

CHAPTER 8: MITIGATION OF ENVIRONMENTAL IMPACTS OF MAJOR TRANSPORTATION PROJECTS

SUMMARY OF MAJOR TRANSPORTATION PROJECTS

The recommended capacity modifying street and highway improvement projects in the Update to the *Year 2045 SATP* are as follows:

1. South Taylor Drive
Racetrack Road to Southpointe Drive (Including addition of Horizon Drive and Southpointe Drive to meet County Highway OK/South Business Drive)
New 2 Lane Facility
Recommended implementation period: 2019 - 2028
2. South 18th Street
County Highway EE/Weeden Creek Road to County Highway V
New 2 Lane Facility
Recommended implementation period: 2019 - 2028
3. State Highway 23
Western Boundary of the Sheboygan Metropolitan Planning Area to State Highway 32
Various Projects (from the Corridor Preservation and Freeway Designation Study, Including an Interchange at State Highway 23 and County Highway TT)
Recommended implementation period: 2019 - 2028
4. County Highway TT
County Highway PP to State Highway 28
New 2 Lane Facility
Recommended implementation period: 2029 – 2038
5. Interstate Highway 43
At County Highway FF
New Full Interchange
Recommended implementation period: 2029 – 2038
6. Interstate Highway 43
At County Highway PP/Lower Falls Road/Indiana Avenue
New Half Interchange (to and from the south)
Recommended implementation period: 2029 – 2038

7. State Highway 42
County Highway Y to County Highway A/Howards Grove
Reconstruction with Increase from 2 to 4 Lanes
Recommended implementation period: 2039 – 2045

The above noted projects are identified on Map 7.1 in Chapter 7 (Recommended Transportation Plan) of the Update to the *Year 2045 SATP*, and also appear as an overlay on the maps presented in this chapter of the plan update.

The Update to the *Year 2045 SATP* also recommends several system preservation, right-of-way/corridor preservation and safety projects, as well as transit capital items and operating expenses and bicycle and pedestrian facilities. However, the focus of this environmental mitigation section is on the capacity modifying street and highway improvement projects in the Update to the *Year 2045 SATP*, since these projects will likely have the greatest impacts on environmental features in the metropolitan planning area.

INVENTORY OF MAPPING COMPLETED WITH OVERLAY OF MAJOR TRANSPORTATION PROJECTS

Several maps were prepared as part of the environmental consultation and mitigation process for the Update to the *Year 2045 SATP*. The seven capacity modifying street and highway improvement projects have been overlaid on each of the maps, and are identified by a number corresponding to the project listed on Map 7.1 in Chapter 7. The maps developed include land use, watersheds, environmental corridors, prime agricultural soils, woodlands, historical sites, and parks and recreation.

Land Use

The Sheboygan metropolitan planning area land use data was most recently collected and integrated into GIS in 2015.

Map 8.1 shows 2015 land use in the Sheboygan metropolitan planning area with the overlay of the major transportation projects. The source of this inventory is the Bay-Lake Regional Planning Commission.

Watersheds

Map 8.2 shows watershed boundaries in the Sheboygan metropolitan planning area with the overlay of the major transportation projects. The six watersheds in the metropolitan planning area include the Sheboygan River, Pigeon River, Black River, Onion River, Mullet River, and Sevenmile Creek/Silver Creek watersheds. The source for this inventory is the Wisconsin Department of Natural Resources (DNR).

Environmental Corridors

Environmental corridors as they apply to the Sheboygan metropolitan planning area are shown on Map 8.3 with the overlay of the major transportation projects. Environmental corridors have been defined by the Bay-Lake Regional Planning Commission natural resources planning staff working with a technical advisory committee.

Environmental corridor features that are shown on this map include the following:

- Wetlands with a 50 foot buffer;
- Surface waters with a 75 foot setback;
- Floodplains; and
- Areas of steep slope (12 percent or greater).

Wetlands

Wetlands larger than two acres are depicted within the Sheboygan metropolitan planning area using Wisconsin DNR wetland inventory data from 2008. The 50-foot wetland buffer layer was created by the Bay-Lake Regional Planning Commission.

Surface Waters

Surface water features in the Sheboygan metropolitan planning area include navigable water bodies and waterways; shorelines; and intermittent and perennial waterways. The source for this inventory is the Wisconsin DNR 24K Open Water Hydrology data (Version 6) from 2009. The 75-foot setback layer was created by the Bay-Lake Regional Planning Commission.

Floodplains

Floodplains include the mapped zone of the 100-year flood or base flood on the flood insurance rate maps (FIRMs) developed by the Federal Emergency Management Agency (FEMA) in 2009.

Steep Slopes

Steep slopes include soils characterized as having a slope of 12 percent or greater using the Soil Survey data from the Natural Resources Conservation Service (NRCS) of the U.S. Department of Agriculture from 2004.

Prime Agricultural Soils

The prime agricultural soils map is divided into three categories to depict the following soil types: all areas of prime farmland; farmland of statewide importance; and prime farmland if drained.

Map 8.4 shows prime agricultural soils in the Sheboygan metropolitan planning area with the overlay of the major transportation projects. The source of this inventory is the U.S. Department of Agriculture's NRCS from 2004.

Woodlands

Map 8.5 shows woodlands in the Sheboygan metropolitan planning area with the overlay of the major transportation projects. Types of woodlands portrayed include deciduous forest, evergreen forest, mixed forest, palustrine forest wetland, and palustrine scrub/shrub wetland. The source for this inventory is the 2015 land use inventory completed by the Bay-Lake Regional Planning Commission.

Historical Sites

Map 8.6 shows historical sites in the Sheboygan metropolitan planning area with the overlay of the major transportation projects. The information was obtained from the Wisconsin Historic Preservation Database of the Wisconsin State Historical Society. The Bay-Lake Regional Planning Commission signed an agreement with the Wisconsin State Historical Society to obtain this file in January 2019.

Parks and Recreation

Map 8.7 shows parks and recreation lands in the Sheboygan metropolitan planning area with the overlay of the major transportation projects, which includes all state, county, and local public parks, along with some private recreation lands (such as golf courses, camps and conservation/hunting clubs). Sources of this inventory include the Sheboygan County Planning and Conservation Department, the City of Sheboygan, and the Bay-Lake Regional Planning Commission (from the 2015 land use inventory).

OTHER INVENTORIES AND PLANS CONSULTED BUT NOT MAPPED

U.S. Fish and Wildlife Service County Lists of Threatened and Endangered Species

The U.S. Fish and Wildlife Service (FWS) publishes county lists of threatened and endangered species. This list can be found at the statewide level at:

<https://www.fws.gov/midwest/endangered/lists/wisc-cty.html>(.) Threatened species in Sheboygan County include the northern long-eared bat and the pitcher's thistle. In addition, the rusty patched bumble bee is an endangered species in Sheboygan County, although the FWS hasn't yet included this species in its listing for the county. These species are likely present in the metropolitan planning area, and will need to be considered as the major transportation projects move toward implementation. At the project level, there will need to be consideration of how a project might affect these and other species that may be listed in the future, and how those impacts would potentially be mitigated.

Wisconsin DNR Natural Heritage Inventory (NHI)

The Wisconsin DNR Bureau of Endangered Resources prepared the Wisconsin Natural Heritage Inventory (NHI), which maps the locations of aquatic and terrestrial occurrences of rare animals, plants and natural communities. The NHI data is provided through the Wisconsin DNR website (<https://dnr.wi.gov/topic/nhi/data.asp>) down to the township/range scale through the NHI “Township Tool,” and more general information can be found at the county level through the NHI “County Tool.” More detailed data on specific locations can be accessed through the NHI Public Portal or by paying one time data request or NHI data license fees. The NHI database, last updated in August 2018, is the most comprehensive source of rare species data for Wisconsin.

All seven recommended capacity modifying projects in the Update to the *Year 2045 SATP* pass through areas where *township-level* occurrences of rare species and/or natural features have been reported. *Section-level* occurrences of rare species or natural features are not as available for analysis directly from the WDNR NHI webpage as they have been in the past, so analysis was not conducted at this level of detail. As the recommended projects move to design and implementation, additional detailed analysis can be conducted by purchasing more location-specific NHI data from the WDNR.

Wisconsin DNR Land Legacy Report

The Land Legacy Report was produced by the Wisconsin Department of Natural Resources in 2006. All of the Sheboygan metropolitan planning area is within the *Central Lake Michigan Coastal* ecological landscape. There are two “legacy places” noted within this ecological landscape in the metropolitan planning area: the Onion River Grasslands along the Onion River in the Town of Lima, as well as the Kohler-Andrae Dunes in Kohler-Andrae State Park in the Town of Wilson.

Neither of these legacy places is directly affected by the seven capacity modifying projects recommended in the Update to the *Year 2045 SATP*. However, the South 18th Street extension could have impacts on future “efforts to buffer and/or expand the (Kohler-Andrae State) park.” It should be noted that the Land Legacy Report recommended park expansion more in terms of expanding recreational opportunities and human demand for the park as opposed to protection of plant or animal species.

Wisconsin Wildlife Action Plan

The Wisconsin Wildlife Action Plan (WWAP), prepared in 2005 and updated in 2015 by the Wisconsin DNR, discusses species of greatest conservation need, as well as natural community and general management opportunities. A link to this plan can be found at: <https://dnr.wi.gov/topic/wildlifehabitat/actionplan.html>(.) Species of greatest conservation need within the *Central Lake Michigan Coastal* ecological landscape (in the *2015 – 2025 WWAP*), which encompasses the Sheboygan metropolitan planning area, include:

- Some 42 species of birds (17 of these species have a “major” association with the landscape, 18 have an “important” association with the landscape, and seven are otherwise “present” in the landscape);
- Some seven species of fish (one of these species has a “major” association with the landscape, two have an “important” association with the landscape, and four are otherwise “present” in the landscape);
- Some seven species of reptiles and amphibians (one of these species has a “major” association with the landscape, three have an “important” association with the landscape, and three are otherwise “present” in the landscape);
- Some 76 species of insects (21 of these species have a “major” association with the landscape, 13 have an “important” association with the landscape, and 42 are otherwise “present” in the landscape);
- Some 21 species of invertebrates (three of these species have a “major” association with the landscape, 11 have an “important” association with the landscape, and seven are otherwise “present” in the landscape); and
- Some nine species of mammals (two of these species have a “major” association with the landscape, two have an “important” association with the landscape, and five are otherwise “present” in the landscape).

The *2005 - 2015 WWAP* was more detailed than was the *2015 – 2025 WWAP*, so all narrative that follows refers to the *2005 – 2015 WWAP*. The *2005 – 2015 WWAP* indicated that there were 37 natural community opportunities listed for the *Central Lake Michigan Coastal* ecological landscape. This included eight natural communities where there were “major” opportunities (alvar; dry cliff; Great Lakes beach; Great Lakes dune; Great Lakes ridge and swale; Lake Michigan; warm water rivers; and warm water streams). There were an additional 20 natural communities where there were “important” opportunities, along with nine natural communities where such opportunities were “present.”

The *2005 – 2015 WWAP* listed five general management opportunities for the *Central Lake Michigan Coastal* ecological landscape, four of which would apply to the Sheboygan metropolitan planning area:

1. Protect unique Great Lakes coastal features such as beach and dune systems, forested ridge and swale complexes, Great Lakes marshes, and alvar (a rare community characterized by thin soil over limestone);
2. Protect sensitive stretches of the Niagara Escarpment, a globally significant geologic feature that supports many rare and specialized organisms (the only part of the

metropolitan planning area known to have this feature is North Point along Lake Michigan in the City of Sheboygan);

3. Expand protection for Lake Michigan shoreline habitats, especially those areas receiving heavy use by migratory birds, fish and colonial birds; and
4. Connect habitat remnants where possible, especially along shorelines and stream corridors.

The first two general management opportunities are not affected by the recommended improvements. However, the last two general management opportunities should be considered in the design of the recommended transportation improvements. The WWAP is too general to specify individual wildlife impacts from any of the seven capacity modifying projects recommended in the Update to the *Year 2045 SATP*.

State Comprehensive Outdoor Recreation Plan (SCORP)

The *2018 – 2023 Wisconsin Statewide Comprehensive Outdoor Recreation Plan (SCORP)*, prepared by the Wisconsin DNR, should be completed in early 2019, and involves the following activities:

- Collecting data on Wisconsinites' participation in outdoor recreation;
- Conducting initial research on the efficacy and costs of different techniques to gather data on visitors (e.g.: numbers, activities pursued, visitation patterns and satisfaction) to public lands;
- Updating data on the supply of outdoor recreation opportunities, with a focus on properties open to the public for nature-based outdoor recreation; and
- Developing priorities for future recreation funding.

Past SCORPs have examined the following topics:

- Wisconsin Outdoor Recreation Uses and Trends;
- Outdoor Recreation and Public Health;
- Access to Outdoor Recreation in Urban Wisconsin;
- Open Space Conservation: Connecting People to Outdoor Recreation Opportunities; and
- Wisconsin SCORP Outdoor Recreation Goals and Actions.

No inconsistencies were found between the seven capacity modifying projects in the Update to the *Year 2045 SATP* and the SCORP. The SCORP is written in a general manner without site-specific recommendations.

Archaeological Sites

Information was obtained on archaeological sites from the Wisconsin Historic Preservation Database of the Wisconsin State Historical Society. The Bay-Lake Regional Planning Commission signed an agreement with the Wisconsin State Historical Society and paid a fee to obtain this file in January 2019. The agreement does not allow for mapping or direct disclosure of archaeological sites to the public; however, the information was reviewed for potential impacts from the seven capacity modifying projects identified in the Update to the *Year 2045 SATP*.

Two capacity modifying projects may have an impact on known archaeological sites. The first project involves the construction of a new half interchange on Interstate Highway 43 to serve traffic coming to and from the south at County Highway PP/Lower Falls Road/Indiana Avenue, and the second project involves the reconstruction and expansion of State Highway 42 from two to four lanes between County Highway Y and County A in Howards Grove.

Sheboygan County Natural Areas and Critical Resources Plan

The *Sheboygan County Natural Areas and Critical Resources Plan* was prepared by the Sheboygan County Planning and Conservation Department (with assistance provided by the Bay-Lake Regional Planning Commission) in 2004. The plan was reviewed by the Sheboygan County Smart Growth – Stewardship Technical and Advisory Committees. Other critical resource committees which reviewed plan elements included the Sheboygan County Agricultural Planning Committee, the Sheboygan County Cultural Resources Planning Committee, and the Sheboygan River Basin Partners (Natural Resources Committee).

The *Sheboygan County Natural Areas and Critical Resources Plan* details a natural resources strategy that includes the following elements:

- Preservation of agricultural lands;
- Large farm expansions and the potential impacts they may cause to the natural environment;
- Preserve rural character;
- Preserve natural resources and public lands through good management for multiple uses;
- Preserve groundwater resources;
- Improve air quality;
- Preserve the quality of groundwater;

- Preserve, restore and improve surface water quality (wetlands, lakes, rivers and streams) through education, erosion control, buffer strips, easements, land use controls, flood controls and nutrient/sediment reductions;
- Preservation of parks and open space/Encourage access and preservation of access to lakes and rivers;
- Encourage the preservation of environmental corridors and other sensitive areas, such as waterfronts, streams and wetlands;
- Continue to promote sustainable forestry;
- Maintain beaches and determine sources of beach closings and degraded water quality;
- Maintain and enhance coastal wetlands;
- Improve access to Lake Michigan and other coastal features; and
- Support cultural activities.

The *Sheboygan County Natural Areas and Critical Resources Plan* includes a vision, and several goals and objectives for each of the following plan elements: natural resources; agricultural resources; agricultural and open space development/preservation; parks and recreational lands; metallic and non-metallic resources; and historic and cultural resources.

Much of the data collected for the *Sheboygan County Natural Areas and Critical Resources Plan* was also used to map features in which the capacity modifying projects in the Update to the *Year 2045 SATP* have been assessed to determine the impacts of these projects on the natural and human environments.

Sheboygan County Farmland Preservation Plan

The *Sheboygan County Farmland Preservation Plan* was completed by the Sheboygan County Planning and Conservation Department and the Bay-Lake Regional Planning Commission, was certified by the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) in November 2013, and was approved by the Sheboygan County Board in January 2014. Four amendments to the plan were approved in October 2014, November 2015, November 2016, and February 2018. Within the communities of the Sheboygan metropolitan planning area, Amendment #2 (November 2015) impacted the Towns of Herman and Lima, while Amendment #3 (November 2016) impacted the Towns of Lima and Mosel. The plan was overseen by the Sheboygan County Agriculture Planning Committee, with input from Sheboygan County UW-Extension, town board members, and plan commission members.

The *Sheboygan County Farmland Preservation Plan* details an agricultural resources strategy that includes the following goals (most of these can also be found in the *Common Visions: Sheboygan County Comprehensive Land Use Plan, 2010 – 2030*):

- Preserve agricultural lands by encouraging towns to follow through on their “Smart Growth” plans;
- Promote agribusiness near production areas;
- Consider important agricultural areas when planning for development;
- Preserve rural character by encouraging towns to adhere to their “Smart Growth” plans;
- Preserve natural resources and public lands through good management for multiple uses;
- Protect groundwater resources through continued well testing;
- Improve nuisance complaints through the adoption of a livestock siting ordinance;
- Preserve, restore, and improve surface water quality (wetlands, lakes, rivers, and streams) through education, erosion control, buffer strips, easements, land use controls, flood controls, and nutrient/sediment reductions;
- Encourage the preservation of environmental corridors and other sensitive areas, such as waterfronts, streams, and wetlands; and
- Continue to promote sustainable forestry.

The plan delineates two categories of lands for the county: *Farmland Preservation Areas* and *Non-Farmland Preservation Areas*.

- ***Farmland Preservation Areas*** included agricultural uses and agriculture-related uses. In addition, a minimal amount of non-farmland uses (such as transportation, utilities, communication and nonmetallic mineral extraction) that support the agriculture industry, do not substantially impair or limit current or future agricultural uses, and comply with Section 91.46 of the *Wisconsin Statutes*. Significant environmental features were also classified as “Farmland Preservation Areas” to be preserved for their natural aesthetics and scenic values as well as their environmental attributes; these include floodways, wetlands and woodlands.
- ***Non-Farmland Preservation Areas*** are those remaining areas not categorized as “Farmland Preservation Areas.” These areas are considered incompatible with agriculture. These areas include concentrations of residential, business and industrial development primarily found in incorporated municipalities, subdivisions, and areas presently receiving or planned for sanitary sewer service. Other land uses located in rural Sheboygan County (such as wind energy systems, wireless communication facilities, golf courses, mineral extraction, etc.) were not included in “Farmland Preservation Areas” unless they were predominantly used for agricultural purposes.

Various natural areas and recreational lands owned by the State of Wisconsin or by Sheboygan County were also excluded from “Farmland Preservation Areas.”

Four of the towns in the metropolitan planning area (Herman, Lima, Mosel and Sheboygan Falls) have been included in the *Sheboygan County Farmland Preservation Plan*. The Towns of Sheboygan and Wilson elected not to participate in this plan due to their status as urban or rapidly urbanizing towns.

Based on the farmland preservation maps provided in the *Sheboygan County Farmland Preservation Plan* (as amended), the recommended capacity modifying street and highway improvement projects in the Update to the *Year 2045 SATP* may have the following impacts on recommended farmland preservation areas:

1. South Taylor Drive from Racetrack Road to Southpointe Drive (Including addition of Horizon Drive and Southpointe Drive to meet County Highway OK/South Business Drive): New 2 Lane Facility

This project is located in the City of Sheboygan and the Town of Wilson. This project is located in jurisdictions that did not participate in the Farmland Preservation Plan process. Therefore, the project is not considered to have an impact on farmland preservation areas.

2. South 18th Street from County Highway EE/Weeden Creek Road to County Highway V: New 2 Lane Facility

The northern edge of this project is located in the City of Sheboygan, but is mostly located in the Town of Wilson. This project is located in jurisdictions that did not participate in the Farmland Preservation Plan process. Therefore, the project is not considered to have an impact on farmland preservation areas.

3. State Highway 23 from the Western Boundary of the Sheboygan Metropolitan Planning Area to State Highway 32: Various Projects (from the Corridor Preservation and Freeway Designation Study, including an interchange at State Highway 23 and County Highway TT)

This project is located in portions of Sections 20 through 23 of the Town of Sheboygan Falls. The project would have significant impacts on farmland preservation areas, as the vast majority of the corridor is located within such areas. The project will include an interchange at County Highway TT (most likely affecting Section 22 and possibly affecting a portion of Section 27). Removal of at-grade access will also occur at various locations along the corridor.

This project will also affect Section 19 of the Town of Sheboygan Falls and Section 24 of the Town of Plymouth, as much of the State Highway 23 corridor in these sections also

includes farmland preservation areas. However, these sections are located outside the Sheboygan metropolitan planning area.

4. County Highway TT from County Highway PP to State Highway 28: New 2 Lane Facility

The northern edge of this project touches the corporate limits of the City of Sheboygan Falls, but is mostly located in the Towns of Sheboygan Falls (Section 34) and Lima (Section 3). The project would have significant impacts on farmland preservation areas in both towns, as the vast majority of the corridor is located within such areas.

5. Interstate Highway 43 at County Highway FF: New Full Interchange

This project is located in Sections 17 and 20 in the Town of Mosel. The project would impact farmland preservation areas.

6. Interstate Highway 43 at County Highway PP/Lower Falls Road/Indiana Avenue: New Half Interchange (to and from the south)

This project is located where the Village of Kohler and the Town of Sheboygan meet. The northbound off ramp could also be configured in such a manner that the City of Sheboygan could be impacted by the project (if land from the UW-Green Bay Sheboygan Campus is needed for the project). This project is located in jurisdictions that did not participate in the Farmland Preservation Plan process. Therefore, the project is not considered to have an impact on farmland preservation areas.

7. State Highway 42 from County Highway Y to County Highway A/Howards Grove: Reconstruction with an Increase from 2 to 4 Lanes

This project is located in portions of the Towns of Mosel (Sections 30 and 31) and Herman (Section 25). Lands adjacent to this corridor no longer involve farmland preservation areas (these were farmland preservation areas in the past, but have become urbanized over time).

Sheboygan County Comprehensive Outdoor Recreation and Open Space Plan

The *Sheboygan County Comprehensive Outdoor Recreation and Open Space Plan*, last updated and adopted in 2015, serves as a guide to local communities and to Sheboygan County in the maintenance and development of outdoor recreation facilities. The *Sheboygan County Comprehensive Outdoor Recreation and Open Space Plan* was examined in comparison to the seven capacity modifying street and highway projects recommended in the Update to the *Year 2045 SATP*.

Based on the existing and proposed outdoor recreation facility maps in the *Sheboygan County Comprehensive Outdoor Recreation and Open Space Plan*, the recommended capacity modifying street and highway improvement projects in the Update to the *Year 2045 SATP* may have the following impacts on outdoor recreation resources (public or private):

1. South Taylor Drive from Racetrack Road to Southpointe Drive (Including addition of Horizon Drive and Southpointe Drive to meet County Highway OK/South Business Drive): New 2 Lane Facility

This project is not expected to have any adverse impacts on outdoor recreation resources.

2. South 18th Street from County Highway EE/Weeden Creek Road to County Highway V: New 2 Lane Facility

This project may potentially impact a portion of the Riverdale Country Club in the Town of Wilson.

3. State Highway 23 from the Western Boundary of the Sheboygan Metropolitan Planning Area to State Highway 32: Various Projects (from the Corridor Preservation and Freeway Designation Study, including an interchange at State Highway 23 and County Highway TT)

This project may potentially impact several outdoor recreation resources, including: the Meadowlark Trailhead to the Old Plank Road Trail; an access point to the Sheboygan River near the current intersection of State Highway 23 and County Highway TT; Camp Y-Koda; and Sunset Hills Golf Course. A proposed public acquisition area east of County Highway TT and between County Highway C and State Highway 23 could also be impacted by implementation of an interchange at State Highway 23 and County Highway TT. Removal of at-grade access to State Highway 23 in certain locations may also change travel patterns of area residents and visitors to other outdoor recreation resources in the Town of Sheboygan Falls.

4. County Highway TT from County Highway PP to State Highway 28: New 2 Lane Facility

This project is not expected to have any adverse impacts on outdoor recreation resources.

5. Interstate Highway 43 at County Highway FF: New Full Interchange

This project is not expected to have any adverse impacts on outdoor recreation resources. This project would improve customer access to Whistling Straits Golf Course.

6. Interstate Highway 43 at County Highway PP/Lower Falls Road/Indiana Avenue: New Half Interchange (to and from the south)

This project is not expected to have any adverse impacts on outdoor recreation resources. This project would improve customer access to Blackwolf Run Golf Course and River Wildlife.

7. State Highway 42 from County Highway Y to County Highway A/Howards Grove: Reconstruction with an Increase from 2 to 4 Lanes

This project may potentially impact recreational facilities at Howards Grove High School, and may also impact Community Park on the southeast side of the Village of Howards Grove. This project is not expected to have any adverse impacts on outdoor recreation resources in the Towns of Herman or Mosel.

Local Comprehensive (“Smart Growth”) Plans

The “Agricultural, Natural and Cultural Resources” and “Transportation” elements of the local comprehensive plans for Sheboygan County and for the communities within the Sheboygan metropolitan planning area were reviewed for consistency with the Update to the *Year 2045 SATP*. Environmental, historical, recreational, or agricultural impacts that have been identified in previous sections of the Update to the *Year 2045 SATP* were not repeated in this section when found in the local comprehensive plans that utilized the same source for the information.

Sheboygan County

Common Visions: Sheboygan County Comprehensive Land Use Plan, 2010 – 2030 was adopted in December of 2009, with one amendment to this plan adopted in January 2014. The “Agricultural, Natural and Cultural Resources” and “Transportation” elements of this plan were reviewed for consistency with the Update to the *Year 2045 SATP*. No inconsistencies were found in most plan elements. It should be noted that the agricultural, natural and cultural resources recommendations and the transportation recommendations in this plan were too broad to determine consistency with this Update to the *Year 2045 SATP*. In addition, the county comprehensive plan was a compilation of the various city, village and town comprehensive plans developed across the county; therefore, local comprehensive plans are the best documents with which to determine plan consistency.

The Sheboygan County Planning and Conservation Department intends to amend this plan in 2019.

City of Sheboygan

The City of Sheboygan adopted its most recent “smart growth compliant” comprehensive plan update in December of 2011 (i.e.: compliant with Section 66.1001 of the *Wisconsin Statutes*).

The “Culture and Education,” “Natural Resources,” “Agricultural Resources” and “Transportation” elements of the *City of Sheboygan Comprehensive Plan* were reviewed for consistency with the Update to the *Year 2045 SATP*; no inconsistencies were found in most plan elements, but a few inconsistencies were noted in the area of transportation.

The *City of Sheboygan Comprehensive Plan* recommended that South Taylor Drive be extended to the south with a multiuse trail (although the comprehensive plan recommended this extension to Stahl Road, while the Update to the *Year 2045 SATP* recommends this extension to Southpointe Drive, including addition of Horizon Drive and Southpointe Drive to meet County Highway OK/South Business Drive). The *City of Sheboygan Comprehensive Plan* also recommended placement of an interchange at Interstate Highway 43 and County Highway PP/Lower Falls Road/Indiana Avenue, although the plan did not specify the configuration of such a full or partial interchange. The *City of Sheboygan Comprehensive Plan* did not recommend the extension of South 18th Street; the comprehensive plan will need to be amended to include this project in order to be fully consistent with the Update to the *Year 2045 SATP*.

City of Sheboygan Falls

The *City of Sheboygan Falls Comprehensive Plan* was adopted in September of 2009. The “Agricultural, Natural and Cultural Resources” and “Transportation” elements of the *City of Sheboygan Falls Comprehensive Plan* were reviewed for consistency with the Update to the *Year 2045 SATP*; no inconsistencies were identified in most plan elements, but some minor inconsistencies were noted in the area of transportation.

It should be noted that two of the seven capacity modifying projects recommended in the Update to the *Year 2045 SATP* are located within the City of Sheboygan Falls’ planning area. The County Highway TT extension from County Highway PP to State Highway 28 appears as a recommendation in the *City of Sheboygan Falls Comprehensive Plan*, although the proposed alignment in the comprehensive plan is different from what appears in the Update to the *Year 2045 SATP*. In addition, an interchange at State Highway 23 and County Highway TT is recommended in the *City of Sheboygan Falls Comprehensive Plan*; this appears as a major recommendation from the State Highway 23 Corridor Preservation and Freeway Designation Study that is being included in the Update to the *Year 2045 SATP*; in this case, the project has been identified with a circle, with no specified location or alignment.

The City of Sheboygan Falls intends to start the process of amending this plan some time in 2019.

Village of Howards Grove

The *Village of Howards Grove Comprehensive Plan* was adopted in July of 2007 and was amended via addendum in 2017. The “Agricultural, Natural and Cultural Resources” and “Transportation” elements of the *Village of Howards Grove Comprehensive Plan* (which were

not changed much in the 2017 addendum) were reviewed for consistency with the Update to the *Year 2045 SATP*, and no inconsistencies were identified.

It should be noted that one of the seven capacity modifying projects recommended in the Update to the *Year 2045 SATP* is in the planning area for this comprehensive plan. This project is the reconstruction with an increase from two to four lanes of State Highway 42 from County Highway Y to County Highway A, which is discussed in the *Village of Howards Grove Comprehensive Plan*. In addition, even though it is distant from the village, the proposed Interstate Highway 43 interchange at County Highway FF is discussed in the *Village of Howards Grove Comprehensive Plan*.

Village of Kohler

The *Village of Kohler Comprehensive Plan* was adopted in November of 2007, and was amended via addendum in 2017. The “Agricultural, Natural and Cultural Resources” and “Transportation” elements of the *Village of Kohler Comprehensive Plan* were reviewed for consistency with the Update to the *Year 2045 SATP*; no inconsistencies were identified in most plan elements, but one inconsistency was noted in the area of transportation.

The *Village of Kohler Comprehensive Plan* did not recommend placement of a half interchange at Interstate Highway 43 and County Highway PP/Lower Falls Road/Indiana Avenue. The *Village of Kohler Comprehensive Plan* will need to be amended to include this project in order to be fully consistent with the Update to the *Year 2045 SATP*. Crossing of the Sheboygan River with the southbound on ramp of this half interchange may also be complex in terms of natural resource impacts.

Town of Herman

The *Town of Herman Comprehensive Plan* was adopted in October of 2007, and was amended via addendum in 2017. The “Agricultural, Natural and Cultural Resources” and “Transportation” elements of the *Town of Herman Comprehensive Plan* were reviewed for consistency with the Update to the *Year 2045 SATP* and no inconsistencies were identified.

It should be noted that one of the seven capacity modifying projects recommended in the Update to the *Year 2045 SATP* is in the planning area for this comprehensive plan. This project is the reconstruction with an increase from two to four lanes of State Highway 42 from County Highway Y to County Highway A, which is discussed in the *Town of Herman Comprehensive Plan*. It is notable that the Agricultural Impact Statement program discussed in the “Agricultural, Natural and Cultural Resources” chapter may impact the State Highway 42 expansion project. The *Town of Herman Comprehensive Plan* also mentions the proposed Interstate Highway 43 full interchange at County Highway FF.

Town of Lima

The *Town of Lima Comprehensive Plan* was originally adopted in December of 2009, and was amended via addendum in January of 2019. The “Agricultural, Natural and Cultural Resources” and “Transportation” elements of the *Town of Lima Comprehensive Plan* (as amended) were reviewed for consistency with the Update to the *Year 2045 SATP*, and no inconsistencies were identified in most plan elements, but some minor inconsistencies were noted in the area of transportation.

It should be noted that one of the seven capacity modifying projects recommended in the Update to the *Year 2045 SATP* is in the planning area for this comprehensive plan. This project is the extension of County Highway TT from County Highway PP to State Highway 28 as a two lane facility. This project appears on the future land use map of the *Town of Lima Comprehensive Plan* (as amended), although the proposed alignment is different from what appears in the Update to the *Year 2045 SATP*. This project is also referred to in the Transportation chapter of the *Town of Lima Comprehensive Plan* (as amended, under “Transportation Corridor Plans”). Crossing of the Mullet River with the portion of this roadway extension in the Town of Lima may also be complex in terms of natural resource impacts.

Town of Mosel

The *Town of Mosel Comprehensive Plan* was adopted in June of 2009, and was amended via addendum in January of 2019. The “Agricultural, Natural and Cultural Resources” and “Transportation” elements of the original and amended *Town of Mosel Comprehensive Plan* were reviewed for consistency with the Update to the *Year 2045 SATP*, and no inconsistencies were identified.

It should be noted that two of the seven capacity modifying projects recommended in the Update to the *Year 2045 SATP* are in the planning area for this comprehensive plan. These projects include a new full interchange on Interstate Highway 43 at County Highway FF, as well as the reconstruction with an increase from two to four lanes of State Highway 42 from County Highway Y to County Highway A. Both projects are discussed in the transportation chapter of the original *Town of Mosel Comprehensive Plan*. It is notable that the Agricultural Impact Statement program discussed in the “Agricultural, Natural and Cultural Resources” chapter of the original *Town of Mosel Comprehensive Plan* may impact the State Highway 42 expansion project and the proposed Interstate Highway 43 interchange at County Highway FF. The plan amendment/addendum recently approved only discussed transportation in the content of funding programs for town road improvements.

Town of Sheboygan

The *Town of Sheboygan Comprehensive Plan* was adopted in December of 2009. The “Agriculture, Natural and Cultural Resources” and “Transportation” elements of the *Town of*

Sheboygan Comprehensive Plan were reviewed for consistency with the Update to the *Year 2045 SATP*; no inconsistencies were identified in most plan elements, but one inconsistency was noted in the area of transportation.

The *Town of Sheboygan Comprehensive Plan* did not recommend placement of a half interchange at Interstate Highway 43 and County Highway PP/Lower Falls Road/Indiana Avenue. The *Town of Sheboygan Comprehensive Plan* will need to be amended to include this project in order to be fully consistent with the Update to the *Year 2045 SATP*. Crossing of the Sheboygan River with the northbound off ramp of this half interchange may also be complex in terms of natural resource impacts.

The Town of Sheboygan will be working with UW Extension staff to amend this plan (likely via addendum) in 2019.

Town of Sheboygan Falls

The *Town of Sheboygan Falls Comprehensive Plan* was adopted in November of 2009. The “Agricultural, Natural and Cultural Resources” and “Transportation” elements of the *Town of Sheboygan Falls Comprehensive Plan* were reviewed for consistency with the Update to the *Year 2045 SATP*; no inconsistencies were identified in most plan elements, but some minor inconsistencies were noted in the area of transportation.

Two of the seven capacity modifying projects recommended in the Update to the *Year 2045 SATP* are in the planning area for this comprehensive plan. These include the extension of County Highway TT from County Highway PP to State Highway 28 as a two lane facility, as well as various projects associated with the State Highway 23 Corridor Preservation and Freeway Designation Study (including a proposed interchange at County Highway TT). The County Highway TT extension appears on the future land use map of the *Town of Sheboygan Falls Comprehensive Plan*, although the proposed alignment is different from what appears in the Update to the *Year 2045 SATP*, as existing residential development means that County Highway TT would need to be extended west of where it intersects with County Highway PP in order to meet State Highway 28. In addition, some of the recommendations from the State Highway 23 Corridor Preservation and Freeway Designation Study are inconsistent with some of the access recommendations for State Highway 23 that appear on the 20 Year Potential Land Use map in the *Town of Sheboygan Falls Comprehensive Plan*. A change in alignment to County Highway TT with an interchange with State Highway 23 would involve a new crossing of the Sheboygan River, which could be complex in terms of natural resource impacts.

The Town of Sheboygan Falls will be working with UW Extension staff to amend this plan (likely via addendum) in 2019.

Town of Wilson

The *Town of Wilson Comprehensive Plan* was adopted in June of 2007, and was amended via addendum in 2017. The “Agricultural, Natural and Cultural Resources” and “Transportation” elements of the *Town of Wilson Comprehensive Plan* were reviewed for consistency with the Update to the *Year 2045 SATP*; no inconsistencies were identified in most plan elements, but one minor inconsistency was noted in the area of transportation.

The *Town of Wilson Comprehensive Plan* mentions the South Taylor Drive extension as a four lane facility from County Highway EE/Weeden Creek Road to County Highway OK/South Business Drive, which is inconsistent with the Update to the *Year 2045 SATP* in that the updated recommendation calls for South Taylor Drive to be extended from Racetrack Road south to Southpointe Drive (including the addition of Horizon Drive and Southpointe Drive to meet County Highway OK/South Business Drive). The *Town of Wilson Comprehensive Plan* also mentions the South 18th Street extension as a two lane facility from County Highway EE/Weeden Creek Road to County Highway V. It is recommended that the *Town of Wilson Comprehensive Plan* be amended to include this change to the South Taylor Drive extension project, and to map these projects as recommendations in the comprehensive plan document.

SUMMARY OF ENVIRONMENTAL CONSULTATION MEETING CONDUCTED

Multi-Agency Environmental Consultation Meeting

Commission staff met with representatives from participating agencies on April 11, 2019, to discuss environmental consultation and the Update to the *Year 2045 SATP*. The meeting was held at the Wisconsin Department of Transportation Northeast Region office in Green Bay, with a teleconference line available. In addition to two staff from the Bay-Lake Regional Planning Commission present at the meeting, representatives from the following agencies were in attendance at the meeting:

- Wisconsin Department of Natural Resources (DNR) Bureau of Air Management (via teleconference);
- Wisconsin Department of Transportation (WisDOT) Bureau of Technical Services (via teleconference); and
- WisDOT Northeast Region, Green Bay (in person).

The meeting started with introductions, background information and discussion regarding the purpose and expectations of the meeting. This was followed by an overview of the MPO transportation plan and planning process. Commission staff reviewed the draft outline for the Update to the *Year 2045 SATP* with meeting participants. The Update to the *Year 2045 SATP* will include nine chapters (the environmental consultation process is Chapter 8), as well as eight appendices, including an air quality conformity analysis. Commission staff also reviewed the

webpage that has been established for the draft Update to the *Year 2045 SATP* with meeting participants. All draft chapters and most draft appendices were posted to this webpage as of this meeting. There were no questions or comments regarding the overview of the MPO transportation plan and planning process.

The next portion of the meeting dealt with discussion of new or updated environmental resource inventories and plans. Commission staff reviewed draft Chapter 8 of the Update to the *Year 2045 SATP* that was prepared in early 2019; this chapter is titled “Mitigation of Environmental Impacts on Major Transportation Projects,” and was prepared based on input received in the last environmental consultation process conducted in April 2015. Commission staff reviewed various environmental resource inventory maps that were being included in the environmental mitigation chapter of the Update to the *Year 2045 SATP*; WisDOT Northeast Region staff commented that the split between two of the local watersheds “looked too straight” on the map depicting watersheds, and suggested that Commission staff look into this and revise these boundaries if necessary. Commission staff also reviewed other inventories and plans consulted but not mapped that were being included in the environmental mitigation chapter of the Update to the *Year 2045 SATP*; this included review of local comprehensive (“smart growth”) plans consulted but not mapped that were being included in the Update to the *Year 2045 SATP*, some of which had been amended since the last plan update. Staff from the Wisconsin DNR Bureau of Air Management indicated that they could work with colleagues to provide a GIS shape file of the 2015 8-hour ozone nonattainment area covering portions of eastern Sheboygan County. Staff from the Wisconsin DNR Bureau of Air Management also suggested that MPO staff examine the State Trails Plan developed by the Wisconsin DNR and check for consistency with bicycle and pedestrian transportation recommendations in the Update to the *Year 2045 SATP*.

The next portion of the meeting dealt with review of major planned transportation improvements and their potential impacts. The summary of major transportation projects being recommended in the Update to the *Year 2045 SATP* was reviewed with meeting participants. The impacts of the major transportation projects on the natural and human environments from the environmental mitigation effort conducted for the Update to the *Year 2045 SATP* were also reviewed. There were no questions or comments regarding the review of major planned transportation improvements and their potential impacts.

The final significant agenda item involved discussion of transportation plan level environmental mitigation policies and strategies. Commission staff reviewed the proposed environmental mitigation policies and strategies with meeting participants. The air quality conformity analysis and environmental justice analysis in the Update to the *Year 2045 SATP* were also briefly discussed by Commission staff, who acknowledged the cooperation of the WisDOT travel forecasting staff and of the WDNR Bureau of Air Management in the completion of the air

quality conformity analysis for the plan. There were no questions or comments regarding the transportation plan level environmental mitigation policies and strategies.

As far as other discussion was concerned, Wisconsin DNR Bureau of Air Management staff invited WisDOT Northeast Region staff to participate in future quarterly meetings of the Wisconsin DNR Transportation Conformity Work Group. Wisconsin DNR Bureau of Air Management staff also wondered if the Manitowoc-Two Rivers area could become an urbanized area following the 2020 Census. Meeting participants raised no other issues at the meeting.

Minutes from the April 11, 2019, multi-agency environmental consultation meeting can be found in Appendix G.

Following the meeting, Commission staff contacted all stakeholders one final time to see if they had additional comments. Staff from the WisDOT Bureau of Technical Services unable to attend the meeting responded with several comments which led to revisions to the environmental consultation documentation. This included: editing of the environmental mitigation policies and strategies section of this chapter; addition of a notation that specific environmental impacts will be identified and appropriately addressed through the project level National and Wisconsin Environmental Policy Act (NEPA/WEPA) processes as applicable; and identification of federally listed threatened and endangered species, noting that at the project level, there needs to be consideration of how a project might affect these and other species listed in the future, and how these impacts would potentially be mitigated. Other potential topics that staff from the WisDOT Bureau of Technical Services thought could be addressed in the environmental consultation documentation or elsewhere in the plan included: flooding; resiliency and climate change; stormwater management requirements (including whether there are any municipal separate storm sewer system (MS4) permitted communities, and discussion of total maximum daily load, or TMDL); and any outstanding water resources. Other staff from the WisDOT Bureau of Technical Services also provided comments on the environmental justice analysis on the plan (Appendix E).

SUMMARY IMPACT ANALYSIS FOR THE MAJOR TRANSPORTATION PROJECTS

The Bay-Lake Regional Planning Commission has analyzed the impacts of the seven major transportation projects recommended in the Update to the *Year 2045 SATP* on the natural and human environments. The following is a summary of the impacts within the rights-of-way previously noted for each project.

Relocations were estimated based on the land use associated with the structure being taken; structures were assumed to be taken if even a portion of a structure was touching the assumed right-of-way for an expansion project.

Table 8.1 discusses the estimated right-of-way impacts associated with implementation of capacity expansion projects in the Update to the *Year 2045 SATP*. The information provided in Table 8.1 and in the following narrative is included in the Update to the *Year 2045 SATP* for planning purposes only, and will need to be verified during environmental reviews. In the case of environmental corridor attributes, acreage for each individual attribute will often exceed the total environmental corridor acreage in Table 8.1 for a project, since the same land can often exhibit multiple environmental corridor features. For this reason, acreage for each environmental corridor attribute is not reported in the narrative which follows.

The following impacts were noted for each project:

1. South Taylor Drive from Racetrack Road to Southpointe Drive (Including addition of Horizon Drive and Southpointe Drive to meet County Highway OK/South Business Drive): New 2 Lane Facility (Recommended implementation period: 2019 – 2028)

- This project is estimated to require the relocation of one commercial or industrial property, but would not involve the relocation of any residential or governmental/institutional properties.
- No historic buildings or sites would be impacted by this project.
- No parks or recreational lands would be impacted by this project.
- Approximately 0.91 acres of environmental corridors would be impacted by the project, all of which would involve surface water with a 75-foot setback.
- No archaeological areas would be impacted by this project.
- Approximately 14.57 acres of prime agricultural lands would be impacted by this project.

2. South 18th Street from County Highway EE/Weeden Creek Road to County Highway V: New 2 Lane Facility (Recommended implementation period: 2019 – 2028)

- This project is estimated to require the relocation of three residential properties, but would not involve the relocation of any commercial/industrial or governmental/institutional properties. Relocation of at least one of the residential properties could be avoided if the southern terminus of the project is modified during the design process.
- No historic buildings or sites would be impacted by this project.

- Approximately 0.35 acres of private recreational lands (in this case, a golf course) would be impacted by this project. Some or all of this could be avoided with a slight relocation of the project to the west during the design process.
 - Approximately 3.51 acres of environmental corridors would be impacted by this project, including wetlands with a 50-foot setback, 100-year floodplain, and surface water with a 75-foot setback.
 - No archaeological areas would be impacted by this project.
 - Approximately 10.02 acres of prime agricultural lands would be impacted by this project.
- 3. State Highway 23 from the Western Boundary of the Sheboygan Metropolitan Planning Area to State Highway 32: Various Projects (from the Corridor Preservation and Freeway Designation Study, including an interchange at State Highway 23 and County Highway TT)(Recommended implementation period: 2019 – 2028)**
- This project is estimated to require the relocation of one residential property and two commercial/industrial properties, but would not involve the relocation of any governmental/institutional properties.
 - No historic buildings or sites would be impacted by this project.
 - Approximately 3.81 acres of public parks or recreational lands would be impacted by this project.
 - Approximately 12.46 acres of environmental corridors would be impacted by this project, including larger wetlands with a 50-foot setback, two wetlands smaller than two acres, areas of steep slope, 100-year floodplain, and surface water with a 75-foot setback.
 - No archaeological areas would be impacted by this project.
 - Approximately 43.20 acres of prime agricultural lands would be impacted by this project.
- 4. County Highway TT from County Highway PP to State Highway 28: New 2 Lane Facility (Recommended implementation period: 2029 – 2038)**
- This project would require no relocations of residential, commercial/industrial, or governmental/institutional properties.
 - No historic buildings or sites would be impacted by this project.
 - No parks or recreational lands would be impacted by this project.

- Approximately 1.80 acres of environmental corridors would be impacted by this project, mostly involving 100-year floodplain, but also including surface water with a 75-foot setback.
- No archaeological areas would be impacted by this project.
- Approximately 8.05 acres of prime agricultural lands would be impacted by this project.

5. Interstate Highway 43 at County Highway FF: New Full Interchange (Recommended implementation period: 2029 – 2038)

- This project is estimated to require the relocation of two residential properties, but would not involve the relocation of any commercial/industrial or governmental/institutional properties.
- No historic buildings or sites would be impacted by this project.
- No parks or recreational lands would be impacted by this project.
- Approximately 0.72 acres of environmental corridors would be impacted by this project, all of which would involve areas of steep slope.
- No archaeological areas would be impacted by this project.
- Approximately 18.34 acres of prime agricultural lands would be impacted by this project.

6. Interstate Highway 43 at County Highway PP/Lower Falls Road/Indiana Avenue: New Half Interchange (to and from the south: Recommended implementation period: 2029 – 2038)

- This project would require no relocations of residential, commercial/industrial, or governmental/institutional properties.
- No historic buildings or sites would be impacted by this project.
- No parks or recreational lands would be impacted by this project.
- Approximately 12.55 acres of environmental corridors would be impacted by this project, including areas of steep slope, 100-year floodplain, and surface water with a 75-foot setback.
- Up to two archaeological areas could be impacted by this project.
- Approximately 5.08 acres of prime agricultural lands would be impacted by this project.

7. State Highway 42 from County Highway Y to County Highway A/Howards Grove: Reconstruction with an Increase from 2 to 4 Lanes (Recommended implementation period: 2039 – 2045)

- This project is estimated to require the relocation of 17 residential properties and three commercial/industrial properties, but would not require the relocation of any governmental/institutional properties.
- No historic buildings or sites would be impacted by this project.
- No parks or recreational lands would be impacted by this project.
- Approximately 2.85 acres of environmental corridors would be impacted by this project, including larger wetlands with a 50-foot setback, 100-year floodplain, and surface water with a 75-foot setback.
- One archaeological area could be impacted by this project.
- Approximately 31.67 acres of prime agricultural lands would be impacted by this project.

Summary of Total Impacts from all Major Transportation Projects

The following compiles the summarized listing of the total impacts from all seven major transportation projects from the Update to the *Year 2045 SATP*.

- These projects are estimated to require the relocation of up to 29 properties, including up to 23 residential properties, six commercial/industrial properties, and no governmental/institutional properties.
- No historical buildings or sites would be impacted by the projects.
- Approximately 3.81 acres of public parkland and 0.35 acres of private recreational lands (golf courses, etc.) would be impacted by these projects.
- Approximately 34.79 acres of environmental corridors would be impacted by these projects, including wetlands with a 50-foot setback, areas of steep slope, 100-year floodplain, and surface water with a 75-foot setback. In addition, two wetlands smaller than two acres would be impacted by these projects.
- Up to three potential archaeological areas could be impacted by these projects.
- Approximately 130.93 acres of prime agricultural lands would be impacted by these projects.

Specific environmental impacts will be identified and appropriately addressed through the project-level National Environmental Policy Act (NEPA) and Wisconsin Environmental

Policy Act (WEPA) processes as applicable to projects as they move toward implementation.

ENVIRONMENTAL MITIGATION POLICIES/STRATEGIES

Arterial and collector street and highway capacity expansion has been developed through the metropolitan transportation planning process to avoid, if at all possible, impacts to environmentally sensitive resources. The metropolitan transportation planning process first considers land use and transportation alternatives other than arterial and collector street and highway improvements. Arterial and collector street and highway capacity expansion is then considered only to address the residual traffic volume and congestion which would not be addressed by these other land use and transportation measures (such as expanded public transit). In addition, the Bay-Lake Regional Planning Commission has developed and maintains extensive databases of environmentally sensitive resources in the Sheboygan metropolitan planning area. During the plan development process, efforts are made by the Bay-Lake Regional Planning Commission to consider arterial and collector improvements and conceptual alignments which avoid, to the extent possible, impacts on environmentally sensitive resources.

During preliminary engineering and environmental studies of arterial and collector street and highway projects with possible unavoidable impacts on environmentally sensitive resources, it is expected that efforts to minimize or eliminate any adverse impacts through consideration of design alternatives will be exhausted. The scope of the necessary preliminary engineering and environmental studies would include the consideration of alternative alignments and cross-sections designed specifically to minimize the attendant impacts on environmentally sensitive resources. To further minimize impacts, consideration should be given to the use of alternative design features (such as construction of a bridge over wetlands rather than a roadway on fill), even if they significantly increase project costs. Another technique that should be considered to minimize impacts is to seek exceptions to design standards that reduce the roadway cross-section through the impacted area.

Where wetlands will be unavoidably impacted, and for which mitigation is compensatory, efforts should focus on the preferred means of mitigation as identified by the regulatory agencies. Types of mitigation typically considered include: (1) the acquisition and utilization of mitigation bank credits; (2) the restoration, establishment, enhancement and/or preservation of aquatic resources through funds paid to a governmental or non-profit natural resources management entity to satisfy compensatory mitigation requirements for U.S. Army Corps of Engineers permits (in-lieu fee programs); and (3) aquatic resource restoration, establishment, enhancement and/or preservation activity undertaken by the permittee (or an authorized agent or contractor) to provide compensatory mitigation for which the permittee retains full responsibility (permittee-responsible mitigation). Potential mitigation sites could include areas within or adjacent to

wetlands and isolated wetlands, mitigation bank sites, and areas identified in the *Sheboygan County Natural Areas and Critical Resources Plan*.

Established federal and/or state policy and guidelines exist with respect to compensatory mitigation of certain environmentally sensitive resources. With respect to wetlands, all wetland compensatory mitigation efforts must meet the requirements of Section 404 of the Federal Clean Water Act of 1972, Section 10 of the Federal Rivers and Harbors Appropriation Act of 1899, Section 281.37 of the *Wisconsin Statutes*, Chapters NR 103 and NR 350 of the *Wisconsin Administrative Code*, and for Wisconsin Department of Transportation projects, compensatory mitigation efforts must meet the requirements of the cooperative agreement between the Wisconsin DNR and Wisconsin DOT that was updated in July 2012. The Wisconsin DNR, U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, and U.S. Fish and Wildlife Service have jointly developed specific guidelines for required compensatory mitigation for permitted wetland loss in Wisconsin; this document (updated in August 2013) is entitled *Guidelines for Wetland Compensatory Mitigation in Wisconsin*. WisDOT has developed technical guidelines regarding wetland mitigation banking as a resource for compensatory mitigation; these guidelines were first developed in 1993, were revised in 1997 and 2002, and can be found at: <https://wisconsindot.gov/Documents/doing-bus/eng-consultants/cnslt-rsrcs/environment/wetlandmitguidelineswisdot.pdf>(.)

The following environmental impact minimization policies can be applied to all capacity modifying transportation projects throughout the Sheboygan metropolitan planning area. An impact minimization approach that should be followed when planning major transportation projects is described below.

Strategy 1: Avoid Environmentally Significant Features (Including Wetlands)

When planning new or improved transportation facilities, measures should be taken to completely avoid environmentally significant features, including wetlands. However, situations may arise where avoiding these features is either not physically possible or not financially feasible. In these situations, the wetlands and other environmentally significant features should be avoided as much as possible and local mitigation measures should be used to restore what is lost or harmed.

Strategy 2: Employ Local Mitigation Measures

When transportation facilities must pass through or near environmentally significant features, the impacts to the features should be minimized at or near the site through the use of various mitigation measures. Some of these measures could include the following:

Stabilize and Establish Vegetative Buffers along Shorelines

A method of minimizing the impacts of transportation facilities near waterways is to stabilize and create vegetative buffers along shorelines. The addition of native plantings will help to

minimize erosion, maximize pollutant filtration, provide wildlife habitat, minimize the spread of invasive vegetation, and improve the appearance of transportation corridors.

Replace Lost Trees with New Trees

When forests or woodlands are disrupted to enable the construction or improvement of transportation facilities, the communities and/or agencies responsible for the project should plant new trees to replace the trees that were removed. The new trees could be added to the original forest or woodland or along the transportation facility. Although these measures are already taken by one community in the Sheboygan metropolitan planning area (the City of Sheboygan) through the Tree City USA program, efforts should be made throughout the entire metropolitan planning area to replace trees that are removed.

Strategy 3: Utilize Wetland Banks When Local Mitigation Measures Are Not Feasible

When environmentally significant features (such as wetlands) cannot be avoided and mitigation measures at or near the sites of transportation projects are not feasible, an attempt to minimize the impacts of these projects should be made by buying space in area or state wetland mitigation banks. Although buying into these banks will not necessarily mitigate the impacts to specific wetlands within the Sheboygan metropolitan planning area, it will help to prevent overall losses to wetlands in the area or elsewhere in Wisconsin. In-lieu fee programs could also be utilized as needed.

There are currently no wetland mitigation banks that serve the Sheboygan metropolitan planning area. Information on functioning wetland mitigation banks can be found at: <https://dnr.wi.gov/topic/Wetlands/mitigation/bankingRegistry.html>(.)

Sheboygan County along with its partner, the Glacial Lakes Conservancy (GLC), purchased the Amsterdam Dunes property in September of 2014. Sheboygan County officially took over the property in July of 2015. This purchase (328 acres) “establishes a wetland mitigation bank and preservation area.” Amsterdam Dunes is located along Lake Michigan in the Town of Holland, just south of the Sheboygan metropolitan planning area. “The property contains a total of seven contiguous parcels, and is comprised of rare sand dunes, forest and wetlands of various types, bluffs, farmland, streams, and diverse plants and wildlife.” The property also contains “over 1,500 feet of frontage along Lake Michigan, and a WDNR raptor research station is directly contiguous to the property. Sheboygan County intends to preserve the property, open it up to the public, and create a wetland mitigation bank.” Sheboygan County is working with an advisory committee that was established for this project, and public input is being gathered. It will take some time to establish this wetland mitigation bank, and it is not yet known if the wetland mitigation bank will be available to entities outside Sheboygan County. When established, the wetland mitigation bank component of this project will play a large role in minimizing the impacts of transportation projects on local wetlands. In addition to providing a means for the

expansion of existing wetland complexes, establishment of this local wetland bank could generate revenue to be used for other local environmental improvements.

AIR QUALITY CONFORMITY ANALYSIS

The air quality conformity analysis (which discusses the conformity of the Update to the *Year 2045 SATP* and its implementing *2019 – 2022 Sheboygan Metropolitan Planning Area Transportation Improvement Program (TIP)* with respect to the Wisconsin Air Quality Implementation Plan) can be found in Appendix C of the Update to the *Year 2045 SATP*. This appendix is entitled “Conformity of the Update to the *Year 2045 Sheboygan Area Transportation Plan (SATP)* and the *2019 – 2022 Sheboygan Metropolitan Planning Area Transportation Improvement Program (TIP)* with Respect to the State of Wisconsin Air Quality Implementation Plan.”

ENVIRONMENTAL JUSTICE ANALYSIS

The environmental justice analysis (which discusses environmental mitigation for the human environment) can be found in Appendix E of the Update to the *Year 2045 SATP*. This appendix is entitled “Statement of Impacts of Projects in the Update to the *Year 2045 SATP* on Environmental Justice.”

Table 8.1
Impacts Associated with Implementation of the Major Transportation Projects
2019 - 2045

Category	Capacity Expansion Projects in the Update to the Year 2045 SATP										Totals
	South Taylor Dr. to Racetrack Rd. to Southpointe Dr. ¹ 2019-2028	South 18th St. CTH EE to CTH V 2019-2028	South 23rd St. Western MPA Boundary to STH 32 ² 2019-2028	CTH TT CTH PP to STH 28 2029-2038	IH 43 Full Interchange at CTH FF 2029-2038	IH 43 Half Interchange at CTH PP ³ 2029-2038	STH 42 CTH Y to CTH A 2039-2045				
Relocations											
Residential (Number)	0	3	1	0	2	0	17	23			
Commercial and Industrial (Number)	1	0	2	0	0	0	3	6			
Government and Institutional (Number)	0	0	0	0	0	0	0	0			
Historical Buildings and Sites	0	0	0	0	0	0	0	0			
Parks and Recreational Lands (Acres)	0.00	0.35	3.81	0.00	0.00	0.00	0.00	4.16			
Public Parks	0.00	0.00	3.81	0.00	0.00	0.00	0.00	3.81			
Private Rec. Lands (Golf Courses, etc.)	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.35			
Environmental Corridors (Acres)	0.91	3.51	12.46	1.80	0.72	12.55	2.85	34.80			
Wetlands											
Greater than 2 Acres in Total Size (Acres)	0.00	1.15	1.00	0.00	0.00	0.00	0.61	2.76			
With 50' Wetland Buffer (Acres)	0.00	2.82	3.16	0.00	0.00	0.00	1.68	7.66			
Less than 2 Acres in Total Size (Number)	0	0	2	0	0	0	0	2			
Areas of Steep Slope (Acres)	0.00	0.00	0.87	0.00	0.72	7.96	0.00	9.55			
100-Year Floodplain (Acres)	0.00	0.48	8.87	1.74	0.00	5.05	2.77	18.90			
Surface Water with 75' Buffer (Acres)	0.91	1.89	6.96	0.28	0.00	4.81	1.04	15.90			
Other Sensitive Lands											
Potential Archaeological Areas (Number)	0	0	0	0	0	2	1	3			
Prime Agricultural Lands (Acres)	14.57	10.02	43.20	8.05	18.34	5.08	31.67	130.93			

¹Including addition of Horizon Drive and Southpointe Drive to meet County Highway OK/South Business Drive.

²From the Corridor Preservation and Freeway Designation Study, including an interchange at State Highway 23 and County Highway TT.

³The proposed interchange would serve traffic to and from the south.

Source: Bay-Lake Regional Planning Commission, 2019.