

## 2024 REVIEW & UPDATE OF VISION 2050

# UPDATED FINANCIAL ANALYSIS FOR VISION 2050 TRANSPORTATION SYSTEM

## INTRODUCTION

As part of this update, Commission staff reviewed and revised the analysis of existing and reasonably expected costs and revenues associated with the transportation system recommended in VISION 2050. When VISION 2050 was first prepared in July 2016, this financial analysis resulted in identification of a gap between the funds needed to construct, operate, and maintain the recommended regional transportation system and available revenues, with expected funds being insufficient to support a large portion of the recommended expansion of the Region’s transit element. Subsequent financial analyses, most recently in the 2020 Update of the plan, showed that the funding gap remained for public transit and that expected funding levels would be insufficient to support the recommended reconstruction of several portions of the Region’s arterial street and highway system. The updated financial analysis for the 2024 Update, presented below, confirms the funding gaps have persisted and presents a series of revenue sources that could be considered to address the gaps.

## FINANCIAL ANALYSIS FOR RECOMMENDED TRANSPORTATION SYSTEM

Though the 2023-2025 State budget increased transportation funding over previous years, increases in vehicle fuel efficiency are expected to continue to limit growth in State funding. As such, State revenues are expected to be constant in nominal dollars through the year 2050, resulting in continuing declines in purchasing power due to inflationary pressures on construction and operating costs. This dynamic, combined with State-imposed limitations on the ability of local governments to generate revenue, results in the funding gaps shown in Table 1. These funding gaps mean that without additional revenue the Region will continue being unable to achieve the public transit system recommended in VISION 2050 or complete the recommended reconstruction of several portions of its arterial street and highway system by 2050. No funding gap was identified for the bicycle and pedestrian element as a part of this updated financial analysis, which is consistent with previous financial analyses completed for VISION 2050.

The updated financial analysis prepared as part of the 2024 Update relies on a detailed analysis of existing and reasonably expected revenues for the Region’s transportation system, which is shown in Table 2 for the arterial streets and highways element and Table 3 for the public transit element. A summary of the estimated costs to implement the VISION 2050 transportation system and reasonably expected revenues is presented in 2022 constant dollars in Table 4 and year of expenditure dollars in Table 5.

The portion of the VISION 2050 transportation component that can be expected to be implemented without an increase in revenues is referred to as the “Fiscally Constrained Transportation System (FCTS).” The estimated costs and revenues associated with the updated FCTS are compared in constant 2022 dollars in Table 6 and in year of expenditure dollars in Table 7.

**Table 1**  
**Estimated Gap Between VISION 2050 Costs and Existing**  
**and Reasonably Expected Revenues**

<b>Constant Year 2022 Dollars (Average Annual Through Year 2050)</b>	
Highway	
Capital	\$ 519 million
Operating	\$ 39 million
Public Transit	
Capital	\$ 111 million
Operating	\$ 123 million
<b>Year of Expenditure Dollars (Average Annual Through Year 2050)</b>	
Highway	
Capital	\$ 774 million
Operating	\$ 54 million
Public Transit	
Capital	\$ 164 million
Operating	\$ 201 million

Source: SEWRPC, 12/2023

**Table 2**  
**Estimate of Existing and Reasonably Expected Arterial Street and Highway Revenues**

**Federal and State Capital and Operating Funding Assessment of  
Historical Statewide Funding (millions of nominal dollars)**

Program	Averaging Timeframe	Bonds		Federal	State	Total	Annual Growth (Percent)
		Transportation Revenue	General Obligation				
Major Highway Development	2024-2025 Budget	\$--	\$--	\$191	\$105	\$296	
	20-Year	114	13	130	60	318	-0.30
	10-Year	61	16	165	52	293	-4.62
	5-Year	47	--	184	57	288	-4.08
State Highway Rehabilitation	2024-2025 Budget	\$--	\$--	\$538	\$578	\$1,116	
	20-Year	--	46	438	377	861	3.23
	10-Year	--	15	473	471	959	2.62
	5-Year	--	--	495	563	1,059	2.46
Southeastern Wisconsin Freeway Megaproject	2024-2025 Budget	\$--	\$--	\$40	\$79	\$119	
	20-Year	--	85	72	38	195	-8.98
	10-Year	--	69	36	29	134	-17.63
	5-Year	--	8	28	39	75	1.36
Operations and Maintenance	2024-2025 Budget	\$--	\$--	\$8	\$307	\$315	
	20-Year	--	--	4	257	261	3.02
	10-Year	--	--	3	294	297	1.51
	5-Year	--	--	4	303	307	1.00
Local Roads and Bridges	2024-2025 Budget	\$--	\$--	\$--	\$346	\$346	
	20-Year	--	--	--	225	225	3.10
	10-Year	--	--	--	253	253	5.81
	5-Year	--	--	--	292	292	8.25
General Transportation Assistance	2024-2025 Budget	\$--	\$--	--	\$537	\$537	
	20-Year	--	--	--	442	442	1.83
	10-Year	--	--	--	483	483	2.59
	5-Year	--	--	--	522	522	1.41
Total	2024-2025 Budget	\$--	\$--	\$777	\$1,952	\$2,729	
	20-Year	114	144	644	1,399	2,301	
	10-Year	61	100	677	1,582	2,420	
	5-Year	47	8	711	1,776	2,542	

**Reasonably Available/Expected Federal and State Annual Funding Levels: Statewide**

Program	Bonding	Federal	State	Total
Major Highway Development	\$--	\$191	\$105	\$296
State Highway Rehabilitation	--	538	578	1,116
Southeastern Wisconsin Freeway Megaproject	--	40	79	119
Operations and Maintenance	--	8	307	315
Local Roads and Bridges	--	--	346	346
General Transportation Aids	--	--	537	537
<b>Total</b>	<b>\$--</b>	<b>\$777</b>	<b>\$1,952</b>	<b>\$2,729</b>

Though the 2024-2025 State budget increased transportation funding over previous years, increases in vehicle fuel efficiency are expected to continue to limit growth in State funding. As such, State funding levels are expected to be constant in nominal dollars through the year 2050.

Based on the Infrastructure Investment and Jobs Act, federal funding levels are expected to increase by 2.0 percent annually.

**Capital Funding Assumptions**

Southeastern Wisconsin represents approximately 35 percent of the State in population, employment, income, and assessed value, and about 30 percent of vehicle-miles of travel. In the years after freeway system construction and before freeway system reconstruction, Southeastern Wisconsin received about 25 to 30 percent of State highway system revenues.

**State Highway System**

To estimate Southeastern Wisconsin's share of State revenues, Option 1 allocates all Southeast Freeway Rehabilitation funds to Southeastern Wisconsin and 25 percent of all other funds to Southeastern Wisconsin. Option 2 allocates 30 percent of all funds to Southeastern Wisconsin.

Option 1

$$\$119 + 0.25(\$1,412) = \$472 \text{ million}$$

Option 2

$$\$1,531 \times 0.30 = \$459 \text{ million}$$

Conclusion

\$472 million Federal and State annual highway revenue in nominal dollars

**Table continued on next page.**

**Table 2 (Continued)**

**Local and County Trunk Highway System**

Local Roads and Bridges

\$346 x 0.30 = \$104 million

General Transportation Aids (Capital)

Southeastern Wisconsin has historically received approximately 20 percent of Statewide General Transportation Aids. Capital expenses have typically represented approximately 40 percent of all General Transportation Aids expenditures, with approximately 25 percent of those expenditures being on arterial streets and highways.

\$537 x 0.20 x 0.40 x 0.25 = \$11 million

Local Capital Transportation Funding

Assessment of Historical Funding

\$51 million annually

Conclusion – 2050 Plan

\$51 million

**Operating and Maintenance Funding Assumptions**

**State Highway System**

State highway operations and maintenance expenditures have historically represented approximately 20 percent of statewide operations and maintenance expenditures

\$315 x 0.20 = \$63 million

**Local and County Trunk Highway System**

General Transportation Aids (O&M)

Southeastern Wisconsin has historically received approximately 20 percent of Statewide General Transportation Aids. Operating expenses have typically represented approximately 30 percent of all General Transportation Aids expenditures attributed to highway operations and maintenance, with approximately 25 percent of those expenditures being on local arterial streets and highways.

\$537 x 0.20 x 0.30 x 0.25 = \$8 million

Local Transportation Funding

Assessment of Historical Funding

\$34 million annually

Conclusion – 2050 Plan

\$34 million

**Reasonably Available/Expected Annual Funding Levels: Southeastern Wisconsin**

<b>Program</b>	<b>Bonding</b>	<b>Federal</b>	<b>State</b>	<b>Local</b>	<b>Total</b>
<b>State</b>					
Capital	\$--	\$222	\$250	\$--	\$472
Operating & Maintenance	--	2	63	--	65
<b>Subtotal</b>	\$--	\$224	\$313	\$--	\$537
<b>County &amp; Local Municipalities</b>					
Capital	\$--	\$--	\$115	\$51	\$166
Operating & Maintenance	--	--	8	34	42
<b>Subtotal</b>	\$--	\$--	\$123	\$85	\$208
<b>Total</b>	\$--	\$224	\$436	\$85	\$745

Source: 2022-2023 Transportation Budget Trends & Interactive Appropriation Spreadsheet (Wisconsin Department of Transportation) and SEWRPC; 12/2023

**Table 3**  
**Estimate of Existing and Reasonably Expected Transit Revenues**

<b>Regional Capital and Operating Funding Assessment (millions of nominal dollars)</b>						
<b>Program</b>	<b>Averaging Timeframe (2002-2021)</b>	<b>Federal</b>	<b>State</b>	<b>Local</b>	<b>Total</b>	<b>Annual Growth (Percent)</b>
Operating	20-Year	\$32	\$78	\$26	\$136	1.13
	10-Year	37	81	28	146	2.73
	5-Year	43	82	32	157	3.91
Capital	20-Year	\$15	\$--	\$7	\$22	0.01
	10-Year	15	1	9	25	-0.01
	5-Year	12	1	12	25	0.22

**Additional Federal Revenue (From Committed Projects)**

City of Milwaukee Streetcar  
 Capital  
 FTA 5337 – \$263,800 beginning in 2025, 2026, and 2027  
 Operating  
 FTA 5307 – \$262,000 beginning in 2025, 2026, and 2027  
 \$2.9 million average annual parking revenue  
 Milwaukee County Bus Rapid Transit  
 Capital  
 FTA 5337 – \$860,000 beginning in 2030  
 Operating  
 FTA 5307 – \$1 million beginning in 2025

**Reasonably Available/Expected Funding Levels**

<b>Program</b>	<b>Federal</b>	<b>State</b>	<b>Local</b>	<b>Total</b>
Operating	\$45	\$82	\$35	\$162
Capital	13	--	14	27
<b>Total</b>	<b>\$58</b>	<b>\$82</b>	<b>\$49</b>	<b>\$189</b>

Though the 2023-2025 State budget increased transportation funding over previous years, increases in vehicle fuel efficiency are expected to continue to limit growth in State funding. As such, State funding levels are expected to be constant in nominal dollars through the year 2050.

Transit service levels envisioned in VISION 2050 would be expected to generate an additional \$84 million in federal capital and operating funding annually on average.

Based on the Infrastructure Investment and Jobs Act, Federal funding levels are expected to increase by 2.0 percent annually.

Source: SEWRPC, 12/2023

**Table 4**  
**Average Annual Costs and Revenues Associated with the VISION 2050**  
**Transportation System in 2022 Constant Dollars: 2025-2050**

<b>Cost or Revenue Item</b>	<b>2022 Dollars (millions)</b>
<b>Transportation System Cost<sup>a</sup></b>	
Arterial Street and Highway System	
Capital	
Freeway	
Reconstruction, Modernization, and Committed Capacity Improvements	\$364
Increment Associated with Recommended Capacity Improvements	51
Resurfacing and Rehabilitation	95
Surface Arterial Reconstruction/Resurfacing <sup>b</sup>	529
Operating & Maintenance	113
	<b>Highway Subtotal</b>
	\$1,152
Transit System	
Capital	\$203
Operating <sup>c</sup>	264
	<b>Transit Subtotal</b>
	\$467
	<b>Total</b>
	\$1,619
<b>Transportation System Revenues<sup>a</sup></b>	
Highway Capital	
Federal/State	\$453
Local	67
	<b>Subtotal</b>
	\$520
Highway Operating & Maintenance	
State	\$45
Local	29
	<b>Subtotal</b>
	\$74
	<b>Highway Subtotal</b>
	\$594
Transit Capital	
Federal	\$82
Local	10
	<b>Subtotal</b>
	\$92
Transit Operating	
Federal	\$60
State	57
Local	24
	<b>Subtotal</b>
	\$141
	<b>Transit Subtotal</b>
	\$233
	<b>Total</b>
	\$827

<sup>a</sup> The estimated arterial street and highway system and transit system costs include all capital, operating, and maintenance costs. The estimated costs include the necessary costs to preserve the existing transportation system, such as arterial street and highway resurfacing and reconstruction and transit system bus replacement, and the estimated costs of the transportation system improvement and expansion recommended under VISION 2050. Costs for freeway and surface arterial resurfacing, reconstruction, widening, and new construction are based upon actual project costs over the past several years. Transit system capital costs include preservation, improvement, and expansion of the existing transit system, including bus replacement on a 12-year schedule.

Highway system operating and maintenance costs are based on estimated actual State and local highway system operating costs and verified by application of estimated unit lane-mile costs. Planned highway system operating costs are increased from estimated existing costs based on the recommended increase in arterial highway system lane-miles under VISION 2050. Transit system operating and maintenance costs are based on existing estimated actual costs and unit costs based on service vehicle-miles and vehicle-hours.

Highway federal, State, and local capital and operating revenues are based on estimated federal, State, and local expenditures over the last several years. Transit federal capital and operating revenues are based on historical expenditures over the last several years, and assessment of available federal formula and program funds. State transit revenues are based on the State maintaining estimated average year 2017-2021 funding levels through the year 2050.

<sup>b</sup> Includes the costs associated with the bicycle and pedestrian, TSM, and TDM elements of VISION 2050.

<sup>c</sup> Net operating cost (total operating costs less fare-box revenue).

Source: SEWRPC, 12/2023

**Table 5  
Average Annual Costs and Revenues Associated with the VISION 2050  
Transportation System Based on Year of Expenditure: 2025-2050**

<b>Cost or Revenue Item</b>	<b>YOE Dollars (millions)</b>
<b>Transportation System Cost<sup>a</sup></b>	
Arterial Street and Highway System	
Capital	
Freeway	
Reconstruction, Modernization, and Committed Capacity Improvements	\$529
Increment Associated with Recommended Capacity Improvements	76
Resurfacing and Rehabilitation	140
Surface Arterial Reconstruction/Resurfacing <sup>b</sup>	787
Operating & Maintenance	161
	<b>Highway Subtotal</b>
	\$1,693
Transit System	
Capital	\$298
Operating <sup>c</sup>	408
	<b>Transit Subtotal</b>
	\$706
	<b>Total</b>
	\$2,399
<b>Transportation System Revenues<sup>a</sup></b>	
Highway Capital	
Federal/State	\$659
Local	99
	<b>Subtotal</b>
	\$758
Highway Operating & Maintenance	
State	\$65
Local	42
	<b>Subtotal</b>
	\$107
	<b>Highway Subtotal</b>
	\$865
Transit Capital	
Federal	\$120
Local	14
	<b>Subtotal</b>
	\$134
Transit Operating	
Federal	\$90
State	82
Local	35
	<b>Subtotal</b>
	\$207
	<b>Transit Subtotal</b>
	\$341
	<b>Total</b>
	\$1,206

<sup>a</sup> The estimated arterial street and highway system and transit system costs include all capital, operating, and maintenance costs. The estimated costs include the necessary costs to preserve the existing transportation system, such as arterial street and highway resurfacing and reconstruction and transit system bus replacement, and the estimated costs of the transportation system improvement and expansion recommended under VISION 2050. Costs for freeway and surface arterial resurfacing, reconstruction, widening, and new construction are based upon actual project costs over the past several years. Transit system capital costs include preservation, improvement, and expansion of the existing transit system, including bus replacement on a 12-year schedule.

Highway system operating and maintenance costs are based on estimated actual State and local highway system operating costs and verified by application of estimated unit lane-mile costs. Planned highway system operating costs are increased from estimated existing costs based on the recommended increase in arterial highway system lane-miles under VISION 2050. Transit system operating and maintenance costs are based on existing estimated actual costs and unit costs based on service vehicle-miles and vehicle-hours.

Highway federal, State, and local capital and operating revenues are based on estimated federal, State, and local expenditures over the last several years. Transit federal capital and operating revenues are based on historical expenditures over the last several years, and assessment of available federal formula and program funds. State transit revenues are based on the State maintaining estimated average year 2017-2021 funding levels through the year 2050.

<sup>b</sup> Includes the costs associated with the bicycle and pedestrian, TSM, and TDM elements of VISION 2050.

<sup>c</sup> Net operating cost (total operating costs less fare-box revenue).

Source: SEWRPC, 12/2023

**Table 6  
Average Annual Costs and Revenues Associated with the Fiscally Constrained  
Transportation System in 2022 Constant Dollars: 2025-2050**

<b>Cost or Revenue Item</b>	<b>2022 Dollars (millions)</b>
<b>Transportation System Cost<sup>a</sup></b>	
Arterial Street and Highway System	
Capital	
Freeway	
Committed Projects	\$118
Resurfacing and Rehabilitation	143
Surface Arterial Reconstruction/Resurfacing <sup>b</sup>	292
Operating & Maintenance	112
	<b>Highway Subtotal</b>
	<b>\$665</b>
Transit System	
Capital	\$21
Operating <sup>c</sup>	124
	<b>Transit Subtotal</b>
	<b>\$145</b>
	<b>Total</b>
	<b>\$810</b>
<b>Transportation System Revenues<sup>a</sup></b>	
Highway Capital	
Federal/State	\$450
Local	67
	<b>Subtotal</b>
	<b>\$517</b>
Highway Operating & Maintenance	
State	\$45
Local	29
	<b>Subtotal</b>
	<b>\$74</b>
	<b>Highway Subtotal</b>
	<b>\$591</b>
Transit Capital	
Federal	\$12
Local	10
	<b>Subtotal</b>
	<b>\$22</b>
Transit Operating	
Federal	\$40
State	57
Local	24
	<b>Subtotal</b>
	<b>\$121</b>
	<b>Transit Subtotal</b>
	<b>\$143</b>
	<b>Total</b>
	<b>\$734</b>

<sup>a</sup> The estimated arterial street and highway system and transit system costs include all capital, operating, and maintenance costs. The estimated costs include the necessary costs to preserve the existing transportation system, such as arterial street and highway resurfacing and reconstruction and transit system bus replacement, and the estimated costs of the transportation system improvement and expansion expected under the FCTS. Costs for freeway and surface arterial resurfacing, reconstruction, widening, and new construction are based upon actual project costs over the past several years. Estimated preservation costs reflect a reduced frequency for surface arterial and freeway reconstruction, resurfacing, and reconditioning. Transit system capital costs include preservation of the existing transit system, including bus replacement on a 15-year schedule and replacement of fixed facilities, and costs associated with the initial phases of the Milwaukee Streetcar and Milwaukee County's CONNECT 1 BRT and proposed North-South BRT, including needed additional vehicles and facilities.

Highway system operating and maintenance costs are based on estimated actual State and local highway system operating costs and verified by application of estimated unit lane-mile costs. Estimated highway system operating costs are increased from estimated existing costs based on the expected increase in the FCTS in arterial highway system lane-miles. Transit system operating and maintenance costs are based on existing estimated actual costs and unit costs based on service vehicle-miles and vehicle-hours. Estimated transit system operating costs have been decreased from existing system operating costs based on the requisite decrease in transit service vehicle-miles and vehicle-hours to match reasonably expected revenues available.

Highway federal, State, and local capital and operating revenues are based on estimated federal, State, and local expenditures over the last several years. Transit federal capital and operating revenues are based on historical expenditures over the last several years, and assessment of available federal formula and program funds. State transit revenues are based on the State maintaining estimated average year 2017-2021 funding levels through the year 2050.

<sup>b</sup> Includes the costs associated with the bicycle and pedestrian, TSM, and TDM elements of the FCTS.

<sup>c</sup> Net operating cost (total operating costs less fare-box revenue).

Source: SEWRPC, 12/2023



**Table 7  
Average Annual Costs and Revenues Associated with the Fiscally Constrained  
Transportation System Based on Year of Expenditure: 2025-2050**

<b>Cost or Revenue Item</b>	<b>YOE Dollars (millions)</b>
<b>Transportation System Cost<sup>a</sup></b>	
Arterial Street and Highway System	
Capital	
Freeway	
Committed Projects	\$144
Resurfacing and Rehabilitation	211
Surface Arterial Reconstruction/Resurfacing <sup>b</sup>	433
Operating & Maintenance	159
	<b>Highway Subtotal</b>
	\$947
Transit System	
Capital	\$31
Operating <sup>c</sup>	180
	<b>Transit Subtotal</b>
	\$211
	<b>Total</b>
	\$1,158
<b>Transportation System Revenues<sup>a</sup></b>	
Highway Capital	
Federal/State	\$654
Local	99
	<b>Subtotal</b>
	\$753
Highway Operating & Maintenance	
State	\$65
Local	42
	<b>Subtotal</b>
	\$107
	<b>Highway Subtotal</b>
	\$860
Transit Capital	
Federal	\$18
Local	14
	<b>Subtotal</b>
	\$32
Transit Operating	
Federal	\$59
State	82
Local	35
	<b>Subtotal</b>
	\$176
	<b>Transit Subtotal</b>
	\$208
	<b>Total</b>
	\$1,068

<sup>a</sup> The estimated arterial street and highway system and transit system costs include all capital, operating, and maintenance costs. The estimated costs include the necessary costs to preserve the existing transportation system, such as arterial street and highway resurfacing and reconstruction and transit system bus replacement, and the estimated costs of the transportation system improvement and expansion expected under the FCTS. Costs for freeway and surface arterial resurfacing, reconstruction, widening, and new construction are based upon actual project costs over the past several years. Estimated preservation costs reflect a reduced frequency for surface arterial and freeway reconstruction, resurfacing, and reconditioning. Transit system capital costs include preservation of the existing transit system, including bus replacement on a 15-year schedule and replacement of fixed facilities, and costs associated with the initial phases of the Milwaukee Streetcar and Milwaukee County's CONNECT 1 BRT and proposed North-South BRT, including needed additional vehicles and facilities.

Highway system operating and maintenance costs are based on estimated actual State and local highway system operating costs and verified by application of estimated unit lane-mile costs. Estimated highway system operating costs are increased from estimated existing costs based on the expected increase in the FCTS in arterial highway system lane-miles. Transit system operating and maintenance costs are based on existing estimated actual costs and unit costs based on service vehicle-miles and vehicle-hours. Estimated transit system operating costs have been decreased from existing system operating costs based on the requisite decrease in transit service vehicle-miles and vehicle-hours to match reasonably expected revenues available.

Highway federal, State, and local capital and operating revenues are based on estimated federal, State, and local expenditures over the last several years. Transit federal capital and operating revenues are based on historical expenditures over the last several years, and assessment of available federal formula and program funds. State transit revenues are based on the State maintaining estimated average year 2017-2021 funding levels through the year 2050.

<sup>b</sup> Includes the costs associated with the bicycle and pedestrian, TSM, and TDM elements of the FCTS.

<sup>c</sup> Net operating cost (total operating costs less fare-box revenue).

Source: SEWRPC, 12/2023

Under the updated FCTS, service levels on the regional transit system would decline by about 30 percent, from about 4,890 revenue vehicle-hours of service on an average weekday in the year 2021 to 3,391 vehicle-hours of service in the year 2050. While this represents a shallower decline than was predicted by previous financial analyses, it is a reduction in service from baseline levels that had already declined during the COVID-19 pandemic. The only VISION 2050-recommended improvements or expansions in transit service under the updated FCTS are the North-South Bus Rapid Transit (BRT) project along 27th Street between Bayshore Mall and Drexel Avenue, and the lakefront extension of the Milwaukee Streetcar. The public transit system expected under the FCTS is shown on Map 1.

The difference between the estimated costs to implement the arterial streets and highways element recommended in VISION 2050 and the expected revenues will result in a reduction in the amount of freeway and surface arterial segments that can be reconstructed, widened, or newly constructed. With respect to surface arterials under the FCTS, approximately two-thirds of the total miles that would be expected to be reconstructed by 2050 would instead be rehabilitated—extending the overall life of the roadway, but likely resulting in a reduction in pavement quality.

Specifically, only approximately 59 miles, or 32 percent, of the 184 miles of remaining freeway reconstruction recommended in VISION 2050 would be expected to be implemented by the year 2050 under the updated FCTS, as shown on Map 2. As such, the FCTS does not include approximately 67 miles of planned freeway reconstruction at existing capacity, 46 miles of planned freeway expansion, and 12 miles of planned new freeway facilities. With respect to surface arterials, all the surface arterial capacity expansion recommended in VISION 2050 is included in the updated FCTS, with the exception of the planned extension of the Lake Parkway between Edgerton Avenue and STH 100 in Milwaukee County and the extension of Cold Springs Road between CTH O and IH 43 (associated with the reconstruction of the IH 43/STH 57 interchange) in Ozaukee County, as shown on Map 3.

Table 8 shows the estimated cost and potential schedule of freeway reconstruction and significant surface arterial construction and widening projects through 2050 under the updated FCTS.

Approximately 95 percent, or 3,459 of the total 3,653 miles, of the expected year 2050 arterial street and highway system would be resurfaced or reconstructed to their same capacity under the updated FCTS. Approximately 148 miles, or 4 percent of the total expected year 2050 arterial system, would be widened to provide additional through traffic lanes as part of their reconstruction. The remaining 46 miles, or about 1 percent of the total expected year 2050 arterial system, would be new arterial roadways. The arterial street and highway capacity improvements—both freeway and surface arterial—under the updated FCTS are shown on Map 4.

### **Potential Revenue Sources to Fund Recommended Transportation System**

VISION 2050 makes strong recommendations for improving and expanding the Region's transportation system, but implementing this system will require adequate funding. State legislation to create local dedicated transit funding would likely be necessary to achieve the transit system improvement and expansion recommended under VISION 2050, although this funding could also be provided through additional State financial assistance to transit. Providing sufficient funding to complete the recommended reconstruction of the Region's arterial street and highway system would also require State action.

The 2023-2025 State budget provided an approximate 17 percent increase in revenues for transportation over the previous biennial budget through a one-time transfer of \$555.5 million from the State general fund, \$352.8 million in new bonding, and an increase in the electric vehicle registration fee. This resulted in an estimated total statewide increase of approximately \$635 million annually over previous biennial budget levels and added funding to the State's Transportation Fund, which supports the arterial street and highway system and public transit operations statewide. The State budget also provided a 2 percent increase in mass transit operating assistance and a 4 percent increase in paratransit aids. Finally, it funded a one-time, \$100 million supplement to the Local Road Improvement Program (LRIP) for existing county highways, city and village streets, town roads, and new or existing bicycle/pedestrian facilities associated with the same roadways and dedicated \$150 million

# Map 1 Fiscally Constrained Transit Services as Updated

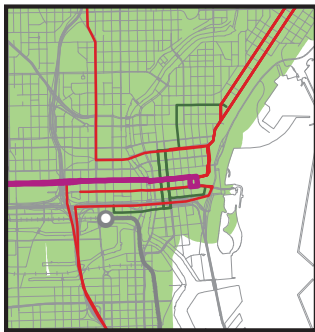
## TRANSIT SERVICES

- RAPID TRANSIT LINE
- EXPRESS BUS ROUTE (NONE)
- COMMUTER RAIL LINE & STATION
- COMMUTER BUS ROUTE & PARK-RIDE
- INTERCITY RAIL
- STREETCAR LINE

## LOCAL TRANSIT SERVICE AREA AND PEAK FREQUENCY

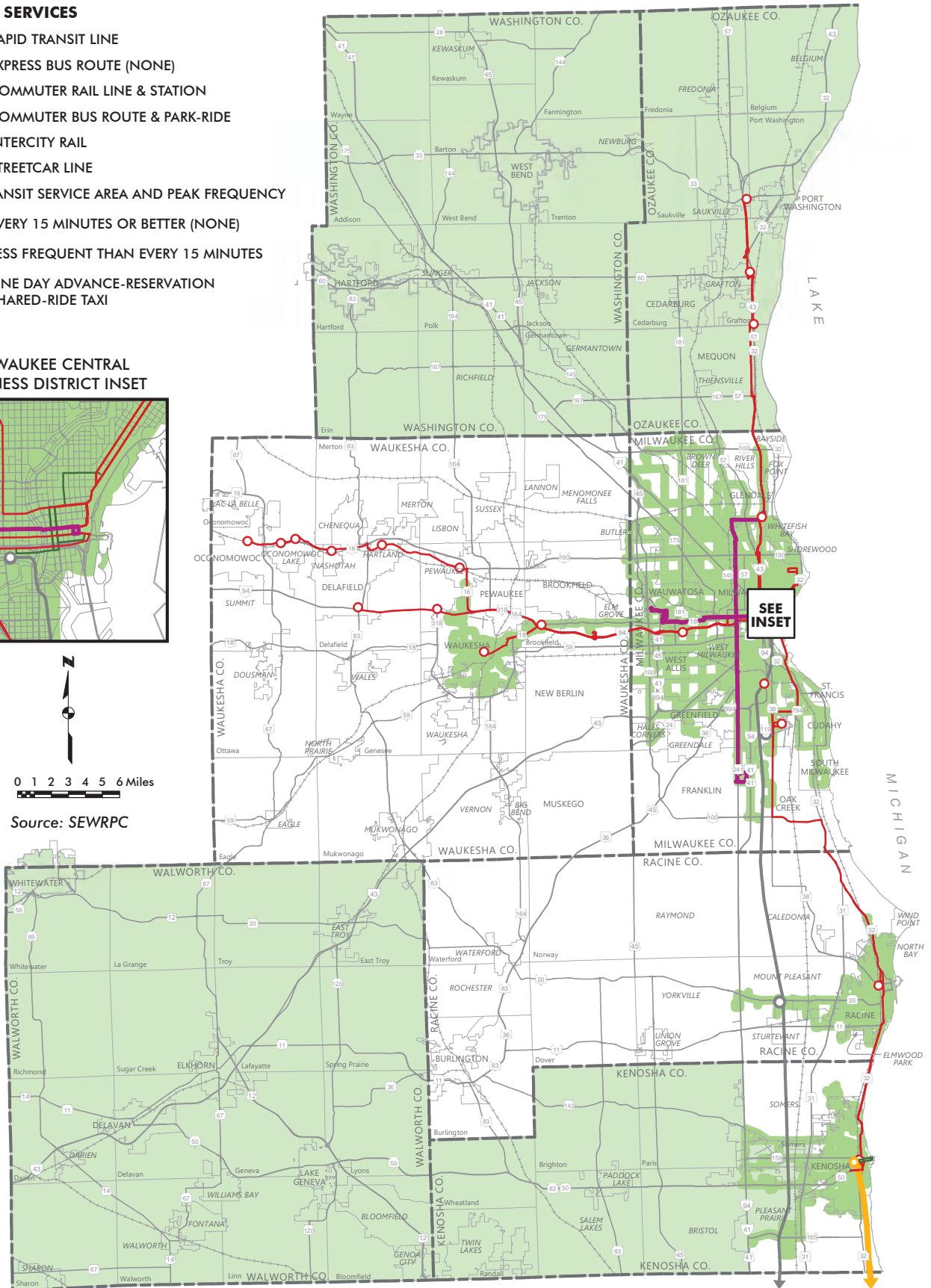
- EVERY 15 MINUTES OR BETTER (NONE)
- LESS FREQUENT THAN EVERY 15 MINUTES
- ONE DAY ADVANCE-RESERVATION SHARED-RIDE TAXI

MILWAUKEE CENTRAL BUSINESS DISTRICT INSET



0 1 2 3 4 5 6 Miles

Source: SEWRPC



Map last updated 12/2023

REVISED DRAFT

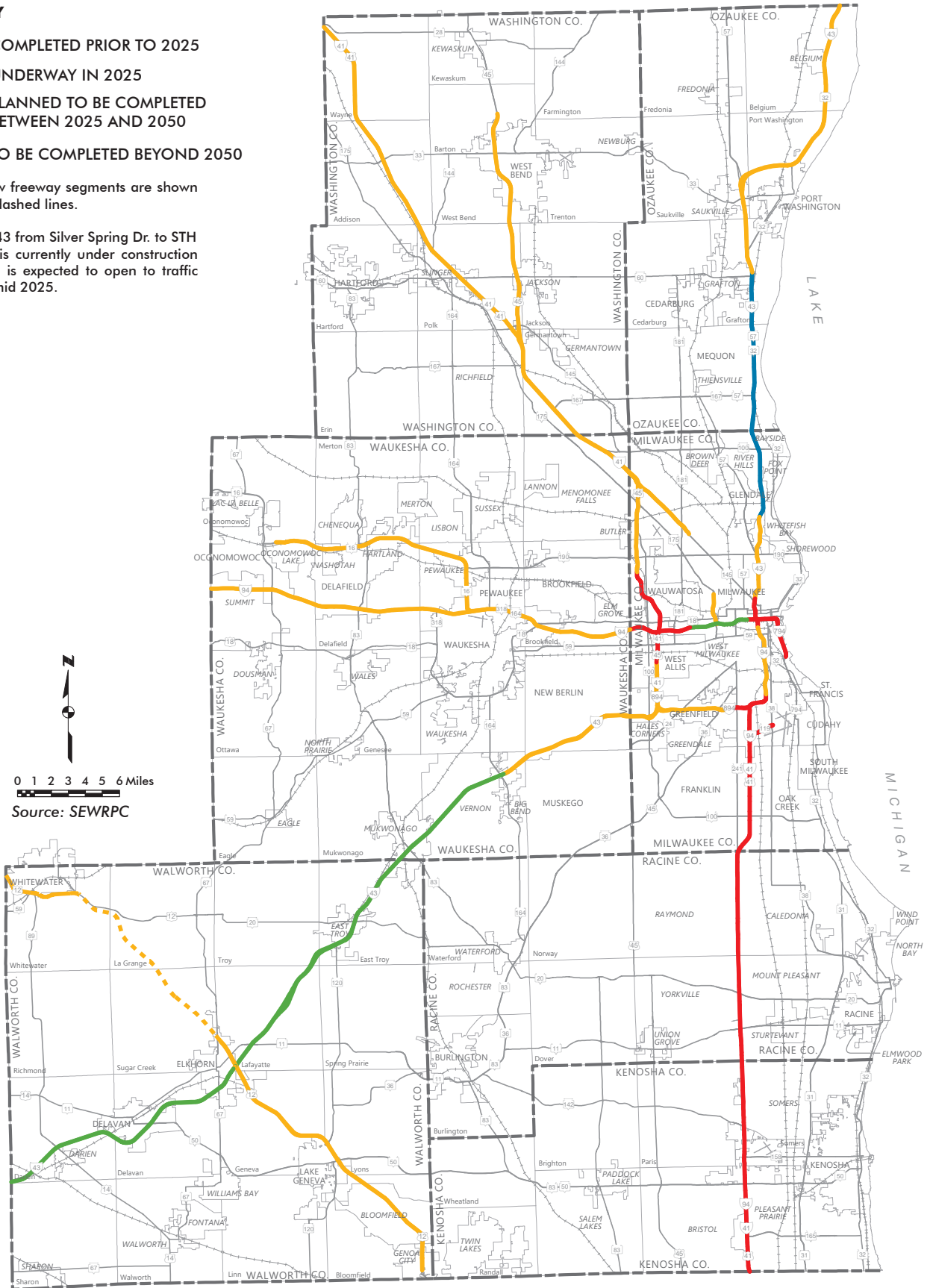
## Map 2 Schedule for Reconstructing the Freeway System Under the Updated FCTS

### FREEWAY

- COMPLETED PRIOR TO 2025
- UNDERWAY IN 2025
- PLANNED TO BE COMPLETED BETWEEN 2025 AND 2050
- TO BE COMPLETED BEYOND 2050

Note: New freeway segments are shown as dashed lines.

IH 43 from Silver Spring Dr. to STH 60 is currently under construction and is expected to open to traffic in mid 2025.

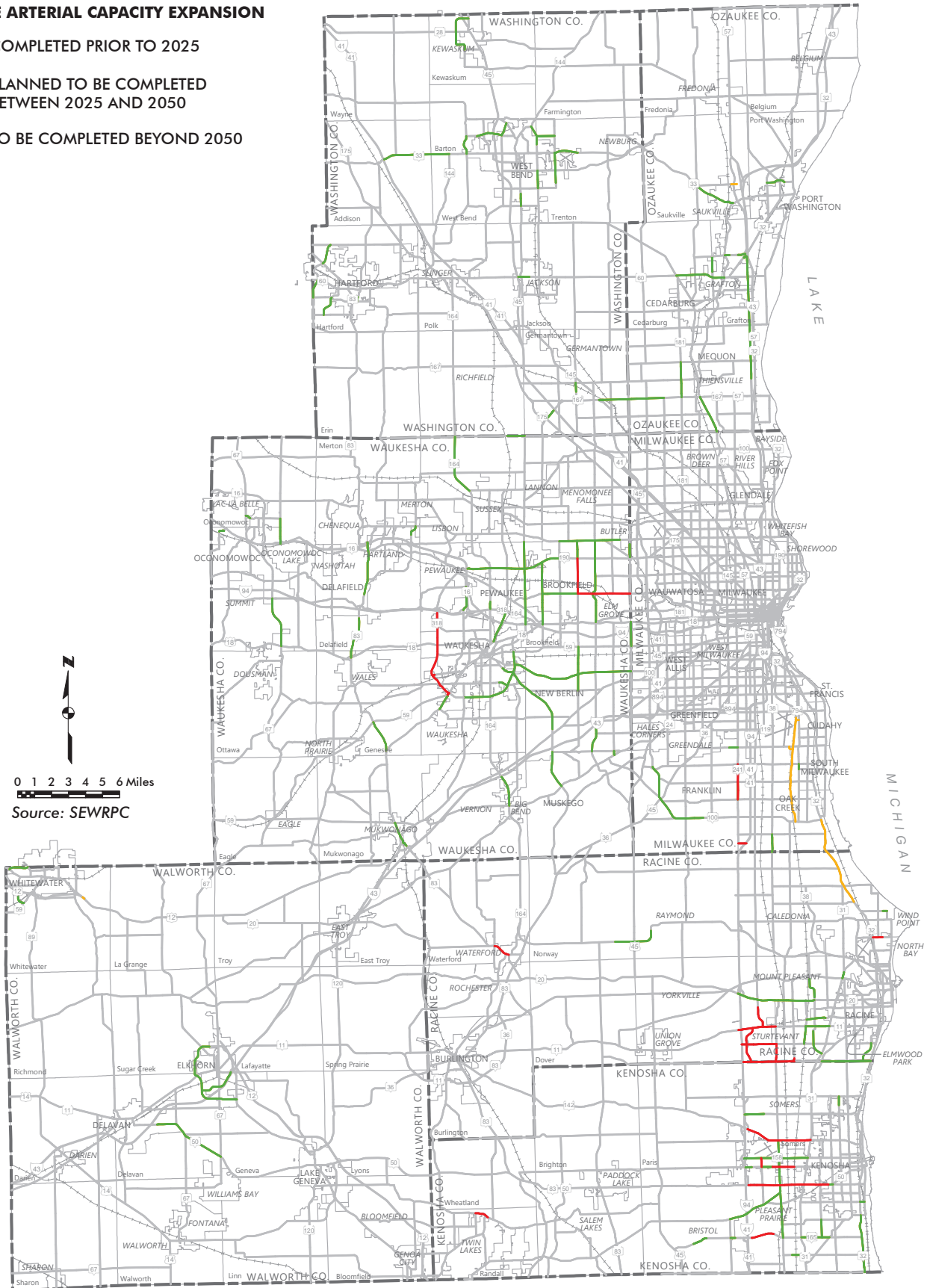


Map last updated 12/2023

### Map 3 Schedule for Reconstructing Surface Arterials with Capacity Expansion Under the Updated FCTS

#### SURFACE ARTERIAL CAPACITY EXPANSION

- COMPLETED PRIOR TO 2025
- PLANNED TO BE COMPLETED BETWEEN 2025 AND 2050
- TO BE COMPLETED BEYOND 2050



0 1 2 3 4 5 6 Miles  
Source: SEWRPC

Map last updated 5/2024

**Table 8  
Estimated Cost and Potential Schedule of Freeway Reconstruction and Significant Surface Arterial  
Construction and Widening Projects Under the Updated FCTS: 2023-2050<sup>a,b</sup>**

<b>Period Completed and Open to Traffic</b>	<b>County</b>	<b>Facility</b>	<b>Limits of Project</b>	<b>Cost (Millions 2022 Dollars)<sup>c</sup></b>	<b>Cost (Millions YOE Dollars)</b>	<b>Mileage</b>
<b>2023 to 2025</b>	Milwaukee and Ozaukee	IH 43 <sup>d</sup>	Silver Spring Dr. to STH 60	178.1	191.7	12.6
	Subtotal			178.1	191.7	12.6
<b>2026 to 2030</b>	Milwaukee	IH 794 Lake Interchange	Milwaukee River to Hoan Bridge	300.0	356.8	0.7
	Milwaukee	USH 45/STH 100	Rawson Avenue to 60th Street	21.0	24.3	4.8
	Walworth	IH 43	Rock Co. to STH 20	713.3	830.4	26.4
	Walworth and Waukesha	IH 43	STH 20 to STH 164	408.2	454.9	12.7
	Waukesha	STH 83	Meadow Lane to STH 16	9.9	11.5	3.6
Subtotal			1,452.4	1,677.9	48.2	
<b>2031 to 2035</b>	Kenosha	CTH H (part)	CTH S to STH 50	22.7	29.7	2.6
	Kenosha	CTH H (part)	STH 50 to STH 165	16.9	22.1	3.0
	Racine	STH 20	IH 94 to Oakes Road	53.1	69.6	4.5
	Milwaukee	IH 94	70th Street to 16th Street (Including Stadium Interchange)	1,465.0	1,919.2	3.5
	Ozaukee	CTH W (part)	Highland Road to W. Glen Oaks Lane	8.7	11.4	1.0
	Waukesha	Pilgrim Road	USH 18 to Lisbon Road	41.9	54.9	4.8
	Waukesha	STH 83	USH 18 to Phylis Parkway	40.8	53.5	2.4
	Waukesha	Springdale Road/CTH SR/Town Line Road extension (part)	CTH JJ to STH 190	28.0	36.7	3.2
	Waukesha	CTH Y (part)	Mill Creek Trail to Newhall Avenue	20.4	26.7	4.0
	Waukesha	CTH D (part)	Milwaukee County line to Calhoun Road	15.4	20.2	3.0
Waukesha	CTH Y (part)	CTH L to College Avenue	14.8	19.4	2.1	
Subtotal			1,727.7	2,263.4	34.1	
<b>2036 to 2040</b>	Ozaukee	CTH W (part)	CTH V to Lakeland Road	27.1	40.1	3.1
	Walworth	STH 50	IH 43 to STH 67	30.2	44.7	4.3
	Waukesha	STH 67 (part)	CTH DR to USH 18	17.1	25.3	2.9
	Waukesha	STH 190	STH 16 to Brookfield Road	63.5	94.0	5.4
	Waukesha	CTH D (part)	Calhoun Road to STH 59/164	19.7	29.2	3.8
Subtotal			157.6	233.3	19.5	
<b>2041 to 2045</b>	Racine	CTH KR	Old Green Bay Road to STH 32	25.1	42.0	2.8
	Ozaukee	CTH W (part)	Lakeland Road to Highland Road	26.9	45.0	3.1
	Waukesha	STH 59/164	CTH XX to Arcadian Avenue	67.0	112.1	4.8
	Waukesha	CTH SR/Town Line Road extension (part)	STH 190 to Weyer Road	9.5	15.9	1.5
Subtotal			128.5	215.0	12.2	
Total			3,644.3	4,581.3	126.6	

<sup>a</sup> Significant surface arterial projects include those projects involving new construction or widening with a cumulative length of four or more miles.

<sup>b</sup> The schedule shown in this table represents an estimate of the timing of construction and reconstruction for the purposes of comparison of costs and revenues, and is not a recommendation for the schedule of construction and reconstruction. Such a schedule can only be developed by the responsible implementing agency and will necessarily entail frequent updating, for example, due to pavement and structure condition.

<sup>c</sup> Cost of construction does not include the cost of right-of-way required for the project.

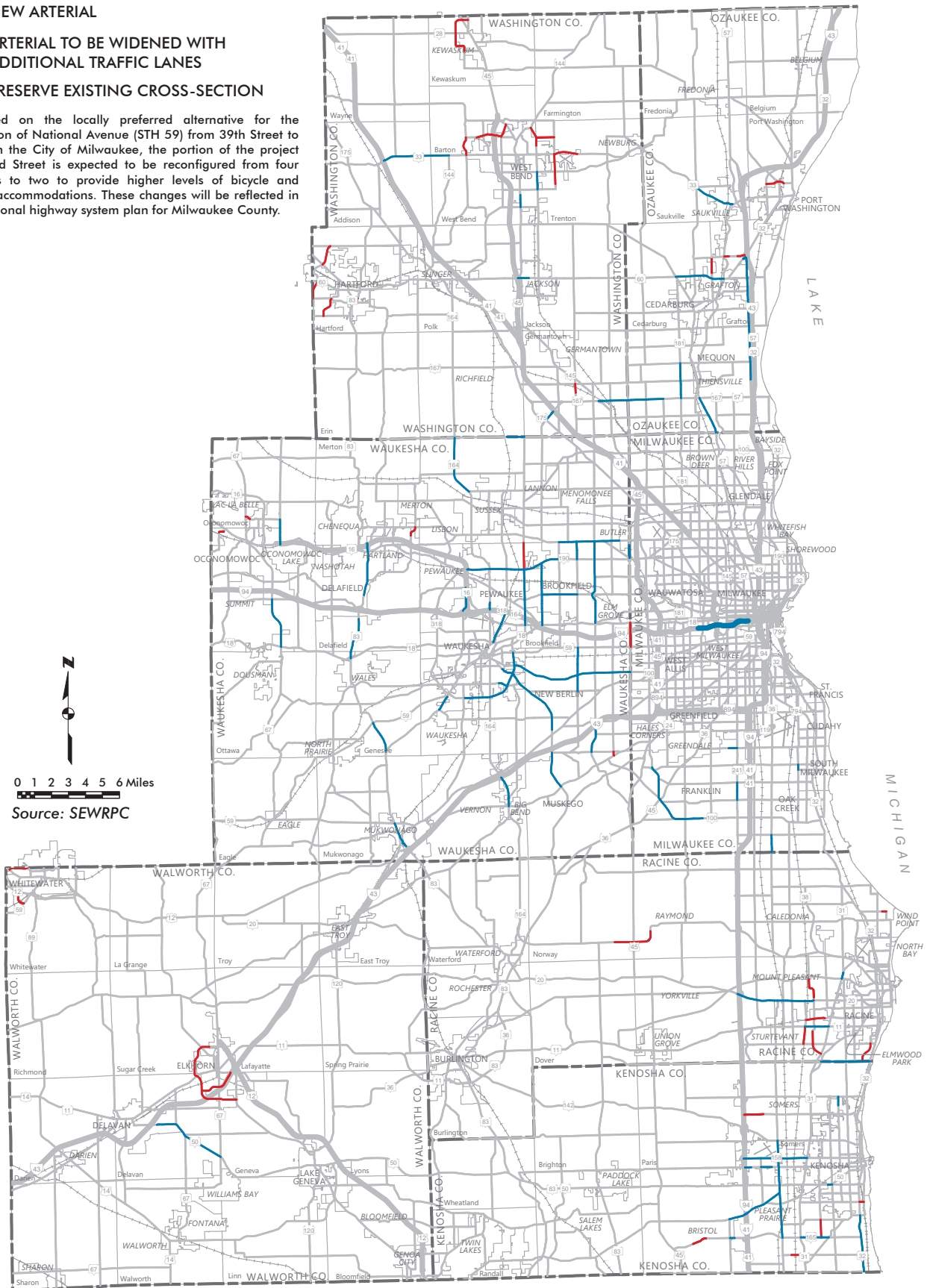
<sup>d</sup> Project is currently underway.

Source: SEWRPC, 5/2024

## Map 4 Fiscally Constrained Arterial Street and Highway Element as Updated

- NEW ARTERIAL
- ARTERIAL TO BE WIDENED WITH ADDITIONAL TRAFFIC LANES
- PRESERVE EXISTING CROSS-SECTION

Note: Based on the locally preferred alternative for the reconstruction of National Avenue (STH 59) from 39th Street to 1st Street in the City of Milwaukee, the portion of the project east of 33rd Street is expected to be reconfigured from four travel lanes to two to provide higher levels of bicycle and pedestrian accommodations. These changes will be reflected in the jurisdictional highway system plan for Milwaukee County.



Map last updated 5/2024

in funding for a new LRIP Agricultural Roads Program to reimburse up to 90 percent of eligible costs for local roads providing access to agricultural lands or facilities.

The passage of Wisconsin Act 12 in June 2023 increased shared revenue from the State to counties and municipalities and allowed the City of Milwaukee and Milwaukee County to levy additional sales taxes. However, funding shortages remain. Large transit providers such as Milwaukee County project that, although the revenue from Act 12 creates short-term budget surpluses, its funding increase is insufficient to address the structural deficit in State aid, which will continue to put pressure on the County's property tax levy and add to future budget gaps.

While these developments represent some positive fiscal news and progress in the short term toward achieving the recommended plan, a substantial revenue increase that provides sustainable, long-term funding would be necessary to achieve VISION 2050. Numerous potential revenue sources that would allow improved and expanded transit services and provide stable funding for arterial street and highway reconstruction have been identified and proposed in recent years. These include an advisory referendum in 2008 in Milwaukee County that approved a 1.0 percent sales tax supporting public transit, county parks, and emergency medical services, and subsequent unsuccessful attempts at the State level to allow a sales tax for transit. In January 2013, the Wisconsin Transportation Finance and Policy Commission made recommendations to the Governor and State Legislature on "options to achieve a stable balance between transportation expenditures, revenues and debt service over the next decade." The WisDOT Secretary proposed including a number of the revenue sources recommended by that Commission in the subsequent 2015-2017 State budget, but the Governor did not include them in his proposed budget. In December 2016, WisDOT completed a report to the Legislature on the solvency of the State's Transportation Fund, including a review of current and projected transportation revenues and a Tolling Feasibility Study. In 2017, the Legislative Fiscal Bureau prepared a paper for the Joint Finance Committee that provided information on "possible revenue increases that could be enacted to improve the sustainability of the transportation fund." These efforts provide the basis for the revenue sources and estimates presented in this section. In 2023, Milwaukee County and the City of Milwaukee approved increases to their respective sales taxes, as authorized under Wisconsin Act 12, although the State limited the use of the new revenues.

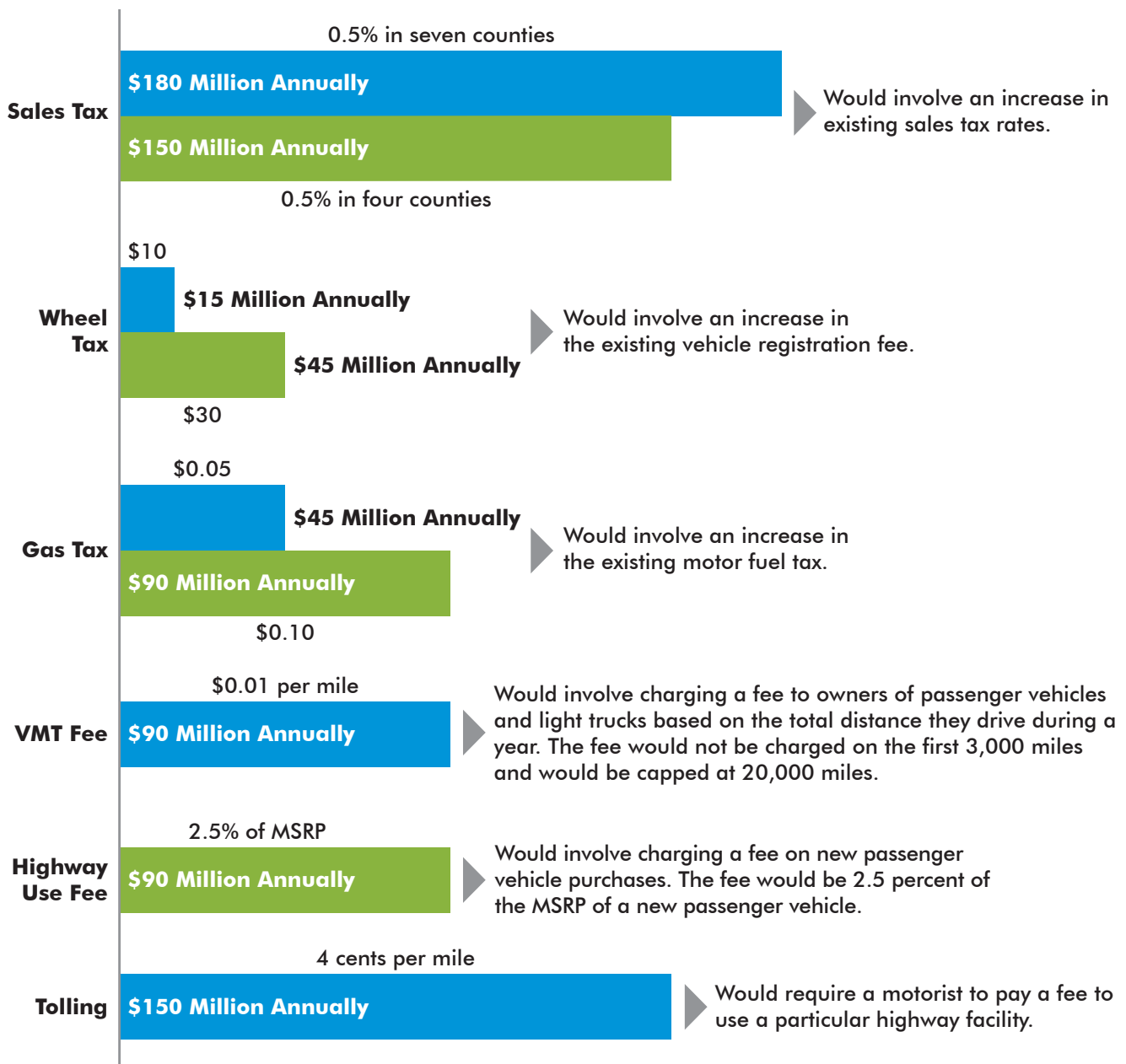
At the same time, the State's 2023-2025 Biennial Budget raised State transit operating funding by 2 percent each year in 2023-24 and 2024-25 but transferred the source of State transit operating funds from the Transportation Fund to the General Fund. This action has raised concerns that the State would be more likely to reduce transit funding levels in future budgets, as transit will be in competition with many budget-limited priorities in the General Fund. The future effects of this action were unclear at the time the 2024 Review & Update of VISION 2050 was prepared and will depend on future budget decisions by the State Legislature and Governor. Commission staff will continue to monitor State transit aid related to revenue assumptions included in this analysis.

This section presents potential revenue sources that could be considered to provide sufficient transportation funding, along with estimates of the revenue each source could generate on an annual basis. It is important to note that staff prepared generalized revenue estimates to demonstrate each individual source's potential for providing the funding necessary to achieve the recommended transportation system. More detailed estimates would need to be prepared as decision makers determine whether to pursue a particular revenue source. It is also important that potential equity concerns be considered related to whether lower-income residents would pay a higher proportion of their incomes than higher-income residents if a particular revenue source were implemented.

While there are certainly more sources that could help address insufficient funding levels, this section focuses on a series of "primary revenue sources" that have been seriously considered and are likely to generate revenues on a scale sufficient to implement all or most of the transit improvements and highway reconstruction recommended under VISION 2050. It should be noted that State legislation to create local dedicated transit funding would likely be necessary to achieve the transit system improvement and expansion recommended under VISION 2050, although this funding could also be provided through additional State financial assistance to transit. Six primary revenue sources are discussed below and a generalized comparison of annual revenue estimates is presented in Figure 1.



**Figure 1**  
**Estimates for Potential Revenue Sources to Fund the**  
**Recommended Transportation System (2022 Dollars)**



Note: All revenue estimates assume the source is levied regionwide, except the four-county sales tax (only in Kenosha, Milwaukee, Racine, and Waukesha Counties) and tolling (estimate is based on tolling these interstate facilities: IH 43 between Beloit and Muskego, IH 41/IH 43/IH 94/IH 794/IH 894 in metropolitan Milwaukee, and IH 94 between Seven Mile Road and the Illinois State Line).

Source: SEWRPC, 12/2023

- **Sales tax** – Involves an increase in existing sales tax rates. A 0.5 percent sales tax could generate about \$180 million annually in the Region. Transportation revenues from a sales tax could be obtained in two ways. The first way would involve the State increasing the statewide sales tax rate, with the revenues added to the State’s Transportation Fund. These revenues could be used to increase State funding towards sufficiently funding both the highway and transit elements of VISION 2050. The second way would involve the State allowing municipalities or counties to enact a sales tax at their discretion (note: this was done for Milwaukee County and the City of Milwaukee under Wisconsin Act 12, although with limitations on the use of the new revenues). A sales tax is the most common dedicated local transit funding source in other areas of the country and has the potential to generate the needed revenue to implement the transit improvements recommended under VISION 2050. A 0.5 percent sales tax enacted in each county would likely generate significantly more revenue in some counties than the level of transit service recommended in those counties. In addition, the amount of transit funding envisioned under VISION 2050 in some counties may not require dedicated funding, particularly if State funding for transit is sufficiently increased. Alternatively, a sales tax could be levied only in the more urban areas of the Region that would be served by a majority of the recommended transit improvements and expansion. Enactment of a dedicated sales tax for transit would also permit counties and municipalities to eliminate or partially eliminate the use of property tax revenues to fund transit. In addition, a portion of sales tax revenues also comes from out-of-state visitors. It should be noted that sales tax revenues also tend to be impacted by downturns in the economy. Some alternative dedicated sources used by peer metro areas, although not as common as the sales tax, include the payroll tax, income tax, and dedicated property tax.
- **Vehicle registration fee (“wheel tax”)** – Involves an increase in the existing vehicle registration fee. A \$10 vehicle registration fee enacted in all counties in the Region could generate about \$15 million annually. The vehicle registration fee is unaffected by, and unrelated to, how much the vehicle’s owner uses the transportation system. The vehicle registration fee is essentially the only revenue source available to municipal and county governments to increase transportation funding without a change in State law. Milwaukee County (\$30) and the City of Milwaukee (\$30) currently levy a vehicle registration fee in addition to the statewide annual registration fee collected by WisDOT. A number of other municipalities and counties across the State also levy a vehicle registration fee, with fees ranging from \$10 to \$40. Alternatively, the State could further increase the statewide registration fee (now \$85 for most automobiles and ranging from \$100 to \$106 for light trucks and from \$173 to \$2,578 for heavy trucks), with the revenues being added to the State’s Transportation Fund. In addition to the increased vehicle registration fees that went into effect in 2019, the State also began assessing a \$75 surcharge on hybrid electric vehicles, which is collected with the regular annual registration fee. A \$175 surcharge on electric vehicles went into effect in 2023. Additional revenue from the registration fee could be generated by indexing the fee based on inflation, charging an additional variable fee based on a vehicle’s value or weight, or increasing the fees for heavy trucks.
- **Motor fuel tax (“gas tax”)** – Involves an increase in the existing motor fuel tax rate levied by the State. A five-cent increase could generate about \$45 million annually in the Region, assuming current fuel consumption levels. However, unlike the other revenue sources discussed in this section, those revenues would likely decline long term as vehicles become more fuel efficient on average. In addition, the motor fuel tax is impacted by the level of use of alternative fuels. The State currently levies a 30.9 cents per gallon motor fuel tax, which has not increased since 2006 when the State eliminated automatic annual indexing of the motor fuel tax based on inflation. Additional revenue from this source could be generated by reinstating annual indexing based on inflation, adjusting the tax rate to reflect lost indexing, eliminating the exemption for farming, or charging a higher rate for diesel fuel. Another related revenue source would involve eliminating the existing sales tax exemption for motor fuel sales.
- **VMT/mileage-based registration fee (“VMT fee”)** – Involves charging a fee to owners of passenger vehicles and light trucks based on the total distance they are driven during a year. The fee would not be charged on the first 3,000 miles and would be capped at 20,000 miles. As an example, such a fee on a vehicle driven 13,000 miles during a year would be \$100. Based on

current travel levels, a one cent per mile fee could generate about \$90 million annually in the Region. Unlike the motor fuel tax and vehicle registration fee, a distance-based fee provides a more equitable means of paying for the costs of the construction, maintenance, and operation of the transportation system as motorists would pay for their actual use of the transportation system. A VMT fee is unaffected by vehicle fuel efficiency or alternative fuels and can encourage residents to drive less, potentially reducing total VMT, traffic volumes, and congestion. Implementing a VMT fee utilizing technologies, such as a GPS unit or an in-vehicle device that would collect mileage data, has faced obstacles due to technology uncertainty, privacy concerns, and cost implementation issues. Low-technology options, such as incorporating odometer readings during the annual vehicle registration process, are also possible. Additional revenue from this source could be generated by indexing the fee to inflation.

- **Highway use fee** – Involves charging a fee on new passenger vehicle purchases. A fee of 2.5 percent of the manufacturer’s suggested retail price (MSRP) of a new passenger vehicle could generate about \$90 million annually in the Region. Given that the fee would only be collected at the time of a vehicle’s initial purchase, it would not directly impact those selling or purchasing used vehicles. New vehicle purchasers could also incorporate the fee into the financing of the vehicle, spreading out payment of the fee over time. Revenue from this type of fee has the potential to naturally increase over time with increases in new vehicle values, although it would decline during economic downturns when new vehicle sales volumes are lower. Critiques of the fee include that it is essentially an extra sales tax on new vehicle purchases and that it targets only one subset of the users of the transportation system. Similar to the highway use fee, the vehicle title fee, which the State increased as part of the 2019-2021 State budget, involves charging a fee on passenger vehicle purchases. However, the title fee is charged whenever an owner applies for a Certificate of Title, regardless of whether the vehicle is new or used.
- **Tolling** – Would require a motorist to pay a fee to use a particular highway facility. Federal law has traditionally prohibited implementing tolls on highways that have received Federal funds. However, a number of exceptions have been added to Federal transportation law over the years. The State could also apply under the Federal Interstate System Reconstruction and Rehabilitation Pilot Program (ISRRPP) to collect tolls on one interstate facility for which funding reconstruction or rehabilitation would not otherwise be possible. In 2016, WisDOT completed a preliminary study of the feasibility of tolling Wisconsin’s interstate highways, at the direction of the State Legislature. This Tolling Feasibility Study identified issues and challenges related to tolling in Wisconsin and included traffic and revenue estimates for all interstate corridors in the State. Based on the study’s revenue estimates, a four cents per mile toll on interstate facilities could generate about \$150 million annually in net revenues (accounting for operating and maintenance costs) in the Region.<sup>1</sup> Tolling would also involve upfront capital costs, which are not accounted for in the annual revenue estimate. Like a VMT fee, tolling involves paying for the costs of the construction, maintenance, and operation of the transportation system based on actual use and it is unaffected by vehicle fuel efficiency or alternative fuels. It also ensures that out-of-state motorists pay for their use of the interstate system. Tolling revenues would likely need to be used for improvements within the interstate corridor in which they are generated, although that could potentially free up revenues for improvements elsewhere in the Region. One challenge associated with tolling would be the potential for traffic to divert from tolled facilities to parallel non-tolled facilities. Related to tolling, congestion pricing can be employed on an express lane or highway facility, with the fee adjusted based on the time of day and level of congestion. Effective express lane congestion pricing ensures free flowing traffic in the toll lanes and provides additional revenue for the construction, maintenance, and operation of the transportation system.

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<sup>1</sup> The annual revenue estimate is based on tolling these interstate facilities: IH 43 between Beloit and Muskego, IH 41/IH 43/IH 94/IH 794/IH 894 in metropolitan Milwaukee, and IH 94 between Seven Mile Road and the Illinois State Line. The annual revenue estimate may be somewhat low because it does not include these interstate facilities: IH 43 north of STH 57 in Ozaukee County, IH 41 north of CTH Q in Washington County, and IH 94 west of STH 67 in Waukesha County.

### **Consequences of Not Sufficiently Funding Transportation System**

There are numerous benefits associated with significantly improving and expanding public transit and it is critical that the Region's arterial streets and highways be reconstructed in a timely manner. Not fully implementing the transportation system recommended under VISION 2050 due to the limitations of current and expected transportation revenues would result in significant negative consequences for Southeastern Wisconsin.

Not improving and expanding transit service will likely result in the following negative impacts:

- Limited transit-oriented development and redevelopment
- Reduced traffic carrying capacity in the Region's heavily traveled corridors
- Reduced access to jobs, healthcare, education, and other daily needs, particularly for the 1 in 10 households in the Region without access to a car, which is more likely to affect people of color and low-income residents
- Smaller labor force available to employers
- Reduced ability to develop compact, walkable neighborhoods

Postponing reconstruction of freeways beyond their service life and not adding capacity on highly congested segments will have the following negative impacts:

- Costly emergency repairs and inefficient pavement maintenance due to unnecessary, and increasingly ineffective, repaving projects
- Increased traffic congestion and travel delays, along with decreased travel reliability
- Increased crashes due to traffic congestion, antiquated roadway design, and deteriorating roadway condition