INTRODUCTION

Federal statutes require that all projects listed in the long-range transportation plan be fiscally constrained. This means that the plan must indicate that resources from public and private sources can be reasonably expected to be available to carry out the planned projects along with the operations and maintenance of the existing system. The financial plan was developed with the goal of providing an accounting of the expected transportation related expenditures and revenues over the next 27 years (2019 to 2045).

This financial plan is based on analyzing past funding efforts by local, state and federal entities and projecting funding into the future. This financial plan is a guide for local communities, the MPO and the Wisconsin Department of Transportation (WisDOT) to ensure that past funding efforts will continue. This will provide for the continuity necessary to preserve the sound transportation system for the Sheboygan metropolitan planning area as well as to program necessary improvements.

As required by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), and continued in the "Moving Ahead for Progress in the 21st Century" Act (MAP-21) and the "Fixing America's Surface Transportation (FAST)" Act, revenue and cost estimates must use an inflation rate (or rates) to reflect "year of expenditure dollars," based on reasonable financial principles and information, and developed cooperatively by the State (WisDOT), MPOs and public transportation operators.

After consulting with staff from the WisDOT Bureau of Planning and Economic Development in June of 2018, it was decided that an inflation rate of 1.7 percent should be applied to the total annual program cost for the second, third and fourth years in the TIP financial plan as well as the second and subsequent years in the long-range transportation plan. In addition, based on that same consultation with WisDOT staff in June of 2018, it was decided that an inflation rate of 2.0 percent should be applied to annual revenues for the second, third and fourth years in the TIP financial plan as well as the second and subsequent years in the long-range transportation plan. The inflation rate is Consumer Price Index (CPI) driven, and is not driven by the construction index, in keeping with limited funds available in state and local budgets. Exceptions to this rule are noted where they occur in the discussion which follows.

This financial plan is intended to show that funding is reasonably available to implement the recommendations in the plan. The financial plan includes a compilation of state and federal transportation funds which are currently available to local jurisdictions in the Sheboygan metropolitan planning area. Local funding level projections are based on historic spending levels. Anticipated needs are estimated based on WisDOT's Urban Corridors study, pavement inventories and output from the Wisconsin Information System for Local Roads (WISLR), and proposed project needs from previous studies.

For each of the recommended projects identified in Chapter 7 of this Update to the *Year 2045 SATP* (regardless of mode), funding sources were identified. Over the life of the plan (2019 to 2045), inflation-adjusted needs are projected at nearly \$1.068 billion, while anticipated funding (adjusted for inflation in programs where inflationary increases could be assumed) is estimated at nearly \$1.103 billion. While this is not enough to complete additional major projects, the difference allows for some flexibility to add smaller projects or studies as part of future updates and the overall long-range transportation planning process and still have a fiscally constrained plan.

STREET AND HIGHWAY FUNDING

The types of highway funding resources that can be used to implement the recommendations in this Update to the *Year 2045 SATP* come from a variety of programs at the federal, state and local levels. Table 9.6 summarizes the financial requirements (adjusted for inflation) for all high cost preservation projects and all capacity expansion projects identified in Chapter 7 of this Update to the *Year 2045 SATP*, as well as the resources that could be used to fund these projects.

The programs that the MPO has identified as funding sources for the committed and recommended highway projects are briefly described below. All estimated revenues and expenditures have been adjusted to 2018 dollars. WisDOT provided the funding levels estimated to be available over the next 27 years.

At the time a project moves into the committed years of the Transportation Improvement Program (TIP), the project's cost will be reevaluated and the funding method to be used will be revisited. The actual funding source will depend on the current allocation levels. The MPO will pursue alternative funding mechanisms (if appropriate) as the design and construction phases of projects in the mid-range (2029 to 2038) and long-range (2039 to 2045) components of the planning horizon approach.

Available Street and Highway Funding Sources

Surface Transportation Block Grant Urban Program (STBG Urban)

This is a federally funded program administered by WisDOT, and was previously known as the Surface Transportation Urban Program (STP – Urban). Up to an 80 percent federal share (with a 20 percent local match) is allowed, but the federal share can be as low as 50 percent under this program. STBG Urban funding provides for a wide range of transportation-related activities and local safety improvements. To qualify for this program, projects must be on roadways functionally classified as collectors or higher, and the projects cannot be on roadways that are part of the State Trunk Highway system. Transit, bicycle and pedestrian projects are also eligible for STBG Urban funding in the Sheboygan metropolitan planning area.

Existing Major Projects Enumerated for Construction (MAJ)

"Major Project" is a state designation that can use federal or state funding for implementation. Major Projects must meet a specific definition and follow a specific process for approval. The Transportation Projects Commission (TPC) and the Legislature must enumerate these projects. Projects designated as Major Projects do not need a local match. The Majors Highway

Development Program is for expansion projects greater than five miles or for new state highway segments greater than 2.5 miles.

There are no Major Projects in the metropolitan planning area. However, there is one Major Project outside the metropolitan planning area but within Sheboygan County which impacts the metropolitan planning area; this project is the expansion of State Highway 23 from two to four lanes from Plymouth to Fond du Lac. This project is not included in the financial plan since it is located outside the metropolitan planning area boundary.

State Trunk Highway (STH) Preservation

This is a state and federally funded program administered by WisDOT, with a variable local match. The majority of projects in this program require no local match. However, some activities within a project may require a local match resulting in a funding split that is project specific.

STH Preservation funds include "Backbone" and "Non-Backbone 3R" funds. Backbone funds can be used on the backbone routes identified in the *Corridors 2030* component of the *Connections 2030* state long-range transportation plan. Non-Backbone 3R funds can be used on the remainder of the state highway system. Backbone and Non-Backbone 3R funds can be used for preservation, reconstruction, resurfacing and reconditioning projects. In this Update to the *Year 2045 SATP*, STH Preservation funds cover projects that had a funding source of National Highway Performance Program (NHPP) or Highway Safety Improvement Program (HSIP) in the TIP. STH Preservation funds can be used for reconstruction, resurfacing and reconditioning projects along State Trunk Highways, including low cost bridge projects.

State Trunk Highway (STH) Operations and Maintenance (STH O & M)

This is a state program. Funds can be used for operations and maintenance activities associated with State Trunk Highways, including bridge projects.

Surface Transportation Block Grant (STBG) Program – Local Bridge Component

This is a state and federally funded program administered by WisDOT with an 80 percent federal/state share and a 20 percent local match. Counties, cities, villages and towns are eligible for rehabilitation funding on bridges with sufficiency ratings of 80 or less, and are eligible for replacement funding on bridges with sufficiency ratings of 50 or less. Local jurisdictions submit information to WisDOT in order to calculate the sufficiency rating of the bridge being considered for funding. Bridges are rated based on a federal bridge rating methodology, which is designed to measure the relative adequacy of a bridge in terms of structural and safety aspects, serviceability and functional obsolescence, and suitability for public use.

The majority of bridge work recommended in the metropolitan planning area is classified as preservation; bridges will be rehabilitated as needed using bridge funds. Should a bridge need major rehabilitation or replacement, the appropriate steps will be taken to provide for this. The work done during an unforeseen bridge replacement will fall under the category of preservation

maintenance, unless the capacity of the structure is significantly increased, which will classify it as an expansion project.

Local Road Improvement Program (LRIP)

This is a state program with at least a 50 percent local match. This program assists local governments with improvements on seriously deteriorating county highways, town roads, and city and village streets. LRIP funds can be split between multiple projects; however, only a maximum of 50 percent of each project's total cost will be funded by LRIP, assuming that their combined federal portions do not exceed the federal allocation. One project substitution is allowed per allocation cycle. From the time the LRIP funding is awarded, local jurisdictions have six years to complete the project and seek reimbursement.

In most cases, the jurisdictions within the metropolitan planning area use LRIP funding for preservation projects. As need warrants and local funds become available, LRIP funds will be used to meet the preservation needs of the Sheboygan metropolitan planning area.

Connecting Highway Aids (CHA)

This is a state program with no local match. This program is designed to assist municipalities with the costs associated with the increased traffic and maintenance of roads that connect segments of the State Trunk Highway system. CHA funds are distributed as quarterly payments on a per lane mile basis, with rates varying according to population and appropriations set in the state budget. Within the metropolitan planning area, connecting highways exist in the City of Sheboygan (portions of Erie Avenue, Kohler Memorial Drive, 14th Street, Calumet Drive and South Business Drive) and in the City of Sheboygan Falls (portions of Main Street, Broadway Street, Pine Street and Giddings Avenue).

Surface Transportation Block Grant Rural Program (STBG Rural)

This is a federally funded program administered by WisDOT that involves an 80 percent federal share and requires a 20 percent local match. STBG Rural funds can be used to complete a variety of improvements to rural highways; this program is primarily used on county trunk highways. The objective of the STBG Rural program is to improve federal aid eligible highways outside of urban areas. Projects must meet federal and state requirements. Communities are eligible for funding on roads classified as major collectors or higher.

WisDOT did not provide future projections for STBG Rural funds because there is uncertainty as to where the urbanized and metropolitan planning area boundaries will be in 2045, so it is difficult to determine if a project currently identified as being eligible for STP Rural funds will still be eligible in the future.

Highway Safety Improvement Program (HSIP)

This program funds "highway safety projects at sites that have experienced a high crash history. Emphasis is on low-cost projects that can be implemented quickly. The overall objective of HSIP is to develop and implement, on a continuing basis, stand-alone safety projects designed to reduce the number and severity of crashes on all streets and highways (state and local). The

federal funding ratio for HSIP funds is usually 90 percent, requiring a 10 percent match of state and/or local funds." The non-federal share is provided by the state if the project is on a state trunk highway, or is provided by a local government if the project is on a non-state trunk highway. Funds distributed under this program are for hazard elimination projects, such as railroad crossing improvements, intersection safety improvements (including roundabouts), and even pedestrian "countdown" signals.

General Transportation Aids (GTA)

There is no local match under the GTA program. This is a state program intended to return a portion of state-collected transportation revenues (fuel taxes and vehicle registration fees) to local governments. General transportation aids are allocated to local units of government each quarter, and can be used on any roadway project. General transportation aids help to offset traffic-related costs, including road construction, maintenance and traffic-related law enforcement.

Local Funds

For projects locally funded or with a local match, local funds are the responsibility of the funding jurisdiction. Local funds can be raised in several different ways. A few of the options in which local funds can be raised include the following:

General Fund

Local funds for street construction and maintenance are obtained primarily through the general property tax levy.

General Obligation Bonds

General obligation bonds are issued on a per project basis, and are supported through the general tax levy.

Special Assessments

Special assessments are charged to property owners for sidewalk installation and street improvements when residential and commercial lands develop. Property owners may also pay a share of the cost for traffic signal or street improvements on streets adjoining their properties.

Tax Increment Financing (TIF) Districts

A TIF district allows a municipality to retain property taxes on an individual development to pay for land acquisition, transportation and utility expenses within that district. The municipality diverts increased revenues from rising property values to pay for the improvements that helped to increase the property's value. The municipality retains the incremental increase in tax revenues from the district until all of the infrastructure costs are paid, at which time the tax revenues from the district may be collected by all applicable taxing jurisdictions.

Historical Street and Highway Funding

Tables 9.1 and 9.2 illustrate historical street and highway expenses at the local, state and federal levels.

Local Funding

Table 9.1 includes local costs for operations and maintenance and total costs (including operations and maintenance, construction, and the local share of projects funded with state and/or federal funding). State General Transportation Aids allocated for municipal use are also included in Table 9.1.

Estimates for local transportation funding are derived from the reports entitled *County and Municipal Revenues and Expenditures* (2013 – 2016), published by the Wisconsin Department of Revenue. Operations and maintenance figures are reported in the categories "Highway Maintenance and Administration" and "Road-Related Facilities." Total costs also include "Highway Construction" and "Other Transportation." The Sheboygan County operations and maintenance figure includes the state allocation for routine maintenance of state highways (non-connecting).

Table 9.1: Historical Local Street and Highway Expenses, Sheboygan Metropolitan Planning Area

To the Profit of	2013		2014		2015		2016	
Jurisdiction	O & M ¹	Total	O & M	Total	O & M	Total	O & M	Total
Sheboygan County ²	\$975,114	\$2,860,137	\$849,051	\$3,155,313	\$905,667	\$2,304,204	\$1,115,394	\$2,174,046
City of Sheboygan	\$5,338,000	\$9,583,000	\$5,337,700	\$6,984,200	\$5,241,000	\$7,495,000	\$5,835,200	\$9,396,200
City of Sheboygan Falls	\$1,202,400	\$1,754,300	\$939,400	\$1,227,200	\$1,081,800	\$1,644,800	\$1,236,900	\$2,400,600
Village of Howards Grove	\$295,500	\$649,800	\$596,800	\$982,200	\$457,000	\$741,800	\$356,300	\$508,600
Village of Kohler	\$468,200	\$554,700	\$510,200	\$1,951,500	\$577,600	\$726,900	\$547,100	\$995,800
Town of Herman	\$290,400	\$290,400	\$237,300	\$237,300	\$180,500	\$180,500	\$184,800	\$184,800
Town of Lima	\$129,300	\$345,700	\$104,500	\$134,100	\$96,300	\$217,500	\$90,900	\$315,800
Town of Mosel	\$81,800	\$81,800	\$83,100	\$760,900	\$54,600	\$54,600	\$55,600	\$55,600
Town of Sheboygan	\$635,400	\$635,400	\$557,700	\$1,075,300	\$459,300	\$1,104,600	\$479,700	\$550,800
Town of Sheboygan Falls	\$158,800	\$336,700	\$163,200	\$248,600	\$108,500	\$181,600	\$113,800	\$285,500
Town of Wilson	\$221,500	\$490,900	\$262,200	\$370,700	\$170,100	\$428,000	\$220,900	\$227,500
Planning Area Total	\$9,796,414	\$17,582,837	\$9,641,151	\$17,127,313	\$9,332,367	\$15,079,504	\$10,236,594	\$17,095,246

¹Operations and Maintenance Costs.

Source: Wisconsin Department of Revenue (for all years listed); and Bay-Lake Regional Planning Commission, 2019.

State and Federal Funding

Table 9.2 illustrates state and federal funding of street and highway projects programmed in the *Sheboygan Metropolitan Planning Area Transportation Improvement Program (TIP)* from 2014 through 2017 (as amended).

²Estimated at 21 percent of total costs for the portion of Sheboygan County in the Sheboygan metropolitan planning area.

Table 9.2: Historical Federal and State Street and Highway Expenses, Sheboygan Metropolitan Planning Area

Funding Source	2014	2015	2016	2017
Federal	\$2,411,893	\$4,451,874	\$2,913,167	\$7,794,188
State	\$506,119	\$846,983	\$491,488	\$1,648,738
Local Match	\$233,757	\$209,106	\$393,478	\$209,954
Planning Area Total	\$3,151,769	\$5,507,963	\$3,798,133	\$9,652,880

Source: Bay-Lake Regional Planning Commission, 2014, 2015, 2016 and 2017.

Long-Range Street and Highway Funding

The following analysis is based in part on the reports entitled *County and Municipal Revenues* and *Expenditures* (2013 – 2016), published by the Wisconsin Department of Revenue (WDOR). Each local jurisdiction in Wisconsin is required to file a report on revenues and expenditures, and is provided a financial report form by the WDOR. Transportation expenditures are reported to the WDOR on a line item basis that includes four categories: highway maintenance and administration, highway construction, road-related facilities, and other transportation costs.

The WDOR reports also identify state highway aids as a line item, but exclude costs incurred by the state or county for the principal arterials, connecting highways and county trunk highways within the metropolitan planning area boundary. State highway aids are separated from the total transportation costs reported in order to isolate local expenditures. The historic local expenditure is then adjusted to current (2018) dollars. However, in arriving at projected local revenue, the adjusted historic total local expenditure needed to be inflated by 2.0 percent per year (per WisDOT guidance issued in 2018).

Table 9.3 indicates that on average, jurisdictions in the Sheboygan metropolitan planning area spend nearly \$13.3 million annually (in adjusted 2018 dollars) on the street and highway system. The largest portion (nearly \$6.8 million and nearly 51 percent) was spent by the City of Sheboygan. Other jurisdictions spending significant amounts on their streets and highways include Sheboygan County, the City of Sheboygan Falls, the Village of Kohler, the Town of Sheboygan, the Village of Howards Grove, and the Town of Wilson. The total anticipated locally generated revenue over the life of the plan based on historic revenues amounts to over \$479 million; while most of this funding involves operations and maintenance expenditures, nearly \$59 million of this amount involves local matching funds for street and highway projects.

Table 9.3: Average Local Transportation Expenditures and Projected Revenue, 2019 – 2045, Sheboygan Metropolitan Planning Area

Jurisdiction	Average Annual	Percent of Total
Jurisulcuon	Transportation Expenditure	Expenditure
Sheboygan County	\$1,749,173	13.2%
City of Sheboygan	\$6,759,006	50.9%
City of Sheboygan Falls	\$1,511,005	11.4%
Village of Howards Grove	\$664,321	5.0%
Village of Kohler	\$915,342	6.9%
Town of Herman	\$140,602	1.1%
Town of Lima	\$181,463	1.4%
Town of Mosel	\$188,750	1.4%
Town of Sheboygan	\$731,097	5.5%
Town of Sheboygan Falls	\$161,642	1.2%
Town of Wilson	\$287,219	2.2%
Total Local Expenditure	\$13,289,620	100.0%
Projected Local Revenue	\$13,289,620 (Over 27 Years) ¹	\$479,106,886

¹The \$13,289,620 in average local transportation expenditures was inflated at an annual rate of 2.0 percent (per WisDOT guidance) to arrive at projected local revenue of \$479,106,886 over the life of the plan.

Source: Wisconsin Department of Revenue, 2013, 2014, 2015 and 2016; Wisconsin Department of Transportation, 2018, and Bay-Lake Regional Planning Commission, 2019.

Table 9.4 indicates projected state and federal funding for the Sheboygan metropolitan planning area (as provided by WisDOT in February and March of 2019), and shows specific annual programs based on funding levels provided by WisDOT. The dollar amounts shown in Table 9.4 were adjusted for inflation by 2.0 percent for the period covered by this Update to the *Year 2045 SATP* for all programs except the local bridge program, which was not adjusted to reflect inflation per previous WisDOT guidance. No major projects are assumed to occur in the metropolitan planning area over the life of the plan. The "STH Preservation, Maintenance and Operations" section of Table 9.4 refers to maintenance and operations on state highways; all other rows in this section of Table 9.4 involve expansion and preservation activities for local roads.

Table 9.4: WisDOT Funding Projections for Street and Highway Activities, Sheboygan Metropolitan Planning Area, 2019 – 2045 (Adjusted for Inflation)

	_	2019 - 2045	
Funding Type	2019 Allocation	Allocation ¹	Funding Cycle
State Trunk Highway (STH) Preservation,			
Maintenance and Operations			
Combined Backbone and Non-Backbone	\$7,300,890	\$263,205,921	Annual
STH Bridges	\$719,000	\$25,920,820	Annual
STH Maintenance and Operations	\$2,706,120	\$97,558,901	Annual
Subtotal	\$10,726,010	\$386,685,643	
Local Road Expansion and Preservation			
STBG Urban	\$600,000	\$21,630,726	Biennial
General Transportation Aids	\$2,332,045	\$84,073,045	Annual
Connecting Highway Aids	\$233,580	\$8,420,842	Biennial
LRIP	\$85,698	\$3,089,517	Biennial
Federal Safety Programs	\$233,616	\$8,422,140	Biennial
Local Bridges	\$1,367,884	\$36,932,868	Biennial
Subtotal	\$4,852,823	\$162,569,137	
Total	\$15,578,833	\$549,254,780	

Note:

Source: Wisconsin Department of Transportation, 2018 and 2019; and Bay-Lake Regional Planning Commission, 2019.

Table 9.5 projects the inflation adjusted funding amounts for the planning period (2019 – 2045). Based on annual expenditures, and with adjustments for inflation, it is estimated that state and federal funding for the local road system is expected to amount to nearly \$368 million, while WisDOT General Transportation Aids (provided to all local jurisdictions) is expected to total over \$84 million. Locally-funded operations and maintenance of local roads will involve over \$315 million. State Trunk Highway (STH) operations and maintenance will involve nearly \$98 million over the planning period. The local match of federal and state funded street and highway projects in the metropolitan planning area will amount to nearly \$59 million.

When local, state and federal funding projections are increased by an annual inflation rate of 2.0 percent, anticipated funding over the life of the plan is forecast to be over \$923 million for street and highway activities, as shown below in Table 9.5. This amounts to an annual average of over \$34 million.

¹With the exception of local bridges, all funding projections were adjusted to reflect an annual inflation factor of 2.0 percent. Local bridge funds were not adjusted to reflect inflation. These adjustments were made per WisDOT guidance issued in June of 2018.

Table 9.5: Long-Range Funding Summary, Street and Highway Activities, Sheboygan Metropolitan Planning Area, 2019 – 2045 (Adjusted for Inflation)³

Revenue Source	Plan Total
Federal and State Funding (project specific) ¹	\$367,622,834
General Transportation Aids (GTA - State Funds)	\$84,073,045
Local Operations and Maintenance (Not paid for by GTA)	\$315,486,368
State Trunk Highway Operations and Maintenance ²	\$97,558,901
Local Match (excludes local preservation projects)	\$58,695,004
Grand Total Funding	\$923,436,152
Yearly Average	\$34,201,339

Notes:

Source: Wisconsin Department of Revenue, 2013, 2014, 2015 and 2016; Wisconsin Department of Transportation, 2018 and 2019; and Bay-Lake Regional Planning Commission, 2019.

Long-Range Street and Highway Operations and Maintenance, Preservation and Reconstruction Needs

As required by the FAST Act and by previous federal surface transportation legislation, MPOs must "emphasize the preservation of the existing transportation system" during the metropolitan transportation planning process. In many cases, transportation agencies use life-cycle cost analysis to study new construction projects and to evaluate preservation strategies for existing transportation assets.

To date, the Bay-Lake Regional Planning Commission has not taken an active role in assisting with or documenting state and local operations, maintenance and preservation programs. However, the Wisconsin Department of Transportation (WisDOT) has programs and has identified funding sources for operations, maintenance and preservation activities. WisDOT provided the MPO staff with a listing and schedule of principal arterial improvement projects, and estimated the various costs associated with these projects over the life of the plan. These costs have been adjusted for inflation per guidance provided by WisDOT staff.

Recommended Street and Highway Projects

Table 9.6 shows a listing of major projects that originated from the *Sheboygan Metropolitan Planning Area TIP: Calendar Years* 2019 – 2022, the WisDOT Six Year Program, from local capital improvement programs (where they exist), and projects remaining to be completed and still worthy of implementation in the original *Year* 2045 SATP approved in 2015. **Generally, the projects involve high-cost construction or reconstruction activities, and are beyond normal preservation and maintenance efforts**. Other system preservation projects (usually

¹Includes the following funding sources: STH Preservation (for backbone and non-backbone facilities as well as STH bridges); STBG Urban; CHA; LRIP; Federal Safety Programs; and Local Bridges. Excludes GTA and STH O & M because they are accounted for in operations and maintenance. There are no Major STH projects planned within the metropolitan planning area over the planning horizon at this time.

²Includes STH long-range preservation.

³With the exception of local bridges, all funding projections were adjusted to reflect an annual inflation factor of 2.0 percent. Local bridge funds were not adjusted to reflect inflation. These adjustments were made per WisDOT guidance issued in June of 2018.

involving lower costs than the projects shown in Table 9.6) may be included in plans or programmed based on pavement condition and/or other documented needs or analysis.

Table 9.6 indicates that the high cost planned projects amount to over \$147 million in needs, and include state trunk and connecting highways as well as several county trunk highways and local streets in the metropolitan planning area. Of this amount, over \$95 million involves system improvement and expansion projects, while over \$52 million involves system preservation projects. "Connecting highways" are those streets owned by local jurisdictions, but are signed and designated as state trunk highways, and are paid for by WisDOT through local maintenance agreements. Other streets in the urbanized portion of the metropolitan planning area belong to local jurisdictions, are classified as principal arterials, minor arterials and collectors based primarily on traffic volumes, and are eligible for funding through the STBG Urban program. Arterials can be county trunk highways, and are subject to maintenance agreements with the various jurisdictions along the route.

Table 9.6: High Cost Planned Projects, Sheboygan Metropolitan Planning Area, 2019 – 2045¹

Facility	Termini	Period	
		reriou	Cost
SYSTEM IMPROVEMENT AND EXPA	NSION PROJECTS (See Table 7.1 for Details)		
S. Taylor Dr.	Racetrack Rd. to Southpointe Dr. (Plus Horizon/Southpointe Dr.)	2019 - 2028	\$6,704,000
S. 18th St.	CTH EE/Weeden Creek Rd. to CTH V	2019 - 2028	\$7,809,000
STH 23	Western Boundary of Sheboygan MPA to STH 32	2019 - 2028	\$26,606,000
СТН ТТ	CTH PP to STH 28	2029 - 2038	\$11,720,000
IH 43	At CTH FF	2029 - 2038	\$17,188,000
IH 43	At CTH PP/Lower Falls Rd./Indiana Ave.	2029 - 2038	\$13,518,000
STH 42	CTH Y to CTH A/Howards Grove	2039 - 2045	\$11,461,000
Subtota	1		\$95,006,000
SYSTEM PRESERVATION PROJECT	S (See Tables 7.2, 7.9 and 7.10 for Details)		
North Ave.	STH 42/Calumet Dr. to 300 feet east of N. 15th St.	2019 - 2028	\$3,077,000
Pennsylvania Ave.	Sheboygan River Bridge	2019 - 2028	\$3,423,000
Fond du Lac Ave.	STH 32/Main St. to Rangeline Rd.	2019 - 2028	\$2,606,000
N. 15th St.	STH 42/Calumet Dr. to Mayflower Ave.	2019 - 2028	\$4,500,000
IH 43	STH 42 to Manitowoc County Line	2019 - 2028	\$2,164,000
STH 28	STH 57 to CTH A	2019 - 2028	\$2,000,000
STH 28/S. Business Dr.	Union Ave. to Washington Ave.	2019 - 2028	\$3,355,000
Wilson Ave.	Lakeshore Dr. to STH 28/S. Business Dr.	2019 - 2028	\$2,500,000
S. Business Dr.	Railroad Overpass South of Washington Ave.	2019 - 2028	\$2,341,000
North Ave.	300 feet east of N. 15th St. to N. 3rd St.	2019 - 2028	\$5,469,000
CTH EE/Weeden Creek Rd.	S. Business Dr. to Lakeshore Dr.	2019 - 2028	\$5,311,000
Mill Rd.	Najacht Rd. to STH 42	2019 - 2028	\$2,563,000
STH 28	Intersection with CTH EE	2019 - 2028	\$1,933,000
IH 43	CTH V to CTH EE/Weeden Creek Road	2019 - 2028	\$611,000
CTH C	Intersection with CTH TT	2019 - 2028	\$1,385,000
Taylor Dr.	Indiana Ave. to Superior Ave. (Plus a Small Section of Erie Ave.)	2019 - 2028	\$667,000
STH 23/Kohler Memorial Dr./Erie Ave.	N. Taylor Dr. to N. 9th St.	2019 - 2028	\$519,000
STHs 28 and 42/14th St./Calumet Dr.	Indiana Ave. to North Ave.	2019 - 2028	\$759,000
STH 32	CTH D to STH 28	2029 - 2038	\$2,200,000
СТН Ү	CTH O/Superior Ave. to STH 42	2029 - 2038	\$5,089,000
Subtota	1		\$52,472,000
Tota	1		\$147,478,000

Note:

Source: City of Sheboygan Department of Public Works, 2018; City of Sheboygan Falls Department of Public Works, 2018; Town of Sheboygan, 2018; Sheboygan County Transportation Department, 2018; Wisconsin Department of Transportation, 2018; and Bay-Lake Regional Planning Commission, 2019.

Street and Highway Operations, Maintenance and Preservation

Operations, maintenance and preservation needs are estimated on a dollar per mile basis using information provided by the WisDOT Northeast Region staff. The data show that local streets and highways are less expensive to provide and maintain than the classified arterial and collector system. Expenditures for the street and highway network vary widely based on facility type and jurisdictional responsibility, which in turn reflects levels of urban development and traffic

¹All cost projections were adjusted to reflect an annual inflation factor of 1.7 percent. These adjustments were made per WisDOT guidance issued in June of 2018. The inflated dollar figures assume either implementation of projects in a given implementation period at the midpoint of that implementation period when not specifically known, or implementation of projects in the actual year of implementation when known.

volumes. For purposes of this analysis, WisDOT has the greatest per mile expenditures, associated with high cost interstate and freeway, bridge structure and interchange projects. Cities have the second highest expenditures, followed by villages, counties and towns. Cities have the largest portion of four-lane facilities, higher traffic capacity requirements, and typically more sidewalks, with most streets requiring accommodations for sewer, water, utilities and other infrastructure associated with the transportation corridor. County trunk highways fall in between city and town facilities, built to a higher standard than town roads, but typically lacking curb and gutter or other amenities.

WisDOT maintenance and preservation data reflects black top, gravel, tar, concrete and the physical patching and paving of roadway surfaces; this is only a portion of the total cost to provide the transportation system. The reported expenditures relate to more than just the estimated road surface preservation cost per mile, and may include the cost for snow plowing, salt, right-of-way maintenance (including ditch cleaning and clearing brush), traffic signs and signals, etc. The reported expenditures likely also include facilities like highway garages, graders, and trucks in the operations and maintenance budgets. A formula was established to better reflect the total cost of operating and maintaining the transportation system; this formula reflects the higher cost for principal and minor arterials compared to collectors and the local road system.

Table 9.7 shows estimated local operations, maintenance and preservation needs in the metropolitan planning area over the life of the plan. The street and highway mileage within the metropolitan planning area is projected to be over 625 miles near the end of the 27 year planning period. The principal arterial operations, maintenance and preservation estimate of \$43,100 per mile annually (in adjusted 2019 dollars), applied to 53.79 miles over the 27 year planning period, and adjusted for inflation annually, amounts to nearly \$80 million over the life of the plan. The minor arterial and collector operations, maintenance and preservation estimate of \$35,500 per mile annually (in adjusted 2019 dollars), applied to 173.02 miles of minor arterials and collectors over the 27 year planning period, and adjusted for inflation annually, amounts to nearly \$212 million over the life of the plan.

Local streets typically have less traffic and fewer trucks than do arterials and collectors, are not as wide, and thus, are slightly less expensive to maintain. Table 9.7 indicates that the local road operations, maintenance and preservation estimate of \$31,900 per mile annually (in adjusted 2019 dollars), applied to 398.22 miles of local streets and roads over the 27 year planning period, and adjusted for inflation annually, amounts to over \$438 million over the life of the plan. The grand total for the identified operations, maintenance and preservation needs, when adjusted for inflation, amounts to nearly \$730 million.

Table 9.7: Estimated Street and Highway Operations, Maintenance and Preservation Needs, Sheboygan Metropolitan Planning Area, 2019 – 2045 (Adjusted for Inflation)

Easility Type	Total Miles	Annual Cost per Mile	Anticipated
Facility Type	Year 2045	(2019 Dollars) ¹	Need (\$) ²
Principal Arterials	53.79	\$43,100	\$79,941,614
Minor Arterials and Collectors	173.02	\$35,500	\$211,796,489
Local Roads	398.22	\$31,900	\$438,034,026
Total	625.03		\$729,772,130

Notes:

Source: Wisconsin Department of Transportation, 2019; Bureau of Labor Statistics, *CPI Inflation Calculator*, 2015 – 2019; and Bay-Lake Regional Planning Commission, 2019.

Street and Highway Operations and Maintenance

Operations and maintenance costs for the entire metropolitan planning area for 2013 through 2016 (from Table 9.1) were added then were divided by four to arrive at an average operations and maintenance cost figure for the four year period. This figure (\$9,751,632) was then increased by 5.99453 percent (the average of the change in the consumer price index between 2013 and 2018, 2014 and 2018, 2015 and 2018, and 2016 and 2018) to arrive at an annual operations and maintenance cost of \$10,336,197 for local (non-State Trunk Highway) roads in the metropolitan planning area in 2018. This adjusted operations and maintenance cost for local facilities was then inflated at an annual rate of 1.7 percent for the period from 2019 through 2045; the summation of these inflation-adjusted operations and maintenance costs for local facilities indicates that over \$356,414,000 would be needed for local road operations and maintenance. When added to the nearly \$97,559,000 in state trunk highway operations and maintenance (Table 9.5), local and state trunk highway operations and maintenance costs amount to nearly \$453,973,000.

Street and Highway Low Cost Preservation Projects

This Update to the *Year 2045 SATP* includes preservation costs other than the projects presented in Table 9.6. Table 9.7 indicates that nearly \$730 million is estimated to be spent on operations, maintenance and preservation needs in the Sheboygan metropolitan planning area between 2019 and 2045. When the nearly \$454 million projected to be needed in operations and maintenance costs is subtracted from the nearly \$730 million, nearly \$276 million is projected to be needed for preservation projects over the life of the plan (or an average of nearly \$10,215,000 per year).

In addition, MPO staff reviewed lower cost preservation projects that appeared in the *Sheboygan Metropolitan Planning Area TIP: Calendar Years* 2019 – 2022, the WisDOT Six Year Program, local capital improvement programs (where they exist), and review of system preservation projects in the original *Year* 2045 SATP (adopted in May 2015) that remain to be implemented. Staff found 16 lower cost preservation projects not included in Table 9.6; when adjusted for

¹The annual cost per mile for all facilities was adjusted to reflect inflation between 2015 and 2019. According to the Consumer Price Index (CPI), the inflation rate was 7.7041 percent between 2015 and 2019.

²The anticipated needs were adjusted to reflect an annual inflation factor of 1.7 percent. These adjustments were made per WisDOT guidance issued in June of 2018.

inflation, these projects had a total cost of over \$11,018,000. These costs were added to the nearly \$276 million to arrive at a revised preservation project cost estimate of nearly \$287 million.

Summary of Long-Range Financial Needs for Street and Highway Activities

Table 9.8 shows that over \$888 million will be needed to maintain and improve the street and highway network over the 27 year planning period. This amounts to an annual average of nearly \$32,899,000.

Table 9.8: Long-Range Financial Need Summary, Street and Highway Activities, Sheboygan Metropolitan Planning Area, 2019 – 2045²

Anticipated Need	Plan Total
Operations and Maintenance (Local and State Trunk Highway)	\$453,973,000
Anticipated Preservation Projects (Other than Recommended)	\$286,817,000
Recommended High Cost Preservation Projects ¹	\$52,472,000
Recommended Expansion Projects ¹	\$95,006,000
Grand Total Need ²	\$888,268,000
Yearly Average	\$32,898,815

Notes:

Source: Wisconsin Department of Transportation, 2018 and 2019; and Bay-Lake Regional Planning Commission, 2019.

A comparison of funding and need (Table 9.5 versus Table 9.8) shows that funding will be available to implement the proposed actions over the life of the plan after adjustments for inflation. In examining the 27 year planning horizon, estimated expenditures are fairly balanced, with some flexibility to consider several projects that are not critical in the short-range future. The roughly \$35.2 million difference between funding and need will allow the area to more flexibly utilize the metropolitan transportation planning process.

A summary table of funding and need for street and highway activities can be found at the end of this chapter.

¹These projects and their costs have been documented in Table 9.6.

²All cost projections were adjusted to reflect an annual inflation rate of 1.7 percent. These adjustments were made per WisDOT guidance issued in June of 2018. The inflated dollar figures assume either implementation of projects in a given implementation period at the midpoint of that implementation period when not specifically known, or implementation of projects in the actual year of implementation when known.

TRANSIT FUNDING

Shoreline Metro's projected expenditures and revenues are compared in Table 9.9.

Table 9.9: 2019 – 2045 Financial Plan, Shoreline Metro¹

	2019 - 2028	2029 - 2038	2039 - 2045
Capital Funding and Expenditures			
Projected Capital Expenditures	\$18,554,000	\$8,478,000	\$9,732,000
Annualized Capital Expenditures	\$1,855,400	\$847,800	\$1,390,286
Capital Funding Resources			
Capital Assistance (Federal - CMAQ			
Funding)	\$6,844,132	\$6,103,970	\$4,272,779
Annualized Federal Capital Assistance	\$684,413	\$610,397	\$610,397
Capital Assistance (Local)	\$11,709,868	\$2,374,030	\$5,459,221
Annualized Local Capital Assistance	\$1,170,987	\$237,403	\$779,889
Operating Funding and Expenditures			
Projected Operating Expenses	\$39,173,008	\$46,184,992	\$37,287,637
Annualized Operating Expenses	\$3,917,301	\$4,618,499	\$5,326,805
Operating Funding Resources			
Projected Farebox and Miscellaneous			
Operating Revenue	\$8,481,897	\$10,000,160	\$8,073,669
Annualized Farebox and Miscellaneous			
Operating Revenue	\$848,190	\$1,000,016	\$1,153,381
FTA Operating Assistance (FTA			
Section 5339)	\$12,852,220	\$15,152,773	\$12,233,652
Annualized FTA Operating Assistance	\$1,285,222	\$1,515,277	\$1,747,665
HUD CDBG Entitlement Funds	\$424,930	\$424,930	\$297,451
Annualized HUD CDBG Entitlement			
Funds for Operating Assistance	\$42,493	\$42,493	\$42,493
State Operating Assistance (State			
Sections 85.20 and 85.205)	\$10,140,159	\$11,875,700	\$9,540,183
Annualized State Operating Assistance	\$1,014,016	\$1,187,570	\$1,362,883
Total Operating Funding	\$31,899,206	\$37,453,563	\$30,144,955
Annualized Total Operating Funding	\$3,189,921	\$3,745,356	\$4,306,422
Projected Local Operating Assistance			
Needed to Fund Operating Shortfall	\$7,273,802	\$8,731,429	\$7,142,682
Annualized Local Operating Assistance			
Needed to Fund Operating Shortfall	\$727,380	\$873,143	\$1,020,383

Note:

Source: Shoreline Metro, 2018 and 2019; Wisconsin Department of Transportation, 2019; and Bay-Lake Regional Planning Commission, 2018 and 2019.

¹Adjusted for Inflation.

Transit Capital Projects

Federal Section 5339 funding is assumed to be available throughout the planning period, but will not be at nearly the level that was seen with federal transit capital funding in the past, leaving large local shares to fund these projects if other options are not found.

Other options that may be available to provide federal funding for transit capital projects include the STBG Urban program and the Congestion Mitigation and Air Quality (CMAQ) program. Shoreline Metro is definitely eligible for STBG Urban funding when it comes to capital items; this is noted in the STBG Urban System Project Prioritization Policy that is included in each Transportation Improvement Program (TIP). Transit operations in other Wisconsin metropolitan planning areas have used STBG Urban funds for transit capital items; when this happens, these funds get transferred to the Federal Transit Administration (FTA) and become Section 5307 funds. However, STBG Urban funding will be needed for a variety of street and highway projects in the metropolitan planning area over the life of the plan. The CMAQ program is also a possibility for transit capital items, as jurisdictions in Sheboygan County are eligible for this program, and vehicle replacements are an eligible project category. However, priority was given to signal timing projects in the last CMAQ funding cycle, and WisDOT has assumed more authority in selecting CMAQ projects with less input from WDNR and the affected MPOs. It is possible that under new leadership at WisDOT, CMAQ will return to funding a variety of emission reducing projects, including transit fleet replacements. Section 5307 operating funds can also be used to finance transit capital items, but they are needed for transit operations at this time.

Capital projects will be prioritized by Shoreline Metro, and implementation will be dependent upon local assistance and bonding as well as upon federal and state capital assistance levels. Capital expenditures were inflated by 1.7 percent each year.

For purposes of this analysis, Table 9.9 has indicated that CMAQ funds will be available to fund transit capital projects, since the financial guidance provided by WisDOT indicated that a considerable amount of CMAQ funding should be available in the metropolitan planning area based on trends in the recent past.

Transit Operating Expenses

The operating shortfall (the difference between operating revenue and federal and state assistance) must be funded by fare increases, local assistance or potential increases in miscellaneous revenues such as advertising and investments. It is projected that inflation-adjusted local operating assistance will increase from an average of \$727,380 in the 2019 to 2028 implementation period to an average of \$873,143 in the 2029 to 2038 implementation period, and to an average of \$1,020,383 in the 2039 to 2045 implementation period, assuming that local assistance is maintained at 18.5 to 19.2 percent of total operating expenses. Transit operating expenses were inflated by 1.0 percent each year over the period covered by the 2019 – 2022 TIP, then were inflated by 1.7 percent each year from 2023 through 2045.

In order to meet potential operating shortfalls in the future, Shoreline Metro has the option of increasing fares, increasing local assistance or reducing service. Adjustments to local assistance Update to the *Year 2045 Sheboygan Area Transportation Plan*

levels and fare increases are local decisions, and will occur in the future as Shoreline Metro has a more certain vision of federal and state assistance levels. The levels of federal and state operating aid provided to the Sheboygan urbanized area will be a primary factor in determining the level of service provided in the transit service area in the future.

A summary table of funding and need for transit activities can be found at the end of this chapter.

BICYCLE AND PEDESTRIAN TRANSPORTATION FUNDING

Past history provides strong evidence that improvements enabling bicyclists and pedestrians to coexist safely and effectively in the world of the motor vehicle often have not received high priority. As a result, many street and highway facilities continue to pose significant challenges to bicyclists and pedestrians.

Retrofitting existing roadways to make them more user friendly for bicyclists and pedestrians involves several potential actions, and has a correspondingly broad range of cost implications. Although many potential improvements would be highly beneficial to bicyclists and/or pedestrians, such improvements often require significant costs, and cannot be economically justified as "stand alone" projects. For these types of improvements, their timing by necessity should correspond to major improvement actions slated for the roadway. However, some major projects designed to accommodate bicyclists and/or pedestrians are independent actions which do not entail modification of the roadway, and should be constructed as funding permits; examples of these types of projects include off-road paths, sidewalks and pedestrian overpasses.

In addition, there are several improvements that can be successfully implemented at relatively little cost and by effecting only minor roadway design changes; this is particularly true at site-specific locations. These types of projects would include improvements such as safety islands, sidewalk curb cuts, paved shoulders, striped bike lanes, bicycle-friendly drainage grates, and strategically located bike racks. In order to demonstrate a commitment to creating a more user friendly environment for bicyclists in the metropolitan planning area, a relatively consistent level of funding should be applied so that selected improvements can be completed on an annual basis until all such improvements are completed.

In order to be cost effective, bicycle and pedestrian related improvements should be built into the design of new projects. Only the cost of design modifications needed to satisfactorily accommodate bicyclists and pedestrians beyond that of standard design motor vehicle roadway construction is justifiably a cost of implementing the bicycle and pedestrian transportation component of this Update to the *Year 2045 SATP*. The additional cost to accommodate bike lanes and/or wide curb lanes (including the costs associated with additional pavement width in compliance with AASHTO standards for safe bicycle accommodations) is logically allocated to the bicycle and pedestrian transportation component of this Update to the *Year 2045 SATP*, and can be relatively easily quantified. Similarly, the cost of providing extra width paved shoulders, sidewalks and pedestrian overpasses associated with new construction or reconstruction activities can be estimated for budgeting purposes once they are inventoried and prioritized.

Bicycle and pedestrian transportation funding typically includes federal transportation alternatives funding (administered by the Wisconsin Department of Transportation), along with a typical local match of 20 percent. The transportation alternatives program (TAP) is competitive at the state level (only MPOs serving areas with a population of 200,000 or more receive a direct allotment, and those MPOs decide the projects that get awarded funding within their jurisdiction). The MPO assumed that an annualized dollar amount of TAP funds would be available based on what could be considered the metropolitan planning area's "fair share" of TAP funding based on the area's population vis-à-vis past statewide funding trends in this program. Federal Congestion Mitigation and Air Quality (CMAQ) funding is also assumed to be available to fund bicycle and pedestrian improvements in the metropolitan planning area, along with a typical local match of 20 percent. While the CMAQ program is also competitive, a smaller number of counties in Wisconsin is eligible for the program, giving metropolitan planning area communities a higher probability of getting funding awarded for their projects. On the other hand, it should be noted that priority was given to signal timing projects in the last CMAQ funding cycle, and WisDOT has assumed more authority in selecting CMAQ projects with less input from WDNR and the affected MPOs. The WisDOT Bureau of Planning and Economic Development provided the metropolitan planning areas in southeastern Wisconsin and the Sheboygan metropolitan planning area with annualized dollar amounts of CMAQ funds that were assumed to be available based on past trends in this program. In addition, the early years of the planning period (2019 – 2021) involve a few remaining projects from the Sheboygan County Non-Motorized Transportation Pilot Program (NMTPP) for implementation of bicycle and pedestrian transportation projects in the metropolitan planning area.

Table 9.10 indicates the amount of funding available from the Sheboygan County NMTPP, as well as the amount of TAP and CMAQ funding (and local match for TAP and CMAQ projects) available by implementation periods identified in the *Sheboygan County Pedestrian and Bicycle Comprehensive Plan: 2015 Update* over the 27 year planning horizon. Table 9.10 also indicates total inflation-adjusted bicycle and pedestrian transportation project recommended expenditures by implementation period over the planning horizon. In addition, Table 9.10 indicates operations and maintenance costs for off-road bicycle and pedestrian facilities (both existing off-road facilities as well as off-road facilities recommended in the *Sheboygan County Pedestrian and Bicycle Comprehensive Plan: 2015 Update* and this Update to the *Year 2045 SATP*). Operations and maintenance of on-road bicycle and pedestrian facilities is included in street and highway operations and maintenance presented earlier in this chapter.

Table 9.10: 2019 – 2045 Financial Plan, Recommended Bicycle and Pedestrian Transportation Projects and Operations and Maintenance Costs for Bicycle and Pedestrian Facilities, Sheboygan Metropolitan Planning Area^{1,3}

	2019 - 2028	2029 - 2038	2039 - 2045
Projected Expenditures			
Recommended Bicycle Facility Projects	\$6,310,001	\$3,822,562	\$1,413,551
Recommended Pedestrian Facility Projects	\$936,311	\$1,280,092	\$1,762,617
Bicycle and Pedestrian Facility Operations and Maintenance ²	\$1,273,485	\$1,673,698	\$1,482,328
Total Expenditures	\$8,519,797	\$6,776,352	\$4,658,496
Estimated Funding Resources			
Carryover from Previous Implementation Period	\$0	\$80,676	\$0
Sheboygan County Non-Motorized Transportation Pilot Program (NMTPP)	\$2,425,000	\$0	\$0
Sheboygan County NMTPP Local Match (where applicable)	\$2,350,000	\$0	\$0
Transportation Alternatives Program (TAP)	\$1,460,510	\$1,460,510	\$1,022,357
Required Local Match for TAP Funding	\$365,128	\$365,128	\$255,589
Congestion Mitigation and Air Quality (CMAQ) Program	\$1,599,868	\$3,896,030	\$2,727,221
Required Local Match for CMAQ Funding	\$399,967	\$974,008	\$681,805
Total Funding Resources	\$8,600,473	\$6,776,352	\$4,686,972
Funding Surplus (Shortfall)	\$80,676	\$0	\$28,476

Notes:

Source: Sheboygan County Planning and Conservation Department, 2015 and 2018; Wisconsin Department of Transportation, 2019; and Bay-Lake Regional Planning Commission, 2018 and 2019.

Based on MPO assumptions regarding what could be considered the metropolitan planning area's "fair share" of TAP funding based on the area's population vis-à-vis past statewide funding trends in this program, some \$146,051 in TAP funding is anticipated to be available each year, along with a 20 percent local match (approximately \$36,513); these amounts have **not** been adjusted for inflation per guidance received from the WisDOT Bureau of Transit, Local Roads, Railroads and Harbors. In addition, some \$389,603 in CMAQ funding is anticipated to be available each year, along with a 20 percent local match (approximately \$97,401); once again, these amounts have **not** been adjusted for inflation per guidance received from the WisDOT Bureau of Transit, Local Roads, Railroads and Harbors. It should be noted that CMAQ funding and the corresponding local match were reduced in the 2019 – 2028 implementation period due to the fact that three signal timing projects were recently awarded CMAQ funding in the metropolitan planning area, and much of the assumed CMAQ funding above the \$389,603 per year is being allocated to transit capital projects (see Table 9.9).

Table 9.10 indicates that there is an \$80,676 funding surplus at the end of the 2019 - 2028 implementation period. Table 9.10 also indicates that there is no funding surplus at the end of the 2029 - 2038 implementation period. Finally, Table 9.10 indicates that there is a \$28,476 funding surplus at the end of the 2039 - 2045 implementation period. Operations and

¹Adjusted for Inflation.

²Operations and maintenance costs only pertain to off-road facilities. On-road facility operations and maintenance costs have already been included in the operations and maintenance costs for streets and highways.

³Not all projects in the *Sheboygan County Pedestrian and Bicycle Comprehensive Plan: 2015 Update* have been recommended in the Update to the *Year 2045 SATP*. Projects that cannot be recommended due to fiscal constraint are being identified as "illustrative" projects in the Update to the *Year 2045 SATP*.

maintenance for existing bicycle and pedestrian facilities has been accounted for in the calculations noted above in Table 9.10. That is not to say that there is not greater need for bicycle and pedestrian transportation improvements in the metropolitan planning area. Several million dollars in bicycle and pedestrian facility projects (when adjusted for inflation) have been identified as needed in the metropolitan planning area from 2019 through 2045, including numerous projects recommended in the *Sheboygan County Pedestrian and Bicycle Comprehensive Plan: 2015 Update* that could not be recommended in the Update to the *Year 2045 SATP* due to fiscal constraint.

The \$28,476 in surplus funding identified at the end of the planning period in Table 9.10 can be allocated to bicycle and pedestrian transportation projects recommended in the *Sheboygan County Pedestrian Comprehensive Plan: 2015 Update*, possibly to start one of the "illustrative" bicycle or pedestrian transportation projects identified in Chapter 7, or for other small projects that may be unforeseen at this time. However, if additional shared use paths were to be completed with this funding, some of the surplus would need to be reserved for operations and maintenance over the planning period.

It should be noted that some long-range bicycle and pedestrian transportation projects did not have refined cost estimates, but are merely conceptual dollar amounts for planning purposes. As these projects become more defined, more accurate cost estimates will become available.

A summary table of funding and need for bicycle and pedestrian activities can be found at the end of this chapter.

SUMMARY

Street and Highway Revenue and Cost Summary

The funding expected to be available for street and highway activities, along with street and highway needs of the metropolitan planning area, adjusted for inflation, are summarized in Table 9.11. Currently, the MPO forecasts an average annual surplus of over \$1.3 million, or nearly \$35.2 million over the 27 year planning period.

Table 9.11: Revenue and Cost Summary for Streets and Highways, Sheboygan Metropolitan Planning Area, $2019 - 2045^1$

Anticipated Funding (Over 27 Years)	
Federal and State Funding (project specific) ²	\$367,622,834
General Transportation Aids (GTA - State Funds)	\$84,073,045
Local Operations and Maintenance (Paid with GTA first)	\$399,559,413
Local Operations and Maintenance (Not paid for by GTA)	\$315,486,368
State Trunk Highway (STH) Operations and Maintenance ³	\$97,558,901
Local Match (excludes local preservation projects)	\$58,695,004
Total Funding	\$923,436,152
Yearly Average	\$34,201,339

Anticipated Needs (Over 27 Years)	
Operations and Maintenance (Local and State Trunk Highway)	\$453,973,000
Anticipated Preservation Projects (Other than Recommended)	\$286,817,000
Recommended High Cost Preservation Projects ⁴	\$52,472,000
Recommended Expansion Projects ⁴	\$95,006,000
Total Needs	\$888,268,000
Yearly Average	\$32,898,815

Notes:

2Includes the following funding sources: STH Preservation (for backbone and non-backbone facilities as well as STH bridges); STBG Urban; CHA; LRIP; Federal Safety Programs; and Local Bridges. Excludes GTA and STH O & M because they are accounted for in operations and maintenance. There are no Major STH projects planned within the metropolitan planning area over the planning horizon at this time.

Source: Wisconsin Department of Revenue, 2013, 2014, 2015 and 2016; Wisconsin Department of Transportation, 2018 and 2019; and Bay-Lake Regional Planning Commission, 2019.

¹Adjusted for Inflation.

³Includes STH long-range preservation.

⁴These projects and their costs have been documented in Table 9.6.

Transit Revenue and Cost Summary

The funding expected to be available for transit activities, along with transit needs of the metropolitan planning area, are summarized in Table 9.12. Currently, the MPO forecasts that transit revenues (from all sources) will match transit costs over the 27 year planning period.

Federal Section 5339 capital funding is assumed to be available throughout the planning period, but will not be at nearly the level that was seen with federal transit capital funding in the past, leaving large local shares to fund these projects if other options are not found. Other options to obtain federal revenues to lessen the local share of transit capital funding were discussed earlier in this chapter; these options include the STBG Urban program, the Congestion Mitigation and Air Quality (CMAQ) program, and Section 5307 operating funds.

For purposes of this analysis, CMAQ funds are assumed to be available to fund transit capital projects, since the financial guidance provided by WisDOT indicated that a considerable amount of CMAQ funding should be available in the metropolitan planning area based on trends in the recent past.

Table 9.12: Revenue and Cost Summary for Transit, Sheboygan Metropolitan Planning Area, $2019 - 2045^1$

Anticipated Funding (Over 27 Years)	
FTA Capital Assistance	\$17,220,881
Local Governmental Capital Assistance	\$19,543,119
FTA Operating Assistance	\$40,238,645
HUD CDBG Entitlement Funds	\$1,147,311
State Operating Assistance	\$31,556,042
Local Governmental Operating Assistance	\$23,147,913
Farebox and Miscellaneous Operating Revenue	\$26,555,726
Total Funding	\$159,409,637
Yearly Average	\$5,904,061

Anticipated Needs (Over 27 Years)	
Projected Capital Expenditures	\$36,764,000
Projected Operating and Maintenance Expenditures	\$122,645,637
Total Needs	\$159,409,637
Yearly Average	\$5,904,061
XY	•

Note:

Source: Shoreline Metro, 2018 and 2019; Wisconsin Department of Transportation, 2019; and Bay-Lake Regional Planning Commission, 2018 and 2019.

¹Adjusted for Inflation.

Bicycle and Pedestrian Transportation Revenue and Cost Summary

The funding expected to be available for bicycle and pedestrian transportation activities, as well as a summary of the bicycle and pedestrian transportation needs, are summarized in Table 9.13. Currently, the MPO forecast an average annual surplus of over \$1,000, or over \$28,000 over the 27 year planning period. Illustrative projects which could be partially financed by the small surplus are identified in Chapter 7 of this Update to the *Year 2045 SATP*.

Table 9.13: Revenue and Cost Summary for Bicycle and Pedestrian Facilities, Sheboygan Metropolitan Planning Area, $2019 - 2045^1$

Anticipated Funding (Over 27 Years)	
Sheboygan County Non-Motorized Transportation Pilot Program (NMTPP)	\$2,425,000
Sheboygan County NMTPP Local Match (where applicable)	\$2,350,000
Transportation Alternatives Program (TAP)	\$3,943,377
Required Local Match for TAP Funding	\$985,845
Congestion Mitigation and Air Quality (CMAQ) Program	\$8,223,119
Required Local Match for CMAQ Funding	\$2,055,780
Total Funding	\$19,983,121
Yearly Average	\$740,116

Anticipated Expenditures (Over 27 Years)	
Recommended Bicycle Facility Project Expenditures ²	\$11,546,114
Recommended Pedestrian Facility Project Expenditures ²	\$3,979,020
Projected Bicycle and Pedestrian Facility Operations and Maintenance Expenditures ³	\$4,429,511
Total Expenditures	\$19,954,645
Yearly Average	\$739,061

Notes:

Source: Sheboygan County Planning and Conservation Department, 2015 and 2018; Wisconsin Department of Transportation, 2019; and Bay-Lake Regional Planning Commission, 2018 and 2019.

¹Adjusted for Inflation.

²Not all projects in the *Sheboygan County Pedestrian and Bicycle Comprehensive Plan: 2015 Update* have been recommended in the Update to the *Year 2045 SATP*. Projects that cannot be recommended due to fiscal constraint are being identified as "illustrative" projects in the Update to the *Year 2045 SATP*.

³Operations and maintenance costs only pertain to off-road facilities. On-road facility operations and maintenance costs have already been included in the operations and maintenance costs for streets and highways.

CONCLUSION

Federal surface transportation in recent years (including the FAST Act) has not provided large amounts of federal funding to finance expanded transportation networks or programs. As a result, the Sheboygan MPO has made an effort to more strongly connect the long-range transportation plan and the TIP in order to invest limited resources in the most efficient manner. A stronger connection between this Update to the *Year 2045 SATP* and the TIP gives the Sheboygan MPO the ability to influence investment decisions. The Sheboygan MPO can then program limited funds for the projects determined to be the most important.

Project evaluation measures developed by the Sheboygan MPO are designed to incorporate strategies for the long-range transportation plan into the programming process. It should be noted that these evaluation tools are not an end to themselves, but rather are a guide to assess a project's contribution to meeting overall goals and objectives established for the Sheboygan metropolitan planning area in the Update to the *Year 2045 SATP* and in previous long-range transportation planning efforts. These TIP evaluation criteria appear as Appendix G in most recent TIPs (*Surface Transportation Block Grant (STBG) Urban Project Prioritization Policy*). The Sheboygan MPO revised the TIP evaluation criteria in 2008 to include safety considerations for street and highway, transit capital, and bicycle and pedestrian transportation projects. The Sheboygan MPO also revised the TIP evaluation criteria in 2014 to remove positive "entitlement balances" for local jurisdiction sponsors as a prerequisite to being eligible for STBG Urban funding for a project, increasing the probability that projects will be selected for their merit based on the established criteria.

Within the constraints of this financial plan, the projects listed in Chapter 7 of this Update to the *Year 2045 SATP* are an investment strategy for the Sheboygan metropolitan planning area. The TIP process is the funding tool used to carry out the strategies established in this plan update.

Estimating costs and revenues over 27 years is an imprecise process, and the financial plan will be revisited in each plan update. When funding shortfalls arise in any of the modal components of this Update to the *Year 2045 SATP*, the MPO will seek to secure additional federal and state funds and will examine the possibility of applying additional fees and taxes.

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