2024 REVIEW & UPDATE OF VISION 2050

This document represents one of the seven elements of the 2024 Review and Update of VISION 2050, which is documented in Memorandum Report No. 268.

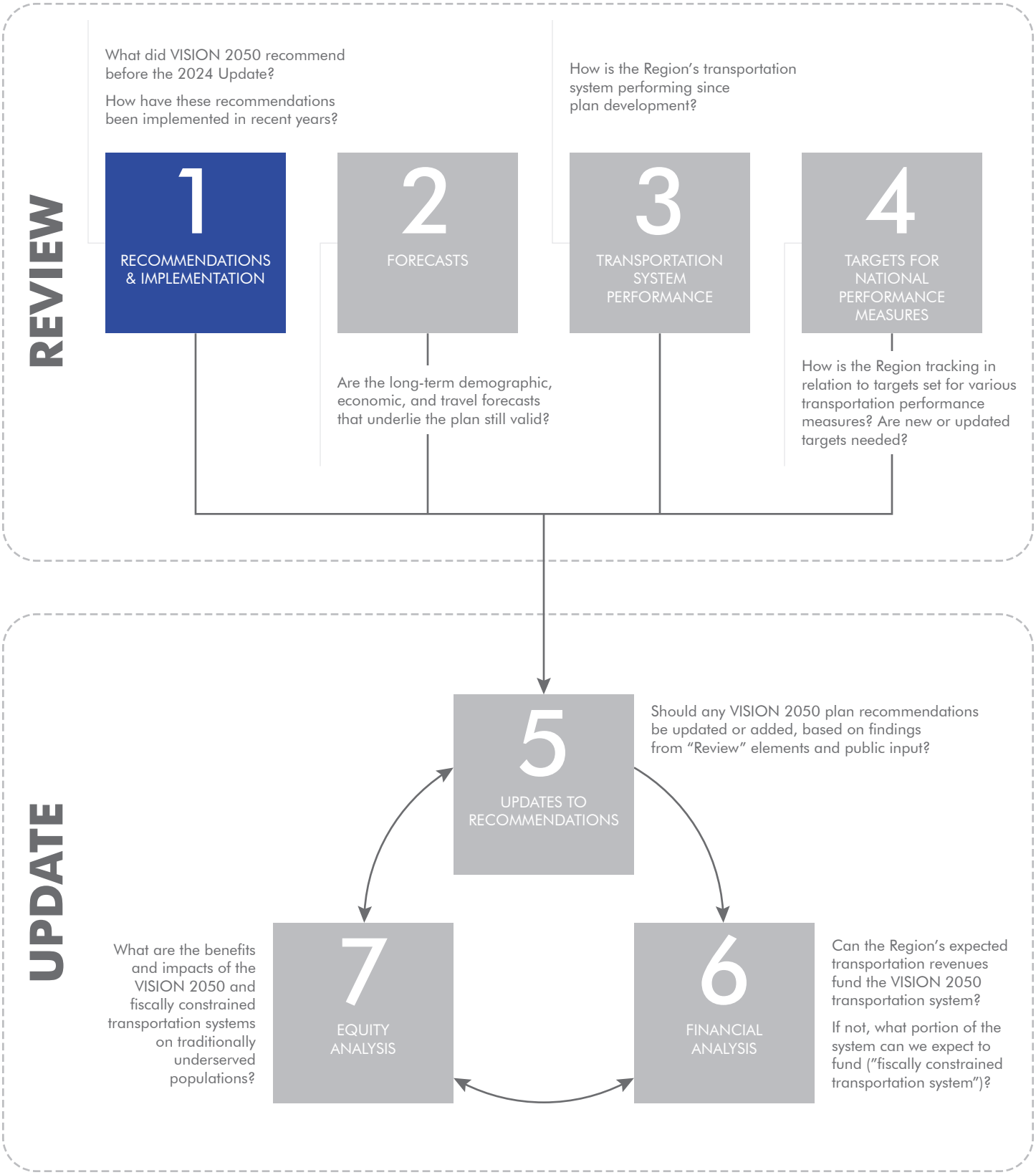
Prepared by the Southeastern Wisconsin Regional Planning Commission

June 2024

1 REVIEW OF VISION 2050 RECOMMENDATIONS AND IMPLEMENTATION

2024 REVIEW & UPDATE OF VISION 2050

The Review & Update Process



INTRODUCTION

This document, titled *Review of VISION 2050 Recommendations and Implementation*, was largely prepared in late 2023 as one of the initial elements of the 2024 Review and Update of VISION 2050, which is documented in Memorandum Report No. 268. This element includes a summary of the VISION 2050 recommendations for land use and transportation, current as of the previous 2020 Review and Update of VISION 2050 ("2020 Update"), along with recent progress in implementing those recommendations. The full set of VISION 2050 recommendations current as of the 2020 Update can be viewed in the Second Edition of Volume III, *Recommended Regional Land Use and Transportation Plan*, of the VISION 2050 plan report.

REVIEW OF LAND USE COMPONENT

The land use component of VISION 2050 focuses on compact development and presents a development pattern and recommendations that accommodate projected growth in regional population, households, and employment in a sustainable manner. The compact development pattern recommended under VISION 2050 ranges from high-density development such as transit-oriented development (TOD), to neighborhoods in smaller communities with housing within easy walking distance of amenities such as parks, schools, and businesses. This range of development is recommended because it has a number of benefits, including:

- Minimizing impacts on natural and cultural resources
- Minimizing impacts to water resources and air quality
- Positioning the Region to attract workers and employers
- Maximizing redevelopment in areas with existing infrastructure
- Minimizing the cost of infrastructure and public services
- Meeting the needs of the Region's aging population
- Providing walkable neighborhoods that encourage active lifestyles and a sense of community
- Reducing the distance needed to travel between destinations
- Providing a variety of housing types near employment
- Supporting public transit connections between housing and employment
- Increasing racial and economic integration throughout the Region

VISION 2050 recognizes the impact of market forces on the location, intensity, and character of future urban development. It also recognizes the important role of communities in development decisions. VISION 2050 is intended to provide a guide, or overall framework, for future land use within the Region. Implementation of the land use recommendations relies on the actions of local, county, State, and Federal agencies and units of government in conjunction with the private sector.

This section describes the implementation status of each of the 18 land use component recommendations. The base years used for the status reports are 2010, the base year of much of the VISION 2050 land use inventory data, and 2016, the year VISION 2050 was adopted. The most current data available were used to report on the implementation status of the recommendations. The Commission's most recent land use inventory, which is based on aerial photography taken in 2020, is a major data source for the reporting.

➤ Recommendation 1.1: Develop urban service areas with a mix of housing types and land uses

Developing urban service areas with a mix of housing types, including multifamily housing and single-family housing on smaller lots (1/4 acre or less), helps provide affordable housing choices for households with a wide range of incomes. Along with a mix of housing types, mixing land uses can create walkable neighborhoods with housing near neighborhood amenities such as parks, schools, and businesses. This combination helps to provide living options that are affordable, desirable to potential workers, and accessible to people with disabilities. A mix of housing types and land uses would be possible under the Mixed-Use City Center, Mixed-Use Traditional Neighborhood, and Small Lot Traditional Neighborhood land use categories, as illustrated on Figure 1 and shown on Map 1.

Housing type data from 2010 to 2022 compiled from the Wisconsin Department of Administration are presented in Table 1. The data are limited to areas of the Region with public sewer service. About 57 percent of the 58,506 new housing units developed in sewered portions of the Region since 2010 have been multifamily, which helps to implement Recommendation 1.1. About 51 percent of the multifamily development between 2016 and 2022 occurred in Milwaukee County, compared to 53 percent between 2010 and 2016, indicating that the production of multifamily housing has recently increased slightly over the existing mix of multifamily housing and single-family housing in the other counties of the Region. The trend of multifamily development in the Region follows national trends.

Data compiled from the Commission's subdivision platting inventory suggest that while the mix of housing units has been consistent with Recommendation 1.1, the single-family housing development that has occurred since 2010 has been mostly at lower densities than recommended. As shown in Table 2, only about 12 percent of the 8,391 single-family lots created in subdivisions with sewer service since 2010 have been 10,000 square feet or less in size. The percentage increases only slightly to about 18 percent when looking at the sewered subdivisions created between 2016 and 2022.

VISION 2050 also recommends that local governments in urban service areas include the Mixed-Use City Center, Mixed-Use Traditional Neighborhood, and Small Lot Traditional Neighborhood land use categories in their comprehensive plans as appropriate. Local governments in the Region are required to adopt a comprehensive plan, which must include a long-range land use plan map, and update the plan at least every 10 years. In addition, important land use regulation ordinances such as zoning ordinances must be consistent with the comprehensive plan. This makes local comprehensive plans an important implementation tool for the recommended regional land use development pattern.

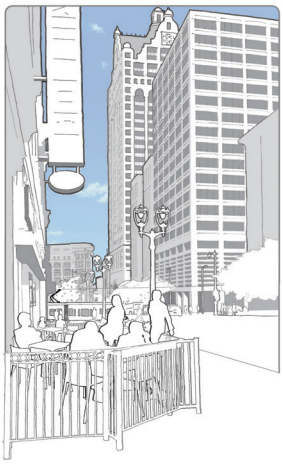
Many of the sewered communities in the Region have recently prepared, or are currently in the process of, preparing 10-year comprehensive plan updates. Accordingly, this is the ideal time for local governments to consider the benefits of Recommendation 1.1 and incorporate the recommended land use categories into their comprehensive plans as appropriate. According to the Commission's records, 36 sewered communities have adopted 10-year comprehensive plan updates as of May 2023. For the most part, the plan updates have maintained existing land use development patterns, although housing-related objectives and analyses were key elements of some of the plan updates. In addition to 10-year plan updates, some of the sewered communities in the Region have adopted amendments to their comprehensive plans in response to major new developments. In addition, the City of Waukesha prepared a Housing Study and Needs Assessment Report that includes recommendations regarding density and mixed-use development that would help to implement Recommendation 1.1.

➤ Recommendation 1.2: Focus TOD near rapid transit and commuter rail stations

VISION 2050 recommends transit-oriented development (TOD) in areas surrounding the rapid transit and commuter rail stations recommended under the transportation component of VISION 2050. Rapid transit and commuter rail are described in more detail under Recommendations 2.1 and 2.2, respectively. Residential development within TODs should occur largely in multifamily buildings or in buildings with a mix of uses such commercial-retail space on the ground floor and dwellings and/or office space on upper floors. TODs may also incorporate public plazas, parks, and other governmental and institutional uses. Streets and sidewalks within TODs should provide convenient and safe access

Figure 1
VISION 2050 Land Use Categories

The recommended VISION 2050 land use pattern was developed by allocating new households and employment envisioned for the Region under the Commission's year 2050 growth projections to a series of seven land use categories that represent a variety of development densities and mixes of uses.



MIXED-USE CITY CENTER
Mix of very high-density offices, businesses, and housing found in the most densely populated areas of the Region

MEDIUM LOT NEIGHBORHOOD (showing lots of about 15,000 square feet)
Primarily single-family homes on ¼- to ½-acre lots found at the edges of cities and villages

LARGE LOT NEIGHBORHOOD (showing lots of about ½ acre)
Primarily single-family homes on ½-acre to one-acre lots found at the edges of cities and villages and scattered outside cities and villages

MIXED-USE TRADITIONAL NEIGHBORHOOD
Mix of high-density housing, businesses, and offices found in densely populated areas

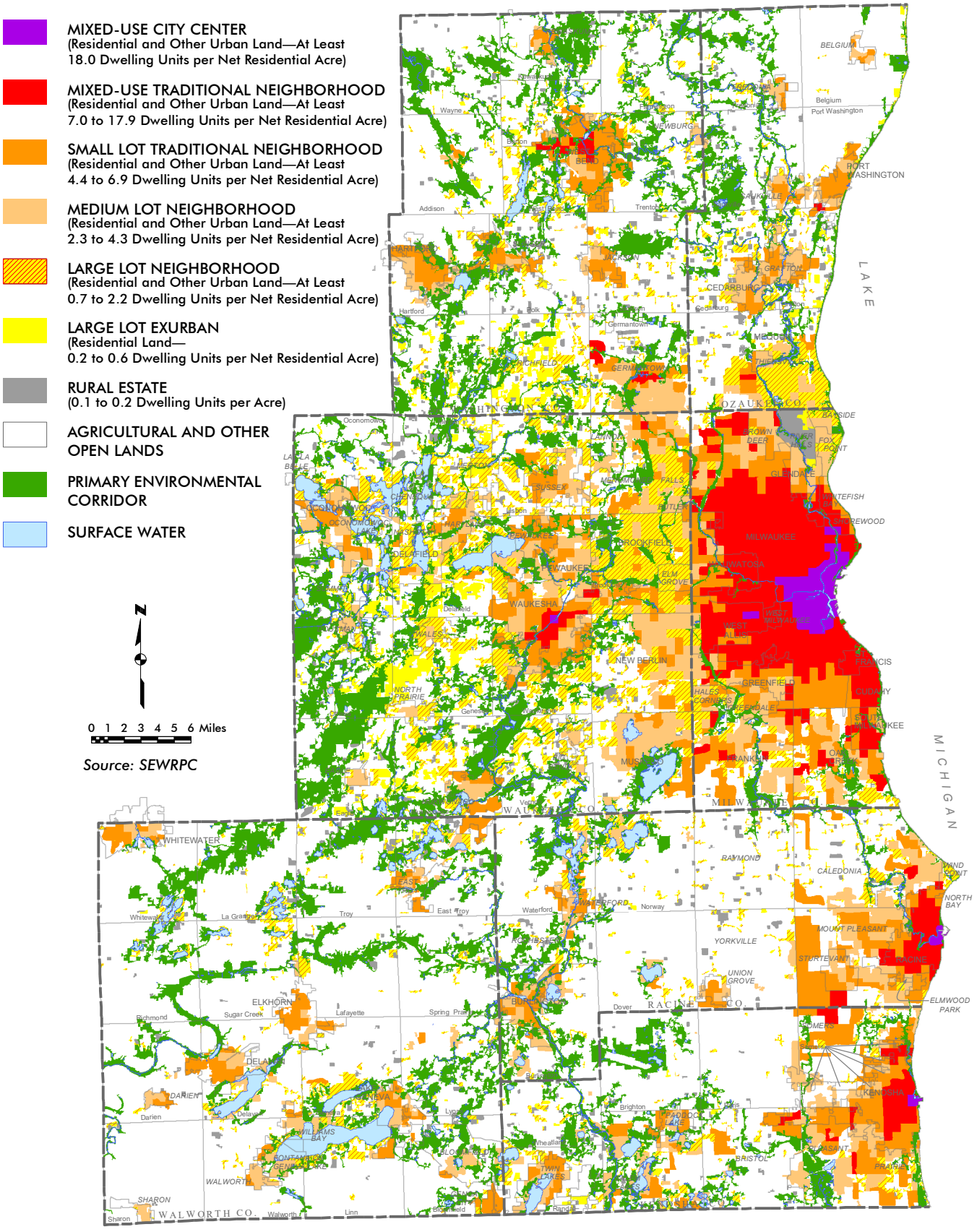
LARGE LOT EXURBAN (showing lots of about 1.5 acres)
Single-family homes at an overall density of one home per 1.5 to five acres scattered outside cities and villages

SMALL LOT TRADITIONAL NEIGHBORHOOD (showing lots of about 7,000 square feet)
Mix of housing types and businesses with single-family homes on lots of ¼-acre or less and multifamily housing found within and at the edges of cities and villages

RURAL ESTATE (showing a cluster subdivision with one-acre lots)
Single-family homes at an overall density of one home per five acres scattered outside cities and villages

Source: SEWRPC, 6/2020

Map 1
Land Use Development Pattern: VISION 2050 (as of 2020 Update)



6/2020

Table 1
New Housing Units by Structure Type in Sewered Areas of the Region: 2010-2022

County	Single-Family		Two-Family		Multifamily		Total	
	Number of Units	Percent of Total	Number of Units	Percent of Total	Number of Units	Percent of Total	Number of Units	Percent of Total
Kenosha	2,352	38.5	206	3.4	3,555	58.1	6,113	100.0
Milwaukee	2,693	12.9	854	4.1	17,288	83.0	20,835	100.0
Ozaukee	1,769	48.4	238	6.5	1,647	45.1	3,654	100.0
Racine	3,672	58.5	350	5.6	2,252	35.9	6,274	100.0
Walworth	1,818	68.1	86	3.2	766	28.7	2,670	100.0
Washington	1,919	46.8	598	14.6	1,585	38.6	4,102	100.0
Waukesha	7,745	52.1	931	6.3	6,182	41.6	14,858	100.0
Region	21,968	37.5	3,263	5.6	33,275	56.9	58,506	100.0

Source: Wisconsin Department of Administration Annual Housing Survey, 6/2024

Table 2
Single-Family Residential Subdivisions by VISION 2050 Land Use Category Served by Public Sanitary Sewer in the Region: 2010-2022

Municipality	Average Lot Size								Zoning Ordinance Allows Lot Size of 10,000 sq ft or Less as a Principal Use[a]
	Small Lot Traditional Neighborhood (10,000 sq ft or less)		Medium Lot Neighborhood (10,001-19,999 sq ft)		Large Lot Neighborhood (20,000 sq ft or More)		Total		
	Number of Lots	Number of Subdivisions	Number of Lots	Number of Subdivisions	Number of Lots	Number of Subdivisions	Number of Lots	Number of Subdivisions	
Kenosha County									
City of Kenosha	12	1	54	2	0	0	66	3	Yes
Village of Bristol	0	0	73	3	0	0	73	3	Yes
Village of Pleasant Prairie	0	0	87	2	0	0	87	2	Yes
Village of Salem Lakes	0	0	0	0	12	1	12	1	Yes
Village of Twin Lakes	0	0	0	0	39	1	39	1	Yes
Milwaukee County									
City of Franklin	0	0	275	6	33	3	308	9	No
City of Greenfield	0	0	25	4	0	0	25	4	Yes
City of Milwaukee	11	1	0	0	0	0	11	1	Yes
City of Oak Creek	68	1	122	5	8	1	198	7	Yes
City of Saint Francis	13	2	0	0	0	0	13	2	Yes
Village of Whitefish Bay	7	1	0	0	0	0	7	1	Yes
Ozaukee County									
City of Cedarburg	45	1	199	8	7	1	251	10	Yes
City of Mequon	23	1	24	2	199	10	246	13	No
City of Port Washington	82	4	86	2	35	2	203	8	Yes
Village of Belgium	9	1	29	2	0	0	38	3	Yes
Village of Grafton	0	0	277	10	48	2	325	12	Yes
Village of Saukville	0	0	63	1	0	0	63	1	Yes
Village of Thiensville	27	2	0	0	0	0	27	2	Yes
Racine County									
City of Burlington	0	0	0	0	30	1	30	1	Yes
Village of Caledonia	0	0	9	1	7	1	16	2	No
Village of Mount Pleasant	5	1	48	3	13	2	66	6	Yes
Village of Sturtevant	0	0	18	1	0	0	18	1	Yes
Village of Union Grove	0	0	141	3	0	0	141	3	Yes
Village of Waterford	0	0	25	1	4	1	29	2	No

Table continued on next page.

Table 2 (Continued)

Municipality	Average Lot Size								Zoning Ordinance Allows Lot Size of 10,000 sq ft or Less as a Principal Use[a]
	Small Lot Traditional Neighborhood (10,000 sq ft or less)		Medium Lot Neighborhood (10,001-19,999 sq ft)		Large Lot Neighborhood (20,000 sq ft or More)		Total		
	Number of Lots	Number of Subdivisions	Number of Lots	Number of Subdivisions	Number of Lots	Number of Subdivisions	Number of Lots	Number of Subdivisions	
Walworth County									
City of Delavan	49	1	24	1	12	1	85	3	Yes
City of Elkhorn	0	0	0	0	5	1	5	1	Yes
City of Lake Geneva	388	3	0	0	0	0	388	3	Yes
Village of Bloomfield	0	0	0	0	9	1	9	1	No
Village of Sharon	0	0	0	0	32	1	32	1	Yes
Village of Walworth	92	2	0	0	0	0	92	2	No
Town of Delavan	0	0	418	2	0	0	418	2	No
Town of Geneva	0	0	0	0	16	1	16	1	No
Washington County									
City of Hartford	0	0	75	3	0	0	75	3	Yes
City of West Bend	18	1	30	1	0	0	48	2	Yes
Village of Germantown	0	0	167	3	32	2	199	5	Yes
Village of Jackson	33	1	119	4	0	0	152	5	Yes
Village of Kewaskum	0	0	10	2	0	0	10	2	Yes
Village of Slinger	0	0	232	4	19	4	251	8	Yes
Waukesha County									
City of Brookfield	25	1	53	2	52	5	130	8	No
City of Delafield	0	0	35	2	64	3	99	5	Yes
City of Muskego	0	0	24	1	249	8	273	9	No
City of New Berlin	0	0	0	0	104	4	104	4	No
City of Oconomowoc	0	0	639	18	0	0	639	18	Yes
City of Pewaukee	0	0	366	10	118	6	484	16	No
City of Waukesha	38	3	292	11	0	0	330	14	Yes
Village of Hartland	0	0	34	1	104	2	138	3	Yes
Village of Lannon	0	0	86	3	0	0	86	3	No
Village of Menomonee Falls	0	0	719	23	122	5	841	28	Yes
Village of Mukwonago	0	0	113	3	7	1	120	4	No
Village of Pewaukee	46	1	0	0	0	0	46	1	No
Village of Summit	50	1	287	7	19	2	356	10	No
Village of Sussex	0	0	398	16	158	6	556	22	Yes
Village of Wales	0	0	18	1	0	0	18	1	No
Town of Delafield	0	0	0	0	99	4	99	4	No
Total	1,041	30	5,694	174	1,656	83	8,391	287	N/A

[a] *Local government zoning ordinance includes at least one zoning district that allows single-family residential lot sizes of 10,000 square feet or less as a principal use.*

Source: SEWRPC, 6/2024

for walking and bicycling to the transit station. TOD is a focus of VISION 2050 because it supports healthy communities, mobility, and revitalization of urban areas; however, displacement of low-income households was raised as a concern during the visioning process.

Since VISION 2050 was adopted, The Hop streetcar's M-Line and Lakefront Line have been implemented. In addition, the CONNECT 1 bus rapid transit (BRT) line has been implemented. Each of these projects could encourage TOD. The City of Milwaukee's Downtown Plan 2040 also recommends pursuing funding four streetcar extensions, including connections to King Drive and the Bronzeville Cultural and Entertainment District north of Downtown, the Walker's Point neighborhood south of Downtown, and the East Side. The Downtown Plan references the economic development opportunities that the streetcar extensions are anticipated to create, including new developments and investment. The Downtown Plan supports TOD planning efforts for the Bronzeville and Walker's Point extensions completed in 2019. In addition, subsequent BRT lines in Milwaukee County that are currently being planned would be expected to present additional opportunities for TOD.

➤ Recommendation 1.3: Focus new urban development in areas that can be efficiently and effectively served by essential municipal facilities and services

VISION 2050 recommends that urban development primarily occur within planned urban service areas where urban services, including public sanitary sewer and water service, can efficiently be provided. Between 2010 and 2020, 26.4 of the 35.4 square miles of incremental greenfield urban development that occurred during that time period, or 75 percent, were located in areas consistent with plan recommendations. It should be noted that this analysis only includes land converted from agricultural and other open space uses and does not account for redevelopment efforts that have taken place in the older urban centers of the Region. In addition, of the 10,042 residential lots created through subdivision plats between 2010 and 2022, 8,391 lots, or 84 percent, were located within planned urban service areas. Table 2 shows these data by county and municipality.

➤ Recommendation 1.4: Consider cluster subdivision design in residential development outside urban service areas

VISION 2050 recommends that consideration be given to utilizing cluster subdivision designs to minimize impacts to natural and agricultural resources while accommodating rural residential development outside of planned urban service areas. From 2010 through 2022, 1,651 lots were created through subdivision plats outside of planned urban service areas. Of these, 146 lots, or 9 percent, were created utilizing cluster subdivision designs.

➤ Recommendation 1.5: Limit low-density development outside urban service areas

Large Lot Neighborhood and Large Lot Exurban residential development outside urban service areas is neither truly urban nor rural in character. Development of this nature generally precludes the provision of centralized sewer and water supply service and other urban amenities. VISION 2050 recommends that Large Lot Neighborhood and Large Lot Exurban residential development be limited to areas outside planned urban service areas where there were approved subdivision plats and certified survey maps at the beginning of the VISION 2050 planning process. From 2010 through 2022, 1,472 lots were created through conventional subdivision plats outside planned urban service areas that were not consistent with Recommendation 1.5. Much of this development occurred since the 2020 Update.

➤ Recommendation 1.6: Provide a mix of housing types near employment-supporting land uses

Providing a mix of housing types near concentrations of employment, along with a multimodal transportation system, is a key to promoting accessibility to job opportunities within the Region. Increased accessibility to jobs will benefit those in the Region who are seeking job opportunities. It will also benefit employers that need to attract workers from across the Region, including those workers that may have transportation barriers. VISION 2050 recommends that communities with public sewer service, which are home to the vast majority of businesses in the Region, implement the housing mix and development pattern recommended under Recommendation 1.1 to promote access to job opportunities.

As discussed under Recommendation 1.1, a significant amount of the residential development since 2010 (and since 2016) within sewered communities has been multifamily. Much of this development has occurred in Milwaukee County; however, Table 2 shows that a significant amount of multifamily development has also occurred in the other six counties compared to the existing housing type mix in 2010 (25 percent of the Region's existing housing units were in multifamily buildings in 2010). This may increase access to jobs for lower-wage workers in the Region and help to implement Recommendation 1.6. Also discussed under Recommendation 1.1, most single-family residential development since 2010 (and since 2016) has occurred at lower-than-recommended densities. This does not improve access to jobs for moderate-wage workers.

The construction of new Low-Income Housing Tax Credit (LIHTC) developments would also help to increase access to jobs for lower-wage workers and implement Recommendation 1.6. Many of the units in LIHTC developments have household income restrictions that typically equate to about 60 percent of area median income, which increases the likelihood that the new units will be affordable to lower-wage workers. About 8,600 affordable LIHTC units have been developed in the Region since 2010; however, less than half of those units (4,150, or 48 percent) are "family" units. Occupancy in other types of LIHTC developments may be limited to certain populations, such as seniors. In addition, only 31 percent of the family units were developed outside of Milwaukee County. More family LIHTC developments in sewered communities outside Milwaukee County would help to implement Recommendation 1.6.

➤ Recommendation 1.7: Encourage and accommodate economic growth

VISION 2050 recommends continued development of major economic activity centers to encourage economic growth. Major economic centers are defined as areas containing concentrations of commercial and/or industrial land with at least 3,500 employees or 2,000 retail employees.

Between 2010 and 2020, about 7.2 square miles, or 83 percent, of all new commercial and industrial development occurred within a planned urban service area. Of that 7.2 square miles, about 3.9 square miles, or 54 percent, were within a major economic activity center.

VISION 2050 also recommends a mix of housing types near major economic activity centers to promote accessibility between housing and jobs. The housing trends discussed under Recommendations 1.1 and 1.6 also apply to communities with major economic activity centers. Between 2010 and 2022, multifamily units accounted for more than 25 percent of the total new housing units in 28 of the 37 communities in the Region with a major economic activity center. This includes 20 communities where multifamily units accounted for over half of the total new housing units.

In addition, the trend in LIHTC development discussed under Recommendation 1.6 applies to communities with major economic activity centers. Between 2010 and 2023, half of the 8,150 affordable units constructed in communities with major economic activity centers have been family units.

➤ Recommendation 1.8: Provide new governmental and institutional buildings in mixed-use settings

VISION 2050 recommends that new governmental and institutional uses occur in mixed-use settings to the greatest extent possible to be accessible to the greatest number of residents possible. Between 2010 and 2020, 83 percent of all new governmental and institutional uses were located within a planned urban service area within or adjacent to other developing areas.

➤ Recommendation 1.9: Provide neighborhood parks in developing residential areas

VISION 2050 recommends reserving land for parks as new residential neighborhoods are developed within urban service areas. Between 2010 and 2020, 20 new park areas were acquired and at least partially developed to serve developing urban areas of the Region.

➤ Recommendation 1.10: Preserve primary environmental corridors

VISION 2050 recommends preserving primary environmental corridors in essentially natural, open use and limiting development within primary environmental corridors to essential transportation and utility facilities, compatible outdoor recreation facilities, and rural-density residential development (a maximum of one housing unit per five acres) in upland areas not encompassing steep slopes.

In 2010, primary environmental corridors covered about 484 square miles, or about 18 percent of the Region. The Commission's 2015 environmental corridor inventory indicates that the area identified as primary environmental corridor, based on changes to the associated natural resources, has increased slightly to about 489 square miles, an increase of about 1 percent.

The Commission monitors efforts by government agencies and private organizations to ensure the long-term protection of open space lands through public interest ownership, including conservation easements. Between 2010 and 2020, approximately 4,200 additional acres of primary environmental corridors in the Region were protected through public interest ownership or conservation easements. These efforts, combined with joint state-local floodplain and shoreland-wetland zoning; State administrative rules governing sanitary sewer extensions; and local land use regulations, indicate that about 463 square miles (including surface water)—representing 95 percent of primary environmental corridors in the Region—were substantially protected from incompatible urban development in 2020.

➤ Recommendation 1.11: Preserve secondary environmental corridors and isolated natural resource areas

VISION 2050 recommends that local governments consider preserving secondary environmental corridors and isolated natural resource areas as natural, open space, or as drainage ways, stormwater detention and retention areas, or local park or recreation trails in developing areas.

In 2010, secondary environmental corridors and isolated natural resources areas combined covered about 149 square miles, or about 6 percent of the Region. The Commission's 2015 environmental corridor inventory indicates that the areas identified as secondary environmental corridors or isolated natural resource areas, based on changes to the associated natural resources, has increased slightly to about 152 square miles, an increase of about 2 percent. Between 2010 and 2015, approximately 400 additional acres of secondary environmental corridors and isolated natural resource areas in the Region were protected through public interest ownership or conservation easements.

➤ Recommendation 1.12: Preserve natural areas and critical species habitat sites

VISION 2050 recommends preserving all natural areas and critical species habitat sites as identified in the regional natural areas and critical species habitat protection and management plan. Between 2010 and 2020, approximately 2,350 additional acres of natural areas and critical species habitat areas in the Region were protected through public interest ownership or conservation easements.

➤ Recommendation 1.13: Preserve productive agricultural land

VISION 2050 recommends preserving the most productive soils for agricultural purposes—agricultural capability Class I and II soils as classified by the U.S. Natural Resources Conservation Service—for agricultural use to the extent practicable. Under the plan, the conversion of prime agricultural land (Class I and II soils) to urban use would be limited to lands within planned urban service areas.

Between 2010 and 2020, about 16.9 square miles of prime agricultural land were converted to urban uses. Of that total, about 7.9 square miles were converted to urban use in locations consistent with the plan. About 9.0 square miles of prime agricultural land were converted to urban use in locations not consistent with the plan.

➤ Recommendation 1.14: Preserve productive agricultural land through farmland preservation plans

VISION 2050 recognizes that, under the Wisconsin Farmland Preservation Law (Chapter 91 of the *Wisconsin Statutes*), counties in the State are responsible for preparing farmland preservation plans. The six counties in the Region with substantial amounts of agricultural land—Kenosha, Ozaukee, Racine, Walworth, Washington, and Waukesha—initially prepared farmland preservation plans in the late 1970s and early 1980s. Subsequent changes to the Wisconsin Farmland Preservation Law, enacted by the State Legislature in 2009, effectively required that counties update their farmland preservation plans as one of the conditions for continued landowner participation in the Farmland Preservation Tax Credit Program. By the end of 2013, Kenosha, Ozaukee, Racine, Walworth, Washington, and Waukesha Counties had prepared and adopted new farmland preservation plans. Each plan has been certified by the Wisconsin Department of Agriculture, Trade, and Consumer Protection as meeting the farmland preservation planning standards set forth in Chapter 91.

The farmland preservation areas identified in the updated county farmland preservation plans are intended to be reserved for agriculture and agricultural-related uses. The largest concentrations of farmland identified for preservation in these plans are located in the southwest and south-central areas of the Region—including Walworth County, Kenosha County west of IH 94, and the far westerly portion of Racine County. A relatively large farmland preservation area has also been identified in northern Ozaukee County. Other, smaller farmland preservation areas have been identified in Washington and Waukesha Counties. As of July 2023, Walworth County adopted another farmland preservation plan update and updates to the Racine County and Washington County plans were underway.

➤ Recommendation 1.15: Develop a regional food system

VISION 2050 recognizes the relationship between the Region's urban centers and agricultural resources, and the need to make healthy foods accessible to all areas of the Region. A number of census tracts in the Region with concentrations of low-income households are "food deserts," as defined by the U.S. Department of Agriculture.

VISION 2050 recommends developing a regional food system that connects food producers, distributors, and consumers to ensure access to healthy foods throughout the entire Region. VISION 2050 also recommends that local government land use policies support supermarkets and grocery stores near residential areas, urban agriculture, and farmers markets as sources of healthy foods. There are many examples of local government initiatives across the Region that help to implement Recommendation 1.15. To build on these recommendations, the Commission is currently preparing a regional food system plan. The plan will address the food system from a regional planning perspective and is aimed at identifying how to achieve several objectives concerned with ensuring accessible and affordable healthy and fresh food options for all residents, reducing economic and health disparities, supporting locally owned and sustainable farming operations, and preserving productive agricultural land and sensitive natural resources.

➤ Recommendation 1.16: Preserve areas with high groundwater recharge potential

VISION 2050 land use recommendations focus on infill, redevelopment, and compact development, and on preserving significant natural resources that would result in the preservation of areas with high and very high groundwater recharge potential. A review of the development that has occurred between 2010 and 2020 indicates that almost 99 percent of areas with high or very high groundwater recharge potential remain in agricultural and open space use as of 2020.

➤ Recommendation 1.17: Manage stormwater through compact development and sustainable development practices

VISION 2050 recommends that local and county governments work to minimize impervious surfaces and encourage sustainable development practices to help manage stormwater (see Recommendation 1.17 in Appendix K, *VISION 2050 Land Use Design Guidelines*, of the Second Edition of Volume III for more details). Several local governments and special units of government in the Region have undertaken sustainable development initiatives related to stormwater management since 2010. This includes the City of Milwaukee and the Milwaukee Metropolitan

Sewerage District, which have each undertaken numerous sustainable development initiatives related to stormwater management. In addition, Washington County and Waukesha County have adopted erosion control and stormwater management ordinances that accommodate green stormwater management (GSM) provisions. Washington County has also developed a model ordinance for local governments to adopt.

Since the 2020 Update, the Milwaukee Climate and Equity Plan has been completed. The plan includes strategies to reduce impervious surfaces and protect environmentally sensitive lands, which would have a positive impact on stormwater management. In addition, the Commission continues to draft refinements to the GSM provisions in its model land division ordinance.

➤ Recommendation 1.18: Target brownfield sites for redevelopment

Southeastern Wisconsin, like many urbanized areas throughout the country, has experienced an increase in vacant or underutilized land once devoted to industrial and commercial uses. These sites, referred to as brownfields, are often concentrated in older, larger urban areas, but could be found in any community in the Region. Redevelopment of brownfields can be challenging because of known or suspected environmental contamination and potential clean-up costs.

There have been numerous brownfield redevelopment efforts undertaken by local and county governments throughout the Region since 2010, often using tools such as Tax Increment Financing (TIF) and State and Federal brownfield remediation grants and loans to assist in the efforts. There are about 10,900 environmental repair sites and leaking underground storage tank sites in the Region listed in the Wisconsin Department of Natural Resources (WDNR) Bureau for Remediation and Redevelopment Tracking Site (BRRTS). Over 9,300 of these sites have been remediated, including about 280 sites between 2020 and 2022, indicating that there has been substantial progress in brownfield redevelopment in the Region, but there is still work to do.

There is financial assistance available to assist the private sector in redeveloping brownfields, including TIF and State and Federal programs. As part of the effort to assist in brownfield redevelopment, the Commission continues to serve as partner with the Bay Lake, Capital Area, East Central Wisconsin, North Central Wisconsin, Northwest Wisconsin, Southwestern Wisconsin, and West Central Wisconsin Regional Planning Commissions and the WDNR in the Wisconsin Brownfields Coalition. The Coalition has obtained, and continues to seek, U.S. Environmental Protection Agency grant funds for brownfields assessments that the WDNR Brownfields Program awards.

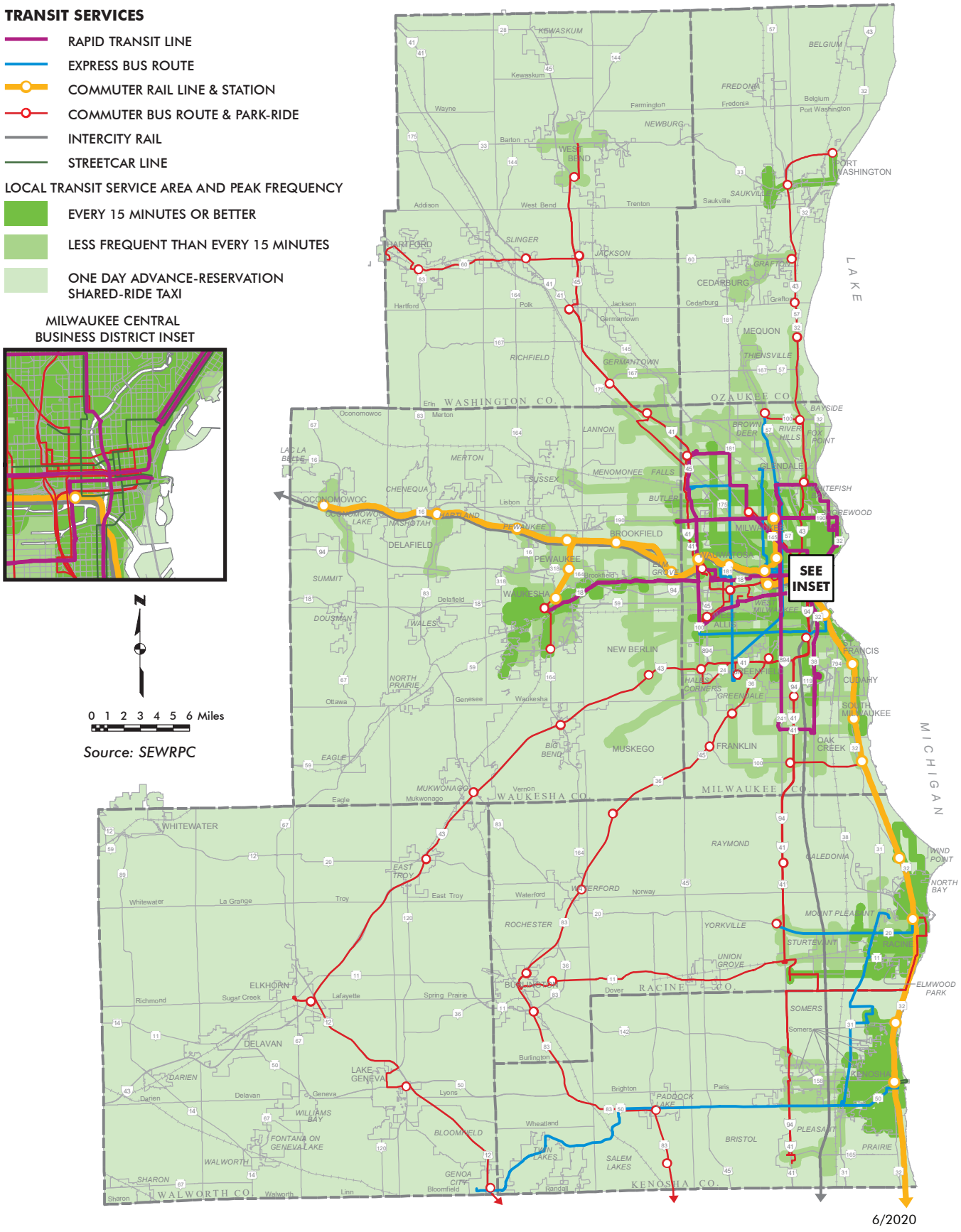
REVIEW OF TRANSPORTATION COMPONENT

The transportation component of VISION 2050 includes the following six elements: public transit, bicycle and pedestrian, transportation systems management, travel demand management, arterial streets and highways, and freight transportation. Each element is summarized below, including specific plan recommendations and the implementation status of each recommendation. When data are presented, the base year varies according to the years data were most recently collected and is noted accordingly.

Public Transit Element

VISION 2050 recommends a significant improvement and expansion of public transit in Southeastern Wisconsin, including four commuter rail lines; eight rapid transit lines; and significantly expanded local bus, express bus, commuter bus, and shared-ride taxi and other flexible transit services. In addition, the plan recommends expanding and enhancing intercity bus services and implementing two new intercity passenger rail lines. The recommended transit service improvements and expansion include an expansion of service area and hours, and significant improvements in the frequency and speed of service. Map 2 displays the routes and areas served by the various components of the recommended transit element.

Map 2
Transit Services: VISION 2050 (as of 2020 Update)



When VISION 2050 was initially prepared, and updated in 2020, the financial analysis identified a funding gap for the recommended regional transportation system, particularly for the transit element. The funded portion of the recommended transportation system is referred to as the "Fiscally Constrained Transportation System (FCTS)," and is presented in Chapter 2 of Volume III (Second Edition) of the VISION 2050 plan report. Due to insufficient current and reasonably expected future revenues, and limitations on how those funds can be used, transit service under the FCTS would be expected to decline rather than significantly improve as recommended under VISION 2050. Specifically, under the most recently updated FCTS, service levels would decline from 2018 levels by about 35 percent measured in terms of revenue transit vehicle-hours, which represents an even greater decline than was predicted by the original financial analysis for VISION 2050. The only transit improvements currently included in the FCTS are Milwaukee County's East-West Bus Rapid Transit (BRT) line (branded as CONNECT 1) between Downtown Milwaukee and the Milwaukee Regional Medical Center, and the lakefront and N. Vel R. Phillips Avenue extensions of The Hop streetcar in the City of Milwaukee. Map 3 shows the regional transit system under the FCTS.

As anticipated based on the financial analyses prepared for the 2020 Update, the Region has experienced a decline in transit service between 2018 and 2021 (the most recent year for which data are available from the National Transit Database). The COVID-19 pandemic and ongoing driver shortages have also impacted transit significantly. Altogether, as demonstrated in Table 3, average weekday service decreased slightly between 2018 and 2021. Express bus service increased between 2018 and 2021—a result of MCTS NEXT implementation (explained in more detail in the following section). Despite the changing travel patterns that resulted from COVID-19 and the shift to hybrid and remote work, these and other high-frequency routes were able to maintain service to provide access to many essential jobs and services. Local transit service held relatively stable, experiencing a slight decrease in service over the four-year period. In contrast, commuter bus service was reduced by more than half—a result of changes in travel patterns due to COVID-19 and the shift to more remote and hybrid work schedules, in addition to changing demographics. Likewise, Metra's commuter rail service, serving only a short distance in the Region between Kenosha and the Wisconsin-Illinois state line, experienced an overall decrease in service of approximately 50 percent.

The following section summarizes the transit recommendations and describes progress toward meeting the transit recommendations since adoption of VISION 2050. Map 4 shows the transit system in 2020 and Map 5 shows the system as of June 2023.

➤ Recommendations 2.1 through 2.4: Develop a rapid transit network, Develop commuter rail corridors and improve and expand commuter bus services, Improve existing express bus service and add service in new corridors, and Increase the frequency and expand the service area of local transit

The significant improvement and expansion of public transit in Southeastern Wisconsin recommended in VISION 2050 includes eight rapid transit lines; four commuter rail lines; and significantly expanded local bus, express bus, and shared-ride taxi and other flexible transit services. Progress in implementing the transit element of VISION 2050 is described below:

- The Region's first bus rapid transit (BRT) line, formerly referred to as the East-West BRT Project and now branded as CONNECT 1, began service in June 2023. The service is operated by the Milwaukee County Transit System (MCTS) and runs along a nine-mile route connecting Downtown Milwaukee to the Milwaukee Regional Medical Center via Wisconsin Avenue and Bluemound Road. The service utilizes dedicated lanes, enhanced stations with elevated boarding platforms, an off-board fare collection system, and battery electric buses to provide reliable and frequent rapid transit service.

- Also in June 2023, the eastern terminus of Waukesha Metro's Route 1 was extended from Brookfield Square to the Milwaukee Regional Medical Center, providing a direct transfer to the CONNECT 1 BRT line. The change was spurred by the planned discontinuation of the MCTS GoldLine, which previously served this segment. The extension preserves the only remaining cross-county transit connection between Waukesha and Milwaukee Counties and provides more direct and frequent service.

Map 3
Transit Services: Fiscally Contrained Transportation System (as of 2020 Update)

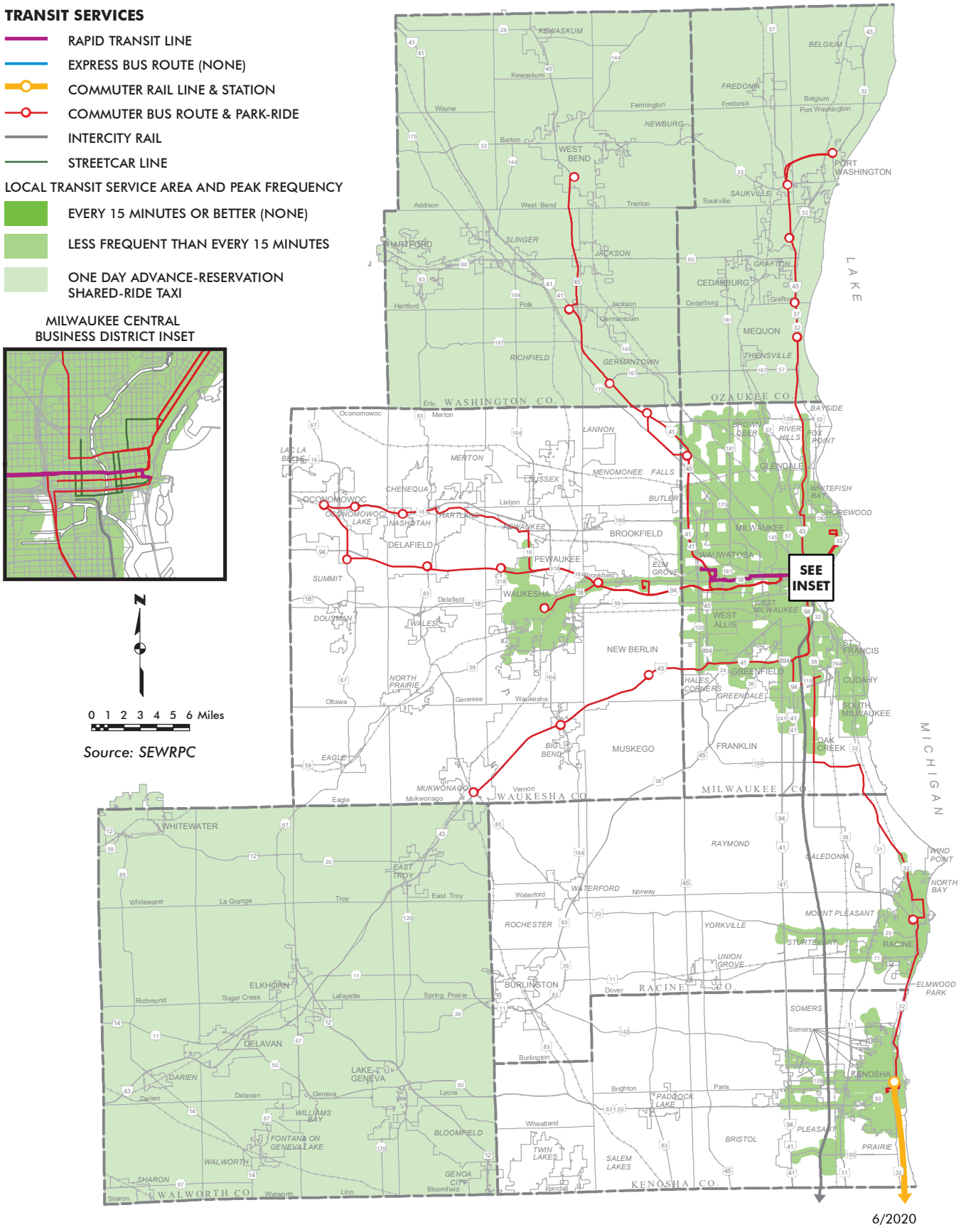


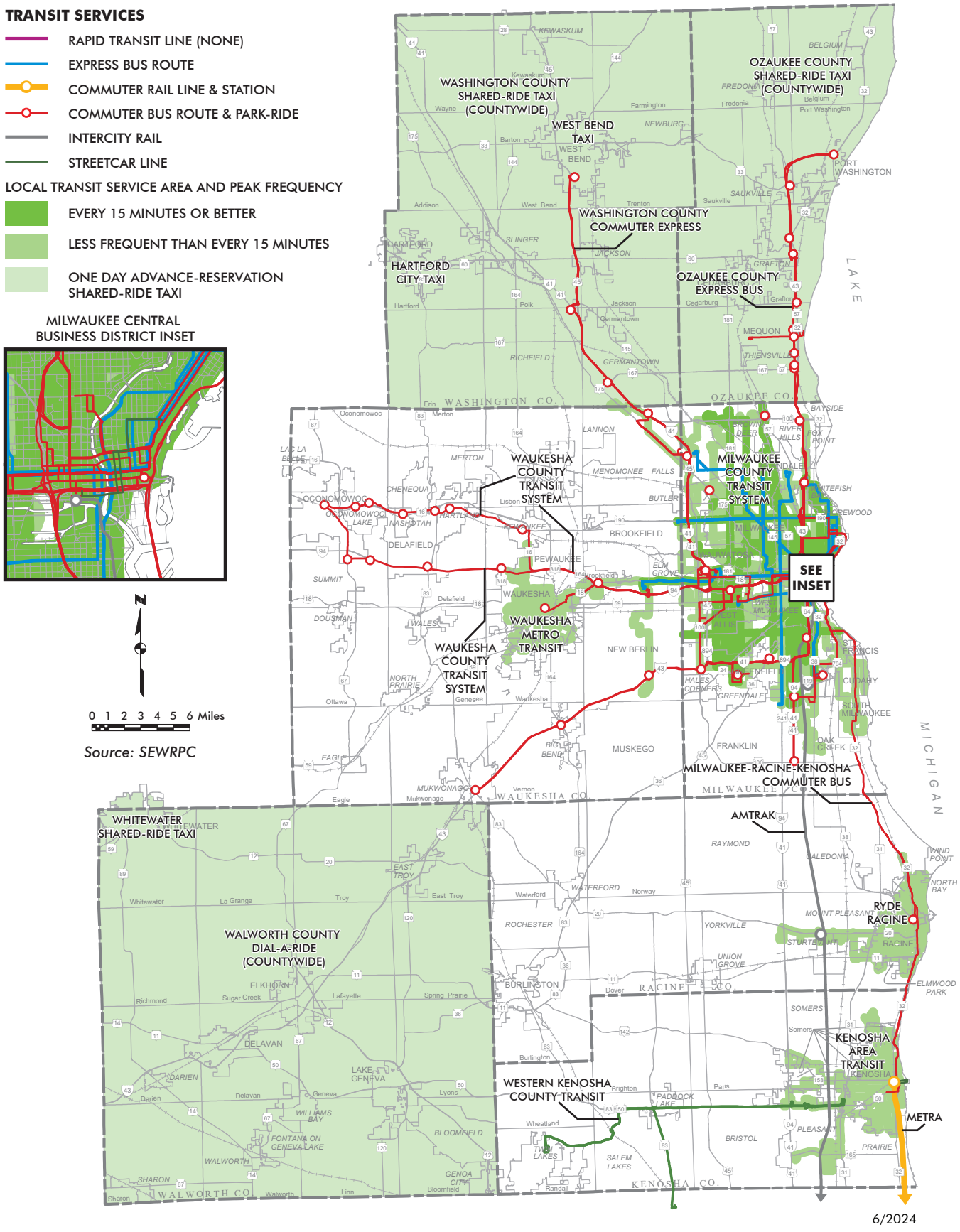
Table 3
Fixed-Route Public Transit Service Levels: VISION 2050

Average Weekday Transit Service Characteristics	2014[a]	2018	2021	Plan as Amended (2050)
Revenue Vehicle-Hours				
Rapid Transit	--	--	--	1,170
Commuter Rail	10	10	5	190
Commuter Bus	290	290	100	1,020
Express Bus	470	880	1,000	890
Local Transit	3,860	3,690	3,500	7,140
Total	4,630	4,870	4,600	10,410
Revenue Vehicle-Miles				
Rapid Transit	--	--	--	23,500
Commuter Rail	100	100	50	8,200
Commuter Bus	6,400	5,700	2,600	25,100
Express Bus	5,800	10,400	12,200	13,200
Local Transit	47,000	46,100	45,400	84,500
Total	59,300	62,300	60,200	154,500

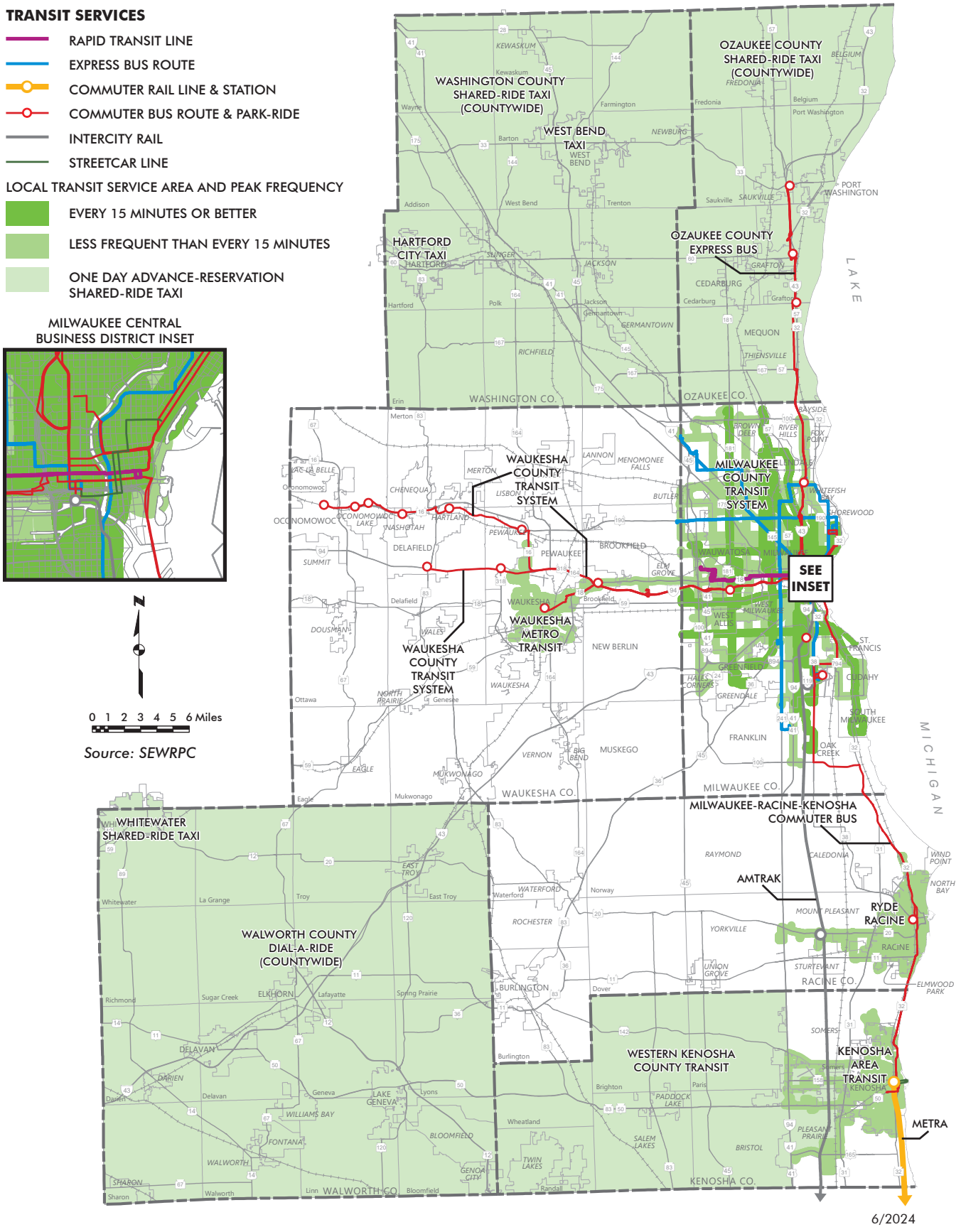
[a] *The revenue vehicle-hours and revenue vehicle-miles for 2014 vary slightly from those reported in VISION 2050 due to changes in the methodology for calculating average weekday service.*

Source: National Transit Database, MCTS, and SEWRPC; 6/2024

Map 4
Public Transit Services in the Region: 2020



Map 5
Public Transit Services in the Region: 2023



- The North-South Transit Enhancement Study—a feasibility study for rapid transit along and near 27th Street in Milwaukee County—was completed in late 2022, representing the start of the development of an additional BRT line in the Region. The study supported a request to the Federal Transit Administration (FTA) to allow Milwaukee County to enter project development under the Small Starts Capital Investment Grant Program, which could provide funding to help support the project. The study was completed by the Commission at the request of Milwaukee County and included a recommended route alignment, station locations, and ridership and cost estimates. The route recommended in the study is consistent with the rapid transit routes recommended in VISION 2050.

- Through a phased process in 2021, MCTS implemented a cost-neutral system redesign called MCTS NEXT, which prioritized high-frequency transit routes, simplified some route alignments, and implemented bus stop balancing—a term that refers to the removal of some stops that are too close to each other, are not used often, or do not meet standards for being accessible to people with disabilities to reduce travel times and make service more reliable. The redesign process included extensive public outreach and, in addition to providing faster and more efficient service, focused on how the redesign could advance racial equity and continue to serve seniors and people with disabilities well.

- In June 2023, Waukesha Metro implemented route revisions, as recommended in the Waukesha Area Transit Development Plan (TDP) that Commission staff completed at the request of the City of Waukesha and Waukesha County. Routing and schedule changes were implemented on each of the system's 10 routes—including changes to Route 1 discussed previously in this section. The changes were designed to reduce operating costs, improve efficiency, and get passengers to key destinations faster, while preserving service in locations that had residents with high transit needs.

- At the request of the City of Kenosha, the Commission started work on the Kenosha Area TDP in the first half of 2023, beginning with a review of draft route alignments related to a potentially new transit center facility situated about one mile west of the current facility. This short-range, 5-year plan is anticipated to include an evaluation of existing services and recommendations for transit service changes.

- The City of Milwaukee Streetcar (The Hop) L-Line Lakefront extension began operation in fall 2023. The City is pursuing additional planned extensions to Brady/Farwell/Prospect, Fiserv Forum/Bronzeville, and Walker's Point.

- In 2022, the City of Racine received congressionally directed spending to advance commuter rail in the Kenosha-Racine-Milwaukee (KRM) corridor. The City subsequently requested Commission support in conducting a feasibility study and environmental and engineering work necessary to move a KRM project forward. A commuter rail line in the KRM corridor is recommended in VISION 2050.

As of the 2020 Update, the Region is expected to experience a 35 percent decline in transit service by 2050 under the FCTS, measured in terms of revenue vehicle-hours of service provided, as a result of funding constraints placed on the current operators of public fixed-route transit services in the Region. As previously mentioned, the changes in travel patterns and revenue associated with the COVID-19 pandemic have exacerbated many of the funding constraints that already existed. Transit service providers in the Region have eliminated routes and reduced or adjusted service levels since 2019 in the following ways:

- In 2021, Western Kenosha County Transit shifted its service model from a flexible bus service that provided route deviation and door-to-door service to an on-demand-only service available west of IH-94 in Kenosha County and to the Metra commuter rail station in Antioch, IL and select locations in Burlington (Racine County) and Lake Geneva (Walworth County). In August 2023, service was reduced from seven days to six days per week with Saturday service available from 9:00 a.m. to 2:00 p.m. (service was previously available on Saturdays and Sundays from 9:00 a.m. to 4:00 p.m.).

- Waukesha County ended service on the commuter-oriented Route 906 in June 2020, due to low ridership occurring prior to the pandemic. Starting in 2022, Waukesha County suspended some commuter route runs due to low ridership and made the changes permanent in 2023. Route 79, which was operated under contract with the County by MCTS, was suspended between January 2021 and August 2021, and terminated in December 2022 due to budget shortfalls, driver shortages, and low ridership.

- The Washington County Commuter Express will no longer operate after September 29, 2023, due to low ridership and increasing costs.

- In late 2022 and early 2023, MCTS removed several routes because of driver shortages and budget cuts. Six Freeway Flyer routes, which had been suspended since January 2022, were eliminated due to previously low levels of ridership, likely a result of many downtown employers moving to hybrid work models. MCTS ended its service contract with Ozaukee County for commuter service on Route 143. The commuter service was continued under a new service contract with GoRiteway starting in January 2023. Route 137 was also removed, which previously provided Saturday-only service to the Milwaukee County Community Reintegration Center in Franklin. Special bus service to the Wisconsin State Fair and American Family Field were eliminated. Frequencies on four routes were reduced due to bus driver shortages and budget constraints.

➤ **Recommendation 2.5: Improve intercity transit services and expand the destinations served**

VISION 2050 recommends intercity transit services to connect communities within the Region to communities in other parts of the State and the remainder of the Midwest. Specifically, VISION 2050 recommends two new intercity rail lines, one connecting Chicago to Minneapolis and St. Paul via Milwaukee and Madison, and another connecting Chicago to Green Bay via Milwaukee and the Fox Valley. Both services would be operated as extensions of the existing Amtrak Hiawatha service from Chicago, and all three lines would operate at speeds up to 110 miles per hour. Progress toward improving intercity transit services since the 2020 Update includes the following:

- WisDOT continues to work with the Illinois Department of Transportation (IDOT), Amtrak, Canadian Pacific Kansas City (CPKC), and Metra to increase the Hiawatha service from seven to 10 daily round trips. Ongoing projects in Wisconsin supporting this initiative include constructing a second platform at the Milwaukee Airport Rail Station (MARS), completing the Muskego Yard Freight Rail Bypass project, and installing a new track signal system at the Milwaukee Intermodal Station (MIS).

- WisDOT continues to work with the Minnesota Department of Transportation (MnDOT), Amtrak, and CPKC to implement Twin Cities-Milwaukee-Chicago (TCMC) intercity passenger rail service, which would add a second daily round trip between Chicago, Milwaukee, and St. Paul. The proposed service would complement, and follow the same route as, Amtrak's existing, long-distance Empire Builder service. The TCMC service, branded as the Borealis service, began operating in May 2024.

- WisDOT participated in a joint purchase of a pool of next-generation locomotives and passenger rail cars with other Midwest states. The new locomotives will have greater fuel efficiency, reduced emissions, and improved performance compared to the locomotives they will replace. The new passenger cars will meet modern accessibility standards. WisDOT is also separately acquiring additional next-generation passenger rail cars to enable the Hiawatha to be completely operated using new train equipment by 2025.

- WisDOT completed the Wisconsin Rail Plan 2050. In addition to the planned increase in Hiawatha frequencies and planned implementation of TCMC intercity passenger rail service described above, the plan also recommends: sealing the Hiawatha corridor to improve safety at grade crossings and facilitate a potential increase in maximum train speeds; improving station facilities; extending Hiawatha service to Waukesha County, Watertown, and Madison; extending Hiawatha service to Fond du Lac, Oshkosh, Appleton, and Green Bay; and adding a second TCMC route connecting Chicago, Milwaukee, Madison, Eau Claire, and the Twin Cities.

- WisDOT submitted successful applications to the Federal Railroad Administration (FRA) Corridor Identification and Development Program (Corridor ID Program) for the four planned intercity passenger rail corridors recommended in the Wisconsin Rail Plan 2050. The Corridor ID Program will provide federal technical and financial support for intercity passenger rail development in the State. The FRA accepted WisDOT's four corridors into Step 1 of the Corridor ID program in December 2023.

- Amtrak's Thruway intercity bus service between Green Bay, the Fox Valley, MIS, and Milwaukee Mitchell International Airport, which began in 2019, continues to operate. This service, combined with existing Lamers Thruway bus service between Wausau and MIS, effectively connects Fond du Lac, Oshkosh, and Appleton with three daily Hiawatha round trips.

➤ Recommendation 2.6: Implement "transit-first" designs on urban streets

VISION 2050 recommends that transit operators work with local governments during the reconstruction of a roadway to include transit-first features on the roadway when it carries rapid, express, or major local transit routes, including transit signal priority systems, dedicated lanes for transit, and "transit bulbs" at significant transit stops. Transit signal priority systems could also be added when existing signals along a roadway are being modified.

In addition to the implementation reported in the 2020 Update related to features along The Hop Streetcar line, recent progress on this recommendation can be seen along the MCTS CONNECT 1 BRT line. CONNECT 1 includes dedicated lanes along half of the alignment (4.6 miles) and traffic signal priority, both features that support preferential treatment for transit vehicles. The North-South BRT study also includes recommendations for dedicated lanes and transit signal priority.

➤ Recommendation 2.7: Enhance stops, stations, and park-ride facilities with state-of-the-art amenities

VISION 2050 recommends enhancing transit stops, stations, and park-ride facilities with state-of-the-art amenities to improve the user experience, make services more convenient and accessible, and encourage ridership. The new CONNECT 1 BRT line has provided progress on this recommendation via the enhanced stations located along the route. Specifically, stations include level boarding platforms, high-quality shelters with seating and wayfinding information, real-time vehicle arrival information, off-board ticketing and fare validation, and sidewalk snow-melt systems to improve access during the winter months.

➤ Recommendation 2.8: Accommodate bicycles on all fixed-route transit vehicles

VISION 2050 recommends that all fixed-route transit vehicles in the Region be able to accommodate bicycles, whether on a rack on the front of the bus for local buses, or on board rapid transit and commuter transit vehicles. When VISION 2050 was completed, all standard-sized buses in the MCTS, City of Racine (RYDE), Kenosha Area Transit, and Western Kenosha County Transit fleets were equipped to accommodate bicycles using a rack on the front of the bus. Since the 2020 Update was completed, Waukesha Metro has added bike racks to several buses in its fleet and plans to accommodate all buses with bike racks as funding becomes available.

➤ Recommendation 2.9: Implement programs to improve access to suburban employment centers

VISION 2050 recommends a series of programs that can be considered to help complete the "last-mile" journey from bus stops to employment, including vanpool programs, network transportation companies (such as Lyft or Uber), pedestrian facility enhancements, and job access programs to assist low-income individuals in accessing job opportunities (such as driver's license recovery programs and low-interest vehicle loan programs for low-income individuals).

Related to this recommendation. the Commission, in coordination with MobiliSE (formerly the Regional Transit Leadership Council), continued work through its Workforce Mobility Team to assist businesses with connecting workers to jobs in Southeastern Wisconsin. The Team aids employers in the Region who experience challenges retaining and attracting workers as a result of those workers having limited or no commuting transportation options available. The goal of the Workforce Mobility

Team is to increase residents' access to jobs and businesses' access to workers by coordinating workforce transportation efforts regionally and supporting the implementation of innovative solutions across the Region.

FlexRide Milwaukee, the Region's first on-demand microtransit service, was initiated through a research study about connecting workers in Milwaukee with jobs in the Menomonee Falls/Butler area, led by the University of Wisconsin-Milwaukee and the Commission. The study, funded by a grant from the National Science Foundation, involved testing and evaluating a pilot on-demand transportation service (FlexRide). FlexRide services for this pilot program operated through fall 2022 when MobiliSE assumed responsibility for operations. The Commission supported transition of the pilot service to MobiliSE's oversight and has assisted MobiliSE in expanding services since the pilot ended, including expanded service in 2023 for Milwaukee residents to reach jobs in Franklin, Oak Creek, and New Berlin.

➤ Recommendation 2.10: Provide information to promote transit use

VISION 2050 recommends a range of activities to be undertaken by transit agencies in the Region to promote transit use and enhance the quality of transit service to increase its desirability, attract new transit users, and encourage residents to use transit more often. Specifically, VISION 2050 recommends real-time transit information for all operators at transit centers, transit stops, on websites, and on mobile devices. The plan also recommends joint marketing and research among transit operators to enhance transit service, including innovative fare payment systems that facilitate intersystem transfers. Recent efforts that represent implementation of this recommendation are summarized below.

- MCTS updated its mobile app in 2022 to make it easier for riders to plan, track, and pay bus fares. The move to WisGo, powered by Umo, equipped MCTS with tools for a new fare collection system that includes fare capping at $4 daily, $19.50 weekly, or $72 monthly. Riders without the app can load a WisGo card online or at several retail stores in the community. Along the lines of this recommendation, MCTS is educating riders about the equity and rider experience improvements of the new account-based system.

- Waukesha Metro service is included on the WisGo mobile app, which allows more seamless transfers between its system and MCTS. It is anticipated that additional updates will be made to incorporate a similar fare capping system. Waukesha Metro currently accepts transfers to its Route 1 with fare validators that accept WisGo cards and the mobile app.

- CONNECT 1 was free for all riders from its launch in June 2023 to April 2024 through a partnership with Umo Mobility. The free rides simplified the first experience riding the new BRT line, which is expected to increase overall transit ridership in the corridor. It is anticipated that ridership will be generated by employers, tourism, learning institutions, and medical systems within the half-mile station areas along the route.

➤ Recommendation 2.11: Implement a universal fare program and free transfers across all transit operators

As transit operators invest in new fare systems across the Region, VISION 2050 recommends that operators coordinate to use the same fare system. This would require significant cross-agency coordination on accounting and procurement, but could offer large benefits to the public by allowing riders to more easily use multiple transit services to complete a journey.

The recent and in-progress transitions to the WisGo mobile app by both MCTS and Waukesha Metro represent a significant step toward the full implementation of this recommendation. Waukesha Metro and MCTS have also come together to honor free transfers between the CONNECT 1 BRT and Waukesha Metro's Route 1.

➤ Recommendation 2.12: Consider implementation of proof-of-payment on heavily used transit services

VISION 2050 recommends that transit operators in the Region, particularly MCTS, study the possibility of implementing proof-of-payment on some or all transit routes to increase travel time reliability. Proof-of-payment relies on occasional checks by transit system staff to ensure that riders have paid their fare, and has been shown to measurably increase the speed of buses where it has been implemented.

The off-board ticketing and fare validation machines in service for the CONNECT 1 BRT line utilizes a proof-of-payment system—reducing wait times at stops by eliminating the need to scan a pass or purchase a ticket during boarding and allowing passengers to board the bus using both the front and rear doors. Future BRT lines operated by MCTS are also expected to utilize this payment and validation process.

➤ Recommendation 2.13: Promote and expand transit pricing programs

VISION 2050 recommends building on existing transit pricing programs conducted by the Region's transit operators, expanding the MCTS college and university transit pass programs to include additional colleges and universities, and establishing similar programs for other transit systems in the Region.

MCTS has a Commuter Value Pass (CVP) program that provides transit passes to employers at a reduced fee, allowing those employers to offer discounted transit passes to their employees. VISION 2050 recommends expanding existing employer transit pass programs, such as the CVP program, and encourages other transit operators to negotiate annual or monthly fees with individual employers to provide discounted transit passes to employees. Recent technological improvements to the overall MCTS system, including a mobile app, continue to make it easier for employers and their employees to implement CVP. No other known implementation of employer transit pass programs has occurred since VISION 2050 was completed.

➤ Recommendation 2.14: Expand "guaranteed ride home" programs

Guaranteed ride home programs provide commuters who take transit, carpool, bike, or walk with the ability to get home in the event of an emergency, unplanned overtime, or other unexpected issues. Since the 2020 Update, the guaranteed ride home program associated with the MCTS CVP was discontinued due to low usage. A second service that had also previously offered a guaranteed ride home program, Washington County Commuter Express, eliminated service at the end of September 2023. However, the Milwaukee Regional Medical Center added a guaranteed ride home through the ride-hailing service Lyft to eligible commuters. And the State of Wisconsin's Rideshare, Etc. program includes an emergency ride home component that provides partial reimbursement to employers that provide an emergency ride home to employees that carpool, walk, bike, or use transit to commute to work.

Bicycle and Pedestrian Element

The ability to support biking and walking is an important component of improving quality of life and achieving healthy, vibrant communities. Well-connected infrastructure and a development pattern that provides a mix of uses within short distances make it easier to bike and walk. This encourages people to incorporate active travel into their daily routine, which can improve their health and reduce their healthcare costs. It is also important to integrate bicycle and pedestrian travel and public transit travel, which often begins and ends by either biking or walking. Bicycle recommendations for VISION 2050 include providing on-street bicycle accommodations on the surface arterial street and highway system (nonfreeways), expanding the off-street bicycle path system, implementing enhanced bicycle facilities in key regional corridors, and expanding bike share program implementation. The recommended bicycle network is shown on Map 6. Below is a summary of the VISION 2050 bicycle and pedestrian recommendations and a description of notable implementation that has occurred since the plan was completed.

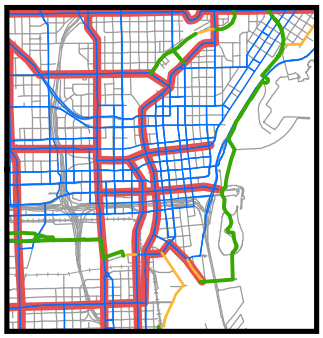
Map 6
Bicycle Network: VISION 2050 (as of 2020 Update)

BICYCLE FACILITIES

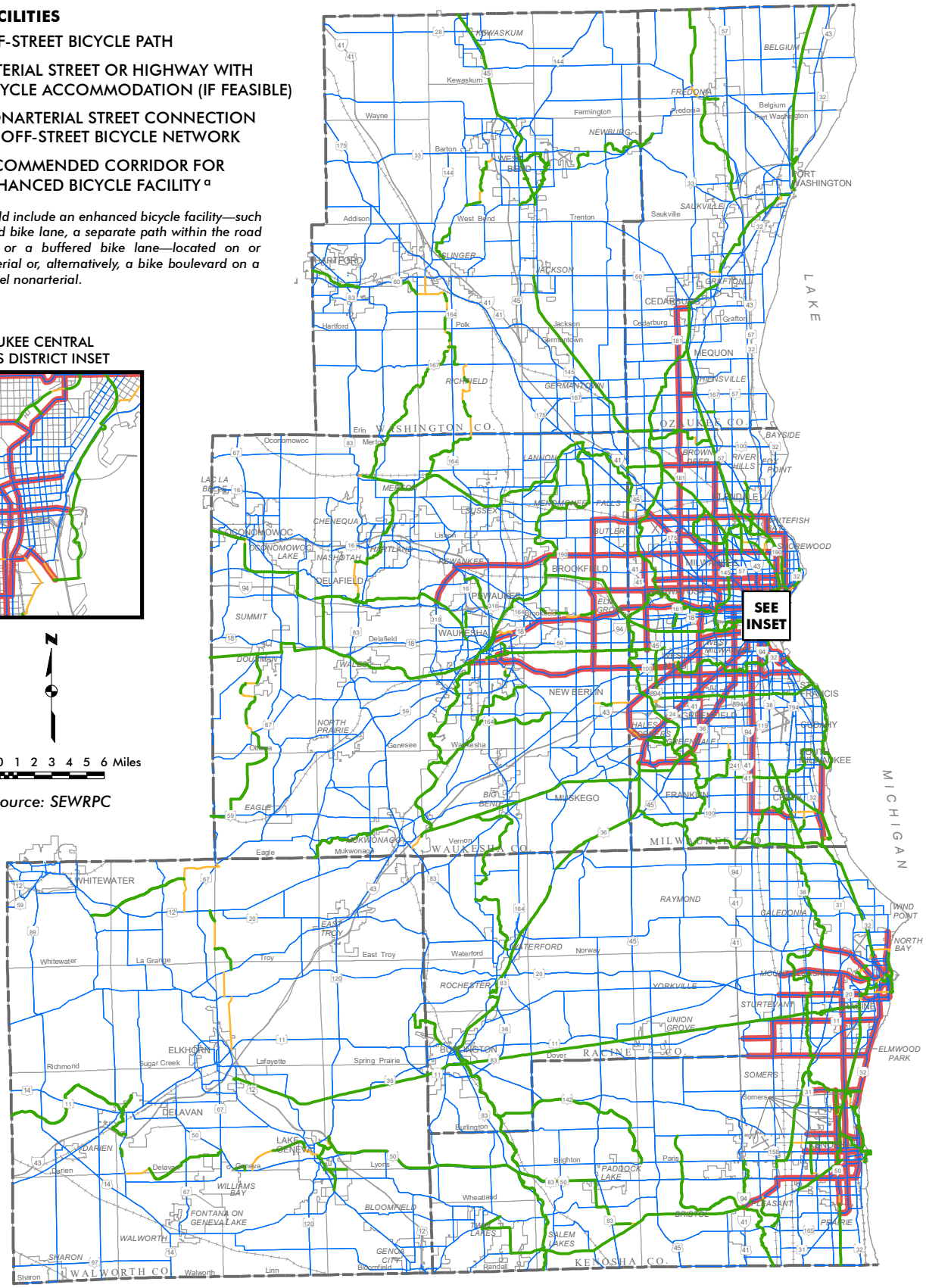
- OFF-STREET BICYCLE PATH
- ARTERIAL STREET OR HIGHWAY WITH BICYCLE ACCOMMODATION (IF FEASIBLE)
- NONARTERIAL STREET CONNECTION TO OFF-STREET BICYCLE NETWORK
- RECOMMENDED CORRIDOR FOR ENHANCED BICYCLE FACILITY [a]

[a] *Corridor would include an enhanced bicycle facility—such as a protected bike lane, a separate path within the road right-of-way, or a buffered bike lane—located on or along an arterial or, alternatively, a bike boulevard on a nearby parallel nonarterial.*

MILWAUKEE CENTRAL BUSINESS DISTRICT INSET



Source: SEWRPC



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➤ Recommendation 3.1: Expand the on-street bicycle network as the surface arterial system is resurfaced and reconstructed

VISION 2050 recommends that as the 3,300-mile existing surface arterial street and highway system is resurfaced and reconstructed, and as new surface arterials are constructed, bicycle accommodations be considered and implemented, if feasible, through bicycle lanes, paved shoulders, widened outside travel lanes, and enhanced bicycle facilities, such as buffered and protected bicycle lanes. The surface arterial system of the Region provides a network of direct travel routes serving virtually all travel origins and destinations within Southeastern Wisconsin. Arterial streets and highways—particularly those with high-speed traffic or heavy volumes of truck or transit vehicle traffic—should include one of the previously listed bicycle improvements to safely accommodate bicycle travel.

Map 7 shows the existing on-street bicycle accommodations provided in 2023 on the arterial network. Since plan completion, approximately 142.7 additional miles of bicycle lanes and wide, paved shoulders have been implemented on the existing 3,300-mile arterial system, as shown on Map 8, bringing the total of standard on-street bicycle accommodations up from 814.7 miles in 2015 to 957.4 miles in 2023. Inclusive of enhanced bicycle facilities (discussed in Recommendation 3.3), on-street bicycle accommodations in the Region in 2023 total 1,089.7 miles, up from 886.5 miles in 2015.

➤ Recommendation 3.2: Expand the off-street bicycle path system to provide a well-connected regional network

VISION 2050 recommends that a system of off-street bicycle paths be provided between the Kenosha, Milwaukee, Racine, Round Lake Beach, and West Bend urbanized areas and the cities and villages within the Region with a population of 5,000 or more located outside these five urbanized areas. These off-street bicycle paths would primarily be located in natural resource and utility corridors and are intended to provide reasonably direct connections between the Region's urbanized and small urban areas on safe and aesthetically attractive routes with separation from motor vehicle traffic. Some on-street bicycle connections would be required to connect segments of this system of off-street paths. These connections, if provided over surface arterials, should include some type of bicycle accommodation—bicycle lanes, paved shoulders, widened outside travel lanes, enhanced bicycle facilities, or separate paths within the arterial's right-of-way.

Bicycle connectivity under VISION 2050 would be improved by addressing gaps in the regional bicycle network. Gaps include those between cities and villages with populations of 5,000 or more where on- or off-street bicycle facilities either do not exist or exist in intermittent segments. Gaps also exist between two off-street path segments. Map 9 shows the regional off-street bicycle path system, which includes existing and recommended paths as well as surface arterial and nonarterial connections to the path system. Specifically, VISION 2050 envisioned expanding the 299 miles of off-street paths in 2015 to approximately 730 miles of off-street paths by the year 2050.

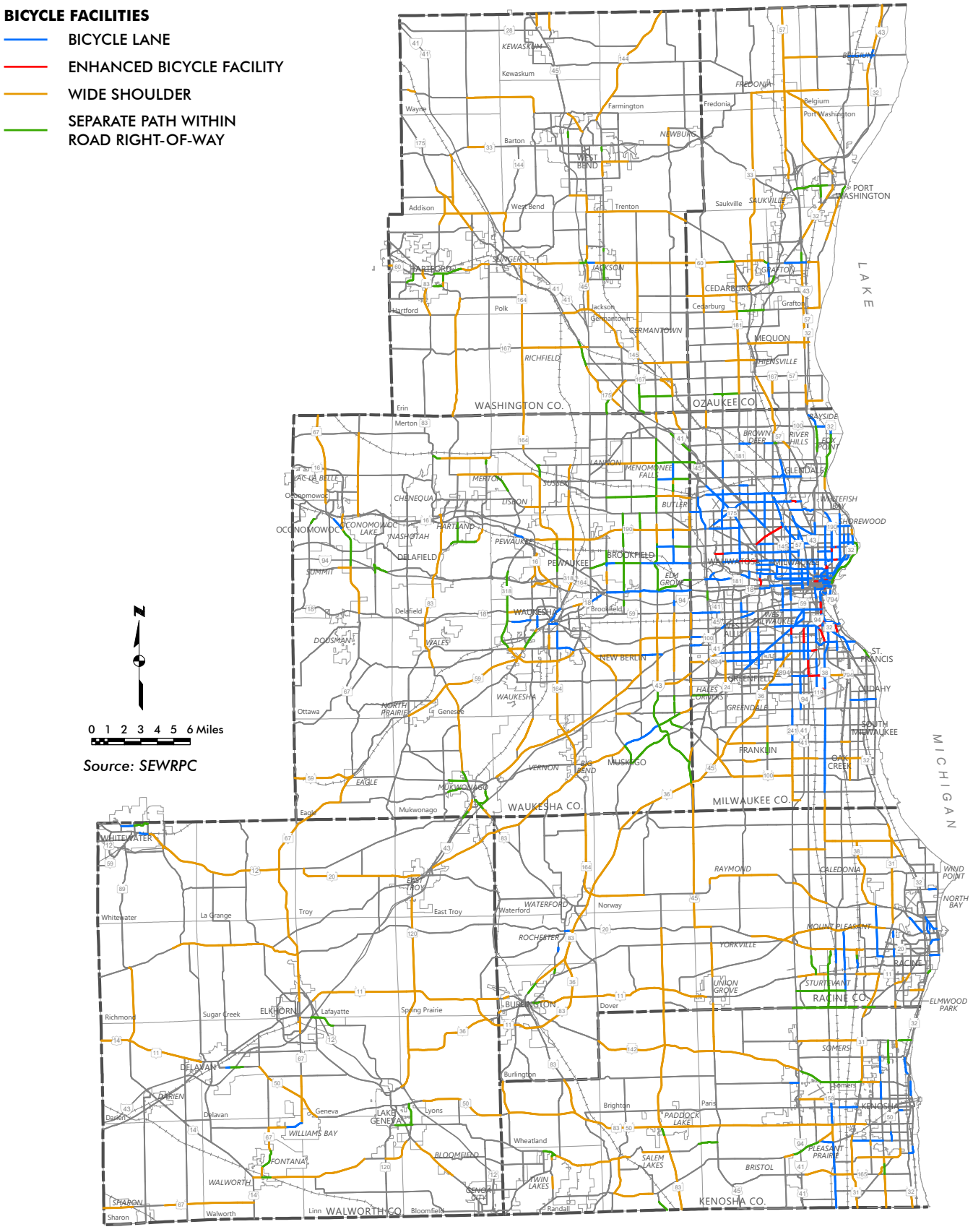
Map 10 shows the off-street bicycle paths that have been completed as of 2023. Since plan completion, approximately 17.4 miles of additional off-street bicycle paths have been completed in the Region, bringing the total of off-street bicycle paths up from 299.2 miles in 2015 to 316.6 miles in 2023.

Related to off-street path implementation, Commission staff have cooperated with the Rails to Trails Conservancy, Wisconsin Bike Fed, and other partners in the development of the Route of the Badger (ROTB). ROTB is an initiative promoting implementation of a trail network throughout Southeastern Wisconsin and beyond. The development of the ROTB network was guided by the path system recommended in VISION 2050.

➤ Recommendation 3.3: Implement enhanced bicycle facilities in key regional corridors

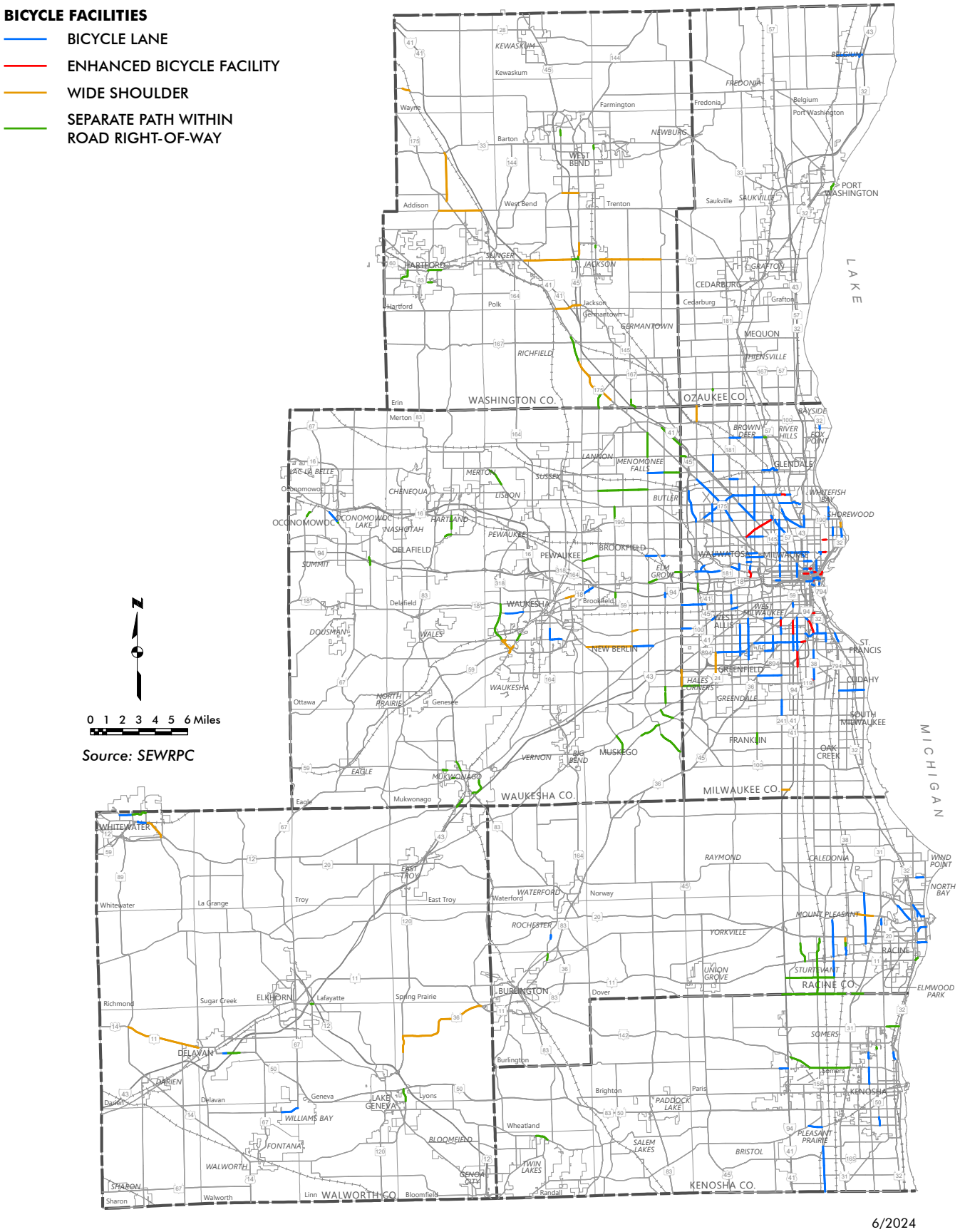
As shown on Map 6, VISION 2050 recommends a network of 374 miles of enhanced bicycle facility corridors through the Kenosha, Milwaukee, and Racine urbanized areas that would connect multiple communities, serve important regional destinations, and link segments of the off-street bicycle path system. Enhanced bicycle facilities—such as protected, buffered, and raised bicycle lanes and separate paths within a road right-of-way—are bicycle facilities on or along an arterial that go beyond the standard bicycle lane, paved shoulder, or widened outside travel lane. They are meant

Map 7
Existing On-Street Bicycle Facilities: 2023



6/2024

Map 8
On-Street Bicycle Facilities Completed: 2016-2023



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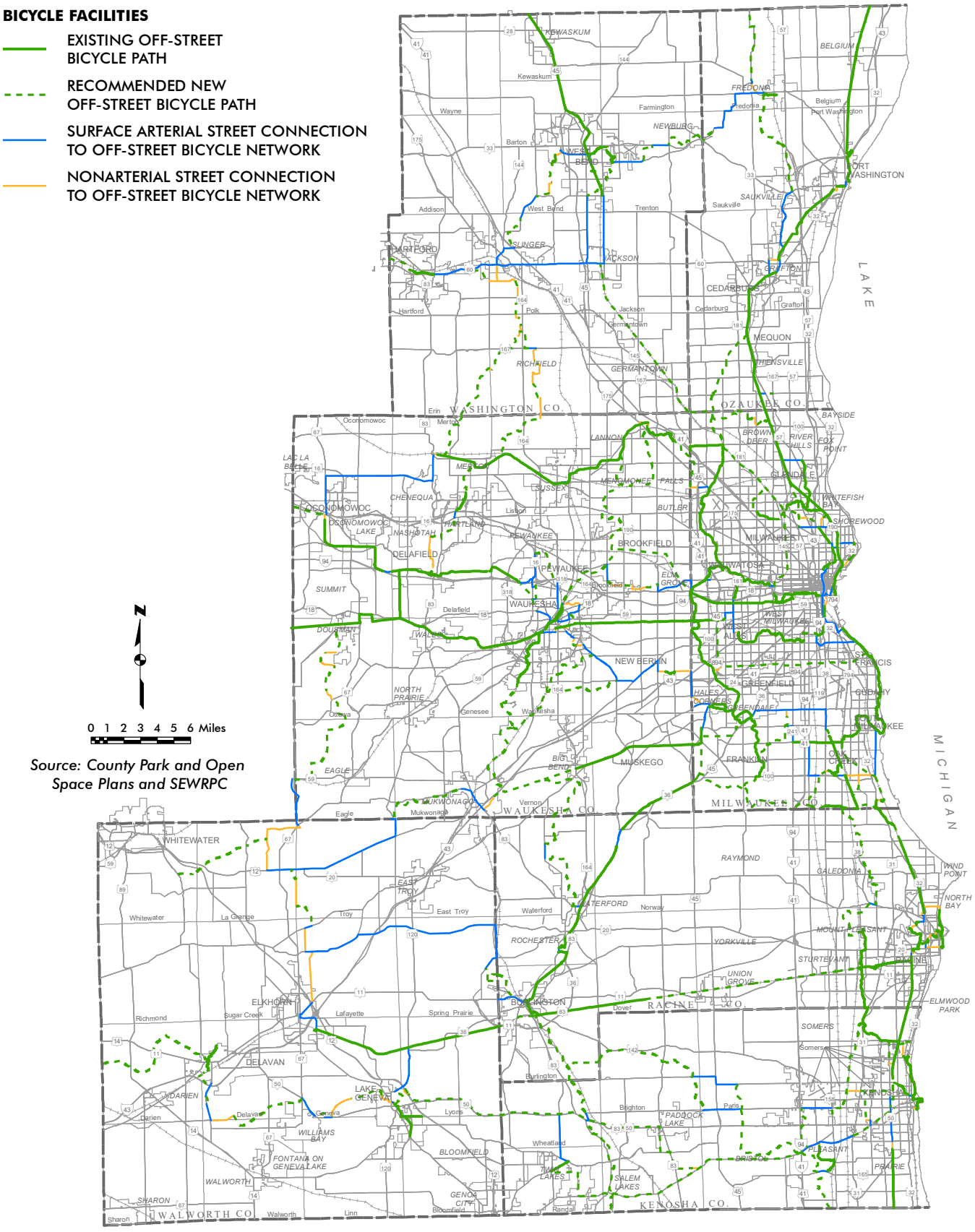
Map 9
Off-Street Bicycle Path System: VISION 2050 (as of 2020 Update)



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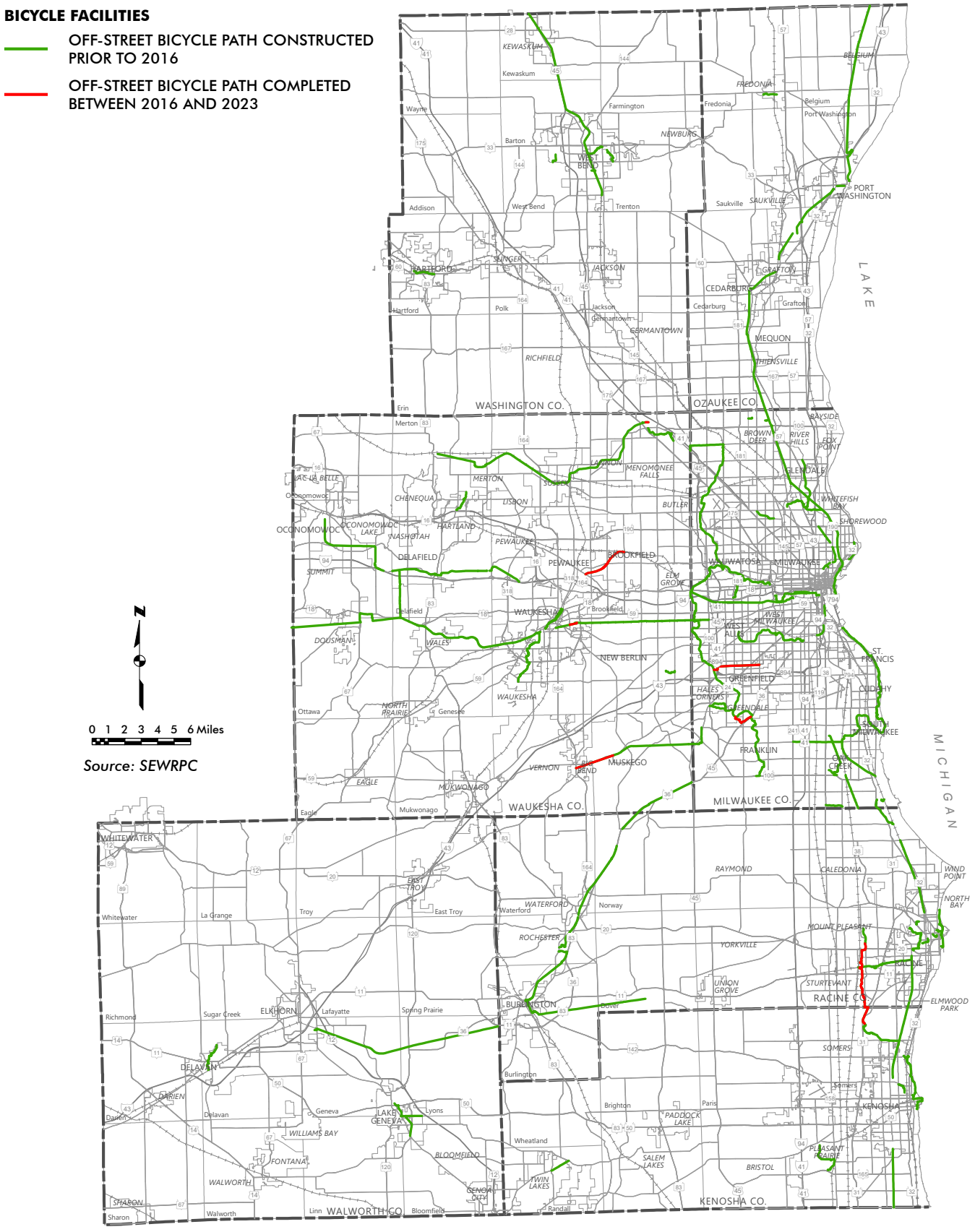
Map 10
Off-Street Bicycle Paths Completed: 2016-2023



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to improve safety, define bicycle space on roadways, and provide clear corridors for bicycle usage. These corridors would either involve implementing an enhanced bicycle facility on or along the arterial street or implementing a neighborhood greenway ("bike boulevard"), which is a low-speed street optimized for bicycle traffic on a parallel nonarterial, within about two blocks of an arterial.

Since plan completion, approximately 9.1 miles of additional buffered and protected bicycle lanes have been completed in the Region, as shown on Map 7, with approximately 2.8 miles of this total being completed within the enhanced bicycle facility corridors identified in VISION 2050. Since plan completion, approximately 51.4 miles of separate paths within a road right-of-way have been completed, as shown on Map 9. Regionally, the total mileage of enhanced bicycle facilities has increased from 71.8 miles in 2015 to 132.3 miles in 2023.

➤ Recommendation 3.4: Expand bike and scooter share program implementation

VISION 2050 recommends expanding bike and scooter share programs, including those that incorporate adaptive bicycles and e-bikes, to make these options a viable mode of travel for more short distance trips in the Region. These programs can also function as a feeder service to transit systems, which often encourages an increase in trips using both modes.

In Milwaukee County, Bublr Bikes currently operates bike share in the Cities of Milwaukee, Wauwatosa, and West Allis. In 2014, there were seven stations installed. Since completion of VISION 2050, Bublr Bikes has expanded to a total of 105 stations in 2022, as shown on Map 11. The City of Milwaukee and Bublr Bikes are working to expand the system by 20 additional stations. In 2022, Bublr Bikes also expanded its fleet to include approximately 350 new e-bikes. Bublr Bikes continues to implement an adaptive bike share program with support from the Cities of Milwaukee and Wauwatosa that makes upright tricycles, side-by-side tricycles, and hand cycles accessible to people of all abilities available. Bublr Bikes also provides a low-cost annual pass for UW-Milwaukee students to encourage them to use the bike share program for trips around campus, between dormitories and campus, and to other destinations around the university.

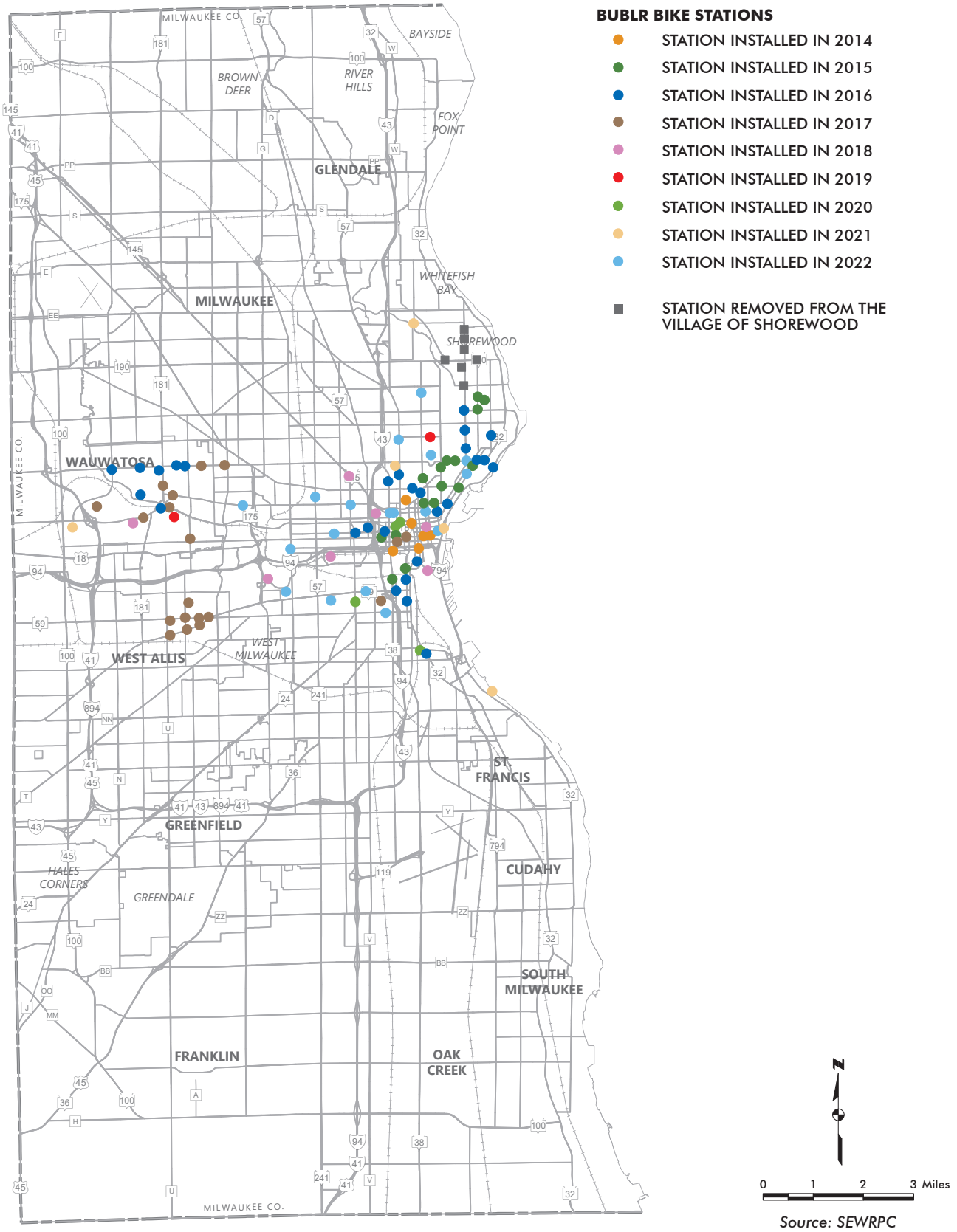
In October 2023, Kenosha County released an RFP seeking a contractor to provide equipment, technology, and installation for a new countywide public bike-sharing system. The RFP specified the contractor would provide a bike share fleet comprised of pedal and e-bikes located at nine initial stations.

As it relates to scooter share systems, the City of Milwaukee initiated a permanent scooter program following completion of its third dockless scooter pilot study in December 2023. Three scooter companies participated in the pilot study, which evaluated dockless scooters as a viable transportation option for short trips, assessing their potential to serve first-mile/last-mile connections to transit, and determining how best to deploy the scooters to areas of highest need to ensure this transportation service is provided equitably. The City has also provided guidance on riding regulations and where to park the scooters to address safety concerns. The City of West Bend began operating a dockless scooter program with one company in 2022 and has issued a safety guide for responsible riding. The City of Greenfield adopted an ordinance to regulate the use of electric scooters and dockless mobility systems in 2021.

➤ Recommendation 3.5: Provide pedestrian facilities that facilitate safe, efficient, and accessible pedestrian travel

VISION 2050 recommends that sidewalks be provided along streets and highways in areas of existing or planned urban development; that gaps in the pedestrian network be addressed through neighborhood connections to regional off-street bicycle paths, transit, and major destinations; that sidewalks be designed and constructed using widths and clearances appropriate for the levels of pedestrian and vehicular traffic; and that terraces or buffered areas be provided, where feasible, between sidewalks and streets to enhance the pedestrian environment. VISION 2050 also emphasizes that all pedestrian facilities be designed and constructed in accordance with the Federal Americans with Disabilities Act (ADA) and its implementing regulations. Consistent with ADA requirements, VISION 2050 encourages communities with 50 or more employees to maintain updated ADA transition plans, which evaluate and plan for physical improvements to address

Map 11
Bublr Bike Stations Installed: 2014-2022



Source: SEWRPC

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accessibility for people with disabilities. VISION 2050 also recommends the development of walkable neighborhoods for the health and vibrancy of communities in the Region. Walkability refers to the ease by which people can walk in an area to various destinations such as schools, parks, retail services, and employment. Walkability can be increased through compact development patterns that have a number of destinations that are within walking distance and through a well-connected network of sidewalks.

Since plan completion, WisDOT completed an update to its statewide ADA transition plan in December 2022, which identifies general practices and policies that WisDOT will undertake to address curb ramp improvements on State highways. This transition plan includes a six-year program of identified locations throughout the State in which curb ramps need to be installed. WisDOT has also completed an inventory of existing sidewalks and intersections with and without curb ramps for the State highway system. This inventory can be accessed through an interactive web map on the WisDOT ADA Projects and Compliance webpage. The WisDOT ADA transition plan and its sidewalk and curb ramp inventory can serve as guidance for local governments in developing local ADA transition plans and in addressing curb ramps that are not in compliance with ADA regulations. The development of a regional inventory of pedestrian facilities on all arterial streets that are made ADA-compliant when streets are altered (reconstructed, resurfaced, etc.) or newly constructed should be considered to demonstrate further progress toward meeting ADA requirements.

Since 2021, the City of Milwaukee has completed various pedestrian initiatives under its Safe and Healthy Streets project, which has assisted the City in implementing and evaluating its complete streets policy. One element of the Safe and Healthy Streets project included the development of Streetwise MKE, a toolkit of pedestrian improvements along the street and at intersections to help make streets safer for walking by reducing vehicle speeds and increasing the visibility of the presence of pedestrians. Several of the pedestrian treatments improve ADA compliance by removing barriers for people with disabilities.

In 2021, the City of West Allis adopted a complete streets policy that incorporates designing the public right-of-way for the needs of all users, of all ages and abilities, and for all types of transportation into street projects and improvements. The City has established a subcommittee to oversee the implementation of the policy by reviewing street design projects in the capital improvement program. The policy also requires an annual report to track progress and implementation.

➤ Recommendation 3.6: Prepare local community bicycle and pedestrian plans

VISION 2050 recommends that local units of government prepare community bicycle and pedestrian plans to supplement the regional plan. The local plans should provide 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. Milwaukee County completed its Northwest Side Trail Connections Plan in April 2023, which identifies seven priority corridors and other on-street bicycle facilities that would link many of the majority-Black neighborhoods in this area to the Oak Leaf Trail. The Village of Mount Pleasant began an update to its bicycle plan in summer 2023 and expanded the scope of the plan to include a pedestrian component. In addition, a number of communities in the Region have or are currently updating their comprehensive plans to include recommendations for bicycle and pedestrian improvements, including the City of Cudahy. These plans are incorporated, as appropriate, into VISION 2050.

Local communities should also consider developing pedestrian safety action plans for improving pedestrian safety through street redesign and other engineering countermeasures. Implementation of Safe Routes to School programs by local communities and school districts should be encouraged in their local planning efforts to further address bicycle and pedestrian safety near schools. The City of Milwaukee began coordinating a citywide Safe Routes to School program in 2021 that identifies policies and initiatives for City departments and Milwaukee Public Schools to implement for improving walking and biking conditions near schools. The City is also working with eight schools on specific street improvement projects to address walking and biking safety concerns. The City of Oak Creek has developed Safe Routes to School action plans for the seven elementary schools and two

middle schools in the Oak Creek-Franklin Joint School District. Several of these schools will also have sidewalks, upgraded curb ramps, and other intersection improvements constructed as part of the first phase of Safe Routes to School infrastructure projects scheduled for 2023 and 2024. In addition, the Wisconsin Bike Federation organizes several Safe Routes programs and classes at many elementary schools each year, particularly within the Milwaukee Public Schools system.

Transportation Systems Management Element

Transportation systems management (TSM) involves managing and operating existing transportation facilities to maximize their carrying capacity and travel efficiency. TSM recommendations for VISION 2050 relate to freeway traffic management, surface arterial street and highway traffic management, and major activity center parking management and guidance. VISION 2050 recommends expanding some of the TSM measures that are currently in place, and implementing some new measures that leverage technology and use a coordinated approach to make our complex transportation system more efficient and safer. Below is a summary of the VISION 2050 recommendations and a description of notable implementation that has occurred since the plan was completed.

- **Recommendations 4.1 through 4.3: Implement freeway operational control measures, Implement advisory information measures for the freeway system, and Implement incident management measures for the freeway system**

  Freeway traffic management strategies include measures that improve the operational control, advisory information, and incident management on the regional freeway system. VISION 2050 recommends a continuation or expansion of measures currently in use, as well as the adoption of newer technologies and additional measures that provide potential opportunities for enhanced freeway management. The WisDOT Traffic Management Center (TMC), formerly called the State Traffic Operations Center, plays an essential role in implementing freeway traffic management measures. The TMC, located in the City of Milwaukee, brings traffic operations engineers together with State Patrol officials to monitor, respond to, and manage incidents; and share advisory information for travel throughout Wisconsin.

  VISION 2050 recommends measures to improve freeway operation—both during average weekday peak traffic periods and during minor and major incidents—through monitoring of freeway operating conditions and control of traffic traveling on and entering the freeway (Recommendation 4.1). Such measures include expanding and enhancing current operational control measures, such as traffic detectors and ramp meters, and considering measures that are currently not in widespread use, such as ramp meter control strategies, lane use control, speed limit control, part-time shoulder use, speed limit control, and truck restrictions. The number of ramp meters in 2023 was 120, one fewer than when the data were last updated in 2019 during the development of the 2020 Update to VISION 2050.

  VISION 2050 also recommends expanding and enhancing advisory information measures that provide real-time advisory information on current travel conditions to motorists, including variable message signs (VMS), the 511 Wisconsin traveler information website (511wi.gov), highway advisory radio (HAR), and dynamic route planning (Recommendation 4.2). Since data were last updated in 2019, the number of variable message signs on the freeway system increased by one to 33 in 2023.

  In addition, VISION 2050 recommends expanding and enhancing incident management measures that detect, confirm, and remove as quickly as possible incidents on travel lanes and shoulders on the freeway system, including crashes, debris, and stopped vehicles (Recommendation 4.3). Measures that enhance incident management include freeway service patrols, closed-circuit television cameras (CCTV), freeway location markers, crash investigation sites, ramp closure devices, and alternative route designations. Since data were last updated in 2019, the following implementation of freeway incident management measures has occurred:

  - Continued operation of CCTVs at 168 locations on the freeway system.

  - Continuation of freeway service patrols in Milwaukee County, the addition of freeway service patrols on IH 43 in Ozaukee County, and the discontinuation of service patrols on IH 94 in Racine County following completion of the IH 94 North-South freeway reconstruction project.

- Reduction in the number of crash investigation sites from 33 to 32, resulting from the addition of one new crash investigation site on IH 94 at the eastbound STH 100 exit and the elimination of two crash investigation sites on IH 41/USH 45 southwest of the Pilgrim Road interchange on Stolper Drive, and on IH 94 at the STH 11 (Durand Avenue) park-ride lot.

Along with the continued operation of CCTV, VMS, and traffic detectors on the freeway system, WisDOT continues to study and prepare for emerging Connected and Automated Vehicle (CAV) technologies. WisDOT established the Wisconsin Automated Vehicle External (WAVE) Advisory Committee in 2020 to gather stakeholder input and advice on CAV-related planning priorities, implementation policies, and impacts on Wisconsin's transportation system. The Committee has met eight times as of April 2023. In addition, WisDOT prepared a CAV Strategic Work Plan in 2021 that describes the Department's goals and objectives for integrating CAV into Wisconsin's transportation system.

In support of improved incident management, WisDOT's Traffic Incident Management Enhancement (TIME) program aims to improve responder safety; enhance the safe and timely clearance of traffic incidents; and support prompt, reliable, and interoperable communications by stakeholders through a collaborative effort of public safety and transportation agencies. In Southeastern Wisconsin, WisDOT continues to host TIME Coalition meetings bi-monthly to facilitate discussions, debrief major incidents that occur on the Region's arterial street and highway system, build relationships, and promote a consistent program for incident management among stakeholders, including officials from the TMC, emergency responders, local units of government, the U.S. Department of Transportation, and the Commission staff.

➤ **Recommendations 4.4 through 4.9: Improve and expand coordinated traffic signal systems, Improve arterial street and highway traffic flow at intersections, Expand curb-lane parking restrictions, Develop and adopt access management standards, Enhance advisory information for surface arterial streets and highways, and Expand the use of emergency vehicle preemption**

Surface arterial street and highway traffic management strategies are measures that improve the operation and management of the regional surface arterial street and highway network. To this end, the following section summarizes progress made toward the respective VISION 2050 recommendations.

- **Traffic Signal Coordination** – Coordinated traffic signals provide efficient progression of traffic along arterial streets and highways, reducing travel time delay, increasing reliability, and allowing motorists to travel through multiple signalized intersections without stopping. There are several coordination system types, including: time-based coordination, interconnected pretimed coordination, traffic responsive systems, real-time adaptive systems, and central computer control systems. VISION 2050 recommends that Commission staff work with State and local governments to document existing and planned arterial street and highway system traffic signals and traffic signal systems and develop recommendations (including prioritization) for improvement and expansion of coordinated signal systems. The intent is to identify signal coordination corridors that should receive high priority for Federal and State funding, such as FHWA CMAQ funds (Recommendation 4.4).

  When VISION 2050 was completed, approximately 1,200 of the 1,700 traffic signals in the Region were part of a coordinated system. As recommended in VISION 2050, the Commission is in the process of documenting existing and planned arterial street and highway system traffic signals and traffic signal systems, with the intent to develop recommendations (including prioritization) for improvement and expansion of coordinated signal systems.

- **Intersection Improvements** – Intersection improvements increase travel efficiency and improve safety along arterial streets and highways through changes such as improving the type of traffic control deployed at the intersection (two- or four-way stop control, roundabouts, or signalization); improving signal timing at individual signalized intersections; adding right- and/or left-turn lanes; or improving bicycle and pedestrian accommodation through an intersection (e.g., pavement markings and leading pedestrian intervals at signalized intersections). VISION 2050 recommends that State

and local governments aggressively consider and implement individual arterial street and highway intersection improvements (Recommendation 4.5). VISION 2050 recommends this be done by preparing a prioritized short-range (two- to six-year) program of arterial street and highway intersection improvements under their jurisdiction, which is reviewed and updated every two to five years; and that Commission staff work with said agencies, at their request, to prepare such programs.

- **Parking Restrictions** – Curb-lane parking restrictions improve traffic flow and operation by restricting on-street parking during peak traffic periods and operating the curb parking lanes as through traffic lanes. This measure provides an alternative to the expansion of highway capacity through roadway widenings and new construction. VISION 2050 recommends that State and local governments consider implementation of curb-lane parking restrictions as needed during peak traffic periods in the peak traffic direction along segments of roadway expected by the year 2050 to operate under congested conditions and where there may be the ability to utilize the existing parking lane as a traffic lane (Recommendation 4.6). The location of potential curb-lane parking restrictions and auxiliary lane conversions is shown on Map 12. There has been no known progress toward expanding curb-lane parking restrictions since VISION 2050 was completed.

- **Access Management** – Developing access management standards for the location, spacing, and operation of driveways (residential or commercial), median openings, and street connections improves transportation system operations by providing full use of the roadway capacity and reducing the number of conflicts that can result in crashes. VISION 2050 recommends that State and local governments continue to adopt and employ access management standards as development takes place along arterials under their jurisdiction and implement access management plans along arterials that currently are developed and violate these access management standards (Recommendation 4.7). When VISION 2050 was adopted, WisDOT had a strong access management policy in place, using *Wisconsin Statutes* and *Wisconsin Administrative Code* to regulate access management on the state trunk highway (STH) system through STH access permit applications and through purchased and administrative access control when reconstruction projects are completed. Since VISION 2050 was adopted, there have been no known changes to access management practices at the local level.

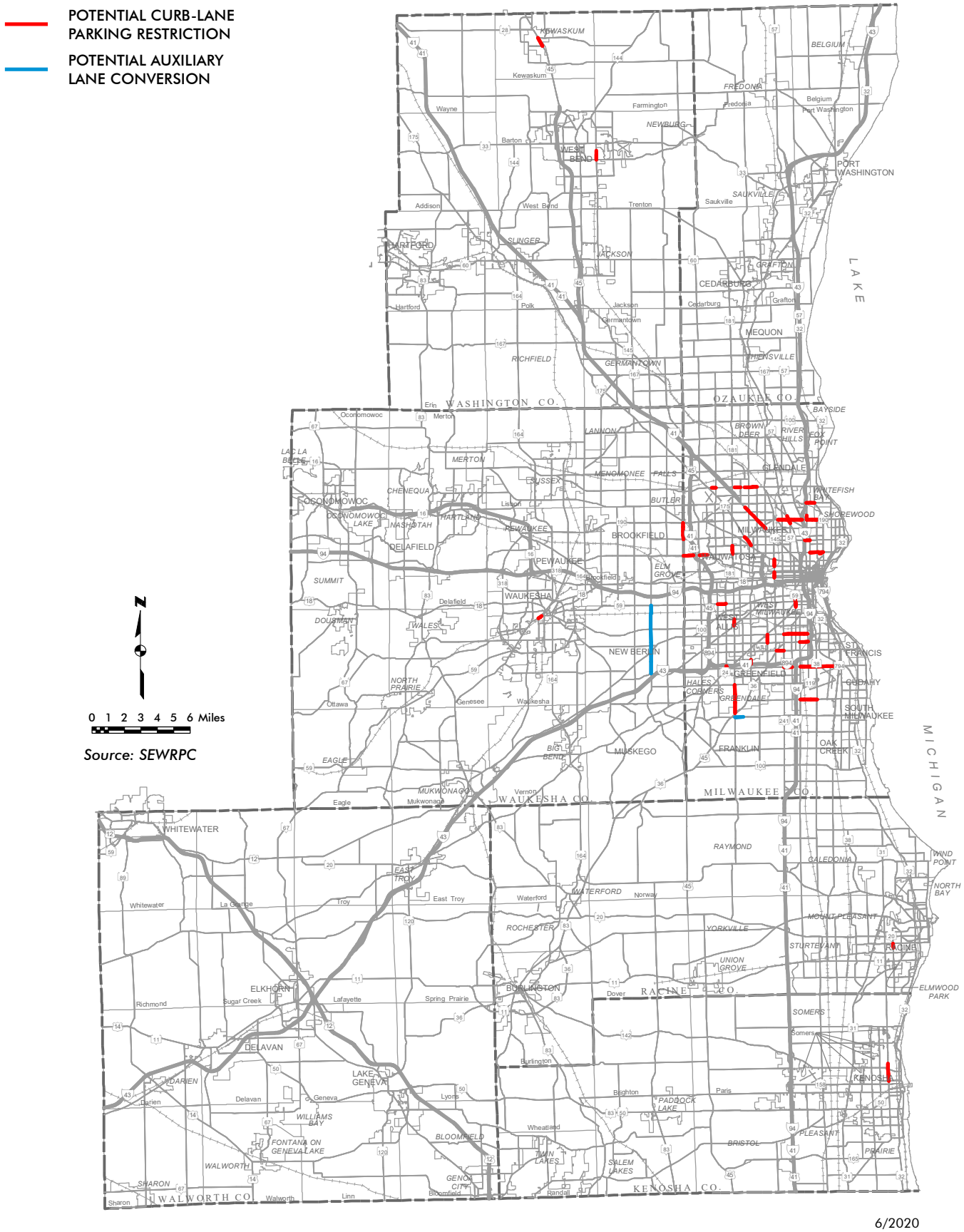
- **Advisory Information** – Similar to advisory information measures for the regional freeway system, advisory information measures for surface arterials involve providing real-time information on existing conditions, particularly delays and major incidents, to encourage more informed travel decisions and more efficient use of the transportation system. VISION 2050 recommends improving and expanding advisory information measures, including expanding data provided on the 511 Wisconsin website to include surface arterials in addition to freeways, and implementing VMS, including hybrid variable/static travel time signs (Recommendation 4.8). Since data were last updated in 2019, the following implementation has occurred:

    - Continued operation of variable message signs on the surface arterial street and highway system at 32 locations in 2023.

    - Reduction in the number of closed-circuit television cameras on the surface arterial street and highway system from 56 locations in 2019 to 55 locations in 2023.

- **Emergency Vehicle Preemption** – Emergency vehicle preemption allows emergency vehicles to intervene in the normal operation of traffic signals to either change the traffic signal to the green phase or to hold the green phase for the approach from which the emergency vehicle is oriented. Some governmental units in the Region have implemented emergency vehicle preemption on some or all of the traffic signals under their jurisdictional authority. VISION 2050 recommends expanding the use of emergency vehicle preemption at traffic signals in Southeastern Wisconsin (Recommendation 4.9). The Commission is currently in the process of documenting traffic signals with emergency vehicle preemption capabilities as a part of the inventory of traffic signal systems that is underway.

Map 12
Location of Potential Curb-Lane Parking Restrictions and Auxiliary Lane Conversions on Arterial Streets and Highways: VISION 2050 (as of 2020 Update)



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➤ Recommendations 4.10 through 4.11: Implement parking management and guidance systems in major activity centers and Implement demand-responsive pricing for parking in major activity centers

VISION 2050 includes recommendations to improve parking around major activity centers, allowing motorists to find available parking quickly, and reducing traffic volume, congestion, air pollutant emissions, and fuel consumption. Specifically, VISION 2050 recommends implementing, in major activity centers, parking management and guidance systems and demand-responsive pricing (Recommendation 4.10 and 4.11, respectively).

Demand-responsive pricing for parking adjusts the price for on-street parking, parking lots, and parking garages around major activity centers. The price for parking can be adjusted throughout the day based on the parking demand in the area with the intent that at least one parking space is available most of the time.

The City of Milwaukee has developed and continues to update and improve its MKE Park application that allows for mobile-based payment and spot renewal.

Travel Demand Management Element

VISION 2050 recommends implementing travel demand management (TDM) 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 and reducing traffic volume, congestion, air pollutant emissions, and fuel consumption. To be effective, these measures should be technically and politically feasible; integrated with public transit, bicycle and pedestrian, and arterial street and highway improvements; and combined into coherent packages so that a variety of measures are implemented. Specifically, VISION 2050 recommends implementing TDM measures related to preferential treatment for high-occupancy vehicles (HOV), park-ride lots, personal vehicle pricing, TDM promotion, and detailed site-specific neighborhood and major activity center land use plans.

Below is a summary of the VISION 2050 TDM recommendations, and a description of notable implementation that has occurred since the 2020 Update.

➤ Recommendation 5.1: Enhance the preferential treatment for high-occupancy vehicles

VISION 2050 recommends continuing and enhancing the preferential treatment for transit vehicles, vanpools, and carpools on the existing arterial street and highway system. Providing preferential treatment for transit vehicles reduces transit travel times and improves transit travel time reliability, making public transportation more competitive with personal vehicle use. Measures to improve preferential treatment for HOVs include the provision of HOV queue bypass lanes at metered freeway on-ramps, and preferential carpool and vanpool parking. No notable progress on these measures has been made recently, although features along The Hop streetcar line and CONNECT 1 BRT line support preferential treatment for transit vehicles, as discussed in Recommendation 2.6.

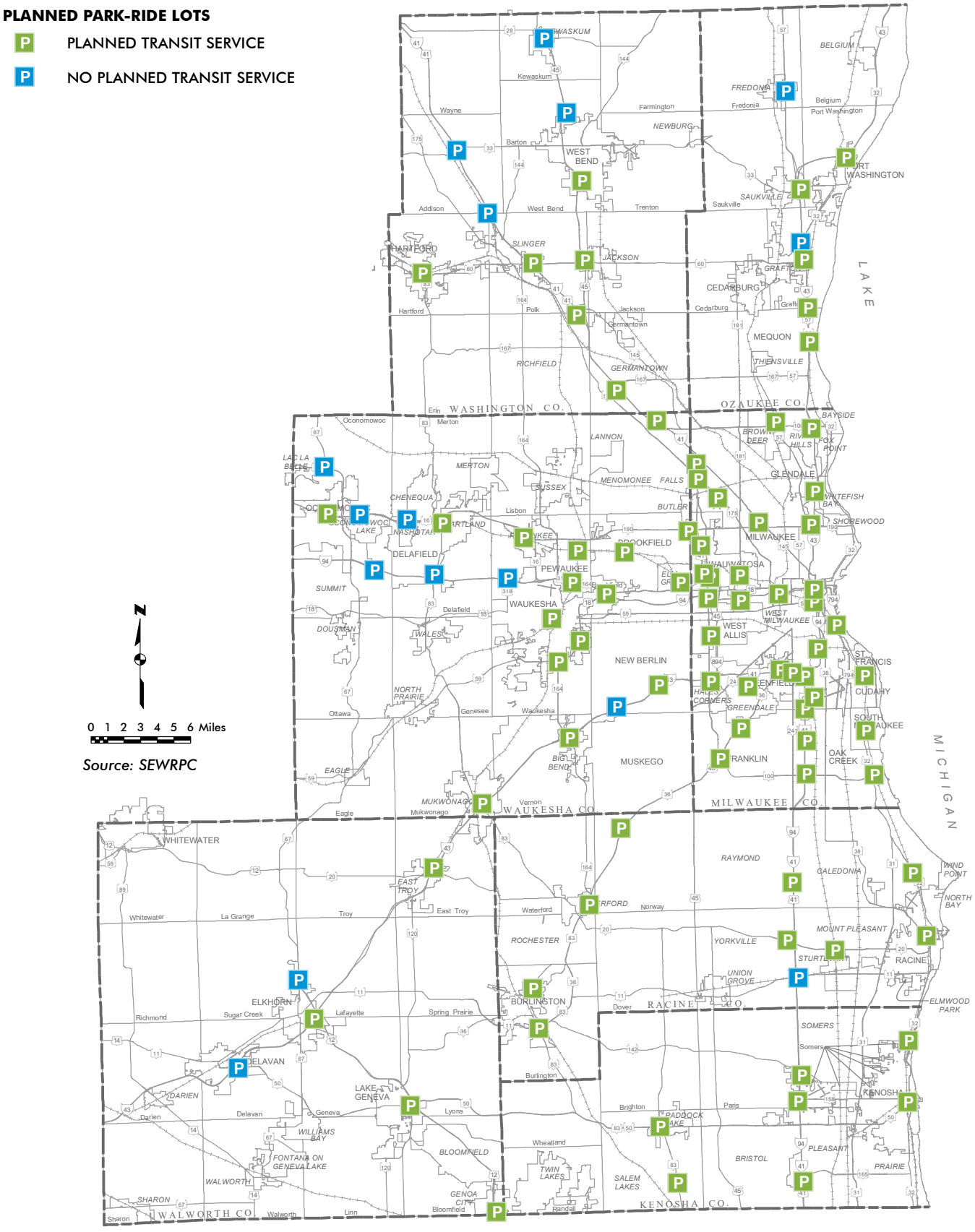
➤ Recommendation 5.2: Expand the network of park-ride lots

To promote the more efficient use of the Region's transportation system and reduce single-occupancy vehicle (SOV) travel, VISION 2050 recommends expanding the network of park-ride lots. Park-ride lots should be located along major routes at major intersections and interchanges where sufficient demand may warrant provision of an off-street parking facility. Map 13 shows recommended park-ride lots. Since the 2020 Update, there have been minor changes to park-ride lots including the relocation of the West Bend lot with no change in capacity and the closure of the Timmerman Field lot. Also, as a result of the reduction in commuter bus service since the 2020 Update, several park-ride lots are no longer served by transit. Implementation of VISION 2050 planned park-ride lots, including those that are served by transit, is shown on Map 14.

➤ Recommendation 5.3: Price personal vehicle travel at its true cost

VISION 2050 recommends that a larger percentage of the full costs of construction, maintenance, and operation of street and highway facilities and services and parking facilities and services be borne by the users of the system. VISION 2050 specifically recommends the following strategies: (1) cash-out of employer-paid parking, which involves encouraging employers currently providing

Map 13
Park-Ride Lots: VISION 2050 (as of 2020 Update)



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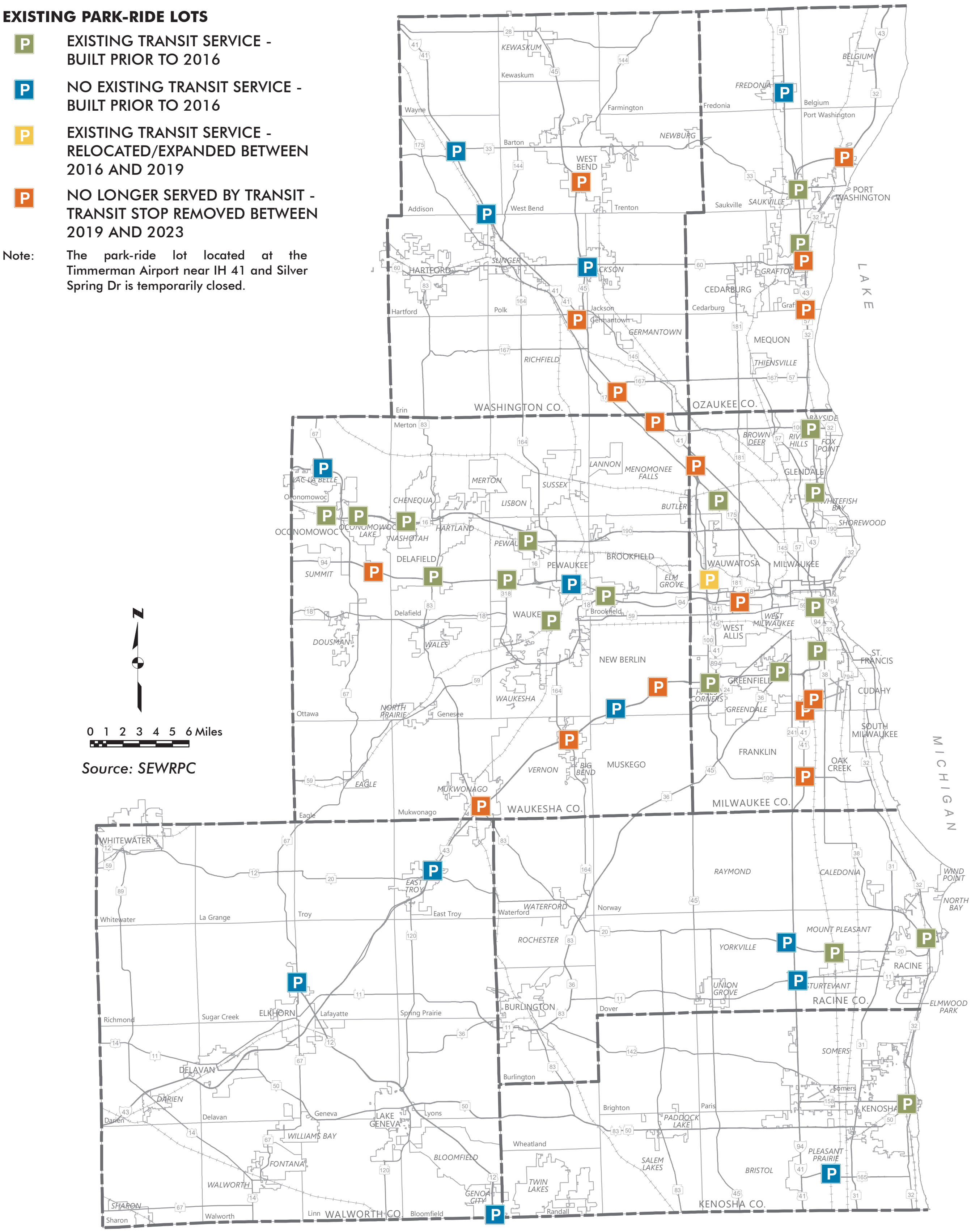
Map 14
Implementation of VISION 2050 Planned Park-Ride Lots: 2023



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free/subsidized parking to charge their employees the market value for parking; (2) road pricing, which involves charging user fees to pay the costs of construction, maintenance, and operation of street and highway facilities and services; and (3) parking pricing, which involves charging user fees for commercial and residential parking facilities. These measures can result in a reduction in total vehicle-miles of travel (VMT).

The unindexed, flat-rate fuel tax remains one of Wisconsin's primary funding mechanisms for transportation at both the State and Federal levels. This funding source continues to provide reduced purchasing power due to increased vehicle fuel efficiency and rising construction, maintenance, and operation costs, and the need for more transportation funding both at the State and Federal level continues to grow. Motor vehicle fuel tax revenues decreased amid the pandemic and federal relief sources, such as the Consolidated Appropriations Act (CAA), came to aid transportation infrastructure costs. The 2019-2021 State budget included funding for WisDOT to study both tolling and mileage-based fees, the first step toward exploring a pilot project or permanent policy implementation. At the time of this writing, the results of this study are not available.

➤ Recommendation 5.4: Promote travel demand management

VISION 2050 recommends a regionwide program to aggressively promote transit use, bicycle use, ridesharing, pedestrian travel, telecommuting, and work-time rescheduling, including compressed work weeks. In 2023, the Commission launched CommuteWISE, a region-wide program that includes education, marketing, and promotion elements aimed at encouraging alternatives to drive-alone personal vehicle travel. CommuteWISE is working to engage employers and commuters through a new trip-planning and ride-matching platform that allows users to search for multimodal commute options; log sustainable trips and track the vehicle miles, cost, and CO_2 saved; and run challenges to incentivize behavior change.

VISION 2050 further recommends expanding programs and services that provide residents in Southeastern Wisconsin the opportunity to reduce personal vehicle ownership and SOV travel, which include car-sharing services and a live near your work program. With respect to car-sharing services, Zipcar expanded its fleet from 44 to 58 vehicles throughout Milwaukee between 2019 and 2023. Application-based ride-hailing services, Uber and Lyft, have become more prevalent since VISION 2050 was completed. While these services can increase VMT and emissions if used to replace transit or traditional carpooling trips, they also have the potential to provide last-mile or emergency ride home solutions that support transit and other modes, and can provide the utility of a personal automobile on an as-needed basis.

Since the adoption of VISION 2050, the private sector, in coordination with public agencies, continues to advance shared mobility services and platforms that promote TDM in the Region by providing more transportation options and alternatives to car ownership and SOV trips. Cloud-based trip planning services, such as Google Maps and Open Street Maps, incorporate bicycle, walking, and public transit in addition to driving. The expansion of Bublr Bikes and dockless scooters, described further under the bicycle and pedestrian element, supports non-SOV travel. Additional multimodal trip planning tools implemented since 2020 include the WisGo mobile app that allows riders to plan, track, and pay bus fares and the CommuteWISE trip-planning and ride-matching platform.

➤ Recommendation 5.5: Facilitate transit, bicycle, and pedestrian movement in local land use plans and zoning

VISION 2050 recommends that local governments facilitate transit, bicycle, and pedestrian movement as they prepare and implement detailed, site-specific neighborhood and major activity center land use plans.

Local governments have been implementing this recommendation by incorporating recommendations that enhance use of those modes of transportation through narrower building setbacks, higher-density development, mixed-use development, and combining planning for land use and multimodal transportation planning in neighborhood and comprehensive plans. Below are examples of plans completed since VISION 2050 was adopted that have a particular focus on connecting multimodal transportation and land use:

- The City of Milwaukee's *Near North Side Area Plan*, updated in 2020, includes a strategic action plan titled *Connecting the Corridor*, which will prioritize mobility, parks, and off-street paths in and around the current and planned development within the 30th Street Industrial Corridor, which includes the ongoing development of the former A.O. Smith/Tower Automotive site.

- The City of Milwaukee's *Fond du Lac and North Area Plan*, updated in November 2021, includes land use and transportation recommendations to improve public transit, walking, and biking as tools to increase access to jobs and address the physical and social environmental factors that influence the health and safety of residents.

- The City of Milwaukee's *Southwest Side Area Plan* was amended in 2022 to include the *Envision South 13th Street Together Strategic Action Plan* as part of the City's Overall Comprehensive Plan. The Plan highlights initiatives to support businesses and transportation projects including multimodal safety improvements on Oklahoma, Kinnickinnic River Trails, and making 13th Street into a Complete Street.

- The City of Milwaukee is currently updating the Downtown Area Plan, titled *Connec+ing MKE*. The draft plan recommends several concepts that would facilitate improvements to the bike and pedestrian environment, including redesigning streets as public spaces that support all users and reconnecting places divided by human-made barriers.

➤ **Recommendation 5.6: Partner with private-sector mobility service providers**

Emerging trends in shared-use transportation are rapidly evolving, with private-sector mobility providers that offer new services such as shared micromobility (e.g., bike and scooter share programs), app-based ride hailing (e.g., Uber and Lyft), on-demand carpooling, and other app-based mobility options. These new services have the potential to have both positive and negative impacts on the Region. For example, shared-use transportation services could reduce personal vehicle ownership and drive-alone personal vehicle travel, particularly when they are used to complement regular public transit use. However, these services also have the potential to pose safety hazards, increase VMT, and reduce public transit use. VISION 2050 recommends that local, county, and State agencies and units of governments develop partnerships with private-sector mobility service providers to advance an equitable, affordable, and efficient transportation system in the Region. When necessary, they should also adapt plans and ordinances to prioritize safety for all users of the transportation system, accommodate people with disabilities, provide affordable options, encourage active and shared-use travel, develop data-sharing agreements, and support public transit as the primary mode of shared mobility by partnering with private-sector mobility services to provide first-mile/last-mile accessibility to transit and to supplement transit service during off-peak service times or in areas with lower-density development patterns.

FlexRide Milwaukee was initiated in 2022 as the Region's first on-demand microtransit service, through a pilot program led by UW-Milwaukee and the Commission. The service has continued and expanded. It is now overseen by MobiliSE and operated by Via. Riders can book and track their ride from Milwaukee neighborhoods to near-suburb employment zones through a mobile app or via phone. The service also includes wheelchair-accessible vehicles.

More broadly for the Region, ride-hailing companies are not offering on-demand carpool options. UberX Share is not available in any cities within the Region and Lyft discontinued its shared-ride option.

Arterial Streets and Highways Element

Arterial streets and highways are those portions of the total street and highway system principally intended to provide travel mobility, serving the through movement of traffic and providing transportation service between major subareas of a region and through a region. The planned arterial street and highway system under VISION 2050, as updated, totals 3,670 route-miles. Approximately 92 percent, or 3,370 of these route-miles, are recommended to be resurfaced and reconstructed to their existing traffic carrying capacity. Approximately 233 route-miles, or about 6 percent of these route-miles, are recommended for capacity expansion through widening to provide additional through traffic lanes. Approximately 65 route-

miles, or about 2 percent of the total arterial street mileage, are recommended for capacity expansion through the construction of new arterial facilities. A map of the functional improvements to the arterial street and highway system recommended in VISION 2050 is shown on Map 15.

When VISION 2050 was initially prepared, and when it was updated in 2020, the financial analysis identified a funding gap affecting the recommended transit element, which required identifying the funded portion of the recommended transportation system. As noted under the public transit element, this funded portion was referred to as the "Fiscally Constrained Transportation System (FCTS)" and is presented in Chapter 2 of Volume III (Second Edition) of the VISION 2050 plan report, and updated in the second amendment to VISION 2050. The updated financial analysis showed, in addition to the transit funding gap, that without additional revenue, the Region will not be able to complete the recommended reconstruction of several portions of the Region's arterial street and highway system by 2050, particularly of the Region's freeway system. To this end, the funded portion of the Region's arterial street and highway system under the FCTS was identified and is shown on Map 16.

Below is a brief explanation of each recommendation under the arterial streets and highways element of VISION 2050, with a description of any notable implementation of those recommendations that has occurred since the plan was completed.

- **Recommendation 6.1: Keep the Region's arterial street and highway system in a state of good repair**

  VISION 2050 recommends that the condition of all 3,600 miles of the roadways that are part of the Region's existing arterial street and highway system be preserved to maintain their ability to effectively carry higher levels of people and goods. Preserving the condition of the Region's arterial streets and highways—including pavement, bridges, and all other infrastructure in the roadway right-of-way—is critical to provide for safe and efficient travel throughout the Region. Since VISION 2050 was adopted, approximately 840 miles of arterial streets and highways were resurfaced, reconditioned, or reconstructed.

- **Recommendation 6.2: Incorporate "complete streets" concepts on arterial streets and highways**

  Complete streets is a roadway design concept focused on providing for the safe and convenient travel of all roadway users (of all ages and abilities) traveling by various modes (walking, bicycling, transit, or automobile) within the roadway right-of-way. Complete street features can be implemented to encourage walking and bicycling and the use of transit as alternatives to travel by automobile. VISION 2050 recommends that complete street concepts be considered as part of the reconstruction of existing surface arterial roadways, the construction of new surface arterial roadways, and when practical during maintenance and preservation projects. Additionally, VISION 2050 recommends considering road diets, which involve reducing the number of travel lanes, on multilane roadways that have existing and future traffic volumes that do not require the current number of travel lanes.

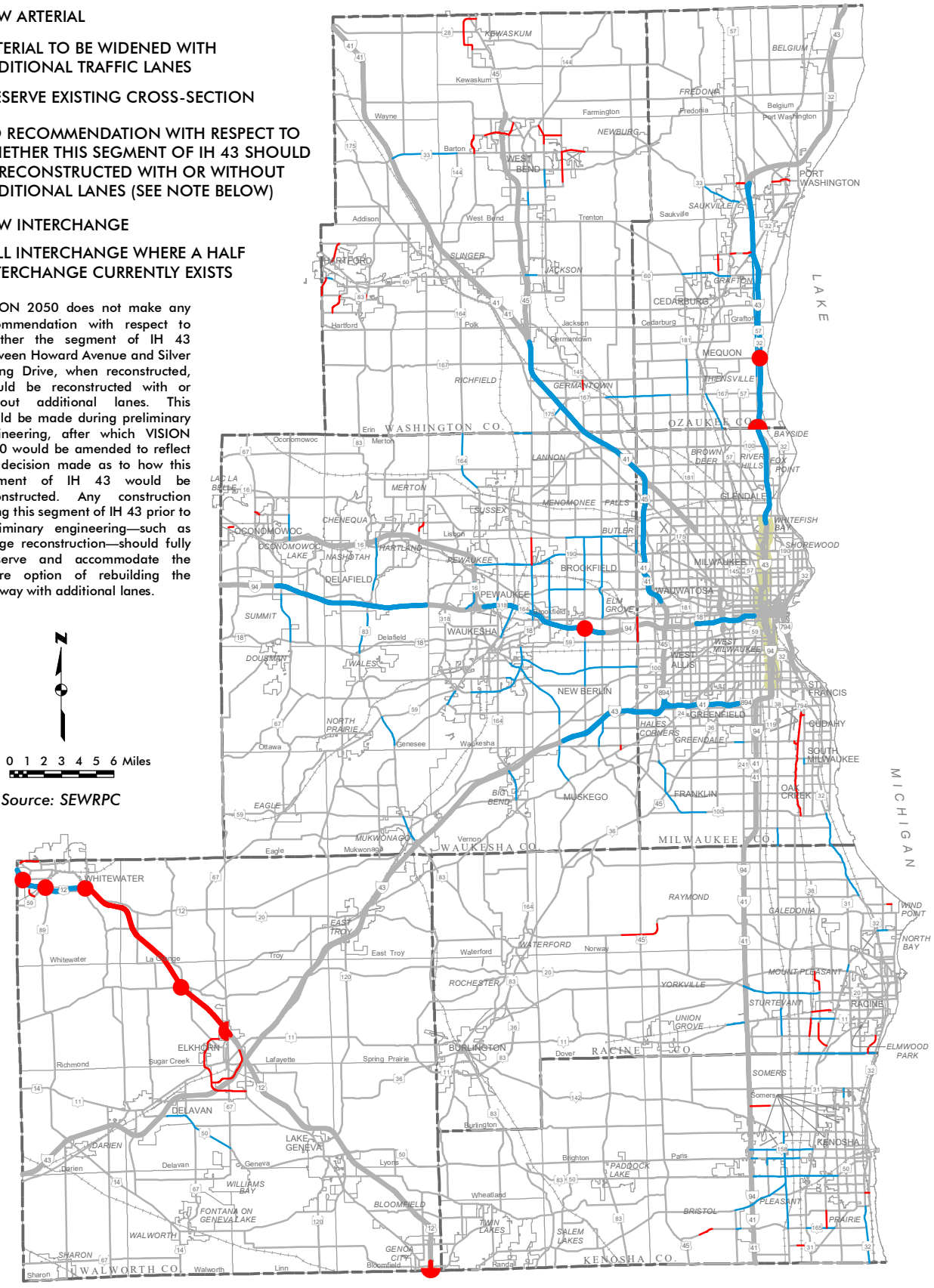
  The level of complete street features implemented for a particular roadway is dependent on the types of land use adjacent to the roadway (urban, suburban, or rural), the prevalence of each type of user, and the preferences of the community in which the roadway is located. Complete street features can include accommodations such as sidewalks, bicycle lanes, or safe crossing treatments; aesthetic features, like plantings and trees; practical features like bicycle racks, sidewalk benches, and tables and chairs; enhanced transit stops that are safer, more accessible, and more comfortable; or features that make development more accessible for pedestrians, including modified setbacks and access points.

  Below is a selection of project examples that incorporate complete street concepts and have been implemented since VISION 2050 was updated in 2020. Additional details about recently implemented bicycle facility improvements and public transit enhancements—both complete street concepts—are described in this appendix under the bicycle and pedestrian element and the public transit element.

Map 15
Functional Improvements to the Arterial Street and Highway System: VISION 2050 (as of 2020 Update)

- NEW ARTERIAL
- ARTERIAL TO BE WIDENED WITH ADDITIONAL TRAFFIC LANES
- PRESERVE EXISTING CROSS-SECTION
- NO RECOMMENDATION WITH RESPECT TO WHETHER THIS SEGMENT OF IH 43 SHOULD BE RECONSTRUCTED WITH OR WITHOUT ADDITIONAL LANES (SEE NOTE BELOW)
- NEW INTERCHANGE
- FULL INTERCHANGE WHERE A HALF INTERCHANGE CURRENTLY EXISTS

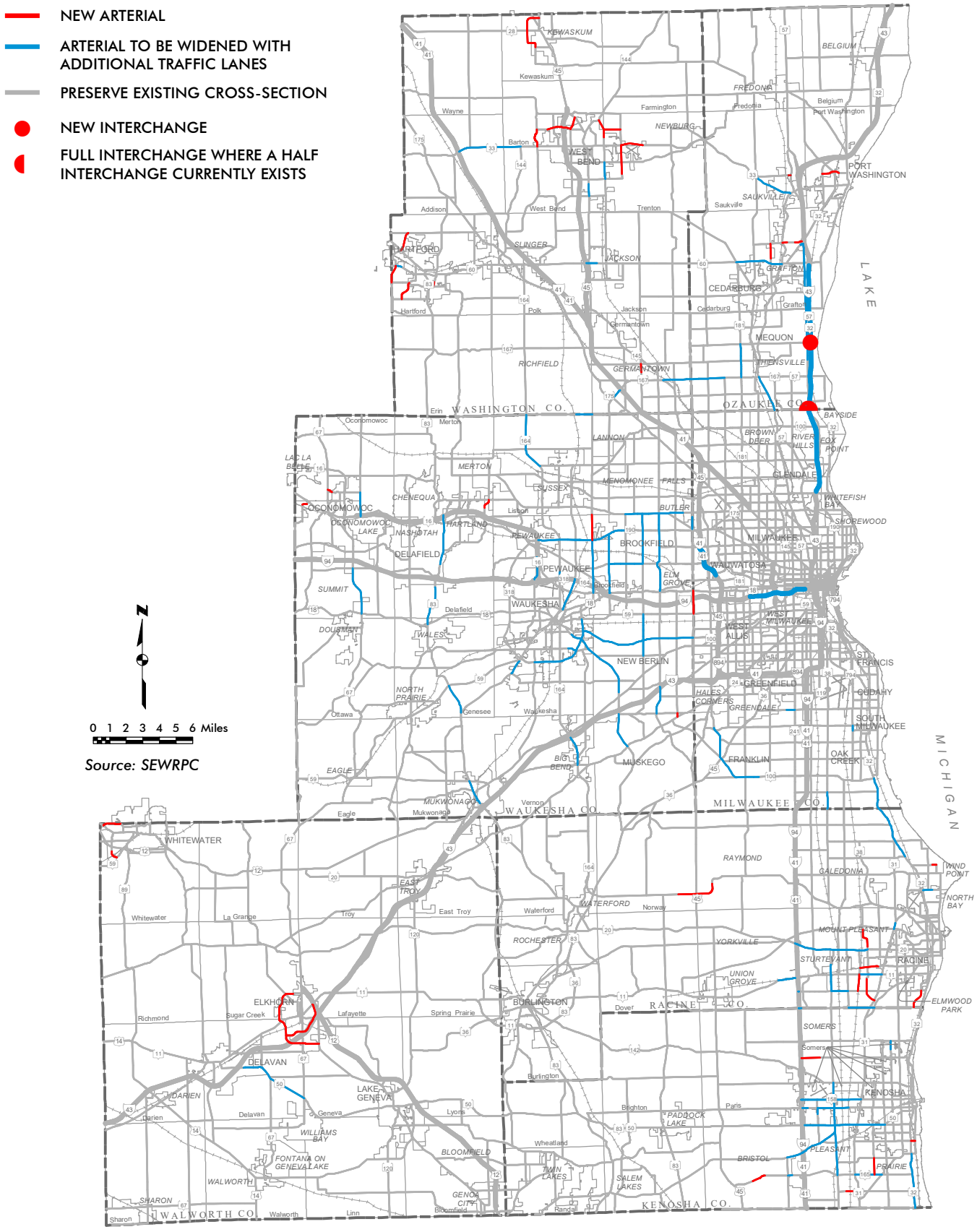
Note: VISION 2050 does not make any recommendation with respect to whether the segment of IH 43 between Howard Avenue and Silver Spring Drive, when reconstructed, should be reconstructed with or without additional lanes. This would be made during preliminary engineering, after which VISION 2050 would be amended to reflect the decision made as to how this segment of IH 43 would be reconstructed. Any construction along this segment of IH 43 prior to preliminary engineering—such as bridge reconstruction—shall fully preserve and accommodate the future option of rebuilding the freeway with additional lanes.



Source: SEWRPC

6/2020

Map 16
Fiscally Constrained Arterial Street and Highway System (as of 2020 Update)



6/2020

- Road diets have been implemented throughout the City of Milwaukee as a part of roadway projects, including on North Hawley Road from Michigan Street to Vliet Street, on Becher Street from 4th Street to Kinnickinnic Avenue, on West Morgan Avenue from 27th Street to 20th Street and from 9th Street to 6th Street, and on S. 43rd Street from Morgan Avenue to KK River Parkway.

- A High-Intensity Activated Crosswalk (HAWK) signal for users of the Pike River Pathway was installed at the trail crossing with STH 11 (Durand Avenue) and CTH KR in the Village of Mount Pleasant.

- In the City of Milwaukee, protected bicycle lanes were installed on Hawley Road from Martin Drive to Wells Street, raised bicycle lanes were constructed on Becher Street from 4th Street to 1st Street, and buffered bicycle lanes were added to several streets, including 13th Street, Chase Avenue, Layton Avenue, Mason Street, and Villard Avenue.

- A shared-use pathway was added along portions of CTH E, CTH F, and CTH S (38th Street) in Kenosha County and along the West Waukesha Bypass in Waukesha County.

- The CONNECT 1 BRT line in Milwaukee County was implemented and includes enhanced transit stops that provide elevated platforms, real-time bus arrival information, and off-bus fare collection systems. Additionally, portions of the nine-mile route have dedicated bus lanes.

- Sidewalks were installed as part of road reconstruction projects on Calhoun Road from North Avenue (CTH M) to Capitol Drive (STH 190) and on North Ave from Calhoun Road to 124th Street in the City of Brookfield.

- Since passing a Complete Streets policy in October 2018 that directed the incorporation of complete street principles in its street designs, the City of Milwaukee has completed a number of road projects that have implemented bicycle and pedestrian accommodations, including along Morgan Avenue, S. 43rd Street, King Drive, and North Lake Drive. An ongoing project on Oklahoma Avenue from 27th Street to 6th Street is incorporating complete street elements by creating safer crossings for pedestrians through pedestrian crossing islands and curb extensions, improving the safety of bicyclists by implementing buffered or protected bicycle lanes, and enhancing transit with bus bulbs. Another project intended to improve safety for all modes along Van Buren Street between Wisconsin Avenue and Brady Street is expected to be completed in late 2024.

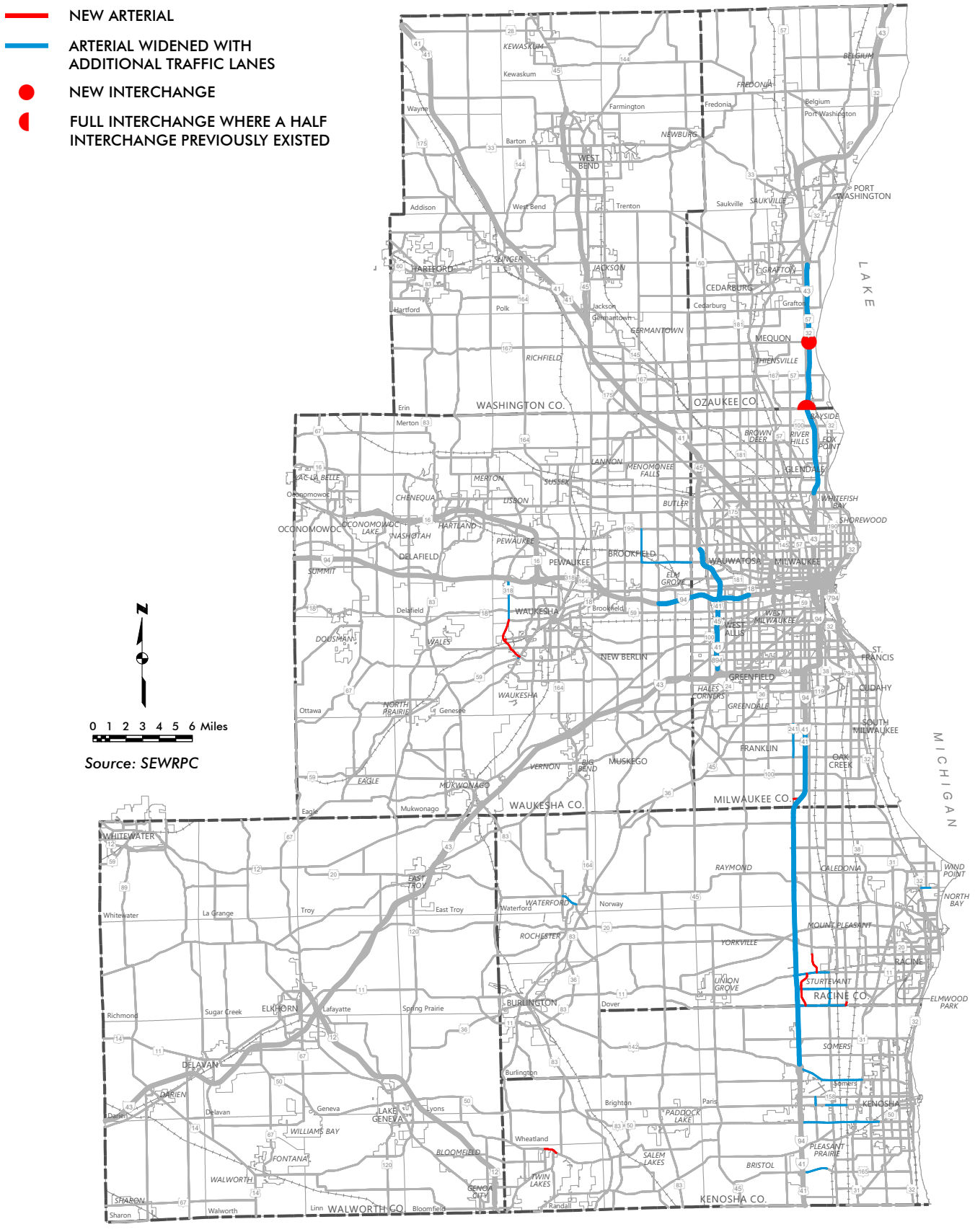
➤ Recommendation 6.3: Expand arterial capacity to address residual congestion

VISION 2050 recommends approximately 230 route-miles be widened to provide additional through traffic lanes, representing about 6 percent of the total VISION 2050 arterial street and highway system mileage. Segments of existing freeways recommended to be widened are shown in Blue on Map 15. In addition, VISION 2050 recommends 65 route-miles of new arterial facilities, representing about 2 percent of the total year 2050 arterial street mileage (shown in red on Map 15). These highway improvements are recommended to address the residual congestion that may not be alleviated by recommended land use, systems management, demand management, bicycle and pedestrian facilities, and public transit measures. In addition, many of the recommended new arterial facilities are designed to provide a grid of arterial streets and highways at the appropriate spacing as the planned urban areas of the Region develop to the year 2050.

Since VISION 2050 was completed in 2016, approximately eight miles of new arterial facilities and 77 miles of arterial facilities planned to be widened with additional traffic lanes have been constructed or are currently under construction through 2023, as shown on Map 17, including 27 miles of arterial highway widenings that have been completed since the completion of the 2020 Update. Projects completed or currently under construction between the completion of the 2020 Update and 2023 include:

- The reconstruction with additional lanes of the north leg of the Zoo Interchange from Swan Boulevard to Burleigh Street

Map 17
Complete or In-Progress Functional Improvements to the Arterial Street and Highway System in the Region: 2016-2024



Source: SEWRPC

6/2024

- The reconstruction with additional lanes of IH 43 from Silver Spring Drive in Milwaukee County to STH 60 in Ozaukee County, which includes the construction of a freeway interchange at Highland Road in the City of Mequon and the conversion of the interchange at County Line Road/Port Washington Road from a half to a full interchange

- The reconstruction with additional lanes of North Avenue (CTH M) from Calhoun Road to 124th Street in Waukesha County

- The reconstruction with additional lanes of Calhoun Road from North Avenue (CTH M) to Capitol Drive (STH 190) in Waukesha County

- The reconstruction with additional lanes of STH 50 (75th Street) from IH 94 to 43rd Avenue including the frontage roads along STH 50 in Kenosha County

- The reconstruction of additional lanes of CTH K (60th Street) from 94th Court to the UP Railroad Crossing in Kenosha County

➤ Recommendation 6.4: Avoid, minimize, or mitigate environmental impacts of arterial capacity expansion

VISION 2050 recommends that impacts to natural resource areas (such as primary environmental corridors and wetlands) due to transportation system improvements be avoided. Should impacts to these areas be found to be unavoidable through preliminary engineering and environmental impact study, VISION 2050 recommends that impacts to such areas be minimized and, if required, mitigated. Arterial street and highway capacity expansion included in VISION 2050 was routed to avoid, if possible, impacts to environmentally sensitive resources. The Commission has developed and maintains extensive databases of the location and quality of environmentally sensitive resources in the Region and Commission staff frequently complete wetland delineations for transportation projects in the Region.

Potential impacts to environmental resource areas due to the recommended functional improvements to the arterial streets and highways element are expected to be modest—typically representing less than 0.1 percent of the total natural resource areas. For the projects that were recently completed or are underway that involve either a capacity expansion or construction of a new arterial, efforts were made to avoid or minimize impacts to wetlands, primary environmental corridors, and other resource areas; however, it was not possible to completely avoid impacts while also addressing the purpose and need of the various projects.

A large project currently under construction where impacts to wetlands or primary environmental corridors were identified is the reconstruction with additional travel lanes of IH 43 between Silver Spring Drive and STH 60. Design modifications, including widening lanes within existing median and steepened side slopes along the effected portions of the outside limits of the project. Additional details about activities to avoid, minimize, and mitigate impacts can be found in the environmental document completed for the project.

➤ Recommendation 6.5: Address safety needs on the arterial street and highway network

Crashes can have a negative effect on the Region as they contribute to overall transportation costs; increase public costs for police, emergency medical, and other social services; and cause nonrecurring congestion on the highway system. In addition, vehicular crashes take a heavy toll on life and property damage and cause human suffering. Vehicular crashes occur due to one or a combination of the following factors: human error, vehicular failure, and roadway/environmental conditions. VISION 2050 recommends that Federal, State, and local governments, and the Commission, work to:

- Minimize total traffic crashes on the arterial street and highway system

- Minimize total traffic crashes, along with crashes involving fatalities and serious injuries, on the arterial street and highway system

- Minimize bicycle and pedestrian-involved crashes
- Reduce conflicts between automobiles and public transit vehicles
- Reduce vehicle traffic conflicts
- Develop a Regional Safety Implementation Plan (RSIP)

Since VISION 2050 was completed, several improvements to the Region's transportation system have been implemented that will address these goals. Expansion of bicycle and pedestrian facilities, described further in the bicycle and pedestrian element of this chapter, should help reduce growth in vehicle travel, reduce conflicts and crashes between bicyclists and pedestrians and vehicular traffic, and encourage increased travel on safer facilities. Continued reconstruction and modernization of the freeway system and the surface arterial street and highway system, with additional travel lanes where necessary, should reduce traffic congestion and related traffic crashes. The implementation of targeted safety projects funded through the Federal and State Highway Safety Improvement Programs (HSIP) and by State and local governments yield spot-level improvements, often at intersections that experience higher-than-average crash rates. Finally, continued enforcement of existing access management standards, and developing new standards, can reduce the number of conflicts that can result in vehicular crashes.

➤ **Recommendation 6.6: Address security needs related to the arterial street and highway system**

Ongoing efforts to prevent and respond to attacks affecting the arterial street and highway system encompass a wide range of Federal, State, and local programs, measures, and initiatives. It is expected that Federal and State agencies will continue to refine transportation security measures, and work toward closer cooperation, coordination, and integration of tasks at all levels of government to provide secure transportation networks and facilities throughout the United States. Although the Commission does not currently have a direct role in Federal and State transportation security policy decisions and implementation, the Commission continues to maintain a supportive regional role for transportation security planning.

One particular role for the Commission related to transportation security planning is assisting counties and local governments with hazard mitigation plans. Since the 2020 Update, Commission staff have completed a hazard mitigation plan update for Ozaukee County and are currently preparing plan updates for Kenosha, Milwaukee, Racine, and Washington Counties, and the Fox River Watershed. These plans support the VISION 2050 recommendation to address security needs related to the arterial street and highway system, often by identifying roads prone to flooding and providing ideas for transportation resilience during severe weather events.

Freight Transportation Element

The movement of freight is essential for maintaining and growing Southeastern Wisconsin's economy. Truck, rail, water, and air modes of transportation bring raw materials to the Region's manufacturers, carry finished goods to domestic and international trade markets, move the goods that stock the Region's retail stores, and deliver parcels to consumers.

VISION 2050 recommends a multimodal freight transportation system designed to provide for the efficient and safe movement of raw materials and finished products to, from, and within Southeastern Wisconsin. To achieve this goal, VISION 2050 recommends improvements to the Region's transportation infrastructure as well as intergovernmental cooperation and other actions to preserve key transportation corridors, address regulatory inefficiencies, meet trucking industry workforce needs, and increase transportation safety and security.

Below is a brief summary of the VISION 2050 freight recommendations, and a description of notable implementation that has occurred since the plan was completed.

➤ Recommendation 7.1: Accommodate truck traffic on the regional highway freight network

Freight shipments in Southeastern Wisconsin—including freight movements by ship, airplane, and rail—rely heavily on trucks using the Region's arterial street and highway system. In particular, the movement of freight depends in large part on trucks using the regional highway freight network (RHFN)—arterial streets and highways in the Region intended to carry a higher percentage of truck traffic. The RHFN is based on the National Highway System (NHS) as well as the State's designated routes for long trucks, and is shown on Map 18. Higher levels of congestion and the presence of bottlenecks on the RHFN can result in increased shipping delays and higher shipping costs, negatively impacting businesses and manufacturers in the Region.

VISION 2050 recommends implementing the capacity expansion improvements described in the arterial streets and highways element of the plan, which would help mitigate existing and forecast future traffic congestion on the RHFN. Since VISION 2050 was completed, approximately 51 miles of planned new arterials and arterial widenings that are part of the RHFN have been constructed or are currently under construction (described under the arterial streets and highways element), including 24 miles that were constructed or are currently under construction since the completion of the 2020 Update of VISION 2050.

The Fixing America's Surface Transportation (FAST) Act directed the U.S. Department of Transportation (USDOT) to establish a National Highway Freight Network (NHFN) to strategically focus federal resources and policies toward improved freight movement. Included in the NHFN are Critical Urban Freight Corridors (CUFCs) and Critical Rural Freight Corridors (CRFCs) that provide regional and local connectivity to the NHFN. In accordance with the FAST Act, the Commission, in consultation with WisDOT, designated CUFCs for the Milwaukee urbanized area in 2019. Similarly, WisDOT, in consultation with the Commission, designated CUFCs and CRFCs in the Region's other urbanized and non-urbanized areas. Projects located within the CUFCs and CRFCs would be eligible to receive NHFP funding. Once a project or set of improvements is completed within a CUFC or CRFC, it will be possible to designate a different portion of the same corridor, or a different corridor, in need of investment. Map 18 shows the current RHFN, including the designated CUFCs and CRFCs, as of 2023. The Bipartisan Infrastructure Law (BIL), enacted in 2021, doubled the number of miles of highways in Wisconsin that can be designated as a CUFC or CRFC. The Commission staff intends to work in partnership with WisDOT to reevaluate and designate a new set of CUFCs and CRFCs in the Region.

In 2018, WisDOT completed the Wisconsin State Freight Plan, which includes information on many of the topics included in VISION 2050 freight recommendations, as well as a prioritized list of freight projects that could potentially be eligible for newly established NHFP funding. In 2022, WisDOT updated the plan, which includes the following recommended projects in the Region that would benefit freight transportation:

- Construction/resurfacing of IH 43 between Brown Street and W. Capitol Drive (STH 190)
- Construction/bridge overlay of IH 794 between the Marquette Interchange and the Lake Interchange
- Construction/resurfacing of IH 41 between W. Capitol Drive (STH 190) and W. Silver Spring Drive
- Reconstruction of S. Lincoln Memorial Drive between Jones Street and IH 794
- Construction/rehabilitation of the CTH F (Redford Boulevard) bridge over IH 94

Map 18
Regional Highway Freight Network: 2023

MAJOR FREIGHT INTERMODAL FACILITY

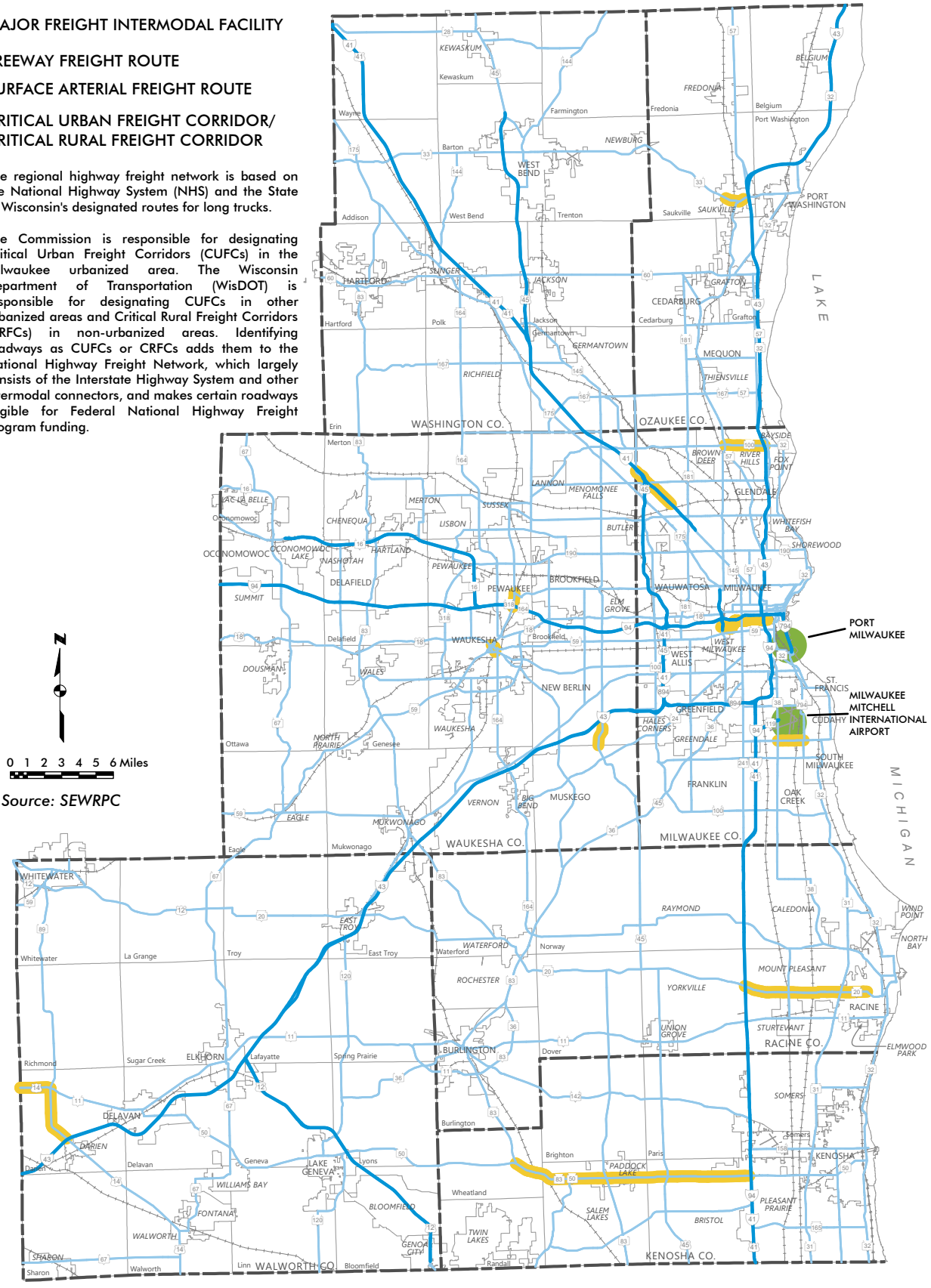
FREEWAY FREIGHT ROUTE

SURFACE ARTERIAL FREIGHT ROUTE

CRITICAL URBAN FREIGHT CORRIDOR/
CRITICAL RURAL FREIGHT CORRIDOR

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 Commission is responsible for designating Critical Urban Freight Corridors (CUFCs) in the Milwaukee urbanized area. The Wisconsin Department of Transportation (WisDOT) is responsible for designating CUFCs in other urbanized areas and Critical Rural Freight Corridors (CRFCs) in non-urbanized areas. Identifying roadways as CUFCs or CRFCs adds them to the National Highway Freight Network, which largely consists of the Interstate Highway System and other intermodal connectors, and makes certain roadways eligible for Federal National Highway Freight Program funding.



Source: SEWRPC

6/2024

➤ Recommendation 7.2: Accommodate oversize/overweight shipments to, from, and within Southeastern Wisconsin

Unusually large or heavy goods shipped within or through the Region require that specific OSOW truck routes be used. In some cases, the movement of OSOW shipments may require temporarily moving infrastructure along the shipment's route—such as raising utility wires or moving traffic signals—or following a more circuitous route to avoid physical restrictions, such as low bridges or structures with weight restrictions. While OSOW shipments constitute only a small percentage of all truck shipments in the Region, they include high-value goods—including exports of locally manufactured products to other countries—that are important to the Region's economy.

VISION 2050 recommends that State and local governments work with the Commission staff and local manufacturers, shippers, and utilities to improve the accommodation of OSOW shipments by truck on the Region's arterial street and highway network. Specifically, VISION 2050 recommends the following actions to improve the accommodation of OSOW shipments:

- Study past OSOW truck shipments in the Region
- Delineate a regional OSOW truck route network
- Identify OSOW truck route infrastructure needs
- Preserve OSOW truck routes

Many of these actions have been completed by WisDOT, in coordination with Commission staff and other stakeholders, since VISION 2050 was adopted, and WisDOT and the State Legislature have taken actions to identify and preserve OSOW truck routes, OSOW high-clearance routes, and wind tower corridors. Since completion of the 2020 Update, no additional actions to accommodate OSOW trucks in the Region have occurred.

➤ Recommendation 7.3: Pursue development of a new truck-rail intermodal facility in or near Southeastern Wisconsin

In many cases, freight shipments between Southeastern Wisconsin and other states or countries are most effectively transported using more than one mode of transportation. The domestic portions of these intermodal shipments often use trucks for the shorter portion of the trip and rail for the longer portion of the trip. Currently, the truck-rail intermodal facilities—where containerized shipments are interchanged between trucks and freight trains—closest to Southeastern Wisconsin are located in the Chicago area, where intermodal shipments sometimes experience significant congestion-related delays. Locating such a facility in or near Southeastern Wisconsin could provide transportation benefits to the Region's manufacturers and shippers, including lower shipping costs.

VISION 2050 recommends that local governments, the Commission, local manufacturers and shippers, freight railroads, and the State work together to pursue development of a new truck-rail intermodal facility in or near Southeastern Wisconsin. Steps to achieve this recommendation, as outlined in the plan, include conducting a study on the feasibility of developing a new truck-rail intermodal facility and supporting private sector efforts to develop a new truck-rail intermodal facility.

In 2014, WisDOT established the Wisconsin Freight Advisory Committee (FAC) to provide a means for representatives from the private sector, key state economic sectors, and the public sector to collectively review and discuss key freight transportation issues—including intermodal shipping—as well as provide input to WisDOT regarding priorities and policies that affect freight transportation in the State. The FAC continues to meet regularly.

In 2018, WisDOT awarded Port Milwaukee a Freight Railroad Preservation Program (FRPP) grant, matched by local funding, to rehabilitate and construct over 8,000 feet of railroad track within the port. The project has been completed and will support the City of Milwaukee's efforts to re-establish truck-rail intermodal service at Port Milwaukee that previously ceased in 2012.

➤ Recommendation 7.4: Develop truck size and weight regulations in Wisconsin consistent with neighboring states

Inefficient movement of goods by truck between the Region and neighboring states can result from differences in truck size and weight regulations between Wisconsin and neighboring states (e.g., a truck may not be able to be fully loaded due to a neighboring state's lower weight restrictions).

VISION 2050 recommends that the State work with neighboring states and FHWA to develop truck size and weight regulations that are consistent across state lines. The State has not yet undertaken efforts to develop regulations consistent with neighboring states.

➤ Recommendation 7.5: Construct the Muskego Yard Bypass

Canadian Pacific Kansas City (CPKC) freight trains traveling through downtown Milwaukee currently pass through the Milwaukee Intermodal Station (MIS). The station is a stop for Amtrak's Hiawatha and Empire Builder intercity passenger trains. Upgrading track and signaling through CPKC's Muskego Yard, which passes through the Menomonee Valley south of MIS, would allow freight trains traveling through downtown Milwaukee to bypass the station. This would improve the station's ability to accommodate Amtrak and additional commuter and intercity passenger rail service, and it would improve safety and reduce delays to both freight and passenger trains traveling through Milwaukee. In line with this recommendation, WisDOT obtained federal funding in 2020 to implement the project and began work to complete the necessary environmental clearance and conceptual engineering for the project. The environmental study and conceptual engineering identified additional infrastructure needs for the project, and WisDOT applied for additional federal funding in 2023 to complete the work.

➤ Recommendation 7.6: Address the potential need for truck drivers in Southeastern Wisconsin

The trucking industry expects to experience a nationwide, significant shortage of qualified truck drivers in the near future, primarily due to increasing demand for shipping goods by truck in conjunction with the impending retirement of a large number of current truck drivers.

VISION 2050 recommends that workforce development agencies and technical colleges in Southeastern Wisconsin monitor the trucking industry's need for qualified drivers in the Region and work with the trucking industry to help address potential driver shortages. Truck driver training to help individuals prepare to pass Wisconsin's Commercial Driver's License (CDL) exam continues to be available in Kenosha, Milwaukee, Washington, and Waukesha Counties, including at Gateway Technical College, Milwaukee Area Technical College, and Waukesha County Technical College.

➤ Recommendation 7.7: Address safety needs related to freight transportation

Crashes involving freight transportation negatively impact the wellbeing of Southeastern Wisconsin's residents as well as its economy. VISION 2050 recommends that Federal, State, and local governments, the Commission, and private freight carriers continue to work to:

- Minimize total traffic crashes on the RHFN
- Implement positive train control (PTC) systems
- Reduce conflicts involving trucks
- Reduce conflicts involving freight trains

VISION 2050 recommends implementing the capacity expansion improvements on the RHFN to help to reduce freight congestion and, in turn, reduce crashes. Progress on this recommendation is described under the arterial streets and highways element.

The Rail Safety Improvement Act of 2008 required Amtrak and Class I railroads transporting certain types of hazardous materials or hosting passenger rail service to implement PTC systems to prevent accidents caused by human error, including train-to-train collisions, train derailments caused by

excessive speed, unauthorized incursions by trains onto sections of track undergoing maintenance, and the movement of trains through incorrectly set switches. By December 2020, the Class I railroads were operating PTC systems on all 57,500 route-miles required by federal law.

In 2023, WisDOT initiated a study examining ways to reduce the risk of pedestrian and bicycle grade crossing incidents along segments of CPKC track in the City of Wauwatosa and Canadian National (CN) track in the City of Waukesha that have seen a number of these incidents during the past two decades.

➤ Recommendation 7.8: Address security needs related to freight transportation

Ongoing efforts to prevent and respond to security incidents affecting freight movements by truck, train, ship, and airplane encompass a wide range of Federal, State, and local programs, measures, or initiatives. VISION 2050 recommends that the State and local governments continue to work with the Federal government, the Commission, and private freight carriers and businesses to address security needs related to freight transportation, including:

- Conduct periodic vulnerability assessments and monitor and strengthen vulnerable infrastructure
- Develop and maintain county and/or local government all hazards mitigation plans
- Maintain a resilient RHFN
- Study the needs of essential freight movement

In line with this recommendation, an update on county and/or local government all hazards mitigation plans and details on implementation of recommended functional improvements to the arterial street and highway system are included under the arterial streets and highways element.

➤ Recommendation 7.9: Support efforts in areas outside the Region that improve freight movement to and from the Region

Freight transportation issues in neighboring metro areas and states—such as highway and rail congestion in the Chicago area—can negatively impact the Region's manufacturers and shippers. In some cases, neighboring metro areas, states, the Federal government, and/or private sector freight transportation providers have initiated efforts to address these issues. VISION 2050 recommends that the State, the Commission, and local manufacturers and shippers participate in and support efforts outside Southeastern Wisconsin that address issues affecting freight movement to and from the Region.

Commission staff have long coordinated with other MPOs and regional planning commissions in Wisconsin and in neighboring states, including the East Central Wisconsin Regional Planning Commission (ECWRPC), Chicago Metropolitan Agency for Planning (CMAP), Northwestern Indiana Regional Planning Commission (NIRPC), and Southwest Michigan Planning Commission (SWMPC). In 2009, the Commission joined CMAP, NIRPC, and SWMPC in adopting the Wingspread Regional Accord, recognizing the socio-economic and environmental interdependence of the four-state region and agreeing to work together to address regional issues, including freight transportation. Consistent with the vision of the Accord, the Executive Directors of the Commission, CMAP, NIRPC, and SWMPC meet quarterly to discuss topics of regional importance. In addition, Commission staff serve on CMAP's standing Transportation Committee, and CMAP staff serve on the Commission's standing Advisory Committee on Regional Transportation Planning.

Commission staff also serve on the Executive Board of the Alliance for Regional Development, a coalition of leaders from the private sector, governments, and higher education that are working to improve the economic competitiveness of the tri-state region comprised of southeast Wisconsin, northeast Illinois, and northwest Indiana. The Alliance's efforts focus on four key areas: workforce development, innovation, transportation and logistics, and green growth.

As previously mentioned, WisDOT established the Wisconsin Freight Advisory Committee (FAC) in 2014 to provide a means for representatives from the private sector, key state economic sectors, and the public sector to collectively review and discuss key freight transportation issues as well as provide input to WisDOT regarding priorities and policies that affect freight transportation in the State. Commission staff have served on the FAC since its inception.

The Commission continues to monitor and indirectly support the efforts of the Chicago Region Environmental and Transportation Efficiency (CREATE) program. Initiated in 2003, CREATE is a public-private partnership between the USDOT, the State of Illinois, the City of Chicago, freight railroads, Metra, and Amtrak. This partnership has identified 70 projects in the Chicago region that will reduce freight rail congestion, decrease auto and truck delays at grade crossings, improve safety, and reduce air pollution emissions. Given the Chicago region's importance as the nation's largest rail hub, and its proximity to Southeastern Wisconsin, CREATE initiatives can provide important benefits to freight travel in the Region. As of 2023, 33 of the 70 CREATE projects have been completed, and an additional 19 projects are under construction or in a planning stage.