APPENDIX E: STATEMENT OF IMPACTS OF PROJECTS IN THE UPDATE TO THE YEAR 2045 SHEBOYGAN AREA TRANSPORTATION PLAN (SATP) ON ENVIRONMENTAL JUSTICE

INTRODUCTION

According to the U.S. Environmental Protection Agency (EPA, https://www.epa.gov/laws-regulations/summary-executive-order-12898-federal-actions-address-environmental-justice), "Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations) was issued by President Clinton in 1994. Its purpose is to focus federal attention on the environmental and human health effects of federal actions on minority and low income populations, with the goal of achieving environmental protection for all communities. The Executive Order directs federal agencies to identify and address the disproportionately high and adverse human health or environmental effects of their actions on minority and low income populations, to the greatest extent practicable and permitted by law. The order also directs each agency to develop a strategy for implementing environmental justice. The order is also intended to promote nondiscrimination in federal programs that affect human health and the environment, as well as to provide minority and low income communities access to public information and public participation." As a recipient of federal funding, MPOs are subject to the provisions of this Executive Order in the development of their plans and programs.

Environmental justice is the fair treatment and meaningful involvement of minority populations and low income populations within the metropolitan planning area in the transportation decision making process. More specifically, it is the assurance that no one group, regardless of race or income level, will have an unfair number of negative impacts imposed upon them. There are three main principles associated with environmental justice:

- (1) To avoid, minimize or mitigate disproportionately high and adverse human health and environmental effects (including social and economic effects) on minority populations and on low income populations;
- (2) To ensure the full and fair participation by all potentially affected communities in the transportation decision making process; and
- (3) To prevent the denial of, reduction in or significant delay in the receipt of benefits by minority and low income populations.

In order to certify compliance with Title VI and address environmental justice, FHWA states that MPOs need to do the following:

(1) Enhance MPO analytical capabilities to ensure that the long-range transportation plan and the transportation improvement program (TIP) comply with Title VI;

- (2) Identify residential, employment and transportation patterns of minority populations and low income populations so that their needs can be identified and addressed, and the benefits and burdens of transportation investments can be fairly distributed; and
- (3) Evaluate and, where necessary, improve MPO public involvement processes to eliminate participation barriers and engage minority populations and low income populations in transportation decision making.

The public is an important element of environmental justice compliance. Transportation agencies cannot fully meet community needs without the active participation of well-informed, empowered individuals. The public is responsible for the following:

- (1) Participation in public involvement activities (meetings, hearings, advisory committees/groups, and task forces) in order to help responsible state and local agencies understand community needs, perceptions and goals; and
- (2) Getting involved with state and local agencies to link FAST Act authorized programs with other federal, state and local resources to fund projects that support community goals.

In addressing environmental justice, the MPO has identified census block groups within the metropolitan planning area boundary with a significant low income or minority population, and has analyzed and addressed (when appropriate) the impacts of the recommended projects on the target groups. In the future, as conditions change, technology improves, and more data become available, the analysis itself will also evolve and will become more comprehensive. In addition, the MPO will develop the ability to reflect back on changes over time, and to evaluate and monitor trends within the metropolitan planning area. This appendix evaluates the potential environmental justice impacts of recommendations contained in the long-range transportation plan. The assessment of potential environmental effects is addressed through evaluating the impacts to economic, social and natural resources.

METHOD OF ANALYSIS

Definition of Terms

The definitions used within this appendix were adopted from the U.S. Environmental Protection Agency's *Toolkit for Assessing Potential Allegations of Environmental Injustice* and the Council on Environmental Quality's *Environmental Justice Guidance under the National Environmental Policy Act*.

- Affected area or community of concern The affected area or community of concern is the geographic area of analysis that the proposed project or action will affect. (In this analysis, the affected areas are those block groups that the project in question abuts).
- Adverse effect or impact Adverse effect or impact is a term used to describe the
 entire compendium of "significant" (as defined under the National Environmental Policy
 Act) individual or cumulative human health or environmental effects or impacts which
 may result from a proposed project or action. Examples of adverse effects or impacts

considered in this plan are: (1) access and mobility; (2) economic and social impacts; (3) land use impacts; (4) community and neighborhood impacts; and (5) impacts on natural resources.

- **Disproportionately high and adverse effects or impacts** An adverse effect or impact that (1) is predominantly borne by an environmental justice target population; or (2) will be suffered by a minority population and/or low income population and is appreciably more severe or greater in magnitude than the adverse effects or impacts that will be suffered by a non-minority population and/or a non-low income population.
- Low Income A person whose household income is at or below the U.S. Department of Health and Human Services' poverty guidelines. For the purposes of this analysis, data on poverty level within the metropolitan planning area from the 2012 2016 American Community Survey 5-Year Estimates was utilized.
- Minority A person (as defined by the U.S. Bureau of the Census) who is: (1) Black or African American (a person having origins in any of the black racial groups of Africa); (2) Hispanic or Latino (a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin, regardless of race); (3) Asian (a person having origins in any of the original peoples of the Far East, Southeast Asia or the Indian subcontinent); (4) Native Hawaiian or Other Pacific Islander (a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands); or (5) American Indian or Alaska Native (a person having origins in any of the original peoples of North and South America (including Central America), and who maintains tribal affiliation or community attachment). For the purposes of this analysis, data on race and ethnicity within the metropolitan planning area from the 2012 2016 American Community Survey 5-Year Estimates was utilized.
- Environmental justice communities or target populations Areas where any readily identifiable group of minority or low income persons resides at percentages that are statistically significantly higher than the percentages of minority and low income persons in the entire metropolitan planning area. An alternate definition is an area where the percentage of the minority or low income population is meaningfully greater than the minority or low income population percentage in the general population of the metropolitan planning area.

Methodology – Identifying Environmental Justice Populations

All analysis was done at the block group level. Both minority and low income population data were collected from the 2012 - 2016 American Community Survey 5-Year Estimates.

The first step in the analysis examined the metropolitan planning area as a whole to evaluate whether the minority and low income populations were greater than the State of Wisconsin. A minority or low income population higher than the state would mean that the target populations in general would carry a greater portion of the recommended projects' collective impacts than the rest of the population. In the communities of the metropolitan planning area, the minority

population is about 17.98 percent of the total population, while 17.85 percent of the population of the State of Wisconsin involves minority populations. The U.S. Bureau of the Census considers 10.08 percent of the population within the communities of the metropolitan planning area to be below the poverty level, compared to 12.73 percent of Wisconsin's total population. The initial analysis indicates that the Sheboygan metropolitan planning area does have a slightly disproportionate number of minority persons, but does not have a disproportionate number of low income persons.

Realizing that the Sheboygan metropolitan planning area contains a unique set of communities, local benchmarks were used to analyze the data. The percentage of the population within each census block group identified as minority or low income was compared to the average for the metropolitan planning area utilizing the following methodology.

Two variables were used to calculate the potential impacts of projects recommended in this Update to the *Year 2045 SATP* on disadvantaged populations by census block group:

- Table B03002 (Hispanic or Latino Origin by Race), 2012 2016 American Community Survey 5-Year Estimates (in this case, the universe is the total population); and
- Table 17021 (Poverty Status of Individuals in the Past 12 Months by Living Arrangement), 2012 2016 American Community Survey 5-Year Estimates (in this case, the universe is the population for whom poverty status is determined).

Table B03002 of the 2012 – 2016 American Community Survey 5-Year Estimates details the population of a given geographic area first by ethnicity (Hispanic or non-Hispanic), then by race within both ethnicities. Table B03002 was useful in determining minority status of the population of the metropolitan planning area and its various Census block groups.

The scope of interest within the variables included minority population and population whose ratio of income to poverty level was less than 1.00 (represents "at poverty").

The first step to determine areas of potential impact involved creating thresholds equal to the percentages of each variable for the whole of the planning area. (This process is exactly the same as for transit propensity). For purposes of this analysis, the "planning area" is equal to the sum of the populations of the ten local jurisdictions (cities, villages and towns) located within the approved Sheboygan metropolitan planning area. The **thresholds** then would equal the total number exhibiting the characteristic or concern divided by the total:

- Population within the communities of the metropolitan planning area that is of a race other than "white alone" <u>or</u> that is white <u>and</u> of the Hispanic/Latino ethnic group (14,441) divided by the total population of the communities of the metropolitan planning area (80,360) equals **17.98 percent**.
- Population within the communities of the metropolitan planning area living below the poverty level (7,906) divided by the total population of the communities of the

metropolitan planning area for whom poverty status is determined (78,727) equals **10.08 percent**.

The next and final steps involved creating categories for very high impact, high impact, and very low to moderate impact for both minority and low income populations. This process included:

- 1. Calculating the standard deviation for each variable to create a "moderate" category equal to one standard deviation around the mean (one-half standard deviation below and one-half standard deviation above the mean). The deviations from the means for minority and low income populations are:
 - Minority: One standard deviation around the mean: 11.53 percent to 24.43 percent; 1.5 standard deviations below the mean: -1.37 percent; and 1.5 standard deviations above the mean: 37.33 percent (The standard deviation for minority populations is 12.90 percent).
 - Low Income: One standard deviation around the mean: 5.305 percent to 14.855 percent; 1.5 standard deviations below the mean: -4.245 percent; and 1.5 standard deviations above the mean: 24.405 percent (The standard deviation for low income populations is 9.55 percent).
- 2. Querying for census block groups that experienced percentages less than or equal to the upper bound of the "moderate" range for minority populations (24.43 percent) and categorizing them as "very low to moderate minority impact."
- 3. Querying for census block groups that experienced percentages less than or equal to the upper bound of the "moderate" range for low income populations (14.855 percent) and categorizing them as "very low to moderate poverty impact."
- 4. Querying for census block groups that experienced minority population percentages greater than 24.43 percent but less than or equal to 37.33 percent and categorizing them as "high minority impact."
- 5. Querying for census block groups that experienced low income population percentages greater than 14.855 percent but less than or equal to 24.405 percent and categorizing them as "high poverty impact."
- 6. Querying for census block groups that experienced minority population percentages greater than 37.33 percent and categorizing them as "very high minority impact."
- 7. Querying for census block groups that experienced low income population percentages greater than 24.405 percent and categorizing them as "very high poverty impact."

Table E.1 helps to illustrate the aforementioned process. In order to save space in the table, "P" represents populations in poverty (low income populations), and "M" represents minority populations.

Table E.1: Impact Potential of Projects Recommended in the Update to the *Year 2045 SATP* on Minority and Low Income Populations

Variable	Very Low to Moderate	High	Very High
	Minority populations make up	M > 24.43% &	M > 37.33%
Minority	less than or equal to 24.43%	$M \le 37.33\%$	
	Low income populations make	P > 14.855% &	P > 24.405%
Poverty	up less than or equal to 14.855%	P ≤ 24.405%	

Source: Bay-Lake Regional Planning Commission, 2018.

Factors Evaluated

The locations of concentrations of minority and low income persons were examined in conjunction with the distribution of significant community services and the projects within the Update to the *Year 2045 SATP*. The community services evaluated are as follows:

- Health Care (hospitals and major clinics);
- Major Schools (middle schools, high schools and colleges/universities);
- Major Retail/Shopping Centers;
- Government (including libraries);
- Entertainment/Recreation;
- Special Need Population Centers (Sheboygan Senior Activity Center, RCS Empowers, etc.);
- Major Employers;
- Transportation Hubs; and
- Park and Open Space.

The planned projects were added to the analysis to evaluate the impact of the Update to the *Year 2045 SATP* on the community services listed above.

In order to provide a simplified picture of the projects examined, the second step of the analysis compared the target areas to the planned projects. The planned projects were grouped by mode. The target areas were examined in conjunction with each group of planned projects to better show the location of each project relative to the target areas.

FINDINGS

The analysis showed that 17 block groups had a significant (high or very high) minority population and 11 block groups had a significant low income population. Of these, nine block groups had both a significant minority <u>and</u> low income population (see Map E.1). The highest concentrations of both low income and minority populations occurred in block groups immediately northwest, west and south of Sheboygan's central business district, as well as one block group on the south side of the City of Sheboygan.

Block groups with concentrations of <u>both</u> environmental justice target populations are considered to be focus areas of the MPO. The block groups that qualify as focus areas are: Census Tract (CT) 2.01, Block Group (BG) 1; CT 5, BG 1; CT 5, BG 2; CT 5, BG 3; CT 8, BG 1; CT 8, BG 2; CT 8, BG 3; CT 9, BG 1; and CT 10, BG 4. With the exception of CT 10, BG 4 (which is located on the south side of the City of Sheboygan), all of these block groups are located to the immediate northwest, west, or south of the central business district of the City of Sheboygan.

The following eight block groups in the City of Sheboygan have high minority populations but do not have large low income populations: CT 2.01, BG 2; CT 3, BG 2; CT 3, BG 3; CT 4, BG 2; CT 9, BG 2; CT 10, BG 1; CT 10, BG 2; and CT 114, BG 2. CT 2.01, BG 1 is located on the near north side of the City of Sheboygan. CT 3, BGs 2 and 3 are located on the northwest side of the City of Sheboygan. CT 4, BG 2 is located in the west central portion of the City of Sheboygan. CT 10, BGs 1 and 2 are located in the south central portion of the City of Sheboygan. CT 114, BG 2 is just to the north and east of Sheboygan's central business district.

The following two block groups in the City of Sheboygan have significant low income populations but do not have large minority populations: CT 1, BG 1; and CT 114, BG 1. CT 1, BG 1 is located on the near northeast side of the City of Sheboygan. CT 114, BG 1 is located in the Sheboygan central business district, and includes a small residential neighborhood immediately east of downtown Sheboygan.

The projects recommended in this Update to the *Year 2045 SATP* are distributed throughout the metropolitan planning area. The recommended projects are intended to preserve the existing transportation system, support a multimodal network, and provide the connectivity necessary to maintain current levels of service (as discussed in Chapters 5 and 6 of the plan). A small number of the planned preservation projects are in close proximity to environmental justice target areas. None of the planned expansion projects (new facilities or additional capacity to existing facilities) are located in environmental justice target areas. The majority of new roadways or facilities where capacity is being added are located in southern, southwestern, western and northern portions of the metropolitan planning area, where the greatest demand for development has been occurring. As better access is provided to the target areas and they further develop and experience the economic benefits derived from capital investments, the populations are expected to increase or change, decreasing the concentrations.

The projects recommended in this Update to the *Year 2045 SATP* are intended to work together to benefit the entire metropolitan planning area, particularly the environmental justice target areas. As projects move into the Transportation Improvement Program (TIP) and receive committed funding, there will be an opportunity to reexamine those projects and to mitigate any unforeseen impacts on the environmental justice target populations.

Evaluation

In order to better analyze the impacts of all projects identified in this Update to the *Year 2045 SATP*, the proposed projects were mapped in relation to the minority and low income environmental justice target areas; this is shown in Maps E.2 and E.3 for transit and in Maps E.4 Update to the *Year 2045 Sheboygan Area Transportation Plan*

and E.5 for streets and highways. In the case of the transit maps, a quarter mile buffer around each target area was mapped to provide a visual boundary corresponding to a five minute walk. The proposed projects should not adversely affect the connectivity of the target populations to major destinations, such as health care, education, retail businesses, government services, entertainment, recreation and employment.

Map E.2 depicts the location of census block groups having a poverty level that is considered significant, or greater than 14.855 percent of the population for that block group. Map E.3 illustrates the location of census block groups with significant minority populations, or greater than 24.43 percent of the block group's population. The locations of the target areas are: all census block groups surrounding and including the City of Sheboygan's central business district (CBD), as well as census block groups in the northwest, west central and south central portions of the City of Sheboygan. Maps E.2 and E.3 illustrate that each target area is within a quarter mile of transit services, providing access to health care, education, retail businesses, government services, entertainment, recreation and employment. Maps E.4 and E.5 clearly illustrate that the proposed street and highway projects do not adversely affect the mobility of those living in the environmental justice target areas.

Access within Targeted Block Groups

Low income and minority persons should have equal access to health care, education, retail businesses, government services, entertainment, recreation and employment. The target populations are likely to have a higher propensity for travel by public transit, so travel to the major centers of concern by bus should not be time prohibitive. Shoreline Metro will stop at regularly scheduled stops, as well as at any requested stops along the route, facilitating easy access to all locations along the route. In most cases, recreational facilities within one quarter mile and employment opportunities within one half mile can be traveled to on foot. Maps E.2 and E.3 illustrate the current access to significant points of interest within the metropolitan planning area via Shoreline Metro. The significant points of interest shown on the maps do not illustrate all such opportunities that exist within the metropolitan planning area; they merely denote the major activity centers.

An inventory of existing conditions within each of the target areas follows.

Census Tract 1, Block Group 1

Census Tract 1, Block Group 1 has a high population in poverty. Shoreline Metro's Route 5 North connects residents of this block group to many important trip generators, including: Aurora Sheboygan Memorial Medical Center; employment and shopping opportunities in the central business district; government services (including Sheboygan City Hall, the U.S. Post Office, and the Sheboygan County Courthouse); and recreational opportunities (including the Sheboygan Senior Activity Center, the Sheboygan YMCA, Vollrath Park, and city parks and beaches along Lake Michigan fronting Broughton Drive). Residents of the block group can take Route 5 North to shop at the north side Piggly Wiggly supermarket. Grant Elementary School is located within the block group. Older students can utilize Route 5 North to reach North High School and Urban Middle School. Residents of this block group (and all block groups analyzed

here) can transfer to other Shoreline Metro routes to reach other destinations in the transit service area.

Census Tract 2.01, Block Group 1

Census Tract 2.01, Block Group 1 has a very high minority population as well as a very high population in poverty. While this block group has substantial residential development, there are also several small businesses, especially near State Highway 42/Calumet Drive and Superior Avenue. Due to the size of this block group, there are few employment or shopping opportunities, and there are no public schools within the block group. Route 3 North serves this block group, and provides residents with good access to trip generators in the central business district as well as trip generators along that route (including the north side Piggly Wiggly supermarket, RCS, and three elementary school sites).

Census Tract 2.01, Block Group 2

Census Tract 2.01, Block Group 2 has a high minority population. This block group has primarily residential development, along with a few small businesses. Again, due to the size of this block group, there are few employment or shopping opportunities, and there are no public schools within the block group. Route 5 North serves the eastern edge of the block group, and connects residents to all of the trip generators previously mentioned for that route.

Census Tract 3, Block Group 2

Census Tract 3, Block Group 2 has a high minority population. This block group has a mix of residential, commercial and industrial development. Due to the size of the block group, there are few employment or shopping opportunities, but residents can find food, fuel and other basic necessities within the block group. Cooper Elementary School and RCS are located within this block group. Route 3 North serves much of this block group, and connects residents to all of the trip generators previously mentioned for that route.

Census Tract 3, Block Group 3

Census Tract 3, Block Group 3 has a high minority population. This block group is largely residential, but also has substantial parkland and open space in its northern and southwestern edges. Commercial uses exist on the eastern boundary of the block group along Calumet Drive/State Highway 42 and North 25th Street. There are few employment or shopping opportunities within the block group, except at its eastern edge. No public schools are located within this block group. Routes 3 North and 7 North serve portions of this block group. Route 7 North connects residents of this block group to many important trip generators, including: the Mead Public Library, Jefferson Elementary School, the Sheboygan Police Department, the Aurora Sheboygan Clinic, Pick & Save Supermarket, St. Nicholas Hospital, the Field of Dreams, and Lakeshore Community Health Care Clinic.

Census Tract 4, Block Group 2

Census Tract 4, Block Group 2 has a high minority population. This block group has a mix of various uses, including residential, commercial (along Taylor Drive), some industrial, governmental and institutional (public works building and a cemetery), and some parks and open space. Shopping and employment opportunities can be found along the Taylor Drive corridor within the block group. Route 10 North and South serve the block group, and portions of Routes 7 North and Route 20 (the Kohler/Sheboygan Falls Route) touch the northern boundary of the block group. Route 10 North connects residents of this block group to many important trip generators, including: the Aurora Sheboygan Clinic, the Sheboygan County Job Center/Lakeshore Technical College (LTC), Memorial Plaza/Marcus Sheboygan Cinema, the Meijer Supermarket, Kohl's, Taylor Heights Shopping Center/Festival Foods, and the Tamarack Apartments. Route 10 South connects residents of the southern portion of this block group to trip generators such as the Washington Square Shopping Center (including the south side Piggly Wiggly Supermarket), Goodwill, the south side Walmart, Sheboygan's old industrial park, and the Aldi Supermarket.

Census Tract 5, Block Group 1

Census Tract 5, Block Group 1 has a very high minority population as well as a high population in poverty. This block group has primarily residential development (including considerable multifamily residential development), although there is some commercial development at the eastern edge of the block group, along with some industrial development scattered around the block group. Jefferson Elementary School is located in this block group. Outside of some dining, shopping opportunities are limited within this block group. Outside of some scattered industry, employment opportunities are limited within this block group. Several Shoreline Metro routes serve this block group, including Route 3 North (which serves the eastern edge of the block group), Route 7 North (which serves the northern half of the block group), and Route 10 North (which serves the southern edge of the block group). Trip generators served by these routes were previously discussed under: Census Tract 2.01, Block Group 1; Census Tract 3, Block Group 3; and Census Tract 4, Block Group 2.

Census Tract 5, Block Group 2

Census Tract 5, Block Group 2 has a high minority population as well as a very high population in poverty. This block group has a mixture of residential development (including considerable multifamily residential development) and park and recreational lands, with a scattering of commercial and industrial development and governmental/institutional uses. Shopping and employment opportunities are limited within the block group. Route 10 North is the main Shoreline Metro route that serves this block group (serving the northern portion of the block group), although Routes 3 North and 7 North also serve the eastern edge of the block group. Trip generators served by these routes were previously discussed under: Census Tract 2.01, Block Group 1; Census Tract 3, Block Group 3; and Census Tract 4, Block Group 2.

Census Tract 5, Block Group 3

Census Tract 5, Block Group 3 has a high minority population as well as a high population in poverty. This block group has commercial development focused on Michigan Avenue, with residential development (including considerable multifamily residential development) elsewhere in the block group. Other land uses in the block group are minimal. Shopping and employment opportunities in this block group are generally limited to the Michigan Avenue corridor. Route 3 North passes through the center of this block group, while Route 7 North travels along the eastern (North 9th Street) and northern (Superior Avenue) edges of the block group. In addition, Route 10 North passes along a portion of the southern (Erie Avenue) edge of the block group. Trip generators served by these routes were previously discussed under: Census Tract 2.01, Block Group 1; Census Tract 3, Block Group 3; and Census Tract 4, Block Group 2.

Census Tract 8, Block Group 1

Census Tract 8, Block Group 1 has a very high minority population as well as a very high population in poverty. This block group has a mixture of residential and industrial development, with a limited amount of commercial development and other uses. Sheridan Elementary School is located within the block group. Shopping opportunities in the block group are limited, and employment opportunities are mostly confined to industrial and a few commercial areas. Route 3 South passes through this block group, and serves trip generators such as Sheridan and James Madison Elementary Schools, Horace Mann Middle School, Biolife Plasma, Old Wisconsin Sausage, UW Sheboygan (certain trips), Lutheran High School (certain trips), and South Pier/Blue Harbor Resort (certain trips). Route 10 South also passes through this block group; trip generators served by Route 10 South were previously discussed under Census Tract 4, Block Group 2. In addition, Route 20 connects this block group to the Village of Kohler and the City of Sheboygan Falls.

Census Tract 8, Block Group 2

Census Tract 8, Block Group 2 has a high minority population and a very high population in poverty. This block group is fairly evenly split between residential, commercial and industrial development, along with a few parks. Longfellow Elementary School is located within the block group. Shopping opportunities are available along Indiana Avenue as well as in the South Pier district, which is part of this block group. Route 5 South passes through much of this block group, and serves trip generators such as Rockline Industries, Wilson Elementary School and Indian Meadows Mobile Home Park. Route 7 South also passes through much of this block group, and serves trip generators such as Longfellow and Jackson Elementary Schools, Farnsworth Middle School, South High School, the Boys' and Girls' Club, Country Village Apartments, and the Sheboygan Business Center/Industrial Park (certain trips, on demand). Routes 3 South, 10 North and 10 South also pass through the extreme northwestern portion of this block group along Pennsylvania Avenue. All Shoreline Metro routes that serve this block group connect with trip generators in Sheboygan's central business district.

Census Tract 8, Block Group 3

Census Tract 8, Block Group 3 has a high minority population as well as a high population in poverty. This block group is primarily residential in nature, along with some commercial development and parks. Shopping opportunities are limited within the block group, and mainly occur in the vicinity of Heritage Square Shopping Center. There are few employment opportunities within the block group. Routes 5 South and 7 South pass through much of this block group. Trip generators served by these routes were previously discussed under Census Tract 8, Block Group 2.

Census Tract 9, Block Group 1

Census Tract 9, Block Group 1 has a high minority population as well as a high population in poverty. This block group is largely residential in nature, along with some industry. In addition, commercial development exists along portions of Indiana Avenue, South Business Drive, Union Avenue, and South 17th Street. Shopping opportunities in the block group mainly occur along Indiana Avenue as well as around the intersection of South Business Drive, Union Avenue and South 17th Street. Employment opportunities mainly occur at commercial and industrial uses located within the block group. Routes 3 South, 5 South and 10 South all serve portions of the block group. Trip generators served by these routes were previously discussed under: Census Tract 4, Block Group 2; Census Tract 8, Block Grant 1; and Census Tract 8, Block Group 2.

Census Tract 9, Block Group 2

Census Tract 9, Block Group 2 has a high minority population. This block group is mostly residential in nature, along with governmental/institutional and park and recreation uses. Commercial uses are very limited, and occur primarily along portions of Indiana and Georgia Avenues. James Madison Elementary School is located in the block group. Shopping opportunities in the block group mainly occur where there are commercial uses, and employment opportunities are limited. Route 3 South is the main route that serves this block group. Trip generators served by Route 3 South were previously discussed under Census Tract 8, Block Group 1.

Census Tract 10, Block Group 1

Census Tract 10, Block Group 1 has a high minority population. This block group is largely residential in nature, along with commercial development along South Business Drive and scattered governmental/institutional uses. Shopping opportunities in the block group mainly occur along South Business Drive, and employment opportunities occur where there are commercial uses. Route 5 South passes through much of the block group. Route 7 South serves the eastern edge of this block group along South 12th Street, while Route 10 South and Route 20 serve the western edge of this block group along South Business Drive. Trip generators served by these routes were previously discussed under: Census Tract 4, Block Group 2; and Census Tract 8, Block Group 2.

Census Tract 10, Block Group 2

Census Tract 10, Block Group 2 has a very high minority population. This block group is predominantly residential in nature. Commercial uses are located mostly adjacent to South Update to the *Year 2045 Sheboygan Area Transportation Plan*

Business Drive, and there are some industrial uses in the southwest portion of the block group adjacent to Washington Avenue. Governmental/institutional and park and recreation lands are also common in this block group. South High School, Wilson Elementary School and the Sheboygan Area School District's Early Learning Center are all located within this block group. Shopping opportunities in the block group mainly occur along South Business Drive, and employment opportunities occur where there are commercial and industrial uses. Routes 5 South and 7 South serve this block group, and Route 20 serves the western edge of this block group along South Business Drive. Trip generators served by these routes were previously discussed under Census Tract 8, Block Group 2.

Census Tract 10, Block Group 4

Census Tract 10, Block Group 4 has a high minority population as well as a high population in poverty. Most of the developed land in this block group is residential in nature (including several apartment complexes), with some parkland. Jackson Elementary School is located in this block group. Undeveloped land in this block group includes open space and agricultural lands. Shopping and employment opportunities are limited within this block group. Route 5 South serves the northern portion of this block group, while Route 7 South serves the southern and western edges of this block group. Trip generators served by these routes were previously discussed under Census Tract 8, Block Group 2.

Census Tract 114, Block Group 1

Census Tract 114, Block Group 1 has a high population in poverty. Much of the land in this block group is commercial in nature, along with some governmental/institutional uses and some parks. Sheboygan's central business district is located in this block group, along with the riverfront and marina. There is some residential development in the block group, and it is primarily located east of the central business district. There are many shopping and employment opportunities in this block group, which are mainly tied to the large amount of commercial development. All Shoreline Metro routes converge at the downtown transfer point, which is located in this block group; this makes Census Tract 114, Block Group 1 the best served block group in the transit service area. Route 5 North best serves the residential portions of this block group. Trip generators served by the various routes that travel through this block group were previously discussed.

Census Tract 114, Block Group 2

Census Tract 114, Block Group 2 has a high minority population. Much of the land in this block group is residential in nature, but commercial, governmental/institutional and park and recreation uses also exist. Sheboygan's North Side Municipal Beach is located in this block group. Shopping and employment opportunities are concentrated in the northwest portion of this block group, with additional such opportunities in adjacent block groups. Route 5 North best serves this block group. Trip generators served by Route 5 North were previously discussed under Census Tract 1, Block Group 1.

Other Comments

Route 20 connects the City of Sheboygan to the Village of Kohler and the City of Sheboygan Falls. There are several trip generators along this route, including: the south side Walmart in the City of Sheboygan; the Kohler Company Plant, Kohler Company Hospitality, Woodlake Market, Kohler Schools, and Deer Trace Shopping Center in the Village of Kohler; and the Sheboygan County Aging and Disability Resource Center (ADRC), the Forest Avenue and Acacia Falls Mobile Home Parks, the Sheboygan Falls Piggly Wiggly Supermarket, the Sheboygan Falls Municipal Building, Bemis Manufacturing, and Sheboygan Falls High School in the City of Sheboygan Falls. All Shoreline Metro customers can access Route 20 from the downtown transfer point. Route 20 is divided into north and south route components, with "north" routes traveling counterclockwise, and with "south" routes traveling clockwise. Areas having high or very high minority populations and/or populations in poverty along Route 20 include: Census Tract 4, Block Group 2; Census Tract 5, All Block Groups (1, 2 and 3), and Census Tract 114, Block Group 1.

Route 40 is "The Square Trolley," which operates approximately from Memorial Day weekend to Labor Day weekend. Many destinations in the central business district, riverfront, lakefront and South Pier district are served by this seasonal route. All Shoreline Metro customers can access Route 40 from the downtown transfer point. Areas having high or very high minority populations and/or populations in poverty along Route 40 include: Census Tract 8, Block Group 2; and Census Tract 114, Both Block Groups (1 and 2).

Travel Times from Environmental Justice Target Areas to Major Potential Trip Generators in the Sheboygan Metropolitan Planning Area

As part of this analysis, Commission staff examined travel times by automobile and by transit usage from three traffic analysis zones (TAZs) representing environmental justice target areas to the TAZs of several major potential trip generators in the metropolitan planning area. The TAZs representative of environmental justice target areas that were selected for this analysis included:

- TAZ 1557 (located in the southwestern and south central portions of Census Tract 5, Block Group 3);
- TAZ 1630 (located in the northwestern portion of Census Tract 8, Block Group 1); and
- TAZ 1680 (located in the western portion of Census Tract 2.01, Block Group 1).

Map E.6 shows the relationship between the three selected TAZs and the environmental justice target areas.

Automobile Travel Times

Table E.2 shows travel times (in minutes) from the three TAZs representing environmental justice target areas to the TAZs of major potential trip generators in the metropolitan planning area through use of an automobile. The travel demand forecast model was used by staff of the WisDOT travel forecasting section to assist the Commission staff in calculating the travel times listed in Table E.2.

Travel times from environmental justice target areas to major potential trip generators are considered reasonable if a trip by automobile can be accomplished in 20 minutes or less. Table E.2 indicates that residents from TAZs representing the environmental justice target areas can reach most major trip generators of the metropolitan planning area in less than ten minutes by automobile. Residents in TAZ 1557 can reach downtown Sheboygan Falls and Sheboygan Falls High School in 10 to 11 minutes, while residents in TAZ 1630 can reach these same trip generators as well as Sheboygan Falls Middle School in 10 to 12 minutes. These are congested times in the plan horizon year of 2045.

It should be noted that the times listed in Table E.2 do not account for travel time within the TAZ where the attraction is located, nor do they account for time getting into or out of the vehicle or walking between the origin and the automobile or between the parked automobile and the entrance to the destination.

It is clear that the TAZs representing the environmental justice target areas are within the 20 minute threshold established for reasonable automobile travel time to major potential trip generators in the metropolitan planning area.

Table E.2: Travel Times from Environmental Justice Target TAZs to Attraction TAZs by Automobile – Sheboygan Metropolitan Planning Area

	Attraction Name	Travel Time to Attraction TAZ (in minutes) ¹		
Attraction TAZ		TAZ 1557	TAZ 1630	TAZ 1680
1531	Sheboygan County Health and Human Services Dept.	1.07	2.02	2.50
1532	Harbor Centre/Central Business District	1.62	1.80	3.10
1533	Sheboygan City Hall	1.30	1.47	2.79
1533	Mead Public Library	1.30	1.47	2.79
1534	Shoreline Metro Transfer Point/Intercity Bus Depot	1.70	1.06	3.19
1537	U.S. Post Office - Sheboygan	1.56	0.94	3.09
1539	John Michael Kohler Arts Center	1.81	1.66	3.25
1541	Harbor Centre/Riverfront	3.04	2.26	4.49
1542	Sheboygan YMCA	2.74	1.96	3.88
1542	Sheboygan County Courthouse	2.74	1.96	3.88
1542	Sheboygan County Courtnouse Sheboygan Senior Activity Center	2.74	1.96	3.88
1549	Aurora Sheboygan Memorial Medical Center	3.18	4.33	2.40
1567	Sheboygan Boys' and Girls' Club	3.89	3.01	5.39
1585	Farnsworth Middle School	4.46	3.31	5.90
1588	Lakeshore Lanes	4.68	3.53	6.12
1591		5.80	4.65	7.24
	Sheboygan South High School			1
1600	Sheboygan County Christian High School	6.91 4.99	6.03	8.41 6.43
1611	Washington Square Shopping Center/Piggly Wiggly		3.84	
1613	Sheboygan Industrial Park	6.57	5.42	8.01
1614	Acuity Insurance Company	5.80	4.38	7.23
1615	Sheboygan Lutheran High School	4.90	3.48	6.33
1615	UW Green Bay - Sheboygan Campus	4.90	3.48	6.33
1617	Horace Mann Middle School	4.79	3.34	6.23
1618	Piggly Wiggly Midwest (Corporate Headquarters)	4.58	3.43	6.02
1633	PJ's Party Zone (formerly Skateland)	1.92	2.36	3.35
1638	Sheboygan Lakers Ice Center (formerly Blue Line)	3.06	1.76	4.50
1638	Wildwood Baseball Park	3.06	1.76	4.50
1642	Taylor Heights Shopping Center/Festival Foods	2.84	3.28	4.25
1644	Meijer/Kohl's	3.15	3.27	4.37
1654	Aurora Sheboygan Clinic	2.20	2.64	2.99
1664	St. Nicholas Hospital	3.27	3.83	3.52
1672	Sheboygan County Job Center	3.62	4.06	3.92
1673	Memorial Plaza	3.46	3.90	4.54
1673	Marcus Sheboygan Cinema	3.46	3.90	4.54
1681	RCS Empowers, Inc.	1.93	2.63	1.61
1686	Sheboygan North High School	3.42	4.12	2.78
1686	Urban Middle School	3.42	4.12	2.78
1687	Northgate Shopping Center/Piggly Wiggly	3.00	3.69	2.36
1721	Kohler Company Main Plant	7.75	7.27	9.08
1722	Woodlake Shops - Kohler	6.48	6.92	7.81
1724	Kohler Public Schools	7.24	6.54	8.56
1731	Sheboygan Falls Middle School	9.45	9.89	10.77
1736	Sheboygan Falls Main Street (Downtown)	10.01	8.60	11.45
1739	Sheboygan Falls High School	10.75	9.33	12.19
1854	Deer Trace Shopping Center - Kohler	7.94	6.53	9.38
1855	Walmart Supercenter - South	7.37	5.95	8.81
1856	Sheboygan Business Center	7.57	6.41	9.00

Note:

¹Congested future time (in 2045). The times listed do not account for travel time within the TAZ where the attraction is located, nor do they account for time getting into or out of the vehicle or walking between the origin and the automobile or between the parked automobile and the entrance to the destination.

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

Transit Travel Times

Table E.3 shows travel time (in minutes) from the three TAZs representing environmental justice target areas to the TAZs of major potential trip generators in the metropolitan planning area through use of Shoreline Metro. The travel times listed in Table E.3 were calculated through approximations of travel times reading Shoreline Metro timetables.

Travel times from environmental justice target areas to major potential trip generators are considered reasonable if a trip using transit can be accomplished in 40 minutes or less. Table E.3 indicates that residents from TAZs representing the environmental justice target areas can reach the majority of major trip generators of the metropolitan planning area in 30 minutes or less. The main portions of the service area that have longer travel times include certain attractions in the City of Sheboygan east of downtown, various attractions scattered around the City of Sheboygan (from TAZ 1680), as well as certain attractions in the Village of Kohler and the City of Sheboygan Falls.

A few attractions east of downtown Sheboygan (the Sheboygan YMCA, the Sheboygan County Courthouse, and the Sheboygan Senior Activity Center) can involve total trip times of 32 to 42 minutes from the environmental justice target TAZs, although the longest trip times originate in TAZ 1680. Riders have other options besides taking fixed-route transit directly to the attraction to access trip generators east of downtown Sheboygan; these options include walking from downtown Sheboygan (from the transfer point or via the beginning part of Route 5 North) to the attractions, or, if disabled, utilizing ADA paratransit to reach these attractions. Route 40 also provides closer service to these attractions when it operates between Memorial Day and Labor Day.

Most trips to attractions in the Village of Kohler take less than 30 minutes. However, trips to the Kohler Public Schools from TAZ 1680 involve a trip time of 32 minutes; it should be noted that residents of TAZ 1680 are not likely to travel to this destination. Trip times to the Kohler Company Main Plant can vary depending upon the trip involved, and service on Route 20 does not involve the same level of service frequency as most Shoreline Metro routes.

Trips to attractions in the City of Sheboygan Falls (Downtown Sheboygan Falls, Sheboygan Falls Middle School and Sheboygan Falls High School) can involve total trip times of 32 to 39 minutes from TAZ 1680; again, it should be noted that residents of TAZ 1680 are not likely to travel to the two schools. In addition, trips to downtown Sheboygan Falls from TAZ 1630 involve a trip time of 31 minutes. Again, Route 20 does not involve the same level of service frequency as most Shoreline Metro routes.

A few other attractions in the service area have trip times exceeding 30 minutes. The following attractions have trip times exceeding 30 minutes from TAZ 1680: Aurora Sheboygan Memorial Medical Center; the Sheboygan Industrial Park; Acuity Insurance Company; Sheboygan Lutheran High School; the UW Green Bay – Sheboygan Campus; Horace Mann Middle School; Taylor Heights Shopping Center/Festival Foods; RCS Empowers, Inc.; North High School; and the Sheboygan Business Center. In addition, the following attractions have trip times exceeding

30 minutes from TAZs 1557 and 1680: the Sheboygan Lakers Ice Center; and Wildwood Baseball Park. These are congested times in the plan horizon year of 2045.

Table E.3: Travel Times from Environmental Justice Target TAZs to Attraction TAZs Using Shoreline Metro – Sheboygan Metropolitan Planning Area

Attraction TAZ	Attraction Name	Travel Time to Attraction TAZ (in minutes) ¹		
		TAZ 1557	TAZ 1630	TAZ 1680
1531	Sheboygan County Health and Human Services Dept.	12	9	17
1532	Harbor Centre/Central Business District	11	8	16
1533	Sheboygan City Hall	5	2	10
1533	Mead Public Library	5	2	10
1534	Shoreline Metro Transfer Point/Intercity Bus Depot	5	2	10
1537	U.S. Post Office - Sheboygan	4	1	9
1539	John Michael Kohler Arts Center	12	9	17
1541	Harbor Centre/Riverfront	12	9	17
1542	Sheboygan YMCA	35	32	40
1542	Sheboygan County Courthouse	37	34	42
1542	Sheboygan Senior Activity Center	36	33	41
1549	Aurora Sheboygan Memorial Medical Center	29	26	34
1567	Sheboygan Boys' and Girls' Club ²	14	11	19
1585	Farnsworth Middle School	15	12	20
1588	Lakeshore Lanes	19	16	24
1591	Sheboygan South High School	18	15	23
1600	Sheboygan County Christian High School	19	16	24
1611	Washington Square Shopping Center/Piggly Wiggly	22	10	27
1613	Sheboygan Industrial Park	27	15	32
1614	Acuity Insurance Company	28	16	33
1615	Sheboygan Lutheran High School	29	26	34
1615	UW Green Bay - Sheboygan Campus	27	24	32
1617	Horace Mann Middle School	26	23	31
1618	Piggly Wiggly Midwest (Corporate Headquarters)	17	5	22
1633	PJ's Party Zone (formerly Skateland)	1	11	19
1638	Sheboygan Lakers Ice Center (formerly Blue Line) ³	33	21	38
1638	Wildwood Baseball Park	34	22	39
1642	Taylor Heights Shopping Center/Festival Foods	14	26	34
1644	Meijer/Kohl's	12	21	29
1654	Aurora Sheboygan Clinic	2	12	20
1664	St. Nicholas Hospital	23	20	28
1672	Sheboygan County Job Center	4	14	22
1673	Memorial Plaza	6	16	24
1673	Marcus Sheboygan Cinema	6	16	24
1681	RCS Empowers, Inc.	29	26	34
1686	Sheboygan North High School	27	24	32
1686	Urban Middle School	21	18	26
1687	Northgate Shopping Center/Piggly Wiggly	22	19	27
1721	Kohler Company Main Plant	10	22	30
1722	Woodlake Shops - Kohler	8	20	28
1724	Kohler Public Schools	12	24	32
1731	Sheboygan Falls Middle School	17	29	37
1736	Sheboygan Falls Main Street (Downtown)	29	31	39
1739	Sheboygan Falls High School	27	24	32
1854	Deer Trace Shopping Center - Kohler	23	20	28
1855	Walmart Supercenter - South	25	13	30
1856	Sheboygan Business Center	27	24	32

¹Congested future time (in 2045). The times listed do not account for time getting onto or off the bus between the origin and the bus stop where the passenger catches the bus or between the bus stop nearest the passenger's destination and the entrance to the destination. A transfer time of 5 minutes is assumed in cases where a transfer is necessary.

Source: Shoreline Metro, 2019; and Bay-Lake Regional Planning Commission, 2019.

²Special school routes may shorten this trip time.

³Travel to this destination will involve a considerable walk from the closest bus stop on New Jersey Avenue.

It should be noted that the times listed in Table E.3 do not account for time getting onto or off of the bus between the origin and the bus stop where the passenger catches the bus or between the bus stop nearest the passenger's destination and the entrance to the destination. A transfer time of five minutes is assumed in cases where a transfer is necessary. This analysis assumes weekday daytime travel, that conditions are ideal (no weather-related delays, mechanical breakdowns, etc.), and also assumes that passengers have planned their travel in a manner in which they can make connections between the transit routes with minimal delay.

It should be noted that a small number of special school routes operated by Shoreline Metro may shorten the trip times indicated for the Boys' and Girls' Club in the City of Sheboygan in Table E.3 (It should be noted that school routes that served middle schools and high schools have been curtailed since the original *Year 2045 SATP* was approved, and that middle and high school students now use regular Shoreline Metro fixed routes to travel to and from school). In addition, travel to the Sheboygan Lakers Ice Center will involve a considerable walk from the closest bus stop on New Jersey Avenue using Route 10 South.

In most cases, passengers in the environmental justice target TAZs were assumed to board the bus at the following locations:

- TAZ 1557: Erie Avenue at North 14th Street (a five minute inbound trip to the transfer point was assumed using either Route 10 North or Route 20 South);
- TAZ 1630: Pennsylvania Avenue at 14th Street (a two minute inbound trip to the transfer point using Route 3 South, Route 10 North, Route 10 South, or Route 20 North (with Route 10 South serving a larger portion of the TAZ); and
- TAZ 1680: Lincoln Avenue at North 13th Street (a ten minute inbound trip to the transfer point was assumed using Route 3 North).

The TAZs representing the environmental justice target areas are generally within the 40 minute threshold established for reasonable travel time via transit to most major potential trip generators in the metropolitan planning area. Exceptions to this rule were previously noted.

For some routes (Route 20 and route deviation portions of Routes 3 South and 7 South) and at some times (evenings and weekends), passengers will need to carefully plan their trips in order to obtain the travel times noted in Table E.3. It is possible that savvy passengers may be able to transfer between routes on the north and south sides of the City of Sheboygan and achieve travel times that are lower than what is noted in Table E.3 in a few cases. It should be noted that recent route revisions by Shoreline Metro have improved travel times to certain attractions in the service area.

Impacts of Recommended Street and Highway Projects on Environmental Justice Target Populations

Maps E.4 and E.5 illustrate the location of recommended street and highway projects in the Update to the *Year 2045 SATP* in relation to the environmental justice target areas. The travel demand forecast model results, discussed in Chapter 6 of the Update to the *Year 2045 SATP*, Update to the *Year 2045 Sheboygan Area Transportation Plan*

indicate that the recommended projects have the ability to minimize future congestion throughout the Sheboygan metropolitan planning area, benefiting the entire population.

The street and highway projects planned for environmental justice target areas are primarily preservation projects intended to remove various poor roadway conditions, therefore improving safety and economic conditions.

In addition, the seven capacity modifying street and highway projects recommended for implementation in the Update to the *Year 2045 SATP* have been overlaid on Maps E.4 and E.5 in order to examine the potential impacts of these projects on minority and low income/poverty populations in the Sheboygan metropolitan planning area. The recommended projects and their impacts are as follows:

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

This project is located in a block group with low to moderate minority population and low to moderate low income/poverty population.

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

This project is generally located in a block group with low to moderate minority population and low to moderate low income/poverty population. The northern terminus of this project is located at the southern boundary of a census block group (10.4) with a high population below the poverty level as well as a high minority population. However, the residential portions of this block group (where minority populations as well as persons below the poverty level are most likely to live) are a considerable distance from the northern terminus of this project.

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

This project is located in block groups with low to moderate minority population and low to moderate low income/poverty population.

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

This project is located in a block group with low to moderate minority population and low to moderate low income/poverty population.

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

This project is located in a block group with low to moderate minority population and low to moderate low income/poverty population.

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 in block groups with low to moderate low income/poverty populations. One of the block groups touched by this project (4.2) does have a high minority population. However, the residential portions of this block group (where minority populations are most likely to live) are a considerable distance from 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

This project is located in block groups with low to moderate minority population and low to moderate low income/poverty population.

Economic, Social, Community and Neighborhood Impacts

The Update to the Year 2045 SATP has the potential to affect the economic well-being of all who live and work in the Sheboygan metropolitan planning area. Levels of service on roadways, multimodal travel opportunities, and accessibility to businesses are all issues worthy of consideration. If levels of service decline during the planning period, trip times are likely to increase. Businesses would incur higher transportation costs, and individuals would face similar costs in the form of time lost. As congestion and trip times increase, the distance from home that people are willing to travel to work decreases, shrinking their job opportunities. For example, if a person were willing to travel 30 minutes to work every day, they would probably have the ability to search for and work at jobs within 15 to 20 miles of their home. If congestion increased, and the time it took to make the same trip doubled, they would only be able to look for and maintain jobs within seven to ten miles of their home while still having a 30 minute trip. Their other option would be to increase their trip time to one hour and keep their current trip length (or their job option range) in miles. Increasing trip times detract from the time available for other activities, negatively impacting upon quality of life. Congestion can also influence quality of life by affecting life expectancy. In addition, areas with high levels of congestion also tend to have higher than average crash rates.

The Update to the Year 2045 SATP also strives to make the Sheboygan metropolitan planning area attractive to residents as well as businesses. The transportation investments recommended in Chapter 7 of the plan will directly impact the ability of residents to travel to and from work, school, health care, retail shopping, government services, entertainment, recreation, and other important destinations within and around the metropolitan planning area. Extensive multimodal planning is intended to provide alternatives to automobile travel; the aim of this planning is to give those without a personal vehicle greater independence of movement throughout the metropolitan planning area, in addition to providing alternatives to those with automobiles. Chapter 5 of the Update to the Year 2045 SATP illustrates the location of existing sidewalks and bicycle facilities, while Chapter 7 contains recommended bicycle and pedestrian projects, policies and strategies, providing further mobility options to those lacking a personal vehicle. The metropolitan planning area has an abundance of natural resources and recreational lands, including the Sheboygan, Pigeon, Black, Mullet and Onion Rivers, Lake Michigan, parklands and trails. The Update to the Year 2045 SATP includes recommendations and policies for

modest expansions of the trail system, implementing a network of on-road bike lanes and signed bike routes, and encouraging the full utilization of the recreational and multimodal transportation opportunities within the metropolitan planning area.

In order to be successful, businesses require a functioning road network and a strong work force. Preservation is the most cost effective method of maintaining the existing infrastructure of the metropolitan planning area so that goods and services can travel quickly and efficiently between their origins and destinations. Expanding the multimodal network and providing greater connectivity is intended to increase the mobility of residents and the economic vitality of the metropolitan planning area.

The Update to the *Year 2045 SATP* supports the development of a transportation system that is compatible with existing and future development patterns and encourages the development of areawide bicycle and pedestrian transportation networks. Integration of pedestrian and bicycle facility development into future system preservation and roadway reconstruction plans is strongly recommended when moving projects forward, especially in environmental justice target areas. When developing the projects recommended in the plan, existing and future land uses were considered, ensuring that the recommended projects do not inadvertently cut off a neighborhood's access to a specific type of service. The plan has a long-term vision of developing an efficient transportation system that provides for the long-term connectivity needs of the metropolitan planning area and the region.

Noise Impacts

It is the policy of the MPO that transportation facilities do not expose residential areas, schools and other areas with high concentrations of people to harmful levels of noise. Currently, there are few residential areas and schools (outside of the UW Green Bay Sheboygan campus) adjacent to noisy freeways such as Interstate Highway 43 or State Highway 23, and no such areas coincide with high environmental justice target areas. If this changes in the future, noise barriers should be erected as a mitigation measure.

Visual Impacts

In an effort to create attractive communities, the MPO supports development of aesthetically pleasing transportation facilities that preserve the existing natural features of the metropolitan planning area. This is documented in Goal 12 and some of its supporting objectives, which can be found in Chapter 4 of the Update to the *Year 2045 SATP*.

Air Quality

Eastern Sheboygan County (including much of the Sheboygan metropolitan planning area) has been designated a marginal nonattainment area for the 2015 eight-hour ozone standard, and all of Sheboygan County (including all of the Sheboygan metropolitan planning area) has been classified as a moderate nonattainment area for the 2008 eight-hour ozone standard. The Update to the *Year 2045 SATP* has been found to conform to the latest State Implementation Plan (SIP) for air quality submitted to the USEPA by the Wisconsin Department of Natural Resources; more information on this can be found in the conformity assessment (Appendix C). In an attempt to reduce motor vehicle produced ozone precursor emissions, the plan supports efficient Update to the *Year 2045 Sheboygan Area Transportation Plan*

traffic control measures and the encouragement of transit, bicycle and pedestrian travel. In addition, air quality should continue to be monitored in the Sheboygan metropolitan planning area and elsewhere in Sheboygan County.

SUMMARY

As stated previously, there are three main principles associated with environmental justice. The success of the Sheboygan metropolitan planning area in meeting the principles is the basis for evaluating the overall impact of the recommended projects on the target groups. The discussion involves a response to each principle; the principles are as follows:

- 1. To avoid, minimize or mitigate disproportionately high and adverse human health and environmental effects (including social and economic effects) on minority populations and low income populations.
- 2. To ensure the full and fair participation by all potentially affected communities in the transportation decision making process.
- 3. To prevent the denial of, reduction in or significant delay in the receipt of benefits by minority and low income populations.

Principles 1 and 3

- To avoid, minimize or mitigate disproportionately high and adverse human health and environmental effects (including social and economic effects) on minority populations and low income populations.
- To prevent the denial of, reduction in or significant delay in the receipt of benefits by minority and low income populations.

The recommended projects are dispersed in an even fashion across the metropolitan planning area. While none of the expansion projects pass through any of the targeted block groups, the seven expansion projects recommended for the metropolitan planning area serve as local and regional connections, increasing opportunities for travel into, out of and within the metropolitan planning area. In addition, the recommended preservation projects will increase the quality of the street and highway network within the metropolitan planning area, including targeted block groups. Generally, the projects will improve access to major employment centers, entertainment and recreation venues, government services, health care, schools and shopping centers for residents of the targeted block groups. Minimal noise impacts are expected from the recommended projects in the targeted block groups.

All of the residential portions of the targeted block groups are currently served by transit. In addition, planned bicycle and pedestrian facilities have been recommended to run through the targeted block groups or provide connections to them, supplying the residents of those block groups with greater mobility and recreational opportunities. The transit service provided allows residents of the targeted block groups to reach a majority of major destinations (such as major employment centers, entertainment and recreation venues, government services, health care,

schools and shopping centers) in 40 minutes or less. When using transit, most residents need to walk no more than three to five blocks to reach their bus stop or destination.

Principle 2

• To ensure the full and fair participation by all potentially affected communities in the transportation decision making process.

The Sheboygan MPO realizes the importance of involving all segments of the community in the decision making process, and a special effort was made to alert the public of the status of the Update to the *Year 2045 SATP* and the various opportunities for public involvement. The public had the opportunity to comment at each of the joint meetings of the Sheboygan MPO Technical and Policy Advisory Committees when the planned projects were being discussed among members of both committees. In addition, the public comment period and public hearing were advertised in the *Sheboygan Press*, and public comment period/public hearing announcements were sent to entities and individuals listed on the MPO public participation mailing list and were publicized on the Bay-Lake Regional Planning Commission's Facebook page and Twitter account. The public hearing on the Update to the *Year 2045 SATP* was held at the Mead Public Library, a location served by public transit. Staff was available to answer any questions presented in person, over the phone, or by e-mail.

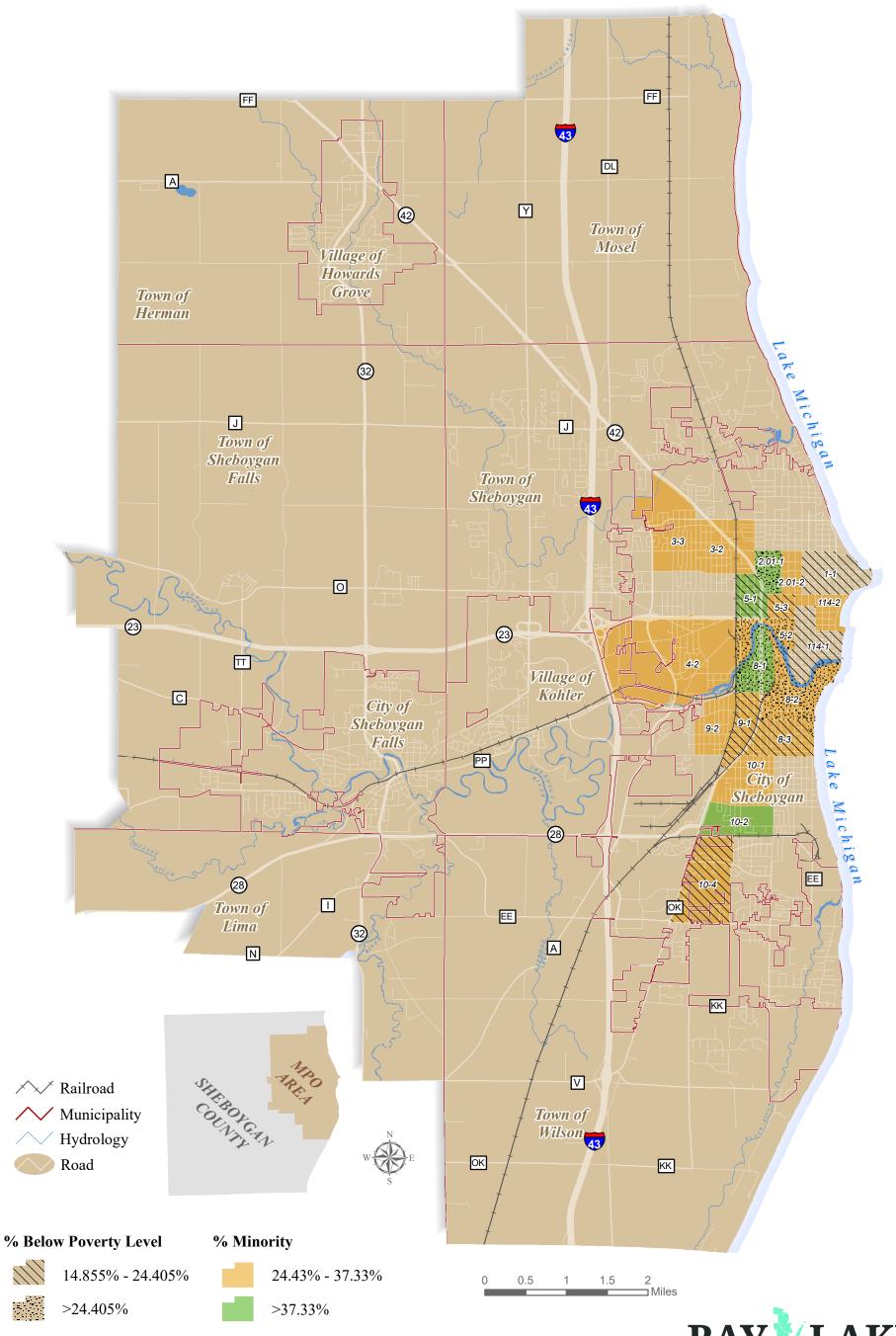
In addition, special outreach was made in the area of transit. Staff is in the process of preparing a Transit Development Program (TDP) Update for Shoreline Metro that will cover the period from 2020 through 2024; this document should be completed later in 2019. This process has included convening a 25 member TDP review committee, and has its own public involvement process.

Additional environmental justice analysis will be completed as projects move forward.

Distribution of Environmental Justice Target Populations Sheboygan Metropolitan Planning Area

Update to the Year 2045 Sheboygan Area Transportation Plan (SATP)

Map E.1



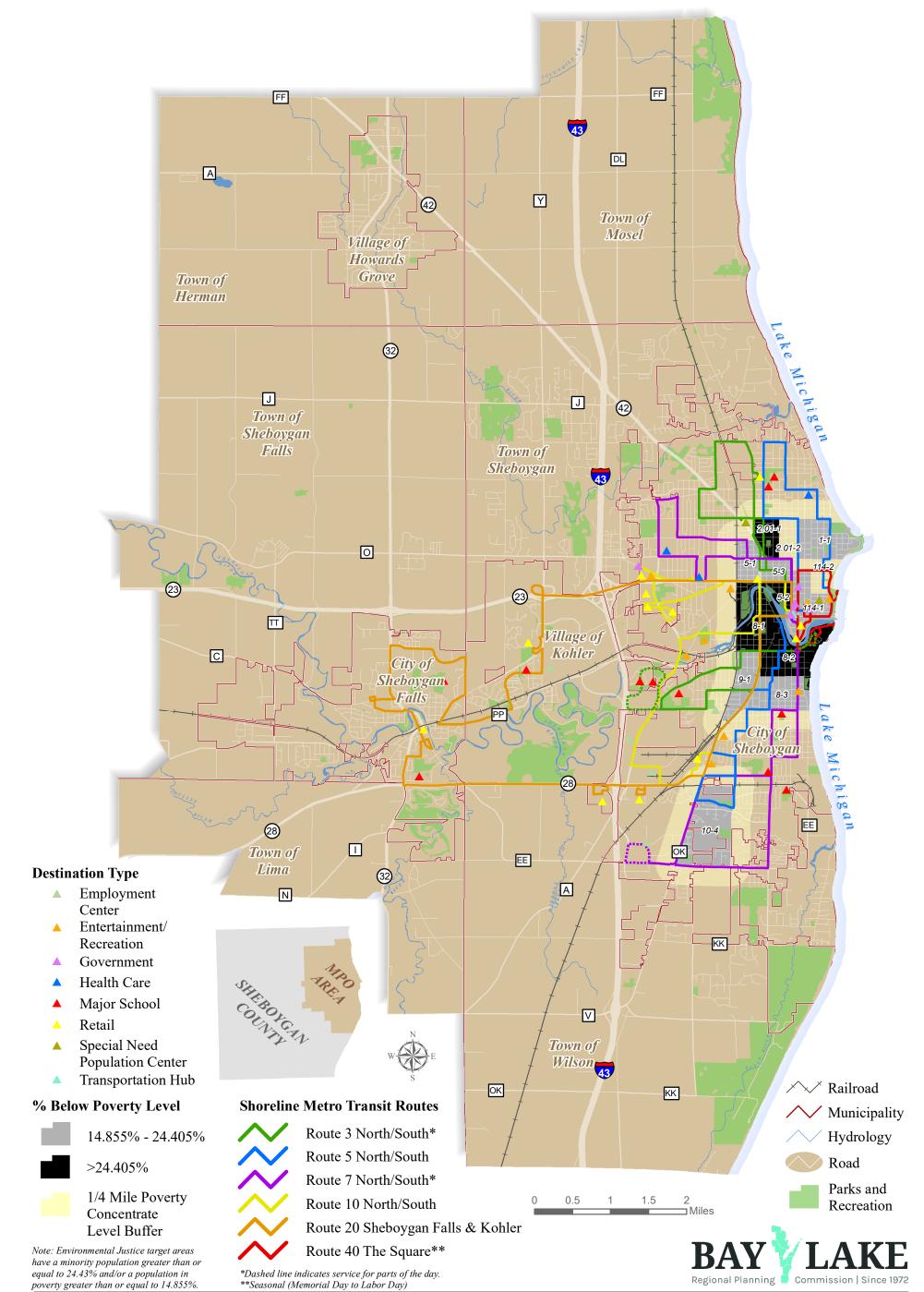
Note: Environmental Justice target areas have a minority population greater than or equal to 24.43% and/or a population in poverty greater than or equal to 14.855%.

Poverty Populations, Transit Routes and Destinations

Sheboygan Metropolitan Planning Area

Update to the Year 2045 Sheboygan Area Transportation Plan (SATP)

Map E.2

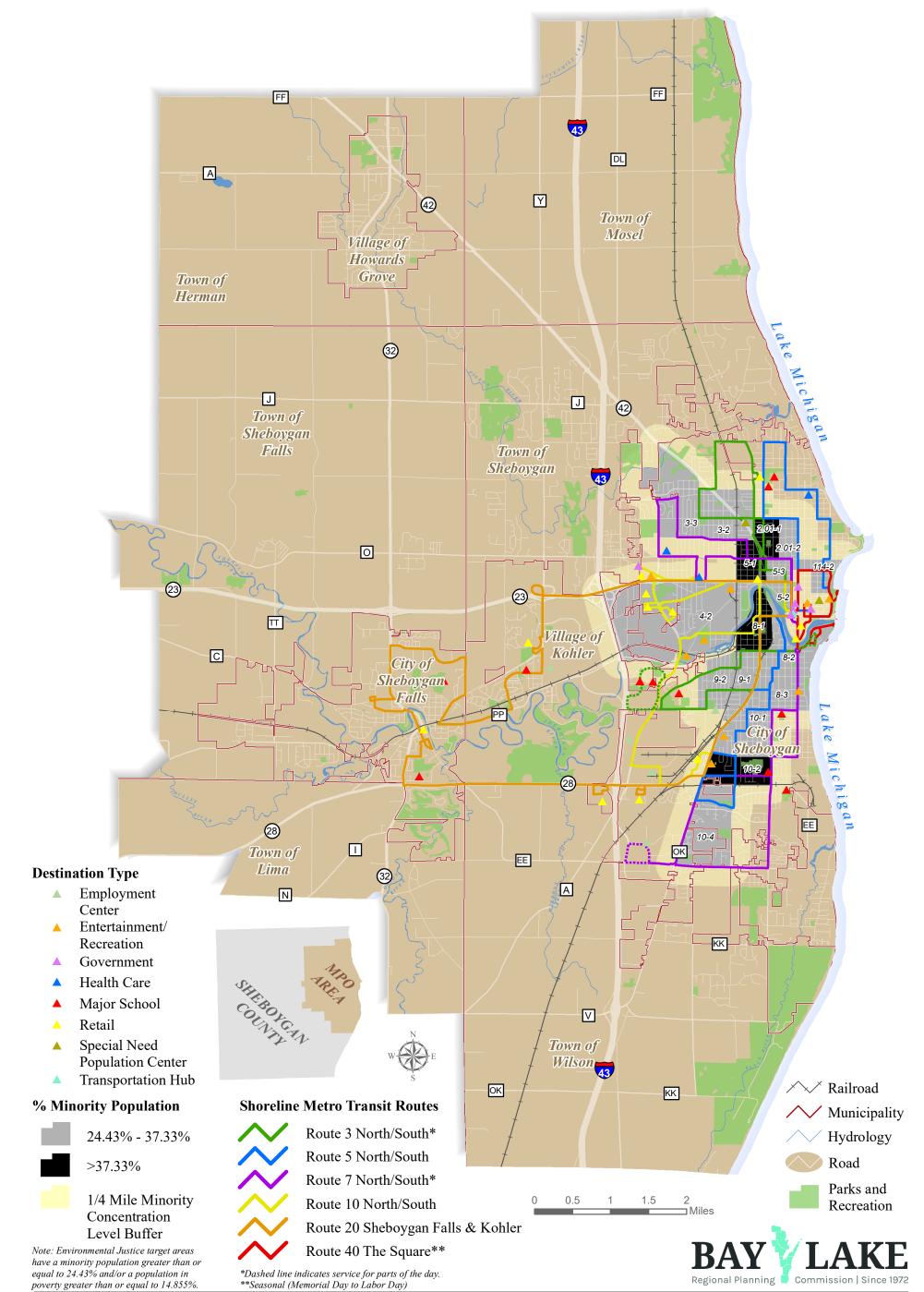


Minority Populations, Transit Routes and Destinations

Sheboygan Metropolitan Planning Area

Update to the Year 2045 Sheboygan Area Transportation Plan (SATP)

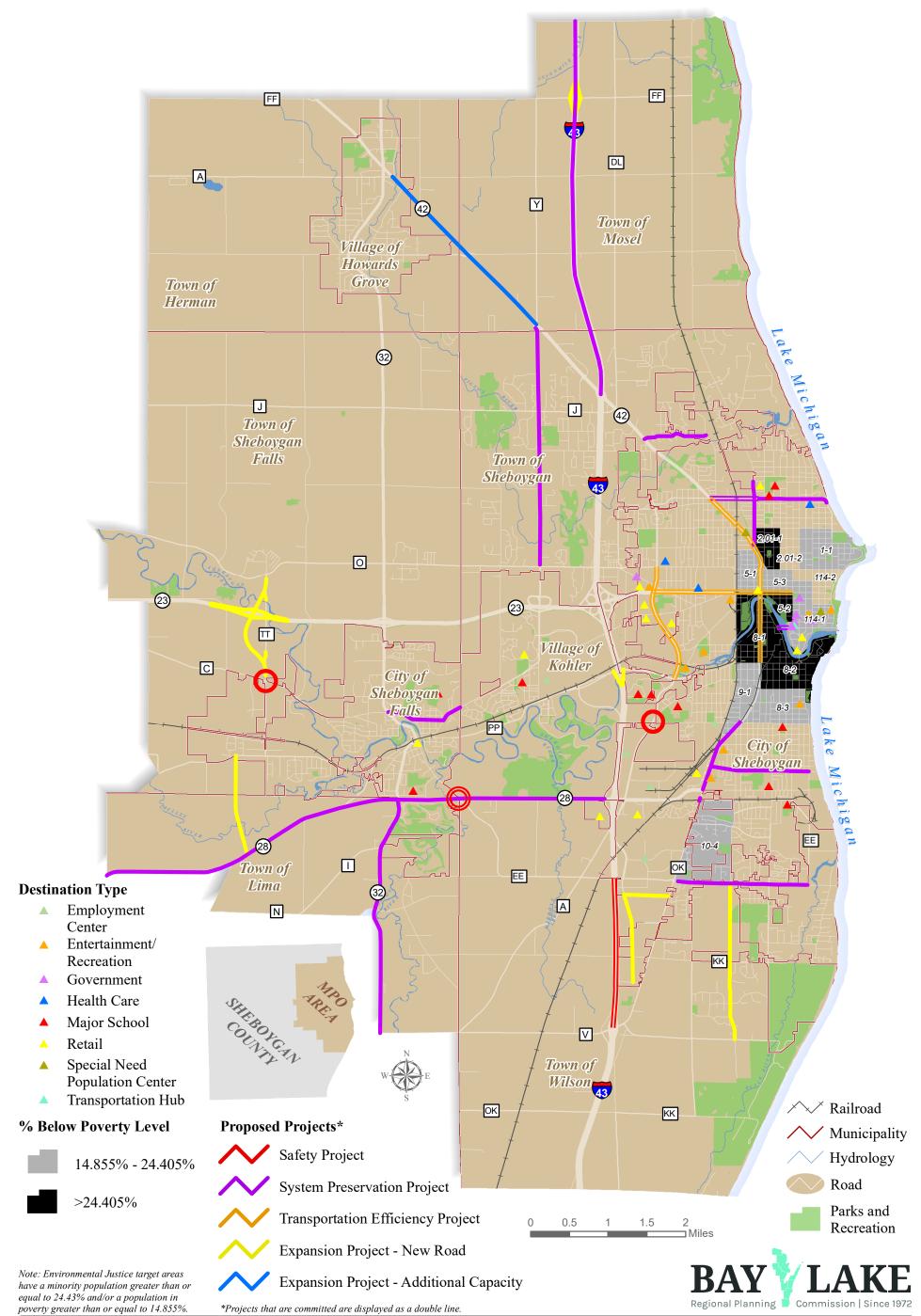
Map E.3



Poverty Populations, Proposed Projects and Destinations Sheboygan Metropolitan Planning Area

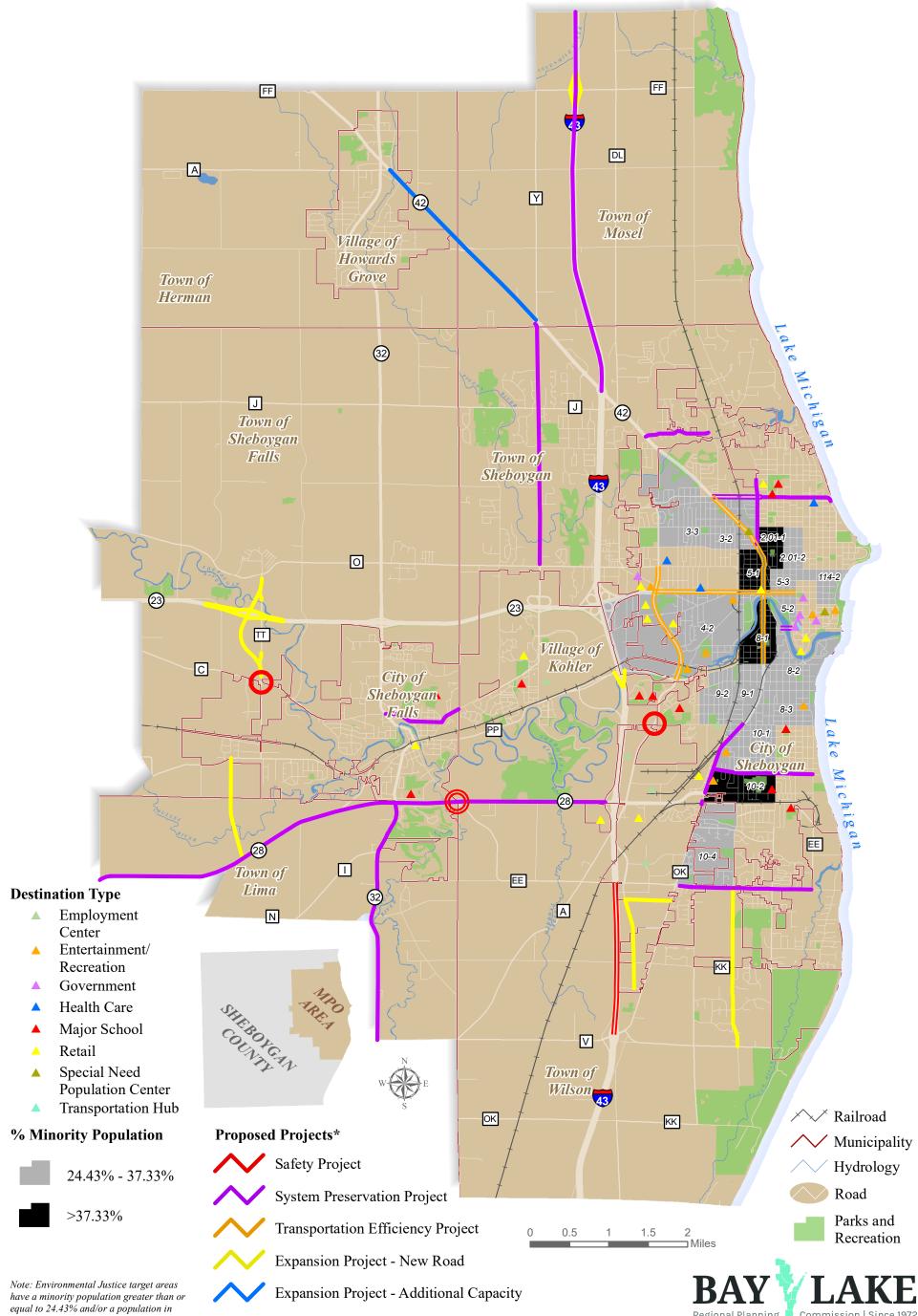
Update to the Year 2045 Sheboygan Area Transportation Plan (SATP)

Map E.4



Update to the Year 2045 Sheboygan Area Transportation Plan (SATP)

Map E.5



poverty greater than or equal to 14.855%

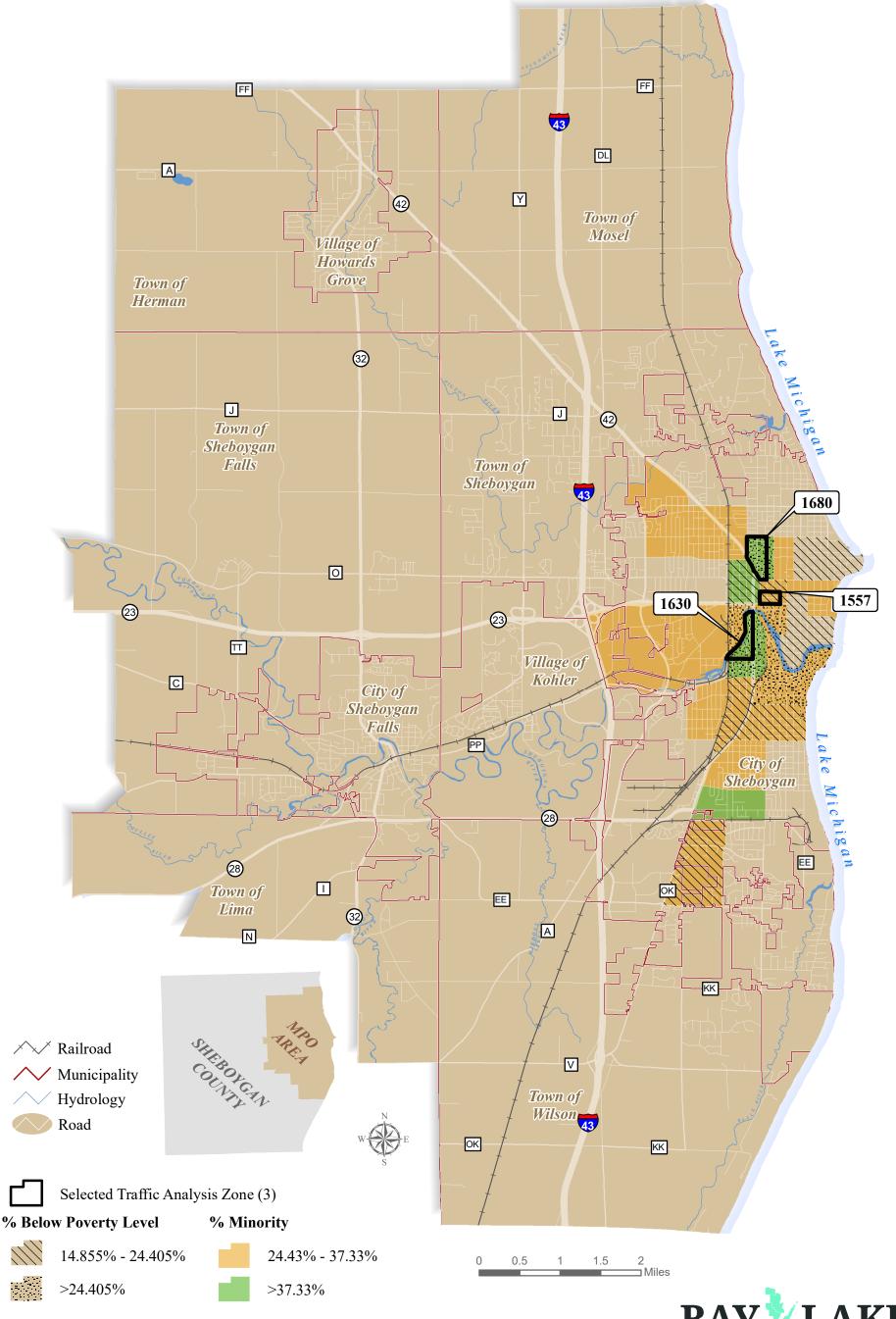
*Projects that are committed are displayed as a double line.

Traffic Analysis Zones (TAZs) Selected for Travel Time Analysis and Environmental Justice Target Areas

Sheboygan Metropolitan Planning Area

Update to the Year 2045 Sheboygan Area Transportation Plan (SATP)

Map E.6



*Note: Environmental Justice target areas have a minority population greater than or equal to 24.43% and/or a population in poverty greater than or equal to 14.855%.