave.  
Canal St.  
Coleman St.  
Columbia  
Elm St.  
Governor St.  
Herbert St.  
High St.  
Island St.  
Jefferson St.
Main St.
Mansfield
Nelson Rd.
Oak St.
Park St. C.T.H "J"
Palmer St.
Pumphouse Rd.
Rushman Dr.
Scheidler Rd.
Spring St.
State St.
Superior St.
Terrill St.
Tropicana St.
Westwood Dr.
Wheaton St.
Woodward Ave.

Miscellaneous Travel Corridors

Other corridors that may not currently serve a major transportation function such as utility corridors, abandoned rail corridors and minor transportation routes have been located and evaluated in this plan. Several miscellaneous corridors are identified that may be available for local and regional transportation functions including:

Chicago and Northwestern Railroad corridor (Town of Hallie to Canal St.)
Chicago and Northwestern Railroad corridor (STH 178 - Chippewa County Farm)
Chippewa River corridor paralleling River St. (Main St. Bridge - Duncan Creek)
Chippewa River corridor (STH 124 Bridge - Pumphouse road via abandoned railroad corridor)
Chippewa River Corridor (Scheidler Rd. - East Bridge Corridor)
Leinenkugals Brewery along drainage to the Northeast to intersection of State St. and Water St.
Duncan Creek (end of Grove St. - Leinenkugals Brewery)

Primary Planning Implications: 1. Chippewa Falls has a variety of potential on-street and off-street travel corridor opportunities that link the city's prime destinations. These corridors are selected for further evaluation.
Safety and Traffic Conditions

The motor-vehicle ADT (Average Daily Traffic) and speed, and the traffic mix within corridors affect the safety, and therefore the suitability, of corridors for bicycling and walking. The factors that affect bicycling and walking may affect individuals differently depending on their level of experience and personal preference. It is important to recognize, however, that even highly traveled streets will be used by various types of cyclists to access appropriate facilities.

There are several general characteristics of users that help to analyze the suitability or desirability of travel corridors for different people. Three types of bicycle users are generally recognized; the experience adult cyclist (sometimes referred to as Type A), the average adult cyclist (Type B), and the child cyclist (Type C). Similarly, several types of pedestrians are recognized including: children and elderly pedestrians, pedestrians using means of assisted movement and average adult pedestrians. The design treatments and facilities recommended in this plan will respond to the experience and preferences of anticipated types of users according to the analysis of potential use. Table 3 shows traffic characteristics and evaluations for selected corridors. Primary findings of safety and traffic conditions include:

- The corridors with the highest level of truck traffic are STH 124, 1st Avenue, STH 29, STH 128, CTH I and CTH J.
- Traffic on both bridges crossing the Chippewa River exceeds 10,000 ADT.
- Two alignments are proposed for the new East Bridge corridor. This travel corridor may reduce traffic in and around the central business district including both bridges.
- Several high volume one-way streets have been identified as primary corridors for bicycling and walking. Safe accommodations on one-way streets are often difficult.
- Several selected highways have traffic volumes that would require design treatments such as bicycle lanes or separated paths.

Primary Planning Implications: 1. One-way streets will pose problems for providing bicycling opportunities without additional safety improvements. Bicyclists should travel in the same direction as motor-vehicle traffic.

2. Opportunities to separate bicyclists from traffic on corridors with high ADTs or high truck traffic will be evaluated.

In addition to responding to safety and traffic conditions design treatments will also be influenced by secondary planning considerations such as roadway and travel corridors conditions.
SECONDARY DESIGN CONSIDERATIONS

After locating and selecting travel corridors according to primary design considerations, further evaluation and analysis of these corridors was conducted according to the following secondary design considerations. These considerations were used to evaluate the selected corridors, recommend design treatments (facilities), select between alternate routes and prioritize travel corridors for improvements.

Cost and Ease of Implementation

The cost of improving bicycle and pedestrian systems is an important factor in recommending facility improvements. In general, the cost of designating bicycle routes may range from $7,500 to $75,000 per mile and paths from $45,000 to $300,000 per mile. The following construction costs were developed by comparing the average statewide costs to Kerr’s Manual of Cost Estimating, 1994. These estimated costs are intended for planning purposes only.

Estimated Construction Costs per Mile (1994)
- Four foot paved bituminous shoulders $20,000
- Bike lanes/wide curb lanes (3’ concrete on both sides) $70,000
- Eight foot wide limestone path on railroad grade $35,000
- Eight foot bituminous path $100,000
- Urban path, basic $200,000
- Urban path, highly developed $300,000
- Signs $500 each or $5,000/mile
- Striping/restriping $5,000
- Bicycle parking, $30 per space

The benefits of a bicycle and pedestrian transportation system to the health and well-being of a community justify the costs. Nonetheless, the financial constraints of providing facilities need to be considered. Infrastructure improvements to accommodate bicycle transportation should be valued on the basis of their cost compared to the cost of the overall transportation system and the level of service provided by the improvements.

Primary Planning Implications: 1. Providing bicycle parking and signing on suitable bicycle corridors are the most cost-effective means of enhancing conditions for local cyclists. Although many of Chippewa Falls’ streets will require improvements before signing can take place, providing increased bicycle parking in the downtown should be a short term goal.

2. When planned with overall reconstruction of a roadway, the cost of bicycle facilities is dramatically reduced and often provides more general transportation benefits. The STH 124 and the East Bridge corridor are in the early stages of planning and design. Both of these corridors are
identified as important bicycle and/or pedestrian linkages. On both of these facilities the cost on improvements may be incidental to the overall cost of the project. Recommendations for accommodating bicyclists and pedestrians on these facilities have been prepared.

Funding Strategies

As part of the state and federal initiative to enhance bicycle and pedestrian transportation modes several grants and funding sources are available to Chippewa Falls for planning, facility development and land acquisition. Although some funding aids may be available for improving on-street facilities, opportunities to fund off-street facilities (such as bicycle paths) are substantial - particularly if the facility is intended to provide both utilitarian and recreational benefits. As a regional transportation and recreation thread through the community the Chippewa Valley Trail Concept appears to be a strong candidate for receiving state and/or federal assistance. (See Appendix A for a complete discussion of "Grants and Aids Opportunities")

The Federal ISTEA Program has helped fund many bicycle and pedestrian transportation activities throughout the United States. Similarly, Wisconsin has approved the funding of many community projects. A Wisconsin component of ISTEA, the State-wide Multimodal Improvements Program (SMIP) is intended to encourage multimodal projects that are "up and beyond" the current transportation activities. In 1996, Wisconsin will submit its last approved projects for the existing Federal ISTEA program. Future funding will depend on a new federal act or similar state appropriations. Therefore, Chippewa Falls should quickly evaluate its bicycle and pedestrian transportation opportunities to apply for the existing programs.

One objective of this plan is to considered facilities that have overlapping recreation and transportation value. For these recommended bicycle and pedestrian improvements the Wisconsin Department of Natural Resources’ Stewardship Program may be an appropriate source of funding.

Alternate funding strategies through private interests should also be considered. Local private interests will benefit from an improved transportation system (one that offers many viable transportation choices). Private agencies that share Chippewa Falls’ vision for a bicycle and pedestrian system may be willing to invest in its development or maintenance. Chippewa Falls should continue to explore private partnerships to provide better bicycle and pedestrian facilities.

Table 5 shows the costs of recommended improvements for selected corridors. This capital improvements program serves as a planning tool to develop suitable facilities for the Chippewa Falls Bicycle and Pedestrian system and shows recommended design treatments along with estimated costs.
Aesthetics

Even for purely utilitarian transportation purposes the aesthetic conditions of corridors have an influence on choices of travel. Pedestrians and bicyclists are more affected by, and aware of, their environment than most motor vehicle drivers. In Chippewa Falls there are many areas of natural and cultural aesthetic quality that will appeal to bicyclists and pedestrians. These include:

Irvine Park
Chippewa River Corridor
Duncan Creek Corridor
Historic Downtown Business District
Historic Residential District
Leinenkugal’s Brewery Site
Hilltop vantage points

View of Chippewa River at Chippewa Falls, 1994

*Primary Planning Implications:* 1. Chippewa Falls has appealing destinations and riverfront corridors. These aesthetic features, planned into the bicycling and pedestrian transportation system, will attract people for utilitarian and recreational purposes. Facilities will be designed to enhance local aesthetic and social characteristics.

2. To attract additional bicyclists and pedestrians for recreation and transportation purposes the city should consider a long range plan to
Security

The potential for criminal acts or harassment of bicyclists and pedestrians can be a deterrent to use. Clear visibility will be an important consideration for determining bicycle and pedestrian corridors and for recommending improvements along the corridors. Lighting may be recommended for parking areas and along some urban paths.

*Primary Planning Implications: Lighting is recommended for facilities in and around the downtown area. Lighting should also be considered for off-street transportation paths.*

Roadway and travel corridor conditions

The roadway width, number of stops and intersections, curb lane width, surface condition, vehicular parking, and barriers affect the suitability of travel corridors for bicycling. Table 3 shows the physical characteristics of the selected corridors. Plan recommendations will be based on these travel corridor conditions as well as other primary and secondary planning considerations.

Review of these selected corridors and their physical characteristics reveals the following concerns:

- Many of the selected roadways are currently too narrow for bicycle accommodation and the existing parallel parking.

- Many off-street corridors provide opportunities for bicycle and pedestrian facilities.

*Primary Planning Implications: 1. The most restrictive city condition for most bicyclists is narrow curb lanes. Recommendations of removing one or both-side parking or widening the street at the time of reconstruction will be considered to accommodate cyclists.*
PLANNING RECOMMENDATIONS

Planning recommendations are divided into 1. bicycle facility recommendations and 2. pedestrian facility recommendations. The focus of these recommendations is to propose a system of on-street and off-street facilities to accommodate bicyclist and pedestrians, respectively. Facilities were recommended according to analysis of primary and secondary considerations as frameworks for local infrastructure improvements.

Bicycle Transportation Plan

Recommendations to designate and improve existing travel corridors for bicycling have been determined using the previously discussed primary and secondary planning considerations. Corridor improvements have been designated to enhance the levels of bicycle activity and to help cyclists locate suitable facilities. The vision of the Chippewa Falls Plan is to enhance bicycling as an attractive and viable mode of transportation. This plan recommends that a system of suitable bicycle facilities be implemented and designated by signing and mapping appropriate routes. For liability reasons, designated facilities should meet or exceed standard specifications within Wisconsin Bicycle Planning Guidance, 1993 and AASHTO Guide for Developing Bicycle Facilities, 1990.

In this plan, facilities to accommodate the child cyclist are recommended on corridors that serve many youth. Likewise, provisions for experienced adult cyclist will be recommended on some arterial streets and regional corridors. Generally, however, design treatments for the city of Chippewa Falls will focus on providing accommodation for the average adult cyclist. Appendix B, Urban Corridor Facility Development Guidelines taken from the Wisconsin Bicycle Planning Guidelines identifies urban design treatments for the Group B, or average adult bicyclist. Accordingly, Table 3 shows recommended facilities and design treatments to accommodate anticipated bicyclists (Table 3).
### Table 3, Urban Travel Corridor Analysis

<table>
<thead>
<tr>
<th>TRAVEL CORRIDOR</th>
<th>AVERAGE DAILY TRAFFIC</th>
<th>TRAFFIC MIX</th>
<th>TOTAL SURFACE WIDTH</th>
<th>SPEED LIMIT</th>
<th>ON-STREET PARKING</th>
<th>RECOMMENDED BICYCLE FACILITIES</th>
<th>RECOMMENDED CORRIDOR IMPROVEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BRIDGES</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main St. Bridge</td>
<td>11400</td>
<td>Truck traffic</td>
<td>28</td>
<td>35</td>
<td>NA</td>
<td>SIDEPATH</td>
<td>Add top rail to the north east side of the Bridge railing for a total height of 4.5’ (1.4m). Move back the railings on the east bridge approaches to allow 2 ft of clear space from edge of path.</td>
</tr>
<tr>
<td>S.T.H. 124 Bridge</td>
<td>14300</td>
<td>Truck traffic</td>
<td>14/28</td>
<td>25</td>
<td>NA</td>
<td>SIDEPATH</td>
<td>Add warning sign for steep westerly decent</td>
</tr>
<tr>
<td><strong>ROADWAY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Ave. (Halbleib - State/State Jefferson)</td>
<td>4100-5200</td>
<td>Truck traffic</td>
<td>36</td>
<td>25</td>
<td>Both sides</td>
<td>BICYCLE ROUTE</td>
<td>Remove north side parking, restripe and sign</td>
</tr>
<tr>
<td>Bridge St. (Elm - River)</td>
<td>4400-7200</td>
<td>General</td>
<td>42' and 50’</td>
<td>25</td>
<td>Both sides</td>
<td>SHARED ROADWAY</td>
<td>Provide bicycle parking, ave., 5 stalls per block, in the downtown.</td>
</tr>
<tr>
<td>Bridgewater Ave. (Wheaton - Jefferson)</td>
<td>1900</td>
<td>General</td>
<td>30'-32'</td>
<td>25</td>
<td>Both sides</td>
<td>BICYCLE LANES</td>
<td>Remove parking both sides, restripe and sign.</td>
</tr>
<tr>
<td>Canal St. (Tilton - Herbert/Herbert - Chippewa Mall)</td>
<td>380-</td>
<td>General</td>
<td>40' and 25'</td>
<td>25</td>
<td>Both sides</td>
<td>BICYCLE ROUTE</td>
<td>Sign/Provide 5’ paved shoulder in rural section.</td>
</tr>
<tr>
<td>Coleman St. (Wheaton - Superior)</td>
<td>2600-3200</td>
<td>General</td>
<td>38' and 40'</td>
<td>25</td>
<td>Both sides</td>
<td>BICYCLE ROUTE</td>
<td>Remove one side parking, restripe and sign.</td>
</tr>
</tbody>
</table>

*Prepared by: Schreiber/Anderson Associates, Spring 1995*
Table 3, Urban Travel Corridor Analysis

<table>
<thead>
<tr>
<th>TRAVEL CORRIDOR</th>
<th>AVERAGE DAILY TRAFFIC</th>
<th>TRAFFIC MIX</th>
<th>TOTAL SURFACE WIDTH</th>
<th>SPEED LIMIT</th>
<th>ON-STREET PARKING</th>
<th>RECOMMENDED BICYCLE FACILITIES</th>
<th>RECOMMENDED CORRIDOR IMPROVEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Columbia (Superior - State)</td>
<td>2800</td>
<td>General</td>
<td>30' and 38'-42'</td>
<td>25</td>
<td>Both sides</td>
<td>BICYCLE ROUTE</td>
<td>Widen to 46' and sign.</td>
</tr>
<tr>
<td>Edeward St. (jefferson - State)</td>
<td>na (local) Est. 800</td>
<td>General</td>
<td>26'</td>
<td>25</td>
<td>?</td>
<td>WIDE CURB LANE</td>
<td>Remove any parking and sign</td>
</tr>
<tr>
<td>Elm St. (High - Bridge)</td>
<td>2000</td>
<td>Truck traffic</td>
<td>42'</td>
<td>25</td>
<td>Both sides</td>
<td>FUTURE BIKE LANES</td>
<td>Provide facilities meeting AASHTO standards</td>
</tr>
<tr>
<td>Governor St. (Columbia - Wheaton)</td>
<td>na (local)</td>
<td>General</td>
<td>30'</td>
<td>25</td>
<td>Both sides</td>
<td>FUTURE ROUTE</td>
<td></td>
</tr>
<tr>
<td>Herbert St (Garden - Canal)</td>
<td>na (local) Est. 1000</td>
<td>Truck traffic</td>
<td>24'</td>
<td>35</td>
<td>Both sides</td>
<td>PAVED SHOULDERS</td>
<td>Sign and remove parking</td>
</tr>
<tr>
<td>High St. (Elm - Columbia)  two lanes, one-way north</td>
<td>5600</td>
<td>General</td>
<td>42'</td>
<td>25</td>
<td>Both sides</td>
<td>BICYCLE LANE</td>
<td>Sign to prohibit wrong way riding. Remove one side parking.</td>
</tr>
<tr>
<td>Island St. (Oak - Spring)</td>
<td>4600</td>
<td>General</td>
<td>42'</td>
<td>25</td>
<td>Both sides</td>
<td>BICYCLE ROUTE</td>
<td>Widen to 46'</td>
</tr>
<tr>
<td>Jefferson St (1st - Elm)</td>
<td>2500-3000</td>
<td>Truck traffic</td>
<td>38' and 66'</td>
<td>25</td>
<td>Both sides</td>
<td>SIDEPATH and BIKE LANES</td>
<td>Develop 8'-10' wide concrete sideway along with new roadway construction. Stripe 5' wide bike lanes and sign.</td>
</tr>
<tr>
<td>Main St. (Canal - Chippewa River)</td>
<td>11400</td>
<td>General</td>
<td>48'</td>
<td>25</td>
<td>Both sides</td>
<td>BICYCLE LANES</td>
<td>Provide bicycle lanes and sign</td>
</tr>
<tr>
<td>Mansfield (Wheaton - Tropicana)</td>
<td>na (local)</td>
<td>General</td>
<td>38'</td>
<td>25</td>
<td>Both sides</td>
<td>WIDE CURB LANE</td>
<td>Remove school side parking</td>
</tr>
<tr>
<td>Nelson Rd. (Shafer - Tilton)</td>
<td>na (local)</td>
<td>General</td>
<td>25</td>
<td>35</td>
<td>Both sides</td>
<td>BICYCLE ROUTE</td>
<td>Add 4' paved shoulders both sides</td>
</tr>
<tr>
<td>Oak St. (Stanley - Cedar)</td>
<td>na (local)</td>
<td>General</td>
<td>22'</td>
<td>25</td>
<td>Both sides</td>
<td>FUTURE WIDE CURB LANES</td>
<td>Provide facilities meeting AASHTO guidelines</td>
</tr>
</tbody>
</table>

### Table 3, Urban Travel Corridor Analysis

<table>
<thead>
<tr>
<th>TRAVEL CORRIDOR</th>
<th>AVERAGE DAILY TRAFFIC</th>
<th>TRAFFIC MIX</th>
<th>TOTAL SURFACE WIDTH</th>
<th>SPEED LIMIT</th>
<th>ON-STREET PARKING</th>
<th>RECOMMENDED BICYCLE FACILITIES</th>
<th>RECOMMENDED CORRIDOR IMPROVEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park St. C.T.H 'J' (Main - Chippewa Mall/Chippewa Mall - east city limits)</td>
<td>5600-6260</td>
<td>Truck traffic</td>
<td>Varies widely ave 40'</td>
<td>Both sides</td>
<td>WIDE CURB LANES</td>
<td>Add 5' paved shoulders to rural sections and 15' curb lanes to urban sections</td>
<td></td>
</tr>
<tr>
<td>Palmer St. (1st - Halbleib)</td>
<td>1000 - 1900</td>
<td>General</td>
<td>30'</td>
<td>25</td>
<td>Both sides</td>
<td>FUTURE ROUTE</td>
<td>Remove all parking</td>
</tr>
<tr>
<td>Pumphouse Rd. (RR tracks - Scheidler)</td>
<td>na (local)</td>
<td>General</td>
<td>42'</td>
<td>25</td>
<td>Both sides</td>
<td>WIDE CURB LANES</td>
<td>Remove one side parking and restripe for bicycle lanes</td>
</tr>
<tr>
<td>Rushman Dr. (River - High) Two, lane one-way north</td>
<td>5200-7100</td>
<td>Truck traffic</td>
<td>36'</td>
<td>30</td>
<td>Both sides</td>
<td>BICYCLE LANES</td>
<td>Widen to provide 5' lanes in each direction. Physically separate southbound lane. Sign</td>
</tr>
<tr>
<td>Scheidler Rd. (entire)</td>
<td>na (local)</td>
<td>General</td>
<td>48'</td>
<td>25</td>
<td>Both sides</td>
<td>WIDE CURB LANES</td>
<td>Sign</td>
</tr>
<tr>
<td>Spring St. (Main - Rushman)</td>
<td>2282</td>
<td>General</td>
<td>42'</td>
<td>25</td>
<td>Both sides</td>
<td>SHARED ROADWAY</td>
<td></td>
</tr>
<tr>
<td>State St. (Columbia - 1st)</td>
<td>2500-3000</td>
<td>Some truck traffic</td>
<td>30'-34'</td>
<td>35</td>
<td>Both sides</td>
<td>WIDE CURB LANES</td>
<td>Remove both sides parking or widen to 38' with one side parking</td>
</tr>
<tr>
<td>Superior St. (Coleman - Columbia)</td>
<td>General</td>
<td>Both sides</td>
<td>WIDE CURB LANE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Terrill St. (Bridgewater - Mansfield)</td>
<td>1300</td>
<td>General</td>
<td>38'</td>
<td>25</td>
<td>Both sides</td>
<td>ALTERNATE TO WHEATON</td>
<td>Sign if being designated</td>
</tr>
<tr>
<td>Tropicana St. (entire)</td>
<td>930</td>
<td>General</td>
<td>21'and48'</td>
<td>25</td>
<td>Both sides</td>
<td>FUTURE ROUTE</td>
<td></td>
</tr>
<tr>
<td>Westwood Dr. (entire)</td>
<td>na (local)</td>
<td>General</td>
<td>42'</td>
<td>Both sides</td>
<td>FUTURE ROUTE</td>
<td>Provide facilities meeting AASHTO standards</td>
<td></td>
</tr>
</tbody>
</table>
### Table 3, Urban Travel Corridor Analysis

<table>
<thead>
<tr>
<th>TRAVEL CORRIDOR</th>
<th>AVERAGE DAILY TRAFFIC</th>
<th>TRAFFIC MIX</th>
<th>TOTAL SURFACE WIDTH</th>
<th>SPEED LIMIT</th>
<th>ON-STREET PARKING</th>
<th>RECOMMENDED BICYCLE FACILITIES</th>
<th>RECOMMENDED CORRIDOR IMPROVEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheaton St. (city limits - Governor)</td>
<td>3600-4800</td>
<td>General</td>
<td>38' (24&quot;)</td>
<td>Both sides</td>
<td>WIDE CURB LANES</td>
<td>Remove one side parking, restripe ans sign. Later widen narrow urban section to 38' with parking one side.</td>
<td></td>
</tr>
<tr>
<td>Woodward Ave. (Colome - Greenville St)</td>
<td>4200-5200</td>
<td>General</td>
<td>na</td>
<td>25</td>
<td>Both sides</td>
<td>WIDE CURB LANE</td>
<td></td>
</tr>
</tbody>
</table>

*Prepared by: Schreiber/Anderson Associates, Spring 1995*
<table>
<thead>
<tr>
<th>TRAVEL CORRIDOR</th>
<th>AVERAGE DAILY TRAFFIC</th>
<th>TRAFFIC MIX</th>
<th>TOTAL SURFACE WIDTH</th>
<th>SPEED LIMIT</th>
<th>ON-STREET PARKING</th>
<th>RECOMMENDED BICYCLE FACILITIES</th>
<th>RECOMMENDED CORRIDOR IMPROVEMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MISCELLANEOUS TRAVEL CORRIDORS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chicago and Northwestern Railroad corridor (Town of Hallie to Canal)</td>
<td></td>
<td></td>
<td>100' ROW</td>
<td></td>
<td></td>
<td>BICYCLE PATH</td>
<td>8' wide limestone path</td>
</tr>
<tr>
<td>Chicago and Northwestern Railroad corridor (STH 178 - Chippewa County Farm)</td>
<td></td>
<td></td>
<td>100' ROW</td>
<td></td>
<td></td>
<td>BICYCLE PATH</td>
<td>8' wide asphalt path</td>
</tr>
<tr>
<td>Chippewa River corridor paralleling River St. (Main St. Bridge - Duncan Creek)</td>
<td></td>
<td></td>
<td>none existing</td>
<td></td>
<td></td>
<td>BICYCLE PATH, trailhead and vehicular parking</td>
<td>Aquisition required, possible ground contamination</td>
</tr>
<tr>
<td>Chippewa River Corridor (STH 124 Bridge - Pumphouse road via abandoned railroad corridor)</td>
<td></td>
<td></td>
<td>ROW, 30' - 45' bench</td>
<td></td>
<td></td>
<td>BICYCLE PATH</td>
<td>develop 10' wide asphalt path with several resting area/overlooks</td>
</tr>
<tr>
<td>Chippewa River Corridor (Scheidler Rd - New Near East Bridge)</td>
<td></td>
<td></td>
<td>none existing, steep and narrow</td>
<td></td>
<td></td>
<td>BICYCLE PATH</td>
<td>acquisition required, steep and difficult to develop but very scenic.</td>
</tr>
<tr>
<td>Leinenkuegals Brewery along drainage to the Northeast to intersection of State St. and Water St.</td>
<td></td>
<td></td>
<td>none existing, easement req., steep and narrow</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duncan Creek (end of Grove St - Leinenkuegals Brewery)</td>
<td></td>
<td></td>
<td>single track trail existing</td>
<td></td>
<td></td>
<td>BICYCLE PATH</td>
<td>acquisition required</td>
</tr>
</tbody>
</table>
Facilities to accommodate bicyclists are defined as follows:

Bicycle facilities - A general term denoting improvements and provisions made by public agencies to accommodate bicycling, including parking facilities, mapping all bikeways, and shared roadways not specifically designated for bicycle use (AASHTO definition).

Shared Roadway - Any roadway upon which a bicycle lane is not designated and which may be legally used by bicyclist regardless of whether such facility is specifically designated as a bikeway (AASHTO definition).

Shared roadways (Figure 4) are often effective and efficient facilities that provide common bicycle accommodation within travel lanes shared by motorist. In general, shared roadways are undesignated because the narrow usable width of the road's surface that the bicyclist shares with motor vehicles. Nonetheless, shared roadways are an integral part of the bicycle transportation system. These facilities provide basic accommodation by linking individuals and minor community destinations to the designated bikeway system. Low traffic volumes, in the case of many residential streets, and low speed in some downtown regions can be suitable shared roadways for bicycling.

Figure 4. Typical Section of Shared Roadway

Wide Curb Lanes - A right of way shared by motor vehicles and bicycles; wide enough to allow motor vehicles to overtake the bicyclist without changing lanes (Wisconsin Bicycle Planning Guidance, 1993).
Widened curb lanes (Figure 5) provide a width that will generally allow bicyclist and motor vehicle drivers to share the roadway while minimizing conflicts. Generally, 14 feet of usable width is necessary to allow motorist to overtake bicyclist. On-street and without parking the usable width should be measured from edge of gutter pan to prevent encounters with drainage grates and curbs. Usable width on-street that includes parking should be a minimum of 22 feet from edge of gutter pan to lane stripe.

Figure 5. Typical Section of Wide Curb Lane.

Figure 6. Typical Section of Bicycle Lane.
traffic. An additional 2 foot clear zone, free from obstructions, is maintained on each side of a designated path. A width of ten feet is highly recommended especially in highly used urban corridors where many skaters and walkers can also be expected.

Both the Wisconsin Bicycle Planning Guidance and the AASHTO Guidelines for Developing Bicycle Facilities, 1991 provide discussion on other design criteria relating to bicycle paths.

Figure 7. Bicycle Path, Typical Section

Only suitable designated bikeways should be signed as "bike routes". Segments of the proposed system that require improvements should not be designated with signs or mapping until improvements are complete. Bicycle signing systems need to meet state and federal highway standards as detailed in the Manual of Uniform Traffic Control Devices (MUTCD), 1988.

Signing systems for bicycle transportation include basic "route" signs, and pavement markings. The design, placement, operation and maintenance of these systems should be developed according to the MUTCD. Standard bicycle route markers should be used on all designated bikeway and designated shared facilities. While many cities sign "bicycle routes" the signing often lacks information concerning the direction of key designations. Direction, location and distance information are often useful to bicyclist, particularly on bikeways that serve regional or visiting bicyclists. On the other hand, directional information may not be necessary on locally used travel corridors such as those within residential districts.
Facilities Map

Transportation facilities are recommended in this plan to enhance bicycling and walking as viable modes of transportation. The bicycle facility plan map shown on the following page is the result of analysis and evaluation of both primary and secondary planning considerations and is intended to provide both on-street and off-street facilities for the accommodation of Chippewa Falls bicyclists. Furthermore, recommendations for "Future and Alternate Bikeways" are provided to aid in future planning efforts.

Implementation Plan

A Capital Improvements Program (CIP) to implement this plan is outlined in Table 4, following the bicycle Facilities map. This CIP Table shows recommended design treatments and cost estimates. It is the recommendation of this report that the bicycle transportation Facilities plan be implemented by year 2020 as a component of the Metropolitan Planning Organization's and City of Chippewa Falls' transportation activities. Furthermore, subsequent plan revisions and evaluations should follow every five years according to the criteria set forth in this plan.
### Table 4, Capital Improvements Program Recommendations

<table>
<thead>
<tr>
<th>TRAVEL CORRIDOR</th>
<th>RECOMMENDED BICYCLE FACILITIES</th>
<th>RECOMMENDED CORRIDOR IMPROVEMENTS</th>
<th>LENGTH OF CORRIDOR (miles)</th>
<th>AVERAGE COST PER MILE*</th>
<th>TOTAL ESTIMATED COST*</th>
<th>SUBTOTAL PER CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRIDGES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main St. Bridge</td>
<td>SIDEPATH</td>
<td>Add top railing to the north east side of the bridge railing for a total of 4.5'(1.4m) high railings. Move back the railings on the east bridge approaches to allow 2ft of clear space from edge of path.</td>
<td>0.19</td>
<td>450,000</td>
<td>85,500.00</td>
<td></td>
</tr>
<tr>
<td>S.T.H. 124 Bridge</td>
<td>SIDEPATH</td>
<td>Add warning signs for steep westerly decent</td>
<td>1 LS</td>
<td>1000</td>
<td>1,000.00</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>86,500.00</td>
</tr>
<tr>
<td>HIGHWAYS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Ave. (State - Halbleib)</td>
<td>WIDE CURB LANES</td>
<td>Remove north side parking, restripe and sign.</td>
<td>0.86</td>
<td>7,500</td>
<td>6,450.00</td>
<td></td>
</tr>
<tr>
<td>Bridge St. (Elm - River)</td>
<td>SHARED ROADWAY</td>
<td>Provide bicycle parking in the downtown Ave. 5 stalls per block.</td>
<td>0.55</td>
<td>4,000</td>
<td>2,200.00</td>
<td></td>
</tr>
<tr>
<td>Bridgewater Ave. (Wheaton - Jefferson)</td>
<td>BICYCLE LANES</td>
<td>Remove parking both sides, restripe and sign.</td>
<td>0.56</td>
<td>7,500</td>
<td>4,200.00</td>
<td></td>
</tr>
<tr>
<td>Canal St. (Tilton - Herbert/Herbert- Chippewa Mall Rd.)</td>
<td>WIDE CURB LANES</td>
<td>Sign/ Provide 5’ paved shoulders in rural section.</td>
<td>1.82</td>
<td>20,000</td>
<td>36,400.00</td>
<td></td>
</tr>
</tbody>
</table>

*Prepared by: Schreiber/Anderson Associates, Spring 1995*
### Table 4. Capital Improvements Program Recommendations

<table>
<thead>
<tr>
<th>TRAVEL CORRIDOR</th>
<th>RECOMMENDED BICYCLE FACILITIES</th>
<th>RECOMMENDED CORRIDOR IMPROVEMENTS</th>
<th>LENGTH OF CORRIDOR (miles)</th>
<th>AVERAGE COST PER MILE*</th>
<th>TOTAL ESTIMATED COST*</th>
<th>SUBTOTAL PER CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rushman Dr. (River - High) Two lanes, one-way north</td>
<td>BICYCLE LANES</td>
<td>Widen to provide 5' lanes in each direction. Physically separate southbound lane. Add warning signs to intersecting streets.</td>
<td>.27</td>
<td>107,500</td>
<td>29,025.00</td>
<td></td>
</tr>
<tr>
<td>Scheidler Rd. (entire)</td>
<td>WIDE CURB LANES</td>
<td>Signs.</td>
<td>.60</td>
<td>3,000</td>
<td>1,800.00</td>
<td></td>
</tr>
<tr>
<td>Spring St. (Main - Rushman)</td>
<td>SHARED ROADWAY</td>
<td></td>
<td>.24</td>
<td>0</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>State St. (Columbia - 1st)</td>
<td>WIDE CURB LANES or BIKE LANES</td>
<td>Remove parking, and sign.</td>
<td>.79</td>
<td>7,500</td>
<td>5,925.00</td>
<td></td>
</tr>
<tr>
<td>Superior St. (Coleman - Columbia)</td>
<td>WIDE CURB LANES</td>
<td>Remove parking, sign.</td>
<td>.12</td>
<td>7,500</td>
<td>900.00</td>
<td></td>
</tr>
<tr>
<td>Terrill St. (Bridgewater - Mansfield)</td>
<td>ALTERNATE ROUTE</td>
<td></td>
<td>.55</td>
<td>0</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Tropicana St. (entire)</td>
<td>FUTURE ROUTE</td>
<td>Provide facilities meeting AASHTO standards.</td>
<td>.48</td>
<td>0</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Westwood Dr. (entire)</td>
<td>FUTURE ROUTE</td>
<td>Provide facilities meeting AASHTO standards.</td>
<td>.49</td>
<td>0</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Wheaton St. (city limits - Governor)</td>
<td>WIDE CURB LANES</td>
<td>Remove one side parking, restripe and sign. Later widen narrow urban section to 38'(15/23) with parking one side.</td>
<td>1.17</td>
<td>7,500</td>
<td>8,775.00</td>
<td></td>
</tr>
</tbody>
</table>

*Prepared by: Schreiber/Anderson Associates, Spring 1995*
### Table 4, Capital Improvements Program Recommendations

<table>
<thead>
<tr>
<th>TRAVEL CORRIDOR</th>
<th>RECOMMENDED BICYCLE FACILITIES</th>
<th>RECOMMENDED CORRIDOR IMPROVEMENTS</th>
<th>LENGTH OF CORRIDOR (miles)</th>
<th>AVERAGE COST PER MILE*</th>
<th>TOTAL ESTIMATED COST*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodward Ave. (Colome - Greenville St)</td>
<td>WIDE CURB LANES</td>
<td>Widen to 46' with parking both sides and sign</td>
<td>.75</td>
<td>75,000</td>
<td>56,250.00</td>
</tr>
<tr>
<td><strong>MISCELLANEOUS TRAVEL CORRIDORS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>487,965.00</td>
</tr>
<tr>
<td>Chicago and Northwestern Railroad corridor (Town of Hallie to Canal)</td>
<td>BICYCLE PATH</td>
<td>10' wide limestone path.</td>
<td>1.00</td>
<td>35,000</td>
<td>35,000.00</td>
</tr>
<tr>
<td>Chicago and Northwestern Railroad corridor (STH 178 - Chippewa County Farm)</td>
<td>BICYCLE PATH</td>
<td>10' wide asphalt path.</td>
<td>.25 est</td>
<td>50,000</td>
<td>12,500.00</td>
</tr>
<tr>
<td>Chippewa River corridor paralleling River St. (Main St. Bridge - Duncan Creek)</td>
<td>BICYCLE PATH, trailhead and vehicular parking</td>
<td>10' wide asphalt path with lighting. Acquisition required, possible ground contamination.</td>
<td>.56</td>
<td>250,000</td>
<td>140,000.00</td>
</tr>
<tr>
<td>Chippewa River Corridor (STH 124 Bridge - Pumphouse road via abandoned railroad corridor)</td>
<td>BICYCLE PATH</td>
<td>Develop 10' wide asphalt path with several resting area/overlooks and lighting.</td>
<td>.55</td>
<td>250,000</td>
<td>137,500.00</td>
</tr>
<tr>
<td>Chippewa River Corridor (Scheider Rd - New Near East Bridge)</td>
<td>FUTURE BICYCLE PATH</td>
<td>Acquisition required, steep and difficult to develop but very scenic. 8'wide limestone path.</td>
<td>.67 est</td>
<td>0 (50,000)</td>
<td>0.00</td>
</tr>
</tbody>
</table>

### Table 4, Capital Improvements Program Recommendations

<table>
<thead>
<tr>
<th>TRAVEL CORRIDOR</th>
<th>RECOMMENDED BICYCLE FACILITIES</th>
<th>RECOMMENDED CORRIDOR IMPROVEMENTS</th>
<th>LENGTH OF CORRIDOR (miles)</th>
<th>AVERAGE COST PER MILE*</th>
<th>TOTAL ESTIMATED COST*</th>
<th>SUBTOTAL PER CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leinenkuegal's Brewery northeast along drainageway to intersection of State S. and Water St.</td>
<td>FUTURE BICYCLE PATH</td>
<td>8' wide limestone path. Easement req., steep and narrow greenway but good transportation and recreation connector.</td>
<td>.36</td>
<td>0 (50,000)</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>Duncan Creek (end of Grove St - Leinenkuegals Brewery)</td>
<td>BICYCLE PATH</td>
<td>8' limestone path. Acquisition required, 8' limestone with some lighting, and bicycle signs.</td>
<td>.30</td>
<td>50,000</td>
<td>15,000.00</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>340,000.00</td>
<td>340,000.00</td>
</tr>
</tbody>
</table>

* Estimated cost do not include acquisitions or purchase of easements. The estimated costs per mile reflect average state-wide cost at the time of reconstruction reported to the State Bicycle Coordinator and cross referenced with Kerr's 1994 Cost Estimate Guide. These costs are intended for planning purposes and not specific budgeting activities.
Project Priorities

Priorities for the bicycle plan development focus on the implementation of the following facilities:

- Implementing the city’s segment of the Chippewa Valley Trail.
- Providing support facilities such as bicycle parking.
- Mitigating existing safety concerns (See "Special Safety Concerns").
- Implementing a system of three interconnected bicycle transportation loops.

As shown in the bicycle facilities map several interconnected bicycle loops comprise the foundation of the bicycle transportation system recommendations. The first is a loop system containing segments of Wheaton Street, Coleman Street, Columbia Street, State Street, 1st Street, Jefferson Street, and Bridgewater Street. The second system is located south of the Chippewa River and includes Woodward Avenue and Park Street. Finally, the third component of the system includes the riverfront linkages that connects south and north via bridges and provide opportunities for regional connectors. The riverfront linkages includes Main Street Bridge, STH 124 Bridge, Pumphouse Road and several railroad corridors. These riverfront corridors also form the basis of the Chippewa Valley Trail.

Chippewa Valley Trail

The Chippewa Valley Trail is important to Chippewa Falls as a regional and intercity transportation system as well as an amenity for recreation. It will provide the city with a separate bicycle and pedestrian path from the southwest to the northeast. The city’s segment of trail will connect to the proposed Chippewa County Farm mixed land-use development northeast of the city and to the town of Hallie at the alignment of the existing CN&W railroad line. Several alignment options exist for the city’s segment of this corridor. All of these alignment options are considered good transportation linkages whether or not designated as part of the Chippewa Valley Trail. Table 5 on the following pages lists several observed advantages and disadvantages of designating alternative routes.

Options 1 and 2 offer very distinct economic, recreation and aesthetic benefits and therefore Chippewa Falls should consider designating both alignment options simultaneously. This action would create a loop within the regional trail system and therefore provide many choices for regional riders and distributing the use among several corridors.
### Table 5, Evaluation of Chippewa River Trail Alignment Options

<table>
<thead>
<tr>
<th>Optional alignment</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
</table>
| **Option 1.** C&NW rail line from Hallie to Garden St., Herbert St., then Canal St. to Chippewa Mall Rd., Enter Park Ave. (CTH "J") to newly proposed near east bridge. Across bridge through Chippewa County Farm. | • Scenic corridor  
• Relatively safe corridor and crossing locations for bicyclists and pedestrians.  
• The quality of the corridor is not significantly altered if the SOO rail line is selected as the Chippewa River Trail entrance to Chippewa Falls from the south  
• Relatively easy and cost efficient to implement  
• Compliments other planned highway improvements (CTH "J") | • Does not transport people into the city's central business district.  
• Does not take full advantage of the scenery and natural amenities along the Chippewa River. |
| **Option 2.** Canal St. to Main St. Bridge, across bridge to River St. (option to continue on trail or go downtown via Spring St.). New path paralleling River St., under STH 124 bridge (clover leaf) to new path along C&NW RR spur line. Pumphouse Rd. to County Farm. | • Ties in well to the previous corridor alignment option.  
• Good location for parking and trail head resulting from acquisitions around water treatment plant along River St.  
• Largely follows riverfront alignment, good aesthetics.  
• Provides a good transportation linkage from the "flats" to the central business district.  
• Close to the downtown with good downtown bicycle and pedestrian linkages.  
• Destination point for tourist | • Does not provide direct linkage to Irvine Park, Northern Wisconsin State Fairgrounds, and Leinenkugel's Brewery.  
• Does not take advantage of the scenery and other natural amenities along Duncan Creek Corridor.  
• Requires land acquisition and/or easements adjoining bridge. |

*Prepared by Schreiber/Anderson Associates, Spring 1995*
## Table 5, Evaluation of Chippewa River Trail Alignment Options

<table>
<thead>
<tr>
<th>Option 3. Canal St to STH 124 bridge, across bridge to new bicycle lane along Rushman Dr. to Lienenkugel’s Brewery and then following new path along drainage basin to Water St. and State St. Water St., to 1st Ave. to Palmer, across STH 178 along RR to County Farm.</th>
<th>Links the users to community destinations such as the central business district, Irvine Park, Northern Wisconsin State Fairgrounds, and Lienenkugel’s Brewery.</th>
<th>Relatively steep grades on STH 124 bridge.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Takes advantage of the scenery and other natural amenities along Duncan Creek.</td>
<td>Potentially hazardous intersection crossings along Rushman Drive.</td>
<td>Marginal aesthetic values through industrial park.</td>
</tr>
<tr>
<td>Does not require land acquisition.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Prepared by Schreiber/Anderson Associates, Spring 1995*
A signing system should be implemented as part of the Chippewa Valley Trail. This signing system should create a unique identifying theme. Figure 9 shows one option of how Chippewa Falls could incorporate elements of "identity", and "direction" into its portion of the Chippewa Valley Trail. It is the recommendation of this plan that a signing system for the proposed Chippewa Valley Trail loop through the city should incorporate direction and identity design features.

![Figure 8. Graphic Example of Possible Sign System for Chippewa Falls Portion of the Chippewa Valley Trail.](image)

*Schreiber\Anderson Associates*
Special Safety Concerns

Other implementation priorities for Chippewa Falls include the mitigation of several special safety concerns. After considering the factors that affect bicycling safety, several localized areas of concern were identified. Facilities to mitigate these concerns are proposed as follows:

1. The northeast intersections along Rushman Drive (STH 124) at Duncan Creek.
   Reasons for concern:
   - Bicyclists currently use the riverside path parallel to Rushman Drive. Southbound bicycle riders are unexpected by motorists approaching the one-way Rushman Drive from intersecting streets.
   - Roadway grades are relatively steep approaching Rushman Drive from the northeast.
   - Sightlines are poor because of bridge structures near intersections.
   - The no-stop turn lane at the intersection of Rushman Drive and Columbia Street is hazardous to bicyclists and pedestrians.

Possible plan solution: Provide 5’ wide bicycle lanes on Rushman Drive; physical separate the southbound bicycle lane from northbound motor-vehicle traffic. Provide signs that alert motorists of bicycle traffic and provide a push-button signal at the intersection of Columbia Street.

Off-street facilities should be provided to increase the safety and convenience of pedestrians and child cyclists. Wide sidewalks, improved sightlines, signing and pavement markings are needed to accommodate these users.

2. STH 124 connecting the downtown to the YMCA, the new elementary school, Leinenkugel’s Brewery, the fairgrounds and the swimming pool.
   Reasons for concern:
   - High motor vehicle speed and volumes reduce the safety of anticipated pedestrian and bicycle users.

Possible plan solution: 5’ wide bicycle lanes in both directions and widened sidewalk for child cyclists and pedestrians.

3. Linkage between the downtown and the STH 124 bridge.
   Reason for concern:
   - The motor vehicle turns are unsignalized and "no-stop".

Possible plan solution: A bike and pedestrian safe island in the middle of the intersection of River St. and STH 124 would provide a safe crossing between the bridge and the downtown via Bridge Street (possibly consider a "yield to bicycle and pedestrians sign" with yellow flashing light activated by push button).
Provisions for support facilities such as bicycle parking are the most cost effective means of enhancing bicycling and therefore should be a priority in the implementation of this plan. Bicycle parking is particularly needed in the downtown business district. The implementation of bicycle racks in the downtown will help to control where bicycle are parked, prevent damage resulting from bicycles falling over, and prevent theft of bicycles. **It is the recommendation of this plan that at least 5 parking spaces per block should be provided in Chippewa Falls’ central business district. Furthermore, parking facilities within the downtown should be uniform in design and consistent with other street furnishings. City ordinances should require bicycle parking for the downtown and other area establishments (See Appendix Item C Bicycle Parking Provisions).**

Several possible locations for bicycle parking facilities in the downtown include the Post Office at the intersection of Columbia and Bridge St. and near the intersection of Bridge St. and Central St. It is also recommended that, following the implementation of the Chippewa Valley Trail, bicycle lockers should be located near the downtown to accommodate storage of equipment for regional cyclists.
PRIORiTY PEDESTRIAN TRANSPORTATION RECOMMENDATIONS

Walking is the dominant form of pedestrian transportation, but assisted movement by the physically challenged or elderly is also a means of pedestrian travel; therefore virtually all members of the population can be classified as pedestrians at some time during the course of a day. According to the 1990 census, 130,136 Wisconsinites, or 5.5% of the state’s population over the age of 16, commute to work by walking. Census data for Chippewa Falls shows nearly one in ten walk to work.

As mentioned previously in this report, Chippewa Falls’ existing infrastructure provides good accommodation for pedestrians. Indeed, analysis of the city’s recent accident data shows no fatalities and few pedestrian accidents outside of the central business district. Facilities contributing to the safety of pedestrians in the downtown and throughout Chippewa Falls include:

- Sidewalks: Types of sidewalks, width, surface, location and design.
- Street Crossings: Curb ramps, crosswalks, overpasses and signals.
- Street Furnishings: Lighting, seating and resting areas.

Sidewalks

Pedestrians walking on the side of a street are endangered by motorists, particularly at night. This situation is one of the ten leading causes of fatal pedestrian accidents nationally. Pedestrians are forced into this hazardous situation when sidewalks are unavailable to them. As critical elements of Chippewa Fall’s transportation infrastructure, sidewalks should be developed on all arterial and collector streets, particularly those that serve schools, commercial districts, park and recreation sites, high density residential areas, and bus routes. Chippewa Falls provides sidewalks to most destinations, with only a few exceptions within the newest residential and commercial developments. Sidewalks are needed on several of the outlying minor arterial and collector streets:

- Tropicana St.
- South Woodward St.
- Colomb St.
- Joseph St.
- Chippewa Mall Rd.
- South Ave.
- Sections of Park St.

Retrofitting sidewalks on at least one side of these streets is recommended and should be scheduled into the local public works projects. Typically, six foot wide sidewalks are sufficient, but consider additional widths near school zones, retail centers and recreational destinations.
Consistent city and subdivision ordinances are needed to ensure pedestrian facilities are planned into the initial infrastructure of large developments. Appendix D. Guidelines for Installing Sidewalks, was taken from Walk Alert: The National Pedestrian Safety Program Guide and provides an example of guidelines for sidewalk provisions that could be used for Chippewa Falls.

A "bump-out" is variation of the sidewalk design. Bump-out sidewalks are often developed at intersections and mid block pedestrian crossing locations within downtowns and areas of high pedestrian and motor vehicle traffic. These sidewalks often cover the width from the building face to the edge of curb lane (as seen in figure 10) and therefore, improve driver visibility of pedestrians. These pedestrian facilities have other recognized safety benefits. Bump-outs have been shown to:

- Calm traffic by reducing curve radii and curb lane width.
- Effectively shorten the length of the crossing and therefore aid children and elderly walkers.
- Control the location of parallel vehicular parking that often impedes sight-lines at intersection corners.

![Figure 9. Plan view of typical bump-out sidewalk.](image-url)
Street Crossings

Crosswalks, ramps and signals are important safety facilities at intersections and mid-block street crossing locations that have a potential for pedestrian/vehicular conflicts. These features should be used discriminately to maintain their effectiveness. In general, crosswalks should be located where pedestrians are highly visible and provide adequate stopping distances for motor vehicles. Traffic crosswalks and signals should conform to the Manual of Uniform Traffic Control Devices and WisDOT Facility Development Manual. In cases where pedestrian crossings are viewed as highly unsafe (such as crossing some principal arterials streets) overpasses may be needed to accommodate pedestrians.

The following are recommended crossing and signal considerations for Chippewa Falls:

• Install high visibility crosswalk markings and signals in the downtown and at established school crossings. Crossings should provide visual and textural cues to denote crossing locations. Install parallel or diagonal striped crossings to enhance color contrast; possibly consider changing surface color and texture.

• Eventual implementation of an overpass near the intersection of Woodward Ave. and STH 124.

• Provide additional pedestrian signals and crossing markers at the intersections:
  ▶ STH 124, River Street and Bridge Street.
  ▶ Rushman Drive and Columbia Street.

• Limit development of free-flow (no-stop) right turns.

Street Furnishings

Lighting, benches, trash receptacles, trees and other street furnishings can improve the security and convenience of pedestrians. Creating resting locations and places to enjoy aesthetic features of the community will help to create a pleasant pedestrian environment. These elements should have a complimentary design and be located away from intersections and other important sight lines. Avoid random placement of these features. Site furnishings should provide a sense of order and continuity to the travel corridor.

Priority Pedestrian Recommendations

Priority recommendations for pedestrian transportation in Chippewa Falls are focused on the central business district because of the level of pedestrian activity and because of the increasing number of pedestrian accidents in the downtown region.
Pedestrian activity and circulation is important to the retail and commercial trade of Chippewa Falls' central business district. This downtown environment should be safe, convenient and comfortable to pedestrians. Adequate motor-vehicle and bicycle parking, benches, pedestrian scale lighting and active storefronts will facilitate downtown pedestrian activity. Furthermore, these pedestrian features should provide a consistent theme that relates to the unique context of the community. Therefore it is the recommendation of this plan that the city of Chippewa Falls promote a plan to provide a unified, contextual pedestrian environment within the central business district. The goal of such a plan should be to provide features that enhance pedestrian comfort and safety.

- Mitigate the pedestrian safety problems caused by no-stop turn lanes. The intersection of Bridge Street and River Street and the intersection of Columbia Street and High Street are hazardous to crossing pedestrians. Yield signs, highly visible crosswalks and safety islands should be evaluated for effectiveness in these locations.

- Pedestrian safety in the Chippewa Falls' downtown region would be improved by developing bump-outs. These pedestrian features are recommended because they effectively calm traffic, improve pedestrian/motor vehicle sightlines and shorten the crossing length. Bump-out sidewalks should be considered along Bridge Street within the central business district.

Relevant to this study is the mobility and accessibility of pedestrians with disabilities. As required by the Americans with Disabilities Act, 1990 it is crucial that the City of Chippewa Falls remove all "architectural and communications barriers" affecting people with disabilities. Curb cuts, walkways, signage, stairs and parking are examples of facilities that are subject to minimum standards for accessibility. Minimum requirements are described in detail in The Americans with Disabilities Act, Title II Technical Assistance Manual and in Americans with Disabilities Act Accessibility Guidelines. Chippewa Falls should strive to exceed these standards by providing facilities that enhance the mobility of this group of people. One effective method of enhancing the mobility of pedestrians with disabilities is to establish a "citizens advisory council on accessibility" that will represent a wide range of ability levels, review city policies and help set guidelines for the community. Chippewa Falls should consider establishing an advisory group of this kind.

For more information contact:

Kristin R. Phillip, ADA Technical Assistant Governor's Commitee for People with Disabilities. Department of Health and Social Services Madison, WI (608) 267-1520 or (608) 267-2082.
References

1. Wisconsin Division of Tourism and Wisconsin Department of Transportation (1980). Wisconsin Bicycle Map


3. The Madison, WI consulting firm, Vierbicker Associates, is preparing concept plans for a multi-use development for the Chippewa County Farm site. This plan will include an off-street bicycle and pedestrian transportation system that will connect the city to the Old Abe, Norma/Cornell Trail.

4. The National Bicycling and Walking Study: Transportation Choices for a Changing America indicates that 21.6% of all daily trips are for the purpose of "earning a living".

5. WisDOT and the City of Chippewa Falls are facilitating a public process that is currently underway to evaluate and select between the two proposed STH 29 bypass alignments.


11. Alignment as proposed in the SuperTrail Plan (1994). Letter to Thomas McCarthy, Director WisDOT District #6, RE Northwest Comprehensive Transportation and Recreation Plan "SuperTrail Plan", From Glenn J Kerbs, Vice President of Engineering Wisconsin Central Ltd. October 21, 1994


13. Standards for uniform access standards can be found within these publications. Also see P.L. 101-336, Americans with Disabilities Act of 1990.
OPERATIONAL RECOMMENDATIONS

The development of facilities as outlined above is only one component of enhancing bicycling and walking. Operational procedures such as education, maintenance of facilities, enforcement of vehicle codes and land use planning are critical for elevating the level of safety and convenience of the bicyclist and pedestrians.

EDUCATION AND ENFORCEMENT

Bicycle and pedestrian safety needs to be the highest multimodal transportation priority for the city of Chippewa Falls. Although the improvement and maintenance of facilities is one means toward this end, education and enforcement are perhaps the most effective means. The following recommendations outlines bicycle and pedestrian educational and procedures.

Bicycling Education and Enforcement of Vehicle Codes

Bicycles are unique and efficient vehicles that can be operated safely in a variety of conditions. An experienced bicyclist is capable of interacting effectively with pedestrians, other bicycles and motor vehicles; on arterial highways and over rough terrain. In fact, the bicyclist must learn to ride in these varied conditions because transportation systems are seldom designed for their exclusive use.

How are the skills that are needed to operate a bicycle in varied conditions learned? The rules of the road that apply to bicyclist, the same as motorists, can be learned through basic drivers education courses. However, these courses are not prerequisites for bicycling nor do these courses typically teach skills that are unique to operating a bicycle. Aptitude for interacting with other vehicles and pedestrians is assumed to be learned through experiences derived from operating other vehicles or from experiences gained on the bicycle. However, experience is not the best teacher for bicycling because the safety of the operator is in jeopardy. Furthermore, simply knowing how to operate a motor vehicle neglects the unique characteristics of effective bicycling. Indeed, the lack of uniform, mandatory education procedures compromises bicycling safety as well as opportunities to promote bicycle transportation.

It is the recommendation of this plan that safety programs for Chippewa Falls should focus on the following groups:

- Child bicyclist
- Average adult bicyclist
- Motor vehicle operator
Educating Child Bicyclists

Bicycling and walking are the primary means of getting around for children. The child cyclist is most responsive to learning, but also has several unique characteristics that complicate education initiatives. For example, child cyclists do not typically know the rules of the road under which they need to operate. Furthermore, children under the age of ten have limited peripheral vision and ability to judge speeds and distances. Educational programs need to recognize these characteristics of child bicyclist.

School based educational programs are perhaps the most effective means of positively increasing a child’s cycling abilities. Hands-on training curriculums designed for elementary school students such as *The Basics of Bicycling* developed by Bicycle Federation of America are typically aimed at fourth and fifth grade students and are designed to teach basic bicycling skills.

In Chippewa Falls a program has been established through the Chippewa Falls Police Department, and instruction of Officer Mel Ott, that teaches bicycling techniques to kindergarten and first grade aged students. This program has also been periodically available to both fourth and fifth grade aged students at local public and paroecual schools. The city should seek private support to sponsor a fourth and/or fifth grade bicycle and pedestrian safety program that stresses street wise bicycling abilities.

Community safety events such as safety fairs and bike rodeos are another means of educating young cyclist. The involvement of sponsoring community organizations reinforces the development of community bicycling activities. Furthermore, promotional activities such as "Bike-to-Work Days" can compliment these educational activities as well as other community bicycling events.

The Chippewa Falls Optimists Club and McDonalds Restaurant have sponsored annual bike rodeos. It is recommended that the City of Chippewa Falls help promote bicycling and bicycle safety events such as "Bike Rodeos" by establishing summer Bike-to-Work-Days.

Child educational curriculums and events are most effective when supplemented with enforcement and parental support and therefore adult bicycling education has increased importance. Adult audiences that should be targeted are:

- High School aged group
- Other adult bicyclists and motorists
Teen aged youth are often caught up in driving, or learning to drive, motor vehicles and are typically less interested in how to effective bicycle. Several programs may be utilized to capture the attention of this audience:

1. **Include a bicycle safety component into existing drivers education program.** Available videos and instruction materials on bicycling should compliment motor vehicle driving instruction.

2. **Create an Effective Bicycling type program that includes techniques of off-road bicycling.** Mountain biking is popular activity among young adults and therefore a short course including mountain biking techniques may be more attractive to this audience while teaching skills of street riding.

3. **Enforce vehicle codes.** Enforcement programs are often effective means to educate adult vehicle operators. Bicyclist and pedestrians share rights and responsibilities with other transportation users. As vehicular operators, the bicyclist must also be held accountable for their actions. Cops-on-Bikes is an effective and efficient method of community policing that reinforces the notion of "bicycling as a viable transportation alternative". Chippewa Falls should consider this type of enforcement.

Enforcement of traffic laws, promotional information, and public relations campaigns are methods of educating adult bicyclist and motorist. In Wisconsin, a number of publications are available by WisDOT that are designed to assist in the education of these adults. The distribution of educational materials to parents and other adults may be made a part of existing school bicycling curriculums. Brochures and videos should also be made available through the local public libraries, the motor vehicle registration office, bike shops, the chamber of commerce office and recreation centers. "Community events announcements" in local newspapers and radio broadcasts may also help to promote safe bicycling and bicycle related events.

The Wisconsin Bicycle/Pedestrian Safety Program Manager (currently, Joann Pruitt Thunder) is a good source for information regarding education and enforcement activities. Contact the WisDOT Office of Transportation Safety, Department of Bicycle and Pedestrian Safety in Madison for more information.

A variety of bicycling safety information is available to individuals and communities. Sources for brochure, videos and programs can be obtained from:

Wisconsin Department of Transportation, Maps and Publications Sales
3617 Pierstoff Street, P.O. Box 7713, Madison, WI 53707-7713
(608) 246-3265
Pedestrian Safety and Education

Effective pedestrian safety programs begin by making the public aware of the significance of pedestrian safety. On a national level nearly one in every five traffic fatalities involves a pedestrian, and over half of these fatalities involved elderly and young people. In Chippewa Falls, 17 pedestrian accidents occurred between 1990 and 1993 and nearly 9 of 10 were in the downtown region. Several recommended goals for enhancing Chippewa Falls’ pedestrian education are:

• Make pedestrian safety brochures and videos available at local schools, library, sports shops, and recreation centers such as the YMCA.

• Teach pedestrian safety along side bicycle safety in the existing school curriculum (this is one of the most effective means of increasing child pedestrian safety).

• Institute and evaluate pedestrian education programs such as “Safe Route Home” and “Walk Alert” programs outlined by the National Pedestrian Safety Guide.

• Evaluate pedestrian crash/accident data to determine accident locations and design countermeasures to prevent future occurrences.

• Promote active enforcement of state vehicle codes, citing not only motorists in violation, but also pedestrians endangering themselves and others.

• Promote better awareness of pedestrians within the curriculum of driver education courses.

For comprehensive pedestrian safety information reference:

Maintenance

Maintenance procedures are important for all forms of transportation. Indeed, poorly maintained facilities can be unsafe or unsuitable for use and therefore increasing the city’s liability. Periodic and consistent removal of debris, resurfacing, patching deteriorated pavements and removing snow and ice are important procedures for insuring that users are provided with safe and reliable transportation facilities. Signs and pavements markings should be regularly inspected and maintained and trees and other vegetation should be kept clear of travel spaces. **An annual capital improvements program budget should be established to ensure proper maintenance of facilities.**

As mentioned previously in the report, the cost of maintenance procedures can be offset through cooperative agreements with private agencies. Consistent and reliable maintenance procedures, however, should not be compromised because of volunteer help.

Policy Issues

The facilities that have been proposed in this plan will accommodate many of the community's bicycling and walking needs. However, these planned travel corridors are only a part of the system that will ultimately be used. In fact, most of the city’s streets and sidewalks will be used on occasion for various kinds of human transportation. Designated facilities cannot be planned for all city streets, but undesignated streets and corridors can help to connect individuals to the designated transportation system. Therefore, city policies need to regulate the use and development of all infrastructure improvements that affect bicycling and walking. Existing city ordinances provide for the development of 5 foot to 6 foot sidewalks in urban and suburban locations. Operation of bicycles and others vehicles is prohibited on these sidewalks. The city should consider a policy that allows the operation of bicycles on sidewalks near school zones in the absence of approximate bicycle facilities.

The following policy approaches are recommended for all city streets and travel corridors in Chippewa Falls:

- Planning documents such as the "land use plan" and "park and open space plan" make recommendations for enhancing bicycling and walking.
- All pedestrian facilities must be barrier free and in compliance with the Americans with Disabilities Act.
- Require, by ordinance, adequate bicycle parking in the downtown and at destinations such as schools, recreation sites, employment centers and government facilities. (See Appendix item "Bicycle Parking Provisions")
- Establish a schedule and capitol improvements program to maintain paths and streets.
- Replace parallel drainage grates with bicycle safe models.
- Incorporate some level of bicycle and pedestrian accommodations on all new transportation infrastructure projects.
- Continually enforce vehicle operating rules and regulations for bicyclists and motorists.
- Require, by ordinance, all new collector and arterial street widths to meet AASHTO guidelines.
Land-use and Site Planning

Chippewa Falls currently enjoys a relatively compact urban structure. However the continued success of enhancing multi-modal transportation activities will be drastically affected by the land-use developments within and outside of the city. The transportation infrastructure planned into new subdivisions, commercial developments, industrial parks and planned unit developments must address the circulation of pedestrians and cyclists and provide viable transportation choices that supplement motor-vehicle travel. **This report recommends that plans for new developments over 5 housing units should be reviewed by the city planner to ensure proper connections to planned bicycle and pedestrian circulation systems. Furthermore, all arterial streets and collector streets should have sidewalks on at least one side.**

Review of large land developments should consider these factors affective bicycle and pedestrian circulation:

- If the development includes culdesacs, does the sidewalk and street pattern prevent direct bicycle and pedestrian connections to local and regional destinations? Although culdesacs are often relatively safe for children's play they can also create awkward pedestrian circulation patterns. **Recommend connecting culdesacs with narrow walking and bicycling corridors.**

- Do residential landuse types and densities prevent realistic walking and bicycling opportunities? **Provide a balance of higher densities and mixed-use developments to allow greater transportation opportunities.**

- Are planned commercial developments accommodating to pedestrians and bicyclists? **Recommend commercial locations, circulation patterns and facilities that accommodate human-powered transportation in conjunction with accommodations for motorists.**

A component of the city's land-use plan should include the evaluation and eventual acquisition of additional public open space along Duncan Creek and the Chippewa River. As public open spaces these riverfronts can effectively benefit many aspect of the community. **These environmental corridors can be developed to:**

- Provide transportation and recreation related activities.
- Protect and enhance water quality.
- Provide wildlife corridors in and around the community.
- Enhance the aesthetics of the community.
- Enhance property values and tax revenue.

It is apparent that these benefits have been recognized in Chippewa Falls because of the existing public spaces along the Duncan Creek and the Chippewa River. The city, however, should continue to assess additional riverfront locations to seize future opportunities. From the standpoint of
bicycle and pedestrian transportation it is important to provide contiguous linear public spaces to allow for the development of off-street paths. In this regard the linkage of public spaces along the city’s riverfronts and drainage ways should be evaluated within overall comprehensive planning efforts.

SUMMARY

Until recently in the United States bicycling and walking have been neglected from serious consideration as viable transportation modes. This neglect has evolved with the development of sprawling land use patterns and transportation facilities that are predominately designed for motor vehicles. Increasingly the benefits of developing multi-modal systems that afford greater transportation choices are being appraised and the advantages of bicycling and walking are being recognized beyond their recreational values, as viable, healthy, cost efficient and environmentally benign means of travel. This plan has seized many of the city’s greatest opportunities to enhance bicycling and walking including:

• Proposing linkages to the Chippewa Valley Trail which will provide regional transportation and recreation travel opportunities within the scenic Chippewa River corridor.
• Proposing safe bicycle and pedestrian facilities within 1/4 mile of all urban homes.
• Recommending bicycle and pedestrian facilities for several local state trunk highways currently being designed for reconstruction.
• Recommending off-street bicycle and pedestrian ways that are eligible for current funding sources administered by the WisDNR and WisDOT.
• Proposing connections to the regional network of bikeways developed by the MPO.
• Recommending bicycle and pedestrian linkages to the mixed-use development being proposed for the Chippewa County Farm site which also incorporates bicycle and pedestrian transportation facilities.
• Recommending procedures to strengthen existing education and enforcement activities.
• Involving leaders of the city and the Main Street program who have helped direct this plan.

By capturing these and other opportunities Chippewa Falls is in a position to develop the bicycle and pedestrian transportation system recommended in this plan as a means toward enhancing the quality of living in the community and providing better mobility.
References


2. Effective Cycling is a program of the League of American Wheelman, a bicycling advocacy group.

3. From Walk Alert, 1993

4. A complete discussion of the benefits of greenway corridors can be found in the Economic Impacts of Protecting Rivers, Trails and Greenway Corridors, A Resource Book, 1992
APPENDIX ITEMS:

A. Bicycle and Pedestrian Funding Sources

B. Urban Corridor Facility Development Guidelines

C. Bicycle Parking Provisions

D. Guidelines for Installing Sidewalks

E. WisDOT Cost Sharing Policy

F. Characteristics of Different Types of Bicyclists
APPENDIX A. BICYCLE AND PEDESTRIAN FUNDING SOURCES

WISCONSIN DEPARTMENT OF TRANSPORTATION ADMINISTERED PROGRAMS

Congestion Mitigation and Air Quality Improvement (CMAQ) Program Funds
A broad program intended to improve air quality by reducing single occupant motor vehicle trips through activities like developing bicycle and pedestrian facilities or improving combined bus/bike/pedestrian transportation choices. These 80 percent matching grants may also fund programs ranging from construction and development projects to education and enforcement.

Federal Lands Highway Funds (Section 1032)
This program matches 80 percent of the costs to construct bicycle and pedestrian transportation facilities on roads, highways and parkways through public lands and Indian reservations. The program is administer by WisDOT and each MPO. Wisconsin will distribute funds in the Forest Highways portion of this program.

National Highways System (NHS) Fund (Section 1006)
This Federal/State program is administered by the DOT and MPO. It provides 80 percent grant assistance to local governments for the construction of bicycle and pedestrian transportation related facilities adjacent to any highway on the National Highway System (Other than the Interstate System). Facilities must be pursuant of an overall plan approved by each MPO and State.

Scenic Byways Program Funds (section 1047)
The program assists construction of bicycle and pedestrian related facilities along scenic highways.

Surface Transportation Program (STP) (section 1007)
Ten percent of the State’s annual STP funds are available for Transportation Enhancement Activities (TEAs). In Wisconsin these enhancements are grouped under the Statewide Multimodal Improvements Program (SMIP). Two of the ten different activities eligible for funding under SMIP are specifically for the enhancement of bicycle and pedestrian facilities: one for the conversion and use of railway corridors and the other specifically for improved bicycle and pedestrian facilities. Bicycle and pedestrian projects must have a utilitarian transportation emphasis. SMIP funds will match 80% of the cost of projects.

WISCONSIN DEPARTMENT OF NATURAL RESOURCES ADMINISTERED PROGRAMS

Schreiber\Anderson Associates
Aids for the Acquisition and Development of Local Parks (Section 23.09(20))
As the name implies this WDNR administered program provides 50 percent matching funds for acquisition and development of public outdoor recreation areas. Local governments must have an approved Comprehensive Outdoor Recreation Plan.

LAWCON (Public Law 88-578 (1964))
A State/Federal program administered by the WDNR provides 50 percent matching grant assistance to local governments for the acquisition of land for public outdoor recreation. Projects must be consistent with the state outdoor recreation plan.

Urban Rivers Grant Program ( )
A State program that provides local government units 50 percent grant assistance for improving access and public recreation opportunities along urban riverfront.

Urban Greenspace (Section 23.09(19))
Objectives of the Urban Greenspace Program are to provide natural or noncommercial gardening space in urban areas and to protect scenic ecological or natural values from urban development. As part of the State’s Stewardship initiative 50% funding is contingent on having and approved Comprehensive Outdoor Recreation Plan.

National Recreation Trails Fund (Section 1302)
The intent of this program is to assist in the development of various recreational trail facilities. The WDNR administers this program that provides 50 percent grant assistance to local governments for non-motorized and motorized trail use projects that are consistent with the Statewide Comprehensive Outdoor Recreation Plan.

OTHER RELATED GRANTS AND PROVISIONS
Wisconsin Department of Transportation provisions for bicycle and pedestrian accommodation
The policy of the Wisconsin DOT is to accommodate bicycle uses on any state trunk highways that carry an average of more than 1000 motor vehicle trips per day and carrying two-way bicycle traffic of more than 25 bicycles per day during normal bicycling season.

Bicycle and pedestrian accommodation on bridges (Section 1033)
When a highway bridge deck is built or replaced using Federal funds and where bicycles are not restricted from that highway the bridge must provide accommodations if the Secretary of Transportation determines that bicycles can be safely accommodated at a reasonable cost.

Section 402 Funding
Under Title II, Section 2002 of ISTEA, pedestrian and bicycle safety
are priorities for highway safety program funding. This safety grant program sets priority status for bicycle and pedestrian safety.

Federal Transit Funding
Title III section 25 of ISTEA provides funding for improving bicycle and pedestrian access to transit.

MISC.
Heritage Tourism Projects
Local Roads Improvement Program
Joint-Use Corridor Developments (ie Sharing costs of acquisition and development with utility companies)
Board of Commissioners of Public Lands
Business Improvement Districts (BIDs)
Rails-to-Trails Conservancy
### Group B Bicyclists • Urban Section

<table>
<thead>
<tr>
<th>Average Motor Vehicle Operating Speed</th>
<th>Annual Average Daily Traffic Volume (AADT)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 2,000</td>
</tr>
<tr>
<td></td>
<td>Adequate Sight Distance</td>
</tr>
<tr>
<td>20–30 mi/h</td>
<td>wc 14</td>
</tr>
<tr>
<td>30–40 mi/h</td>
<td>bl 5</td>
</tr>
<tr>
<td>40–50 mi/h</td>
<td>bl 6</td>
</tr>
<tr>
<td>Over 50 mi/h</td>
<td>bl 6</td>
</tr>
</tbody>
</table>

**Key:**
- **wc** = wide curb lane
- **bl** = bike lane

From: WisDOT, Wisconsin Bicycle Planning Guidance, 1993
### Appendix C

**Bicycle Parking Facility Recommendations**

<table>
<thead>
<tr>
<th>Land-use of Development Type</th>
<th>Number of Bicycle Parking Spaces Recommended</th>
<th>Type of Bicycle Parking Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary or Secondary School</td>
<td>10% of the number of students</td>
<td>Rack to lock bike frame and one wheel, should secure bike position.</td>
</tr>
<tr>
<td>College or University</td>
<td>8% of the number of students</td>
<td>Rack to secure whole bike, lighting essential.</td>
</tr>
<tr>
<td>Shopping Mall/Retail Stores</td>
<td>1 space for every 20 motor vehicle spaces</td>
<td>Rack to lock bike frame and one wheel.</td>
</tr>
<tr>
<td>Commercial Street/Downtown</td>
<td>5 spaces per block of storefront</td>
<td>Rack to lock bike frame and wheel. In downtown areas with more than 1000 employees provide bike lockers or enclosures.</td>
</tr>
<tr>
<td>Recreation Center/Parks</td>
<td>1 spaces per 10 motor vehicle spaces, 5 spaces minimum</td>
<td>Rack to lock bike frame and wheel. Lighting essential.</td>
</tr>
<tr>
<td>Office Work Place</td>
<td>1 space per 20 motor vehicle spaces</td>
<td>Racks to secure whole bike. Offices with more than 200 people should provide indoor or enclosed spaces.</td>
</tr>
<tr>
<td>Industrial Work Place</td>
<td>1 space per 30 motor vehicle spaces</td>
<td>Racks to lock bike frame and one wheel.</td>
</tr>
<tr>
<td>Library/Gallery/Zoo</td>
<td>1 space per 15 motor vehicle spaces, 5 spaces minimum</td>
<td></td>
</tr>
</tbody>
</table>

*Prepared by: Schreiber/Anderson Associates, 1994*
### Appendix D
Guidelines for Installing Sidewalks


<table>
<thead>
<tr>
<th>Types of areas (land-use, roadway functional classification, or dwelling units)</th>
<th>Where do you need sidewalks...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial and industrial — all streets.</td>
<td>... with new urban and suburban streets?</td>
</tr>
<tr>
<td>Residential — major arterials.</td>
<td>On both sides of these streets.</td>
</tr>
<tr>
<td>Residential — collectors.</td>
<td>On both sides of these streets.</td>
</tr>
<tr>
<td>Residential — local streets with more than 4 units per acre.</td>
<td>On both sides of these streets.</td>
</tr>
<tr>
<td>Residential — local streets with 1-4 units per acre.</td>
<td>Required on one side, but preferred on both sides.</td>
</tr>
<tr>
<td>Residential — local streets with less than 1 unit per acre.</td>
<td>On one side of these streets preferred, but shoulder on both sides required.</td>
</tr>
</tbody>
</table>

**Notes:**

1. You must have a sidewalk on at least one side of any local street that is within two blocks of a school and that is a walking route to that school.

2. You may omit a sidewalk on one side of any new street when that side of the street clearly cannot be developed and when there are no uses or planned uses for that side of the street that would encourage people to walk there.

3. When a main road has a service road, you may eliminate the sidewalk next to a main road if you replace it with a sidewalk on the far side of the service road.

4. When you have a rural road that is not likely to serve development, you must provide a shoulder at least 4 feet in width. If the road serves as a primary highway, the shoulder should be 8 feet wide. The shoulder should be made of a material that provides a stable, mud-free walking surface.
Appendix E.
WisDOT's Cost Sharing Policy

PROGRAM MANAGEMENT MANUAL

6.2.3 Cost of Conditioning and Maintenance -
The cost for conditioning and maintenance of a designated detour route(s) (Wis. Stats., 84.02(10)) is not eligible.

6.2.4 Payment For/Or Repair of Damages -
Payment for/or repair of damages to roads or streets caused because of their use in hauling materials incident to the improvement (Wis. Stats., 84.20) are not eligible.

6.2.5 Resurfacing -
Resurfacing is considered an improvement and therefore WisDOT's responsibility if the mat is continuous and more than 2 inches deep. Intermittent mats and mats of 2 inches or less are considered maintenance and the responsibility of the local jurisdiction.

6.2.6 Project Costs -
Other project costs not specifically listed above are eligible at the same rate as if the items were on a State Trunk Highway project.

6.3.0 PROJECT COSTS ELIGIBLE FOR STATE FUNDING

Some project costs are eligible for state or federal funding on urban non-freeway projects for a State Trunk Highway. Eligible for funding means that only certain costs qualify for state or federal monies. Urban means the project has an urban cross section where urban type development exists or a section where urban type development is planned, or may reasonably be expected. Local agreements are required for all projects that involve participation.

6.3.1 Street Construction -
All usual items of street construction (grading, paving, etc.) which are an integral part of a construction project are eligible.

6.3.2 Preconstruction Engineering -
All preconstruction engineering costs which are necessary for the construction project are eligible except as noted in 6.2.1.

6.3.3 Right-of-Way -
The acquisition of the necessary right-of-way in order to construct the project is eligible.

6.3.4 Sidewalks -
Replacement sidewalks necessitated by street/road construction are eligible if the local jurisdiction agrees to accept responsibility for sidewalk repair, maintenance, and replacement (other than that caused by future highway projects).

Where sidewalks do not already exist, provision will be made for sidewalks as part of the project design for all reconstruction and recondition type projects at state expense. Provision for new sidewalk consists of purchasing the right-of-way and grading a berm so that a sidewalk may be installed.

6.3.5. Driveways -
When replacement driveways are necessitated by street or road construction and there is a sidewalk, concrete from curb to sidewalk and replacement in kind beyond the sidewalk is eligible. When there is no sidewalk, replacement in kind beyond the curb is eligible. New driveways are not eligible.
6.3.6 Storm Sewer-
Latterals are eligible. Trunk line sewers needed to accommodate surface water naturally flowing to the street are fully eligible in the ratio that the estimated cost of the sewer needed to accommodate the water naturally flowing from the street bears to the total estimated cost of the sewer to be constructed.

6.3.7 Street Lighting-
Replacement street lighting necessitated by the street or road construction is eligible if the affected jurisdiction(s) agree to accept responsibility for energy, operation, maintenance, and replacement of the lighting system (including associated costs). In urban areas, provided the affected jurisdiction(s) accept responsibility for the energy, operation, maintenance and replacement of the lighting system (including associated costs), new continuous street lighting designed to national standards adopted by WisDOT is 50 percent eligible.

WisDOT will participate in the cost of new continuous street lighting only if they are installed at the time of project construction, except as it may qualify under special funding programs specifically for lighting. Where an alternate design acceptable to WisDOT is installed, 50 percent of the cost equivalent to lighting meeting WisDOT standards is eligible, not to exceed 50 percent of actual cost.

6.3.8 Landscaping -
Landscaping is 75 percent eligible when placement is in the right-of-way or when local jurisdiction arranges for placement on private property in cases where there is insufficient space in the right-of-way.

Landscaping will be consistent with the adopted WisDOT standards (limited to trees and shrubs as appropriate). It shall be designed as part of all urban projects provided the local jurisdiction or property owner accepts responsibility for the maintenance of the landscaping items.

Where possible, landscaping design should be consistent with the community's landscaping practices.

6.3.9 Traffic Signals -
Traffic signals necessary and warranted for the safety and efficient flow of traffic within the construction project limits are eligible.

6.3.10 Street Signs, Parking Meters and other Items Not Essential for Service to Moving Traffic -
Any item not necessary for the safe and efficient movement of traffic are not eligible for state or federal funding.

6.3.11 Installations -
New installations of or alteration of sanitary sewers and connections, water, gas, electric, telephone, telegraph, fire or police alarm facilities, parking meters, and similar utilities are not eligible.
GENERAL REFERENCES


Bicycle Federation of America, Pro Bike News


Chippewa Falls Plan Commission (1982). City of Chippewa Falls Land Use Plan

City of Chippewa Falls Transportation Study Committee (1989). Chippewa Falls Comprehensive Traffic Study, Chippewa Falls, WI

City of Chippewa Falls Planning Commission (1992). East Bridge Connecting Arterial Street System: Chippewa Falls, WI


National Parks Service, Summer 1992. Trails for all Americas, Summary on the Report of the National Trails Agenda Project


Short/Eliott/Henderson (1988). Chippewa Falls Corridor Study:

Schreiber\Anderson Associates
Comprehensive Landuse Planning: Chippewa Falls, WI


Smith, Jayson C. (July 1991). Chippewa Valley Recreation Trail Concept

Traffic Institute (1994) Instruction and Technical Book: Northwestern University, IL.

U.S. Department of Transportation, Office of the Secretary, (1980). Bicycle Transportation for Energy Conservation

Wisconsin Department of Transportation, Bicycle and Pedestrian Planning, Wisconsin TransLinks 21 Newsletter, Vol. 1. No. 7, October 1993


Yan Xu, Spring 1994. City of Chippewa Falls Riverfront Bicycle Corridor Project, Senior Thesis
Proposed bike trail plan
wins approval from public

By ROBERT JOHNSON
Of the Herald Staff

Close to 25 people attended a presentation of the bike trail plan to the public, and the general mood was upbeat.

Members of the public who attended the meeting Tuesday night remained generally silent as city officials commented on the plan.

"This is going to be an asset to the city," said Alderman Arlan Bergquist, who attended the meeting. "But I would like to see public support before any funds are put aside."

Mayor Virginia Smith said the plan could promote bicycling in Chippewa Falls.

"It's a good plan," she said. "I think when we get a few paths, more people will use their bicycles."

The mayor also said this is a good time to implement trails with the road work projects on Hwy. 124 and County J soon to start.

Alderman Howard Schroeder said the plan's implementation depends on the availability from grants.

Shon Parks, of Schreiber/Anderson Consultants, which was hired by the city to devise the bike plan, said the plan, if implemented, would cost an estimated $1 million in 1995 dollars.

"If we implement it as we improve the roads through general construction, it will be less," Parks said.

Parks described the plan as a long-range plan, one that would be completed within 25 years.

Few members of the public spoke during the meeting. One, Mike Dineen of Chippewa Falls, asked if the proposed trails would exclude four-wheelers and snowmobiles.

"Four-wheelers and snowmobilers use railroad rights of way when they are abandoned," Dineen said. "Then the state acquires them and closes them off."

Parks said the trail could have many uses.

"Many vehicles can be applied to the trails," Parks said. "It depends on the community."

City Planner Jayson Smith said the plan was drafted because it appeared that Chippewa Falls was falling behind in the creation of bike trails throughout the Chippewa Valley.

"The idea started several years ago when bikers met informally and bike trails came together," Smith told the audience. "We have an opportunity to create a trail that will go from Menomonie to Cornell (through Chippewa Falls)."

Dorothee Sommerfeld, an avid biker, said she is "elated" with what Parks has done.

"I'm glad the city has decided to do something," Sommerfeld said. "It has been happening elsewhere."

City Engineer Rod Pike said it helps to see a plan.

"It is far better to have an overall plan than to do it in bits and pieces," Pike said. "This way, we can look at the County Park plan, the bike plan and the other plans and adjust what is needed. Fewer mistakes are made, too."

Parks said he was encouraged by the response.

Next up for Parks is a presentation to the City Plan Commission on March 13.