



Credit: Washington County

8.1 INTRODUCTION

The Transportation Element is one of the nine elements of a comprehensive plan required under Section 66.1001 of the *Wisconsin Statutes*. Section 66.1001 (2) (c) of the *Statutes* requires this element to compile goals, objectives, policies, and programs to guide the future development of various modes of transportation in the County. Under the comprehensive planning law, the Transportation Element should incorporate State and Regional transportation plans, and compare County goals, objectives, policies, and programs to those of State and Regional transportation plans. Washington County transportation-related goals, objectives, policies, and programs are presented in Chapter 12.

It should be noted that the Washington County Board of Supervisors voted to adopt the Washington County 2050 Transportation Network Sustainability Plan in February 2018. The primary goal of this plan, which is consistent with the County's Strategic Plan, is to determine the level of funding necessary to maintain reliable infrastructure to provide effective mobility. The guiding principle of the plan is to effectively plan for a reliable, well-maintained, and accessible transportation network that meets the current and future growth needs of the County. The Washington County transportation-related goals, objectives, policies, and programs presented in Chapter 12 have been updated accordingly to reflect the recommendations and findings of the 2050 Transportation Network Sustainability Plan.

Modes of transportation addressed in this element include:

- Arterial streets and highways
- Collector and local streets
- Public transit
- Transportation systems for people with disabilities and the elderly
- Bicycle and pedestrian facilities

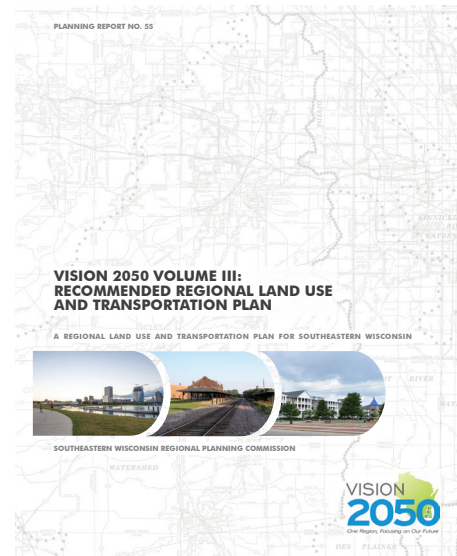
- Railroads
- Air transportation
- Trucking and water transportation

8.2 EXISTING TRANSPORTATION SYSTEM AND REGIONAL TRANSPORTATION SYSTEM PLAN

VISION 2050: A Regional Land Use and Transportation Plan for Southeastern Wisconsin

The adopted regional transportation plan is set forth in SEWRPC Planning Report No. 55, *VISION 2050: A Regional Land Use and Transportation Plan for Southeastern Wisconsin*. The transportation component of the plan is designed to serve the land use pattern recommended in the land use component of the plan. VISION 2050 is multimodal, i.e., it provides recommendations for a transportation system that integrates several modes, or means, of transportation. The plan includes recommendations regarding six key transportation elements: public transit, bicycle and pedestrian facilities, transportation system management, travel demand management, arterial streets and highways, and freight transportation. Implementing the plan would result in:

- Significantly improving and expanding public transit and improving and expanding local and express transit services to support compact growth and enhance the attractiveness and accessibility of the Region
- Enhancing the Region’s bicycle and pedestrian network to improve access to activity centers, neighborhoods, and other destinations
- Keeping existing major streets in a state of good repair and efficiently using the capacity of existing streets and highways
- Strategically adding capacity on highly congested roadways, incorporating “complete streets” roadway design concepts to provide safe and convenient travel for all, and addressing key issues related to moving goods into and through the Region



VISION 2050 is multimodal, and provides recommendations for a transportation system that integrates several modes, or means, of transportation.

Arterial Streets and Highways

The VISION 2050 Transportation Component recommends a street and highway system that supports the existing development pattern and promotes the implementation of the Land Use Component. Among other recommendations, the Land Use Component recommends centralized urban development within planned urban service areas, which can be more economically served by transportation facilities and services than low-density development dispersed across the County. That recommendation is generally reflected in the County Land Use Element.

The street and highway system serves several important functions, including the movement of through vehicular traffic; providing vehicular access to abutting land uses; providing for pedestrian and bicycle circulation; and serving as the location for utilities and stormwater



The arterial street and highway system is intended to provide a high degree of travel mobility, serving the through movement of traffic between and through urban areas.

management facilities. The three functional classifications of streets and highways are: arterial streets, collector streets, and local streets. In 2017, there were approximately 1,537 miles of streets and highways in Washington County, including about 277 miles of arterial streets and highways. Of the 277 miles of arterial streets and highways, 186 miles were under State jurisdiction, 29 miles were under County jurisdiction, and 62 miles were under local jurisdiction. Existing roadway mileage by function and jurisdiction (not including roadways under State jurisdiction) is presented in Table 8.1. The arterial street and highway system is intended to provide a high degree of travel mobility, serving the through movement of traffic between and through urban areas. Collector streets are intended to serve primarily as connections between the arterial street system and the local streets. In addition to collecting and distributing traffic to and from the local streets, collector streets usually perform a secondary function of providing access to abutting property. The primary function of local streets is to provide access to abutting property.

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) database. Physical attributes such as right-of-way (RW) and pavement width, number of traffic lanes, type of surface and pavement rating, resurfacing and maintenance treatment history, the presence and type of shoulders or curbs, and the presence of sidewalks are available in a database that can be accessed through the WisDOT website by registered users. Administrative information, including the functional classification and owner of a street, can also be obtained. The information in the database is provided by county and local government and is intended to assist in reporting roadway pavement conditions. Pavement conditions of arterial streets and highways in Washington County under State jurisdiction in 2016, and arterial streets and highways in Washington County under County or local jurisdiction in 2015 are shown on Map 8.1 and presented in Table 8.2. 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 pavement surface evaluation and rating (PASER) is the most commonly used method in Wisconsin.



WisDOT maintains a detailed database of the county and local street information in the Wisconsin Information System for Local Roads (WISLR).

Jurisdictional Highway System Plan

Recommendations for the maintenance, improvement, and expansion of arterial streets and highways from the Year 2035 Regional Transportation System Plan were refined in 2007 and 2008 while preparing an update to the Washington County jurisdictional highway system plan.⁷¹ The County plan was adopted by the County Board of Supervisors in 2008 and the Regional Planning Commission in 2009. The recommendations of the jurisdictional highway system plan have been incorporated into this Transportation Element and will efficiently serve the anticipated land use development pattern recommended by this plan. The plan can be further refined based on VISION 2050 at the request of the County.

The Year 2035 County jurisdictional highway system plan contains a functional arterial street and highway system plan. This functional plan consists of recommendations concerning the general location, type, capacity, and service levels of the arterial street and highway facilities required to serve Southeastern Wisconsin to the year 2035. Recommended improvements to the arterial street and highway system in Washington County from the jurisdictional highway system plan and updated based on input for VISION 2050 from the Washington County Jurisdictional Highway Planning Committee are shown on Map 8.2. Alternative alignments for the conceptual location of the new street and highway segments shown on Map 8.2 would be evaluated during preliminary engineering, which would precede construction of proposed routes.

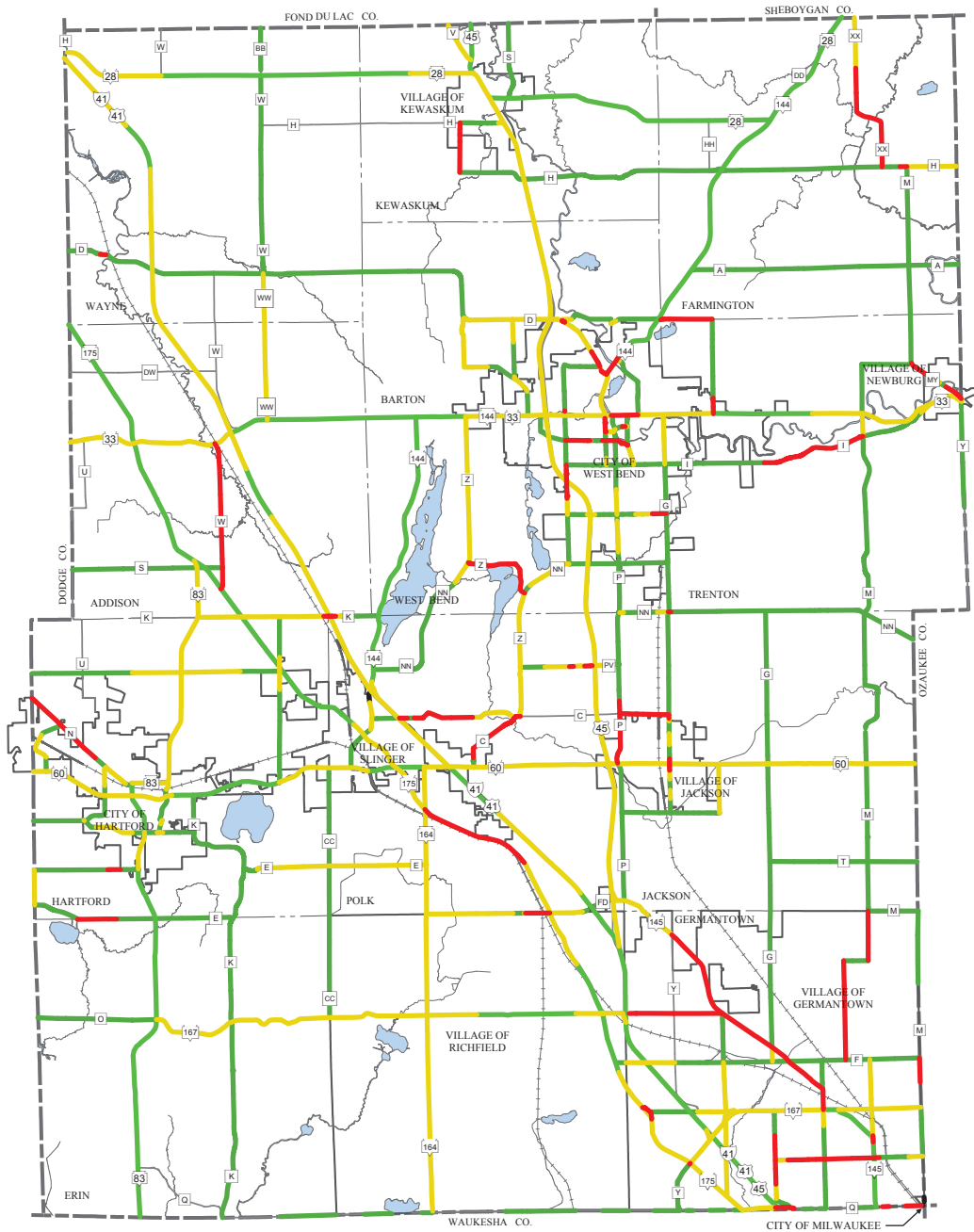
⁷¹ Documented in SEWRPC Planning Report No. 23, 2nd edition, A Jurisdictional Highway System Plan for Washington County: 2035.

**Table 8.1
Street and Highway Mileage by Jurisdictional Classification in Washington County Communities: 2017**

Community	Municipal Jurisdiction			County Jurisdiction			Total Municipal Miles	Total County Miles	Total Miles
	Arterial	Collector	Local	Arterial	Collector	Local			
Cities									
Hartford	7.78	5.58	56.86	0.63	0.83	--	70.22	1.46	71.68
West Bend	19.01	19.53	95.85	0.97	--	--	134.39	0.97	135.36
Villages									
Germantown	21.03	11.89	97.65	7.40	7.77	--	130.57	15.17	145.74
Jackson	1.68	6.74	18.37	0.78	--	--	26.79	0.78	27.57
Kewaskum	--	1.23	17.01	1.65	--	--	18.24	1.65	19.89
Newburg	--	0.27	4.92	--	0.99	--	5.19	0.99	6.18
Richfield	0.25	27.12	118.95	3.00	1.03	--	146.32	4.03	150.35
Slinger	2.16	2.95	22.89	--	0.68	--	28.00	0.68	28.68
Towns									
Addison	--	--	64.55	0.45	13.06	5.17	64.55	18.68	83.23
Barton	0.59	8.49	37.19	1.78	3.86	--	46.27	5.64	51.91
Erin	--	0.51	56.19	1.17	12.80	--	56.70	13.97	70.67
Farmington	--	4.03	61.09	--	18.88	1.57	65.12	20.45	85.57
Germantown	--	0.31	4.15	--	0.85	--	4.46	0.85	5.31
Hartford	1.93	11.47	35.29	1.23	8.71	1.86	48.69	11.80	60.49
Jackson	3.46	6.54	49.53	1.68	20.61	--	59.53	22.29	81.82
Kewaskum	--	4.27	33.78	0.02	6.38	--	38.05	6.40	44.45
Polk	0.46	8.32	49.17	3.28	11.29	--	57.95	14.57	72.52
Trenton	3.53	10.48	52.40	1.10	14.10	--	66.41	15.20	81.61
Wayne	--	--	57.33	--	15.13	1.36	57.33	16.49	73.82
West Bend	0.11	4.32	40.48	3.93	6.09	--	44.91	10.02	54.93
Washington County	61.99	134.05	973.65	29.07	143.06	9.96	1,169.69	182.09	1,351.78

Source: Wisconsin Department of Transportation and Washington County

Map 8.1 Arterial Street and Highway Pavement Condition in Washington County: 2015/2016



PAVEMENT CONDITION

- POOR
- FAIR
- GOOD
- NO RATING

Notes: For state trunk highways, a roadway with an International Roughness Index (IRI) of less than 1.5 is considered in good condition, an IRI between 1.5 and 3.5 is considered in fair condition, and an IRI of more than 3.5 is considered in poor condition. For county/local trunk highways, a roadway having a PASER of 7 or more is considered in good condition, a PASER of 5 or 6 is considered in fair condition, and a PASER of 4 or less is considered in poor condition.

The pavement condition along state trunk highways was collected in the year 2016 and the pavement condition along county and local arterials was collected in the year 2015.

Source: Wisconsin Department of Transportation and SEWRPC

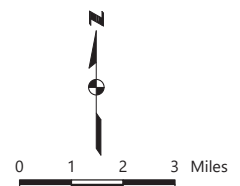


Table 8.2
Arterial Street and Highway Pavement Condition in Washington County: 2015/2016^a

Pavement Rating	Surface Arterials	Freeways	Total	Percent of Total
Good	231.9	11.3	243.2	55.2
Fair	123.5	30.9	154.4	35.0
Poor	43.0	--	43.0	9.8
Total	398.4	42.2	440.6	100.0

Note: For state trunk highways, a roadway with an International Roughness Index (IRI) of less than 1.5 is considered in good condition, an IRI between 1.5 and 3.5 is considered in fair condition, and an IRI of more than 3.5 is considered in poor condition. For county/local trunk highways, a roadway having a PASER of 7 or more is considered in good condition, a PASER of 5 or 6 is considered in fair condition, and a PASER of 4 or less is considered in poor condition.

^a The pavement condition along State Trunk Highways was collected in the year 2016 and the pavement condition along County and Local arterials was collected in the year 2015.

Source: Wisconsin Department of Transportation and SEWRPC

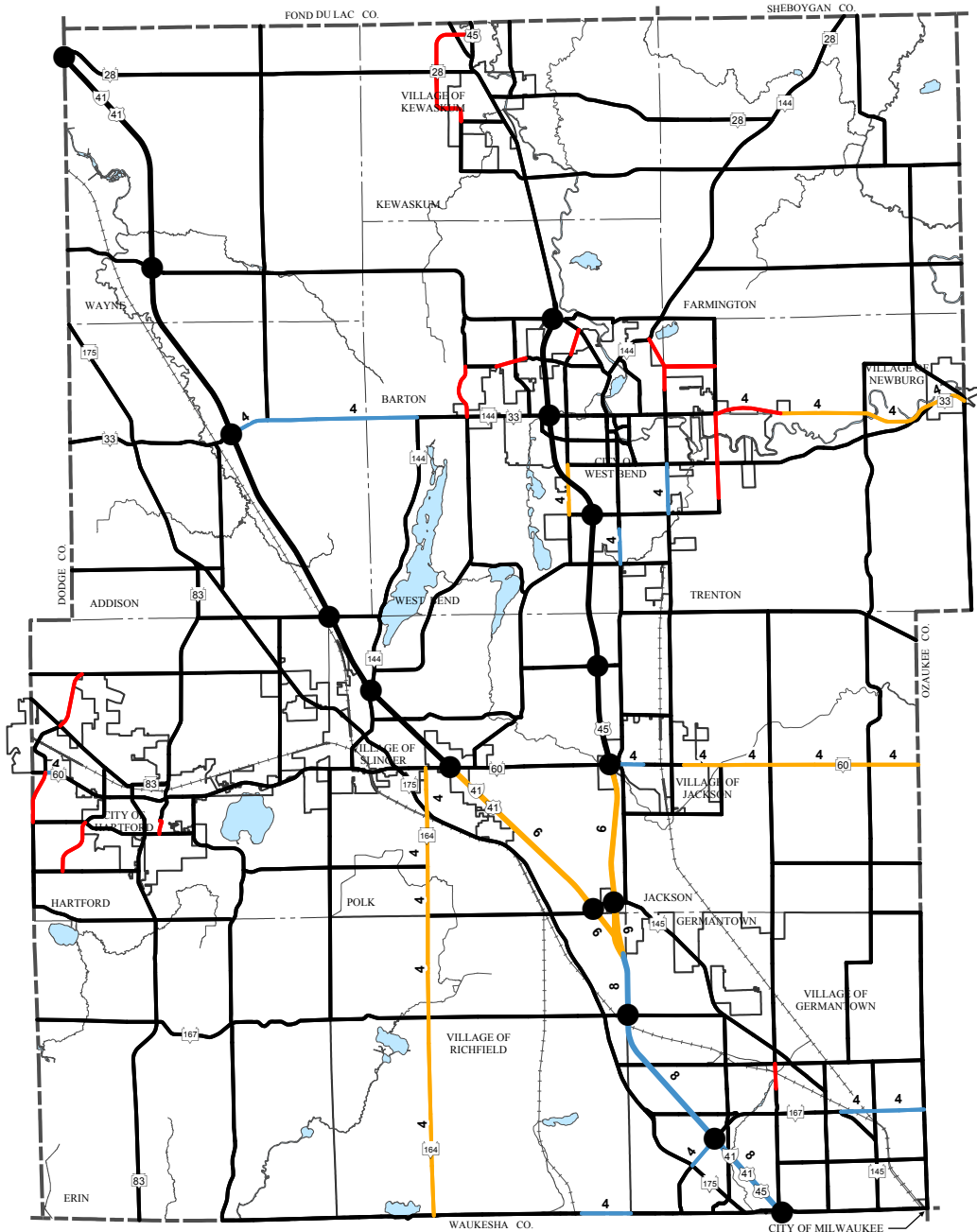
Changes to the functional improvement recommendations under the year 2035 Washington County jurisdictional highway system plan approved by the Washington County Jurisdictional Highway Planning Committee as part of the development of VISION 2050 include:⁷²

- Removal of planned extension of Pioneer Road between Powder Hill Road and Slinger Road
- Removal of planned widening of STH 164 from two to four traffic lanes between County Line Road (CTH Q) and Pioneer Road, and, instead, addition of reservation of right-of-way to accommodate a future widening of the facility beyond the year 2050
- Removal of planned realignment of USH 45 within the former railroad right-of-way in the Village of Kewaskum
- Removal of the planned widening of STH 60 from two to four traffic lanes between a point 1,000 feet east of Jackson Drive to Maple Road, and, instead, addition of reservation of right-of-way to accommodate a future widening of this facility beyond the year 2050
- Removal of the planned widening of S. Main Street between Walnut Street and W. Decorah Road and on W. Decorah Road between S. 7th Avenue and S. Indiana Avenue in the City of West Bend
- Addition of the planned widening of STH 33 from two to four traffic lanes between IH 41 and STH 144
- Addition of the planned widening of S. River Road from two to four traffic lanes between E. Decorah Road (CTH I) and E. Paradise Drive
- Addition of planned widening of S. Main Street/CTH P from two to four traffic lanes between Humar Street and Rusco Road/CTH NN

The Year 2035 County jurisdictional highway system plan also made recommendations for arterial street and highway system jurisdictional responsibility; specifically, which unit of government (State, County, or local) should have jurisdiction over each arterial street and highway and be responsible for maintaining and improving the facility. Map 8.3 shows the levels of government recommended to have jurisdiction over arterial streets and highways in Washington County by 2035, and reflects additional recommendations of

⁷² Discussion of the process for removing the planned east-west arterial route located north of the Hartford and Slinger areas (STH 60 reliever route) from the jurisdictional highway system plan for Washington County and VISION 2050 is discussed under Section 11.4 of Chapter 11, Intergovernmental Cooperation Element. This process was initiated under this comprehensive plan update.

Map 8.2
Washington County Functional Highway Improvement Plan: 2050



ARTERIAL STREET OR HIGHWAY

- NEW
- WIDENING AND/OR OTHER IMPROVEMENT TO PROVIDE SIGNIFICANT ADDITIONAL CAPACITY
- RESERVE RIGHT-OF-WAY TO ACCOMMODATE FUTURE IMPROVEMENT (ADDITIONAL LANES OR NEW FACILITY)
- RESURFACING OR RECONSTRUCTION TO PROVIDE ESSENTIALLY THE SAME CAPACITY
- EXISTING FREEWAY INTERCHANGE
- 4 NUMBER OF TRAFFIC LANES FOR NEW OR WIDENED AND/OR IMPROVED FACILITY (2 LANES WHERE UNNUMBERED)

LOCAL GOVERNMENT CONCERNS REGARDING PLAN

The Town of Barton expressed opposition regarding the planned extension of N. River Road on new alignment and to the planned extension of 18th Avenue, Schuster Drive, and Kettle Moraine Drive in the Town of Barton. The Town of Barton does not adopt as part of the transportation element of the comprehensive plan.

The Towns of Barton and Trenton expressed opposition to the planned east-west arterial between Trenton Road and N. River Road on an entirely new alignment. The Town of Barton does not adopt as part of the transportation element of the comprehensive plan.

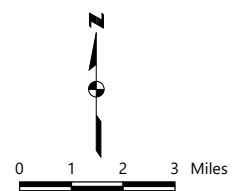
The Village of Germantown expressed opposition to Division Road being proposed as a local arterial facility between CTH Q and STH 145 rather than as a County arterial facility and to any other planned jurisdictional responsibility that differs from their comprehensive plan.

The alignment for the planned north-south extension of Kettle View Drive between CTH H and STH 28 is conceptual. The actual alignment may be expected to differ from the alignment shown on this map and will be determined cooperatively by the Village and Town of Kewaskum and Washington County.

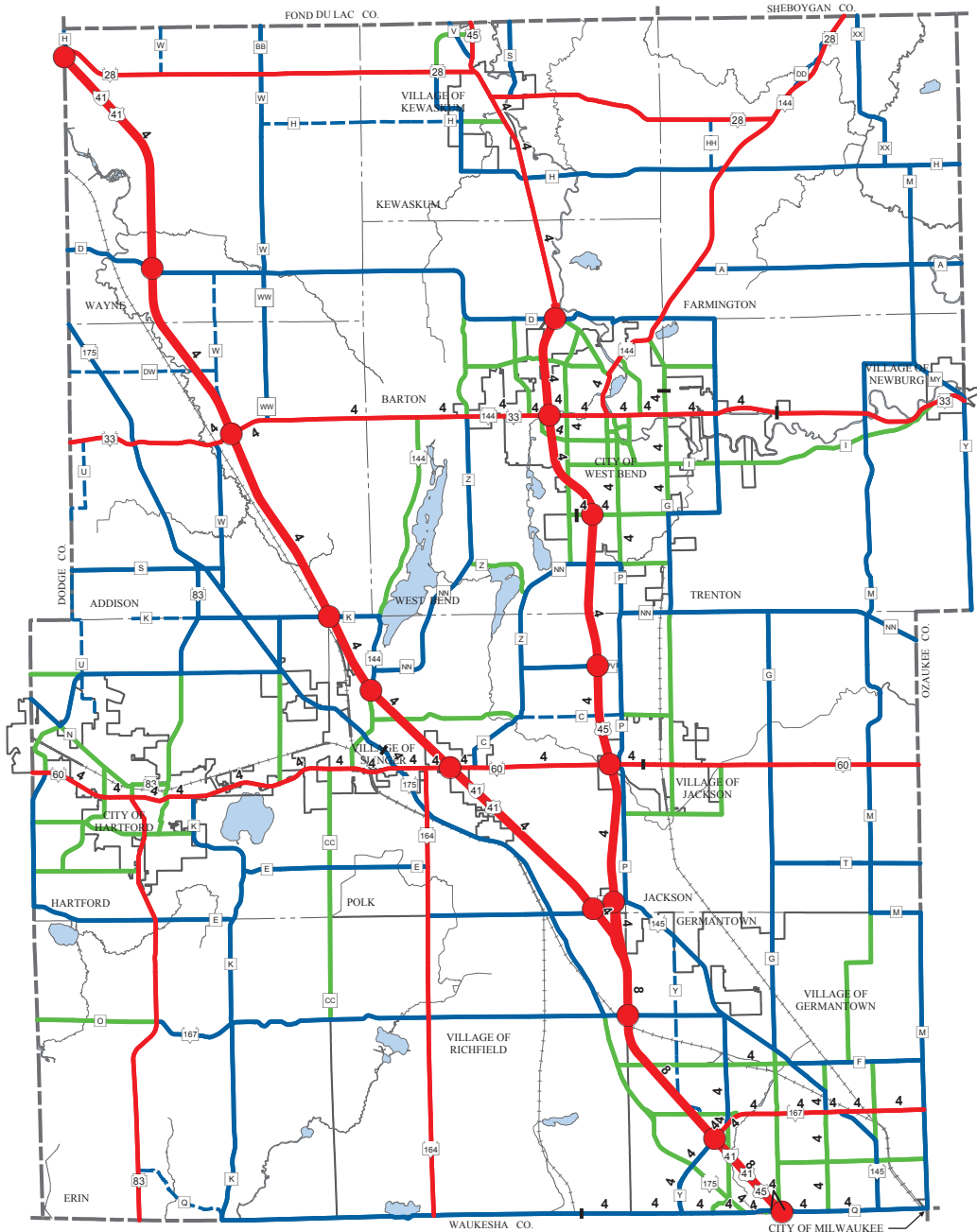
The Village of Kewaskum expressed opposition to CTH H being proposed as a local arterial facility between Kettle View Drive and USH 45 rather than as a County arterial facility.

The Town of Erin expressed opposition to CTH Q being proposed as a local nonarterial facility between CTH K and STH 83 rather than a county nonarterial facility, CTH O being proposed as a local arterial facility between STH 83 and the Dodge County line rather than a County arterial facility, and CTH CC being proposed as a local arterial facility between STH 167 and STH 60 rather than a County arterial facility.

Source: Washington County and SEWRPC



Map 8.3
Washington County Jurisdictional Highway Improvement Plan: 2050



ARTERIAL STREET OR HIGHWAY

- STATE TRUNK FREEWAY
- STATE TRUNK NONFREEWAY
- COUNTY TRUNK
- - - COUNTY OR LOCAL TRUNK
- LOCAL TRUNK
- 4** NUMBER OF TRAFFIC LANES FOR NEW OR WIDENED AND/OR IMPROVED FACILITY (2 LANES WHERE UNNUMBERED)
- FREEWAY INTERCHANGE

LOCAL GOVERNMENT CONCERNS REGARDING PLAN

The Town of Barton expressed opposition regarding the planned extension of N. River Road on new alignment and to the planned extension of 18th Avenue, Schuster Drive, and Kettle Moraine Drive in the Town of Barton. The Town of Barton does not adopt as part of the transportation element of the comprehensive plan.

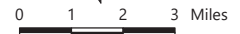
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The Village of Germantown expressed opposition to Division Road being proposed as a local arterial facility between CTH Q and STH 145 rather than as a County arterial facility and to any other planned jurisdictional responsibility that differs from their comprehensive plan.

The alignment for the planned north-south extension of Kettle View Drive between CTH H and STH 28 is conceptual. The actual alignment may be expected to differ from the alignment shown on this map and will be determined cooperatively by the Village and Town of Kewaskum and Washington County.

The Village of Kewaskum expressed opposition to CTH H being proposed as a local arterial facility between Kettle View Drive and USH 45 rather than as a County arterial facility.

The Town of Erin expressed opposition to CTH Q being proposed as a local nonarterial facility between CTH K and STH 83 rather than a county nonarterial facility. CTH O being proposed as a local arterial facility between STH 83 and the Dodge County line rather than a County arterial facility, and CTH CC being proposed as a local arterial facility between STH 167 and STH 60 rather than a County arterial facility.



Source: Washington County and SEWRPC

the Jurisdictional Highway Planning Committee that were incorporated into VISION 2050.⁷³ In 2008, that committee completed a major review and reevaluation of the jurisdictional transfer recommendations in the 2035 regional plan, including a review and redefinition of the criteria used to determine which level of government should have jurisdiction over each arterial street and the application of those criteria to arterial streets and highways in the County.

Transit

Fixed-route urban public transportation in Washington County consists of the Washington County Commuter Express (WCCE) Bus System.⁷⁴ Operating characteristics of the WCCE are presented in Table 8.3. The WCCE runs on weekdays only and includes two express commuter bus routes between Milwaukee and Washington County (see Map 8.4). The two routes are the Downtown Milwaukee Express and the Froedtert, Mayfair, Marquette High, and Veteran Affairs Medical Center Express. Stops are made at three WCCE park-ride lot locations in Washington County (shown on Map 8.4) and Milwaukee County locations (shown on Map 8.5). Park-ride facility amenities and utilization are presented in Table 8.4.



The fixed-route bus transit system operated by Washington County is one example of urban public transportation.

The County is also served by the Washington County Shared-Ride Taxi Service, which provides shared-ride taxi coverage for the entire County. The shared-ride taxi service includes a transfer point in the Village of Newburg to the Ozaukee County shared-ride taxi service and also operates to and from a portion of the Village of Menomonee Falls in Waukesha County. The hours of operation for the Washington County Shared-Ride Taxi Service are as follows:



The County is also served by the Washington County Shared-Ride Taxi Service, which provides shared-ride taxi coverage for the entire County.

- Monday through Saturday, 5:00 a.m. to 11:00 p.m.
- Sunday, 8:00 a.m. to 4:00 p.m.

In addition, the Cities of Hartford and West Bend both provide shared-ride taxi services. The West Bend taxi service provides service within the City of West Bend and extended service up to two miles beyond the City limits. The hours of operation for the City of West Bend taxi service are as follows:

- Monday through Saturday, 6:00 a.m. to 10:00 p.m.
- Sundays and holidays, 8:00 a.m. to 4:00 p.m.

The City of Hartford taxi service provides service within the City limits and up to one mile outside the City limits, provided one end of the trip is located in the City. In addition, the Hartford taxi service serves selected destinations in the Village of Slinger and in Dodge and Milwaukee Counties. The Hartford taxi service also provides service to the Amtrak depot in Columbia County. The hours of operation for the City of Hartford taxi service are as follows:

⁷³ The Washington County Jurisdictional Highway System Planning Committee met during 2015 and 2016 to update the jurisdictional highway system plan as part of the VISION 2050 planning effort. The committee includes a representative from each city, town, and village in the County, and staff from Washington County, SEWRPC, and State and Federal agencies. Minutes of Jurisdictional Highway System Planning Committee meetings are available from SEWRPC.

⁷⁴ A small portion of the Village of Germantown at the intersection of STH 175 and County Line Road is served by Milwaukee County Transit System (MCTS) bus service.

**Table 8.3
Operating Characteristics of the Washington County Commuter Express Bus System by Route: 2016**

Route	Route Length ^a (Miles)	Number of Scheduled Daily Runs		Weekday Service Periods ^b	
		Eastbound/ Southbound	Northbound/ Westbound	Eastbound/ Southbound	Northbound/ Westbound
Downtown Milwaukee Express	78.3	8	8	5:16 a.m. – 8:45 a.m.	11:55 a.m. – 7:12 p.m.
Milwaukee Regional Medical Center/VA Center	72.4	3	4	5:30 a.m. – 6:51 a.m.	12:20 p.m. – 5:41 p.m.
Total System	150.7	11	12	--	--

^a Round trip.

^b Regular service is not provided on weekends or holidays.

Source: Washington County and SEWRPC

- January through May and September through December
 - Weekdays, 6:00 a.m. to 9:00 p.m.
 - Saturdays, 8:00 a.m. to 8:00 p.m.
 - Sundays, 9:00 a.m. to 4:00 p.m.
- June through August
 - Weekdays, 6:00 a.m. to 8:00 p.m.
 - Saturdays, 8:00 a.m. to 8:00 p.m.
 - Sundays, 9:00 a.m. to 4:00 p.m.

Service areas for the County and Cities of West Bend and Hartford taxi services are shown on Map 8.6. The Washington County Commuter Express and the shared-ride taxi services operating within the County have experienced a decrease in ridership since 2010 as shown on Tables 8.5 and 8.6.

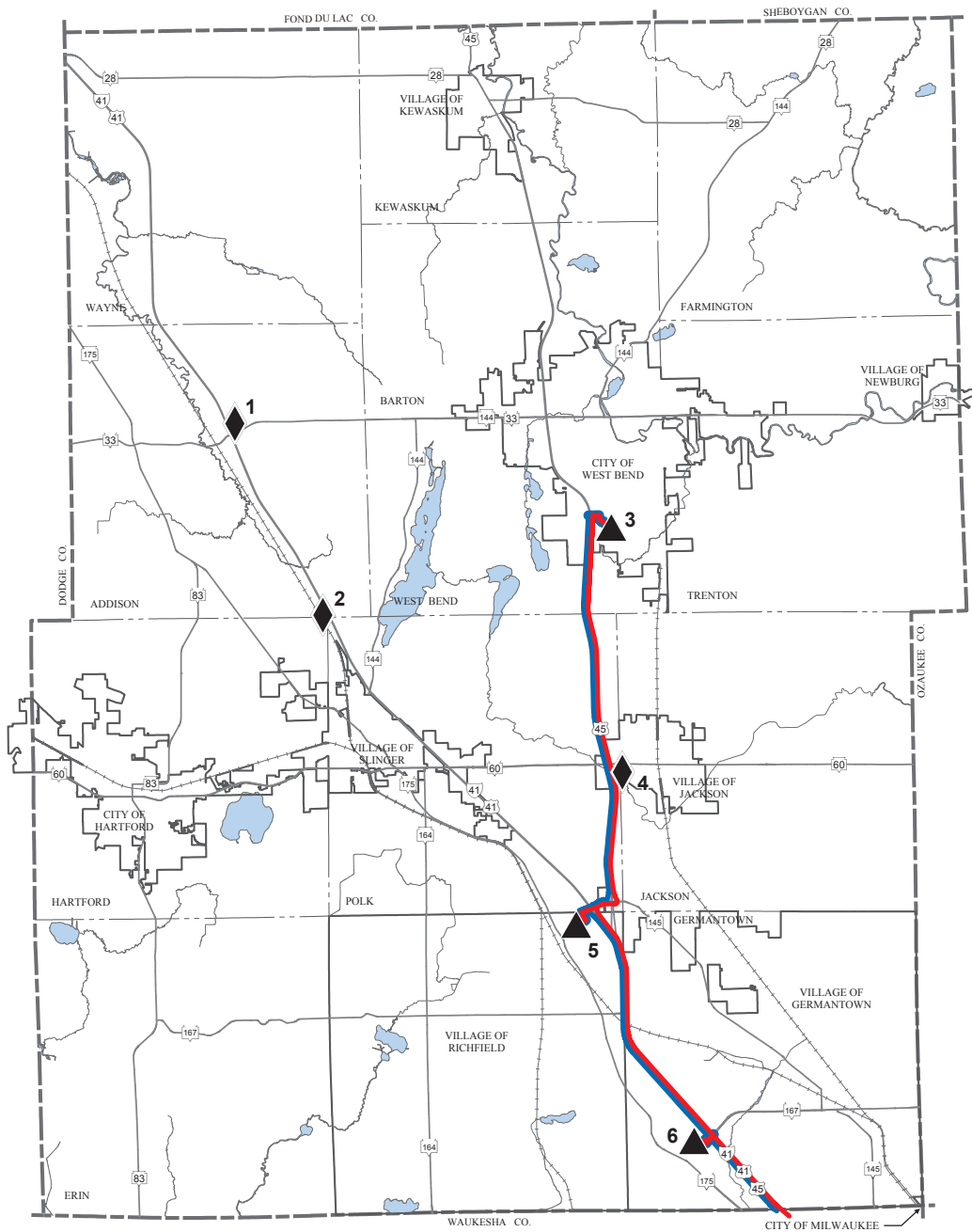
Washington County also has multiple transportation services aimed at serving the human services transportation needs of special population groups, including seniors, people with disabilities, low-income residents, or veterans. Some of the major human services transportation providers include:

- The Germantown Senior Van service provides transportation for adults age 55 years of age and older. The Germantown Senior Van Service consists of one lift equipped mini-bus, driven by volunteer drivers. Transportation is provided for senior center activities, meeting nutritional needs, attending medical appointments, and participating in social activities. Operates weekdays from 9:00 a.m. to 2:30 p.m.
- Interfaith Caregivers of Washington County provides advance reservation, door-to-door and door-through-door service to seniors throughout the County and surrounding counties. Operates weekdays from 8:00 a.m. to 5:00 p.m.
- The Threshold, Inc. provides fixed-route, fixed-schedule door-to-door service for participants in the daily programs for seniors or people with disabilities. Operates weekdays from 6:30 a.m. to 5:00 p.m.

VISION 2050 Transit Element

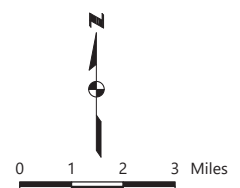
The VISION 2050 public transit element recommends improved and expanded commuter bus connections from Washington County to Milwaukee and through Milwaukee to the other urban centers of Southeastern Wisconsin, and improved and expanded local transit service to commercial and industrial development in the Germantown and West Bend areas. Implementing the recommendations set forth in the transit element would result in transit service more than doubling over the plan design period regionwide, including a 117 percent increase in transit revenue vehicle-miles and a 152 percent increase in transit revenue vehicle-hours. This would produce enhanced transit service levels in Washington County, including service on weekdays and weekends and more attractive peak and non-peak service frequency levels. VISION 2050 public transit recommendations for Washington County are shown on Map 8.7 and include the following:

Map 8.4
Washington County Commuter Express Bus Services and Park-Ride Lots: 2016



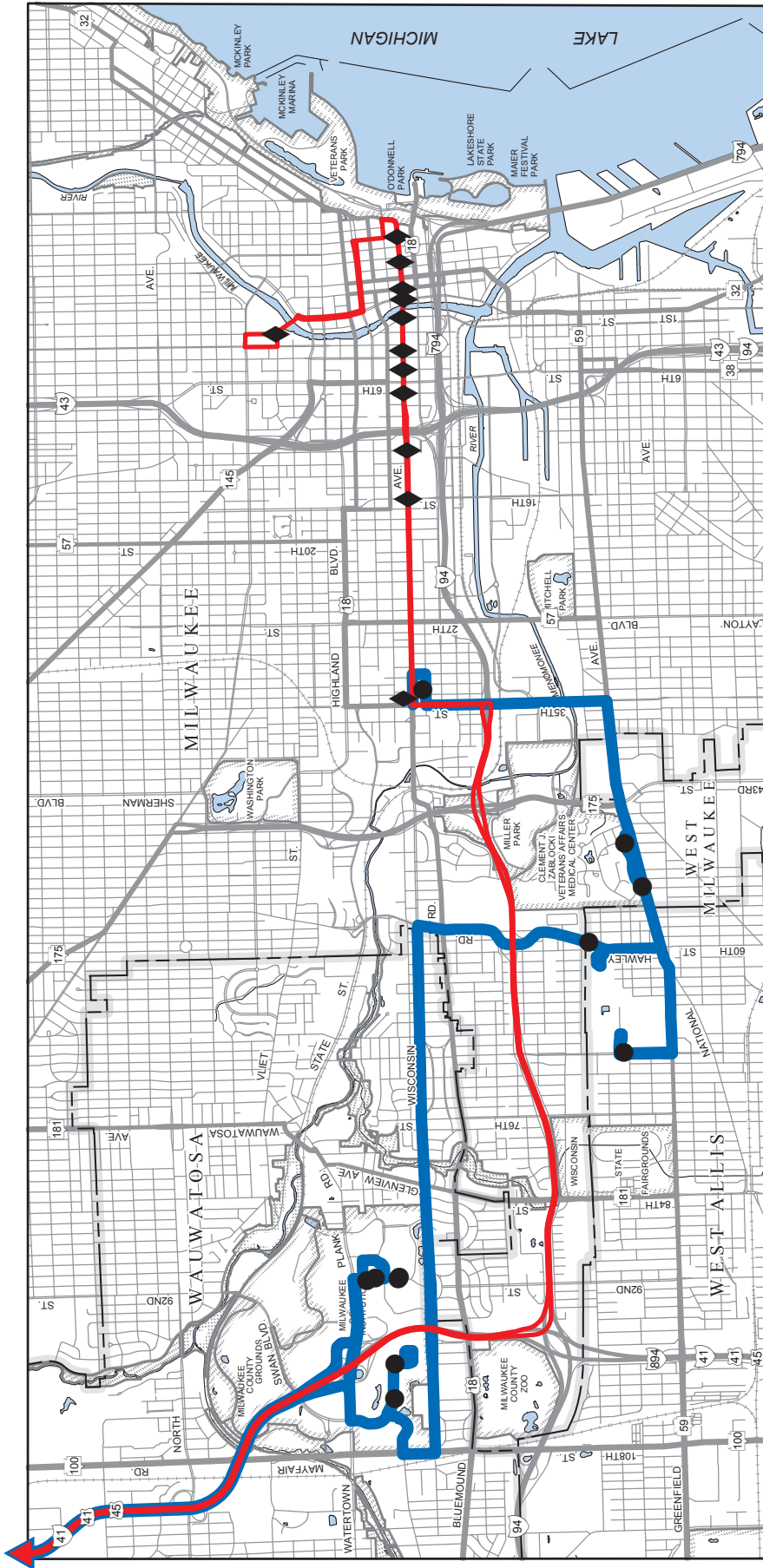
- DOWNTOWN EXPRESS
- MILWAUKEE REGIONAL MEDICAL CENTER/
VETERANS ADMINISTRATION CENTER
- ▲ PARK-RIDE LOT SERVED BY
EXISTING PUBLIC TRANSIT
- ◆ PARK-RIDE LOT NOT SERVED BY
EXISTING PUBLIC TRANSIT
- 3 PARK-RIDE LOT NUMBER
(SEE TABLE 8.4)

Source: SEWRPC



Map 8.5

Washington Commuter Express Services Within Milwaukee County: 2016



— DOWNTOWN EXPRESS

◆ DOWNTOWN EXPRESS BUS STOP

— MILWAUKEE REGIONAL MEDICAL CENTER/
VETERANS ADMINISTRATION CENTER

● MILWAUKEE REGIONAL MEDICAL CENTER/
VETERANS ADMINISTRATION CENTER BUS STOP

Source: Washington County and SEWRPC

Table 8.4
Park-Ride Facilities in Washington County: 2016

Number on Map 8.4	Location	Served by Transit	Utilization		
			Available Parking Spaces	Average Weekday Autos Parked	Percent of Spaces Used
1	IH 41 and STH 33, Town of Addison	No	60	45	75
2	IH 41 and CTH K, Town of Addison	No	40	9	23
3	USH 45 and Paradise Drive, City of West Bend	Yes	100	82	82
4	STH 60 and CTH P, Village of Jackson	No	125	13	10
5	IH 41 and Pioneer Road, Village of Richfield	Yes	280	51	18
6	IH 41/USH 45 and Lannon Road, Village of Germantown	Yes	100	93	93
Total			705	293	42

Source: SEWRPC

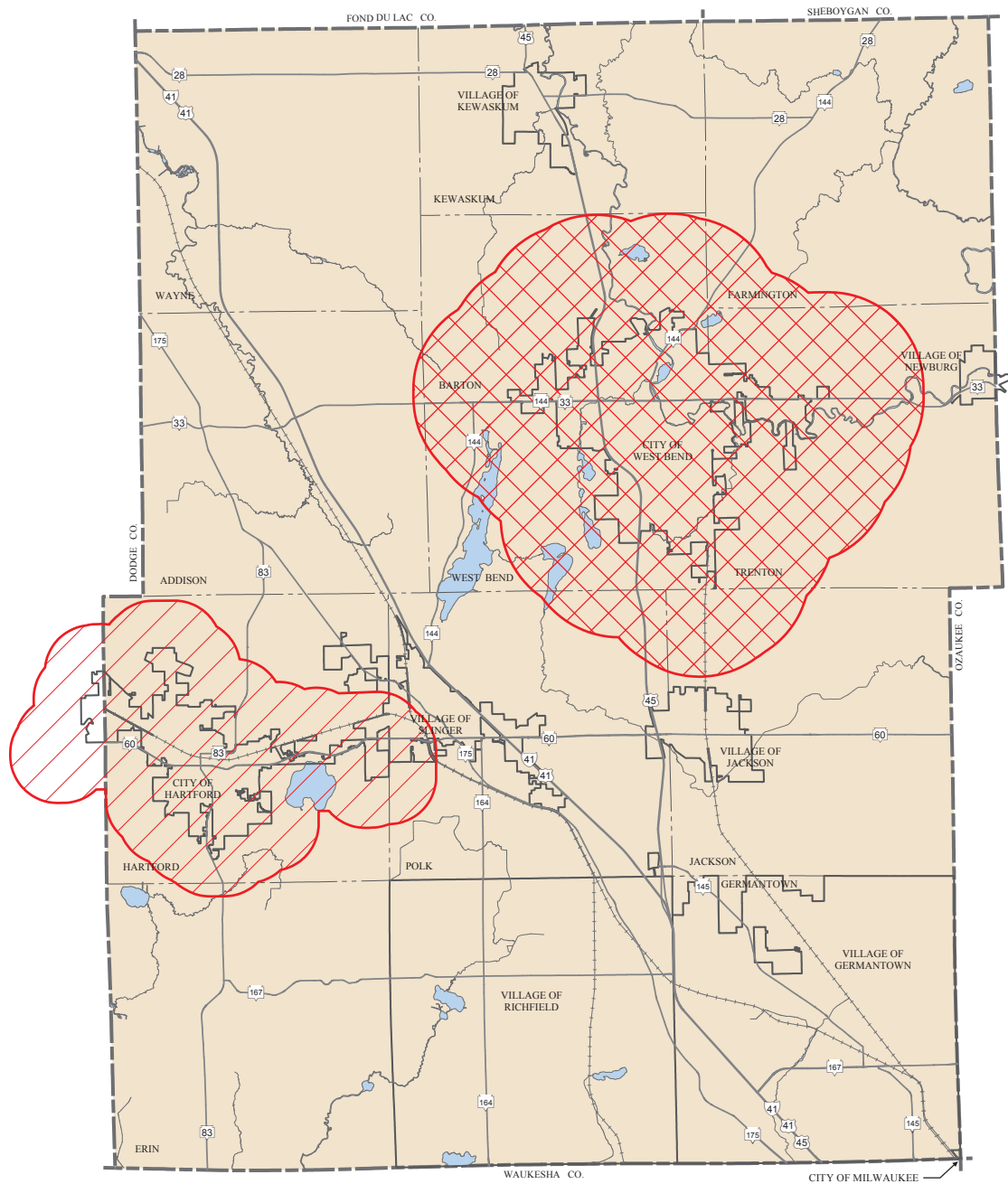
- Providing commuter bus service between Washington County and major employment centers in Milwaukee County. The plan envisions that new or restructured services would be provided over the area freeway system and major surface arterials by commuter bus routes designed to provide bi-directional service to accommodate both traditional commuter travel by Washington County residents to jobs in Milwaukee County and reverse commute travel by Milwaukee County residents to jobs in Washington County.
- Increasing the number of park-ride lots to 10, including five with transit service and five without (only those lots along the Washington County Commuter Express routes are shown on Map 8.7). New park-ride lots with transit service are recommended to be constructed at the IH 41/STH 60 interchange and near STH 60 and STH 83. New publicly constructed park-ride lots without transit service are recommended to be constructed at the USH 45/CTH D interchange and at USH 45 and STH 28. The existing park-ride lots at IH 41 and STH 33, IH 41 and CTH K, USH 45 and Paradise Drive, STH 60 and Apple Court (CTH P), IH 41 and Richfield Way off Pioneer Road, and the IH 41/USH 45/Lannon Road interchange would be maintained. The Lannon Road park-ride lot is typically over-crowded and may need to be expanded, or an additional lot provided, to help alleviate capacity problems/issues.
- Providing local transit service improvements, including new shuttle bus routes connecting with the commuter bus routes to take workers to and from commercial and industrial development in the Germantown and West Bend areas in the County. Shared-ride taxi services would also be provided wherever local fixed-route transit service is unavailable.
- The Commission prepares a short-range transit plan for each transit operator, which refines VISION 2050 recommendations and provides recommendations to be considered for implementation over a five-year period. The 2015-2019 transit development plan (TDP) for Washington County is the most recent TDP for Washington County. The next update to the TDP should incorporate and refine VISION 2050 transit element recommendations for Washington County.

Bicycle and Pedestrian Facilities

Bicycle Facilities

A bicycle facility includes any road, path, or way that may legally be used for bicycle travel. Types of bicycle facilities include “bike paths,” which are physically separated from motorized vehicles; “bike lanes,” which are portions of roadways that are designated by striping, signing, and pavement markings for the exclusive or preferential use of bicycles; and “shared roadways,” which are roadways that do not have designated bicycle lanes, but may be legally used for bicycle travel. Generally, all streets and highways except freeways may be used by bicyclists. A “bike route” or “bike trail” is a bicycle facility designated with directional and information markers, and may consist of a combination of bike paths, bike lanes, and shared roadways. Bicycle facilities are also classified as either “on-street” or “off-street” facilities. On-street facilities include those located in a street right-of-way, which include bike lanes, shared roadways signed as bike routes,

Map 8.6 Service Areas for Shared-Ride Taxi Systems in Washington County: 2016



SHARED-RIDE TAXI SERVICE AREA

- WASHINGTON COUNTY
- CITY OF WEST BEND
- CITY OF HARTFORD

Notes: The Washington County Shared-Ride Taxi provides service into the northern portion of Menomonee Falls in Waukesha County. It does not provide service for trips that begin and end in the City of West Bend or the City of Hartford.

The City of Hartford Shared-Ride Taxi provides service to the Aurora Health Clinic in Slinger and to Dodge County up to a 10 mile limit. It also provides service to Milwaukee Mitchell International Airport, the Columbus Train Depot, and the Milwaukee Intermodal Station with an advance notice of 5 to 7 days.

Source: SEWRPC

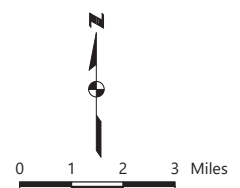


Table 8.5
Washington County Commuter Express Bus System Ridership: 2010-2016

Year	Total Ridership	Change From Previous Year	
		Number	Percent
2010	111,185	--	--
2011	127,551	16,366	14.7
2012	127,535	-16	0.0
2013	116,067	-11,468	-9.0
2014	110,339	-5,728	-4.9
2015	102,205	-8,134	-7.4
2016	91,901	-10,304	-10.1

Source: Washington County and SEWRPC

Table 8.6
Shared-Ride Taxi Systems Ridership: 2010-2016

Shared-Ride Taxi System Provider	Total Ridership							Percent Change 2010-2016
	2010	2011	2012	2013	2014	2015	2016	
City of Hartford	20,603	21,008	20,474	22,025	20,475	20,123	19,754	-4.1
City of West Bend	120,401	122,984	119,764	114,506	113,398	108,550	104,900	-12.9
Washington County	93,978	99,587	92,941	94,457	91,125	89,860	86,858	-7.6
Total	234,982	243,579	233,179	230,988	224,998	218,533	211,512	-10.0

Source: City of Hartford, City of West Bend, Washington County, and SEWRPC

and bike paths separated from motor vehicle lanes but within the street right-of-way. Off-street bicycle facilities are bike paths not located in a street right-of-way. Off-street facilities are typically located in utility rights-of-way or along rivers or streams, or may serve as short connectors between residential areas and commercial or public facilities.

Bicycle facilities in the County in 2016 are shown on Map 8.8, and totaled about 106 miles. The longest bicycle facility in the County is the Eisenbahn State Trail, which spans north and south for 24 miles within Fond du Lac and Washington Counties, of which 12 miles are located in the northern half of Washington County. Additional on-street and off-street bicycle facilities are located in the City of West Bend, including a total of about five miles of off-street facilities and about one mile of on-street facilities. The Pike Lake Trail extends about four miles from the City of Hartford to the Pike Lake Unit of the Kettle Moraine State Forest. The Pike Lake Trail bicycle facility is located in the right-of-way of STH 60 from South Wilson Avenue to Pike Lake Drive and off-street from that point into the State Forest.

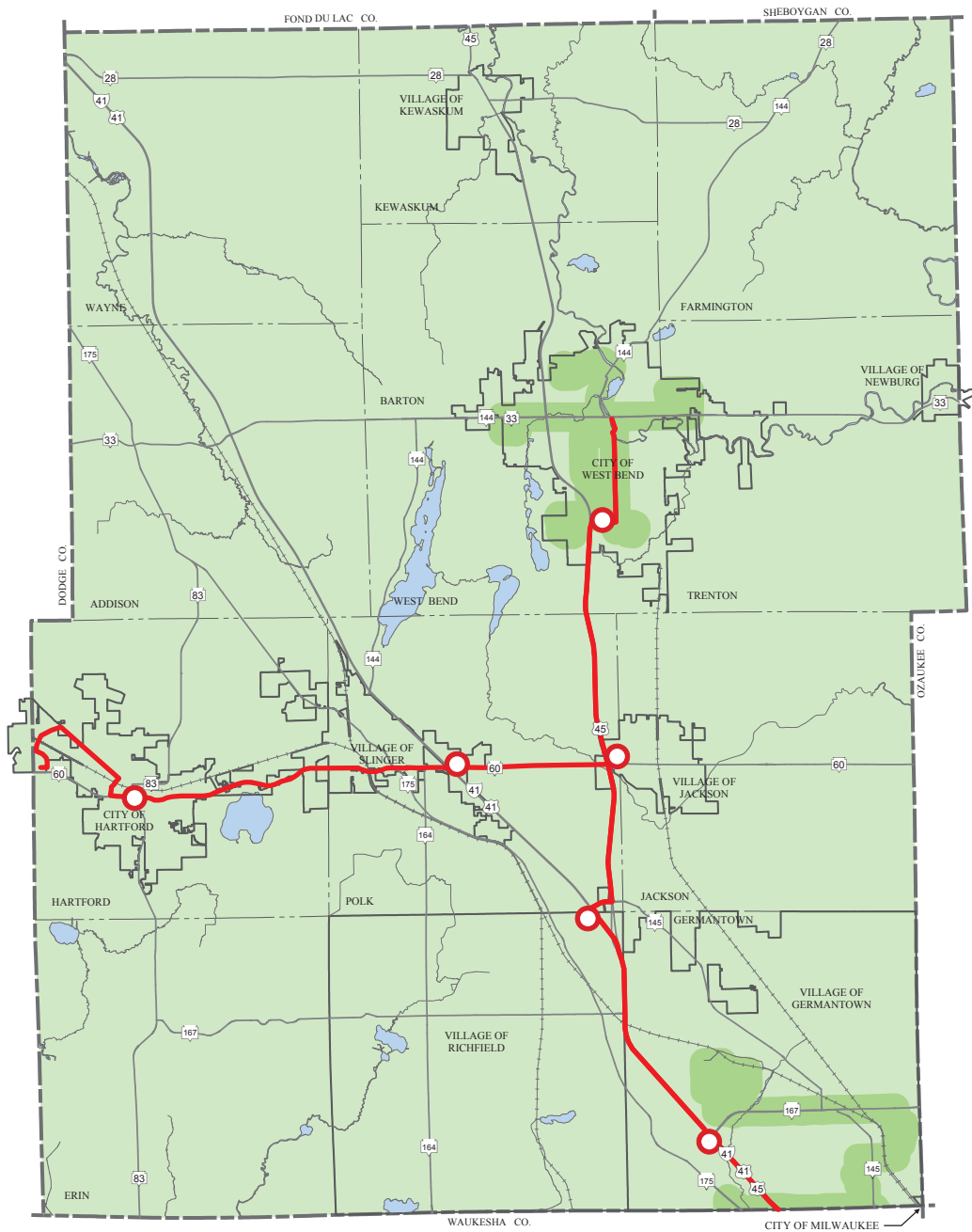


The longest bikeway in the County is the Eisenbahn Trail, which spans north and south for 24 miles within Fond du Lac and Washington Counties, of which 12 miles are in the northern half of Washington County.

Pedestrian Facilities



A comprehensive inventory of pedestrian facilities, such as sidewalks, has not been completed for Washington County. However, SEWRPC has developed a pedestrian facilities policy, which applies to facilities in the County, as documented in the *Amendment to the Regional Bicycle and Pedestrian Facilities System Plan for Southeastern Wisconsin: 2020*. 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 A of the amendment to the regional bicycle and pedestrian facilities

Map 8.7
VISION 2050 Transit Element as it Pertains to Washington County



 COMMUTER BUS ROUTE & PARK-RIDE

LOCAL TRANSIT SERVICE AREA AND PEAK FREQUENCY

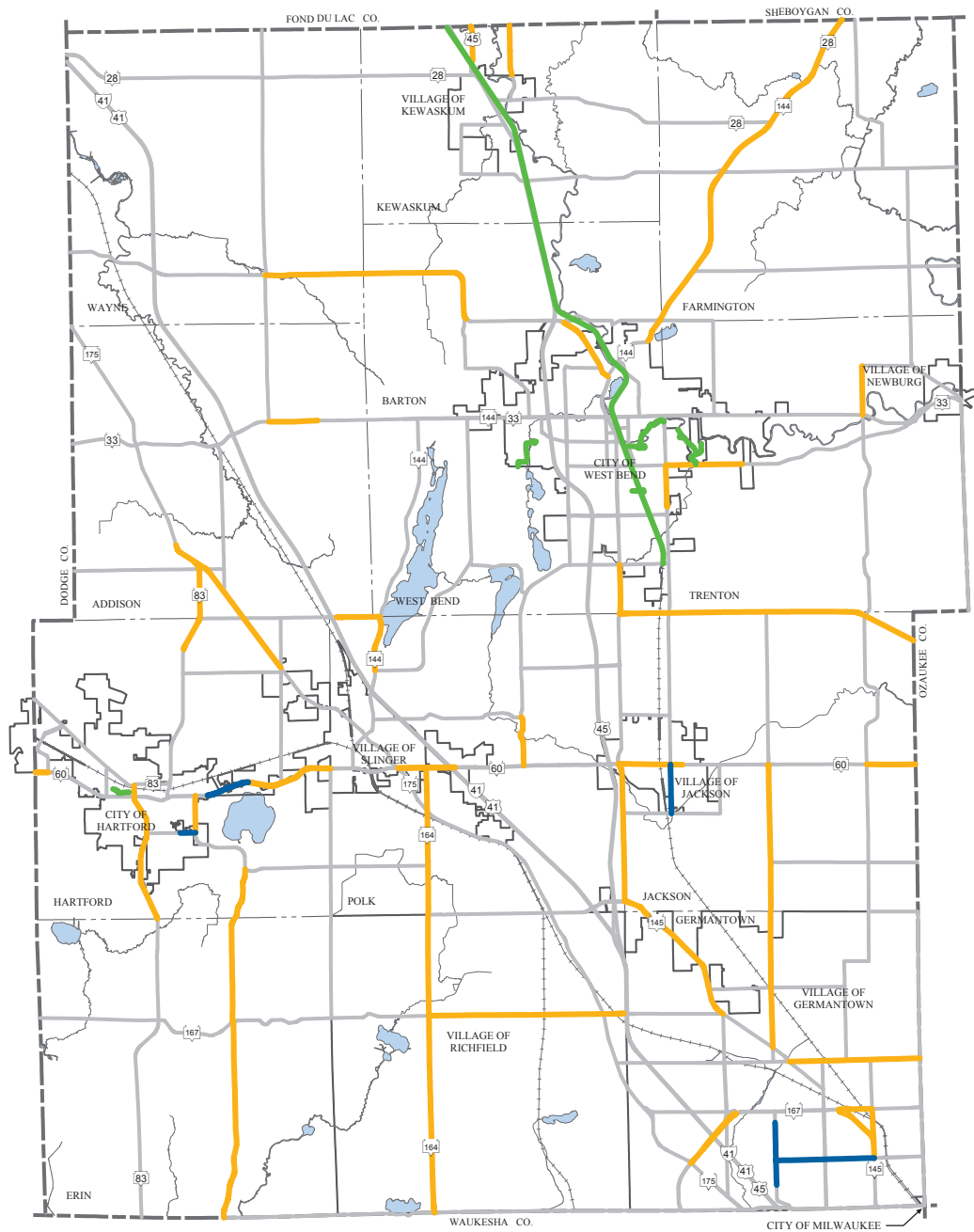
-  LOCAL TRANSIT SERVICE-LESS FREQUENT THAN EVERY 15 MINUTES
-  ONE DAY ADVANCE-RESERVATION SHARED-RIDE TAXI

Note: The USH 45/STH 60 Park-Ride is not proposed to be served by public transit.

Source: SEWRPC



**Map 8.8
Bicycle Facilities in Washington County: 2015/2016**



- OFF-STREET BICYCLE PATH (2016)
- SEPARATE PATH WITHIN ROAD WAY RIGHT-OF-WAY (2015)
- PAVED SHOULDER OR BIKE LANE (2015)
- ARTERIAL STREET OR HIGHWAY WITHOUT BICYCLE ACCOMMODATION (2016)

Source: SEWRPC



system plan. SEWRPC recommendations for provisions of sidewalks in areas of existing or planned urban development are summarized in Table 8.7.

VISION 2050 Bicycle and Pedestrian Element

The VISION 2050 Bicycle and Pedestrian Element is intended to accommodate safe bicycle and pedestrian travel, encourage bicycle and pedestrian travel as an alternative to motor vehicle travel, and to provide a variety of transportation choices. VISION 2050 recommends providing bicycle accommodations on all arterial streets, except freeways, as those streets are constructed or reconstructed. Bicycle accommodation could include marked bicycle lanes, widened outside travel lanes, widened shoulders, or separate bicycle paths. The type of bicycle facility to be provided should be determined during the preliminary engineering phase of a street improvement project. A system of off-street bicycle paths is also recommended to connect cities and villages with a population of 5,000 or more. The bicycle network recommended in VISION 2050 for Washington County is shown on Map 8.9. VISION 2050 recommends that county and local governments prepare bicycle system plans for their jurisdictions that would supplement and refine the regional plan. At the time of this comprehensive plan update, the County was also developing a Bikeway and Trail Network Plan in an effort to increase opportunities for non-motorized vehicle transportation. The County Bikeway and Trail Network Plan is discussed in more detail in Chapter 2, Existing Plans and Ordinances.

The pedestrian facilities portion of the bicycle and pedestrian element is envisioned as a policy plan rather than a system plan. It proposes that the various units and agencies of government responsible for constructing and maintaining pedestrian facilities adopt and follow a series of recommended design guidelines with regard to the development of those facilities, particularly within urban neighborhoods. These guidelines include providing sidewalks in urban portions of the County.

Transportation Systems Management (TSM)

VISION 2050 transportation systems management recommendations include measures intended to manage and operate existing transportation facilities to their maximum carrying capacity and travel efficiency. TSM recommendations relate to freeway traffic management, surface arterial street and highway traffic management, and major activity center parking management and guidance.

The freeway traffic management strategies include: installing traffic detectors and ramp meters at freeway on-ramps⁷⁵ in the County and Region; providing variable message signs on the freeway system, and on surface arterials leading to the most heavily used freeway system on-ramps; and expanding the closed-circuit television network, enhancing reference markers, and expanding crash investigation sites to better serve the regional freeway system.

The surface arterial street and highway traffic management strategies include: improving and expanding coordinated traffic signal systems; improving the type of traffic control deployed at intersections; improving signal timing at individual signalized intersections; adding right- and/or left-turn lanes; improving bicycle and pedestrian accommodation through intersections; implementing curb-lane parking restrictions where feasible; developing access management standards for the location, spacing, and operation of driveways (residential and commercial), median openings, and street connections; and implementing emergency vehicle preemption at traffic signals.

Travel Demand Management (TDM)

Travel demand management (TDM) refers to a series of measures or strategies 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. The general intent of such measures is to reduce traffic volume and congestion, and attendant air pollutant emissions and fuel consumption. To be effective, these measures should be technically and politically feasible; integrated with public transit, bicycle and pedestrian facilities, and arterial street and highway improvements; and combined into coherent packages so that a variety of measures are implemented.

⁷⁵ The only exceptions for installing detectors and ramp meters on freeway segments may be those with current and expected future traffic volumes that would be substantially less than freeway traffic carrying capacity, including USH 45 north of the Richfield Interchange and IH 41 north of STH 60 in Washington County.

Table 8.7
SEWRPC 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)	At least one side	At least one side

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

^b Where 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.

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

Source: SEWRPC

VISION 2050 TDM recommendations include: enhancing preferential treatment for high-occupancy vehicles (HOV) through the provision of HOV queue bypass lanes at metered freeway on-ramps and preferential carpool and vanpool parking; expanding the network of park-ride lots; personal vehicle pricing; promoting alternatives to drive-alone personal vehicle travel such as transit use, bicycle use, ridesharing, pedestrian travel, telecommuting, and work-time rescheduling; and, facilitating transit, bicycle, and pedestrian movement in local land use plans and zoning.

Air Transportation

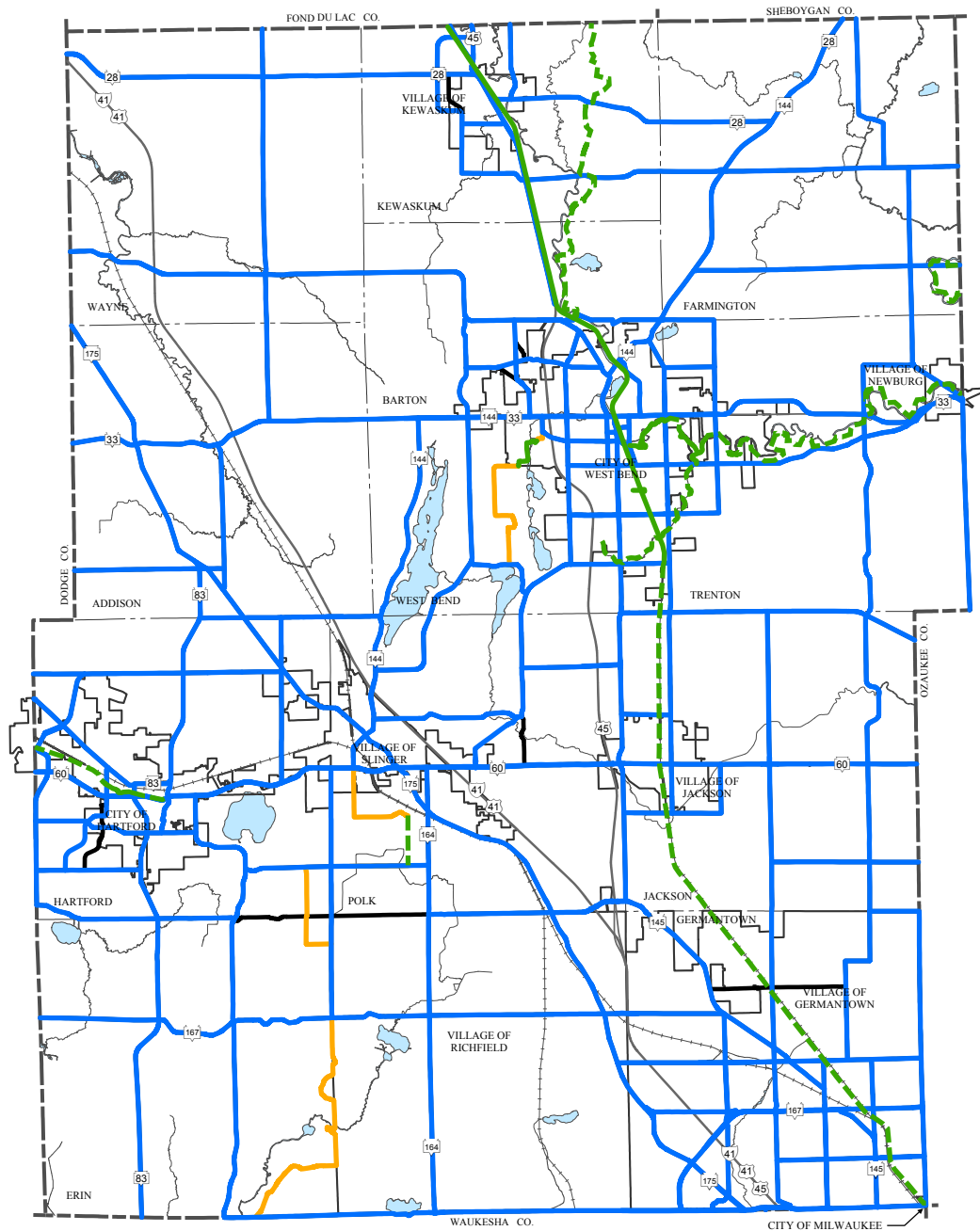
Air transportation is a valuable transportation mode for moving both people and cargo. Convenient access to an airport allows businesses to efficiently move goods and personnel from location to location, saving valuable time and increasing productivity. Local airports such as the West Bend Municipal Airport and the Hartford Municipal Airport play a crucial role in fostering business growth and economic development in Washington County. These airports also provide facilities for emergency medical flights, law enforcement, agricultural spraying, pilot training, and other community services. Milwaukee Mitchell International Airport in Milwaukee County provides commercial airline service to residents of the County.

The Wisconsin Department of Transportation, Bureau of Aeronautics in conjunction with the Bureau of Planning has developed the 2030 Wisconsin State Airport System Plan. Most airports included in the State plan are eligible for State and Federal improvement grants, including the publicly-owned Hartford and West Bend airports. The State plan identifies four general classifications of airports based on the type of service each airport provides: air carrier/cargo, transport/corporate, general utility, and basic utility. The Hartford Municipal Airport is classified as a general utility airport, and the West Bend Municipal Airport is classified as a transport/corporate airport. The West Bend Municipal Airport provides chartered air service. Both airports provide air freight service. Airports in the County are shown on Map 8.10.



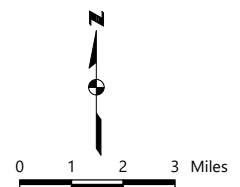
Air freight service is provided at the West Bend Municipal Airport and Hartford Municipal Airport (pictured).

Map 8.9
Off-Street Bicycle Paths and Surface Arterial Street and Highway System
Bicycle Accommodation Under VISION 2050 as it Pertains to Washington County

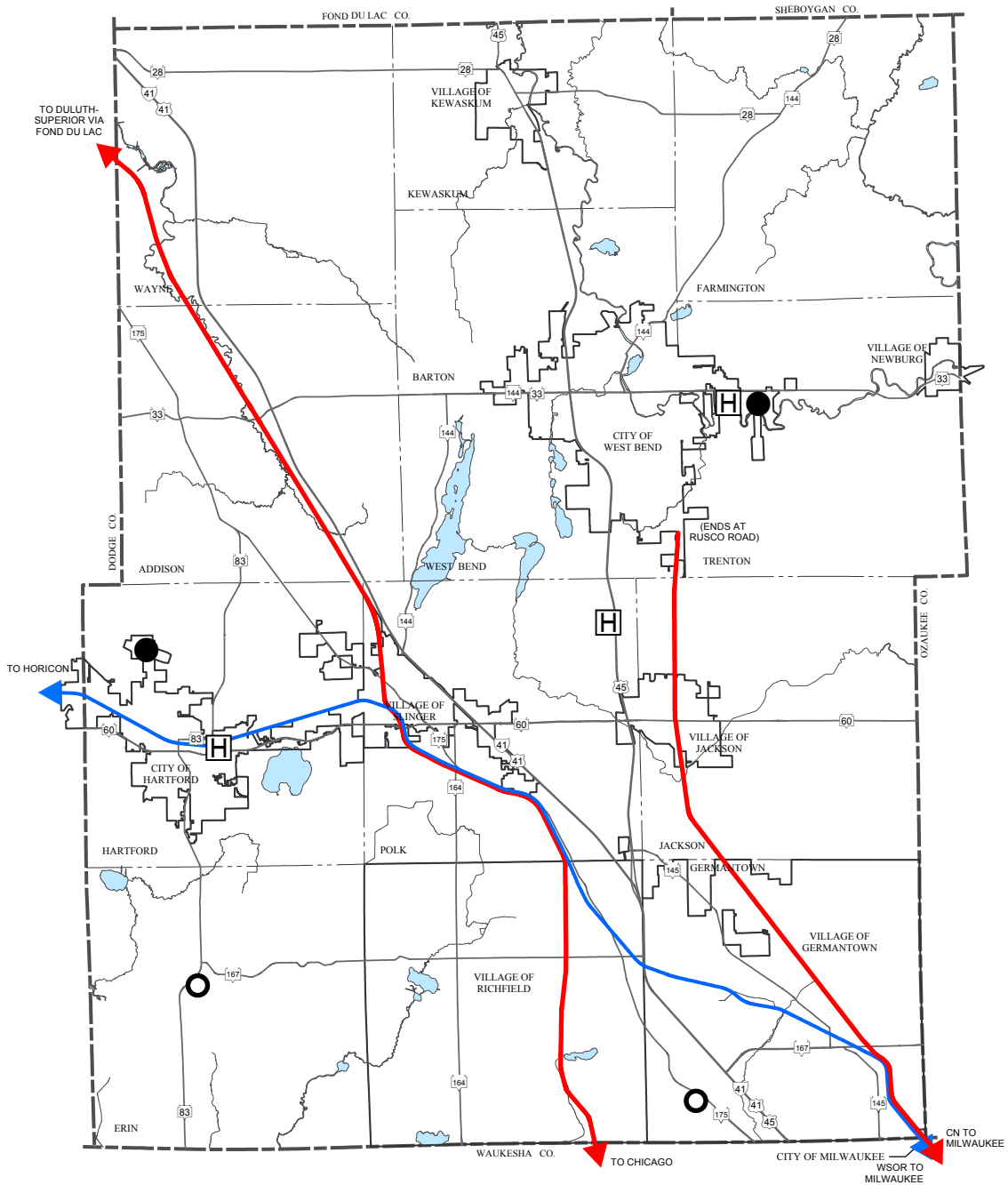


- EXISTING OFF-STREET BICYCLE PATH
- - - RECOMMENDED NEW OFF-STREET BICYCLE PATH
- ARTERIAL STREET OR HIGHWAY WITH BICYCLE ACCOMMODATION (IF FEASIBLE)
- NONARTERIAL STREET CONNECTION TO OFF-STREET BICYCLE NETWORK
- SURFACE ARTERIAL STREET CONNECTION TO OFF-STREET BICYCLE NETWORK

Source: SEWRPC



Map 8.10
Railroads and Airports in Washington County: 2016



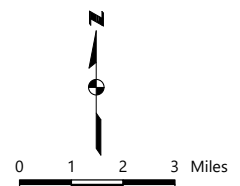
RAILROADS

- CANADIAN NATIONAL RAILWAY (CN)
- WISCONSIN AND SOUTHERN RAILROAD COMPANY (WSR)

AIRPORTS

- PUBLIC-USE AIRPORT - PUBLIC OWNERSHIP
- PRIVATE-USE AIRPORT - PRIVATE OWNERSHIP
- Ⓜ PRIVATE-USE HELIPORT

Source: SEWRPC



The Hartford Municipal Airport serves small general aviation single and twin engine aircraft. The airport was established in 1946 and is operated by the City of Hartford Public Works Department. The airport includes a 3,000-foot lighted asphalt runway and a 2,250-foot grass runway, and also includes a 24-hour self-serve fuel station and a pilots' lounge, which is provided by Air Cargo Carriers, an air cargo carrier company located at the airport. The airport supports about 125 aircraft with 37 active hangars and 25 to 30 vacant hangars. The Wisconsin Soaring Society also operates their Glider Club at the airport.

In 2006, the City of Hartford approved a new airport master plan. In 2007, the Bureau of Aeronautics approved a plan for the City to extend the 3,000-foot runway to 3,700 feet in 2010. The runway extension project has been delayed and is now planned to be completed in 2019. In 2021, the City plans to build a new terminal building at the airport. As a long-term recommendation, the City may consider lengthening the runway to 5,000 feet.

The West Bend Municipal Airport serves single and twin-engine aircraft and corporate jets. The West Bend airport is also classified as a General Aviation Reliever Airport, and serves as an alternative to Milwaukee Mitchell International Airport. The West Bend airport was established in 1928 as a grass landing field. The first concrete runway was constructed in the 1950's. The airport contains a 3,900-foot asphalt runway, a 4,500-foot lighted asphalt runway, and a helipad. The airport supports about 98 aircraft. The airport also serves as the headquarters for the Wisconsin Army National Guard 832 Air Ambulance Company, which is located on the western portion of the airport grounds. West Bend Air provides basic aeronautical services such as fuel sales, flying instruction, charter flights, and aircraft maintenance services at the airport.



Chartered air service is provided at the West Bend Municipal Airport (pictured).

Since the late 1970's, both the Regional Airport System Plan⁷⁶ and the City of West Bend long range plan for the airport have included a runway expansion project so the airport can better accommodate business and corporate air travel and meet Federal Aviation Administration (FAA) safety design standards. Other recommendations include developing a parallel taxiway, an aircraft hangar area and parking apron, a new precision instrument approach system, an access road, and other support facilities. In 2009, the FAA rejected a proposed expansion, citing significant environmental impacts and a reduction in aircraft demand at the airport. The City was working with WisDOT's Bureau of Aeronautics (BOA) on a new facility expansion plan during the preparation of this plan update.

Interregional Transportation

Interregional transportation services and facilities such as air transportation, railroads, trucking, and water transportation provide public transportation services and commercial shipping services between Washington County and the rest of the Southeastern Wisconsin Region and other regions around the nation and world.

Washington County is served by interregional public transportation and shipping services primarily through bus, rail, air, and port facilities located in Milwaukee County. These facilities meet the County's needs for interregional transportation services. IH 41 and USH 45 are the primary interregional highway facilities serving Washington County. IH 41 and USH 45 serve as the primary trucking routes for shipping goods into and from

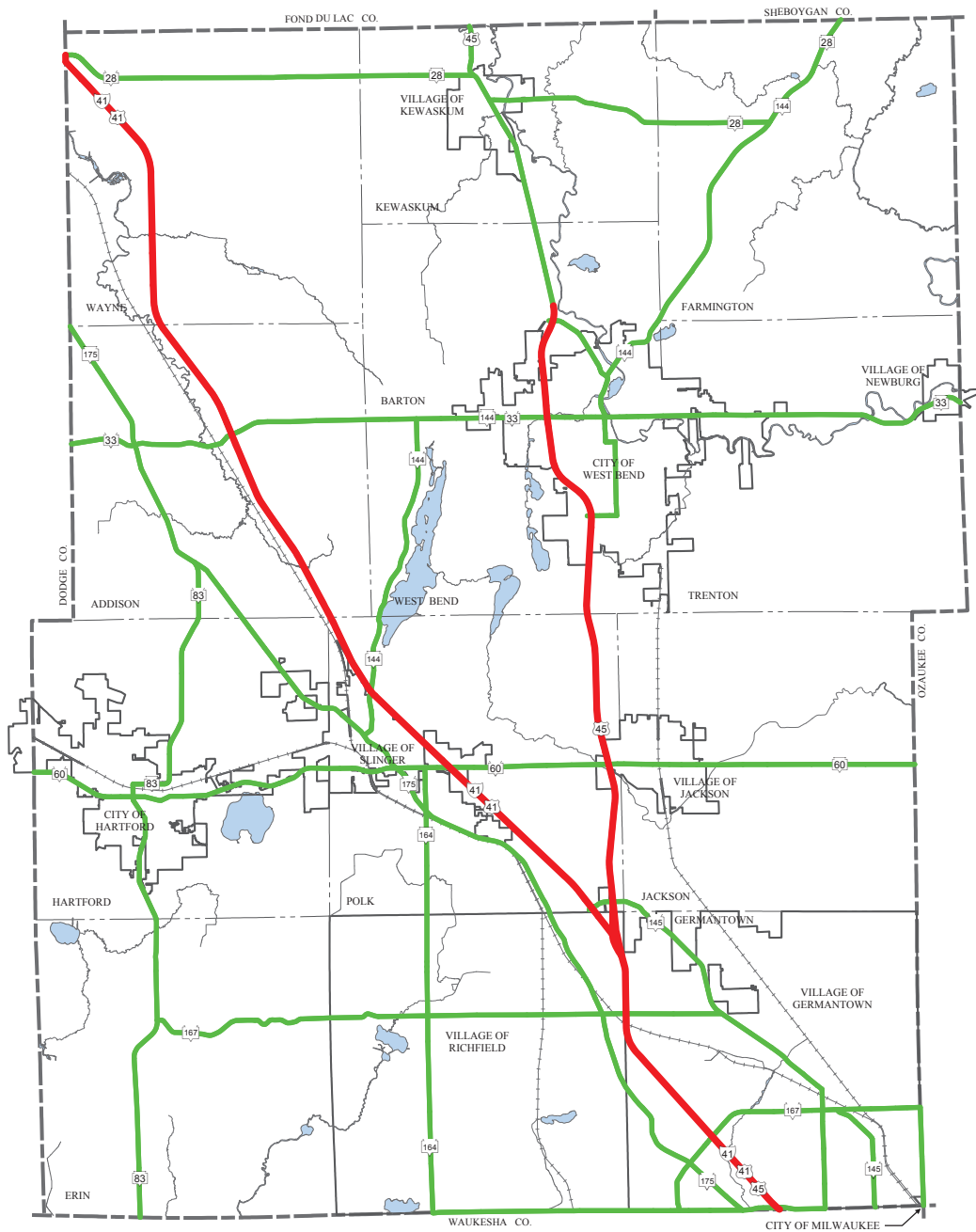


Three freight railroad lines run through Washington County, which provide access to businesses in the County that ship items better suited for transport by rail

⁷⁶ A Regional Airport System Plan was prepared by SEWRPC and adopted by the Regional Planning Commission in 1996. The plan, which has a design year of 2010, has not been updated to a design year of 2050, because the function served by the Regional Airport System Plan is now fulfilled by the 2030 Wisconsin State Airport System Plan.

Washington County businesses. The commercial and industrial land use development pattern set forth in the Land Use Element should be maintained to encourage easy truck access to the County's highway freight network (shown on Map 8.11), including IH 41 and USH 45, to maintain the flow of goods into and from Washington County. As shown on Map 8.10, three freight railroad lines run through Washington County, which provide access to businesses in the County that ship items better suited for transport by rail. Major rail customers include Quad Graphics located in the City of Hartford just across the County line in Dodge County, and Cedar Lake Sand and Gravel in the Towns of Addison and Hartford. VISION 2050 includes several freight transportation recommendations to support commerce in Washington County.

Map 8.11 Highway Freight Network in Washington County: 2016



— FREEWAY FREIGHT ROUTE

— ARTERIAL FREIGHT ROUTE

Note: The Regional Highway Freight Network is based on the National Highway System (NHS) and the State of Wisconsin's Designated Routes for Long Trucks. The network may be revised upon completion of the two freight planning efforts underway during the preparation of this plan update, the U.S. Department of Transportation's National Freight Strategic Plan and the Wisconsin Department of Transportation's Wisconsin

Source: SEWRPC

