# TRANSPORTATION SYSTEM PERFORMANCE INDICATORS

# **INTRODUCTION**

This narrative presents a set of system performance indicators and the base data relevant to the indicators. The purpose of the performance indicators is to provide some quantitative evaluation of the ability of the Sheboygan metropolitan planning area to move toward the goals stated in the Update to the *Year 2045 Sheboygan Area Transportation Plan (SATP)*; these goals can be found in Chapter 4 of the plan (Mission Statement, Goals and Objectives). At this time, the majority of the indicators are not tied to any specific performance goals, and are only intended as a planning tool. Over time, it will become possible and/or desirable to compile realistic performance goals; however, some experience and trend data would be necessary to develop such quantitative goals.

It should be noted that some of the performance indicators in this report were impacted by the COVID-19 pandemic, which started to seriously impact life across Wisconsin in March 2020. This included WisDOT traffic counts, which were to be collected in 2020, but were postponed due to the pandemic; this impacted certain performance indicators in the areas of accessibility and mobility of people and freight (for both streets and highways and freight) and efficient management and operations (system operations and usage). In addition, demand at the park-and-ride locations in Sheboygan County was lower than normal in many cases due to individuals working from home or being unemployed or underemployed during the pandemic. Total operations at the Sheboygan County Memorial Airport were lower in the 12-month period that ended June 10, 2020, than what was observed in the past, and it is likely that the pandemic had something to do with these lower numbers (at least in the spring of 2020).

### PERFORMANCE INDICATORS

#### **Safety**

#### **Streets and Highways**

Indicators: Fatalities, Fatality Rates, Serious Injuries and Serious Injury Rates

Data Source: Traffic Operations and Safety Laboratory, University of Wisconsin - Madison; and

National Highway Traffic Safety Administration, Fatality Analysis Reporting

System (FARS) Encyclopedia

#### Base Data:

*Table 1: Fatalities and Serious Injuries in Sheboygan Metropolitan Planning Area: 2016 – 2020* 

	2016	2017	2018	2019	2020	Average Annual 2016 - 2020
Fatalities	2	6	5	6	3	4.4
Fatality Rate	0.309	0.958	0.788	0.942	0.546	0.711
Serious Injuries	17	20	34	22	36	25.8
Serious Injury Rate	2.629	3.193	5.356	3.454	6.548	4.168

Figure 1: Fatalities

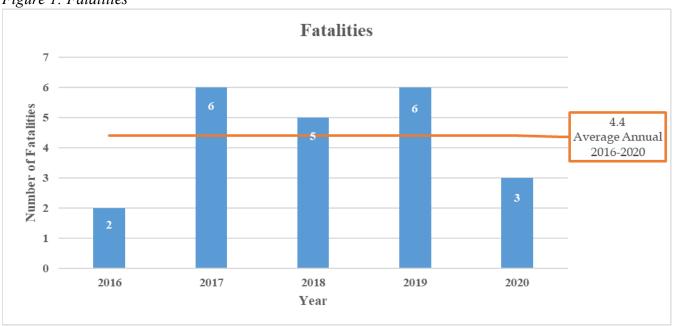


Figure 2: Fatality Rate

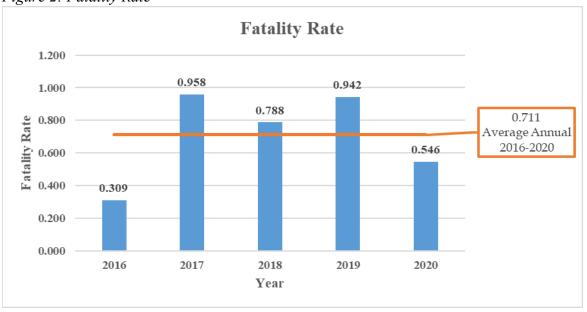


Figure 3: Serious Injuries

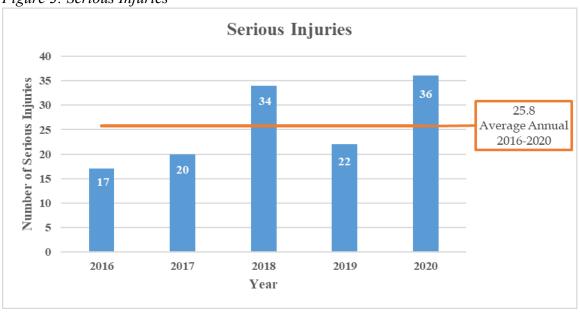
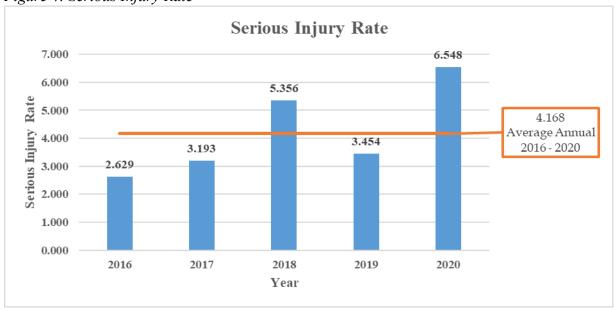


Figure 4: Serious Injury Rate



Indicator: Reportable Crashes by Crash Type

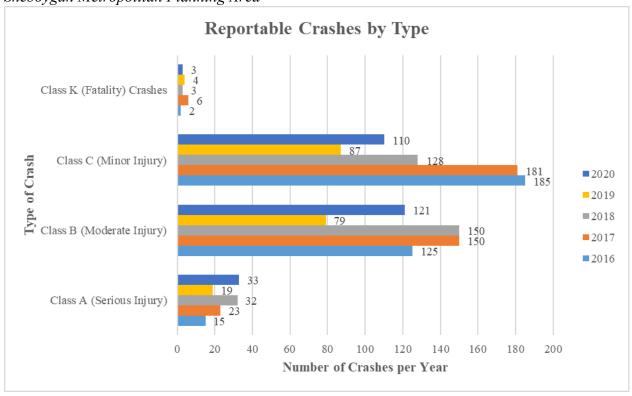
Data Source: Traffic Operations and Safety Laboratory, University of Wisconsin – Madison; and National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS) Encyclopedia

# Base Data:

Table 2: Reportable Crashes by Crash Type in the Communities of the Sheboygan Metropolitan Planning Area: 2016 – 2020

	2016	2017	2018	2019	2020
Total Crashes	1,535	1,702	1,687	1,275	1,536
Class A (Serious Injury)	15	23	32	19	33
Class B (Moderate Injury)	125	150	150	79	121
Class C (Minor Injury)	185	181	128	87	110
Class K (Fatality) Crashes	2	6	3	4	3
Property Damage Only Crashes	1,208	1,342	1,374	1,086	1,269

Figure 5: Reportable Crashes by Type: Fatality and Injury Crashes: Communities of the Sheboygan Metropolitan Planning Area



Reportable Crashes by Type 1,269 1,086 Property Damage Only Crashes 1,374 1,342 1,208 ■2020 2019 **2018** 1,536 **2017** 1,275 2016 Total Crashes 1.687 1,702 1,535 200 400 1,000 1,200 1,600 1,800 1,400 Number of Crashes per Year

Figure 6: Reportable Crashes by Type: Property Damage Only and Total Crashes: Communities of the Sheboygan Metropolitan Planning Area

#### **Transit**

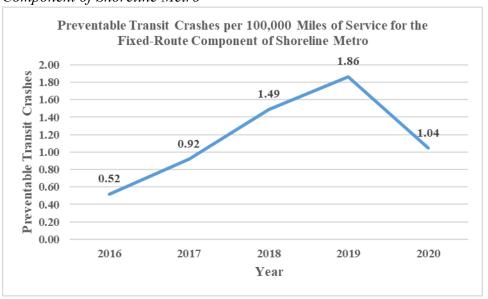
Indicator: Transit crashes per 100,000 miles of service

Data source: Shoreline Metro, 2020

Base Data:

With 5 preventable crashes and 478,994 vehicle revenue miles, there were **1.04** preventable transit crashes per 100,000 miles of service for the fixed-route component of Shoreline Metro in 2020.

Figure 7: Preventable Transit Crashes per 100,000 Miles of Service for the Fixed-Route Component of Shoreline Metro



### **Non-Motorized Travel**

Indicator: Non-Motorized Fatalities and Serious Injuries

Data source: Traffic Operations and Safety Laboratory, University of Wisconsin – Madison; and National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS) Encyclopedia

Base Data:

*Table 3: Non-Motorized Fatalities and Serious Injuries in Sheboygan Metropolitan Planning Area:* 2016 – 2020

Year	2016	2017	2018	2019	2020	Average Annual 2016 - 2020
Bicycle Fatalities	0	0	0	1	0	
Bicycle Serious Injuries	0	1	1	0	0	
Pedestrian Fatalities	0	0	0	2	0	
Pedestrian Serious Injuries	2	3	2	4	5	
Total	2	4	3	7	5	4.2

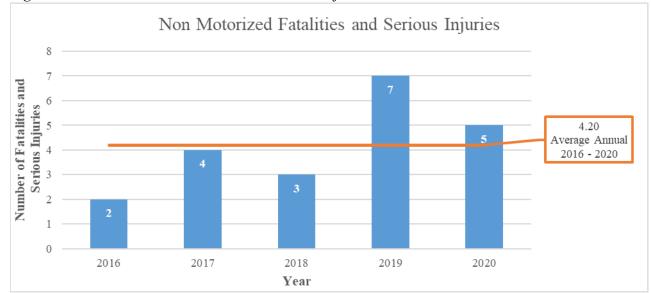


Figure 8: Non-Motorized Fatalities and Serious Injuries

# **Security**

There are no security measures at this time.

# Accessibility and Mobility of People and Freight

# **Streets and Highways**

Indicator: Level of Service

Data Source: WisDOT – Traffic Counts – Wisconsin Highway Traffic Volume Data Publication (Last full publication for Sheboygan County was for data collected in 2017, with some counts off the state trunk highway system collected more sporadically. Traffic counts were originally scheduled for 2020 in Sheboygan County, but were postponed to 2021 because of suppressed travel demand due to the COVID-19 pandemic; WisDOT plans to release the counts in mid-2022. Some 2020 counts from permanent count locations are available, but there are only a few of these in Sheboygan County).

#### Base Data:

Traffic counts can be found at the following website:

https://wisdot.maps.arcgis.com/apps/webappviewer/index.html?id=2e12a4f051de4ea9bc865ec63 93731f8 (Note: This is a statewide interactive map; zoom in to the Sheboygan metropolitan planning area is required).

Data Source: WisDOT, Lane Miles in Model Base Year of 2010

Base Data: There was a total of **1,592.68** lane miles in Sheboygan County (according to the WisDOT Northeast Region travel demand forecast model) in the base year of 2010.

#### **Transit**

Indicator: Percentage of Urbanized Area Served by Transit

Data Source: Shoreline Metro and Bay-Lake Regional Planning Commission (GIS, 0.25-mile buffer around Shoreline Metro fixed routes).

Base Data: The "transit service area" (0.25-mile buffer around Shoreline Metro fixed routes) is currently 19.74 square miles in total, but is 19.39 square miles in the Sheboygan Urbanized Area. The Sheboygan Urbanized Area is 48.69 square miles. Approximately **39.8** percent of the urbanized area is covered by fixed-route transit service.

Percentage of Urbanized Area Covered by Fixed-Route Transit Service

2017

2018

2019

2020

39.8%

39.8%

39.8%

39.8%

2020

39.8%

2021

39.8%

Percentage

Figure 9: Percentage of Urbanized Area Covered by Fixed-Route Transit Service

There is no shared-ride taxi service in the Sheboygan Urbanized Area.

Indicator: Revenue Hours of Service

Data Source: National Transit Database (NTD) or Transit Operator

Base Data: There were **36,986** revenue hours of service for Shoreline Metro fixed-route transit in 2020.

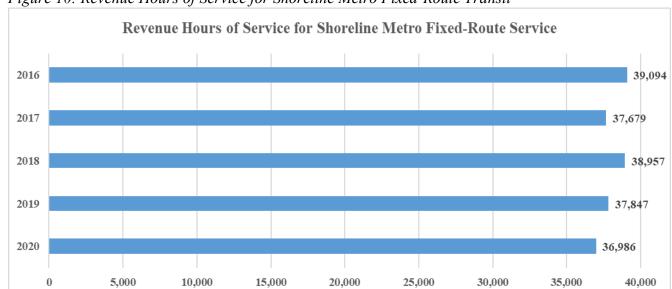


Figure 10: Revenue Hours of Service for Shoreline Metro Fixed-Route Transit

Indicator: Revenue Miles of Service

Data Source: National Transit Database (NTD) or Transit Operator

Base Data: There were **478,994** revenue miles of service for Shoreline Metro fixed-route transit in 2020.

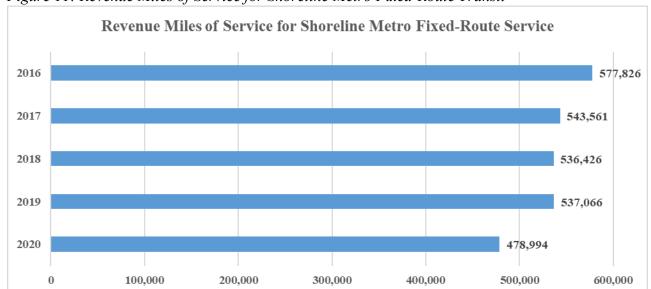


Figure 11: Revenue Miles of Service for Shoreline Metro Fixed-Route Transit

# **Other Passenger Transit Services**

Indicator: Inventory of Other Passenger Transportation Serving the Sheboygan Metropolitan Planning Area

Data Source: 2020 Coordinated Public Transit – Human Services Transportation Plan for Sheboygan County, Wisconsin, Table Listing Private Transportation Providers in Sheboygan County (Updated in January 2022)

# Base Data:

Table 4: Private Transportation Providers in Sheboygan County

Company	Type(s) of Service Provided
Airport Connection and GO Riteway	Airport Limousine Service to and from Mitchell
6970 South 6th Street	International Airport in Milwaukee and to and from
Milwaukee, WI 53154	Chicago's O'Hare and Midway Airports, and Service
	Connecting the City of Sheboygan to Lakeshore
	Technical College's Cleveland campus
All Star Taxi	Taxi Service
1214 South 9th Street	
Sheboygan, WI 53081	
Custom Care and Transport Service, LLC	Accessible Transportation
N3803 Horace Mann Road	
Sheboygan Falls, WI 53085	
Discovery Coach, Inc.	Charter, Tour and School Bus Services
1139 Pennsylvania Avenue	
Sheboygan, WI 53081	
Harms' Transportation	School Bus Service
N7940 State Highway 42	
Howards Grove, WI 53083	
Heidenreiter Bus Service, Inc.	School Bus Service
400 Cleveland Street	
Sheboygan Falls, WI 53085	
Indian Trails Bus Lines	Intercity Bus Service
828 Pennsylvania Avenue	
Sheboygan, WI 53081	
Johnson School Bus Service	School Bus Service
808 Valley Road	
Plymouth, WI 53073 AND	
220 North Commerce Street	
Cedar Grove, WI 53013	
Lakeshore Transportation	Accessible Transportation
N5806 County Highway M	
Plymouth, WI 53073	

Table 4: Private Transportation Providers in Sheboygan County (Continued)

Company	Type(s) of Service Provided
Lamers Bus Lines (Bought Otte Bus Service)	Charter Bus Service, and School Bus Service in
2407 South Point Road	Some Locales
Green Bay, WI 54313	
Megabus/Coach USA (Wisconsin Coach Lines)	Intercity Bus Service
1520 Arcadian Avenue	
Waukesha, WI 53186	
Orange Cross Ambulance	Ambulance Service
1919 Ashland Avenue	
Sheboygan, WI 53081	
Plymouth City Ambulance	Ambulance Service
111 East Main Street	
Plymouth, WI 53073	
Random Lake Ambulance	Ambulance Service
718 North Spring Street	
Random Lake, WI 53075	
Sheboygan City Fire Department	Ambulance Service
1326 North 25th Street	
Sheboygan, WI 53081	
Santana's Limousine	Limous ine Service
1019 Erie Avenue	
Sheboygan, WI 53081	
Stardust Limousine	Limous ine Service
17023 County Road F	
Kiel, WI 53042	
The Best Taxi	Taxi Service
611 South 15th Street	
Sheboygan, WI 53081	
Transtar Medical Transport	Accessible Transportation
120 West Main Street, PO Box 509	
Campbellsport, WI 53010	

In addition, the Sheboygan metropolitan planning area is served by informal "taxi" style transportation services, such as Uber and Lyft. These services are not listed in Table 4 because they do not typically have a specific location (street address), but are accessed by using an application on one's smart phone. Uber can be found at: <a href="https://www.uber.com/">https://www.uber.com/</a>, while Lyft can be found at: <a href="https://www.lyft.com/rider">https://www.lyft.com/rider</a>(.) There is also a taxi service in Sheboygan known as Blue Cab; while this service does not list a business address, they can be contacted by phone and are also active on Facebook.

### **Bicycle Facilities**

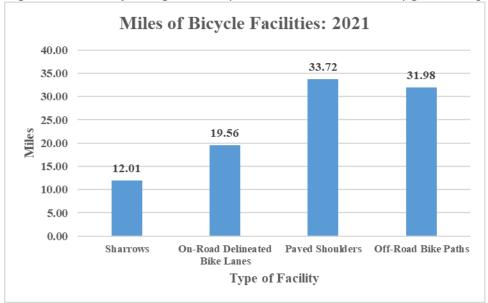
Indicator: Bicycle Facilities (Miles)

Data Source: Sheboygan County Planning and Conservation Department, *Sheboygan County Pedestrian and Bicycle Comprehensive Plan: 2015 Update*, and Bay-Lake Regional Planning Commission (GIS calculations and review of recent Transportation Improvement Programs)

Base Data: Within the Sheboygan metropolitan planning area, there are approximately:

- 12.01 miles of "sharrows" (marked roadways where bicyclists use the road with motorists, with no separation of use for bicyclists);
- 19.56 miles of on-road delineated bike lanes;
- 33.72 miles of paved shoulders; and
- 31.98 miles of off-road bike paths (shared-use trails).

Figure 12: Miles of Designated Bicycle Facilities in the Sheboygan Metropolitan Planning Area



This involves a total of approximately 97.27 miles of bicycle facilities in the Sheboygan metropolitan planning area. Many facilities have been built since 2007 through the Sheboygan County Non-Motorized Transportation Pilot Program (NMTPP), with the final project to be built in 2022. It should be noted that approximately 0.58 miles of shared-use trails were built in 2019 involving the construction of a multiuse pathway in the Alliant Energy utility corridor on the south side of the City of Sheboygan from County Highway OK/South Business Drive to South 18<sup>th</sup> Street. No additional facilities have been built in recent years.

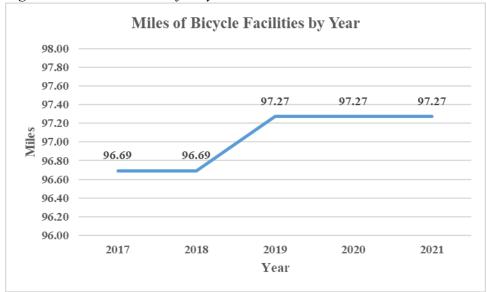


Figure 13: Overall Miles of Bicycle Facilities: 2017 – 2021

# **Freight**

Indicators: Levels of Service for Designated Truck Routes and for NHS Routes

Data Sources: WisDOT – Traffic Counts – Wisconsin Highway Traffic Volume Data Publication (Last full publication for Sheboygan County was for data collected in 2017, with some counts off the state trunk highway system collected more sporadically. Traffic counts were originally scheduled for 2020 in Sheboygan County, but were postponed to 2021 because of suppressed travel demand due to the COVID-19 pandemic; WisDOT plans to release the counts in mid-2022. Some 2020 counts from permanent count locations are available, but there are only a few of these in Sheboygan County), and Maps 5.12 (Freight Routes and Terminals) and 5.16 (Enhanced National Highway Base System) of the Update to the *Year 2045 SATP*, which can be found at:

https://baylakerpc.maps.arcgis.com/apps/MinimalGallery/index.html?appid=64ea766ad7bf4b2a95d3cfb9190d6e0f#viewer=0e29727611734b3893c47d8d81857194(.)

Traffic counts can be found at the following website:

https://wisdot.maps.arcgis.com/apps/webappviewer/index.html?id=2e12a4f051de4ea9bc865ec63 93731f8 (Note: This is a statewide interactive map; zoom in to the Sheboygan metropolitan planning area is required).

**Indicator: Truck Counts** 

Data Source: WisDOT – Vehicle Classification Data - Traffic Count Data – Wisconsin Vehicle Classification Data Publication.

#### **Environment**

# Air Quality

Indicator: Monitored levels of criteria pollutants: ozone, PM 2.5, etc.

Data Source: USEPA

On May 21, 2012, USEPA designated Sheboygan County a marginal nonattainment area for ground-level ozone under the 2008 eight-hour standard for that pollutant. The effective date for that designation was July 20, 2012. On April 6, 2017, USEPA reclassified Sheboygan County as a moderate nonattainment area for ground-level ozone under the 2008 eight-hour standard.

In September of 2017, the Wisconsin Department of Natural Resources (WDNR) Bureau of Air Management submitted the *Attainment Plan for the Sheboygan County, Wisconsin, 8-Hour Ozone Nonattainment Area* to the USEPA, and the USEPA found the motor vehicle emission budgets (MVEBs) in that document to be adequate for transportation conformity purposes in January 2018. USEPA designated all of Sheboygan County to be in attainment of the 2008 "eight-hour" ozone standard based on this plan in July 2020.

Recognizing that ozone concentrations are a problem that primarily impacts the Lake Michigan shoreline, the WDNR worked with local officials and with the USEPA to attempt to decrease the size of the nonattainment area from the entirety of Sheboygan County to the eastern portion of the county. These efforts took place in 2013 and 2014. The WDNR also placed a second air monitor between Sheboygan and Howards Grove to measure the effect that proximity to Lake Michigan has on ozone levels in warm weather.

USEPA designated nonattainment areas for ground-level ozone under the more stringent 2015 eight-hour standard for that pollutant in a letter dated December 20, 2017. In that letter, a portion of Sheboygan County (the eastern portion nearest Lake Michigan known as the "shoreline area") was designated a marginal nonattainment area under this new standard. This designation took effect on April 30, 2018. There were court challenges to the area covered by this designation; the District of Columbia Circuit Court remanded to the USEPA, but did not vacate, these designations for 16 counties associated with nine nonattainment areas located in seven states. In response, the USEPA reevaluated the designations for the remanded counties and revised the designations and/or boundaries of 13 counties associated with six nonattainment areas in four states; one of these was Sheboygan County, Wisconsin. The expanded boundary of the "shoreline" nonattainment area within Sheboygan County took effect on July 14, 2021. Future conformity analyses will examine mobile sector ozone precursor pollutants in the "shoreline" nonattainment area as well as for the "inland" portion of Sheboygan County, which is considered a maintenance area for the 2008 eight-hour standard.

#### Streets and Highways

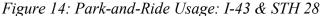
Indicator: Designated park-and-ride capacity and use

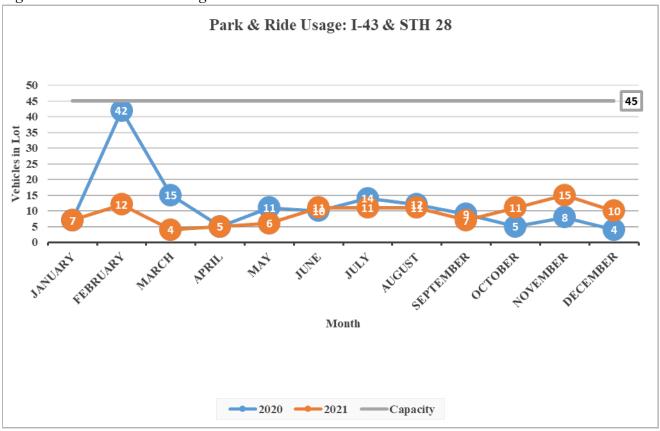
Data Source: WisDOT Northeast Region office – Park-and-ride capacity and use statistics (total spaces available per average weekday, spaces occupied per average weekday, and percent in use per average weekday)

#### Base Data:

There are two park-and-ride lots within the Sheboygan metropolitan planning area:

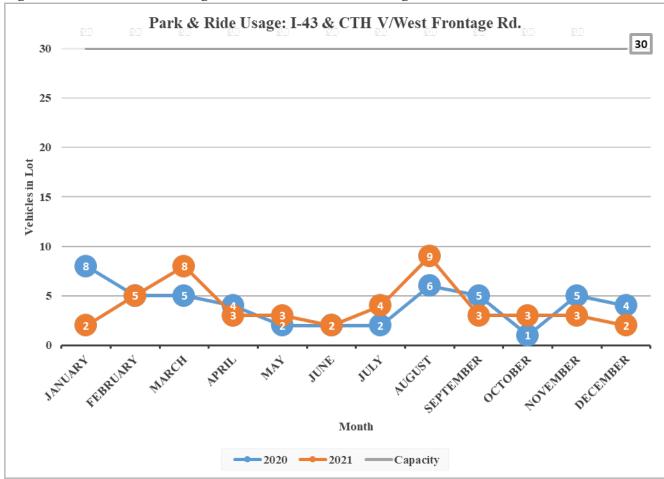
The most used lot is the southwest quadrant of the interchange of Interstate Highway 43 and State Highway 28, and is situated east of County Highway A across from Deer Trace Shopping Center. This lot has a capacity of 45 motor vehicles. In 2020, this lot's average volume was 12, giving this lot an average volume-to-capacity ratio of 0.27. This lot was below capacity every month in 2020, with the peak month in 2020 being February, with 42 vehicles using the lot. In 2021, this lot's average volume was 9, giving this lot an average volume-to-capacity ratio of 0.20. This lot was also below capacity every month in 2021, with the peak month in 2021 being November, with 15 vehicles using the lot After February 2020, this lot had relatively low demand, likely due to the COVID-19 pandemic.





• A second lot is located in the northwest quadrant of the interchange of Interstate Highway 43 and County Highway V, and is situated along the Interstate's west frontage road. This lot has a capacity of 30 motor vehicles, and also includes bike racks for six bicycles. In 2020, this lot's average volume was 4, giving this lot an average volume-to-capacity ratio of 0.13. This lot was below capacity every month in 2020, with the peak month in 2020 being January, with 8 vehicles using the lot. In 2021, this lot's average volume was also 4, again giving this lot an average volume-to-capacity ratio of 0.13. Again, this lot was below capacity every month in 2021, with the peak month in 2021 being August, with 9 vehicles using the lot.

Figure 15: Park-and-Ride Usage: I-43 & CTH V/West Frontage Road



• A third park-and-ride lot is located in Sheboygan County but outside the metropolitan planning area at the Interstate Highway 43/County Highway AA interchange around the Village of Oostburg. This lot has a capacity of 30 motor vehicles. In 2020, this lot's average volume was 5, giving this lot an average volume-to-capacity ratio of 0.17. This lot was below capacity every month in 2020, with the peak month in 2020 being March, with 10 vehicles using the lot. In 2021, this lot's average volume was 4, giving this lot an average volume-to-capacity ratio of 0.13. This lot was below capacity every month in 2021, with the peak months in 2021 being January and July, with 6 vehicles using the lot

in each of those months. Usage decreased in most months after the first quarter of 2020 likely due to the COVID-19 pandemic.

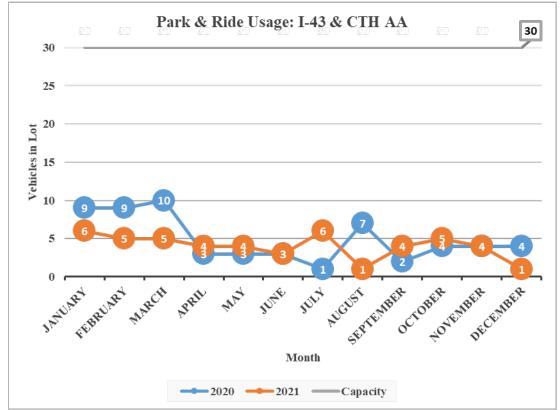


Figure 16: Park-and-Ride Usage: I-43 & CTH AA

### **Intercity Bus**

Indicator: Frequency of Service/Number of Departures per Day

Data Source: Bus Operators

Base Data (as of January 2022):

- Indian Trails Bus Lines provides one northbound departure (8:45 p.m.) and one southbound departure (6:55 a.m.) each day.
- Megabus/Coach USA also provides one northbound departure (11:35 a.m.) and one southbound departure (4:00 p.m.) each day.

Each bus line's trips to Milwaukee serve the Amtrak intermodal station. In addition, Megabus/Coach USA serves General Mitchell International Airport in Milwaukee.

Jefferson Bus Lines served the Sheboygan area through December 2021, but Megabus/Coach USA took over this route as of January 1, 2022. Lamers Connect also provided weekend transportation service to the Sheboygan area, but this has since discontinued.

Indicator: Demand for Intercity Bus Service

Data Source: WisDOT Bureau of Transit, Local Roads, Railroads and Harbors, Transit Section Base Data:

- Indian Trails Bus Lines Calendar Year 2020: There were 364 boardings and 479 alightings in Sheboygan. Information on how many of these were northbound and southbound boardings and alightings was not available, and there was no overall travel demand information provided for the larger corridor in which this route runs. There were no boardings or alightings from April through July due to the COVID-19 pandemic.
- Indian Trails Bus Lines January through October 2021: There were 603 boardings and 829 alightings in Sheboygan. Information on how many of these were northbound and southbound boardings and alightings was not available, and there was no overall travel demand information provided for the larger corridor in which this route runs.
- Jefferson Bus Lines Calendar Year 2020: For northbound runs, there were 147 boardings and 274 alightings in Sheboygan. For southbound runs, there were 203 boardings and 184 alightings in Sheboygan. There was a total of 7,062 trips provided on all northbound runs for the entire service corridor, while there was a total of 6,122 trips provided on all southbound runs for the entire service corridor. Demand was depressed for a few months in 2020 due to the COVID-19 pandemic.
- Jefferson Bus Lines January through October 2021: For northbound runs, there were 121 boardings and 258 alightings in Sheboygan. For southbound runs, there were 234 boardings and 146 alightings in Sheboygan. There was a total of 8,039 trips provided on all northbound runs for the entire service corridor, while there was a total of 6,408 trips provided on all southbound runs for the entire service corridor.

### **Intercity Rail**

Not applicable (although Indian Trails Bus Lines and Megabus/Coach USA both connect Sheboygan to the intermodal station in Milwaukee served by Amtrak).

#### Air

Indicator: Airport volume – total operations

Data Source: Sheboygan County Memorial Airport and Federal Aviation Administration (FAA)

Base Data:

The Sheboygan County Memorial Airport does not offer commercial air carrier service. However, there were approximately **43,200** total annual operations (takeoffs and landings) in the 12-month period that ended on June 10, 2020 (the last period in which data have been made available). Of these, about 38,000 operations involved general aviation (20,000 were local operations and 18,000 were itinerant operations), while about 5,000 operations involved air taxi services. In addition to the civilian operations, some 200 military air operations took place at the Sheboygan County Memorial Airport during this period. It is suspected that the COVID-19

pandemic lowered these numbers relative to the approximately 65,000 total annual operations that were observed in the 12-month period that ended on August 25, 2017.

# **Freight**

Indicator: Tonnage by Mode, Sheboygan County

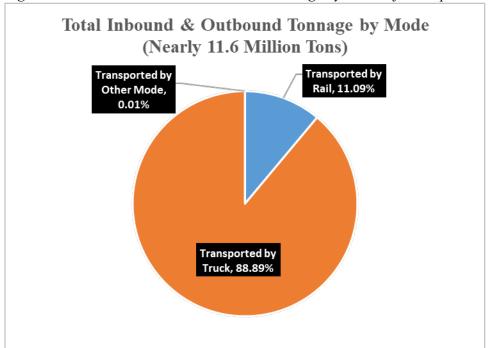
Data: Commodity Flow Survey, WisDOT (IHS TRANSEARCH, 2019)

Base Data:

For total inbound, outbound and internal tonnage in 2019:

- 1,284,304 tons of freight (11.09 percent) were transported by rail;
- 10,290,808 tons of freight (88.89 percent) were transported by truck; and
- 1,664 tons of freight (0.01 percent) were transported by other modes (water or unknown).

Figure 17: Total Inbound and Outbound Tonnage by Mode of Transport, 2019



For inbound tonnage in 2019:

- 1,268,184 tons of freight (16.88 percent) were transported by rail;
- 6,242,442 tons of freight (83.10 percent) were transported by truck; and
- 1,502 tons of freight (0.02 percent) were transported by other modes.

For outbound tonnage in 2019:

- 16,120 tons of freight (0.42 percent) were transported by rail;
- 3,861,207 tons of freight (99.58 percent) were transported by truck; and
- 162 tons of freight (negligible percentage) were transported by other modes.

For internal tonnage in 2019, all 187,159 tons (100.00 percent) were transported by truck.

# **Efficient Management and Operations (System Operations and Usage)**

Indicator: Traffic Volume

Data Source: WisDOT – Traffic Counts - Wisconsin Highway Traffic Volume Data Publication (Last full publication for Sheboygan County was for data collected in 2017, with some counts off the state trunk highway system collected more sporadically. Traffic counts were originally scheduled for 2020 in Sheboygan County, but were postponed to 2021 because of suppressed travel demand due to the COVID-19 pandemic; WisDOT plans to release the counts in mid-2022. Some 2020 counts from permanent count locations are available, but there are only a few of these in Sheboygan County).

Base Data:

Traffic counts can be found at the following website:

https://wisdot.maps.arcgis.com/apps/webappviewer/index.html?id=2e12a4f051de4ea9bc865ec63 93731f8 (Note: This is a statewide interactive map; zoom in to the Sheboygan metropolitan planning area is required).

Indicator: Travel Speed

Data Source: WisDOT, Overall Average Travel Speed in Model Base Year of 2010

Base Data: Overall average travel speed was **46.13** miles per hour in the model base year of 2010.

Indicator: Deficiency Status of Lane Miles

Data Source: WisDOT, Deficiency Status of Lane Miles in Model Base Year of 2010

Base Data: In the model base year of 2010, there were 1,592.68 lane miles. Of these:

- 1,563.08 lane miles (98.14 percent) were at levels of service (LOS) A, B or C;
- 27.60 lane miles (1.73 percent) were at LOS D;
- 2.00 lane miles (0.13 percent) were at LOS E; and
- No lane miles (0.00 percent) were at LOS F.

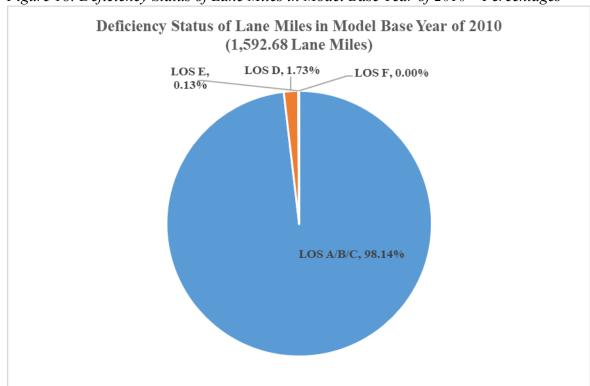


Figure 18: Deficiency Status of Lane Miles in Model Base Year of 2010 – Percentages

(Note: LOS statistics are subject to revision as the travel demand forecast model is further refined).

### **Transit**

Indicator: Passengers per revenue hour of operation

Data Source: Shoreline Metro, 2020

Base Data: There were **10.09** passengers per revenue hour of operation for the fixed-route transit component of Shoreline Metro in 2020. The decrease from 2019 was largely due to effects from the COVID-19 pandemic.



Figure 19: Passengers per Revenue Hour: Shoreline Metro Fixed-Route Service

Indicator: Passengers per revenue mile of operation

2017

Data Source: Shoreline Metro, 2020

2016

Base Data: There were **0.78** passengers per revenue mile of operation for the fixed-route transit component of Shoreline Metro in 2020. Again, the decrease from 2019 was largely due to effects from the COVID-19 pandemic.

2018

Year

2019

2020

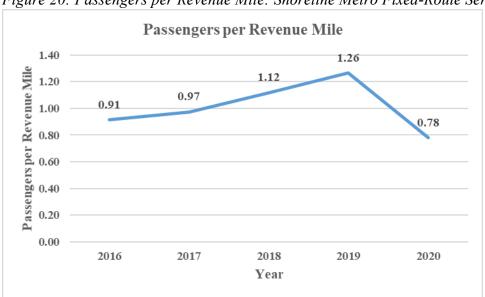


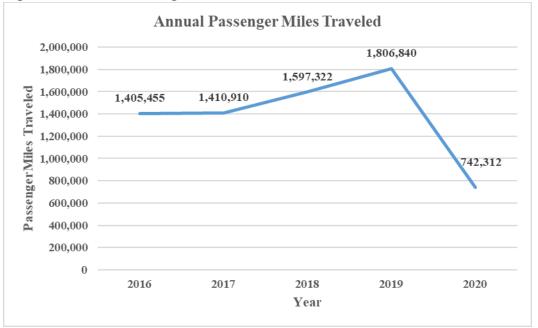
Figure 20: Passengers per Revenue Mile: Shoreline Metro Fixed-Route Service

Indicator: Passenger miles traveled

Data Source: Shoreline Metro, 2020

Base Data: There were **742,312** annual passenger miles traveled for the fixed-route transit component of Shoreline Metro in 2020. The significant decrease from 2019 was due to two factors: lower ridership due to the COVID-19 pandemic; and a lower average trip length from previous years (1.99 miles versus 2.66 miles).

Figure 21: Annual Passenger Miles Traveled: Shoreline Metro Fixed-Route Service



Indicator: Number of passenger trips

Data Source: Shoreline Metro, 2020

Base Data: There were **373,021** unlinked passenger trips for the fixed-route transit component of Shoreline Metro in 2020. Once again, the decrease from 2019 was largely due to effects from the COVID-19 pandemic.



Figure 22: Unlinked Passenger Trips: Shoreline Metro Fixed-Route Service

#### **System Preservation**

#### Streets and Highways

Indicator: Pavement condition – number of miles and percentage of total miles in each category Data Source: WISLR for local system (PASER ratings) and WisDOT for the state system (PCI ratings)

#### Base Data:

PASER data were compiled for the two cities, two villages and six towns as well as for the county trunk highway network in the Sheboygan metropolitan planning area. Most local jurisdictions used 2021 as their base inventory, while the City of Sheboygan Falls had a mix of 2020 and 2021 entries in its most current pavement ratings, and the Village of Kohler had a mix of 2019 and 2021 in its most current pavement ratings.

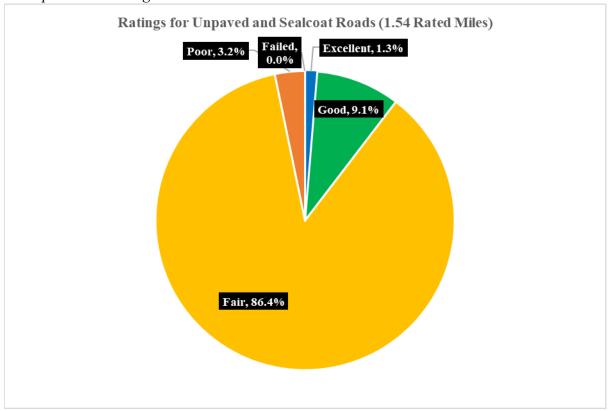
There were three small segments (total of 370 feet) of unimproved road in the communities of the Sheboygan metropolitan planning area. This segment was not rated (normal rating scale for this type of facility is 1 to 4, with "1" being poor and "4" being very good).

There were five small segments (total of 1,478 feet) of brick or block road in the communities of the Sheboygan metropolitan planning area. On a scale from 1 to 4 (with "1" being poor and "4" being very good), these segments were all rated a "2" (fair condition).

There were 3,701 feet (0.70 miles) of roadway with an "unknown" pavement type or rating in the communities of the Sheboygan metropolitan planning area.

There were 1.54 miles of unpaved (gravel) and sealcoat roads in the communities of the Sheboygan metropolitan planning area. These roads are rated on a scale from 1 to 5 (with "1" being failed and "5" being excellent). The distribution of ratings for unpaved and sealcoat roads in the communities of the Sheboygan metropolitan planning area was as follows:

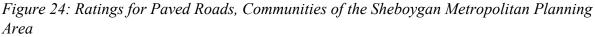
Figure 23: Ratings for Unpaved and Sealcoat Roads, Communities of the Sheboygan Metropolitan Planning Area

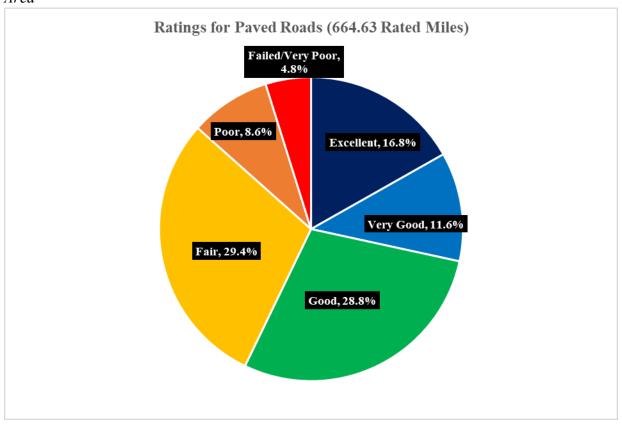


- Rating of 1 (Failed) = 0 feet, or 0.00 miles (0.0 percent);
- Rating of 2 (Poor) = 264 feet, or 0.05 miles (3.2 percent);
- Rating of 3 (Fair) = 7,022 feet, or 1.33 miles (86.4 percent);
- Rating of 4 (Good) = 739 feet, or 0.14 miles (9.1 percent); and
- Rating of 5 (Excellent) = 106 feet, or 0.02 miles (1.3 percent).

#### Average Rating = 3.08

There were approximately 666.22 miles of paved (typically asphalt and concrete) roads in the communities of the Sheboygan metropolitan planning area. Of these, 664.63 miles were rated. These roads are rated on a scale from 1 to 10 (with "1" being failed and "10" being excellent). The distribution of ratings for paved roads in the communities of the Sheboygan metropolitan planning area was as follows:





- Rating of 1 (Failed) = 30,870 feet, or 5.85 miles (0.9 percent);
- Rating of 2 (Very Poor) = 138,878 feet, or 26.30 miles (3.9 percent);
- Rating of 3 (Poor) = 301,030 feet, or 57.01 miles (8.6 percent);
- Rating of 4 (Fair) = 535,517 feet, or 101.42 miles (15.2 percent);
- Rating of 5 (Fair) = 496,996 feet, or 94.13 miles (14.2 percent);
- Rating of 6 (Good) = 421,420 feet, or 79.81 miles (12.0 percent);
- Rating of 7 (Good) = 587,749 feet, or 111.32 miles (16.8 percent);
- Rating of 8 (Very Good) = 406,761 feet, or 77.04 miles (11.6 percent);
- Rating of 9 (Excellent) = 366,912 feet, or 69.49 miles (10.4 percent); and
- Rating of 10 (Excellent) = 223,110 feet, or 42.26 miles (6.4 percent).

### Average Rating = 6.06

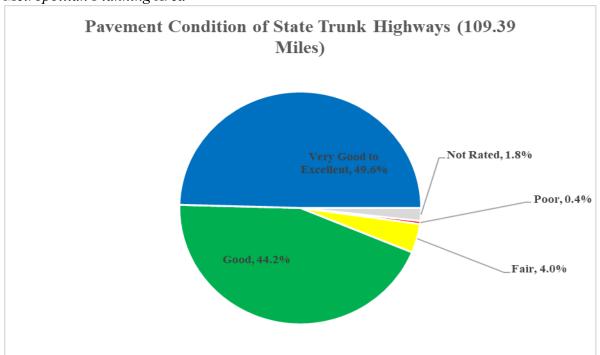
Analysis for individual communities in the Sheboygan metropolitan planning area is also available upon request.

WisDOT has also supplied the MPO with Pavement Condition Index (PCI) data for the state trunk highway system. This data was last collected in 2021. MPO staff has tabulated a summary of the condition of state trunk highways that pass through the two cities, two villages and six towns in the Sheboygan metropolitan planning area. "A PCI is calculated based on the results of a detailed pavement distress survey that identifies pavement distress type, distress severity, and distress quantity. The PCI is a numerical rating that ranges from 0 for a totally failed pavement to 100 for a pavement in perfect condition."

There are approximately 109.39 miles of state trunk highway in the communities of the Sheboygan metropolitan planning area. Of these:

- 2.00 miles (1.8 percent) were not rated;
- No miles were rated as "failed" (0 to 9.99 points);
- No miles were rated as "serious" (10 to 24.99 points);
- No miles were rated as "very poor" (25 to 39.99 points);
- 0.46 miles (0.4 miles) were rated as "poor" (40 to 54.99 points);
- 4.39 miles (4.0 percent) were rated as "fair" (55 to 69.99 points);
- 48.33 miles (44.2 percent) were rated as "good" (70 to 84.99 points); and
- 54.21 miles (49.6 percent) were rated as "very good to excellent" (85 to 100 points).

Figure 25: State Trunk Highway Pavement Condition, Communities of the Sheboygan Metropolitan Planning Area



Note: No state trunk highway segments in the communities of the Sheboygan metropolitan planning area were rated as "failed," "serious" or "very poor."

Indicator: Structural condition of bridges

Data Source: WisDOT, Sufficiency Ratings

Base Data:

Bridges typically are assessed using a 0- to 100-point scale known as a "sufficiency rating." WisDOT considers bridges with a sufficiency rating of 0 to 49.99 as being "deficient," while bridges with a sufficiency rating of 50 to 79.99 are considered to be in "fair" condition, and bridges with a sufficiency rating of 80 and higher are "sufficient," or in good condition.

There are 138 bridges identified within the communities of the Sheboygan metropolitan planning area. Of these, 103 bridges (74.6 percent) are "sufficient," or in good condition. Another 26 bridges (18.8 percent) are in "fair" condition. Three bridges (2.2 percent) were identified as being "deficient," or in poor condition. Six bridges (4.4 percent) were of "unknown" condition.

Figure 26: Bridge Conditions by Rating within the Communities of the Sheboygan Metropolitan Planning Area

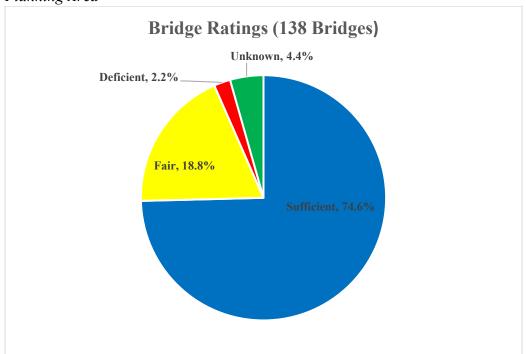


Table 5 identifies the bridges that are considered "deficient" (eligible for replacement).

Table 5: Deficient Bridges: Communities of the Sheboygan Metropolitan Planning Area

WisDOT Bridge ID Number	Street or Highway	Over (Stream/Road)	Location	Sufficiency Rating
P-59-930	Woodland Road	Branch of the Sheboygan River	Town of Sheboygan Falls	28.5
P-59-069	County Highway OO	Onion River	Town of Lima	34.5
P-59-921	County Highway W	Branch of the Onion River	Town of Lima	36.8

Table 6 identifies bridges that are in "fair" condition (eligible for rehabilitation but not replacement). Bridges listed in **bold** have been completed, are programmed in the TIP/STIP, or are in progress, while bridges in red are those recently completed bridges where MPO staff question the listed sufficiency rating of the bridge.

Table 6: Bridges in Fair Condition\*: Communities of the Sheboygan Metropolitan Planning Area

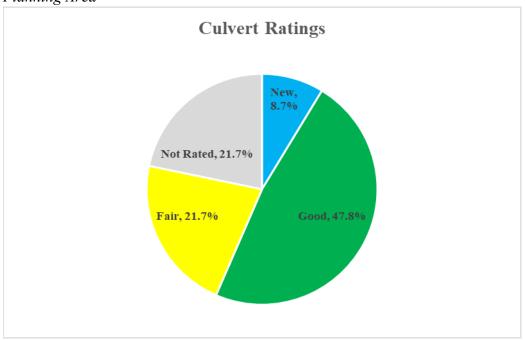
WisDOT Bridge ID Number	Street or Highway	Over (Stream/Road)	Location	Sufficiency Rating
P-59-922	County Highway PP	Branch of the Mullet River	Town of Sheboygan Falls	50.2
P-59-701	Roosevelt Avenue	Pigeon River	Village of Howards Grove	55.1
B-59-009	Lakeshore Road (formerly County	Sevenmile Creek	Town of Mosel	56.2
	Highway LS)			
P-59-112	Willow Road	Otter Creek	Town of Sheboygan Falls	57.0
P-59-705	Broadway Street	Onion River	City of Sheboygan Falls	60.1
B-59-100	South Business Drive	Rail Line	City of Sheboygan	61.1
P-59-124	County Highway TT	Sheboygan River	Town of Sheboygan Falls	63.0
B-59-030	County Highway J	Sheboygan River	Town of Sheboygan Falls	64.2
P-59-114	Willow Road	Mullet River	Town of Sheboygan Falls	67.8
P-59-135	County Highway EE/Lakeshore Drive	Fisherman's Creek	Town of Wilson	70.6
B-59-018	Interstate Highway 43 (Southbound)	Pigeon River	Town of Sheboygan	72.1
B-59-154	South 8th Street	Sheboygan River	City of Sheboygan	72.5
P-59-118	Alpine Road	Sheboygan River	Town of Sheboygan Falls	72.8
P-59-139	Camp Riversite Road	Onion River	Town of Lima	73.8
B-59-096	Georgia Avenue	Old Rail Line	City of Sheboygan	74.3
B-59-105	State Highway 23/Erie Avenue	Rail Line	City of Sheboygan	74.8
B-59-121	Rio Road	Sheboygan River	Town of Sheboygan Falls	74.9
P-59-120	Sumac Road	Mullet River	Town of Lima	75.5
B-59-136	Playbird Road	Pigeon River	Town of Sheboygan Falls	75.8
B-59-294	Interstate Highway 43	Branch of the Sheboygan River	Town of Sheboygan	75.9
P-59-092	Garton Road	Sheboygan River	Town of Herman	76.4
B-59-033	State Highway 28/North 14th Street	Sheboygan River	City of Sheboygan	76.5
P-59-914	Lakeshore Road (formerly County	Pigeon River	City of Sheboygan	76.9
	Highway LS)			
P-59-130	West Evergreen Drive	Black River	Town of Wilson	77.8
B-59-023	Mueller Road	Interstate Highway 43	Town of Sheboygan	77.9
B-59-064	Pennsylvania Avenue	Sheboygan River	City of Sheboygan	79.9

<sup>\*</sup>Bridges listed in **bold** have been completed, are programmed in the TIP/STIP, or are in progress. Bridges listed in red are those recently completed bridges where MPO staff question the listed sufficiency rating of the bridge.

Culverts are rated on a scale from 0 to 9, with "0" meaning that the culvert has failed, with "1" or "2" meaning that the culvert is in critical condition, with "3" or "4" meaning that the culvert is in poor condition, with "5" or "6" meaning that the culvert is in fair condition, with "7" or "8" meaning that the culvert is in good condition, and with "9" mainly involving new culverts.

There are 23 culverts identified on various roads and highways within the communities of the Sheboygan metropolitan planning area. Of these, two culverts (8.7 percent) are new, 11 culverts (47.8 percent) are in good condition, and five culverts (21.7 percent) are in fair condition. No culverts are in poor, critical or failed condition. An additional five culverts (21.7 percent) were not rated.

Figure 27: Culvert Conditions by Rating within the Communities of the Sheboygan Metropolitan Planning Area



Note: No culverts in the communities of the Sheboygan metropolitan planning area were rated as being in poor, critical or failed condition.

Table 7 identifies the 18 culverts that were rated in the communities of the Sheboygan metropolitan planning area.

Table 7: Condition of Rated Culverts: Communities of the Sheboygan Metropolitan Planning Area

WisDOT Structure ID Number	Street or Highway	Over (Stream)	Location	Culvert Rating
C-59-080	State Highway 32	Unnamed Creek	Town of Lima (1.37 miles	5 (Fair)
			North of County Highway V)	
C-59-2916	State Highway 32	Unnamed Creek	Town of Lima (0.38 miles	5 (Fair)
			North of County Highway OO)	
C-59-032	Interstate Highway 43	Unnamed Creek	Town of Wilson (0.52 miles	6 (Fair)
			North of County Highway KK)	
C-59-042	Interstate Highway 43	Old Plank Road Trail	Town of Sheboygan (0.51 miles	6 (Fair)
			North of County Highway PP)	
C-59-2655	Wilson Lima Road	No Name Creek	Town of Lima (0.51 miles	6 (Fair)
			North of County Highway W)	
C-59-038	Interstate Highway 43	Unnamed Creek	Town of Mosel (1.21 miles	7 (Good)
			North of County Highway MM)	
C-59-041	Interstate Highway 43	Unnamed Creek	Town of Sheboygan (0.44 miles	7 (Good)
			North of State Highway 42)	
C-59-048	Interstate Highway 43	Unnamed Creek	Town of Sheboygan (0.32 miles	7 (Good)
			North of State Highway 42)	
C-59-049	Interstate Highway 43	Unnamed Creek	Town of Mosel (0.58 miles	7 (Good)
			North of County Highway FF)	
C-59-051	State Highway 42	Unnamed Creek	Town of Herman (0.63 miles	7 (Good)
			North of County Highway FF)	
C-59-069	State Highway 28	Tributary to Mullet River	Town of Lima (1.43 miles East	7 (Good)
			of County Highway U)	
C-59-070	State Highway 32	Fischer Creek	Town of Herman (0.87 miles	7 (Good)
			North of County Highway FF)	
C-59-071	State Highway 32	Drainage Way	Town of Sheboygan Falls (0.40	7 (Good)
			miles North of County Highway O)	
C-59-072	State Highway 32	Drainage Way	Town of Sheboygan Falls (0.80	7 (Good)
			miles North of County Highway O)	
C-59-073	State Highway 32	Drainage Way	Village of Howards Grove (1.70	7 (Good)
			miles North of County Highway J)	
C-59-046	Interstate Highway 43	Seven Mile Creek	Town of Mosel (0.47 miles North	8 (Good)
			of County Highway FF)	
C-59-112	County Highway OK/	Tributary to Fisherman's	City of Sheboygan (0.30 miles	9 (New)
	South Business Drive	Creek	North of County Highway EE/	
			Weeden Creek Road)	
C-59-113	County Highway OK/	Fisherman's Creek	City of Sheboygan (0.02 miles	9 (New)
	South Business Drive		South of Camelot Boulevard	

#### **Transit**

Indicator: Percentage of transit fleet beyond the Federal Transit Administration (FTA) Useful

Life Benchmark (ULB)

Data Source: Shoreline Metro, 2021

Base Data:

Shoreline Metro evaluated the inventory of its vehicle capital items and divided all vehicle types into three categories: heavy duty bus; medium duty bus (cutaways); and light duty vehicles (auto, pickup truck, minivan, van, SUV, etc.). Shoreline Metro then used the FTA's ULB set in FTA 5010.D, page IV-17, to determine if the vehicles were beyond their useful life. Shoreline Metro has also added a mileage ULB in that there are some vehicles in the fleet that exceed the age ULB but are well within the mileage permitted before replacement is considered.

Table 8 shows the results of Shoreline Metro's findings for revenue vehicles (heavy and medium duty buses) and for non-revenue vehicles (auto, pickup, truck, minivan, van, SUV, etc.).

Table 8: Percentage of Shoreline Metro Revenue and Non-Revenue Transit Fleet beyond the FTA ULB, 2021

Vehicle Type	Vehicle Count	Useful Life Age Benchmark (ULB, in years)	Mileage Renchmark (in	Vehicles Beyond ULB - Age	Vehicles Beyond ULB - Mileage <sup>1</sup>	Percent of Fleet Beyond ULB <sup>2</sup>
Revenue						
Heavy Duty Bus	21	12	500,000	12	8	38%
Medium Duty Bus	10	7	150,000	5	4	40%
Sub-Total	31			17	12	39%
Non-Revenue						
Light Duty (Support) Vehicles	5	10	100,000	2	0	0%
Sub-Total	5			2	0	0%
Total	36			19	12	33%

<sup>&</sup>lt;sup>1</sup>Mileage as of January 1, 2021

Shoreline Metro set the transit asset management (TAM) performance target to allow for 39 percent of revenue vehicles to pass beyond useful life. Shoreline Metro is aggressively attempting to replace its fleet through various grant programs in order to lower the revenue vehicle performance target percentage over time. Shoreline Metro also set the TAM performance target to allow for 0 percent of non-revenue vehicles to pass beyond useful life.

Indicator: Age and Years of Remaining Useful Life of Significant Equipment

Data Source: Shoreline Metro, 2021

Base Data:

Shoreline Metro evaluated the inventory of its most significant equipment (items with a replacement cost of \$50,000 or more). These items include a bus wash, a forklift, a hoist and a scrubber, all located at the Shoreline Metro bus garage. Shoreline Metro then used guidance from

<sup>&</sup>lt;sup>2</sup>The lesser of number of vehicles beyond ULB age *or* mileage divided by vehicle count (by type)

the FTA and from various reports that discuss useful life for these types of equipment to determine if these pieces of equipment were beyond their useful life. For the equipment types listed in Table 9, scrubbers have a useful life of five years, forklifts have a useful life of seven years, and hoists and bus washes have a useful life of 10 years.

Table 9 shows the results of Shoreline Metro's findings:

Table 9: Age and Years of Remaining Useful Life of Significant Equipment, Shoreline Metro, 2021

Equipment Type	Useful Life Age Benchmark (ULB, in years)	Age	Years of Remaining Useful Life
Bus Wash	10	20	-10
Forklift	7	52	-45
Hoist	10	46	-36
Scrubber	5	26	-21

All of Shoreline Metro's most significant equipment is beyond its useful life. For now, Shoreline Metro is setting the TAM performance target to allow for 100 percent of its most significant equipment to pass beyond useful life. Shoreline Metro will examine the condition of this equipment in greater detail in future TAM plans; if the condition of this equipment is deemed beyond its "state of good repair" in future TAM plans, then steps will be taken to get replacement equipment programmed in the Transportation Improvement Program (TIP).

Indicator: Condition, Age and Years of Remaining Useful Life of Facilities

Data Source: Shoreline Metro, 2021

Base Data:

Shoreline Metro evaluated the condition of its facilities using the remaining useful life standards outlined in FTA 5010.1D, page IV-18(e), as a guide. The guidance indicated that facilities relevant to Shoreline Metro generally have a useful life of forty (40) years.

Table 10 shows the results of Shoreline Metro's findings.

Table 10: Condition, Age and Years of Remaining Useful Life of Facilities, Shoreline Metro, 2021

Facility Type	Condition	Condition  Description	Useful Life Age Benchmark (ULB, in years)	Age	Years of Remaining Useful Life
Administration, Maintenance, and Storage (Bus Garage)	3	Adequate	40	46	-6
Transfer Station	4	Good	40	29	11

One of Shoreline Metro's two facilities is beyond its useful life of 40 years. Shoreline Metro set the TAM performance target to only allow 50 percent of the facilities to pass beyond useful life. Shoreline Metro will continue to examine the condition of these facilities in greater detail in

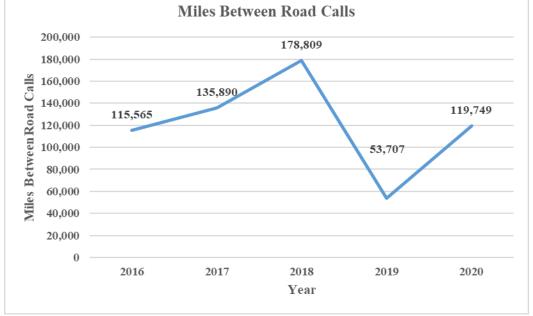
future TAM plans. A roof replacement for the administration, maintenance and storage facility was recently completed. In addition, various improvements to the administration, maintenance and storage facility are currently underway.

Indicator: Number of road calls divided by revenue miles of service for Shoreline Metro

Data Source: Shoreline Metro, 2020

Base Data: There were **four (4)** "major mechanical failures" (road calls) for fixed-route transit at Shoreline Metro in 2020 (there were two additional paratransit road calls in 2020). There were **478,994** fixed-route revenue miles in 2020. This translated to an average of **119,749** miles between fixed-route road calls in 2020.

Figure 28: Miles between Road Calls (Major Mechanical Failures): Shoreline Metro
Miles Between Road Calls



# **Regional Trends**

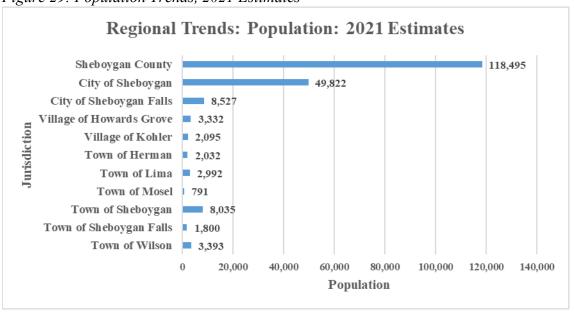
# **Population**

Data Source: Wisconsin Department of Administration, Demographic Services Center, 2021 Base Data:

Table 11: Sheboygan Metropolitan Planning Area Municipalities Final Population Estimates (January 1, 2021)

Jurisdiction	Estimated Population
Sheboygan County	118,495
City of Sheboygan	49,822
City of Sheboygan Falls	8,527
Village of Howards Grove	3,332
Village of Kohler	2,095
Town of Herman	2,032
Town of Lima	2,992
Town of Mosel	791
Town of Sheboygan	8,035
Town of Sheboygan Falls	1,800
Town of Wilson	3,393

Figure 29: Population Trends, 2021 Estimates



## Households

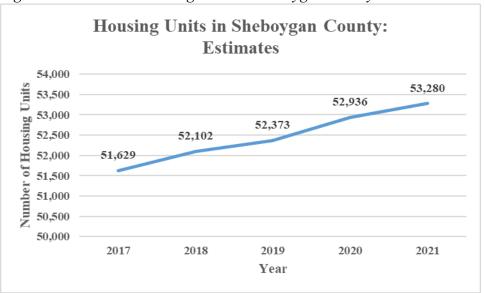
Indicator: Households

Data Source: U.S. Bureau of the Census, 2020 Decennial Census; and Wisconsin Department of Administration, Demographic Services Center, 2021.

#### Base Data:

The Wisconsin Department of Administration's Demographic Services Center estimated that there were **53,280** housing units in Sheboygan County on April 1, 2021. Estimates were not available below the county level.

Figure 30: Estimated Housing Units in Sheboygan County

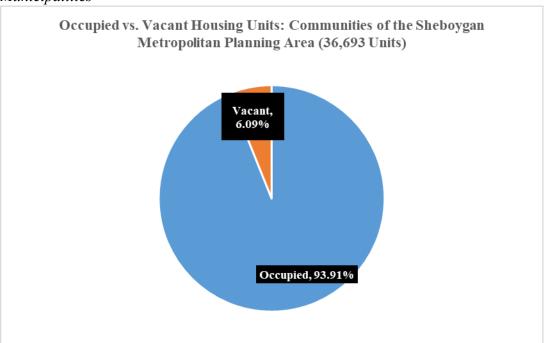


The U.S. Bureau of the Census reported the following total, occupied and vacant housing units in the communities of the Sheboygan metropolitan planning area in the *2020 Census*:

Table 12: Sheboygan Metropolitan Planning Area Municipalities: Total, Occupied and Vacant Housing Units: 2020 Census

	Total	Occupied	Vacant
	Housing	Housing	Housing
Jurisdiction	Units	Units	Units
City of Sheboygan	22,605	21,041	1,564
City of Sheboygan Falls	3,900	3,728	172
Village of Howards Grove	1,323	1,297	26
Village of Kohler	865	795	70
Town of Herman	668	625	43
Town of Lima	1,165	1,131	34
Town of Mosel	326	303	23
Town of Sheboygan	3,594	3,453	141
Town of Sheboygan Falls	773	723	50
Town of Wilson	1,474	1,362	112
Total	36,693	34,458	2,235
Percent	100.00%	93.91%	6.09%

Figure 31: Occupied vs. Vacant Housing Units in Sheboygan Metropolitan Planning Area Municipalities



Note: These statistics include five towns which have portions outside the Sheboygan metropolitan planning area. The two cities and two villages as well as the Town of Sheboygan are completely within the Sheboygan metropolitan planning area.

# **Employment**

Indicator: Employment

Data Source: U.S. Bureau of Labor Statistics, *Local Area Unemployment Statistics* (Labor force and employment estimates by county/Metropolitan Statistical Area, or MSA)

#### Base Data:

Sheboygan County (the Sheboygan MSA) had an average annual labor force of 61,510 in 2020. Of these, 57,996 were employed, while 3,514 (5.7 percent) were unemployed. These figures were not seasonally adjusted. This rate was higher than previous recent years due to the COVID-19 pandemic.

Some unemployment rates were changed or adjusted since last year's report.

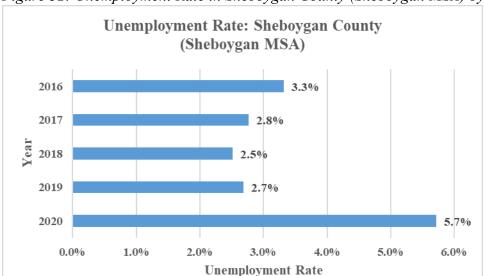


Figure 32: Unemployment Rate in Sheboygan County (Sheboygan MSA) by Year

# **Economic Development**

Indicator: Housing additions and deletions in 2020

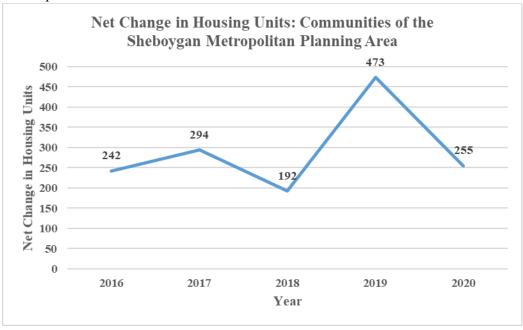
Data Source: Wisconsin Department of Administration, Demographic Services Center, *Housing Unit Additions and Deletions for Wisconsin Minor Civil Divisions* 

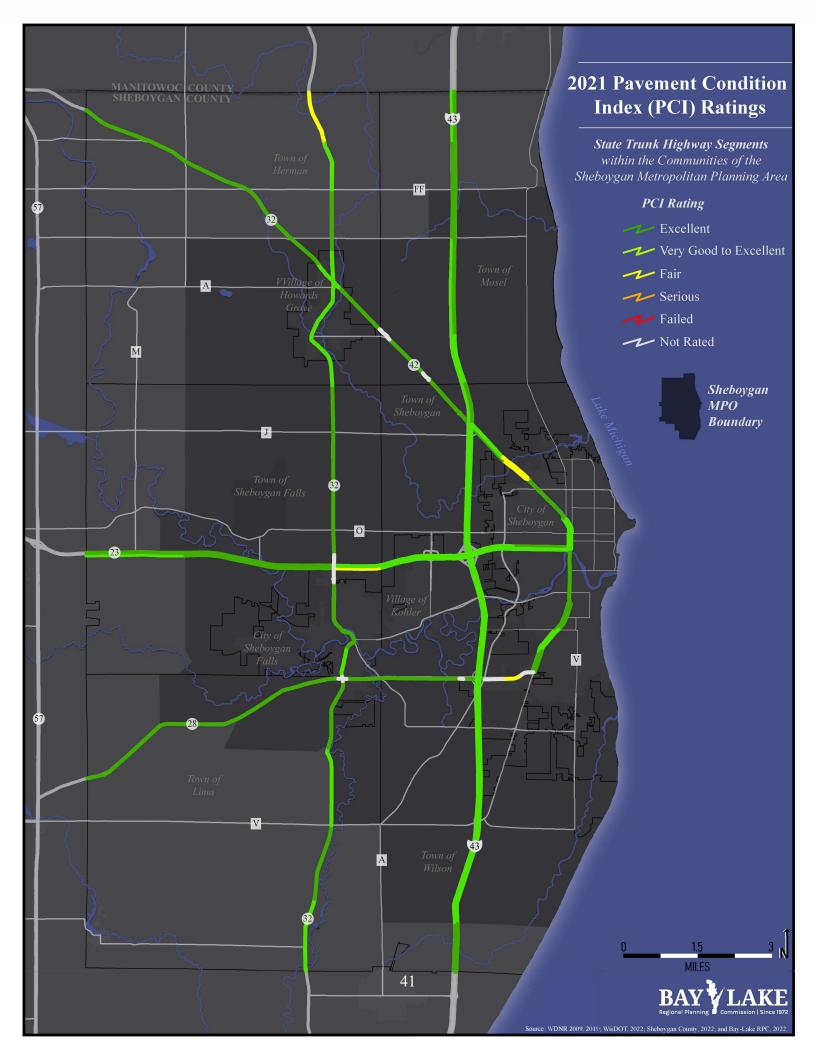
Base Data:

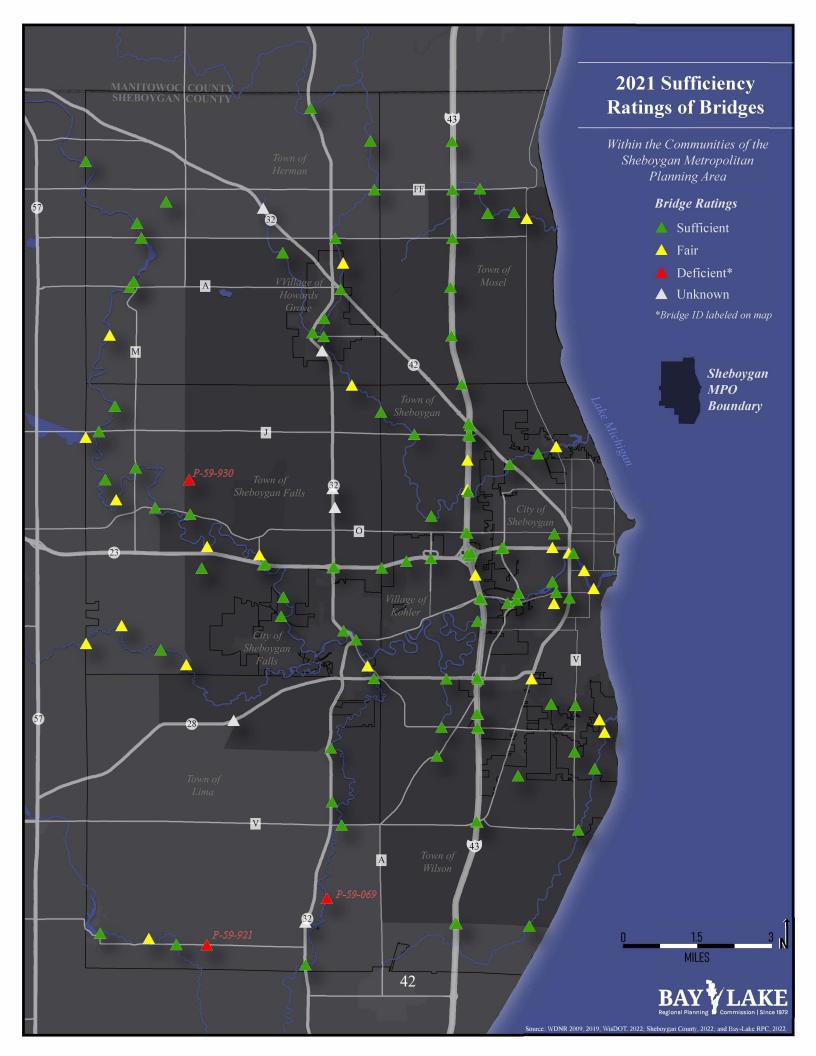
Table 13: Sheboygan Metropolitan Planning Area Municipalities: Housing Unit Additions and Deletions: 2020

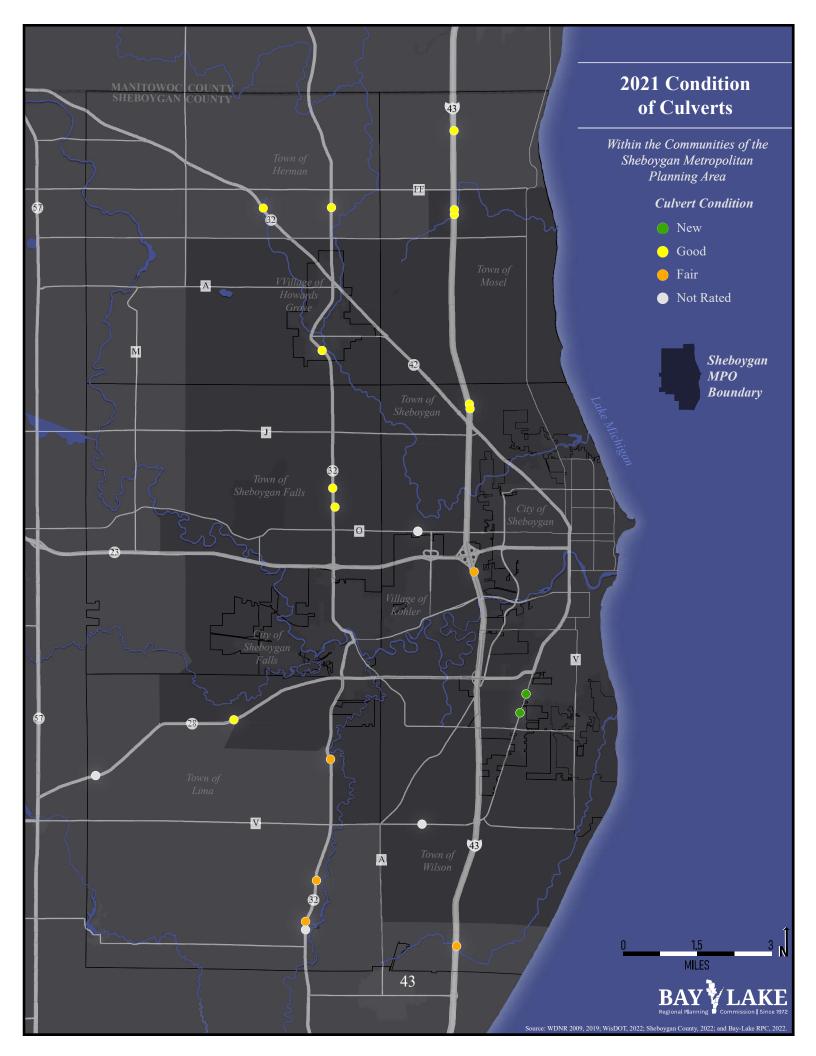
	Added	Deleted	Net Change in
	Housing	Housing	Housing
Jurisdiction	Units	Units	Units
City of Sheboygan	203	11	192
City of Sheboygan Falls	19	1	18
Village of Howards Grove	13	0	13
Village of Kohler	4	1	3
Town of Herman	3	0	3
Town of Lima	7	3	4
Town of Mosel	2	0	2
Town of Sheboygan	15	0	15
Town of Sheboygan Falls	3	0	3
Town of Wilson	3	1	2
Total	272	17	255

Figure 33: Net Change in Housing Units by Year in Sheboygan Metropolitan Planning Area Municipalities









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