

3. Transportation

3.1 Introduction

Broadly speaking, a transportation system can be defined as any means used to move people and/or products. A community relies on its transportation system daily to transport people and goods effectively and efficiently. It should also have the ability to link the community to neighboring communities and beyond. Additionally, the system should be able to accommodate a variety of transportation modes.



Roads and highways account for the majority of a transportation system and are probably the most commonly used paths, however, they are not the only component. Rail lines, waterways, airways, bike paths and trails contribute to the entire transportation system. Taken together, these individual transportation options create a community’s transportation system.

The following sections discuss in more detail, specific information about Menasha’s transportation system.

3.2 Existing Road System

The City of Menasha is served by an extensive system of U.S., state, and county highways as well as local roads. Table 3-1 shows the total miles of roadway in the City of Menasha by type of roadway.

Table 3-1
Miles of Road by Type, City of Menasha, 2004

	Miles	% of Total
US Highways	0.5	0.6%
State Highways	4.1	4.8%
Ramps	1.8	2.1%
County Highways	1.6	1.9%
Town Roads	0.9	1.0%
City Roads	77.0	89.1%
Alleys	0.0	0.0%
Private Roads	0.5	0.5%
Total	86.4	100.0%

Source: Calumet County Planning Department.

Local city roads make up the largest portion of the total City of Menasha road system with 77 miles of roadway, approximately 89% of all roads in the city. State highways make up the second greatest proportion with 4.1 miles of road, or 4.8% of total roads.

3.3 Road Functional/Jurisdictional Classification

For planning and design purposes, roadways are divided into different classes, such as arterials and collectors, which relate to the function of the roadway. Factors influencing function include traffic circulation patterns, land use, the land access needs, and traffic volumes.

Roadways can be further defined by the entities that have authority over the roadway. These provide jurisdictional classifications. State and federal roads are commonly classified as arterials and county highways as collectors. In addition to arterial and collector roads providing for movement between communities, local roads provide public access to private property. Although a community may not have direct jurisdictional authority over a specific roadway, the development and land use decisions surrounding the roadway impact the roadway users, the community where the roadway is located, and the communities that are linked through the roadway. Additionally, the local street system decisions regarding local travel directly impact the amount of traffic that is diverted onto state and/or county facilities.



Of the total road mileage in the City of Menasha, 62.82 miles are located in Winnebago County and 14.01 miles are located in Calumet County. 3.24 miles of roads are the responsibility of the DOT and 4.06 miles are private roads.

The functional classification of roads in Menasha is detailed below.

Principal Arterials

Principal arterials generally accommodate interstate and interregional trips. These routes generally serve all urban areas with greater than 5,000 population. Principal arterials in the City of Menasha include:

- ◆ Appleton Road
- ◆ Oneida Street
- ◆ Plank Road from Manitowoc Street to Corporate Limits
- ◆ Racine Road from Ninth Street to State Road 441 Ramp

- ◆ Racine Street from Third Street to Ninth Street
- ◆ Tayco Street/Road from Water Street to Fourth Street
- ◆ Third Street from Tayco Street to Manitowoc Street

Minor Arterials

In conjunction with principal arterials, minor arterials serve cities, large communities, and other major traffic generators, providing intra-regional and inter-area traffic movement. Minor arterials in Menasha include:

- ◆ Ahnaip Street
- ◆ Midway Road
- ◆ Nicolet Boulevard from Washington Street to First Street
- ◆ Ninth Street from Corporate Limits to London Street
- ◆ Racine Road from State Road 441 Ramp to Beck Street
- ◆ Racine Street from Ahnaip Street to Third Street
- ◆ Valley Road from Beck Street to Appleton Road

There are 9.27 miles of arterials within the City of Menasha.

Collectors

Collectors provide service to moderate sized communities and other intra-area traffic generators, and link those generators to nearby larger population centers or higher function routes.

Collectors in the community include:

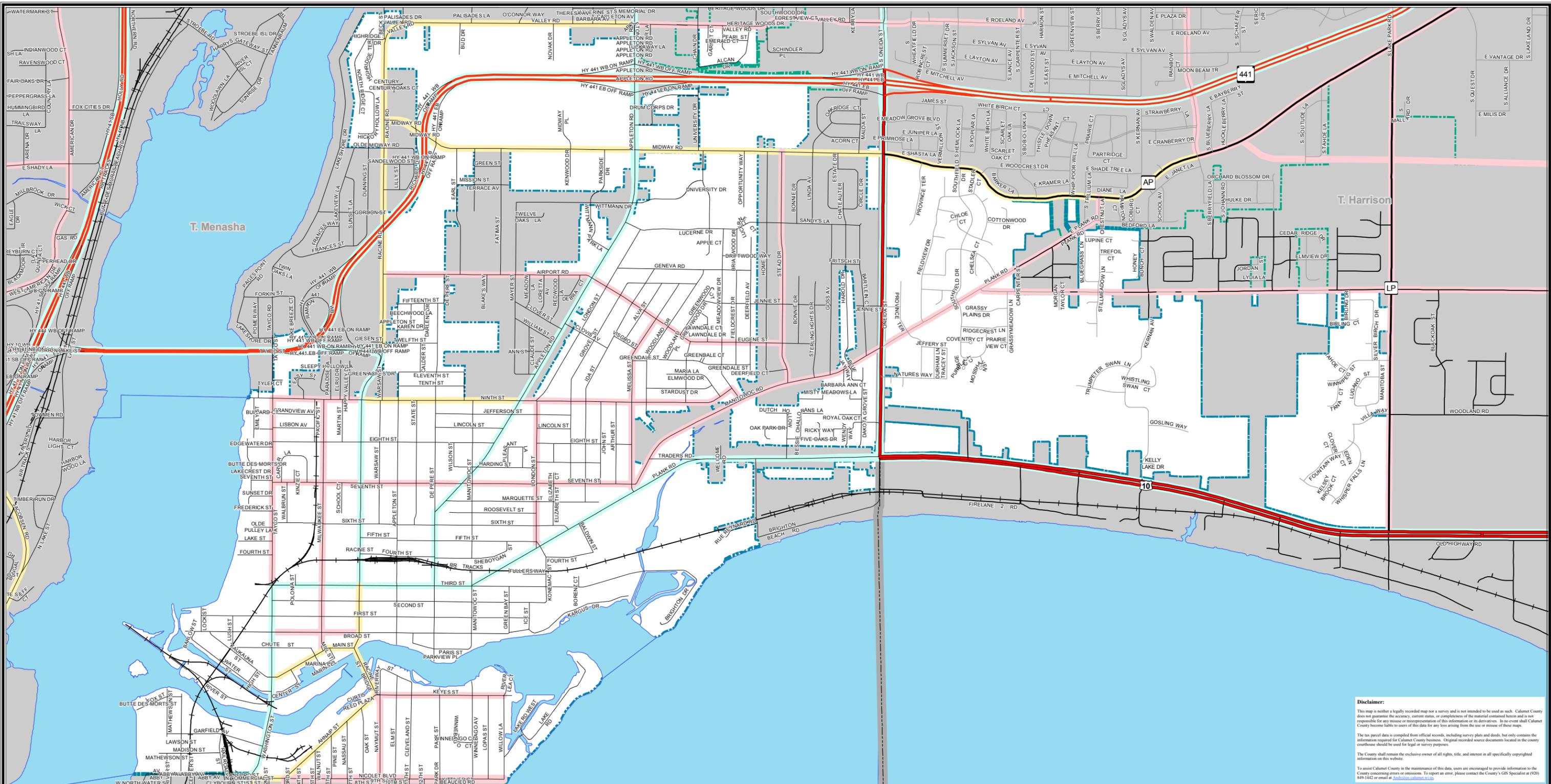
- ◆ Broad Street from Tayco to Racine Street
- ◆ Keyes Street
- ◆ Lake Park Road
- ◆ London Street from Plank Road to Ninth Street
- ◆ Manitowoc Road
- ◆ Meadowview Drive
- ◆ Melissa Street from Plank Road to Airport Road
- ◆ Milwaukee Street
- ◆ Naymut Street
- ◆ Nicolet Boulevard from First Street to East end
- ◆ Ninth Street from Tayco Street to Corporate Limits
- ◆ Plank Road from Manitowoc Road to Corporate Limits
- ◆ Seventh Street from Carver Lane to Melissa Street
- ◆ Tayco Street from Fourth Street to Corporate Limits
- ◆ Valley Road from Appleton Road to Schneider Place

The City of Menasha has 11.24 miles of arterials.

Local Roads

Local roads provide access to adjacent land and provide for travel over relatively short distances. All roads not classified as arterials or collectors are local function roads. There are 56.3 miles of local roads in the City of Menasha.

Map 3-1 displays the functional and jurisdictional classifications of roadways in the City of Menasha.

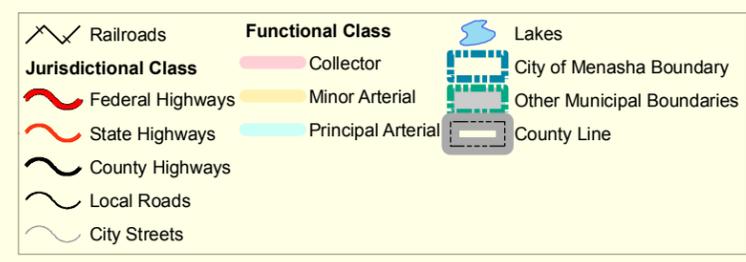


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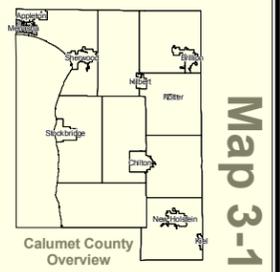
Existing Transportation

City of Menasha, Calumet & Winnebago Counties

Functional Class data provided by East Central Regional Planning Commission



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3.4 Traffic Volume Trends

Annual average daily traffic (AADT) counts are taken every three years for selected roadways in the city. Counts are calculated by multiplying hourly traffic counts by seasonal, day-of-week, and axle adjustment factors. The daily hourly values are then averaged by hour of the day and the values are summed to create the AADT count. Also refer to Map 3-1 for traffic counts.

Table 3-3
AADT Counts, City of Menasha, 2000 and 2004

Location	2000	2004	# Change 2000- 2004	% Change 2000-2004
Appleton Road, between Ninth St. and Airport Rd.	12,300	10,000	-2,300	-18.7%
Tayco St., between First and Second St.	9,000	7,600	-1,400	-15.6%
Third St., between Racine St. and Appleton St.	14,900	11,900	-3,000	-20.1%
Racine St., between Eighth and Ninth St.	17,200	12,500	-4,700	-27.3%
Main St., between Milwaukee and Racine St.	3,700	4,500	800	21.6%
Airport Rd., between London and Grove	4,000	4,600	600	15.0%
CTH AP, between U.S. 10 and Stead Drive	9,200	10,400	1,200	13.0%
STH 47, northbound off STH 441	10,900	9,500	-1,400	-12.8%
CTH LP, Lake Park Road, between Manitowoc and USH10/STH 114	1,800	4,600	2,800	156%
Manitowoc Road, between LP and Plank Road	1,100	2,000	900	81%
USH 10/Oneida Street, between Midway Road and Manitowoc Road	15,900	16,400	500	3.1%
USH10/Oneida Street, between Manitowoc Road and STH 114	13,500	13,100	-400	-2.9%

Source: Wisconsin Department of Transportation. Annual Average Daily Traffic counts, 2000, 2004.

As shown on Map 3-1 and in Table 3-3, traffic volumes vary depending on the location within the city. Some roadways have experienced significant increases while others are experiencing declines in traffic volumes.

3.5 Accident Types and Locations

Data gathered by the Menasha Police Department gathered between January 2004 and June 2006 identifies accident locations within the city boundaries. Based on this data it is evident that there are several areas in the city that have accident rates higher than other areas in the community. The intersections listed below have ten or more accidents within the study period. They are listed by location followed by number of accidents. Please note that there is no breakout of information available regarding the type of accident- for example it is not noted if the accidents involved automobiles, bicycles, or pedestrians.



Busy Intersection, City of Menasha

- ◆ Midway Road and Appleton Road (39)
- ◆ Third Street and Racine Street (36)
- ◆ 1578 Appleton Road (21)
- ◆ 1151 Midway Road (21)
- ◆ S Oneida Street and Midway Road (17)
- ◆ Third Street and De Pere Street (15)
- ◆ Ninth Street and Racine Road (15)
- ◆ Racine Street and Seventh Street (15)
- ◆ Appleton Road and Highway 441 East Bound (14)
- ◆ 420 Seventh Street (14)
- ◆ Racine Street and Main Street (14)
- ◆ Third Street and Milwaukee Street (13)
- ◆ 1049 Tayco Street (13)
- ◆ First Street and Racine Street (12)
- ◆ Main Street and Tayco Street (11)
- ◆ Airport Road and Appleton Road (11)
- ◆ 1478 Midway Road (10)

In addition to the information provided by the Menasha Police Department, the following locations have been identified in our transportation focus group as intersections that are perceived to be dangerous.

- ◆ Oneida Street and Manitowoc Road
- ◆ USH 10 and STH 114
- ◆ Manitowoc Road and Lake Park Road
- ◆ Racine Street and Broad Street

As more data is gathered in the future it will be possible to note how serious problems are in these areas.

3.6 Transit

Valley Transit is owned and operated by the City of Appleton. It operates in the following jurisdictions: the cities of Appleton, Kaukauna, Menasha and Neenah; the towns of Buchanan, Grand Chute and Menasha; and the villages of Kimberly and Little Chute.

Valley Transit has two routes within the City of Menasha (Routes 30 and 1). Route 30 is an hourly route which runs from the Valley Transit bus terminal to Wisconsin Avenue in the City of Neenah. Within Menasha, this route runs from the corner of Valley Road and Appleton Road to Doty Island including a loop inside the city. Route 1 runs half-hourly during peak hours, and hourly during non-peak hours. This route serves Midway Road, including UW-Fox Valley, and Appleton Road, including Shopko Plaza and Goodwill Industries, within the City of Menasha.

Fares for Valley Transit are \$1.50, \$.075 for seniors and disabled people, and children under the age of four travel free. Reduced fares for multi trip options include Day Pass (\$4.00), a 10-Ride Ticket (\$13.00), and 10-Ride Senior/Disabled Ticket (7.50).

Fares and other operating revenues (including Menasha's) may require substantial adjustments due to possible reductions in federal operating cost subsidies. Under current federal funding policy guidelines, federal assistance for operating costs would be markedly reduced after the Fox Cities Urbanized Area reaches a population of 200,000. This is expected to occur with the 2010 decennial census. Valley Transit is pursuing avenues to change federal funding guidelines to soften or eliminate the fiscal effects of reaching the 200,000 population threshold. It is also pursuing alternative revenue sources, including the formation of a Regional Transit Authority, to mitigate the impacts of reaching the 200,000 threshold if the funding guidelines are not changed. As the city moves forward in its future transportation planning, efforts should be made for regional collaboration to maintain or increase existing levels of service.

Transportation for Persons with Disabilities

Specialized public transportation, referred to as para transit, provides services to the elderly, disabled, and other persons with similar needs for more accessible vehicles. Valley Transit II serves those who meet the ADA guidelines for para transit eligibility. This service operates on the same schedule as fixed-route operations within $\frac{3}{4}$ mile of the fixed routes. It also is in operation 7:30 a.m.-2:00 p.m. on Sunday.

Taxi service is available in Menasha and other Fox Cities communities. There is also a volunteer transportation service coordinated through the Calumet County Senior Resources Center that links volunteer drivers with people in need on a request basis.

3.7 Pedestrian and Bicycle Corridors

Non-motorized travel is an integral part of the total transportation picture. Many people rely on walking and biking for travel from their homes to work, school, or shopping. For the elderly, children, and those who are disabled, having safe and convenient pedestrian facilities is often

essential to daily activities. Creation and maintenance of these safe corridors is a priority for the City of Menasha.

The City has an established sidewalk policy which requires sidewalks on both sides of all arterial and collector streets, with installation taking place at the time the streets are constructed to urban sections. Sidewalks are also mandatory on streets with higher densities and ADT is greater than 500 vehicles per day. Exceptions may be granted for newly platted subdivisions if the subdivision meets certain special circumstances.

The City of Menasha has a system of trails which includes the State Friendship Trail, on-street bike routes, and off-street trails.

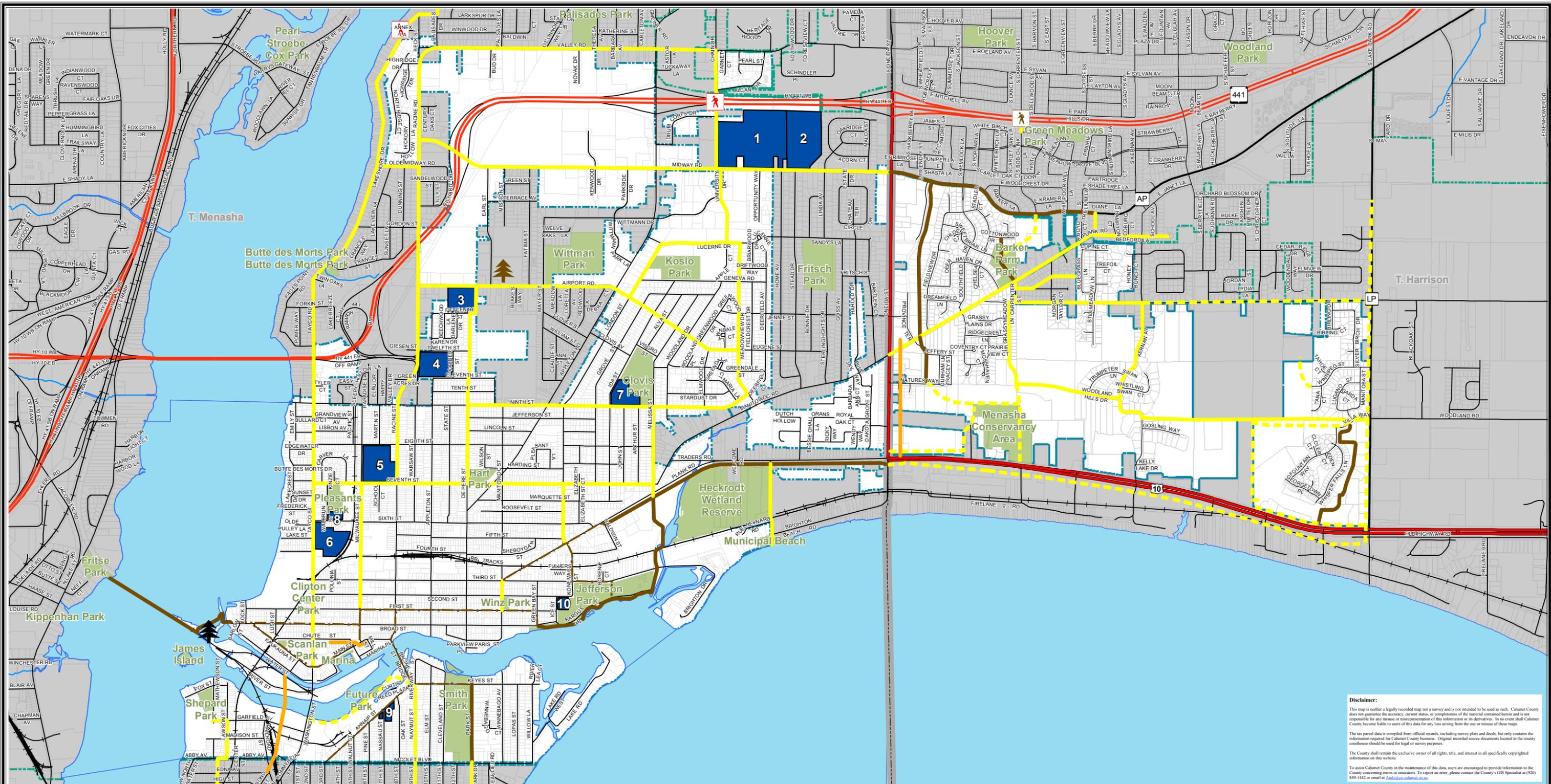
The Friendship Trail includes the recently completed Trestle Trail which spans Little Lake Butte des Morts and connects the City and the Town of Menasha. The trail features a unique lift bridge over the Menasha lock. The 1,600-foot long, lighted pedestrian bridge is the longest in Wisconsin and includes a center pavilion area with seating and several fishing platforms along the way. At its western end, the Trestle Trail meets the Friendship Trail at Fritse Park in the Town of Menasha. Currently, on the western end, it runs from Fritse Park eight miles to the Wiouwash Trail. On the eastern edge the trail follows Broad Street, First Street, goes along Jefferson Park and Heckrodt Wetland Reserve and ends at the intersection of Plank Road and State Highway 10. It is anticipated that the trail will soon extend east to High Cliff State Park. When completed the Friendship Trail will extend for 110 miles and connect a number of existing trails together linking Stevens Point and Manitowoc.

On the western side of the city an on-street bike route runs from Doty Island, across the Friendship Trail, and continues north along Tayco Street, 9th Street, Racine Street and Valley Road. This route terminates at STH 47. On the eastern side of the city there is an off-street trail on Province Terrace which runs from Midway Road south to the Menasha Conservancy. There is also an off-street trail in Lake Park Villas.

The city is currently working to expand the system of on and off road trails with an emphasis on connectivity between neighborhoods, parks, and services. The following projects have been identified as priorities:

- ◆ The extension of the Province Terrace Trail to the Friendship Trail on USH 10/Oneida Street.
- ◆ Land acquisition and design of the Friendship Trail from USH 10/Oneida Street to High Cliff State Park.
- ◆ Continued planning and development of the city's trail system.

Refer to Map 3-2 to see the locations of paths and trails in the City of Menasha.



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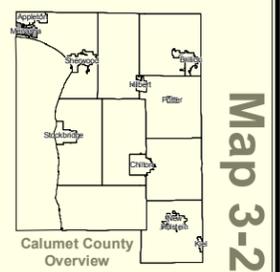
Park and Recreation Facilities

City of Menasha, Calumet & Winnebago Counties

- Public School Facilities**
- 1 UW - Fox Valley
 - 2 Maplewood Middle School
 - 3 Gegan Elementary School
 - 4 Calder Stadium
 - 5 Menasha Senior High
 - 6 Butte des Morts Elementary School
 - 7 Clovis Grove Elementary School
 - 8 Banta Administration Building
 - 9 Nicolet Elementary School
 - 10 Jefferson Elementary School

Railroads	Rivers	County Line	Off-Road Hard Surface
Federal Highways	Lakes	Proposed Pedestrian Overpass	On-Street Route
State Highways	Parks and Public Lands	Existing Pedestrian Overpass	Future Off-Road Hard Surface
County Highways	Parcel Boundaries	Menasha Lock	Future On-Street Route
Local Roads	City of Menasha Boundary	Youth Sports, Inc.	Sidewalk Link
City Streets	Other Municipal Boundaries		Public School Facilities

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3.8 Additional Modes of Transport

Trucking

Trucking is an integral part of the regional economy and depends on a safe and efficient highway system as well as adequate local roads and streets. The manufacturing and agriculture industries are particularly dependent on trucking.

According to the Wisconsin Department of Transportation truck operator maps, officially designated truck routes in Menasha include USH10/STH 114, STH 47, and STH 441.

There are no state rest areas or private truck parking areas in the City of Menasha. There are no major truck terminals in the City of Menasha.

Air Service

The City of Menasha does not have air service located within the city boundaries but is serviced through several airports in the vicinity.

The nearest commercial service airports to the City of Menasha are Outagamie County Regional Airport (approximately seven miles away in Appleton), Whitman Regional Airport (located in Oshkosh and approximately 18 miles away), and Austin Straubel International Airport (located in Green Bay, approximately 29 miles away).

Outagamie County Regional Airport serves the Fox Cities Metro Area and the surrounding counties with commercial airline service. The airport which has two runways (8,000 and 6,000 feet) is currently served by five commercial airlines. It provides 66 flights (arrivals and departures) daily with connecting flights to Atlanta, Chicago, Cincinnati, Detroit, Milwaukee and Minneapolis-St. Paul. In addition to the commercial passenger service, air freight, chartered flight service, car rentals, and aviation technological services are also provided at the airport. The airport recently adopted an Air Service Development Plan (2007) - the primary goal of this plan is expanding and retaining services which may include new routes, larger planes, or other possible expansion opportunities.

Whitman Regional Airport, located in Oshkosh, no longer offers passenger service but still offers aircraft rental and charter flights. Operated by Winnebago County, this airfield is best known for its annual hosting of the Experimental Aircraft Association (EAA) Fly-In Convention every July. This event brings an estimated 825,000 visitors annually. At present there is one 8,000 foot north-south runway and one 6,000 foot east-west runway in operation at the facility. There is an Airport Master Plan which was adopted in 1992 and is expected to be updated in the near future.

Austin Straubel International Airport located in Green Bay is the third largest airport in the state of Wisconsin. Almost 907,000 visitors utilized this airport in 2006. The airport has two runways which are 8,700 and 7,700 feet in length. The airport is served by six airlines with a seventh expected in 2008. After this anticipated expansion there will be nine direct service cities. The airport is also a regional base of operations for the Federal Aviation Administration

and the Transportation Security Administration serving one-third of Wisconsin and the Upper Peninsula of Michigan. Additionally, the airport has a U.S. Customs office stationed within the main terminal for those who wish to enter or exit the United States. There is an Airport Master Plan which was adopted in 1998. It is in the process of being revised and is expected to be adopted by January, 2008.

The only airport located in Calumet County is the New Holstein Municipal Airport. This airport is identified by the WDOT as a Basic Utility – B (BU-B) airport and does not offer commercial passenger service. This classification means that the airport is designed to accommodate aircraft of less than 12,500 pound gross weight, with approach speeds below 121 knots and wingspans of less than 49 feet. Along with a 3,600 foot paved primary runway, facilities at the New Holstein Municipal Airport include a 2,970-foot turf airstrip. In 2004, the New Holstein Municipal Airport received a \$200,666 FAA grant (\$220,000 total project cost) that provided grading for a new hangar site, installation of a runway end lighting system, and replacement and relocation of the airport's rotating navigational beacon. As the New Holstein Municipal Airport is the only air facility in the county, the improvements are as much a valuable economic development tool as they are safety enhancements.

Brennand Airport, located in Neenah, is a public-use airport which does not accommodate commercial air travel. This airport offers a 2,500 foot asphalt strip, fuel, transportation, and mechanics (on-call only).

Rail Service

There are several Canadian National rail lines that travel through Calumet and Winnebago Counties. Canadian National is the parent company of Wisconsin Central Limited, which may also use these lines. There are freight transfers and switching operations that take place in the City of Menasha. While a local line connects Menasha directly with the Manitowoc Area and Lake Michigan, it is relatively easy to connect from Menasha to points all over the state as well as lines that lead to Chicago and Minneapolis/St. Paul.



Rail line in Menasha

Regular rail service provides freight service to several businesses in the City of Menasha including Alcan Packaging, R.R. Donnelley & Sons Co., SCA Tissue, Peltz Paper, Sonoco and Orbis.

Passenger Rail

Although passenger service is not available in the City of Menasha, there is a plan to implement a high-speed passenger rail service in the states of Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin. The Midwest Regional Rail System would have a hub in Chicago and over

3,000 miles of track planned. The goal of the initiative is to develop a passenger rail system that offers business and leisure travelers shorter travel times, additional train frequencies, and connections between urban centers and smaller communities.

Water Transport

The City of Menasha has shoreline on Little Lake Butte des Morts, the Fox River, and Lake Winnebago. There is a lock and a dam that operate in the city to facilitate movement between the two lakes.

The northwestern tip of Lake Winnebago touches the southern edge of the City of Menasha. While there are a number of marinas and boat landings on its shores, there are no commercial ferries or cruise lines offering passage on the lake.

The City of Menasha is also in relatively close proximity to the Bay of Green Bay and Lake Michigan. Both of these water bodies offer commercial services and ports. In 1999, 1.9 million tons of freight passed through this port. The Port of Manitowoc handles bulk commodities, newly constructed yachts, and offers a car ferry. The Port of Green Bay is served by a major railroad and several nationally known truck lines providing overnight delivery of goods within a 400-mile radius.

3.9 Existing State and Regional Transportation Plans and Coordination

There are several studies and plans from either state or regional organizations that affect the City of Menasha.

State Plans

The Wisconsin Department of Transportation maintains several plans with statewide policies and recommendations regarding various aspects of transportation. These plans should be taken into consideration

when making future transportation decisions. The following plans have been reviewed and coordinated throughout the planning process.

- ◆ Translink 21: A Multi-modal Transportation Plan for Wisconsin's 21st Century (This plan has been replaced with Corridors 2020. Corridors 2020 is now being updated and will be replaced with Connections 2030 in the next few years.)
- ◆ Wisconsin State Highway Plan 2020
- ◆ Wisconsin Bicycle Transportation Plan 2020
- ◆ Wisconsin State Airport System Plan 2020
- ◆ Five Year Airport Improvement Plan, 2002
- ◆ Wisconsin State Pedestrian Plan 2020

Transportation Impacts Every Level of Government

Coordinated development is an essential component to maintaining roadway functionality. Assessing the impacts on the transportation system through development review and impact analysis prior to development approval is becoming more important at all levels of jurisdictional authority, not just in the heavily populated areas.

- ◆ Wisconsin State Rail Plan (a component of Connections 2030)
- ◆ Wisconsin Department of Transportation Access Management System Plan
- ◆ Wisconsin DNR State Trails Network Plan
- ◆ Statewide Transportation Improvement Plan
- ◆ Six-Year Highway Improvement Program

Connections 2030: Wisconsin’s Long Range Transportation Plan

The WDOT is currently developing a long-range transportation plan for the state, called Connections 2030. This plan will address all forms of transportation over a 25-year planning horizon: highways, local roads, air, water, rail, bicycle, pedestrian and transit. The overall goal of the planning process is to identify a series of policies to aid transportation decision makers when evaluating programs and projects.

Connections 2030 has identified a series of multimodal corridors for each part of the state. When completed, the multimodal corridors will accomplish key goals including portraying key Connections 2030 recommendations, prioritizing investments, and assisting the WDOT Transportation Districts in identifying future segments for more detailed corridor plans. The following relevant corridors were identified:

- ◆ Fox Valley, Milwaukee to Green Bay: This 130-mile corridor is part of a major passenger and freight corridor that links Green Bay, Appleton, Oshkosh and Milwaukee and points further south, including Chicago. It serves the major manufacturing centers in the Fox Valley. It is also an important tourist corridor between the population centers in Illinois and the recreation areas of northeastern Wisconsin.
- ◆ Lake to Lake, Fox Cities to Manitowoc: This 50-mile corridor is part of a passenger and freight corridor linking central Wisconsin, the Fox Cities and the Manitowoc-Two Rivers area. With the ferry service across Lake Michigan, it also becomes part of an interstate corridor connection to west central Michigan and points east.

Fox River Navigational System Authority Plan

The Fox River Navigational System Authority (FRNSA) was created in 2001 by the State Legislature to facilitate the transfer and rehabilitation of the lower Fox River locks from the U.S. Army Corps of Engineers. The FRNSA has a plan to complete all lock restoration projects by 2009 and to have the system in operation by 2010. The mission of the FRNSA is to serve the citizens of the Fox River area and the state by rehabilitating, maintaining, developing and operating the navigational system to:

- ◆ Promote tourism and recreational use of the navigational system; and
- ◆ Maintain and improve the scenic, physical, historic and environmental character of the navigational system.

U.S. 10/STH 441

U.S. 10/STH 441 is a vital regional transportation link serving the Fox Cities urban area including communities in Calumet, Outagamie, and Winnebago Counties. The WDOT is

currently conducting a study that evaluates the impacts of expanding USH 10/STH 441 from four to six lanes. The study will also review upgrading USH 10/STH 441 interchanges.

The Fox Cities area is one of the fastest growing areas in the state. Traffic volumes have increased sharply over the last decade. Existing USH 10/STH 441 does not have sufficient capacity to safely handle expected traffic increases and lacks auxiliary lanes, which help preserve traffic flow between closely spaced interchanges. Construction to address these deficiencies is not expected to begin until 2011 or 2012 at the earliest, assuming improvements are funded. Calumet County approved resolution 2004-17 in July, 2004, a resolution requesting legislative support for funding of reconfiguration of USH 10. The resolution noted that USH 10 is an integral part of the economic development of Calumet County as well as Manitowoc, Outagamie, and Winnebago Counties. The resolution also stated the position of the Calumet County Highway Committee that it felt funding for design and construction due to the increase in traffic volumes and safety concerns be given immediate consideration by the Wisconsin Department of Transportation.

USH 41 Corridor

In the broader context of long term (20+ years) transportation planning, the existing USH 41 corridor between the Fond du Lac and Green Bay urban areas will need to be expanded to functionally handle anticipated growth. The rapidly growing Fox Valley region will place demands on USH 41 that will most likely include adding lanes and capacity improvements over the planning period. As part of this process, it is anticipated transportation planners will review and study alternative corridor opportunities to address demands, including opportunity for traffic reduction, improving other regional highways to allow traffic disbursement while improving capacity, and development of new facilities.

Regional Plans

The East Central Wisconsin Regional Planning Commission (ECWRPC) is the official Metropolitan Planning Agency for the counties of Calumet, Fond du Lac, Green Lake, Marquette, Menominee, Outagamie, Shawano, Waupaca, Waushara, and Winnebago. Services provided by the Commission include land use, comprehensive, and transportation planning for the region. The Commission's transportation program has three major functional work elements: the Long Range Transportation/Land Use Plan for the Fox Cities Urbanized Area, the Transportation System Management Plan for the urbanized areas, and the Regional Transportation Plan. Existing regional plans were reviewed and coordinated throughout the planning process.

Long-Range Transportation/Land Use Plan, Fox Cities Urbanized Area, 2005

This plan, prepared by the East Central Regional Planning Commission, was prepared to meet the requirements of the Transportation Equity Act for the 21st Century (TEA-21) for long range transportation and land use in metropolitan areas. The primary purpose of the plan is to ensure coordination between land use and transportation planning within the Fox Cities Metropolitan Planning Area. The study area included approximately 274 square miles including the City of Menasha. The plan includes adopted goals, objectives, and policies, an inventory of existing

conditions, a land use plan with several alternatives, recommendations, environmental review, and a financial plan.

Specific modal recommendations identified in the plan which impact Menasha were as follows:

- ◆ CTH LP, CTH AP to US 10, reconstruct four lane urban facility
- ◆ CTH AP (Midway Road), CTH N to Kernan Avenue, construct four lane urban section
- ◆ STH 47 (Appleton Road), Ninth Street to north county line, reconstruction
- ◆ Tayco Street and Racine Street Structure, Fox River Bridge, rehabilitation

Transportation Improvement Program for the Fox Cities (Appleton) and Oshkosh Urbanized Areas, 2007

This plan is prepared annually by the East Central Regional Planning Commission. It discusses the Transportation Improvement Program (TIP) process, creates a list of possible projects in the planning area, and identifies target projects from the list to recommend for implementation. The list of projects for 2007 to 2011 currently doesn't include any projects directly affecting the City of Menasha.

County Plans

Both Winnebago and Calumet Counties have adopted Comprehensive Plans that cover transportation issues with relevance to the City of Menasha.

The 2006 Winnebago County Comprehensive Plan (adopted March 2006) covers transportation issues within both Winnebago County and the City of Menasha. The following recommendations specifically impact the City of Menasha:

- ◆ The Winnebago County transportation system should be continually evaluated, deficiencies identified and solutions proposed in support of current land use, desired patterns of future development and adopted local comprehensive plans.
- ◆ The County and local units of government should continue to be proactive in promoting compatibility among local, regional, and state transportation policies by incorporating adopted urban and regional transportation plans and by attending state and local transportation meetings.
- ◆ The transportation needs of all citizens should be considered. Funding for transportation policies and programs should be provided by local units of government as determined by local needs and priorities.
- ◆ Local units of government in the County should adopt regulations concerning the use of highways, including those which prevent the deterioration of structures and the highway surface.
- ◆ Development of new or expanded highway corridors should only be considered after a determination that alternative transportation modes cannot address the need to:
 - ▶ Alleviate significant safety hazards.
 - ▶ Relieve communities of heavy through traffic burdens.
 - ▶ Alleviate traffic congestion.

- ▶ Conserve energy in highway use.
 - ▶ Stimulate economic development.
 - ▶ Provide a framework for future planned land use.
- ◆ When proposing future Principal and Minor Arterial streets within their existing and “extraterritorial powers”, jurisdictions should coordinate the planning and adjacent municipalities.
 - ◆ To ensure compatibility, County and municipality street and highway design standards should be based on functional class criteria set forth in WisDOT’s Design Manual.
 - ◆ County, city, and town street design standards should be adequate for the legal speeds, sizes, and weights of vehicles.
 - ◆ Design speed and accident exposure rate standards should be used by local units of governments to mark and sign roads where appropriate.
 - ◆ Future infrastructure improvements by local units of governments should reduce vehicle conflicts through roadway and intersection designs appropriate for the desired level of service.
 - ◆ Local Comprehensive Plans/Transportation Plans should prevent the location of roadways through environmentally sensitive areas.
 - ◆ Local transportation planning should protect historic or visually pleasing buildings and scenic, historic, scientific, and cultural sites when constructing new or improving existing transportation facilities.
 - ◆ Local units of government through adopted ordinances should design transportation facilities to be aesthetically pleasing and sensitive to the natural landscape, incorporating such amenities as boulevards, berms and attractive landscaping on major arterials in urban areas and minimizing unsightly views such as junkyards, billboards, and strip commercial development in more rural areas.
 - ◆ Local Transportation Plans should minimize air pollution through efficient traffic control measures and encourage transit, bicycle, and pedestrian travel.
 - ◆ The County and municipalities should consider adopting noise set back ordinances or use Federal and State noise standards when approving subdivisions to ensure that residential areas, schools, or other places with high concentrations of people are not exposed to harmful levels of noise from transportation facilities.
 - ◆ The County and municipalities should coordinate their transportation planning to minimize the amount of land used for right-of-ways and consider multiple use of right-of-ways.

- ◆ Local governments should develop transportation policies to conserve transportation energy and meet contingency situations in case of fuel shortfalls.
- ◆ During the planning process local governments should recommend the type of land use patterns and site design standards that can be efficiently served by public transportation.
- ◆ Provide uniform signing and marking of all bikeways and walkways throughout the Fox Cities region.

The 2007 Calumet County Comprehensive Plan (Adopted May 2007) covers transportation issues within both Calumet County and the City of Menasha. The following recommendations specifically impact the City of Menasha:

- ◆ Support the jurisdictional transfer of highways in accordance with periodic updating of the functional classification of highways.
- ◆ Implement and preserve access controls along all arterial and major collector highways, and consider the need for additional access control for other county trunk highways.
- ◆ Work with local and regional governments to create bicycle and pedestrian linkages between neighborhoods, subdivisions, and communities.
- ◆ The county shall work cooperatively with communities and the East Central Wisconsin Regional Planning Commission to prepare transportation system plans and studies for corridors for major facilities (such as U.S. Highway 10) as needed throughout the planning period.

3.10 Planned Transportation Improvements

PASER

Menasha uses PASER (Pavement Surface Evaluation and Rating) to plan for local road improvements. PASER uses visual assessment to rate the conditions of roads within a community. This data, combined with economic analysis is a useful way to generate short and long term maintenance plans for the roads in the city.

A designation of #2 indicates that roads are severely deteriorated and need reconstruction. These roads have more than 25% alligator cracking or severe distortion as well as potholes or extensive patches in poor condition. A designation of #3 indicates that structural improvement is required. Cracking is extensive, patches are in fair to poor condition and there is moderate distortion and occasional potholes.

Currently the following roads are graded as being in “very poor” and “poor” conditions:

Rating of #2 (Very poor):

- ◆ 1st Street from Manitowoc Street to Ice Street
- ◆ 8th Street from Pacific Street to Tayco Street

- ◆ Pacific Street from 9th Street to 8th Street
- ◆ University Drive from Termini to CTH AP

Rating of #3 (Poor):

- ◆ 4th Street from Konemac Street to Termini
- ◆ Broad Street from STH 114 to Racine Street
- ◆ Clovis Avenue from STH 47 to London Street
- ◆ Konemac Street from STH 114 to 3rd Street
- ◆ Lawndale Ct from Lawndale Drive to Termini
- ◆ Manitowoc Street from Paris Street to Broad Street
- ◆ Manitowoc Street from 2nd Street to 3rd Street
- ◆ Old Pulley Lane from Tayco Street to Termini
- ◆ Paris Street from Manitowoc Street to Broad Street
- ◆ Polonia Street from Termini to STH 114
- ◆ Water Street from Barlow Street to Lush Street
- ◆ Water Street from High Street to STH 114

Five Year Street Improvement Program

The City of Menasha currently does not have a comprehensive capital improvement plan, but a five year street improvement program is reviewed annually. The following are projects identified for 2008 through 2011:

2008

- ◆ Pacific Street, Eighth Street to Ninth Street; Pulverize and Asphalt Resurface
- ◆ Chute Street, Lush Street to Tayco Street; Pulverize and Asphalt Resurface
- ◆ Eighth Street, Tayco Street to Pacific Street, Pulverize and Asphalt Resurface
- ◆ Fourth Street, Konemac Street to East End; Pulverize and Asphalt Resurface
- ◆ Konemac Street, Third Street to Plank Road; Pulverize and Asphalt Resurface
- ◆ Green Bay Street, Broad Street to Third Street; Pulverize and Asphalt Resurface
- ◆ First Street, Manitowoc Street to Ice Street; Pulverize and Asphalt Resurface
- ◆ First Street, De Pere Street to Manitowoc Street; Total Reconstruction
- ◆ Appleton Street, First Street to Third Street; Total Reconstruction

2009

- ◆ STH 114 from Tayco Street to Manitowoc Street; Reconstruction; (Local cost share only)
- ◆ Lush Street from R.R. Tracks to First Street; Pulverize/Resurface
- ◆ Lock Street from Broad Street to LLB; Pulverize/Resurface
- ◆ Water Street from Barlow Street to Tayco Street; Pulverize/Resurface

2010

- ◆ Broad Street from Tayco Street to Racine Street; Reconstruct Concrete/Asphalt

2011

- ◆ Garfield Avenue from R.R. tracks to Washington Street; Reconstruct Concrete

3.11 Transportation Focus Group

A focus group was held with the City of Menasha on January 12, 2006, which covered transportation issues. Attendees included representatives from the City of Menasha, WDOT, Winnebago and Calumet Counties, private/non-profit interest groups, Valley Transit, Canadian National Rail, UW Extension, ECWRPC, and neighboring municipalities. Information gathered at this meeting covered in part: strengths and weaknesses of the current transportation system, future anticipated needs, and anticipated challenges.

For a summary of questions asked and data gathered at this meeting please refer to Appendix B of this document.

3.12 Transportation Goals and Objectives

Following are the goals and objectives developed by the City of Menasha regarding transportation.

Goal: Provide a safe, efficient, and cost effective transportation system for the movement of people and goods.

Objectives

1. Balance competing community desires (i.e., scenic beauty, direct highway access, etc.) with the need to provide for safe roads, intersections, interchanges, rail crossings, and other transportation features.
2. Mitigate hazards at high accident locations.
3. Require safe locations and designs for driveway access onto local public roadways.
4. Require developers to bear an equitable share of the costs for the improvement or construction of transportation system infrastructure and services (road, bike paths, sidewalks, public transportation, etc.) needed to serve development.
5. Where feasible, direct development to areas of existing infrastructure capable of managing new development or redevelopment.
6. Coordinate the location of new road infrastructure with Area Development Plans and utilities.
7. Monitor the effectiveness of existing, and enhance opportunities for new shared service agreements for providing local road development and maintenance.
8. Improve deficient roadways and other transportation systems.
9. Work to achieve a traffic circulation network that conforms to the planned functional classification of roadways.

10. Direct future residential, commercial, and industrial development to roadways capable of accommodating resulting traffic.
11. Direct truck traffic to appropriate routes and coordinate routes with adjoining jurisdictions.
12. Maintain existing public parking facilities and monitor the need for additional facilities.
13. Ensure that the transportation needs of the physically challenged are met.
14. Support regular fixed commercial air service.

Goal: Support and promote the development and use of multiple modes of transportation.

Objectives

1. Make bicycling and walking viable, convenient, and safe transportation choices in the community.
2. Continue the provision of both fixed route and demand response transportation services.
3. Improve pedestrian facilities to better accommodate people with disabilities (i.e., curb cuts, minimizing inclines and slopes of sidewalks, ensuring sidewalk connectivity, and increasing signal times at crossings, etc.).
4. Support the development of convenient and affordable transit options.
5. Promote the use and development of alternative forms of transportation as a positive, viable choice.

Goal: Incorporate energy conservation principles in transportation facility design and services.

Objectives

1. Design Streets and Highways to promote the free flow of traffic.
2. Design streets to minimize heat islands.
3. Use design of streets, neighborhoods, destination points and subdivisions to facilitate multi-modal transportation.
4. Encourage the use of design techniques that minimize hard surfaces where possible.

3.13 Transportation Policies and Recommendation

Policies and recommendations build on goals and objectives by providing more focused responses and actions to the goals and objectives. Policies and recommendations become the tools that the community should use to aid in making land use decisions. Policies and recommendations that direct action using the words “will” or “shall” are advised to be mandatory and regulatory aspects of the implementation of the comprehensive plan. In contrast, those policies and recommendations that direct action using the word “should” are advisory and intended to serve as a guide.

1. The PASER (Pavement Service and Evaluation Rating System) shall be utilized to bi-annually update the 5-year Road improvement Program, including funding sources and priorities for identified improvement projects.
2. Area Development Plans may be required as part of the submittal of any residential development plans (i.e., subdivisions). This will allow the community to assess the future connection and traffic flow impacts on surrounding properties.
3. The city shall install planned bicycle and pedestrian facilities during road construction in new developments.
4. The community will consider bicycle and pedestrian safety needs when new roads are proposed or when roadway improvements are made.
5. Through and Loop street systems shall be encouraged to promote traffic circulation within and between neighborhoods.
6. The city shall update its list of designated heavy truck routes.
7. All proposed access to local roads shall require an access permit.
8. Developers shall bear an equitable share of the costs for improvements and extensions to the transportation network.
9. Street design standards (intersection design, signal phasing, roadway width) shall give priority to and enhance the safety of pedestrians and non-motorized traffic and minimize conflict with motorists. Priority for installation or construction should be given to those routes that are used by school children, senior citizens, physically challenged persons and/or commuters.
10. Transportation related issues which have impact neighboring communities will be discussed and evaluated considering input from East Central Wisconsin Regional Planning Commission and the Wisconsin Department of Transportation as necessary.
11. Residential development proposals will be designed to include an efficient system of internal circulation and interconnectivity for all vehicles, non-motorized traffic and pedestrians including the provision for external collector streets, on-street bike lanes,

sidewalks, and trails where applicable, to feed all traffic onto external arterial roads and highways.

12. The existing road network and public facilities and services will be utilized to accommodate new development to the maximum extent possible.
13. Whenever feasible, promote the separation of truck and through-traffic from local traffic and reroute truck traffic around the community as much as possible.
14. Actively pursue all available funding, especially federal and state sources, for needed transportation facilities. Funding for multimodal facilities should be emphasized.
15. The community shall protect the visual quality of major community thoroughfares by requiring all development and redevelopment along these entry corridors to include site plan and design review. Streets shall be designed and located in such manner as to maintain and preserve natural topography, cover, significant landmarks, and trees, and to preserve views and vistas.
16. Require pedestrian facilities as land is developed based on standards for the street classification and community needs.
17. Continue to support public transportation and para transit initiatives.
18. Participate in planning initiatives evaluating future public transportation programs and funding options.
19. Ensure that the transportation needs of the physically challenged are met.
20. The city shall participate in regional transportation system planning.
21. Promote maintenance and expansion of fixed route air carrier service.
22. Limit the use of stop signs and traffic control signals to intersections where MUTDC warrants are met and engineering studies conclude that installing such signs or devices will improve the overall safety and/or operation of an intersection.
23. Utilize roundabouts as an alternative to stop signs or traffic signals wherever practicable.
24. Employ traffic calming measures as an alternative to stop signs or traffic signals wherever feasible.
25. Coordinate traffic signal cycles wherever feasible.
26. The city should engage in transportation planning to ensure that the needs of the citizens of the city are being met.

27. The city should obtain data related to type of vehicle involved accidents (automobile, motorcycle, bicycle) and if the accident involved pedestrians. This data will allow the city to analyze the types of accidents that occur and look towards finding site-specific solutions that will minimize future accidents.
28. Encourage the use of the Safe Routes to School Programs when appropriate.

3.14 Transportation Programs and Resources

The following programs and resources are currently utilized by the city or are available for use by the city to implement the goals, objectives, policies, and recommendations identified.

Fox River Navigational System Authority

The Fox River Navigational System Authority (FRNSA) was created in 2001 by the State Legislature to facilitate the transfer and rehabilitation of the lower Fox River locks from the U.S. Army Corps of Engineers. The mission of the FRNSA is to serve the citizens of the Fox River area and the state by rehabilitating, maintaining, developing and operating the navigational system to:

- ◆ Promote tourism and recreational use of the navigational system; and
- ◆ Maintain and improve the scenic, physical, historic and environmental character of the navigational system.

Local Roads Improvement Program (LRIP)

Established in 1991, the Local Roads Improvement Program (LRIP) assists local governments in improving seriously deteriorating county highways, town roads, and city and village streets. A reimbursement program, LRIP pays up to 50% of total eligible costs with local governments providing the balance. The program has three basic components: County Highway Improvement (CHIP); Town Road Improvement (TRIP); and Municipal Street Improvement (MSIP). Three additional discretionary programs (CHIP-D, TRIP-D and MSIP-D) allow municipalities to apply for additional funds for high-cost road projects. For more information contact the WDOT.

Pavement Surface Evaluation and Rating (PASER)

PASER is a simple method of rating asphalt and concrete roads on a scale of 1 to 10 and gravel roads on a scale of 1 to 5, based on visual inspection. PASER manuals and a video explain how and why roads deteriorate, and describe proper repair and replacement techniques. PASER ratings can be put into PASERWARE, an easy to use pavement management software. PASERWARE helps to inventory roads and keep track of their PASER ratings and maintenance histories. It also helps to prioritize road maintenance and improvement needs, calculate project costs, evaluate the consequences of alternative budgets and project selection strategies, and communicate those consequences to the public and local officials. Both PASER and PASERWARE are available from the University of Wisconsin's Transportation Information Center at no charge. The Center also offers free training courses.

Safe Routes to School

The Wisconsin DOT defines the Safe Routes to School Programs (SRTS) as programs that "encourage children ages K-8 to walk and bike to school by creating safer walking and biking routes. These programs are funded through the revised federal transportation act - SAFETEA-LU - signed into law on August 10, 2005. This legislation provides funding to state departments of transportation to create and administer SRTS Programs. SRTS Programs improve walking and biking travel options, promote healthier lifestyles in children at an early age and decrease auto-related emissions near schools."

Transportation Economic Assistance (TEA) Program

The Transportation Economic Assistance program provides 50% state grants to governing bodies, private businesses, and consortiums for road, rail, harbor, and airport projects that help attract employers to Wisconsin, or encourage business and industry to remain and expand in the state. Grants of up to \$1 million are available for transportation improvements that are essential for an economic development project. It must be scheduled to begin within three years, have the local government's endorsement, and benefit the public. For more information about this program, contact: Wisconsin Department of Transportation, Division of Transportation Investment Management.