

Chapter 8

TRANSPORTATION FACILITIES

The transportation system of the region benefits all Village residents by providing for the movement of goods and people into, out of, through, and within the region. An efficient, durable, cost-effective transportation system is essential to sound social, community, and economic development. An understanding of the existing transportation system and future improvements is fundamental to the preparation of the Village of Hartland Comprehensive Plan.

The term transportation system describes several different aspects including:

- Transportation options used to move people and products
- Levels of jurisdictional authority
- Facilities that a user might access to begin, change, or switch, and end a trip.

When people hear the term transportation system they often think only of roads. While roads account for the majority of the transportation system, they are not the only component. A transportation system includes: roads, transit services, rail services, bicycle lanes, paths, trails, pedestrian accommodations, airports, and water ports and harbors. This chapter is laid out to address Village and County transportation issues first, and finish with information about the 2035 Regional Transportation System Plan.

This element of the comprehensive plan was created by identifying the strengths, concerns, and weaknesses related to Transportation in the Village of Hartland. The Plan Commission, Village staff, and planning consultant evaluated the following list of items to gauge the impacts of transportation within the community.

Transportation Strengths:

- Easy access to the Interstate Highway System
- An established and efficient State and County Trunk Highway System is in place
- An established street maintenance program is being adhered to
- A continued endorsement of long-range comprehensive planning related to streets, and an understanding of the impact of not planning long-range or failure to implement these plans
- An Official Map, which includes all existing and proposed street and highway locations, has been adopted by Village Officials
- SEWRPC support for the Village alternative traffic route of Jungbluth Road at Lisbon Road on the northeast side of the community
- Close proximity to both passage rail and freight rail

Transportation Concerns and Weaknesses:

- A lack of a dedicated funding source exists for transit at the Village level.
- Unresolved County issues regarding alternative transportation patterns to service the northeast side of the community
- A tendency by the Village to upgrade streets after volume or impact is realized instead of doing a more effective analysis of projecting these changes.
- A lack of grade separation between competing transportation modes such as street and railroad crossings

VILLAGE TRANSPORTATION SYSTEM

The comprehensive plan recommends an integrated street system which, through its location, capacity, and design, can effectively serve the travel demand generated by the existing and proposed land uses incorporated in the recommended land use pattern. The attendant street system plan provides a framework for land use development in the Hartland area and is, therefore, regarded as a very important land use element. In the preparation of the street system plan, all modes of travel, including walking and bicycling, as well as transit and railway services, were considered with emphasis on how those modes may affect the utilization of the street network.

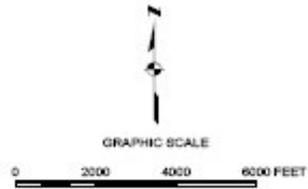
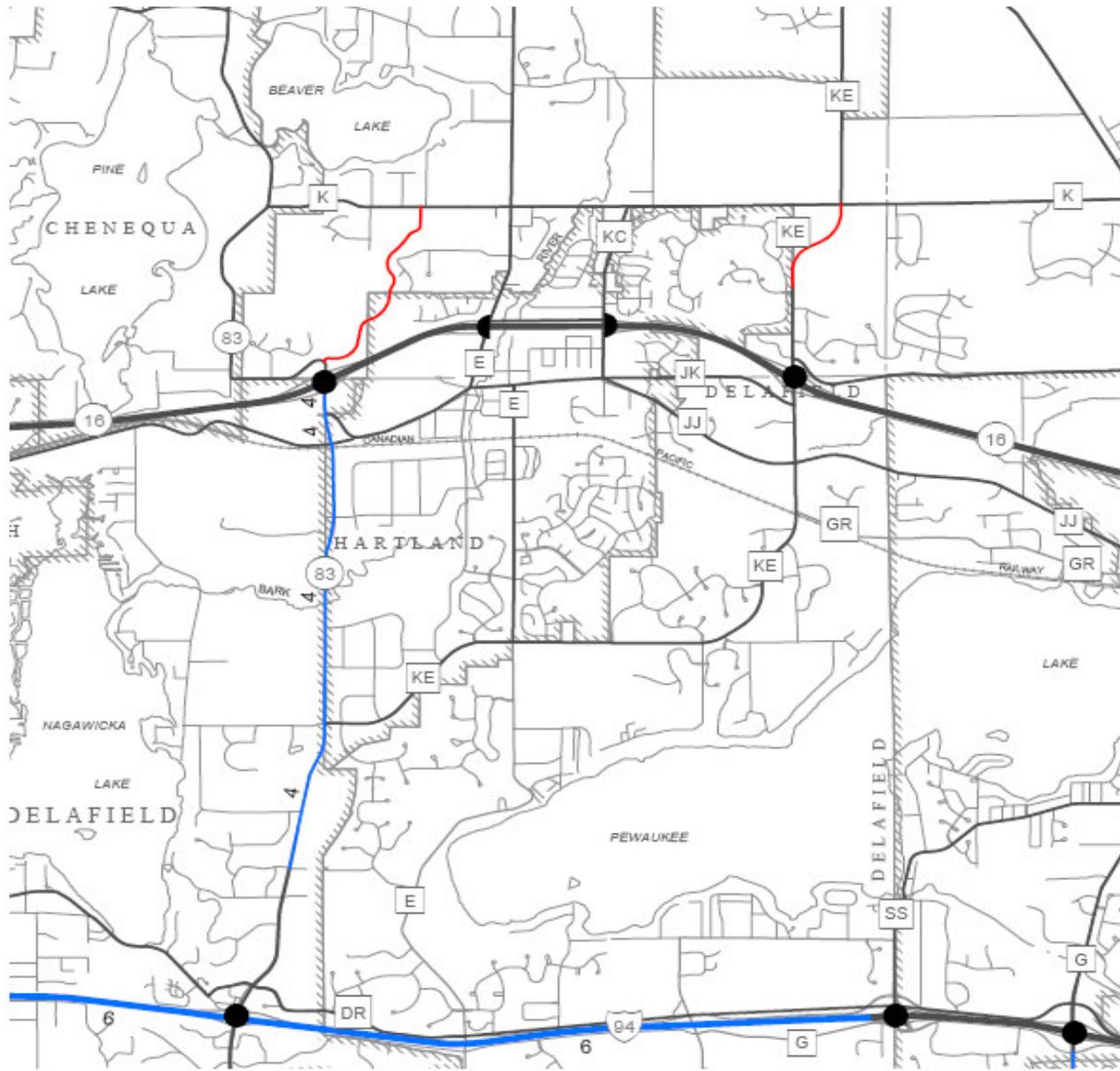
Street and Highway System

Transportation facilities, especially street and highway systems, are among the most important land use elements influencing the spatial distribution of development in a community. In the 2035 Regional Transportation System Plan, Map 8-1 graphically depicts the recommended functional improvements to arterial streets and highways that would serve the probable future traffic demand in the Hartland study area. It should be noted that, as a result of an alternative concepts study conducted by the Wisconsin Department of Transportation (WisDOT), the WisDOT and the Waukesha County Board acted to remove the long-planned STH 83 bypass, shown north of STH 16, from the State and County transportation plans. Instead they endorsed retaining STH 83 on its existing alignment, as well as the recommendation of the Regional Transportation System Plan to widen STH 83 south of STH 16 within the Village of Hartland study area to accommodate four travel lanes. The Village has already expressed transportation and design-related comments, as described in the design recommendations later in this chapter, to WisDOT for their consideration as part of a transportation improvements study being conducted by WisDOT for STH 83 from STH 16 south to CTH NN in the Village of Mukwonago.

In addition to incorporating a network of arterial streets and highways, the transportation plan shows existing and proposed street rights-of-way for other streets such as collector and minor land-access streets, as shown on Map 8-2 and Map 8-3. Collector streets, such as the proposed street with a north-south alignment between Lisbon Road (CTH K) and STH 16, were arranged to collect traffic from urban uses abutting minor land-access streets and to convey it to the arterial streets and activity centers identified on the plan. Collector streets should be related to special traffic generators such as schools, churches, shopping centers, and other proposed concentrations of population or activities, and to the arterial streets to which they connect. The minor land-access street network was designed to achieve the most efficient use of land; to discourage use by through traffic; to minimize street area and cost; to provide an attractive setting for residential development; to facilitate the provision of efficient storm water drainage, sanitary sewerage, and public water supply facilities; and to complement the natural terrain, thereby minimizing the need for extensive grading during the development process. All street locations were based upon careful consideration of a number of factors, including soil characteristics, topography, property boundaries, the hierarchy within the total street system, existing and proposed land uses, the principles of good neighborhood planning, and the design guidelines presented in Appendix C. Suggested cross-sections and attendant right-of-way widths for these streets are also shown in Figure C-1 of Appendix C. These cross-sections may be subject to variations with regard to a number of considerations, including topography, vehicular and pedestrian traffic patterns and volumes, traffic and parking lane widths, bicycle path and lane widths, and relation to adjacent land uses.

MAP 8-1

RECOMMENDED FUNCTIONAL IMPROVEMENTS
 IN THE VILLAGE OF HARTLAND STUDY AREA
 UNDER THE REGIONAL TRANSPORTATION SYSTEM PLAN: 2035



Source: SEWRPC

The Village of Hartland Recommended Transportation Plan, Map 8-2 reflects a realignment of Jungbluth Road (CTH KE) in the northeast corner of the study area. The proposed alignment south of Lisbon Road (CTH K) is endorsed by the Village and as shown in SEWRPC Planning Report No. 49, due to safety concerns and construction expenses associated with an alternative alignment endorsed by Waukesha County. Waukesha County prefers a northern alignment as reflected on Map 8-3. The Village transportation plan will continue to show the street system submitted in this document.

Traffic Studies

Four traffic studies pertinent to the Village of Hartland have been completed by the Regional Planning Commission. In 1983, a study evaluated six alternatives for the redesign of the intersection of Capitol Drive with North Avenue, Cottonwood Drive, Hill Street, and Village Drive (now named Haight Drive). In addition, the study analyzed impacts of this intersection on the streetscape proposed for E. Capitol Drive as part of the downtown redevelopment plan. The Regional Planning Commission staff recommended that either one of two alternatives should be implemented, neither of which would impact the proposed streetscaping for E. Capitol Drive. The study found that traffic volumes and accident problems were not severe to warrant the redesign of the intersection. Any redesign would be important for aesthetic purposes only. The preferred alternative was to be decided by Village officials. To date, neither alternative have been fully implemented.

A study evaluating alternative local street improvements to relieve the intersection of Maple Avenue and Capitol Drive was completed in 1985. Based upon comparative evaluations of various alternatives for relieving traffic congestion at this intersection, including potential local street extensions to the north, east, and west of the Hartridge Subdivision and traffic engineering improvements at the intersection, the Commission staff recommended that separate turn lanes be provided at the intersection with minimal cost and impact on adjacent land uses compared to the other alternatives. In addition, it was recommended that proposed urban developments in the southern portion of the Village be directed to locate their principal access to streets other than Maple Avenue, such as Cottonwood Avenue. The study further recommended that land be reserved for the potential westerly extension of Hartwood Lane and Hartridge Drive to Cottonwood Avenue, if needed in the future. Of all the local street extensions considered—west, north, and east—the study determined that the westerly street extension would have the most potential to reduce northbound Maple Avenue left-turning traffic, have the least impact on existing development, and would be no more costly than the others considered. It would, however, be difficult to implement since the street extension would traverse a wetland. The study also indicated that future development and attendant traffic growth may warrant the installation of traffic signals or three-way stop signs at the aforementioned intersection, prior to any extension of local streets. To date, three-way stop signs have been installed, and access for development in the southern portion of the Village has been directed towards Cottonwood Avenue and the new CTH KE extension that was completed.

The third study documented in SEWRPC Memorandum Report No. 117, *Traffic Study of Selected Intersections in the Village of Hartland, Waukesha County, Wisconsin*, November 1996, analyzed six Village intersections. These intersections were: 1) the intersection of E. Capitol Drive (CTH JJ), Lisbon Avenue (CTH JK), Merton Avenue (CTH KC), and Highland Avenue; 2) the intersection of E. Capitol Drive and Maple Avenue; 3) the intersection of E. Capitol Drive and Church Street; 4) the intersection of E. Capitol Drive, North Avenue, and Hill Street; 5) the intersection of Cottonwood Avenue, W. Capitol Drive, and Haight Drive; and, 6) the intersection of W. Capitol Drive, W. Park Avenue, and Prospect Avenue. For each of the intersections, the study presents inventory findings with respect to their physical and operational characteristics, analyses of potential traffic problems, identification and evaluation of alternatives to abate those problems, and the recommended actions and estimated cost to implement them. To date, only recommended improvements to the intersection of E. Capitol Drive, Lisbon Avenue, Merton Avenue, and Highland Avenue have been implemented.

In 2000, a fourth study evaluated alternative transportation measures to help reduce traffic congestion on North Avenue (CTH E). The study analyzed the need for a new north-south roadway extending generally from the interchange of STH 16 with STH 83 to CTH K in the Chenequa-Merton-Hartland area. A number of alternative alignments were considered, including an alignment following a portion of the now-abandoned bypass route of STH 83. Also, alternatives were considered that propose intersection traffic engineering improvements where North Avenue (CTH E) intersects with Hartbrook Drive, the southern Arrowhead High School Campus entrance, Arrowhead Drive, and CTH K. To date, no recommended alternatives have been fully implemented. The Villages of Chenequa and Hartland, however, have adopted and placed a future north-south roadway extending north from the interchange of STH 16 and STH 83 on their official map. The study also includes potential traffic demand management strategies for reducing the volume of traffic to and from Arrowhead High School, which contributes significantly to the traffic congestion on North Avenue (CTH E).

Official Mapping

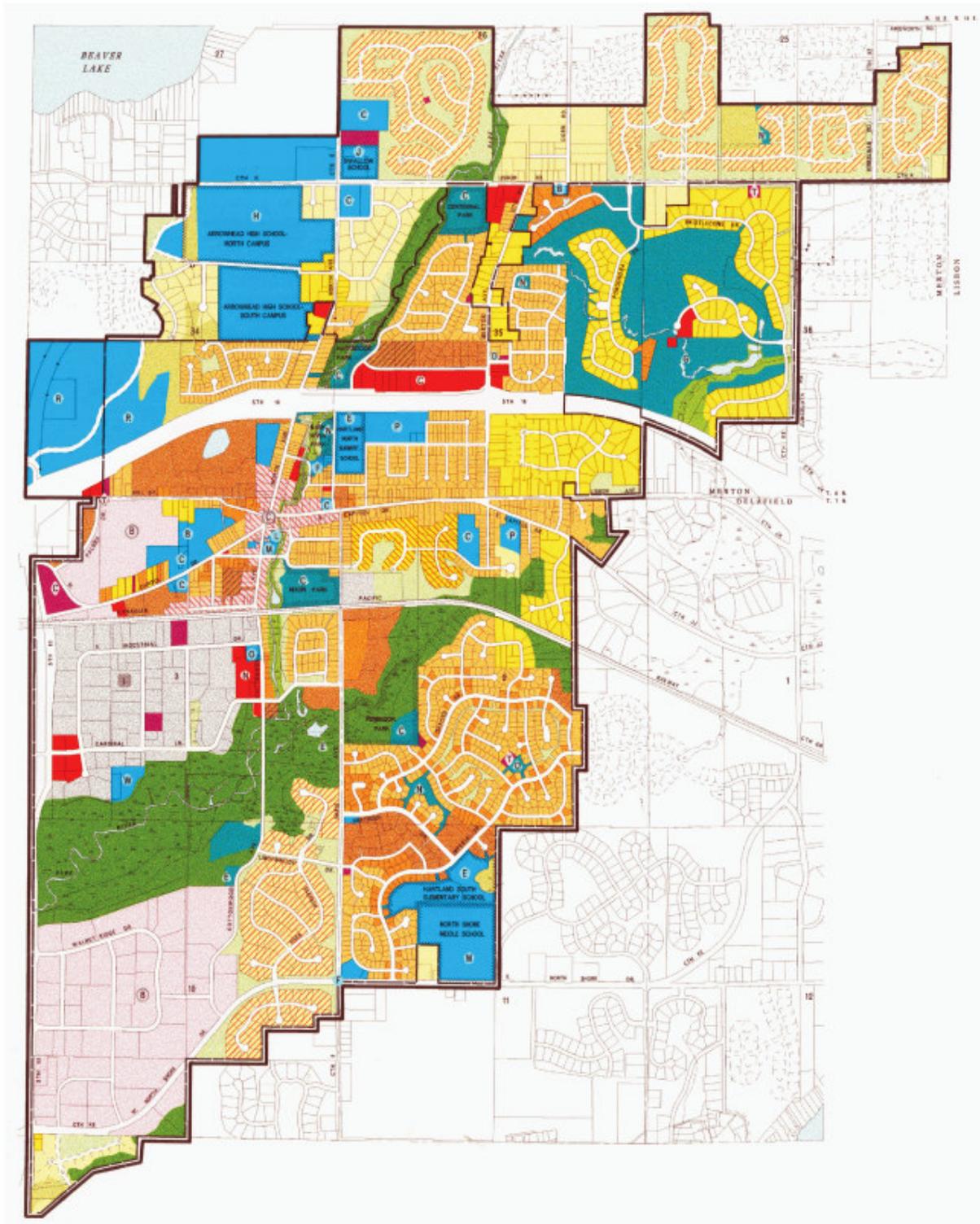
Official mapping authority, granted to local governments under Section 62.23(6) of the *Wisconsin Statutes*, is an important but historically underutilized plan implementation device. An official map is one of the most effective and efficient devices to manage the problem of reserving land for future public use. The map is intended to identify the location and width of existing and proposed streets, highways, parkways, and drainage-ways, and the location and extent of railway rights-of-way, public transit facilities, parks, and playgrounds. The adoption of an official map prevents the construction of buildings or structures and their associated improvements on lands designated for future public use. The features shown on an official map may be extended to areas beyond the boundaries of a city or village, but within the extraterritorial plat approval jurisdiction of the municipality.

The Village adopted its first Official Map for the Village and environs on April 12, 1999. The Official Map reflects current conditions within the Village corporate limits based on present cadastral maps and also shows the location of two future streets just outside of the Village; a future street extending northeast from STH 83, between STH 16 and CTH K; and a future street extension from Jungbluth Road east and north to Lisbon Road. The official map should be updated from time to time to continue to facilitate the proper implementation of any adopted development plan proposals, including the development plan set forth in this report, relating to streets, highways, waterways and parkways, railways, public transit facilities, parks, and playgrounds.

The City of Delafield and the Village of Chenequa and Merton have also adopted official maps. These maps show general locations for future streets, parks, and parkways in order to reserve land for such future public use. Under Section 80.64 of the Statutes, counties may adopt highway-width maps showing the location and width of proposed new highways and the widths of any highways proposed to be expanded. Such maps serve a function similar to local official map, but with jurisdiction limited to streets and highways. The Waukesha County Board initially adopted a highway-width map in 1954 and has amended it from time to time. The planned streets and street rights-of-way of the Waukesha County Established Street and Highway Width Map, as it applies to the study area and as shown on Map 8-3.

Map 8-2

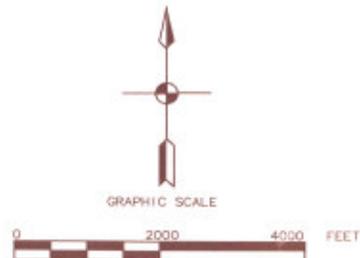
RECOMMENDED TRANSPORTATION PLAN FOR THE
VILLAGE OF HARTLAND PLANNED URBAN SERVICE AREA: 2035



Source: SEWRPC.

Map 8-2 (continued)

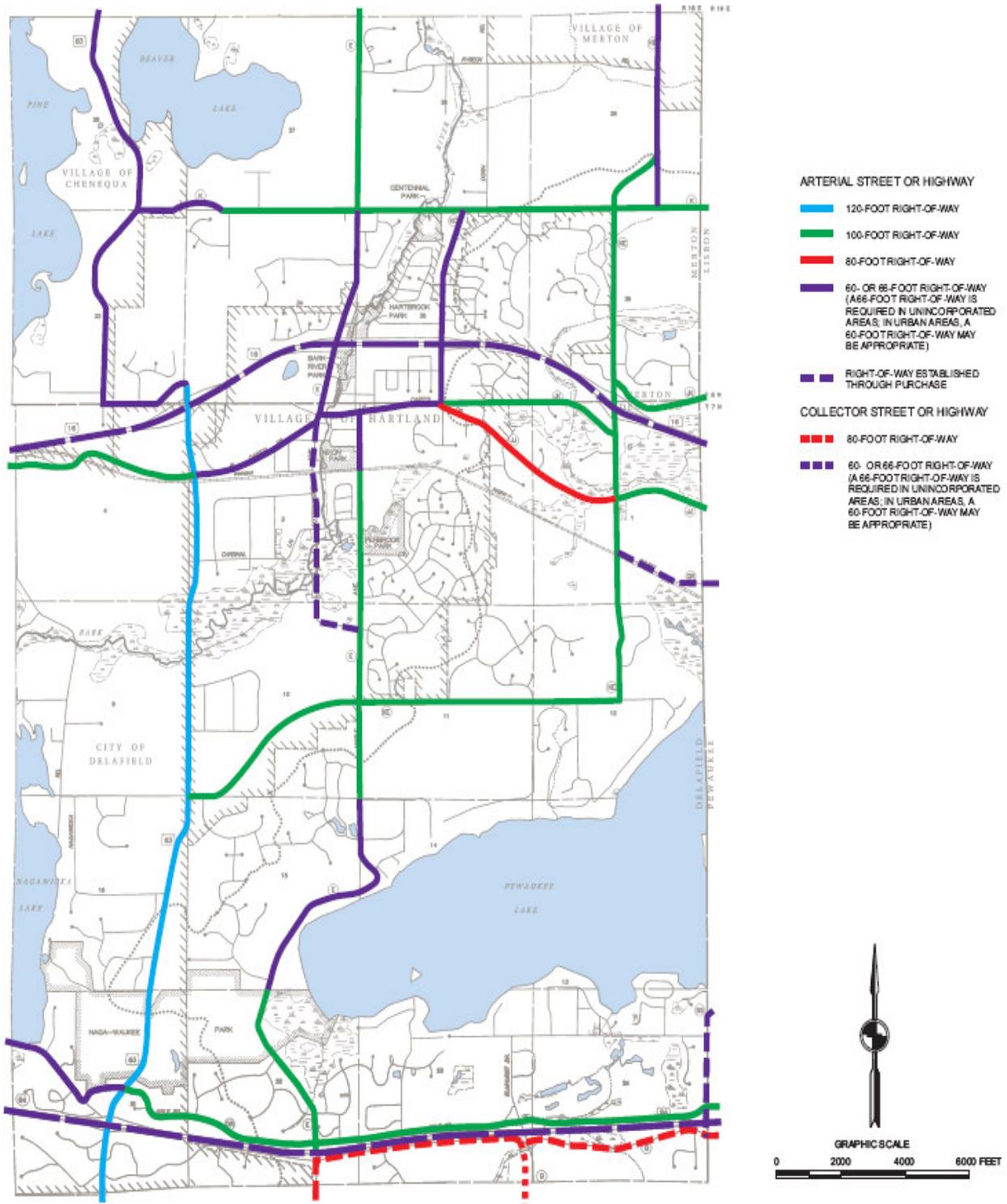
-  PLANNED URBAN SERVICE AREA BOUNDARIES: 2020
-  EXISTING CORPORATE LIMIT BOUNDARIES: 2000
- SINGLE-FAMILY RESIDENTIAL DEVELOPMENT**
 -  LOW-DENSITY (32,670 SQUARE FEET OR MORE PER DWELLING UNIT)
 -  LOW-DENSITY CLUSTER DEVELOPMENT (32,670 SQUARE FEET OR MORE PER DWELLING UNIT)
 -  MEDIUM-LOW-DENSITY (20,000-32,669 SQUARE FEET PER DWELLING UNIT)
 -  MEDIUM-LOW-DENSITY CLUSTER DEVELOPMENT (20,000-32,669 SQUARE FEET PER DWELLING UNIT)
 -  MEDIUM-DENSITY (8,000 - 19,999 SQUARE FEET PER DWELLING UNIT)
- TWO-FAMILY RESIDENTIAL DEVELOPMENT**
 -  UPPER-MEDIUM-DENSITY (UP TO 8.7 DWELLING UNITS PER ACRE)
- MULTI-FAMILY RESIDENTIAL DEVELOPMENT**
 -  HIGH-DENSITY (UP TO 17.4 DWELLING UNITS PER ACRE)
 -  SENIOR HOUSING (UP TO 17.4 DWELLING UNITS PER ACRE)
- COMMERCIAL DEVELOPMENT**
 -  RETAIL SALES AND SERVICES
 - N NEIGHBORHOOD SHOPPING CENTER
 - C COMMUNITY SHOPPING CENTER
 -  MIXED-USE COMMERCIAL/RESIDENTIAL (PART OF VILLAGE CENTER)
 -  BUSINESS AND PROFESSIONAL OFFICES
 - B BUSINESS/LIMITED MANUFACTURING PARK
- OTHER LAND USES**
 -  INDUSTRIAL
 - I INDUSTRIAL PARK
 -  TRANSPORTATION AND UTILITIES
 - C COMMUTER CENTER
 - T WATER TOWER
 -  GOVERNMENTAL AND INSTITUTIONAL
 - M MUNICIPAL BUILDING AND POLICE DEPARTMENT
 - W PUBLIC WORKS
 - L LIBRARY
 - F FIRE STATION
 - O POST OFFICE
 - E PUBLIC ELEMENTARY SCHOOL
 - M PUBLIC MIDDLE SCHOOL
 - J PUBLIC ELEMENTARY/MIDDLE SCHOOL
 - H PUBLIC HIGH SCHOOL
 - R PRIVATE SCHOOL
 - C CHURCH
 - P CHURCH AND PRIVATE SCHOOL
 - B CEMETERY
 -  PARKS AND RECREATION
 - N NEIGHBORHOOD PARK
 - C COMMUNITY PARK
 - E CONSERVANCY PARK
 - G GOLF COURSE
 - O OTHER PARK AND OPEN SPACE SITES
 -  PRIMARY ENVIRONMENTAL CORRIDOR
 -  SECONDARY ENVIRONMENTAL CORRIDOR
 -  ISOLATED NATURAL RESOURCE AREA
 -  OTHER LANDS TO BE PRESERVED
 -  SURFACE WATER
 -  EXISTING PROPERTY LINE
 -  EXISTING STREET RIGHT-OF-WAY LINES
 -  PROPOSED PROPERTY LINE
 -  PROPOSED STREET RIGHT-OF-WAY LINES



Source: SEWRPC.

Map 8-3

WAUKESHA COUNTY ESTABLISHED STREET AND HIGHWAY WIDTH MAP AS RELATED TO THE VILLAGE OF HARTLAND STUDY AREA: 1998



Source: Waukesha County and SEWRPC.

COUNTY TRANSPORTATION PLAN

The Waukesha County Comprehensive Development Plan includes a transportation plan, which addresses an arterial street and highway system plan, and a public transit system plan intended to serve the County through the year 2035 and beyond. The document also describes additional functional improvements to these systems that may be expected to serve the County under full development, or “build out” conditions, of urban areas shown in the adopted County land use plan. A synopsis of information from the Waukesha County Development Plan will include specific recommendations regarding certain streets in the Village that may be reclassified, or relocated to promote a smooth and efficient traffic flow for vehicles moving north east of the Village. The Village of Hartland study area is shown on Map 8-1, and is based on the adopted 2035 Regional Transportation System Plan. This Plan notes the additional improvements that may be needed under “build out” conditions of the Waukesha County land use plan.

It should be noted that a new curvilinear street alignment for CTH KE was constructed and completed in the vicinity of the perpendicular alignment of CTH KE shown on Map 8-2, southeast of the Village of Hartland and in the Town of Delafield. The existing perpendicular streets previously designated as CTH KE were retained to function as local access streets. It should be further noted that the Wisconsin Department of Transportation completed a preliminary engineering study of STH 83 between STH 16 and the Waukesha-Washington County line in 1997. As part of that study, the Department evaluated extensively the long-planned STH 83 bypass, two realignments of STH 83, and retaining STH 83 on its existing alignment. The regional transportation plan, as shown on Map 8-1, no longer recommended the bypass, but did recommend the two minor realignments of STH 83. At the conclusion of their preliminary engineering study, the Department determined that STH 83 would remain on its existing route. Therefore, the realignment of STH 83 between STH 16 and CTH K was not recommended for implementation.

The following section contains three elements: arterial streets and highway, public transportation systems management, and bicycle and pedestrian facilities, and presents inventories of the existing transportation system in Waukesha County and in the Village of Hartland.

STREETS AND HIGHWAYS

Waukesha County has over 2,917 miles of federal, state, county, and local roads within the County (Table 8-1). Four freeways; Interstate Highway 43, Interstate Highway 94, State Highway 16, and U.S. Highway 41/45 serve Waukesha County. In addition, the County is served by State Highways 36, 59, 67, 74, 83, 100, 145, 164, 175, and 190. The County Trunk System includes over 391 miles of roads. Over 78 percent of road miles in Waukesha County are local in village, town, or city roads. This street and highway system within the County serves several important functions; including providing movement of vehicular traffic; providing access for vehicular traffic to abutting land uses; providing for the movement of pedestrians and bicycles; and serving as a location for utilities and storm water drainage facilities. Streets and highways fall into a three-category hierarchy that, includes arterial, collector, and land access streets.

Table 8-1

ROAD MILEAGE IN WAUKESHA COUNTY: 2005

	State Trunk System (freeways, U.S., STH)	County Trunk System	Local Roads (City, Village, Town)	Total
Waukesha County	232.18	391.78	2,291.90	2,917.43

Source: Wisconsin Department of Transportation

Table 8-2**VILLAGE OF HARTLAND ANNUAL AVERAGE DAILY TRAFFIC COUNTS: 2006**

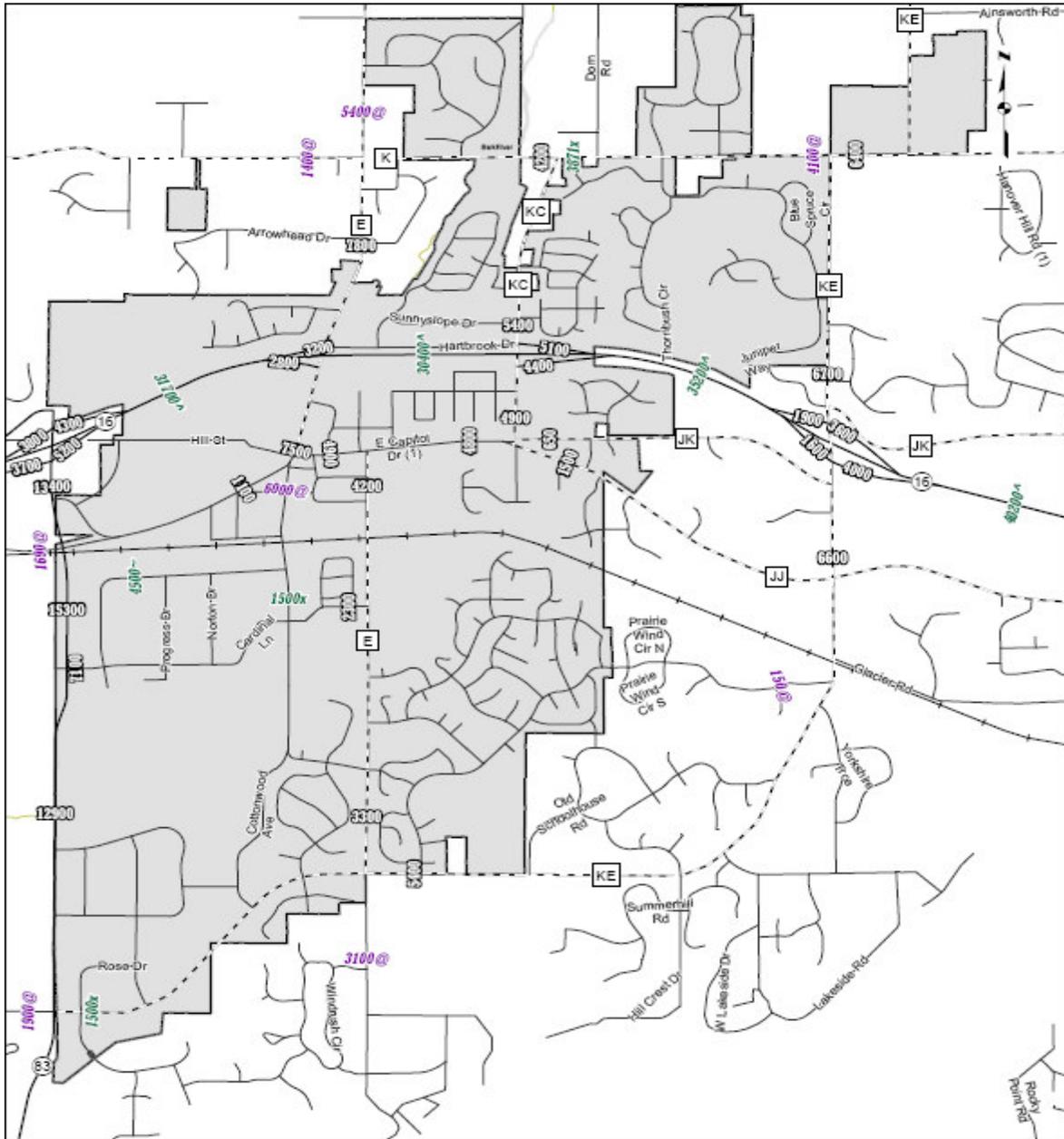
HIGHWAY	LOCATION	COUNT	YEAR OF COUNT
CTH KE	South of CTH K	6,700	2006
CTH KE	South of STH 16	6,600	2006
CTH KE	East of CTH E	5,400	2006
CTH KE	East of STH 83	1,500	2000
CTH KC	South of CTH K	5,400	2006
CTH KC	South of STH 16	4,900	2006
CTH E	South of CTH KE	7,800	2006
CTH E	South of STH 16 at E. Capitol	7,500	2006
CTH E	South of Canadian Pacific Railroad	3,300	2006
STH 83	South of STH 16	13,400	2006
STH 83	South of Canadian Pacific Railroad	12,900	2006
CTH K	Between CTH KC and CTH KE	6,400	2006
CTH K	Between CTH KC and CTH E	4,200	2006
STH 16	East of CTH KE	40,200	2002
STH 16	Between CTH KE and CTH KC	35,200	2002
STH 16	Between CTH KC and CTH E	30,400	2002
STH 16	West of CTH E	31,700	2002
CTH JK	East of CTH KC	650	2006
CTH JJ	East of CTH KC	1,500	2006
CTH E	South of CTH KE	7,800	2005

County Traffic Counts

WisDOT conducts average daily traffic counts for county trunk highways, state trunk highways, and U.S. Highways in Waukesha County every three years. Traffic counts are reported as the number of vehicles expected to pass a given location on an average day of the year. This value is called the “annual average daily traffic” or AADT and is represented on traffic count or traffic volume maps. The AADT is based on a short-term traffic count, usually 48 hours, taken at the location. This count is then adjusted for the variation in traffic volume throughout the year and the average number of axles per vehicle. The short-term counts are collected over a three-year cycle at nearly 26,000 rural and urban locations. County data from 2000, 2003, and 2006 can be found at <http://www.dot.wisconsin.gov/travel/counts/waukesha.htm>. Map 8-4 provides traffic counts for State Trunk Highways and County Trunk Highways in the Village of Hartland study area.

MAP 8-4

VILLAGE OF HARTLAND ANNUAL AVERAGE DAILY TRAFFIC COUNTS: 2006



Source: Wisconsin Department of Transportation

2006
 Village of HARTLAND
 WAUKESHA County
 Annual Average Daily Traffic

9999 - AADT - 2006

9999# - AADT - 2005 9999^ - AADT - 2002
 9999* - AADT - 2004 9999~ - AADT - 2001
 9999@ - AADT - 2003 9999x - AADT - 2000 or older
 Character following AADT on map designates year

Arterial Streets

An arterial is a high-volume street that functions to conduct traffic between communities and activity centers and to connect communities to interstate highways. Arterial streets are defined by SEWRPC as streets and highways which are principally intended to provide a high degree of travel mobility, serving the through movement of traffic, and providing transportation service between major sub-areas of an urban area or through an area. In a rural area, an arterial is a high-volume street that functions to conduct traffic between communities and activity centers and to connect communities to interstate highways. Together, arterial streets should form an integrated, area wide system. The most heavily traveled arterial streets and highways in the County are Interstate Highway 94, Bluemound Road (US Highway 18), Capitol Drive (State Trunk Highway 190), Moorland Road (County Trunk Highway O), Cleveland Avenue (County Highway D), Interstate Highway 43, State Highway 164, U.S. Highway 41/45, State Highway 16, State Highway 59, County Highway F, County J (Pewaukee Road) and State Highway 74.

In addition to their functional classification, arterial streets and highways are also classified by the unit of government that has the responsibility, or jurisdiction, over the facility. The Wisconsin Department of Transportation (WisDOT) has jurisdiction over the State trunk highway system, Waukesha County has jurisdiction over the County trunk highway system, and each local government unit has jurisdiction over local arterial streets within their community.

The State trunk highway system, which includes Interstate Highways, U.S. – numbered highways, and State highways, generally carry the highest traffic volumes, provide the highest traffic speeds, have the highest degree of access control, and serve land uses of statewide or regional significance. State trunk highways serve the longest trips, principally carrying traffic traveling through Waukesha County and between Waukesha County and surrounding counties. County trunk highways should form an integrated system together with the state trunk highways, and serve traffic between communities in the County and land uses of countywide importance. Local arterial streets and highways would serve the shortest trips, serve locally-oriented land uses, carry the lightest traffic volumes on the arterial system, carry traffic at lower speeds, have the least access control, and predominately serve traffic within a community.

Collector Streets

Collector streets are defined as streets which are intended to serve primarily as connections between the arterial system and the land access street system. They may include frontage roads that parallel freeways within the County. In addition to collecting traffic from, and distributing traffic to, the land access streets, the collector streets provide a secondary function of providing access to abutting properties. As a result, collector and land access streets are sometimes referred to as non-arterial, or local streets.

Land Access Streets

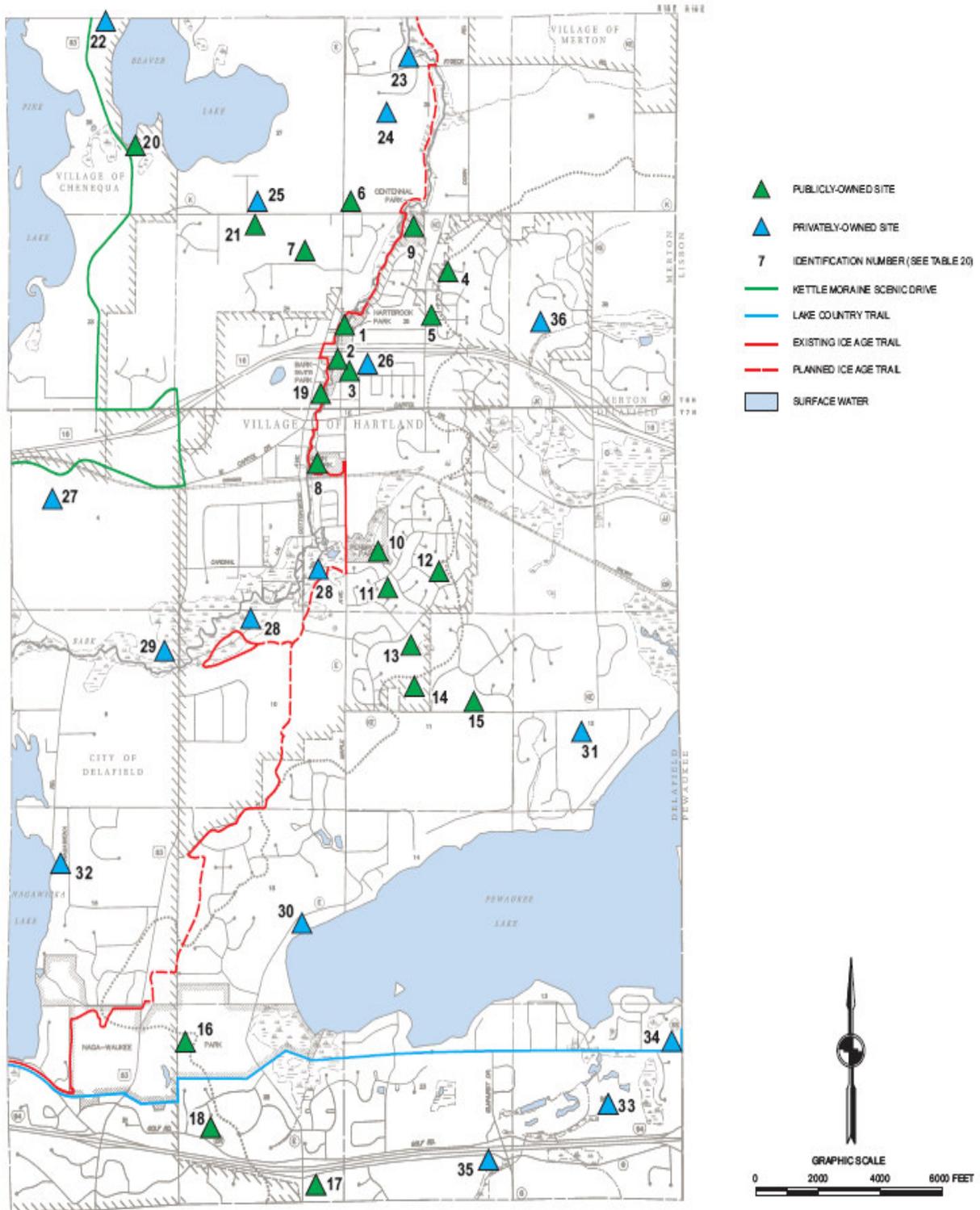
The function of land access streets is to provide access to abutting property. As the lowest-order street in the hierarchy the access street is designed to conduct traffic between dwelling units and higher order streets. Land access streets are sometimes referred to as minor streets and may include frontage roads that parallel freeways.

Scenic Drives

The plan recognizes the continued recreational use of the Kettle Moraine Scenic Drive traversing through the Hartland area, as well as major trails and open space on Map 8-5. The Kettle Moraine Scenic Drive is a marked route over public roadways, intended for pleasure driving. The route connects the Kettle Moraine State Forest--Northern Unit in Fond du Lac, Sheboygan, and Washington Counties with the Kettle Moraine State Forest--Southern Unit in Jefferson, Walworth, and Waukesha Counties. The total touring route is about 75 miles in length within the Southeastern Wisconsin Region, including 4.3 miles in the Village of Hartland study area along Vetteson Road and part of STH 83.

Map 8-5

SCENIC DRIVE, MAJOR TRAILS, PARKS, AND RECREATION AND OPEN SPACE SITES IN THE VILLAGE OF HARTLAND STUDY AREA: 1998



Source: SEWRPC.

County and Local Street Inventory

The Wisconsin Department of Transportation (WisDOT) maintains a detailed database of county and local street information in the “Wisconsin Information System for Local Roads” (WISLR). Physical attributes such as right-of-way and pavement width, number of traffic lanes, type of surface and pavement rating, the presence and type of shoulders or curbs, and the presence of sidewalks are available through a database that can be accessed through the WisDOT website by registered users. Administrative information, including the functional classification and owner of street, can also be obtained. The information in the database is provided by county and local governments, and is intended to assist in the reporting of roadway pavement conditions. Under Section 86.302 of the Wisconsin Statutes, pavement ratings must be submitted to WisDOT by each county and local government every other year. The PASER method (pavement surface evaluation and rating) is the most commonly used method in Wisconsin, and the Village of Hartland employs the PASER rating method.

Commuter Center

The regional transportation system plan also recommended that a "park-and-ride" lot be provided near the interchange of STH 16 and STH 83. Such a lot exists southwest of this interchange; however, a new facility is tentatively planned by WisDOT across the street from this lot and northwest of the intersection of W. Capitol Drive and Vettleson Road, as indicated on Transportation Plan Map 8-2. The new lot or “commuter center” would be served by public transit and include services intended to increase park and ride usage by providing limited day-to-day retail and service needs of commuters and convenience facilities such as public telephones and restrooms, a sheltered transit station and travel/visitor information center, mail services, and a postal station. The proposed development of retail and convenience services (for example, dry cleaners and banking services) at the park-and-ride lot would be established within an aesthetically enhanced environment designed to complement the community’s desired visual character. By promoting transit and car-pooling for longer commuting trips, the vehicular travel demand as well as emission of air pollutants would be reduced, thereby saving motor fuel and capital investment in arterial street and highway improvements.

PUBLIC TRANSPORTATION SYSTEMS MANAGEMENT

Public transportation is the transportation of people by publicly operated vehicles between trip origins and destinations, and may be divided into service provided for the general public, and service provided to special population groups. Examples of special group public transportation include the yellow school bus service funded by local school districts, and fixed route bus service provided by counties or municipalities.

Inter-regional Public Transportation

Air, rail, bus and ferry carriers provide Waukesha County residents with public transportation service between the Southeastern Wisconsin Region and a number of cities and regions across the Country.

Commercial Bus Service

Badger Coaches, Greyhound, Coach USA, and Lamers Bus Lines provide intercity bus service within the Region. Badger Coaches provides daily round trips between Madison, downtown Milwaukee, and Mitchell International Airport. Greyhound has a regional hub in Milwaukee that provides passengers with the opportunity to transfer between buses. Greyhound operates a daily route between Milwaukee and Green Bay with stops in Manitowoc and Oshkosh. Lamers Bus Lines provides a daily roundtrip service between Milwaukee and Wausau. Coach USA provides service between Goerke’s Corners in Waukesha County and Chicago O’Hare International Airport, with stops in downtown Milwaukee and at General Mitchell International Airport. Other employee related bus services are also provided by various employers in Waukesha to serve their private needs and meet their needs for employees from outside of Waukesha County.

Public Bus Transportation

Waukesha Metro Transit oversees eighteen bus routes that travel throughout Waukesha County and parts of Milwaukee County. Waukesha Metro Transit directly operates ten routes to provide bus service within the City of Waukesha. Waukesha Metro Transit administers for all Waukesha County. The County's service contracts with the Milwaukee County Transit System and Wisconsin Coach Lines, Inc. for eight bus routes comprising the Waukesha County Transit System. Wisconsin Coach Lines and the Milwaukee County Transit System operate the other routes for Waukesha Metro Transit. In 2006, sixty-three percent of riders were employed full-time or part-time. In 2008, over 2,700 trips were taken each weekday on the Waukesha Metro, and a total of 1,411,907 riders were carried on Waukesha County and Waukesha City bus routes. Para-transit service is provided to disabled individuals that cannot use fixed route service in accordance with the Federal Americans with Disabilities Act (ADA) of 1990. All transit vehicles that provide conventional fixed-route transit service must be accessible to persons with disabilities, including those persons using wheelchairs.

Employer Supported Transit Service

Several employers within the area provide bus or van transportation to bring workers to Waukesha County. Wisconsin Coach Lines operates a bus route that picks up workers for school bus driving and for work at their facility in Waukesha. JNA, a temporary help service company, operates a bus route from West Bend that brings workers to Waukesha County businesses. Milwaukee Careers Cooperative receives funding from the Wisconsin Employment Transportation Assistance Program to operate a van service that brings workers to River West Nursing Home in Pewaukee, Waukesha Technical College, Ameritech, Target and MTE Inc.

Specialized Transportation

The Rideline program provides lift-equipped vans for non-driving Waukesha County residents age 65 and older, individuals who use a cane, walker, crutches, wheelchair or scooter, or are legally blind. In 2006, Rideline provided 21,307 trips to 427 unduplicated passengers. Over 78 percent of these trips were for medical purposes, about 10 percent were for education, 4 percent for social/recreational opportunities, and 3 percent for shopping.

The shared-fare taxi program provides reduced fares to taxi service to Waukesha County residents age 65 or older, or Waukesha County non-drivers, ages 18 to 64 who receive SSI or SSDI. Waukesha County communities that are involved include, Hartland, Delafield, and Merton. In 2006, 46,246 trips were made with shared-fare taxi. Operators of the shared-fare taxi program include Best Cab of Waukesha, Elmbrook Senior Taxi, Ann Marie Ryan's Transportation Services, Lake Country Cares Cab, Oconomowoc Silver Streak, New Berlin Senior Taxi, Seniors on the Go of Mukwonago, and Mukwonago Senior Taxi. One of the constraints of this program is the fact that it is not offered County wide. In 2006, this program only served residents living in 11 of the 37 communities within the County. Washington County provides a county wide shared taxi service program that could serve as a model. Another constraint is the fact that this service is typically restricted within the municipality and does not support mobility throughout the County.

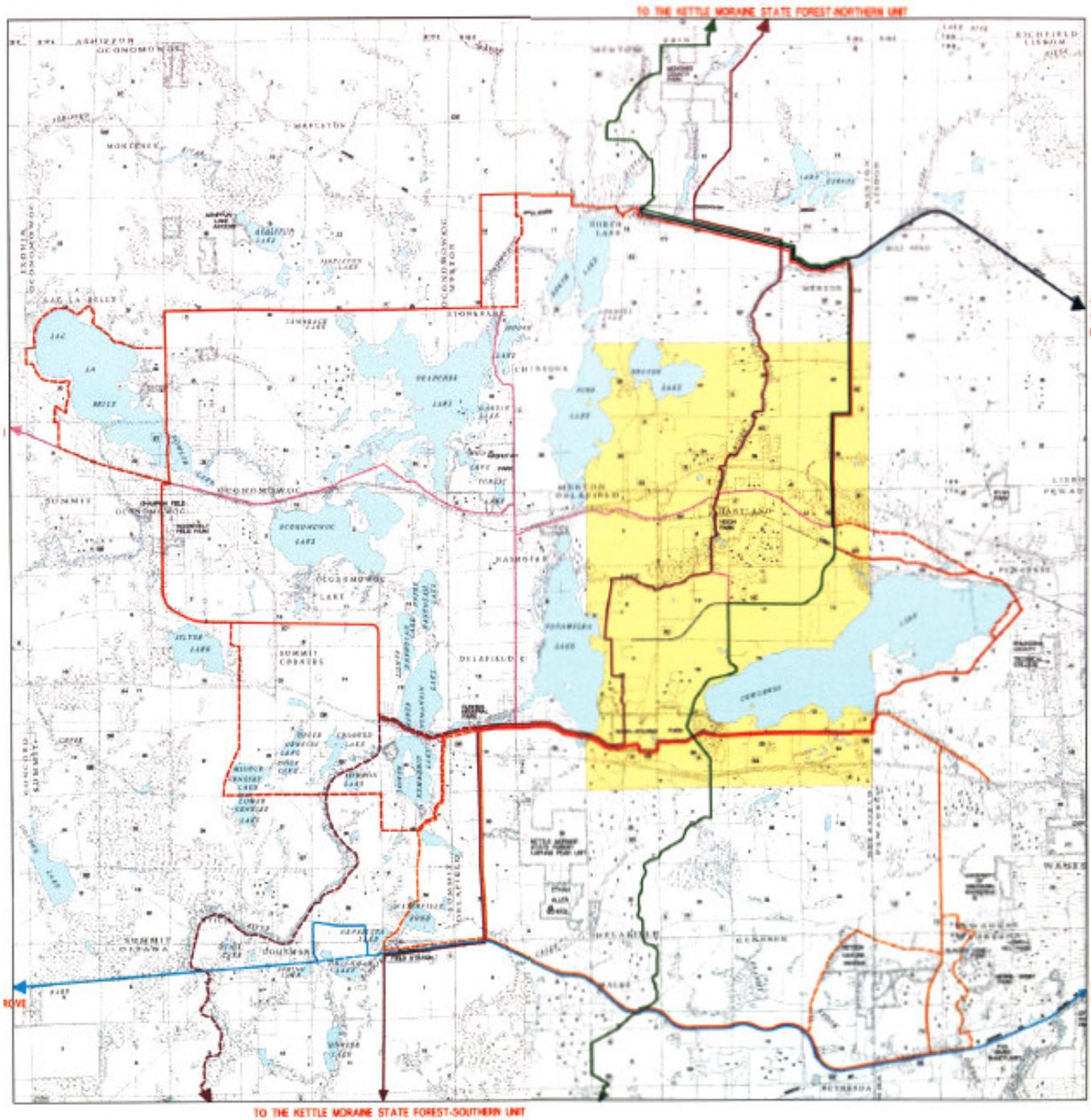
A third program, the shuttle program, serves ambulatory residents of age 60 and over in Menomonee Falls, Sussex and Lisbon. In 2006, The Menomonee Falls bus provided 2,190 trips and the Sussex Senior Shuttle had 720 trips.

BICYCLE AND PEDESTRIAN FACILITIES

The Village of Hartland Comprehensive Plan references the adopted regional bicycle and pedestrian facilities system plan element, presented in SEWRPC Planning Report No. 49, *A Regional Transportation System Plan for Southeastern Wisconsin: 2035*, June 2006. The Village of Hartland has addressed specific bikeways and pedestrian paths in SEWRPC Memorandum Report No. 163, *A Hartland-Merton Cluster Development Plan*, and as presented in the *Comprehensive Outdoor Recreation Plan - Village of Hartland*. These plans provide recommendations to encourage increased bicycle and pedestrian travel as alternatives to travel by automobile within the Region in a safe and efficient manner. The plan includes a recommended regional bicycle-way system designed to provide connections between urbanized areas and incorporated areas. There is additional information following Maps 8-6, 8-7, and 8-8.

Map 8-6

RECOMMENED AREA WIDE BIKEWAY FOR THE LAKE COUNTRY AREA
AND THE VILLAGE OF HARTLAND STUDY AREA: 2035

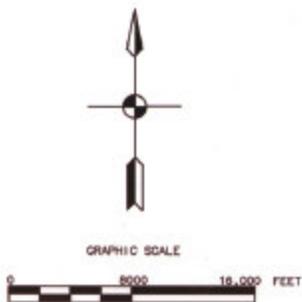


Source: SEWRPC and *A Master Plan for the Village of Hartland: 2020*

Map- 8-6 (Continued)

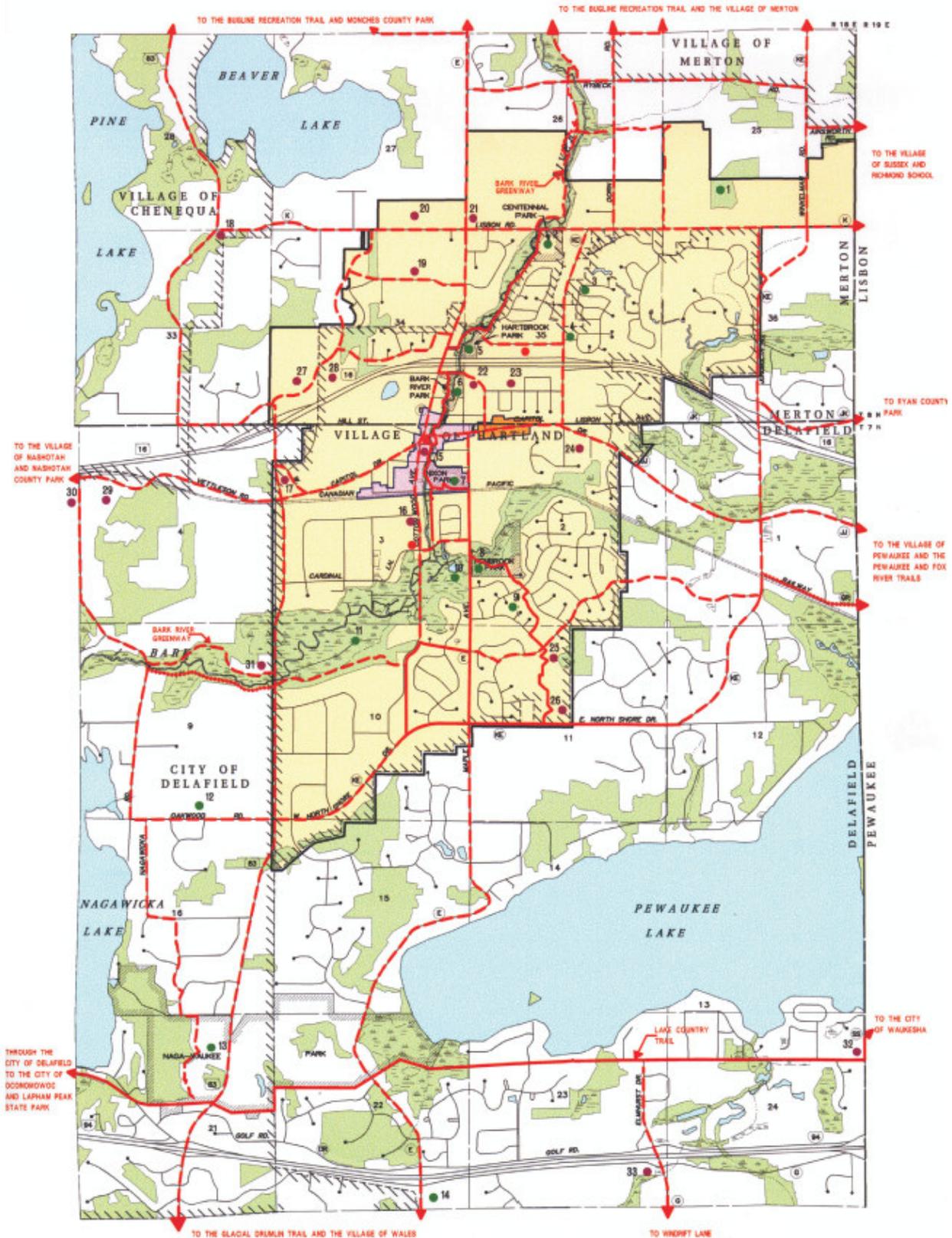
-  HARTLAND STUDY AREA
-  BUGLINE TRAIL
-  GLACIAL DRUMLIN TRAIL
-  ALTERNATIVE ROUTE
-  WOOLY MAMMOTH BIKE TRAIL
(aka ICE AGE BIKE TRAIL)
-  ALTERNATIVE ROUTE
-  KETTLE MORaine BIKE TRAIL
-  KETTLE VIEW BIKE LOOP
-  ALTERNATIVE ROUTE
-  LAKE COUNTRY BIKE LOOP
-  ALTERNATIVE ROUTE
-  KEY CONNECTOR ROUTES
-  SURFACE WATER

NOTE: TRAILS SHOWN PARALLEL TO EACH OTHER SHARE THE SAME TRAIL FACILITY.



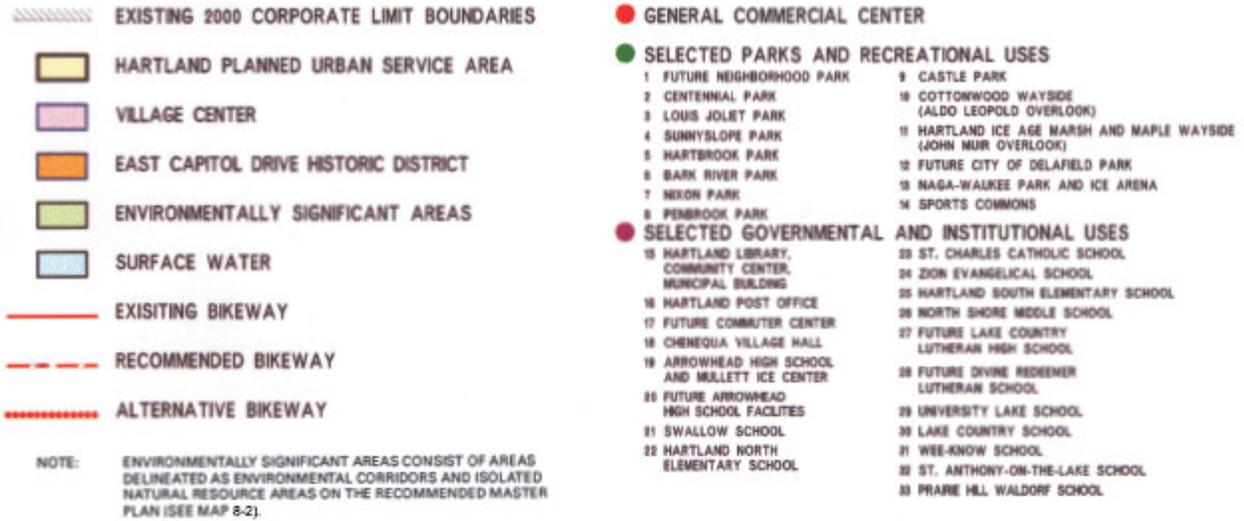
Map 8-7

RECOMMENDED BIKEWAYS FOR THE VILLAGE HARTLAND STUDY AREA



and A Master Plan for the Village of Hartland: 2020

MAP 8-7 (Continued)

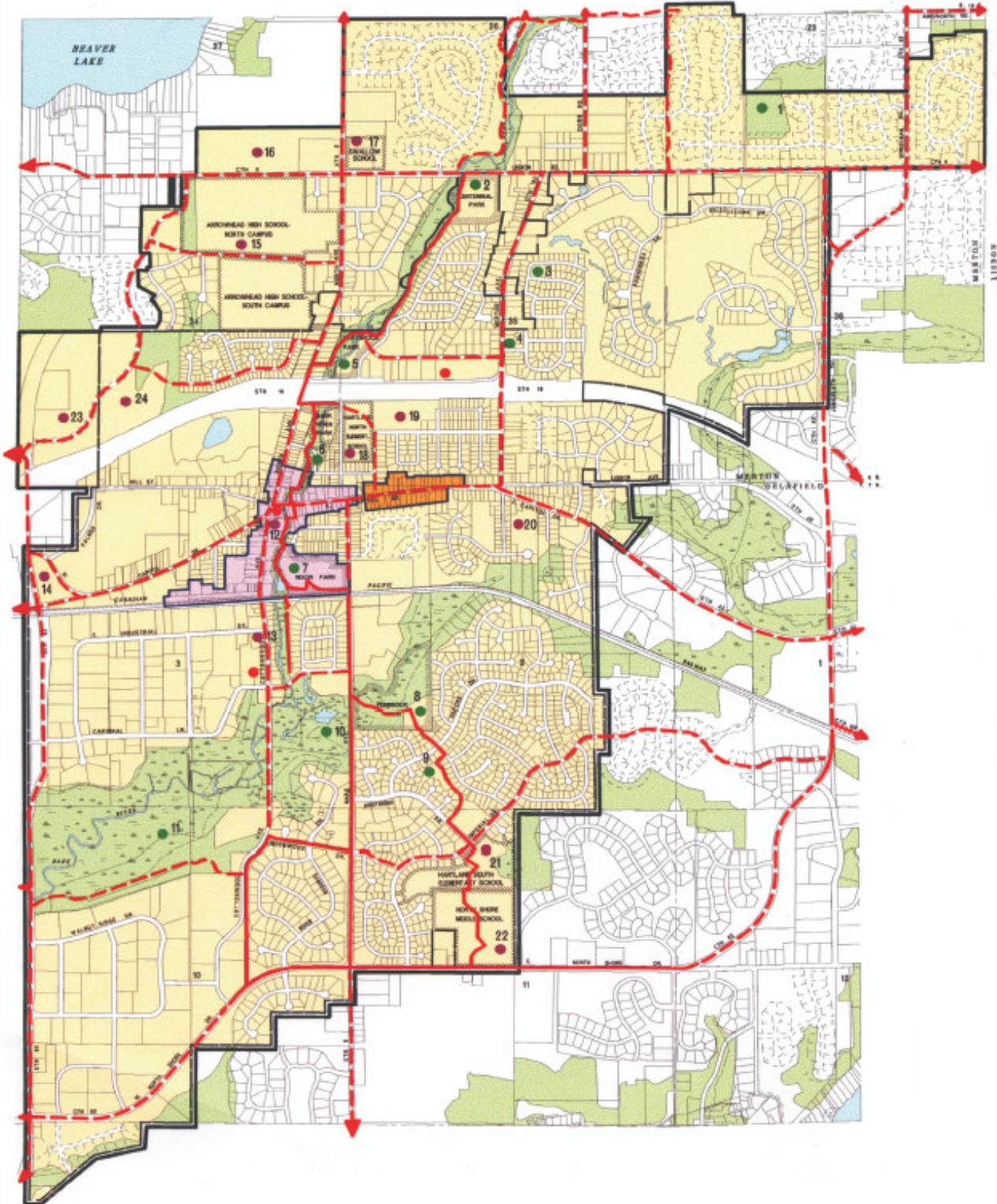


GRAPHIC SCALE



Map 8-8

RECOMMENDED BIKEWAY FOR THE VILLAGE OF HARTLAND PLANNED URBAN SERVICE AREA AND ENVIRONS



Source: SEWRPC.

and A Master Plan for the Village of Hartland: 2020

MAP 8-8 (Continued)

- EXISTING 2000 CORPORATE LIMIT BOUNDARIES
-  HARTLAND PLANNED URBAN SERVICE AREA
-  VILLAGE CENTER
-  EAST CAPITOL DRIVE HISTORIC DISTRICT
-  ENVIRONMENTALLY SIGNIFICANT AREAS
-  SURFACE WATER
-  EXISTING BIKEWAY
-  RECOMMENDED BIKEWAY
-  ALTERNATIVE BIKEWAY
-  GENERAL COMMERCIAL CENTERS
-  SELECTED PARKS AND RECREATIONAL USES
 - 1 FUTURE NEIGHBORHOOD PARK
 - 2 CENTENNIAL PARK
 - 3 LOUIS JOLIET PARK
 - 4 SUNNYSLOPE PARK
 - 5 HARTBROOK PARK
 - 6 BARK RIVER PARK
 - 7 NIXON PARK
 - 8 PENBROOK PARK
 - 9 CASTLE PARK
 - 10 COTTONWOOD WAYSIDE (ALDO LEOPOLD OVERLOOK)
 - 11 HARTLAND ICE AGE MARSH AND MAPLE WAYSIDE (JOHN MUIR OVERLOOK)
-  SELECTED GOVERNMENTAL AND INSTITUTIONAL USES
 - 12 HARTLAND LIBRARY, COMMUNITY CENTER, MUNICIPAL BUILDING
 - 13 HARTLAND POST OFFICE
 - 14 FUTURE COMMUTER CENTER
 - 15 ARROWHEAD HIGH SCHOOL AND MULLETT ICE CENTER
 - 16 FUTURE ARROWHEAD HIGH SCHOOL FACILITIES
 - 17 SWALLOW SCHOOL
 - 18 HARTLAND NORTH ELEMENTARY SCHOOL
 - 19 ST. CHARLES CATHOLIC SCHOOL
 - 20 ZION EVANGELICAL SCHOOL
 - 21 HARTLAND SOUTH ELEMENTARY SCHOOL
 - 22 NORTH SHORE MIDDLE SCHOOL
 - 23 FUTURE LAKE COUNTRY LUTHERAN HIGH SCHOOL
 - 24 FUTURE DIVINE REDEEMER LUTHERAN SCHOOL

NOTE: ENVIRONMENTALLY SIGNIFICANT AREAS CONSIST OF AREAS DELINEATED AS ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS ON THE RECOMMENDED MASTER PLAN (SEE MAP 8-2).



GRAPHIC SCALE



Trail-oriented facilities, such as bikeways, hiking trails, and a water trail, are advanced by the recommended comprehensive plan for both recreational and utilitarian purposes. As shown on Maps 8-6 through 8-10, a network of trails is recommended to traverse the Hartland study area, comprehensively linking residential areas and providing access to major activity centers as well as to significant natural resources. Maps 8-6, 8-7, and 8-9 show main trail routes within the Hartland study area. Maps 8-8 and 8-10 show more detailed network systems for the Village study area and environs indicating not only the primary routes, but also secondary routes connecting residential areas to the main routes. This interlinked network of trails would provide the residents of the Hartland area opportunities for a longer and wider array of trail-oriented recreational pursuits, such as biking, hiking, and canoeing. These trails would also provide safe and convenient pedestrian and bicycle access to major recreation attractions mentioned earlier and to key activity centers such as parks, schools, and shopping areas.

Bikeways¹

Approximately 56 linear miles of designated bikeways—sometimes called bike routes or bike trails—are recommended in the study area to serve recreational and utilitarian purposes by linking Village residents to significant urban and natural features identified on Maps 8-7 and 8-8. As indicated on Map 8-6, it is envisioned that the Village bikeways would be a part of and connect to a larger system of potential area wide bike trails in the Lake Country area, including the existing popular Bugline, Lake Country, and Glacial Drumlin Trails. The most popular bikeway in the Village is the multi-use Bark River Trail which is recommended to continue to extend north and west of the study area. It should be noted that collector and minor land-access streets within the study area can generally function as supplementary bikeways connecting to the primary bikeways shown on the abovementioned maps without widening roadways due to the usually low traffic speed and volume on these streets. Existing busy streets that are recommended as bikeways should provide bicycle facilities as such streets are reconstructed or resurfaced. Bike trails should only be officially designated and used after proper improvements or facilities have been implemented to ensure safe usage.

Recreation Trails

Opportunities for trail-oriented recreation activities such as hiking, bicycling, cross-country skiing, and nature study, and routes for pleasure driving are provided in the study area. In addition to the hiking and cross-country ski trails provided in Naga-Waukees County Park and the Village of Hartland, other major trail facilities traversing the study area are shown on Map 8-9.

These facilities offer the promise of enhancing the quality of the recreational amenities in the Hartland area. As shown on Map 8-9, approximately 4.5 miles of the existing eight-mile Lake Country Trail is located within the study area. The completed portion of this multiple-use recreation trail, which accommodates bicycling, extends approximately eight miles between the Landsberg Center in the northwest corner of the City of Waukesha and east of the study area, to Cushing Park located west of the study area in the City of Delafield. The trail is proposed to be extended 6.5 miles westward from Cushing Park to Roosevelt Park in the City of Oconomowoc.

A portion of the Ice Age National Scenic Trail is also located in the Village of Hartland study area. This trail is a planned 1,000-mile National scenic trail designated by Congress in 1982 as a hiking route which generally follows glacial moraines and other glacial features. The planned trail stretches from Door County in northeastern Wisconsin through the Kettle Moraine area in southeastern Wisconsin to Interstate Park in northwestern Wisconsin. As shown on Map 8-9 and 8-10, about 9.3 miles of the Ice Age National Scenic Trail is planned to traverse through the Hartland study area, of which 5.2 miles are already developed. The Ice Age Park & Trail Foundation acquired and developed, with assistance from the late U.S. Congressman Henry S. Reuss of Wisconsin, volunteers from the local Ice Age Chapter and students and teachers from Arrowhead and Kettle Moraine High Schools, property along the south segment of the Bark River and east of this site. Improvements to the so-named Hartland Ice Age Marsh include a trailhead parking lot at both sites, additional improved trail routes

¹A "bikeway" is a general term that includes any road, path, or way that may legally be used for bicycle travel. Types of bikeways include "bike paths," which are physically separated from motorized vehicles; "bike lanes," where portions of roadways are designated by striping, signing, and pavement markings for the exclusive or preferential use of bicycles; and "shared roadways," that do not have designated bicycle lanes, but may legally be used for bicycle travel. A "bike route" or "bike trail" is a bikeway designated with directional and information markers, and may consist of a combination of bike paths, bike lanes, and shared roadways.

to overlooks, and boardwalks through marshes. The existing Hartland Ice Age Marsh is comprised of a trail network with two overlooks and waysides: the Aldo Leopold Overlook and Cottonwood Wayside on the west of Cottonwood Avenue and the John Muir Overlook and Maple Wayside on the west side of Maple Avenue. A short section of a trail located near the Maple Wayside is one of only three handicapped-accessible sections of the Ice Age Trail in the State that is owned and maintained by the Ice Age Park and Trail Foundation. The trails within the Hartland Ice Age Marsh have been improved to extend this trail westward from the Maple Wayside view platform through the marsh. Those portions of the Ice Age Trail owned or managed by the Ice Age Park and Trail Foundation are generally closed to bicycling.

The main routes of a recommended local trail network that would traverse the Village of Hartland study area, ultimately connecting residential areas to key activity centers are shown on map 8-9. A more detailed trail network system is shown on Map 8-10 for the Hartland Planned Urban Service Area, indicating not only the main trail routes but also the supplemental trail routes connecting planned residential areas to the main routes. Some of these recreation trails will connect to the Village's popular Bark River Trail, which is owned by the village of Hartland, and is a shared-use, wheelchair-accessible paved path that allows for a variety of trail-oriented uses, such as walking, bicycling, in-line skating, roller skiing, and cross-country skiing. As the popularity of this trail continues to grow, the path should be widened whenever possible. The comprehensive plan recognizes that privately owned and maintained trails, such as those within the Hartridge, Hawk's Nest, and Stillmeadows Subdivision, will continue to develop in the Hartland area, as illustrated in SEWRPC Memorandum Report No. 163, *A Hartland-Merton Cluster Development Plan, Waukesha County, Wisconsin*, December 2004.

Water Trail²

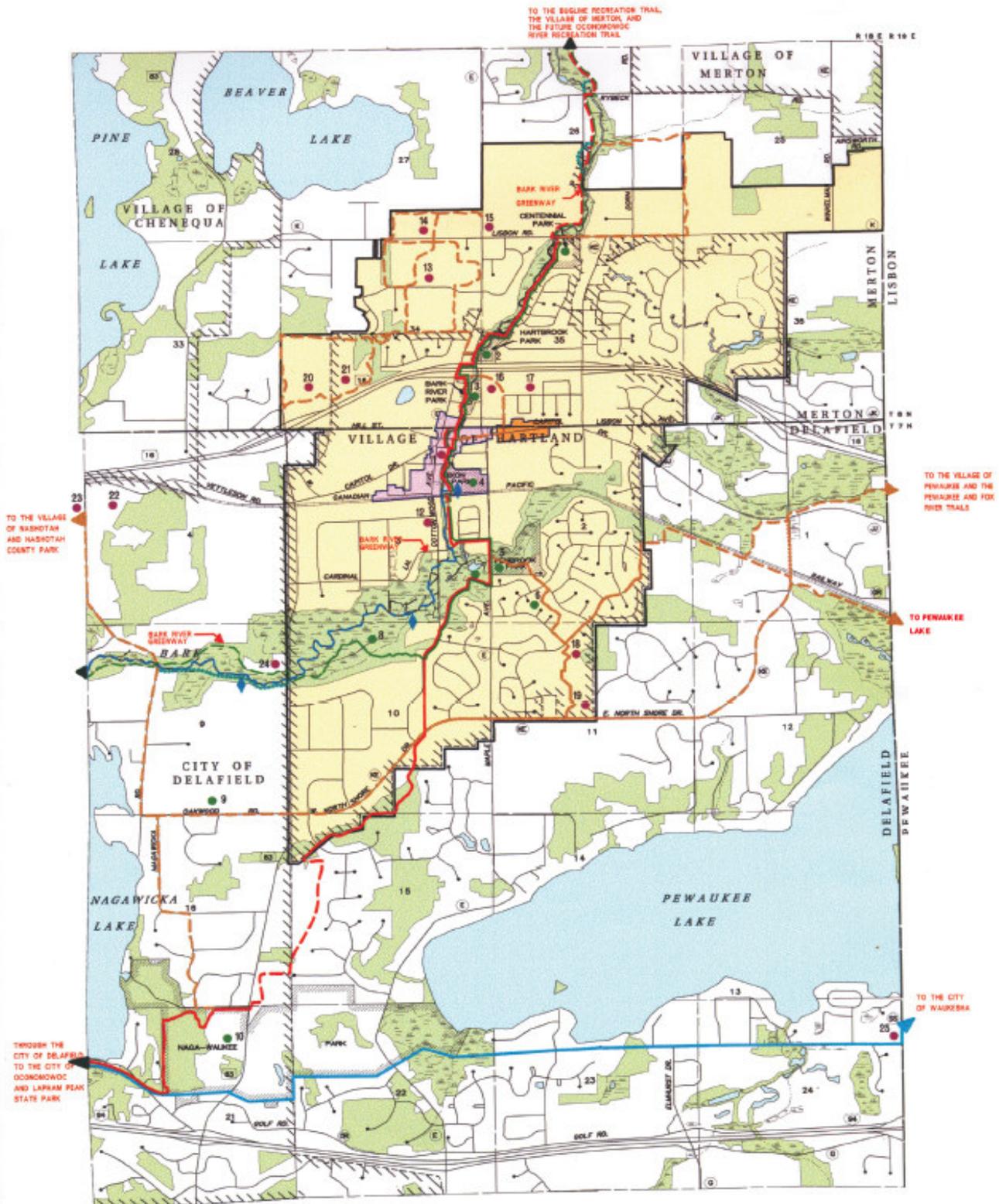
Another type of trail, the Bark River Water Trail, is recommended in the Bark River Greenway as shown on Maps 8-9 and 8-10. This nearly three-mile trail in the Hartland study area consist of the southern portion of the Bark River extending from Nixon Park to the River's confluence with Nagawicka Lake, which could then further connect to a potential water trail designated around the Lake and eventually to where the River continues to flow southwest to the Rock River. This water trail--sometimes referred to as a paddling trail or a canoeing/kayaking trail--would essentially identify part of the Bark River as a navigable waterway that could accommodate low-impact, human-powered watercraft such as canoes and kayaks. Such small watercrafts typically create "no wake" and embrace the "Leave No Trace" code of outdoor ethics, which would promote the responsible use and enjoyment of the ecologically-sensitive marsh areas along the River. The trail would further serve as a place for solitude and respite from the urban environment, while providing educational and recreational opportunities.

Important factors for establishing a water trail are the provision of safe and convenient access to a navigable waterway with unobstructed passageways. Access points in the Village could be established at Nixon Park, which is subject to changing water levels, and/or north of the developed trailhead for the Ice Age Trail at Cottonwood Wayside, which is presently under private ownership but is recommended to be acquired as part of the Hartland Ice Age Marsh. As an alternative, an access point could be provided southwest of the Cottonwood Avenue river crossing. In addition, an access point may be provided west of STH 83 in the City of Delafield as part of the Bark River Greenway. These put-in and take-out destinations should include adequate parking facilities with potential restrooms and picnicking areas. Other trail improvements would include removing litter, clearing logjams for navigability, installing way finding and educational signs, and providing safe portaging areas. In addition, narrow or low underpasses (i.e. small culverts or low bridges) should be replaced with larger openings, when reconstruction is warranted, such as where Cardinal Lane and Cottonwood Avenue crosses the Bark River. Large box culverts or higher bridges are recommended, provided that the floodwater flow and storage capacity is not significantly affected, which is subject to approval by the Wisconsin Department of Natural Resources. Since bridges or overpasses may not be reconstructed for a period of time or not at all, an alternative is to provide safe portaging areas. A durable path should be provided for carrying watercraft, which should consist of more natural, less engineered facilities, such as submerged pavers with openings for vegetation to grow through to help retain the natural river bank appearance, along with providing proper roadside signage forewarning motor vehicle traffic of potential portage crossings.

²A "water trail" is an officially designated trail on a lake (typically along the shoreline), waterway, or portion of a waterway that usually contains a sufficient water level to navigate a small watercraft such as a canoe or kayak with unobstructed passageways while providing safe and convenient access points (put-in and take-out points). Support facilities for water trails may include parking areas, restrooms, and picnic areas.

Map 8-9

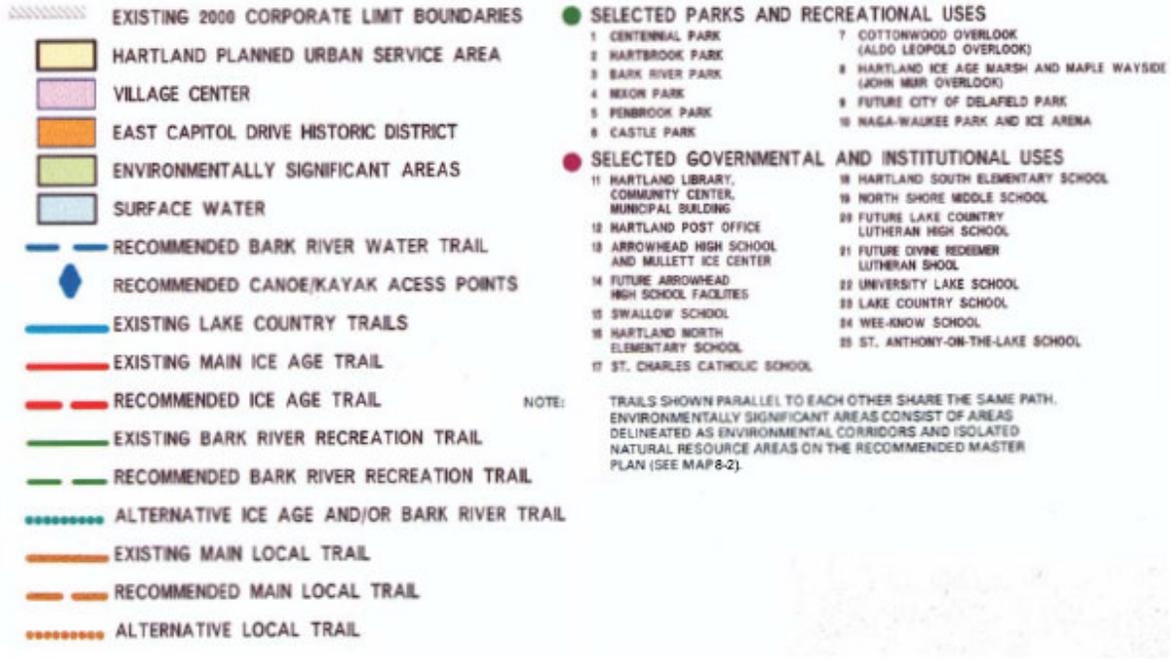
RECOMMENDED WATER TRAIL AND MAIN RECREATION TRAILS
FOR THE VILLAGE HARTLAND STUDY AREA



Source: SEWRPC.

and A Master Plan for the Village of Hartland: 2020

Map 8-9 (Continued)

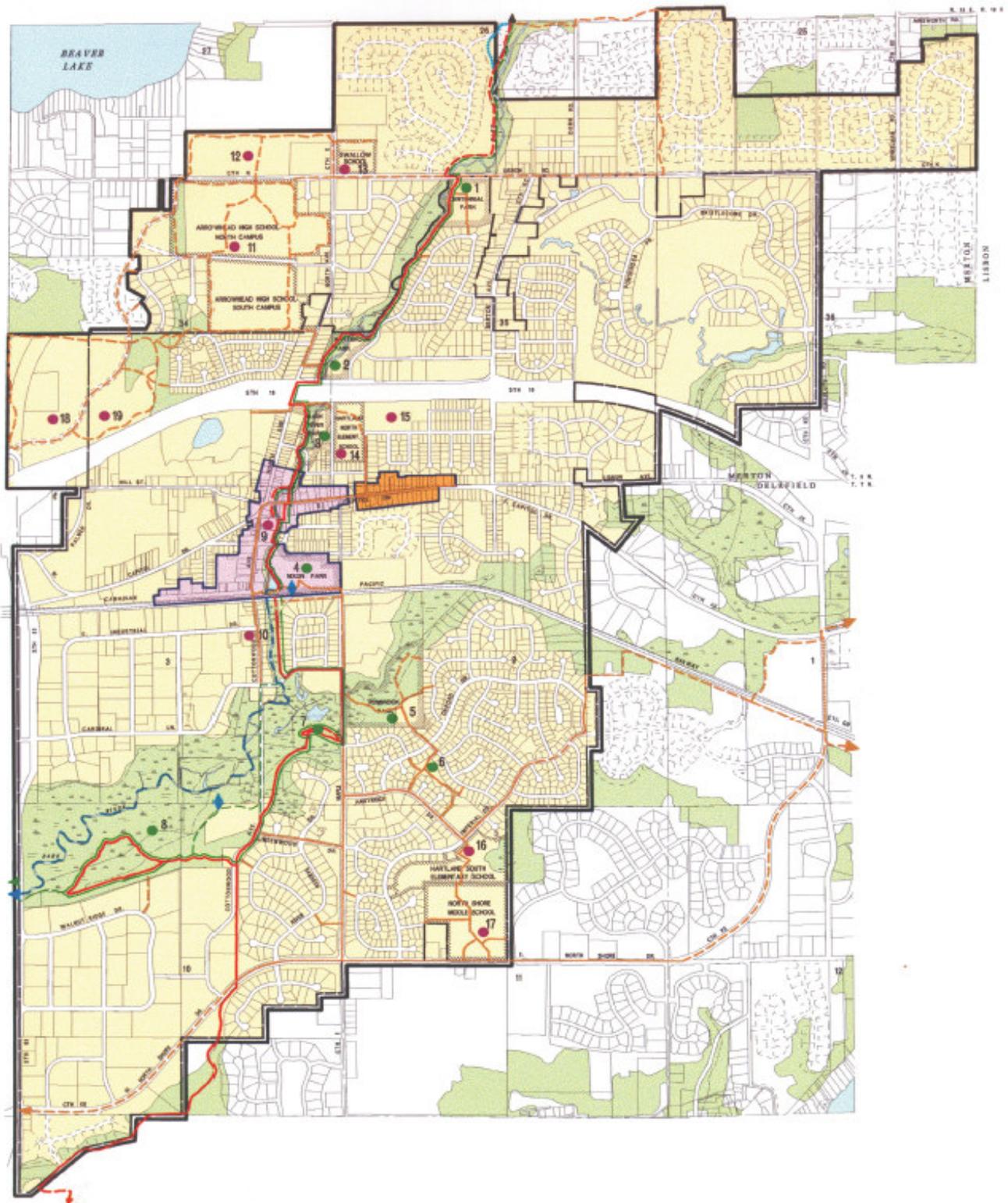


GRAPHIC SCALE



Map 8-10

RECOMMENDED WATER TRAIL AND RECREATION TRAILS FOR THE VILLAGE OF HARTLAND PLANNED URBAN SERVICE AREA AND ENVIRONS: 2035



Source: SEWRPC.

and A Master Plan for the Village of Hartland: 2020

Map 8-10 (Continued)

- EXISTING 2000 CORPORATE LIMIT BOUNDARIES
 - HARTLAND PLANNED URBAN SERVICE AREA
 - VILLAGE CENTER
 - EAST CAPITOL DRIVE HISTORIC DISTRICT
 - ENVIRONMENTALLY SIGNIFICANT AREAS
 - SURFACE WATER
 - RECOMMENDED BARK RIVER WATER TRAIL
 - ◆ RECOMMENDED CANOE/KAYAK ACCESS POINT
 - EXISTING ICE AGE TRAIL
 - - - RECOMMENDED ICE AGE TRAIL
 - EXISTING BARK RIVER RECREATION TRAIL
 - - - RECOMMENDED BARK RIVER RECREATION TRAIL
 - ALTERNATIVE ICE AGE/BARK RIVER TRAIL
 - EXISTING LOCAL TRAIL
 - - - RECOMMENDED LOCAL TRAIL
 - ALTERNATIVE LOCAL TRAIL
 - **SELECTED PARKS AND RECREATIONAL USES**

1 CENTENNIAL PARK	6 CASTLE PARK
2 HARTBROOK PARK	7 COTTONWOOD WAYSIDE (ALDO LEOPOLD OVERLOOK)
3 BARK RIVER PARK	8 HARTLAND ICE AGE MARSH AND MAPLE WAYSIDE (JOHN MUIR OVERLOOK)
4 NIXON PARK	
5 PENBROOK PARK	
 - **SELECTED GOVERNMENTAL AND INSTITUTIONAL USES**

9 HARTLAND LIBRARY, COMMUNITY CENTER, MUNICIPAL BUILDING	14 HARTLAND NORTH ELEMENTARY SCHOOL
10 HARTLAND POST OFFICE	15 ST. CHARLES CATHOLIC SCHOOL
11 ARROWHEAD HIGH SCHOOL AND MULLETT ICE CENTER	16 HARTLAND SOUTH ELEMENTARY SCHOOL
12 FUTURE ARROWHEAD HIGH SCHOOL FACILITIES	17 NORTH SHORE MIDDLE SCHOOL
13 SWALLOW SCHOOL	18 FUTURE LAKE COUNTRY LUTHERAN HIGH SCHOOL
	19 FUTURE DIVINE REDEEMER LUTHERAN SCHOOL
- NOTE: TRAILS SHOWN PARALLEL TO EACH OTHER SHARE THE SAME PATH. ENVIRONMENTALLY SIGNIFICANT AREAS CONSIST OF AREAS DELINEATED AS ENVIRONMENTAL CORRIDORS AND ISOLATED NATURAL RESOURCE AREAS ON THE RECOMMENDED MASTER PLAN (SEE MAP 8-2).



GRAPHIC SCALE



REGIONAL TRANSPORTATION SYSTEM PLAN: 2035

The adopted regional transportation system plan, presented in SEWRPC Planning Report No. 49, *A Regional Transportation System Plan for Southeastern Wisconsin: 2035*, June 2006, provides recommendations on how the regional land use plan can best be served by arterial street and highway and transit facilities. This plan represents the 5th generation of the Transportation Plan, and replaces Report 42 completed in 1997, and will serve as a guide to transportation system development to the year 2035. It recommends a functional and jurisdictional system of arterial streets and highways to serve the Region through the design year 2035, together with a functional network of various types of transit lines. The regional transportation system plan was developed on the basis of careful quantitative analyses of existing and probable future traffic movements within the Region, and of existing highway and transit system capacity and use.

This section refers to the 2035 Regional Transportation System Plan for the Southeastern Wisconsin Region, and includes county and regional information on bicycle-ways, outdoor recreational elements (Map 8-11), and pedestrian facilities. The section concludes with other transportation facilities and services.

Bicycle and Pedestrian Facilities

It is intended to promote safe accommodation of bicycle and pedestrian travel, and encourage bicycle and pedestrian travel as an alternative to personal vehicle travel. The regional plan recommends that as the surface arterial street system of about 3,300 miles in the Region is resurfaced and reconstructed, the provision of accommodation for bicycle travel should be implemented, if feasible, through bicycle lanes, widened outside travel lanes, widened and paved shoulders, or separate bicycle paths. This recommendation would result in an additional 161 miles of off-street bicycle mileage on state, county, and local roads within Waukesha County.

The adopted Regional Bicycle-way System plan related to the Village of Hartland, and the recommended bikeways in Waukesha County are shown on Maps 8-18 and 8-19 from the Regional Transportation Plan. The longest current bikeway in Waukesha County is the Glacial Drumlin Trail that is owned and managed by the Wisconsin Department of Natural Resources. Developed on a former railroad bed, it extends 51 miles from Waukesha to Cottage Grove in Dane County. Daily or annual State Trail Pass for ages 16 and over required, except on the City of Waukesha trails segment from the Fox River Sanctuary to McArthur Rd. The Wisconsin Department of Transportation published a map of bicycling conditions for Waukesha County. This map shows bicycle touring trails, urban escape routes, best roads for biking, and mountain bike trails on Map 8-12.

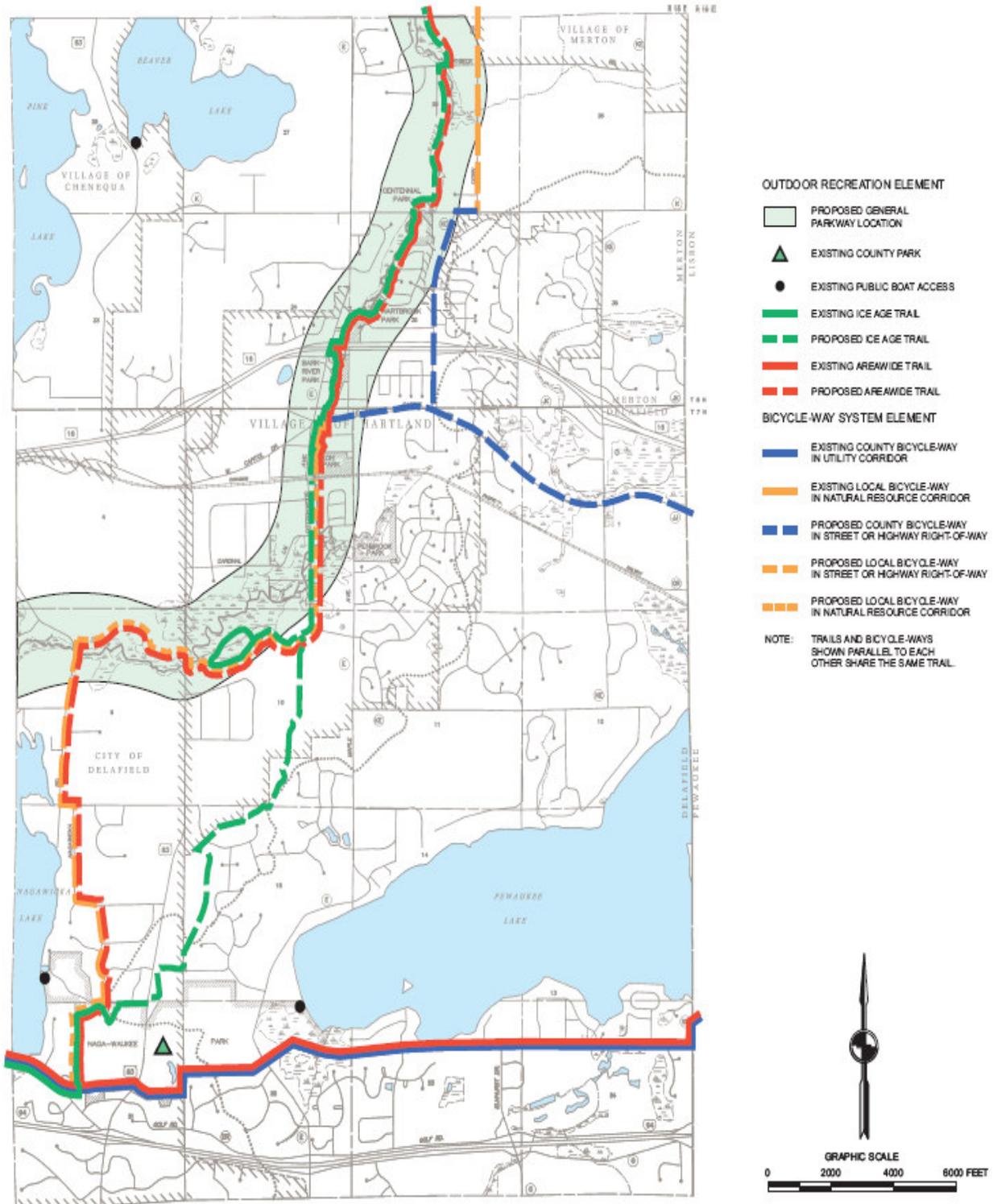
Waukesha County currently owns and manages three bikeways within the County. The Bugline Recreation Trail is a 12.2-mile trail located on the former Chicago, Milwaukee, St. Paul, and Pacific Railroad right-of-way. It stretches between Appleton Ave (State Trunk Highway 175) in Menomonee Falls and Main Street (County Trunk Highway VV) in the Village of Merton. A separate 4 foot wide bridle trail adjacent to the original 8 foot wide recreation trail extends 2.5 miles from The Ranch in Menomonee Falls to Menomonee Park where it joins the Park bridle trails

The Lake Country Recreation Trail is located on the former Milwaukee - Watertown Interurban Railway. It was popular in the late 1800's as a direct link between Waukesha and the Oconomowoc Lake country. This 8-mile recreation trail now utilizes the Wisconsin Electric Power Company right-of-way. It stretches between the Landsberg Center trailhead (just north of Interstate Highway 94 on Golf Road, west of County Trunk Highway T) and Cushing Park in the City of Delafield. The Waukesha County Development Plan suggested that this trail be extended 7 miles to Oconomowoc. Jefferson County identified the segment of the Wisconsin Electric Company right-of-way between Oconomowoc and Watertown as a high priority for conversion to a multi-use trail in their County bike plan.

The New Berlin Recreation Trail is a 7-mile lineal recreation trail located on the Wisconsin Electric Power Company right-of-way in the City of New Berlin. It extends from South 124th Street just south of Greenfield Ave. (State Highway 59) at the Milwaukee/ Waukesha County Line to Springdale Road in Waukesha. The New Berlin Trail connects to the Milwaukee Oak Leaf Bike Trail in Greenfield Park. A connection to the State DNR Glacial Drumlin Trail is possible by using city streets through Waukesha. In an effort to provide continuity of trails into neighboring counties, where available, references to those adjacent plans will be noted on Map 8-18 and Map 8-19. Specifically, Dodge County in their 2003 Bicycle and Pedestrian Plan recommended bike lane development along County Trunk Highway P extending to the Waukesha County line.

Map 8-11

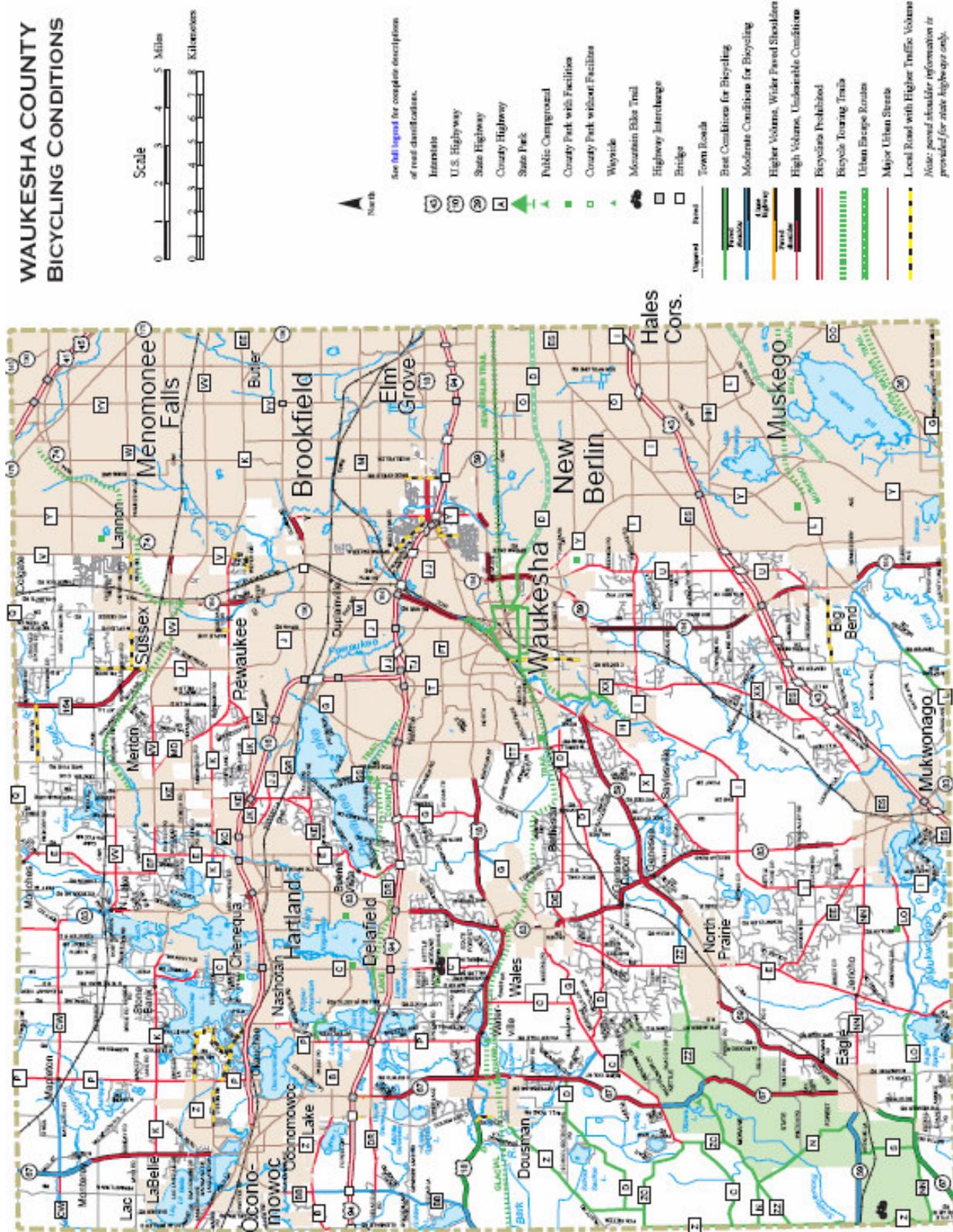
ADOPTED REGIONAL BICYCLE-WAY SYSTEM PLAN AND THE OUTDOOR RECREATION ELEMENT OF THE ADOPTED WAUKESHA COUNTY PARK AND OPEN SPACE PLAN FOR THE VILLAGE OF HARTLAND STUDY AREA: 2035



Source: Waukesha County and SEWRPC.
and A Master Plan for the Village of Hartland: 2020

Map 8-12

BICYCLING CONDITIONS IN WAUKESHA COUNTY



Pedestrian Facilities

A comprehensive inventory of pedestrian facilities, such as sidewalks, has not been completed for communities in Waukesha County. However, SEWRPC developed a pedestrian facilities policy, which applies to Waukesha County, as documented in the bicycle and pedestrian systems element of the 2035 Regional Transportation System Plan. It recommends that the various units and agencies of government responsible for the construction and maintenance of pedestrian facilities in the Region adopt and follow certain recommended policies and guidelines with regard to the development of those facilities. These policies and guidelines are designed to facilitate safe and efficient pedestrian travel within the Region and are documented in Appendix B of the Regional Transportation System Plan. Recommendations for provisions of sidewalks in areas of existing or planned urban development are summarized in Table 8-3.

Table 8-3

RECOMMENDATIONS FOR PROVISION OF SIDEWALKS IN AREAS OF EXISTING OR PLANNED URBAN DEVELOPMENT

Roadway Functional Classification	Land Use	New Streets ^a	Existing Streets ^a
Arterial Streets ^b	Industrial	Both Sides	Both Sides
	Commercial	Both Sides	Both Sides
	Residential	Both Sides	Both Sides
Collector Streets	Industrial	Both Sides	Both Sides
	Commercial	Both Sides	Both Sides
	Residential	Both Sides	At least One Side
Land Access Streets ^c	Industrial	Both Sides	Both Sides
	Commercial	Both Sides	Both Sides
	Residential (medium and high-density)	Both Sides	At least One Side
	Residential (low-density) ^d	At least One Side	At least One Side

^aSidewalks may be omitted on one side of streets where there are no existing or anticipated uses that would generate pedestrian trips on that side.

^bWhere there are marginal access control or service roads, the sidewalk along the main road may be eliminated and replaced by a sidewalk along the service road on the side away from the main road.

^cSidewalks need not be provided along courts and cul-de-sac streets less than 600 feet in length, unless such streets serve multi-family development; or along streets served by parallel off-street walkways.

^dIn low-density residential cluster developments, sidewalks could be replaced by perimeter and interior pathway systems.

Source: SEWRPC.

OTHER TRANSPORTATION FACILITIES AND SERVICES

Passenger Rail Service

Amtrak operates its Chicago-Seattle intercity passenger service in the Region, the nearest stops being the Milwaukee Amtrak depot, Mitchell International Airport, and Sturtevant. Amtrak provides no stops in Waukesha County at this time. The adopted regional transportation system plan for southeastern Wisconsin includes this railroad line as a possible candidate for consideration of commuter rail service as an alternative to express bus service. To date, further consideration of commuter rail service in this corridor has not been requested by affected local governments. The Wisconsin Department of Transportation has also considered initiation of a high speed intercity passenger rail service over this line between Milwaukee, Madison, and Minneapolis-St. Paul but has not yet made a decision to implement such a service.

Specialty Rail Services

The East Troy Electric Railroad is a 7 mile stretch of track from East Troy to Mukwonago. The line dates back to 1907 when it was part of the Milwaukee Electric Railway and Light Company line from East Troy to Milwaukee. The East Troy-Mukwonago segment was transferred to the Village of East Troy in 1939 and the remainder of the line to Milwaukee was abandoned. Between 1995 and 2000 the Friends of the East Troy Railroad Museum purchased the rail line and it operates it as a tourist destination offering rail rides on a weekly basis during the spring through fall season.

Rail Freight Service

Other Railway freight service in Waukesha County is provided by four railroad companies. (Map 8-13). These include the Union Pacific Railroad, Canadian National Railroad, Canadian Pacific Railway, and Wisconsin & Southern Railroad Company. All four railroads provide rail freight transportation to Metropolitan Chicago. About one-third of the rail traffic in the United States (including much of Wisconsin's rail freight) originates, terminates, or passes through Metropolitan Chicago.

Union Pacific, with headquarters in Omaha, Nebraska, is the largest railroad in North America, operating in the western two-thirds of the United States. The railroad serves 23 states, linking every major West Coast and Gulf Coast port and provides service to the east through its four major gateways in Chicago, St. Louis, Memphis and New Orleans. Additionally, Union Pacific operates key north/south corridors and is the only railroad to serve all six major gateways to Mexico. The railroad is the nation's largest hauler of chemicals, much of which originates along the Gulf Coast near Houston, Texas. Union Pacific is also one of the largest intermodal carriers – that is the transport of truck trailers and containers.

The Canadian Pacific Railway is a transcontinental railroad stretching from Vancouver to Montreal, and also serves major cities in the United States such as Minneapolis, Chicago, and New York City. Its headquarters are in Calgary, Alberta. In 1992, The Canadian Pacific Railway purchased the Soo Line Railroad. Over half of the Canadian Pacific Railway's freight traffic is in coal, grain, and intermodal freight, and the vast majority of its profits are made in western Canada. It also ships automotive parts and assembled automobiles, sulfur, fertilizers, other chemicals, forest products, and other types of commodities. The busiest part of its railway network is along its main line between Calgary and Vancouver.

Canadian National Railroad, a transcontinental railroad headquartered in Montreal, Quebec, serves ports on the Atlantic, Pacific, and Gulf coasts. It links customers to the United States, Canada, and Mexico. Canadian National derives revenues from the movement of petroleum and chemicals, grain, fertilizers, coal, metals, minerals, forest products, intermodal, and automotive. In 2001, Canadian National Railroad purchased Wisconsin Central Ltd. Wisconsin & Southern Railroad Co. (WSOR), a regional railroad with headquarters in Milwaukee, operates 700 miles of track (600 owned or leased and 100 in trackage rights) throughout south central Wisconsin and northeastern Illinois. It serves Waukesha, Genesee Depot, North Prairie, and Eagle in Waukesha County. The mission of WSOR is to provide rail freight service to rural communities in southern Wisconsin. In Waukesha County, WSOR operates over publicly owned railroad lines owned by the Wisconsin Department of Transportation and the Wisconsin River Rail Transit Commission.

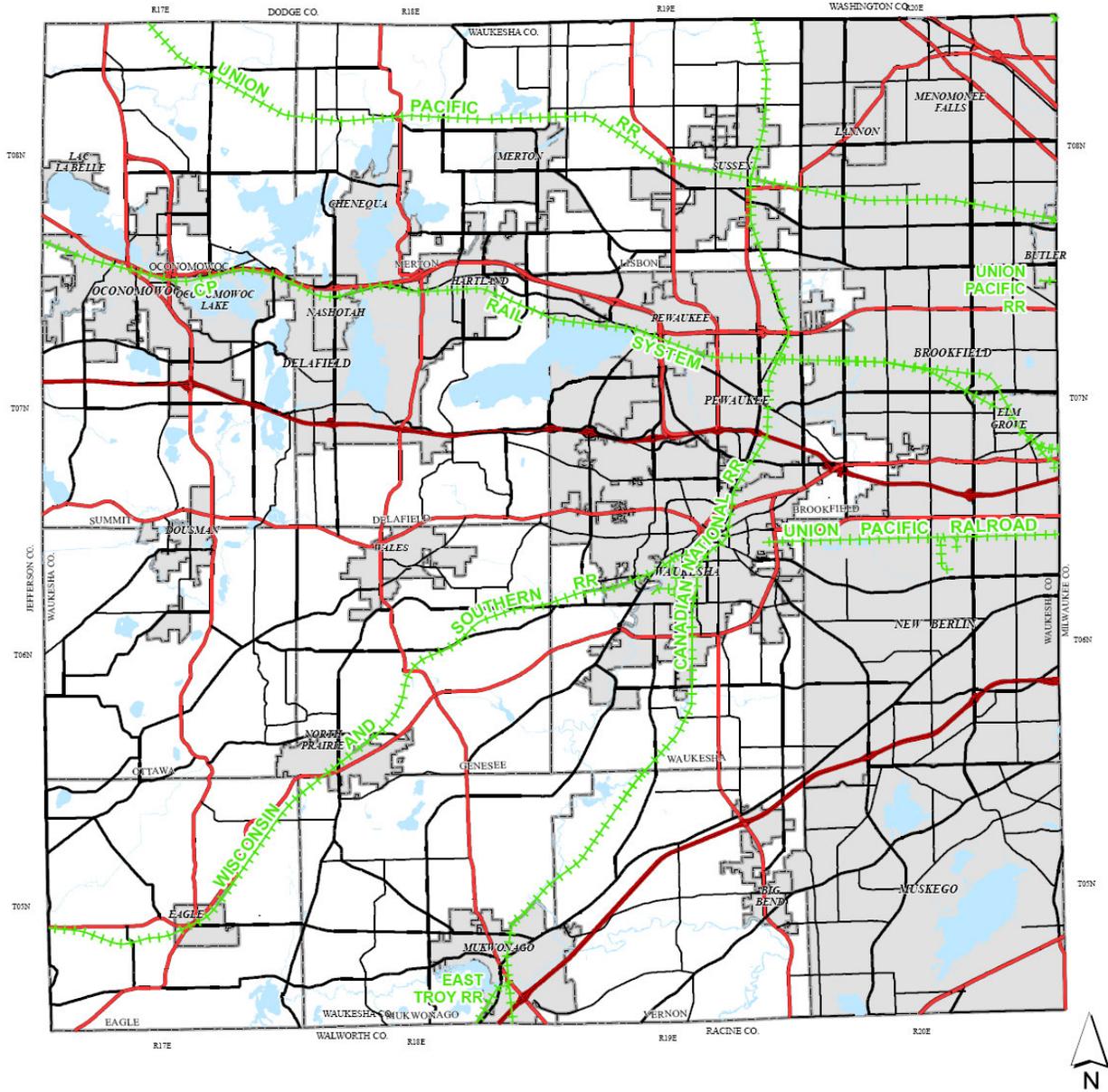
Between 1990 and 2004, rail freight traffic nearly doubled in Wisconsin exceeding 27.4 billion ton-miles and resulting in over 713 million in revenue. This increase in traffic has resulted in a need to consider additional grade crossing separations at busy intersections and quiet zones where railroad locomotives are prohibited from sounding horns.

Rail Intermodal Facilities

Intermodal facilities are locations where bulk or containerized commodities are transferred from one mode of transportation to another. Intermodal transportation seeks to take advantage of the most cost-effective elements of each individual mode and maximize overall transportation efficiency. In 2004, The Port of Milwaukee is the only truck-rail intermodal facility operating in Southeastern Wisconsin. The 2020 Wisconsin Department of Transportation forecast indicates that six Wisconsin counties have concentrations of the types of commodities that generally indicate the potential for truck-rail intermodal movement (Brown, Dane, Outagamie, Milwaukee, Waukesha, and Winnebago). Nearly two-thirds of this estimate was identified as coming from, or to, Milwaukee and Waukesha counties. Currently, many shipments or destinations in Wisconsin are currently trucked to/from intermodal facilities located in Metropolitan Chicago or the Minneapolis/St. Paul metropolitan area.

Map 8-13

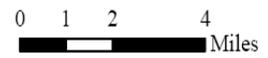
EXISTING RAILROAD ROUTES IN WAUKESHA COUNTY, 2007



Legend

- Interstate
- US
- State
- County
- Local Major
- Major Water Body
- Town
- City or Village
- Railroads

Source: Waukesha Co. Parks and Land Use



Civil Divisions as of 04/30/07
 Prepared by Waukesha Co.
 Dept. of Parks and Land Use

Ferry

There are no ferry services within the County. High speed cross-Lake Michigan ferry services are provided between Milwaukee and Muskegon, Michigan by Lake Express. This ferry service operates from April to October each year and handles automobiles, small trucks, and passengers.

Ports and Harbors

There are no harbors within the County. Water freight and transportation facilities are provided to Waukesha County by the Port of Milwaukee, located about 20 miles east of the planning area in the City of Milwaukee. In 2006, the Port of Milwaukee handled over 3.5 million tons of Wisconsin commodities.

Air Service

Air services provide people, businesses, and goods with direct access to regional, national and international markets. The primary commercial airport serving Waukesha County with scheduled air carrier service is General Mitchell International Airport, owned and operated by Milwaukee County. Located within the City of Milwaukee, Mitchell International is the largest airport in Wisconsin and is served by 13 airlines offering about 235 departures and arrivals every day. Approximately 90 cities are served by nonstop or direct flights from Mitchell International.

Two principal airport facilities in Waukesha County provide general aviation services, those being Waukesha County-Crites Field and Capitol Airport. Crites Field, owned and operated by Waukesha County, is the larger of the two and can accommodate all types of general aviation aircraft up to and including business and corporate jets. It is equipped for full instrument landing system approaches and in 2006, handled about 60,000 aircraft operations. Capitol Airport is a private airport open to public use and provides an important facility for smaller business, personal, and recreational aircraft. Both Crites Field and Capitol Airport are reliever facilities for General Mitchell International Airport. Although Capitol Airport has more limitations on the size of aircrafts being serviced, it is generally limited to smaller aircrafts than Crites Field. The City of Brookfield does not support retaining the Capitol Airport as designated in the Regional Year 2035 Land Use Plan as noted in the City's Resolution 7655-06. The City of Pewaukee has also recently indicated they do not support retention of Capital Airport.

STATE TRANSPORTATION PROGRAMS

WisDOT maintains 11,753 miles out of 112,262 miles of the public roads in the State. The State highway system includes 750 miles of interstate freeways and 11,010 miles of state and US-marked highways. The state highway system represents only 10.5% of all of the public road mileage in Wisconsin, but the State highways carry about 60% of the highway travel each year. The following list of programs provides state and federal funds to assist local governments. A more complete description of each program can be found in the Waukesha County Comprehensive Development Plan in Chapter 8.

- Corridors 2020
- Airport Improvement Program
- Freight Rail Infrastructure Improvement Program
- Freight Rail Preservation Program
- Midwest Regional Rail Initiative
- Transportation Economic Assistance Program
- Congestion Mitigation and Air Quality Improvement Program
- Disadvantaged Business Enterprise Program
- Wisconsin Highway Improvement Program
- In This Together Program
- Local Transportation Enhancements Program
- Rustic Roads Program
- Scenic Byways Program
- Tourist Oriented Directional Sign Program
- Transit Assistance Programs

SUMMARY

If the Comprehensive Plan is to constitute a sound and realistic guide for making decisions concerning the physical development of the Village and environs, then pertinent transportation issues of the built environment must be given due consideration. This chapter has presented a description of various aspects of the transportation system within the Village of Hartland. The most important findings are as follows:

- An efficient, durable, cost-effective transportation system is essential to the sound social, community, and economic development of the Village of Hartland. This plan includes review of roads, transit services, bicycle lanes, trails, pedestrian paths, as well as rail services, airports, and water ports and harbors.
- The Waukesha County Comprehensive Development Plan includes a transportation plan, which addresses an arterial street and highway system plan, and a public transit system plan intended to serve the County through the year 2010 and beyond. A synopsis of information from the Waukesha County Development Plan includes specific recommendations regarding streets in the Village that may be reclassified, or relocated to promote a smooth and efficient traffic flow for vehicles moving north east of the Village.
- The Village of Hartland Recommended Transportation Plan, Map 8-2, reflects a realignment of CTH KE south of Lisbon Road (CTH K). This alignment is endorsed by the Village and by SEWRPC, as shown in SEWRPC Planning Report No. 49, due to safety concerns and construction expenses. Therefore, Village transportation plan will continue to show the street system as indicated on Maps 8-1 and 8-2
- Four traffic studies pertinent to the Village of Hartland have been completed by the Regional Planning Commission. The studies occurred in 1983, 1985, 1996, and 2000, and address transportation concerns in all areas of the Village.
- Official mapping authority, granted to the Village under Section 62.23(6) of the *Wisconsin Statutes*, is an important but historically underutilized plan implementation device. The official map is one of the most effective and efficient devices to manage the problem of reserving land for future public use. The Village recently adopted its first Official Map for the Village and environs on April 12, 1999. The adoption of the official map prevents the construction of buildings or structures and their associated improvements, on lands designated for future public use.
- The Transportation Facilities and Services section contains three elements: arterial streets and highway, public transportation systems management, and bicycle and pedestrian facilities, and presents inventories of the existing transportation system in Waukesha County and the Village of Hartland.
- The Other Transportation Facilities and Services section contains information on Passenger Rail Service, Specialty Rail Services, Rail Freight Service, Rail Intermodal Facilities, Ferry Service, Ports and Harbors, and Air Services.
- WisDOT maintains 11,753 miles out of 112,262 miles of the public roads in the State. The State highway system includes 750 miles of interstate freeways and 11,010 miles of state and US-marked highways. The state highway system represents only 10.5% of all of the public road mileage in Wisconsin, but the State highways carry about 60% of the highway travel each year.

TRANSPORTATION OBJECTIVE

The following list provides an overview of Planning Objectives for this Chapter.

OBJECTIVE NO. 1 – TRANSPORTATION SYSTEM

To provide an integrated transportation system which will effectively serve travel demand generated by the existing and proposed land uses, and will do so by providing high aesthetic quality through its location, capacity, and design,

Principle

An integrated transportation system connects various land use activities in neighborhoods, communities, counties, and the Region, thereby providing the accessibility needed to support these activities. As a major feature of a community, transportation facilities should possess a high aesthetic quality with proper visual relation to the land- and cityscape to help preserve the beauty of the physical environment, which is conducive to the mental health and well-being of people.

Standards

1. Arterial streets and highways and supporting collector and land access streets should provide access not only to all land presently devoted to urban use but also to land planned for such use. All streets and highways in the Village of Hartland study area should be placed into one of the following functional classifications:
 - **Minor Land-Access Streets**
This subsystem provides access to and from individual building sites.
 - **Collector Streets**
This subsystem collects traffic from urban uses abutting land access streets and conveys it to arterial streets and/or activity centers.
 - **Arterial Streets**
This subsystem provides for the expeditious movement of through traffic into, out of, and within the community. Where possible, arterial streets should not be located through existing, or planned residential neighborhoods.
2. Streets and highways in the Village of Hartland study area should be improved to cross-sections that are similar to the Village of Hartland's preferred cross-sections shown in Figure C-1 in the street design guidelines section of Appendix C.
3. The Village should support a regional transportation system plan which includes a mass transit element for the greater Milwaukee area.
4. Off-street parking and loading facilities should be located near land uses which they are intended to serve.
5. Bicycle and pedestrian facilities should be provided as part of an overall transportation system to reduce air pollution, reduce energy consumption, encourage outdoor recreational pursuits, improve public health, reduce transportation cost, and provide for convenient travel between residential areas and shopping centers, schools, parks, and transit facilities. A community bicycle and pedestrian facilities plan should be based, in part, on the planning and design standards established for such facilities in SEWRPC Planning Report No. 49, *A Regional Transportation System Plan for Southeastern Wisconsin: 2035*, June 2006. Bikeways and pedestrian ways should:

- a. Be provided to connect residential areas with major activity centers and places of employment located within reasonable walking and biking distances of such areas.
 - b. Facilitate bicycle parking and storage facilities should be provided at all major activity centers.
 - c. Be detailed in the Village of Hartland Park and Transportation System Plan.
6. Transportation facilities have a significant impact on the visual character of a community and, therefore, should meet the following standards:
- a. Transportation facility construction plans should be developed using sound geometric, structural, and landscape design standards which consider the aesthetic quality of the transportation facilities and the areas through which they pass.
 - b. Transportation facilities should be so located as to avoid or minimize disturbance of visually pleasing buildings, structures, historic sites, and natural features and to enhance, and avoid interference with, vistas to such features.

TRANSPORTATION - IMPLEMENTATION RECOMMENDATIONS

The implementation recommendations are based on the 2035 Regional Transportation System Plan for Southeastern Wisconsin, which is multi-modal in nature, dealing with bicycle and pedestrian, travel demand management, transportation systems management, arterial streets and highways, and public transit.. The plan is designed to serve, and be consistent with, the Year 2035 Regional Land Use Plan. The development of the recommended multi-modal program includes consideration and development of the travel demand management, transportation systems management, bicycle and pedestrian, and public transit elements of the plan. Arterial street and highway improvement and expansion was considered only to address the residual high traffic volumes and attendant traffic congestion, which may not be alleviated by travel demand management, transportation systems management, bicycle and pedestrian facilities, and public transit.

The recommendations set forth below are presented in abbreviated form in order to focus on only those areas affecting the Village of Hartland. A detailed review of this recommendation can be found in the Regional Transportation System Plan for Southeastern Wisconsin, and the transportation development objectives, principles, and standards in Chapter 7 of the regional plan.

Jurisdictional Recommendations

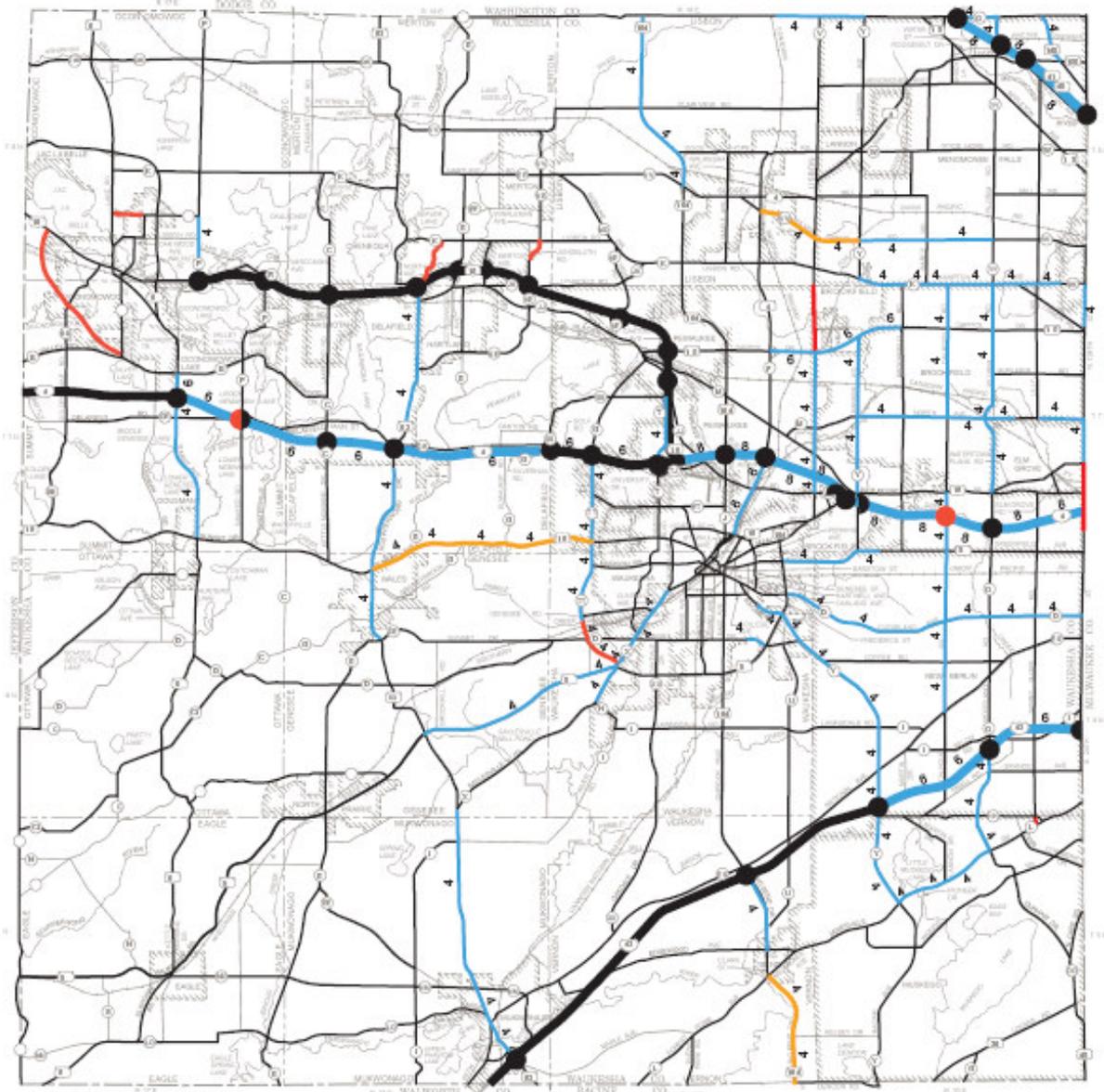
Jurisdictional classification establishes which level of government – state, county, or local – has or should have responsibility for the design, construction, maintenance, and operation of each segment of the total street and highway system. Jurisdictional classification is intended to group all streets and highways logically into subsystems under the jurisdiction of given level of government. The recommended Waukesha County jurisdictional arterial street and highway system plan map for the year 2035 is based upon the extension of the year 2020 plan to the year 2035. The Village of Hartland has not adopted the Waukesha County Plan, but instead has endorsed SEWRPC Planning Report No. 49, *A Regional Transportation System Plan for Southeastern Wisconsin: 2035*, June 2006

Arterial Street and Highway System Functional Improvements

The Regional Transportation System Plan for Southeastern Wisconsin: 2035 identifies recommended functional improvements to the arterial street and highway system in Waukesha County (Map 8-14). These recommendations are divided into three categories: *System Preservation* – the proposed resurfacing, reconstruction, and modernization of arterials (as needed) at the same capacity as exists today; *System Improvement* – the proposed widening of existing arterials to carry additional traffic lanes; and *System Expansion* – the proposed construction of new arterial facilities.

Map 8-14

FUNCTIONAL IMPROVEMENTS TO THE ARTERIAL STREET AND HIGHWAY SYSTEM IN WAUKESHA COUNTY 2035: RECOMMENDED REGIONAL TRANSPORTATION SYSTEM PLAN



ARTERIAL STREET OR HIGHWAY

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT, ADDITIONAL CAPACITY OR NEW FACILITY
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY

4 NUMBER OF TRAFFIC LANES FOR NEW OR WIDENED AND/OR IMPROVED FACILITY. 2 LANES WHERE UNNUMBERED

FREEWAY INTERCHANGE

- NEW
- ◐ NEW HALF
- EXISTING

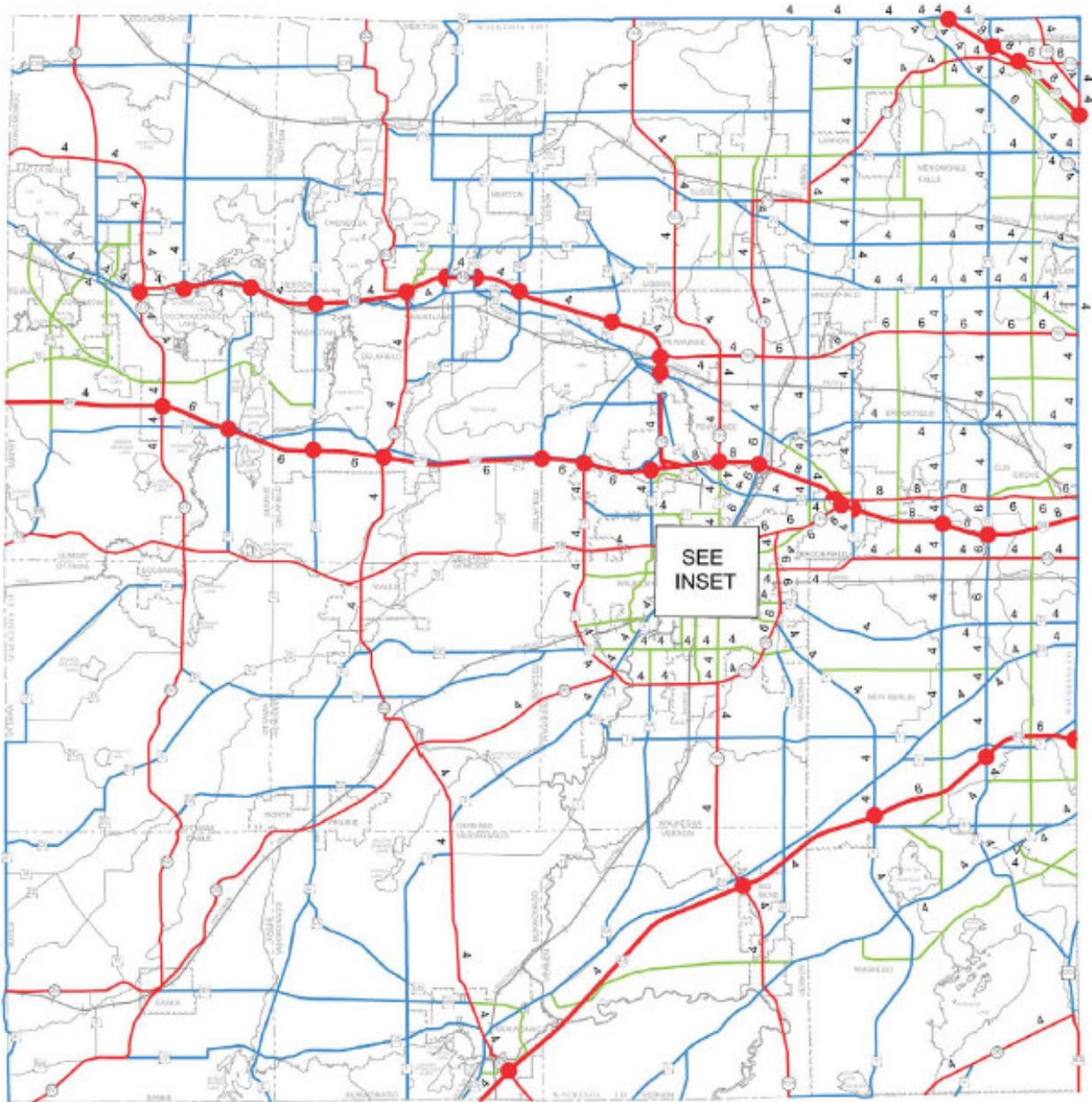
Source: SEWRPC.

THE FOLLOWING NOTES SUPPLEMENT THE RECOMMENDATIONS PORTRAYED ON THIS MAP:

1. Each proposed arterial street and highway improvement and expansion, and, as well, preservation project, would need to undergo preliminary engineering and environmental studies by the responsible State, county, or municipal government prior to implementation. The preliminary engineering and environmental studies will consider alternatives and impacts, and final decisions as to whether and how a plan and project will proceed to implementation will be made by the responsible State, county, or municipal government. State for state highways, County for county highways, and municipal for municipal arterial streets, at the conclusion of preliminary engineering.
2. The 12 miles of freeway widening proposed in the plan and in particular the 1 mile of widening in the City of Milwaukee I-43 between the Grand Marquette Interchanges and I-43 between the Mitchell and Silver Spring Interchanges, will undergo preliminary engineering and environmental impact statement by the Wisconsin Department of Transportation. During preliminary engineering, alternatives will be considered, including rebuild-to-build, various options of rebuild to modern design standards, comprehensive to rebuilding with modern design standards, rebuilding with additional lanes, and rebuilding with the existing number of lanes. Only at the conclusion of preliminary engineering would a determination be made as to how the freeway would be reconstructed.
3. The plan also provides further recommendations with respect to half freeway interchanges. The plan recommends that the Wisconsin Department of Transportation during the reconstruction of the freeway system:
 - Convert the CTH Path 14 interchange to a full interchange.
 - Consider as an alternative where conditions permit the combination of selected half interchanges into one full interchange - for example, I-94 100 and S. 124th Street half I-94 and
 - Retain all other existing half interchanges and examine during preliminary engineering the improvement of connection between adjacent interchanges.
4. Subsequent to the completion of the regional transportation plan update and reevaluation, more detailed analyses will be conducted with the Waukesha County jurisdiction of highway system planning advisory committee addressing I-94 164 in the Village of Big Bend and potentially considering various alternatives including do-nothing, nested parking, widen with additional lanes, construct bypass, and improve construct parallel arterial.

Map 8-15

RECOMMENDED JURISDICTIONAL HIGHWAY SYSTEM PLAN FOR WAUKESHA COUNTY: 2035



- FREEWAY**
- STATE TRUNK HIGHWAY
 - INTERCHANGE
 - ◐ HALF INTERCHANGE
- STANDARD ARTERIAL**
- STATE TRUNK HIGHWAY
 - COUNTY TRUNK HIGHWAY
 - LOCAL TRUNK HIGHWAY
 - 4 NUMBER OF TRAFFIC LANES (2 WHERE UNNUMBERED)

NOTE: The jurisdictional classification recommendations in this year 2035 recommended jurisdictional highway system plan are based on the year 2020 jurisdictional highway system plan for the Southeastern Wisconsin Region. Over the next two years, Commission staff will be working with the Waukesha County Jurisdictional highway system planning committee, to conduct a major review and reevaluation of the jurisdictional transfer recommendations. This will be an extensive effort that will involve the review, update, and application of functional criteria used for jurisdictional classification of arterial streets and highways, and may be expected to change the jurisdictional recommendations of the year 2035 regional transportation system plan. Upon completion, the year 2035 regional transportation system plan would then be amended to reflect the recommendations made in each county jurisdictional highway system plan.



INSET



Source: SEWRPC.

REGIONAL TRANSPORTATION SYSTEM PLAN

The regional transportation plan recommends that local governments, which are the sponsors and operators of transit systems, would determine whether to upgrade to commuter rail or light rail by conducting a detailed corridor transit analysis study. These studies are a requirement of the U.S. Department of Transportation, Federal Transit Administration in order to be eligible for Federal funding.

A key requirement for the success of the MWRRRI is Congressional passage of a federal passenger rail funding program. Local rail station stops on the proposed Milwaukee to Madison corridor include Brookfield, Hartland, and Oconomowoc.

Public Transit

The public transit element of the final recommended regional plan envisions development within the Region of a rapid transit and express transit system, improvement of existing local bus service, and the integration of local bus service with the proposed rapid and express transit services. The proposed expansion of public transit is essential in southeastern Wisconsin and Waukesha County for many reasons, which can be found in Transportation Chapter 8 of the Waukesha County Comprehensive Development Plan document.

Upgrading to Rail Transit or Bus Guideways

The regional transportation plan also proposes that consideration be given to upgrading the recommended rapid and express bus transit services to commuter rail for rapid transit service and light rail or bus guideways for express transit service. The regional transportation plan suggests four future commuter lines and six light rail lines within the Region as shown in the Regional Plan. The Village of Hartland is positioned along one of these proposed routes. Local rail station stops on the proposed Milwaukee to Madison corridor include Brookfield, Hartland, and Oconomowoc.

Bicycle and Pedestrian Facilities

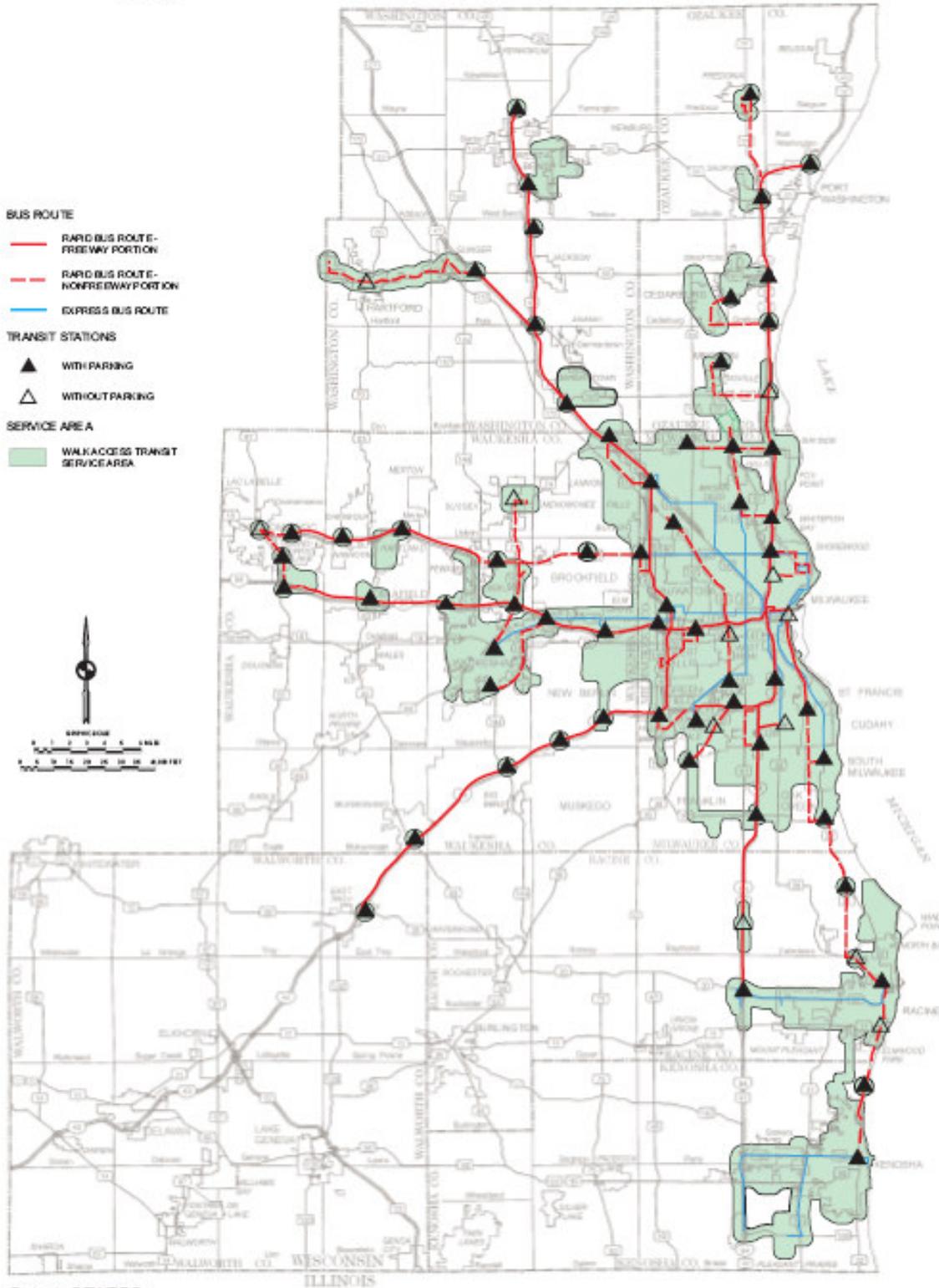
The bicycle and pedestrian facilities element in the 2035 Regional Transportation System Plan for Southeastern Wisconsin is intended to promote safe accommodation of bicycle and pedestrian travel, and encourage bicycle and pedestrian travel as an alternative to personal vehicle travel. The regional plan recommends that as the surface arterial street system of about 3,300 miles in the Region is resurfaced and reconstructed, the provision of accommodation for bicycle travel should be implemented, if feasible, through bicycle lanes, widened outside travel lanes, widened and paved shoulders, or separate bicycle paths. This recommendation would result in an additional 161 miles of off-street bicycle mileage on state, county, and local roads within Waukesha County.

Community Bicycle and Pedestrian Plans

The Village of Hartland has prepared community bicycle and pedestrian plans to supplement the SEWRPC regional plan. The local plan provides for facilities to accommodate bicycle and pedestrian travel within neighborhoods, providing for convenient travel between residential areas and shopping centers, schools, parks, and transit stops within or adjacent to the neighborhood. The standards, guidelines, and system plans set forth in the regional plan are the basis for the preparation of community and neighborhood plans. The Village has prepared and will implement a land use plan that encourages more compact and dense development patterns, in order to facilitate pedestrian and bicycle travel. The Village also has a parks and recreation plan that incorporates bicycle and pedestrian pathways. The plan also recognize what jurisdiction is responsible for said trails. These are discussed further in Chapter 8 of the Waukesha County Comprehensive Development Plan document.

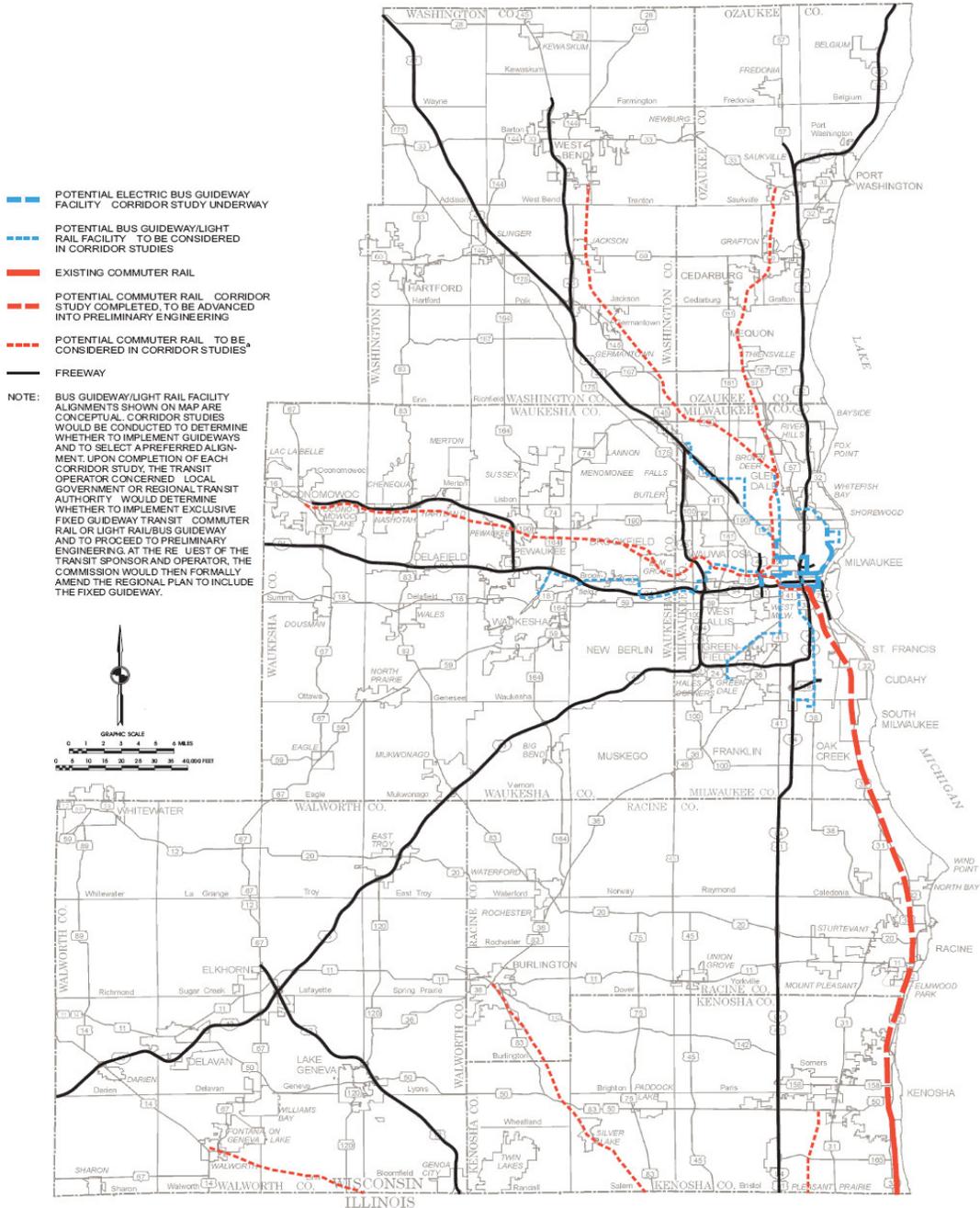
Map 8-16

RECOMMENDED PUBLIC TRANSIT ELEMENT OF THE
REGIONAL TRANSPORTATION SYSTEM PLAN: 2035



Map 8-17

POTENTIAL RAPID TRANSIT COMMUTER RAIL AND EXPRESS TRANSIT BUS GUIDEWAY/LIGHT RAIL LINES UNDER THE REGIONAL TRANSPORTATION SYSTEM PLAN: 2035



*Corridor feasibility studies have been completed for the Chicago-based commuter rail extensions to the Village of Walworth in Walworth County and the City of Burlington in Racine County. The conclusion of the Walworth extension study was that it was potentially feasible and cost-effective, but should be deferred and considered again when a Metra extension from its current terminus in Fox Lake, Illinois is considered to Richmond, Illinois near the Wisconsin-Illinois Stataline. The conclusion of the Burlington extension study was that it was not feasible or cost-effective at that time, but could be considered again in the future.

Source: SEWRPC.

Transportation Systems Management

The transportation systems management element of the final recommended year 2035 regional transportation plan includes measures intended to manage and operate existing transportation facilities to their maximum carrying capacity and travel efficiency, including: freeway traffic management, surface arterial street and highway traffic management, and major activity center parking management and guidance. In addition, improving the overall operation of the regional transportation system requires regional cooperation and coordination between government agencies, and operators.

Travel Demand Management

The travel demand management measures included in the final recommended year 2035 regional transportation plan include measures intended to reduce personal and vehicular travel or to shift such travel to alternative times and routes, allowing for more efficient use of the existing capacity of the transportation system. These measures are in addition to the public transit and pedestrian and bicycle plan elements previously discussed.

There are seven categories of travel demand management measures that are recommended in the year 2035 Regional Transportation Plan. For more information on these categories see pages 384 to 387 in the SEWRPC Planning Report No. 49, A Regional Transportation System Plan For Southeastern Wisconsin: 2035.

ADDITIONAL IMPLEMENTATION RECOMMENDATIONS

1. The Village should implement the transportation system development planning objectives, principles and standards contained in Chapter 3 and detailed in this chapter.
2. The County and Village should evaluate dedicated funding sources for county-wide shared taxi service to meet the needs of a growing elderly population.
3. The County should establish additional rail quiet zones and invest in railroad grade separations as a safety priority at county trunk highway crossings, as a consequence of increasing rail freight traffic.
4. The County should work with the Wisconsin Department of Transportation's Bureau of Aeronautics to determine if maintaining Capitol Airport as an aviation facility is consistent with future transportation and land use plans.
5. The Village should implement the public transit recommendations contained in the 2035 Regional Transportation System Plan for Southeastern Wisconsin that pertain to the Village.

