APPENDIX B: DOCUMENTATION OF MEETING MAP-21 AND FAST ACT PLANNING REQUIREMENTS SINCE APPROVAL OF THE ORIGINAL YEAR 2045 SHEBOYGAN AREA TRANSPORTATION PLAN (SATP)

INTRODUCTION
A variety of changes have been made to the transportation planning process since MAP-21 and the FAST Act were approved and signed into law. Examples of these changes include the following:

- Evidence of Performance-Based Planning and Programming (MAP-21, and continued in the FAST Act);
- Inclusion of Additional Metropolitan Planning Factors (FAST Act);
- Additional Transportation Components to be Addressed (FAST Act); and
- Consultation with Additional Parties (FAST Act).

This appendix addresses the efforts of the Sheboygan MPO to incorporate these requirements into this Update to the Year 2045 SATP.

EVIDENCE OF PERFORMANCE-BASED PLANNING AND PROGRAMMING
As part of MAP-21 and continued in the FAST Act, it is a requirement to incorporate performance-based planning and programming into the development of Metropolitan Planning Organization (MPO) Long-Range Transportation Plans (LRTPs) and Transportation Improvement Programs (TIPs). The Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning; Final Rule further defined that the long-range transportation plan shall include “a description of the performance measures and performance targets used in assessing the performance of the transportation system” and “a system performance report…evaluating the condition and performance of the transportation system with respect to the performance targets.” (23 CFR 450.324 (f)(3) and (f)(4)).

Federal funding is provided for a wide range of transportation-related activities, including projects on higher function local streets and highways not on the State Trunk Highway system, and local safety improvements. These programs are funded through the federal “Fixing America’s Surface Transportation” (FAST) Act.

23 USC 150: National performance measure goals are:

- **Safety** – To achieve a significant reduction in traffic fatalities and serious injuries on all public roads;
- **Infrastructure Condition** – To maintain the highway infrastructure asset system in a state of good repair;

Update to the *Year 2045 Sheboygan Area Transportation Plan*
• **Congestion Reduction** – To achieve a significant reduction in congestion on the National Highway System;

• **System Reliability** – To improve the efficiency of the surface transportation system;

• **Freight Movement and Economic Vitality** – To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development;

• **Environmental Sustainability** – To enhance the performance of the transportation system while protecting and enhancing the natural environment; and

• **Reduced Project Delivery Delays** – To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies’ work practices.

More information on the national performance measure goals can be found at the Federal Highway Administration (FHWA) website link listed below:

[https://www.fhwa.dot.gov/tpm/about/goals.cfm](https://www.fhwa.dot.gov/tpm/about/goals.cfm)

MAP-21/FAST Act Performance Measures (as established in 49 USC 625 and 23 CFR 490) are:

• **Transit**
  - Rolling Stock: The percentage of revenue vehicles (by type) that exceed the useful life benchmark (ULB)
  - Equipment: The percentage of equipment that exceeds the ULB
  - Facilities: The percentage of facilities (by group) that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale
  - Infrastructure: The percentage of track segments (by mode) that have performance restrictions. Track segments are measured to the nearest 0.01 of a mile. (This performance measure does not apply to the Sheboygan Metropolitan Planning Area).

• **Safety**
  - Number of fatalities
  - Fatalities per 100 million vehicle miles traveled
  - Number of serious injuries
  - Serious injuries per 100 million vehicle miles traveled
  - Number of non-motorized fatalities and non-motorized serious injuries
• Infrastructure
  o Percentage of pavements on the Interstate System in Good Condition
  o Percentage of pavements on the Interstate System in Poor Condition
  o Percentage of pavements on the non-Interstate National Highway System (NHS) in Good condition
  o Percentage of pavements on the non-Interstate NHS in Poor condition.
  o Percentage of NHS bridges classified as in Good condition
  o Percentage of NHS bridges classified as in Poor condition

• System Performance on the NHS
  o Interstate Travel Time Reliability Measure: Percent of person-miles traveled on the Interstate that are reliable
  o Non-Interstate NHS Travel Time Reliability Measure: Percent of person-miles on the non-Interstate NHS that are reliable

• Freight Movement
  o Freight Reliability Measure: Truck Travel Time Reliability (TTTR) Index

• CMAQ – Congestion Reduction
  o Peak Hour Excessive Delay (PHED) Measure: Annual Hours of PHED Per Capita (This performance measure does not apply to the Sheboygan Metropolitan Planning Area).
  o Non-Single Occupancy Vehicle (SOV) Travel Measure: Percentage of Non-SOV Travel (This performance measure does not apply to the Sheboygan Metropolitan Planning Area).
  o Emissions Measure: Total Emission Reductions

Sheboygan MPO Performance-Based Planning and Programming Processes

Long-Range Transportation Plan

The Bay-Lake Regional Planning Commission, as the designated MPO for the Sheboygan Metropolitan Planning Area, has been using performance measures in its planning process for several years. The Update to the Year 2045 Sheboygan Area Transportation Plan (SATP) addressed performance measures as a new requirement as a part of the federal MAP-21 transportation legislation, which continued in the FAST Act. MPO staff has been tracking and updating data on an annual basis or as it becomes available. The national performance measure goals identified in the introduction have been incorporated into the policies and performance measures monitored in the Update to the Year 2045 SATP. The Update to the Year 2045 SATP
The Update to the Year 2045 SATP involved a performance-based planning process.

**Transportation Improvement Program (TIP)**

The Sheboygan MPO has always used appropriate scoring criteria for ranking and selecting projects for the Surface Transportation Block Grant (STBG) – Urban program in the TIP. The ranking criteria for this federal program use scoring systems that are tied to goals and policies in the Update to the Year 2045 SATP. The TIP evaluates short-range projects based on criteria that include: plan consistency, current or potential demand (capacity needs), functional classification (including traffic volume within two of the classifications), pavement condition, multimodalism, and safety. Transit improvements and bicycle and pedestrian transportation improvements also have parallel criteria which allow projects in these categories to compete for funding. While not officially included as a criterion, preservation of existing systems has been emphasized in the project selection process over past funding cycles. Projects are scored based on a set number of points for each criterion, resulting in a project ranking and recommendation list for STBG – Urban projects in the TIP. The *Sheboygan Metropolitan Planning Area TIP: Calendar Years 2019 – 2022* was approved on October 26, 2018, and it, along with any future amendments to that document, can be viewed at the following page on the Sheboygan MPO website:

https://baylakerpc.org/sheboygan-mpo/transportation-improvement-program-tip

**Sheboygan MPO Performance Measures**

According to the requirement for the federal performance measure management process, targets are set for national performance measures on a schedule based on when the measures were finalized. In this case, the Wisconsin Department of Transportation (WisDOT) must report to the U.S. Department of Transportation (USDOT) on the progress in achieving the targets for each measure. WisDOT sets its performance measure targets first (in coordination with the MPOs), and then, the MPOs can choose to either set their own targets or support the targets that WisDOT has adopted (or a combination thereof) within 180 days of WisDOT setting its targets. In Wisconsin, for most performance measure targets, most MPOs have chosen to follow and support WisDOT and its targets.

**Transit Asset Management Targets**

The U.S. Department of Transportation established four performance measures for transit asset management (TAM). The Sheboygan MPO worked with the one transit operator in the Sheboygan Metropolitan Planning Area (Shoreline Metro) to establish targets for three of the four measures (rolling stock, equipment and facilities; infrastructure only relates to rail transit,
which does not exist locally). A TAM Plan was developed for Shoreline Metro in the process of setting these targets. The Sheboygan Transit Commission approved the targets for Shoreline Metro on October 29, 2018. The Sheboygan MPO Technical and Policy Advisory Committees recommended approval of the targets for the MPO at their September 6, 2018, joint meeting. The Bay-Lake Regional Planning Commission approved the targets for the Sheboygan MPO on September 14, 2018. The TAM targets are:

- **Rolling Stock**: The percentage of revenue vehicles (by type) that exceed the useful life benchmark (ULB). This target allows for 36 percent of revenue vehicles and 0 percent of non-revenue vehicles to pass beyond useful life.

- **Equipment**: The percentage of equipment that exceeds the ULB – In the case of Shoreline Metro, “equipment” was characterized as the most significant equipment, or non-vehicle items with a replacement value of $50,000 or more. These items include a scrubber, a hoist and a bus wash, all located at the Shoreline Metro bus garage. This target allows for 100 percent of Shoreline Metro’s most significant equipment to pass beyond its useful life.

- **Facilities**: The percentage of facilities that are rated less than 3.0 on the Transit Economic Requirements Model (TERM) Scale. Shoreline Metro’s facilities include: its administration, maintenance and storage facility (bus garage), and its transfer facility/station. This target allows for 50 percent of facilities to pass beyond useful life.

- **Infrastructure**: The percentage of track segments (by mode) that have performance restrictions. This performance measure does not apply to the Sheboygan Metropolitan Planning Area, as there is no rail transit in the area.

**Safety Targets**

The USDOT established five performance measures for the Highway Safety Improvement Program (HSIP) within the National Performance Management Measures. WisDOT established statewide calendar year 2019 targets for each of the five HSIP performance measures in accordance with 23 CFR 490.209, which were approved at the state level on August 31, 2018. The WisDOT statewide targets are:

- Number of fatalities < 555.7 (a 2 percent reduction from the 2013 – 2017 annual average);
- Rate of fatalities < 0.915 per 100 million vehicle miles traveled (VMT, a 2 percent reduction from the 2013 – 2017 annual average);
- Number of serious injuries < 2,967.6 (a 5 percent reduction from the 2013 – 2017 annual average);
- Rate of serious injuries < 4.785 per 100 million VMT (a 5 percent reduction from the 2013 – 2017 annual average); and
• Number of non-motorized fatalities and non-motorized serious injuries < 342.0 (a 5 percent reduction from the 2013 – 2017 annual average).

The Bay-Lake Regional Planning Commission, as MPO for the Sheboygan Metropolitan Planning Area, agreed to support the statewide safety targets, which were approved by formal resolution on December 14, 2018. This followed several months of measuring these numbers and rates for the Sheboygan Metropolitan Planning Area, and coming to the conclusion that the area had lower incidences and rates for the above measures than statewide averages. Commission MPO staff will work closely with WisDOT and will plan and program projects so that they contribute toward the accomplishment of WisDOT’s calendar year 2019 HSIP targets.

Pavement Condition Targets

The USDOT established four performance measures for pavement condition on the National Highway System (NHS). WisDOT established 4-year (2021) statewide targets for the Interstate system, as well as 2-year (2019) and 4-year (2021) statewide targets for the non-Interstate NHS in accordance with 23 CFR 490, Subpart C, which were approved at the state level on May 18, 2018. The WisDOT statewide targets are:

• Interstate – Percentage of pavements in “good” condition: 4-Year Target ≥ 45 percent;
• Interstate – Percentage of pavements in “poor” condition: 4-Year Target ≤ 5 percent;
• Non-Interstate NHS – Percentage of pavements in “good” condition: 2-Year Target ≥ 20 percent and 4-Year Target ≥ 20 percent; and
• Non-Interstate NHS – Percentage of pavements in “poor” condition: 2-Year Target ≤ 12 percent and 4-Year Target ≤ 12 percent.

The Bay-Lake Regional Planning Commission, as MPO for the Sheboygan Metropolitan Planning Area, agreed to support the statewide pavement condition targets, which were approved by formal resolution on October 26, 2018. This followed limited time measuring pavement condition for Interstate and non-Interstate NHS segments in the Sheboygan Metropolitan Planning Area, and coming to the conclusion that the area had higher percentages of Interstate and non-Interstate NHS pavement in “good” condition as well as lower percentages of Interstate and non-Interstate NHS pavement in “poor” condition than statewide averages. Commission MPO staff will work closely with WisDOT and will plan and program projects so that they contribute toward the accomplishment of WisDOT’s 4-year (2021) Interstate pavement condition targets as well as WisDOT’s 2-year (2019) and 4-year (2021) non-Interstate NHS pavement condition targets.

Bridge Condition Targets

The USDOT established two performance measures for bridge condition on the NHS. WisDOT established 2-year (2019) and 4-year (2021) statewide targets for the NHS in accordance with 23
CFR 490, Subpart D, which were approved at the state level on May 18, 2018. The WisDOT statewide targets are:

- Percentage of NHS bridges by deck area in “good” condition: 2-Year Target ≥ 50 percent and 4-Year Target ≥ 50 percent; and
- Percentage of NHS bridges by deck area in “poor” condition: 2-Year Target ≤ 3 percent and 4-Year Target ≤ 3 percent.

The Bay-Lake Regional Planning Commission, as MPO for the Sheboygan Metropolitan Planning Area, agreed to support the statewide bridge condition targets, which were approved by formal resolution on October 26, 2018. This followed limited time measuring the condition of NHS bridges by deck area in the Sheboygan Metropolitan Planning Area. The percentage of NHS bridges by deck area in “poor” condition in the Sheboygan Metropolitan Planning Area was lower than the statewide average. However, the percentage of NHS bridges by deck area in “good” condition in the Sheboygan Metropolitan Planning Area was also lower than the statewide average (one of only two performance measures in which the metropolitan planning area fared worse than statewide averages). In spite of this below average statistic, MPO staff thought it would be best to support the statewide targets at this early stage in the target setting process until more robust data are available over time. Commission staff will work closely with WisDOT and will plan and program projects so that they contribute toward the accomplishment of WisDOT’s 2-year (2019) and 4-year (2021) NHS bridge condition targets.

**Travel Time Reliability Targets**

The USDOT established two performance measures for overall travel time reliability on the NHS. WisDOT established 2-year (2019) and 4-year (2021) statewide targets for the percentage of person-miles traveled that are reliable on the Interstate, and also established a 4-year (2021) statewide target for the percentage of person-miles traveled that are reliable on the non-Interstate NHS in accordance with 23 CFR 490, Subpart E, which were approved at the state level on May 18, 2018. The WisDOT statewide targets are:

- Percent of person-miles traveled that are reliable on the Interstate: 2-Year Target (2019) ≥ 94.0 percent and 4-Year Target (2021) ≥ 90.0 percent; and
- Percent of person-miles traveled that are reliable on the non-Interstate NHS: 4-Year Target (2021) ≥ 86.0 percent.

The Bay-Lake Regional Planning Commission, as MPO for the Sheboygan Metropolitan Planning Area, agreed to support the statewide travel time reliability targets, which were approved by formal resolution on October 26, 2018. This followed limited time measuring the travel time reliability of the Interstate and the non-Interstate NHS in the Sheboygan Metropolitan Planning Area. The percentage of person-miles traveled that are reliable on the Interstate in the Sheboygan Metropolitan Planning Area was higher than the statewide average. However, the percentage of person-miles traveled that are reliable on the non-Interstate NHS in the Sheboygan Metropolitan Planning Area was lower than the statewide average.
Metropolitan Planning Area was lower than the statewide average (the second of two performance measures in which the metropolitan planning area fared worse than statewide averages). Again, in spite of this below average statistic, MPO staff thought it would be best to support the statewide targets at this early stage in the target setting process until more robust data are available over time. Commission staff will work closely with WisDOT and will plan and program projects so that they contribute toward the accomplishment of WisDOT’s 2-year (2019) and 4-year (2021) travel time reliability targets on the Interstate and of WisDOT’s 4-year (2021) travel time reliability target on the non-Interstate NHS.

**Freight Reliability Targets**

The USDOT established one performance measure for freight reliability, which is the Truck Travel Time Reliability Index on the Interstate. WisDOT established 2-year (2019) and 4-year (2021) statewide targets for the Truck Travel Time Reliability Index on the Interstate in accordance with 23 CFR 490, Subpart F, which were approved at the state level on May 18, 2018. The WisDOT statewide target is:

- Truck Travel Time Reliability Index on the Interstate: 2-Year Target (2019) ≤ 1.40 and 4-Year Target (2021) ≤ 1.60.

The Bay-Lake Regional Planning Commission, as MPO for the Sheboygan Metropolitan Planning Area, agreed to support the statewide freight reliability targets, which were approved by formal resolution on October 26, 2018. This followed limited time measuring truck travel time reliability on the Interstate in the Sheboygan Metropolitan Planning Area. The Truck Travel Time Reliability Index on the Interstate in the Sheboygan Metropolitan Planning Area was lower than the statewide average. Commission staff will work closely with WisDOT and will plan and program projects so that they contribute toward the accomplishment of WisDOT’s 2-year (2019) and 4-year (2021) freight reliability targets on the Interstate.

**Emission Reduction Targets**

The USDOT established three performance targets applicable to air quality nonattainment and maintenance areas. Two of these (Peak Hour Excessive Delay and Non-SOV (Single Occupant Vehicle) Travel) are only applicable in urbanized areas with a population over one million. The only performance target in air quality nonattainment and maintenance areas that is applicable to the Sheboygan Metropolitan Planning Area involves emission reductions. In Wisconsin, three precursor pollutants are measured for emission reductions: volatile organic compounds (VOCs), oxides of nitrogen (NOx), and fine particulate matter (PM 2.5). WisDOT established 2-year (2019) and 4-year (2021) statewide targets for VOCs, NOx and PM 2.5 in accordance with 23 CFR 490, Subpart H, which were approved at the state level on May 18, 2018. The WisDOT statewide targets (in kilograms per day per $1,000,000 of expenditure) are:

- VOCs: 2-Year Target (2019) = 12.154 kg., and 4-Year Target (2021) = 30.123 kg.
- NOx: 2-Year Target (2019) = 90.354 kg., and 4-Year Target (2021) = 150.388 kg.
PM 2.5: 2-Year Target (2019) = 9.043 kg., and 4-Year Target (2021) = 13.820 kg.

In this case, the Sheboygan Metropolitan Planning Area is only responsible for either setting its own 4-year (2021) emission reduction targets or supporting WisDOT’s statewide 4-year (2021) emission reduction targets for the precursor pollutants noted above. The Bay-Lake Regional Planning Commission staff consulted with WisDOT staff on where the metropolitan planning area stood relative to all nonattainment and maintenance areas in Wisconsin in regard to emission reductions for the precursor pollutants noted above. USDOT guidance recommends that states and MPOs use FHWA’s “CMAQ Public Access System” to set emission reduction targets for precursor pollutants. Unfortunately, there are few CMAQ projects from the Sheboygan Metropolitan Planning Area that are accounted for in the “CMAQ Public Access System.” There would be other ways to set targets for the metropolitan planning area, such as using previously calculated emission reduction estimates for projects that were awarded funding in the past two cycles that do not appear in the “CMAQ Public Access System,” or assuming that the metropolitan planning area would have approximately 10 percent of the statewide emission reductions (since northeastern Wisconsin typically receives about 10 percent of the CMAQ funding in any given cycle). However, the first option is not advised by USDOT, and the second option is faulty because there are projects in this 10 percent that are outside the Sheboygan Metropolitan Planning Area. For these reasons, the Bay-Lake Regional Planning Commission, as MPO for the Sheboygan Metropolitan Planning Area, agreed to support the statewide 4-year (2021) emission reduction targets, which were approved by formal resolution on October 26, 2018. Commission staff will work closely with WisDOT and will plan and program projects so that they contribute toward the accomplishment of WisDOT’s and 4-year (2021) statewide emission reduction targets.

**Linkage of Investments to Established Performance Measures**

Federal planning requirements for MPOs for the LRTP and for TIPs mandate inclusion of a description of the effects of these planning documents toward meeting the transportation system performance targets that were established. The next section links projects with funding priorities to those with transit asset management, highway safety, pavement condition, bridge condition, travel time reliability, freight reliability, and emission reduction benefits to the transportation system. Projects programmed in this Update to the *Year 2045 SATP* will assist WisDOT in achieving the various performance targets.

**Analysis of Transit Capital Projects in the Update to the Year 2045 SATP in Regard to Transit Asset Management**

This Update to the *Year 2045 SATP* recommends the following transit capital projects:

- Replacement of 46 fixed-route buses;
- Replacement of 28 paratransit vehicles;
- Replacement of 12 support vehicles;

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• Replacement of a bus wash, forklift, and the roof at Shoreline Metro’s administrative/maintenance facility; and

• Construction of a new transit administrative/maintenance facility at Shoreline Metro.

All bus and vehicle replacements will improve the overall condition of the rolling stock component of Shoreline Metro’s transit assets. Replacement of the bus wash and forklift will improve the overall condition of the equipment component of Shoreline Metro’s transit assets. Replacement of the roof at Shoreline Metro’s administrative/maintenance facility and construction of a new transit administrative/maintenance facility at Shoreline Metro will improve the overall condition of the facilities component of Shoreline Metro’s transit assets, all within the timeframe of this Update to the Year 2045 SATP.

**Analysis of Projects in the Update to the Year 2045 SATP in Regard to Safety**

**Street and Highway Safety Projects**

This Update to the Year 2045 SATP recommends the following projects that will improve safety on the transportation system:

• Construction of a roundabout at the intersection of State Highway 28 and County Highway EE;

• Installation of median cable guard on Interstate Highway 43 from County Highway V and County Highway EE/Weeden Creek Road;

• Construction of a roundabout at the intersection of County Highway C and County Highway TT; and

• Signalization and other improvements at the intersection of South Taylor Drive and Union Avenue.

These projects are also identified in Table 7.9.

In addition, seven capacity modifying projects, 14 larger system preservation projects, and various smaller system preservation projects have been included in this Update to the Year 2045 SATP, all of which should improve safety on the transportation system. These projects are identified in Table 7.1 and Map 7.1 for capacity modifying projects, and are identified in Table 7.2 for system preservation projects. Also, several categories of WisDOT “grouped” street and highway projects in Table 7.2 involve various forms of highway safety.

**Bicycle and Pedestrian Safety Projects**

This Update to the Year 2045 SATP recommends various projects that promote bicycle and/or pedestrian safety. Bicycle transportation projects are identified in Table 7.6 and Map 7.2, while pedestrian transportation projects are identified in Table 7.8 and Map 7.3. Safety education takes place under the Sheboygan County Non-Motorized Transportation Pilot Program (NMTPP) level of effort for program oversight project, which includes some funding for education and outreach.
Safety education can also take place under the Sheboygan County NMTPP marketing and branding project.

Analysis of Projects in the Update to the Year 2045 SATP in Regard to Pavement Condition

Table 7.2 of this Update to the Year 2045 SATP contains 11 major projects and several smaller projects that will improve the pavement condition of the transportation system. The major projects include the following:

- North Avenue from State Highway 42/Calumet Drive to 300 feet east of North 15th Street: Reconstruction to the same capacity and rail work;
- Fond du Lac Avenue from State Highway 32/Main Street to Rangeline Road: Reconstruction to the same capacity;
- North 15th Street from State Highway 42/Calumet Drive to Mayflower Avenue: Reconstruction to the same capacity;
- State Highway 28 from State Highway 57 to County Highway A: Roadway maintenance and resurfacing;
- State Highway 28/South Business Drive from Union Avenue to Washington Avenue: Reconstruction to the same capacity;
- Wilson Avenue from Lakeshore Drive to State Highway 28/South Business Drive: Roadway maintenance and resurfacing;
- North Avenue from 300 feet east of North 15th Street to North 3rd Street: Reconstruction to the same capacity;
- County Highway EE/Weeden Creek Road from South Business Drive to Lakeshore Drive: Reconstruction to the same capacity;
- Mill Road from Najacht Road to State Highway 42: Reconstruction to the same capacity;
- State Highway 32 from County Highway D to State Highway 28: Roadway preservation; and
- County Highway Y from County Highway O/Superior Avenue to State Highway 42: Reconstruction to the same capacity.

In addition, several categories of WisDOT “grouped” street and highway projects in Table 7.2 can also improve pavement condition in the area.

Analysis of Projects in the Update to the Year 2045 SATP in Regard to Bridge Condition

Table 7.2 of this Update to the Year 2045 SATP contains three major projects and a few smaller projects that will improve the condition of transportation system bridges. The major projects include the following:

- Pennsylvania Avenue over the Sheboygan River: Bridge replacement;
• Interstate Highway 43 from State Highway 42 to the Manitowoc County line: Bridge rehabilitation and deck overlays; and
• South Business Drive: Railroad Overpass south of Washington Avenue: Bridge replacement.

In addition, several categories of WisDOT “grouped” street and highway projects in Table 7.2 can also improve bridge conditions in the area.

**Analysis of Projects in the Update to the Year 2045 SATP in Regard to Travel Time Reliability**

The Update to the Year 2045 SATP contains at least three projects that will improve travel time reliability on the transportation network. All of these projects involve “addition of radio communication infrastructure, installation of video detection, conducting intersection turning movement counts, and retiming and coordinating traffic signals.” In addition, all of these projects involve design and implementation in the 2019 – 2028 implementation period, and each project is funded through the CMAQ program as well as with local matching funds.

• Signal timing on Taylor Drive from Indiana Avenue to Superior Avenue (including a small portion of Erie Avenue west of Taylor Drive);
• Signal timing on State Highway 23/Kohler Memorial Drive/Erie Avenue from North Taylor Drive to North 9th Street; and
• Signal timing on State Highways 28 and 42/14th Street/Calumet Drive from Indiana Avenue to North Avenue.

It is also possible that other recommended projects may indirectly improve travel time reliability on the transportation network, especially if they are located on the NHS in the metropolitan planning area.

**Analysis of Projects in the Update to the Year 2045 SATP in Regard to Freight Reliability**

The same projects that will improve travel time reliability on the transportation network will also improve freight reliability on the network.

It is also possible that other recommended projects may indirectly improve freight reliability on the transportation network, especially if they are located on the NHS in the metropolitan planning area.

**Analysis of Projects in the Update to the Year 2045 SATP in Regard to Emission Reductions**

The Update to the Year 2045 SATP contains six projects that will lead to emission reductions on the transportation network. The projects include the following, all of which will occur in the 2019 – 2028 implementation period:

• Replacement of Four (2) 35-Foot Fixed-Route Buses at Shoreline Metro;

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• Obtaining Three (3) Vehicles for Employment Transportation at Lakeland University;
• A small multi-county employment transportation carpool program operated by Forward Service Corporation;
• Signal timing on Taylor Drive from Indiana Avenue to Superior Avenue (including a small portion of Erie Avenue west of Taylor Drive);
• Signal timing on State Highway 23/Kohler Memorial Drive/Erie Avenue from North Taylor Drive to North 9th Street; and
• Signal timing on State Highways 28 and 42/14th Street/Calumet Drive from Indiana Avenue to North Avenue.

The last three projects involve “addition of radio communication infrastructure, installation of video detection, conducting intersection turning movement counts, and retiming and coordinating traffic signals.” Each of the six projects is funded through the CMAQ program as well as with local matching funds.

It should also be noted that previous CMAQ projects will also contribute to emission reductions in the metropolitan planning area; these projects included a previous cycle of the small multi-county employment transportation carpool program operated by Forward Service Corporation.

Conclusion

The Update to the Year 2045 Sheboygan Area Transportation Plan (SATP) recommends a variety of projects that assist in either meeting locally established performance targets (in the case of Transit Asset Management) or in assisting the MPO in supporting statewide performance targets established by WisDOT (in the case of all other targets, including targets in the areas of safety, pavement condition, bridge condition, travel time reliability, freight reliability, and emission reductions). Future long-range transportation plans and TIPs are expected to continue to improve the linkage between performance targets and recommended projects over the years to come.

INCLUSION OF ADDITIONAL METROPOLITAN PLANNING FACTORS

The FAST Act added two planning factors to the metropolitan transportation planning process, including:

• Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
• Enhance travel and tourism.

These new metropolitan planning factors have been addressed in the following portions of the Update to the Year 2045 SATP:
• Chapter 2 (Metropolitan Transportation Planning Process) – Discussion of the FAST Act (pp. 2-6 and 2-7, and in other portions of the chapter);
• Chapter 4 (Mission Statement, Goals and Objectives) – Resiliency, reliability and stormwater impacts are addressed in Goal 9 and its supporting objectives (p. 4-10). Travel and tourism are addressed in Goal 10 and its supporting objectives (pp. 4-10 and 4-11); and
• Chapter 7 (Recommended Transportation Plan) – The recommended transportation system resiliency and reliability policy and strategies can be found on pp. 7-24 and 7-25. The recommended policy and strategies regarding reduction or mitigation of stormwater impacts of surface transportation can be found on pp. 7-25 and 7-26. The recommended policy and strategies regarding enhancement of travel and tourism can be found on p. 7-26. Better addressing these additional factors is also discussed in Recommended Future Studies (pp. 7-30 and 7-31).

ADDITIONAL TRANSPORTATION COMPONENTS TO BE ADDRESSED

The FAST Act added transportation components to be addressed in the metropolitan transportation planning process. These components are noted below:

Intermodal Transportation System

The FAST Act continues to require long-range transportation plans…to provide for facilities that enable an intermodal transportation system, including pedestrian and bicycle facilities. It adds other facilities that support intercity transportation, including intercity buses, intercity bus facilities, and commuter vanpool providers. The FAST Act also requires that the long-range transportation plan include identification of public transportation facilities and intercity bus facilities.

Pedestrian and bicycle facilities have been addressed in several updates of the SATP, and this Update to the Year 2045 SATP is no exception. Intercity transportation (including intercity buses and intercity bus facilities) have also been included in several updates to the SATP (including this update), while commuter vanpool providers are starting to be addressed in the planning process (where they exist). The Update to the Year 2045 SATP (along with previous plan updates) identifies public transportation and intercity bus facilities.

MPO Representation

The FAST Act clarifies that MPO representation is selected by an MPO according to its bylaws and enabling statute. The FAST Act also changes the selection criteria for MPO officials to: (1) grant a representative of a transit provider authority equal to that of other MPO officials; and (2) allow a representative of a transit provider to also represent a local community.
The Sheboygan MPO has operated according to bylaws since late 2003 and early 2004 and has operated through multiple Cooperative Agreements with WisDOT and with Shoreline Metro since the early 1980s. Shoreline Metro has equal voting representation on the MPO Technical Advisory Committee and the MPO Policy Advisory Committee. Shoreline Metro can also represent the City of Sheboygan on MPO matters if authorized in writing by other city planning and public works officials (Technical Advisory Committee) or by the Mayor (Policy Advisory Committee).

**Inclusion of Strategies to Meet Current and Projected Transportation Infrastructure Needs**

The FAST Act continues to require a long-range transportation plan to include strategies to meet current and projected transportation infrastructure needs.

Various updates to the SATP have addressed this requirement, including this Update to the *Year 2045 SATP*.

**Inclusion of Transportation and Transit Enhancement Activities**

The FAST Act continues to require a long-range transportation plan to include transportation and transit enhancement activities. When proposing these activities, the long-range transportation plan must now include: (1) consideration of the role that intercity buses may play in reducing congestion, pollution and energy consumption in a cost-effective manner; and (2) strategies and investments that preserve and enhance intercity bus systems (including those that are privately owned and operated).

Due to the relatively small demand for intercity bus services in the metropolitan planning area in comparison to other modes, the Update to the *Year 2045 SATP* did not give much consideration to the role that intercity buses may play in reducing congestion, pollution and energy consumption in a cost-effective manner, but analysis of this role can be completed with tools available to the MPO. Strategies and investments that preserve and enhance intercity bus systems are addressed in Chapter 7 (Recommended Transportation Plan), and can be found on pages 7-21 and 7-22.

**CONSULTATION WITH ADDITIONAL PARTIES**

The FAST Act requires consultation with additional parties who might have not been consulted with under previous federal metropolitan transportation planning legislation. Specifically, the FAST Act continues to encourage MPOs to consult with officials responsible for other types of planning activities, and adds to the list of such activities tourism and the reduction of risk of natural disasters. In addition, the FAST Act explicitly adds public ports and certain private providers of transportation, including intercity bus operators and employer-based commuting programs, to the list of interested parties that an MPO must provide with reasonable opportunity to comment on the long-range transportation plan.
As the 2016 Public Participation Plan for the Sheboygan MPO was developed, the public participation mailing list was updated to include most of the entities listed above. Tourism entities added to the consultation list included the Tourism Director at the Sheboygan County Chamber of Commerce and the Chairperson of the Village of Kohler Tourism Committee. One official added to the consultation list in regard to reduction of risk of natural disasters was the Emergency Management Director at the Sheboygan County Sheriff’s Department. The public port representative that was added to the consultation list was the Harbor Centre Marina. Various private providers of transportation have been on the consultation list for several years, including the three intercity bus operators and local transportation services. The MPO will add employer-based commuting programs to the consultation list as such programs emerge. All of these entities (as well as the other entities on the public participation mailing list) have been consulted so that they have been provided reasonable opportunity to comment on the draft Update to the Year 2045 SATP.

CONCLUSION

This Update to the Year 2045 SATP has made a reasonable effort to address newer planning requirements, some of which were from MAP-21, but most of which were included in the FAST Act. These include: (1) Evidence of Performance-Based Planning and Programming (MAP-21, and continued in the FAST Act); (2) Inclusion of Additional Metropolitan Planning Factors (FAST Act); (3) Additional Transportation Components to be Addressed (FAST Act); and (4) Consultation with Additional Parties (FAST Act). The Sheboygan MPO is committed to continuing to implement these provisions in future long-range transportation plans, TIPs, and other planning documents.