



VOLUME 1 **EXISTING CONDITIONS**



Milwaukee County **North-South**
Transit Enhancement Study

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COMMUNITY ASSISTANCE PLANNING REPORT
NUMBER 340



MILWAUKEE COUNTY NORTH-SOUTH
TRANSIT ENHANCEMENT STUDY

**VOLUME 1:
EXISTING CONDITIONS**



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INTRODUCTION

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Credit: SEWRPC Staff

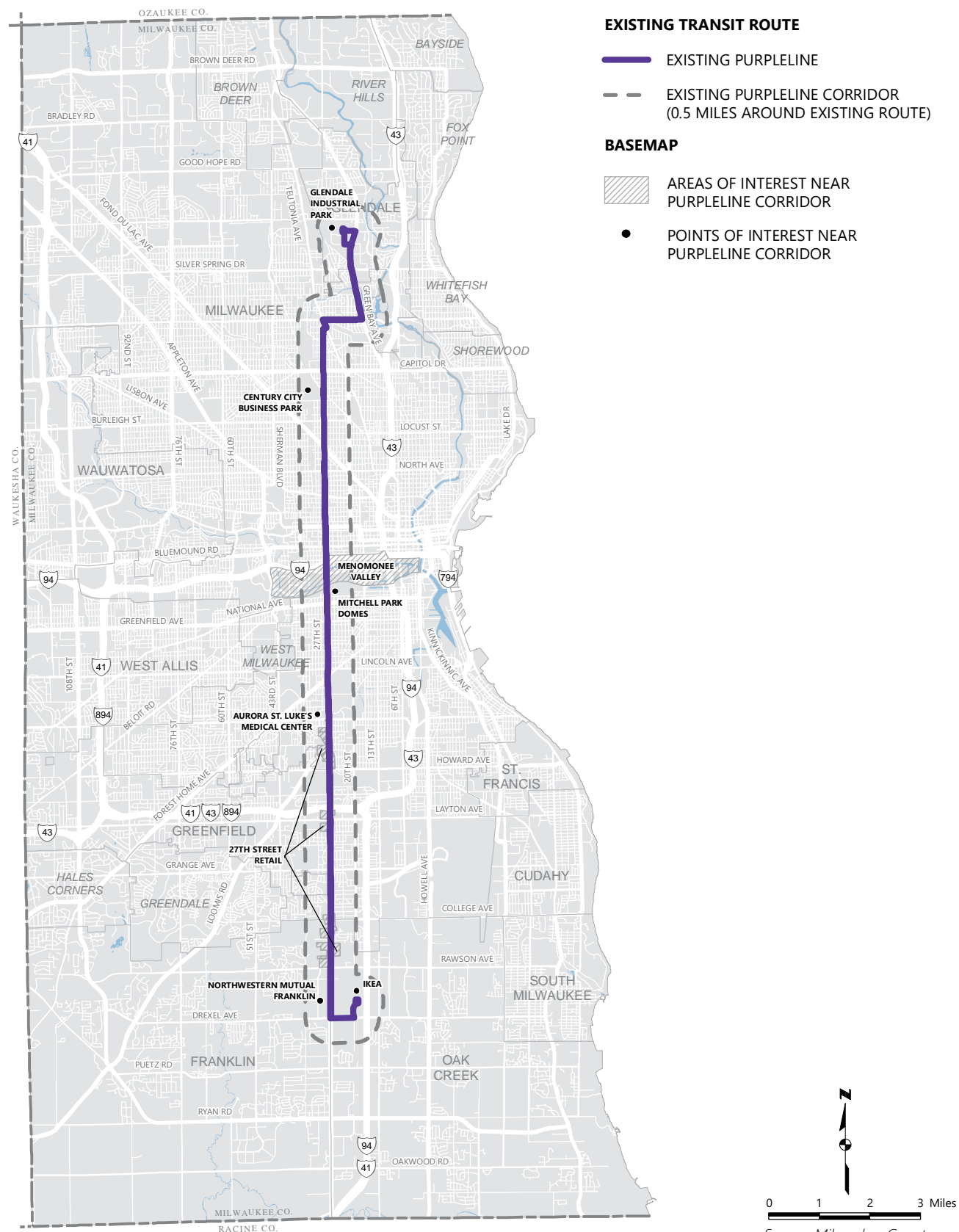
This Existing Conditions summary is the first of a series of reports initiating the North-South Transit Enhancement Study. The existing transit route that serves the area of study is the Milwaukee County Transit Service's (MCTS) PurpleLine, which is an approximately 15-mile route along 27th Street from the Glendale Industrial Park near W. Bender Road and N. Green Bay Avenue in Glendale to IKEA just north of Drexel Avenue in Oak Creek, as shown on Map 1.1. The mainline of PurpleLine service, as shown on Map 1.1, is the basis of the data presented and analyzed in this report. The PurpleLine service also has several variations including the following route variations:

- From S. 27th Street, west on W. Ramsey Avenue to S. 35th Street, east on W. College Avenue, and back to 27th Street
- From S. 27th Street, west on W. Sycamore Street into the Super Walmart driveway and bus stop, and back to S. 27th Street
- From S. 27th Street, southwest on W. Loomis Road, north on S. Point Terrace, east on W. Morgan Avenue and back to S. 27th Street
- From N. 27th Street, west on W. Capitol Drive, north on N. 31st Street-W. Hope Avenue, east on W. Hope Avenue and back to N. 27th Street

Other variations on the PurpleLine service include portions of the routes described above, with varied schedules and frequency of service. The PurpleLine corridor, or "the corridor," as referenced throughout this document, is defined as the area within a half-mile buffer around the mainline of the PurpleLine.

The data presented in this report will inform a purpose and need statement for the North-South Transit Enhancement Study. This statement, along with consideration of local governments, local business and public input, will be used to guide the study, including the development and evaluation of alternative transit enhancements and the selection of a recommended alternative for the investment in the North-South Corridor. After the recommended alternative is identified, Milwaukee County will submit a request to the Federal Transit Administration (FTA) to participate in the funding of the project and to enter project development, which will include a required environmental study and the initial engineering and design of the system, followed by any construction that may be necessary to implement the recommended alternative.

Map 1.1 Existing MCTS PurpleLine Transit Route



Source: Milwaukee County
Transit System and SEWRPC



Credit: SEWRPC Staff

Milwaukee County recognizes a need to invest in the 27th Street area as part of North-South Transit Enhancement Study as the corridor serves some of the most concentrated areas of underrepresented populations in the City of Milwaukee, which is among the most racially segregated metro areas in the Nation. The investment aligns with Milwaukee County's 2019 declaration of racism as a public health crisis and its commitment to addressing the root causes of racial inequities.

The North-South Transit Enhancement Study will look at options to decrease passenger travel times, increase service frequency, add amenities, and potentially expand the existing MCTS network to better serve the neighborhoods, people, and businesses in the corridor, and transit users across the County. A transit investment into the 27th Street area could be a catalyst for development and job growth within the corridor and provide improved transit connections to areas outside of the corridor.

Both Milwaukee County and the City of Milwaukee have been working to improve and expand the transit network within Milwaukee County in recent years. The City of Milwaukee began service on the first phase of its streetcar system, The Hop, in 2018 and Milwaukee County and MCTS are expected to begin service in 2022 for the East-West Bus Rapid Transit (BRT) service, the Region's first BRT line, from downtown to the Milwaukee Regional Medical Center campus in Wauwatosa. The East-West BRT line will intersect with the PurpleLine at W. Wisconsin Avenue and N. 27th Street.

Recent planning efforts have also included recommendations for transit enhancement along this corridor. The Milwaukee County Transit System Development Plan (TDP), completed in 2010, recommended improvements that have been implemented over the last several years, including changes along this corridor. More recently, MCTS NEXT—a plan to redesign the County's transit system to increase frequencies and simplify routes within current budget constraints—has been approved by the Milwaukee County Board of Supervisors and is scheduled to be implemented incrementally over the next year. VISION 2050—the Region's long-range land use and transportation plan which the Southeastern Wisconsin Regional Planning Commission (SEWRPC) adopted in 2016 and updated in 2020—recommends a significant improvement and expansion of public transit in Southeastern Wisconsin, including implementation of rapid transit along this corridor and commuter rail along a portion of this corridor. More details about relevant recommendations from these plans are further discussed in Chapter 3, Transportation Network.

2.1 MILWAUKEE COUNTY TRANSIT SYSTEM PLANNING

The most recent Milwaukee County TDP, completed in 2010, recommended that a new express bus service be implemented in the 27th Street corridor. This express bus service was recommended to terminate at Bayshore Shopping Center (now Bayshore) in the City of Glendale (near the intersection of N. Port Washington Road and W. Silver Spring Drive) in the north and at the Walmart Supercenter in the City of Franklin (near the intersection of W. Sycamore Street and S. 27th Street) in the south. The TDP recommended that a southern extension of the express route to the Wheaton Franciscan Healthcare - Franklin Hospital (now Ascension SE Wisconsin Hospital - Franklin Campus, near the intersection of W. Oakwood Road and S. 27th Street) be considered, including service to the Northwestern Mutual campus in Franklin.

Since the TDP was developed, MCTS created the high frequency transit route, the PurpleLine, and retired local Route 27, with the PurpleLine currently extending to the IKEA entrance on W. Drexel Avenue and W. Ikea Way in Oak Creek and including service to the Northwestern Mutual Campus in Franklin. The northern terminus of the PurpleLine is currently the same as the former Route 27, with the route ending at W. Bender Road and N. Green Bay Avenue in the City of Glendale.

2.2 MCTS NEXT

MCTS NEXT is a comprehensive review and redesign of the MCTS network, with the goal to increase service frequency, and improve accessibility via transit across Milwaukee County. Under MCTS NEXT, the PurpleLine will remain a high-frequency route with more connections to other high frequency routes. Implementation of MCTS NEXT will also modify the northern terminus of the PurpleLine to serve Bayshore (See Map 2.1).

The NEXT plan was presented to the full County Board and was approved on September 24, 2020. The recommended system changes are being implemented incrementally throughout 2021, with changes to the PurpleLine scheduled to begin in June 2021.

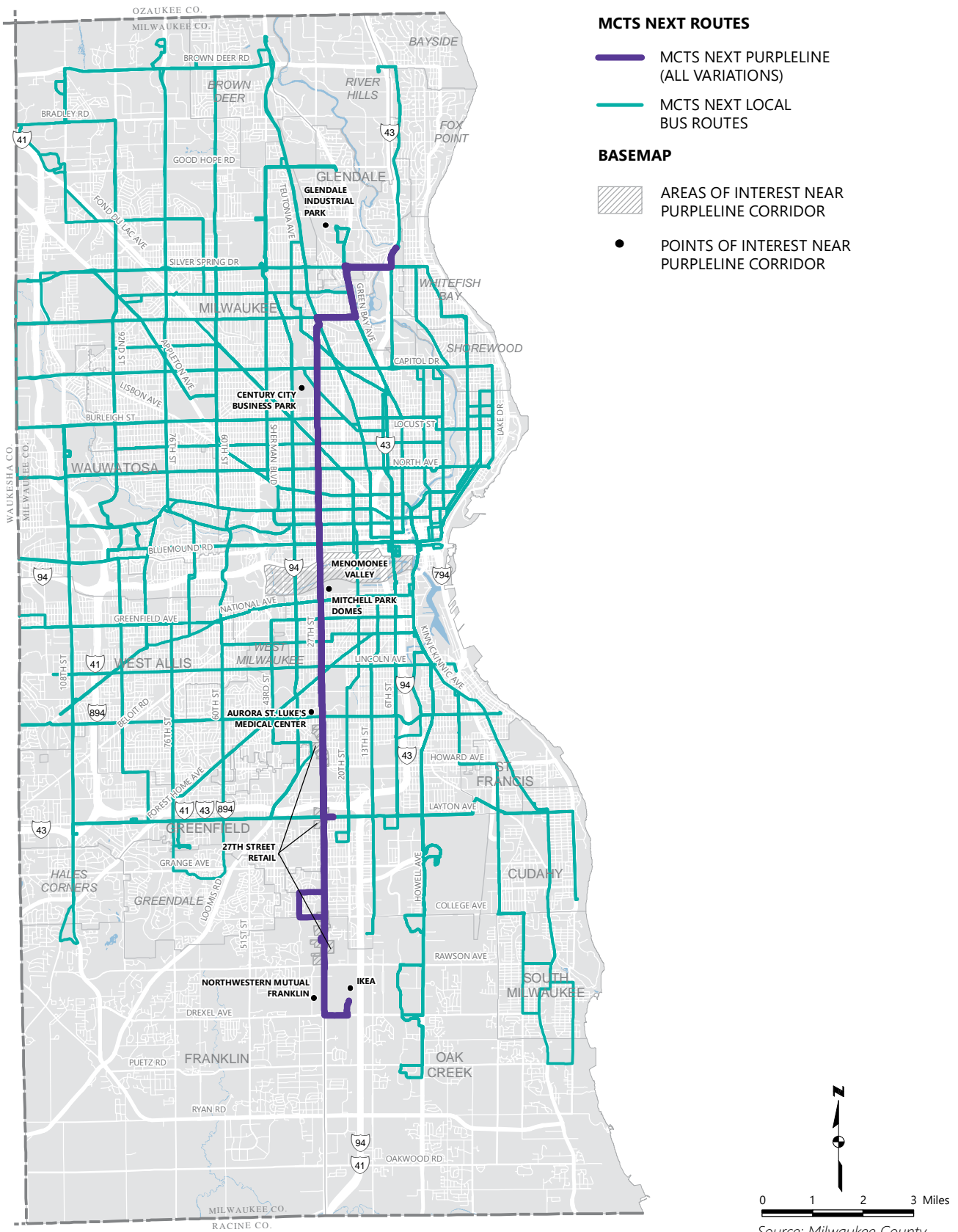
2.3 VISION 2050 TRANSIT RECOMMENDATIONS

VISION 2050 includes several transit improvements for the 27th Street corridor. Rapid transit—which is defined as either bus rapid transit (BRT) or light rail transit lines, with vehicles operating in exclusive lanes and using signal priority or preemption, and stations typically spaced every one-half to one mile—is recommended along 27th Street from Bayshore in the City of Glendale south along 27th Street to Northwestern Mutual's Franklin campus.

Express bus—which is defined as limited-stop, higher-speed routes, with buses operating in mixed traffic or in reserved street lanes and stops typically spaced every ½ to one mile—is also recommended along a portion of this corridor, from W. Brown Deer Road (STH 100) and N. Green Bay Road (STH 57), south predominately on 27th Street and W. Forest Home Avenue to Southridge Mall in the Village of Greendale. The recommended rapid transit route along 27th Street would also intersect with other recommended rapid transit routes along the corridor including at both termini, at W. Capitol Drive, W. National Avenue, and W. Wisconsin Avenue.

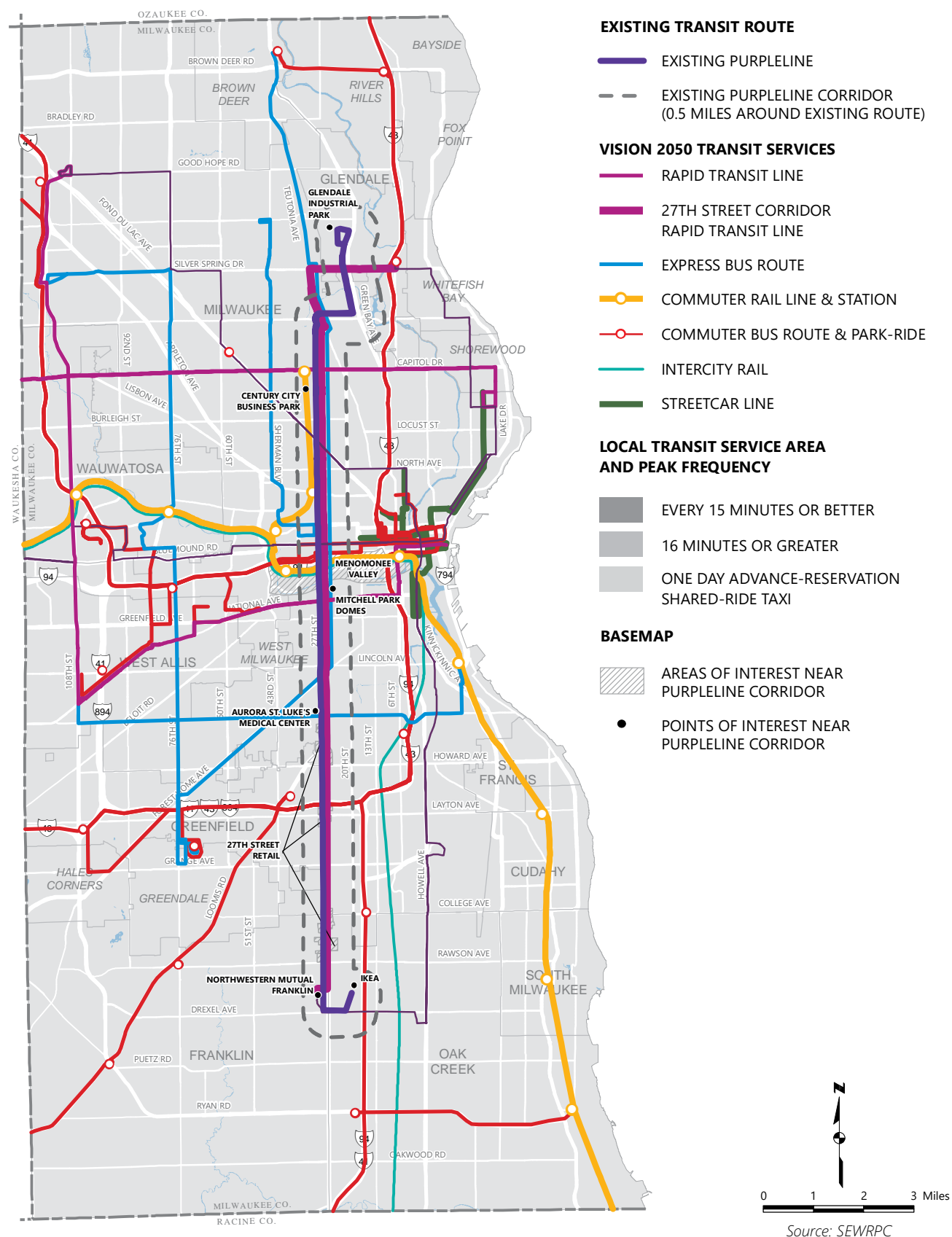
VISION 2050 also recommends implementation of commuter rail connecting Kenosha, Milwaukee, Racine, and Waukesha Counties. Commuter Rail is defined as longer-distance lines with stations typically spaced every two to five miles. Near the 27th Street corridor, just north of the Century City Business Park, a commuter rail line is recommended to run from the rail line near W. Capitol Drive and N. 30th Street used by Wisconsin and Southern Railroad, connecting to the Canadian Pacific Railway line in the Miller Valley, through the Menomonee Valley, to the Milwaukee Intermodal Station (MIS) in downtown Milwaukee at N. 5th Street and W. St. Paul Avenue (See Map 2.2). VISION 2050 recommends that commuter rail service continue south along the Union Pacific-owned railroad parallel to the Lake Michigan shoreline which has historically been referred to as the Kenosha-Racine-Milwaukee (KRM) commuter rail line, eventually connecting to the Metra commuter rail line that terminates in the City of Kenosha and continues south to Chicago.

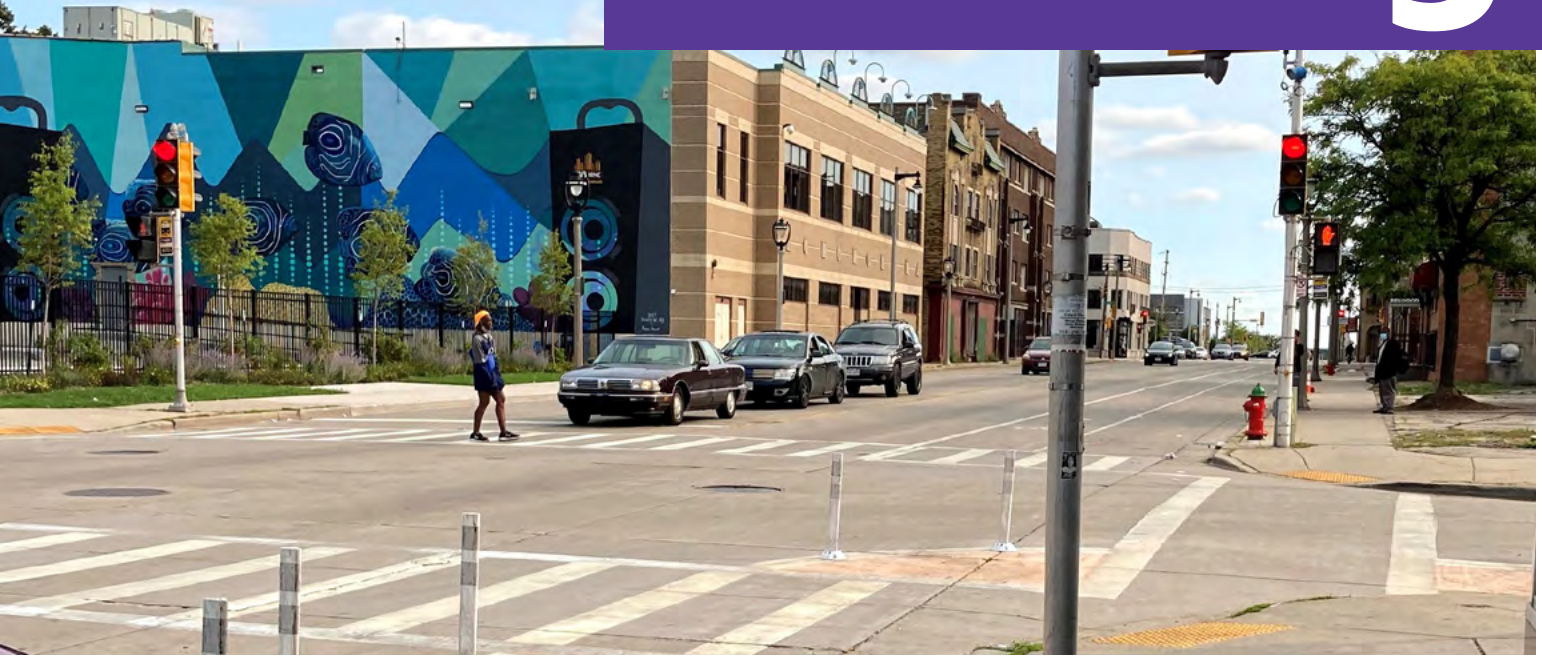
Map 2.1 Planned MCTS NEXT PurpleLine and Surrounding Routes



Map 2.2

VISION 2050 Recommended Transit Services near the Existing PurpleLine





Credit: SEWRPC Staff

The PurpleLine corridor includes a transportation network that supports transit, automobile, pedestrian and bike transportation that transit riders use to connect to the PurpleLine. The PurpleLine is part of the transit transportation network, but it operates on, and its performance is dependent on, the roadway network. The following section provides an overview of the existing transportation facilities.

3.1 PUBLIC TRANSIT NETWORK IN THE PURPLELINE CORRIDOR

The PurpleLine high frequency transit route runs roughly from W. Bender Road and N. Green Bay Avenue in the City of Glendale in the north, west along W. Hampton Avenue to 27th Street, and south to W. Drexel Avenue in Oak Creek; approximately 15 miles in length. Annually, the PurpleLine operates nearly 1 million vehicle miles, more than 70,000 vehicle hours, and utilizes 15 buses to operate the service during peak travel periods. In the fall of 2019, the PurpleLine provided 6,769 average weekday rides (see Table 3.1), which made the PurpleLine the second highest ridership route on the MCTS network.

While the PurpleLine is a high frequency local bus route, it has 156 stops in both directions (stop locations are located about 0.2 mile apart on average), travels within the same roadway travel lanes as all other vehicular traffic, and does not utilize transit signal prioritization (TSP). TSP provides technology that allows transit vehicles to reduce the amount of time spent at a red light by shortening the green signal for the perpendicular traffic or lengthening an already active green signal to ensure the transit vehicle passes through an intersection before a red signal. The PurpleLine headways, or the time between bus arrivals at a bus stop, are between 12 and 25 minutes (see Table 3.2). On an average weekday, the PurpleLine has a runtime of anywhere between 65 and 80 minutes for the full length of the route, while driving the corridor in an automobile can take anywhere between 30-45 minutes.¹ The difference in travel time illustrates that the PurpleLine does not offer a competitive travel option as compared to automobile travel in the North-South corridor.

¹ Travel time estimates utilize both the SEWRPC Traffic model and Google Maps estimated travel times.

Table 3.1
PurpleLine Ridership

	Fall 2019 Average Weekday Boardings	Fall 2019 Average Weekday Alightings	Fall 2019 Average Weekday Total Rides
PurpleLine Northbound	3,404	3,410	6,814
PurpleLine Southbound	3,365	3,359	6,724
Total Average Weekday Rides (Boardings + Alightings / 2)			6,769

Source: Milwaukee County Transit System and SEWRPC

Table 3.2
PurpleLine Headways

PurpleLine Average Headways (Fall 2019)	AM Peak 6 a.m. – 9 a.m.	Mid-Day 9 a.m. – 3 p.m.	PM Peak 3 p.m. – 6 p.m.	Evening 6 p.m. – 9:30 p.m.	Late Night/ Early Morning 9:30 p.m. – 6 a.m.
Weekday	12 minutes	14 minutes	12 minutes	17 minutes	20 minutes
Saturday	17 minutes	15 minutes	16 minutes	18 minutes	25 minutes
Sunday	25 minutes	16 minutes	15 minutes	21 minutes	25 minutes

Source: Milwaukee County Transit System and SEWRPC

Other Transit Service near the PurpleLine Corridor

The PurpleLine is the only north-south transit route within the half-mile corridor, but there are four north-south routes just outside the half-mile corridor on N. 35th Street (Route 35), N. 16th Street and N. 17th Street (Blueline and Route 14), and S. 20th Street (Route 19). The majority of MCTS east-west transit routes intersect with the PurpleLine as shown in Map 3.1, including the future East-West Bus Rapid Transit (BRT) service.

Impacts of the COVID-19 Pandemic

The PurpleLine carried more riders per weekday than any other MCTS route during the first three months of the COVID-19 pandemic. This suggests that, perhaps more than other corridors in the system, the PurpleLine provides access to jobs, services, and destinations deemed essential. The PurpleLine also offers connections to virtually every east-west route in the system.

In the interest of public health, MCTS instituted a ten-rider-per-bus limit at the beginning of the COVID-19 pandemic. To meet demand for service during the implementation of this capacity limit, MCTS added 14 percent to 18 percent more service to the PurpleLine at various times throughout the day on weekdays and Saturdays.

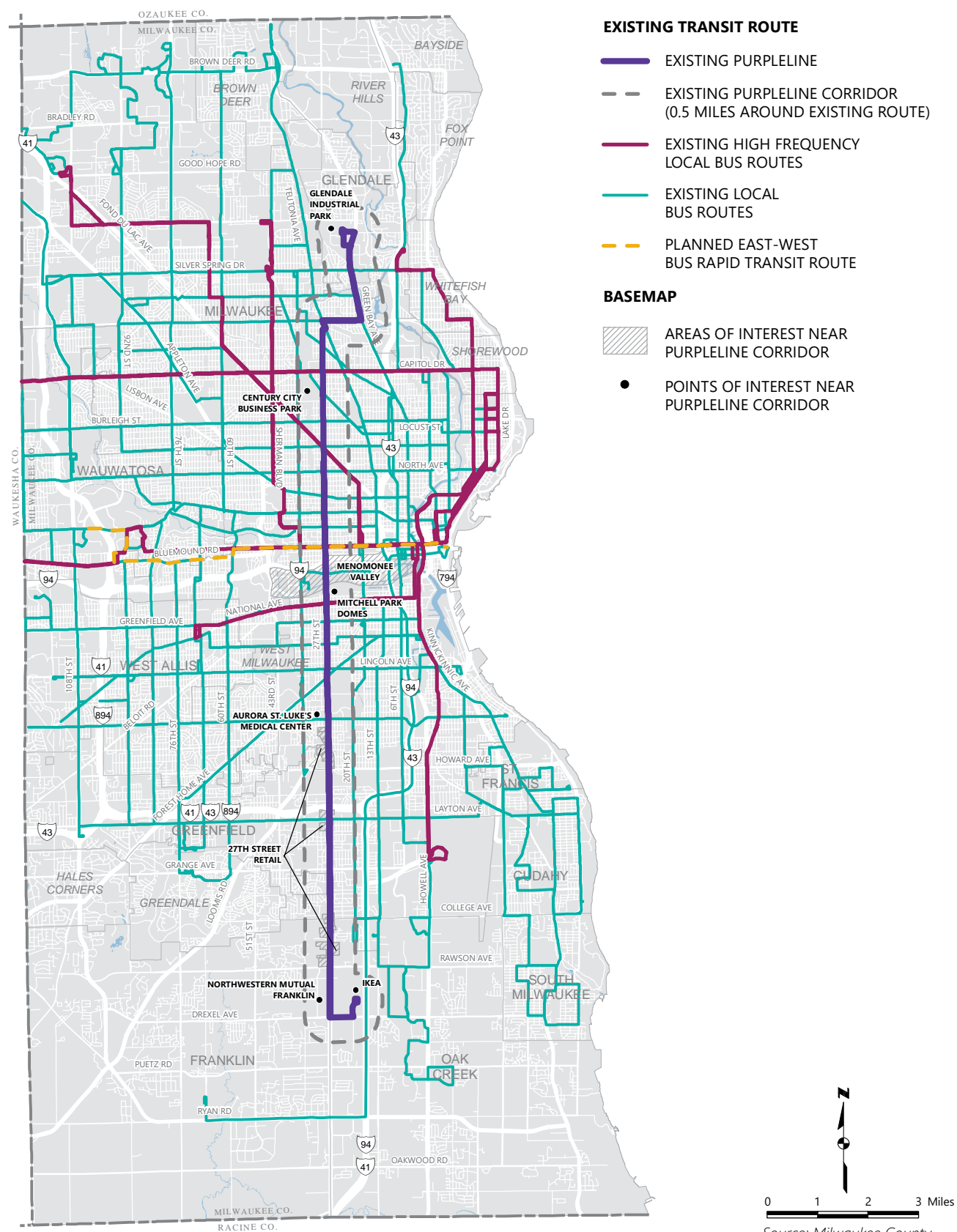
3.2 ROADWAYS IN THE PURPLELINE CORRIDOR

The PurpleLine operates on roadways that have several designations and involve different jurisdictions, which determine who is responsible for the maintenance and operations of those roadways. Coordination regarding any changes to the existing roadway, shoulders, signalization, signal timing and configuration, parking lanes, bike lanes, and sidewalks with each of these jurisdictions will take place throughout the North-South Transit Enhancement Study.

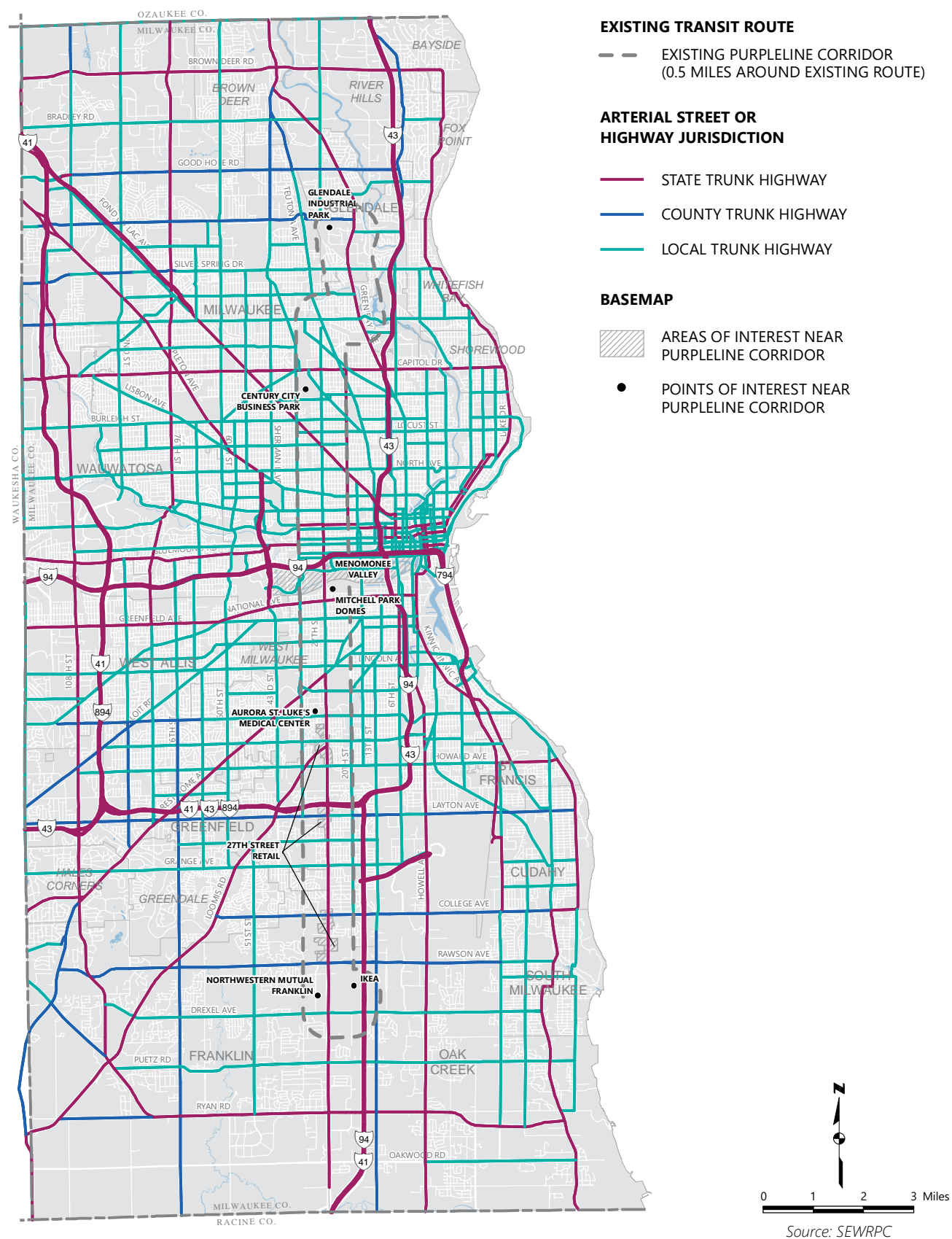
The designations of the arterials that the existing PurpleLine travels on, as shown on Map 3.2, include State, county, and local trunk highways and are described below:

- State trunk highway from W. Bender Road to W. Hampton Avenue
- Local trunk highway along W. Hampton Avenue to 27th Street and south to W. Highland Boulevard
- State trunk highway from W. Highland Boulevard to W. National Avenue

Map 3.1 Existing Transit Routes in PurpleLine Corridor



Map 3.2 Existing Arterial Streets and Highways Jurisdiction in the PurpleLine Corridor



- Local trunk highway W. National Avenue to W. Forest Home Avenue
- State trunk highway from W. Forest Home Avenue to W. Drexel Avenue
- Local trunk highway along W. Drexel Avenue, east to W. Ikea Way

27th Street is designated STH 241 south of Greenfield Avenue (STH 59), and STH 57 from Greenfield Avenue (STH 59) to Fond du Lac Avenue (STH 145). These concurrent highway segments with 27th Street are designated as part of the National Highway System (NHS). The NHS is a system of highways designated to ensure connectivity to the national defense highway network as well as other regional transportation routes and are subject to higher highway design standards than non-NHS highways. NHS routes² are significant because they are important to the economy, defense, and mobility of the nation.

In addition to the roadway jurisdictions along the existing PurpleLine route, certain segments are designated as a Connecting Highway by the Wisconsin Department of Transportation (WisDOT). This designation is given to county and local roads that carry state highway travel through cities and villages. County and local governments are required to maintain these road segments according to State highway standards. Connecting Highway Aids provide funding to support some of the costs associated with carrying traffic along the State system. Accordingly, WisDOT and the local jurisdictions will be invited to participate in and contribute to the North-South Transit Enhancement Study.

Roadway Characteristics

Along the PurpleLine corridor, the general characteristics of the roadway have been identified, including the number of traffic lanes (not including turn-only lanes), and the presence of medians, bike lanes, and on-street parking lanes. There are no dedicated transit lanes within the PurpleLine corridor, so all motorized travel lanes are intended for mixed-vehicle use.

Map 3.3 illustrates the number of travel lanes within the PurpleLine Corridor and also divides the corridor into four segments, which provide a legend for the more detailed roadway characteristic maps that follow (Maps 3.4, 3.5, 3.6 and 3.7).

Within the PurpleLine corridor, there are two-, four-, and six-lane roadways. In Segment 1 and Segment 2 of the corridor on N. 27th Street, two lanes and four lanes are present in various, some short, segments with an inconsistent presence of medians. Parking is provided on W. Bender Road, N. Baker Road, and W. Florist Avenue, along W. Hampton Avenue, and on N. 27th Street from W. Teutonia Avenue south to N. Highland Avenue (see Maps 3.4 and Map 3.5). No parking is provided within the PurpleLine corridor south of N. Highland Avenue.

Segments 3 and 4 of the corridor are comprised of primarily four and six lane roadways with the transition from four lanes to six lanes occurring at W. Oklahoma Avenue (see Map 3.6). Medians are present from W. National Avenue south to, and on, W. Drexel Avenue to S. Ikea Way, and also on S. Ikea Way. S. Ikea way is the only two-lane roadway in Segments 3 and 4 of the corridor.

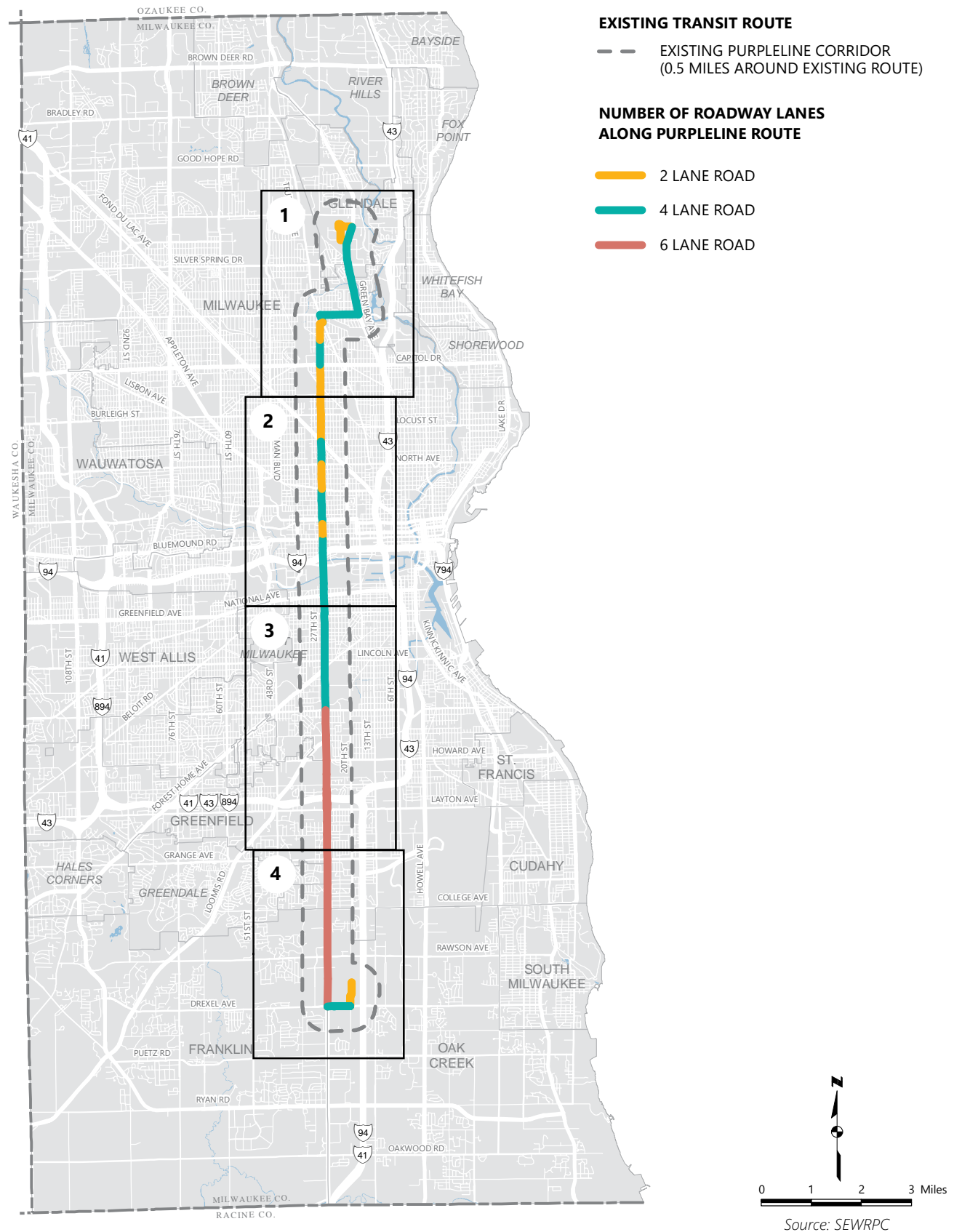
Bike lanes are provided on W. Hampton Avenue, 27th Street from W. Capitol Drive to W. Evergreen Lane, near the Mitchell Park Domes, just north of W. Forest Home Avenue to W. Oklahoma Avenue, and from W. College Avenue to W. Drexel Avenue. There is also an off-street multi-use path on W. Drexel Avenue from S. 27th Street to S. Ikea Way.

Signalized intersections are present throughout the PurpleLine corridor, 59 in total, with many closely spaced to accommodate angled streets at W. Atkinson Avenue, W. Fond du Lac Avenue, W. Hopkins Street, W. Forest Home Avenue, and W. Loomis Road, and to accommodate the freeway ramps and overpasses at 27th Street and IH 41/94 and IH 43/894.

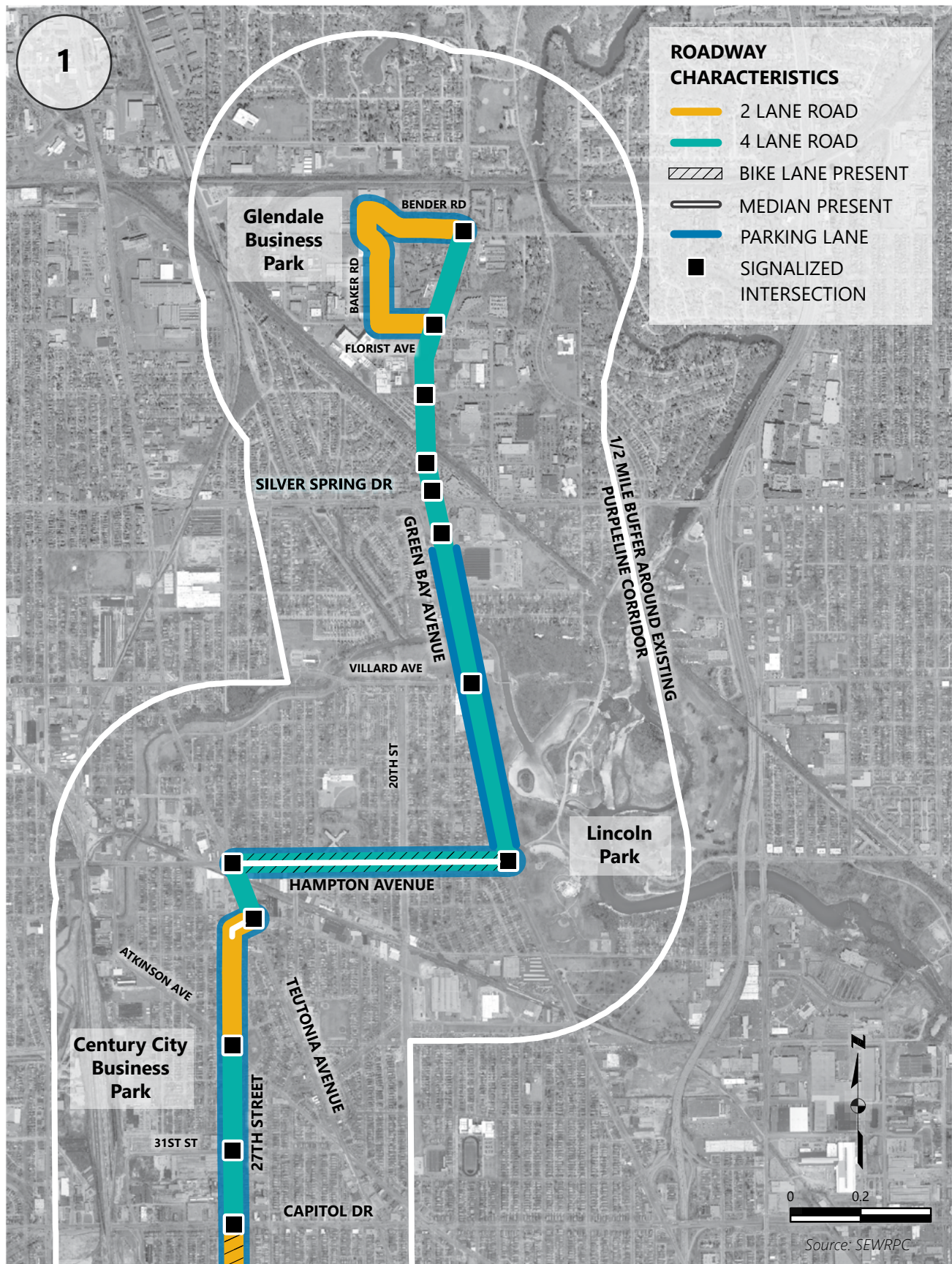
² NHS System in Wisconsin: wisconsindot.gov/Pages/projects/data-plan/plan-res/nhs.aspx

Map 3.3

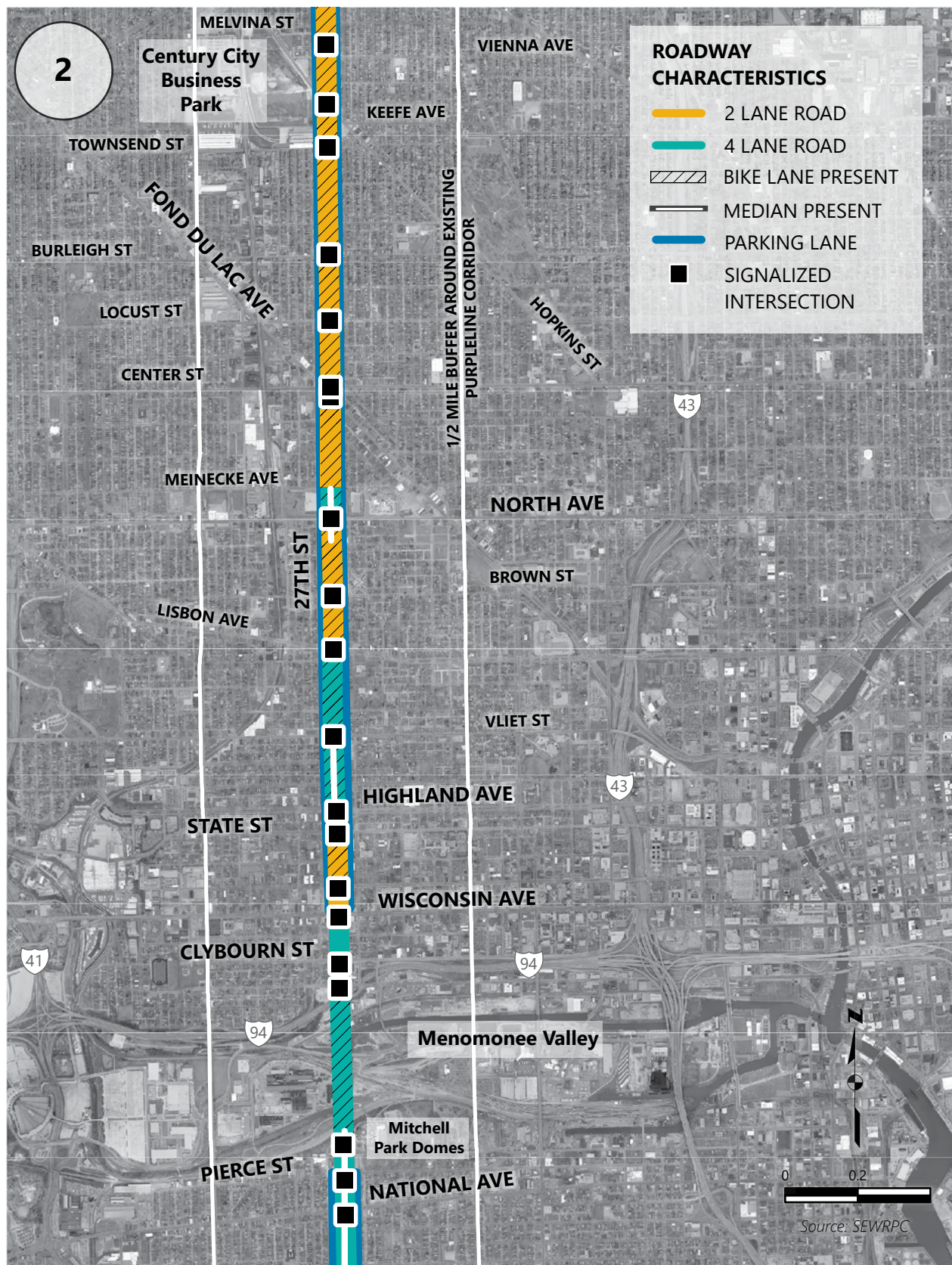
Number of Lanes and Roadway Characteristics in the PurpleLine Corridor – Overview Map



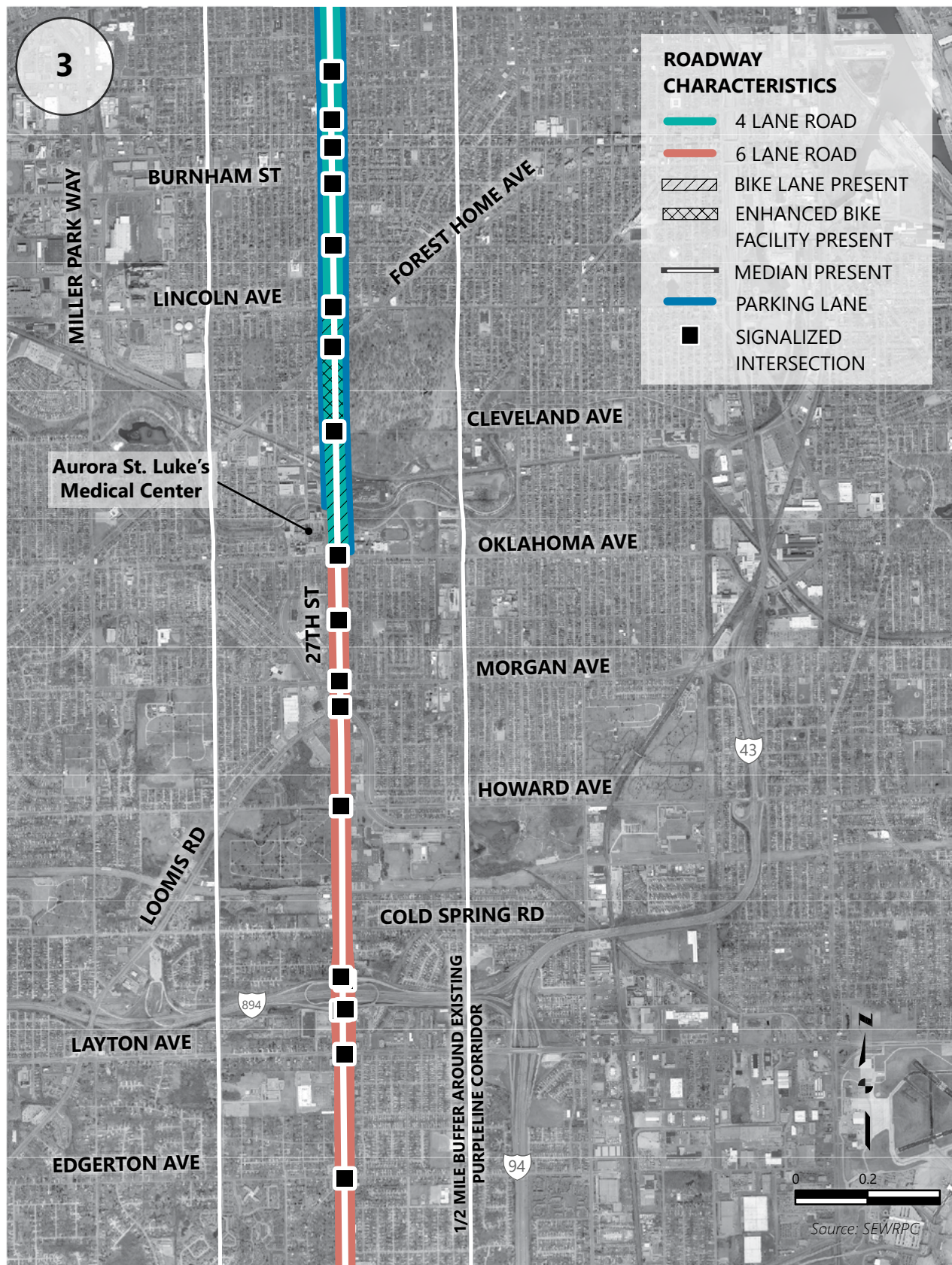
Map 3.4
Segment 1 Roadway Characteristics



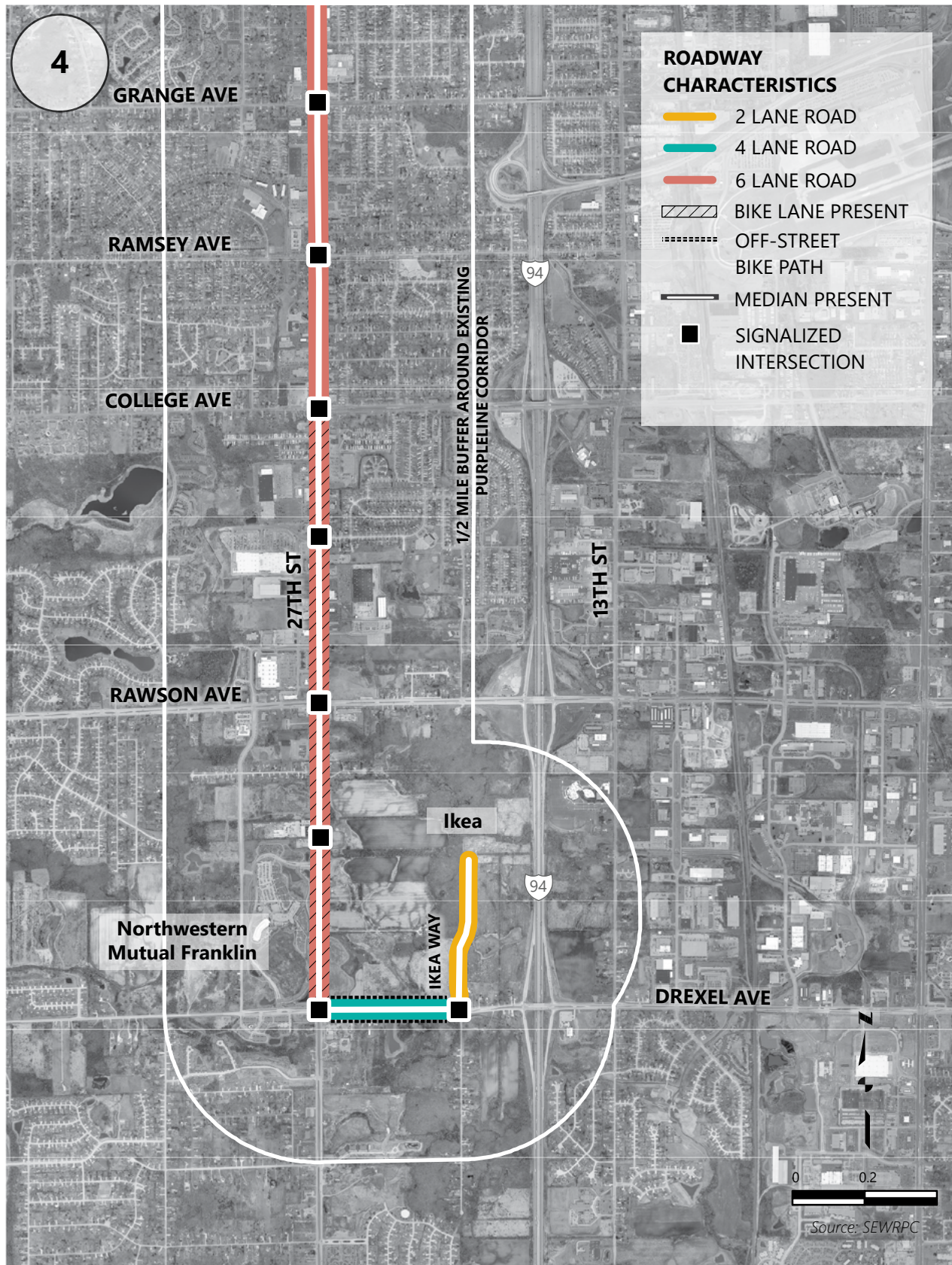
Map 3.5
Segment 2 Roadway Characteristics



Map 3.6
Segment 3 Roadway Characteristics



Map 3.7
Segment 4 Roadway Characteristics



Roadway Performance and Traffic Operations

Traffic operations are measured using a grading system called Level of Service (LOS), which rates how a roadway is performing in terms of traffic congestion. The grading system uses A (no congestion) through F (extreme congestion) to describe how traffic is flowing and the roadway is operating. Table 3.3 shows the characteristics of each LOS grade.

The PurpleLine corridor includes roadways currently operating at LOS C, D, and E. LOS C represents conditions that are generally free flowing, but with traffic present on the roadway and travel speeds that may be lowered. Roadways with a LOS D have more traffic congestion and speeds are further lowered to accommodate traffic. LOS E represents the condition where the roadway is at capacity to handle the traffic on the roadway and travel speeds are low due to traffic congestion.

As shown on Map 3.8, most of the PurpleLine corridor operates at a LOS C, including the northernmost segment along N. 27th Street and N. Green Bay Avenue to W. Hampton Avenue, along W. Hampton Avenue to W. Teutonia Avenue, and from W. Teutonia Avenue to W. Auer Avenue. These areas operate with a posted speed limit of 30 to 35 mph. A LOS C is also indicated from S. Oklahoma Avenue to S. Ikea Way on the southern end of the corridor, with speed limits of 35 to 45 mph.

Small segments of the PurpleLine corridor alternate between LOS C and LOS D on 27th Street from W. Auer Avenue to S. Oklahoma Avenue, and have posted speed limits between 25 and 35 mph.

The only segment in the PurpleLine corridor at a LOS E is on W. Teutonia Avenue, from W. Hampton Avenue to W. Cornell Street, which has a speed limit of 35 mph. This roadway segment is short, approximately 800 feet long, with a signalized intersection at each end and an at-grade railroad crossing that includes a rail spur to service one business to the west of N. 27th Street. These features in a short distance may account for the lower LOS in this roadway segment.

3.3. NON-MOTORIZED TRANSPORTATION

Sidewalks

Most of the PurpleLine Corridor has sidewalks along both directions of the route, except in the following sections (See Map 3.9):

- Along the north side of W. Bender Road from N. 27th Street west to N. Baker Road
- Along both sides of N. Baker Road from W. Bender Road south to W. Florist Avenue
- Along both sides of W. Florist Avenue east to N. Green Bay Avenue
- Along the east side of N. Green Bay Avenue from W. Florist Avenue south to W. Marne Avenue
- Along the west side of N. Green Bay Avenue from just south of W. Villard Avenue south to just north of W. Hampton Avenue
- Along the south side of W. Drexel Avenue east to W. Ikea Way
- Along the east side of W. Ikea Way

Bicycle Facilities

Some roadway sections of the PurpleLine route also incorporate bicycle facilities. A combination of bike lanes, off street bike paths, and enhanced bike facilities (which include protected bike lanes, separate paths within the road right-of-way, or buffered bike lanes) exist along and intersect with the corridor. The existing bike network is shown on Map 3.10. Within the PurpleLine Corridor, bike lanes are designated along W. Hampton Avenue and bike facilities are included along several disconnected segments on the following north to south sections of the PurpleLine:

Table 3.3
Surface Arterial Traffic Level of Service Definitions

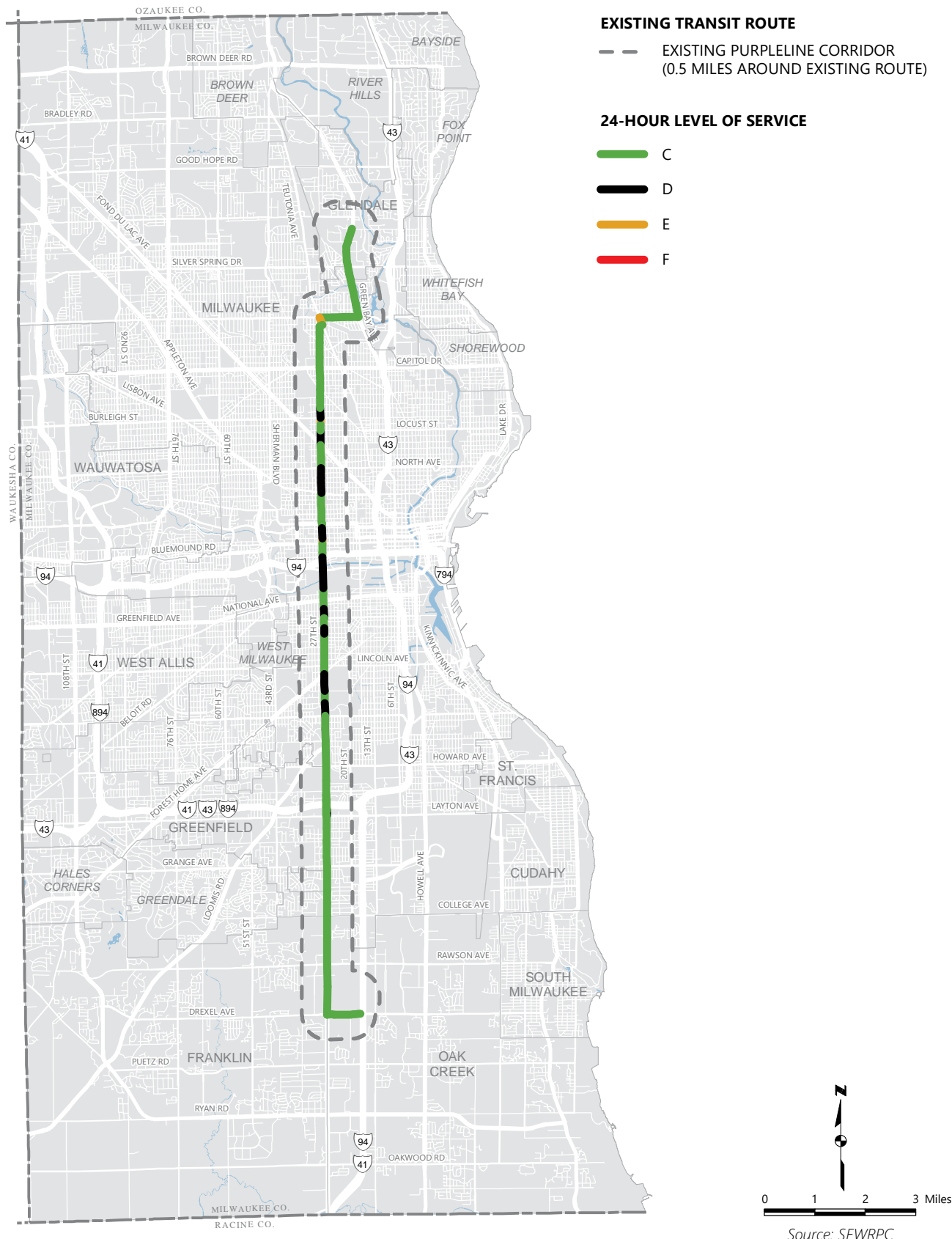
Level of Traffic Congestion	Level of Service	Average Speed	Operating Conditions
None	A and B	70 to 100 percent of free-flow speed	Ability to maneuver within traffic stream is unimpeded. Control delay at signalized intersections is minimal.
None	C	50 to 100 percent of free-flow speed	Restricted ability to maneuver and change lanes at mid-block locations.
Moderate	D	40 to 50 percent of free-flow speed	Restricted ability to maneuver and change lanes. Small increases in flow lead to substantial increases in delay and decreases in travel speed.
Severe	E	33 to 40 percent of free-flow speed	Significant restrictions on lane changes. Traffic flow approaches instability.
Extreme	F	25 to 33 percent of free-flow speed	Flow at extremely low speeds. Intersection congestion with high delays, high volumes, and extensive queuing.

Source: SEWRPC

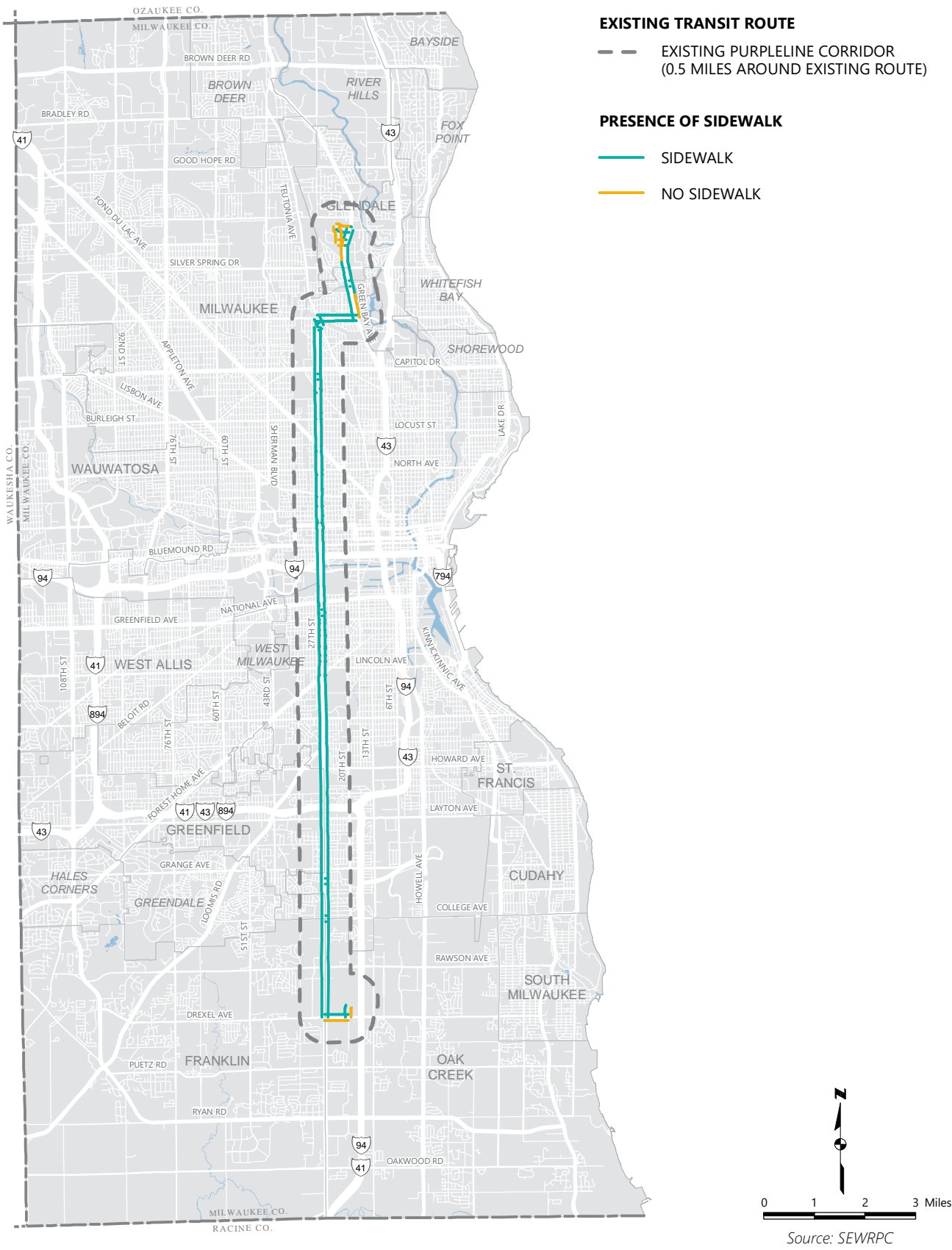
- Bike lane on W. Hampton Avenue from N. 27th Street east to N. Green Bay Avenue
- Bike lane on N. 27th Street from W. Capitol Drive to W. Wisconsin Avenue
- Bike lane on the 27th Street viaduct over the Menomonee Valley from St. Paul Avenue to the Mitchell Park Domes
- Bike lane on S. 27th Street from W. Lincoln Avenue to W. Forest Home Avenue
- Enhanced bike facility on S. 27th Street from W. Forest Home Avenue to W. Cleveland Avenue
- Bike lane from on S. 27th Street from W. Cleveland Avenue to W. Oklahoma Avenue
- Bike lane from on S. 27th Street from W. College Avenue to W. Drexel Avenue

Although the bike network is not currently well-connected within the PurpleLine corridor, VISION 2050 includes recommendations to complete the bike network within the corridor including adding an enhanced bike facility from W. Wisconsin Avenue to W. Forest Home Avenue as shown in Map 3.11.

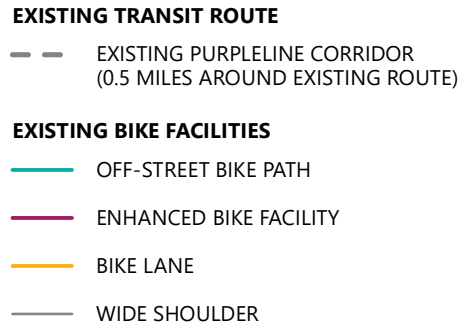
Level of Service on Arterial Streets in the PurpleLine Corridor



Map 3.9 **Sidewalks in the PurpleLine Corridor**

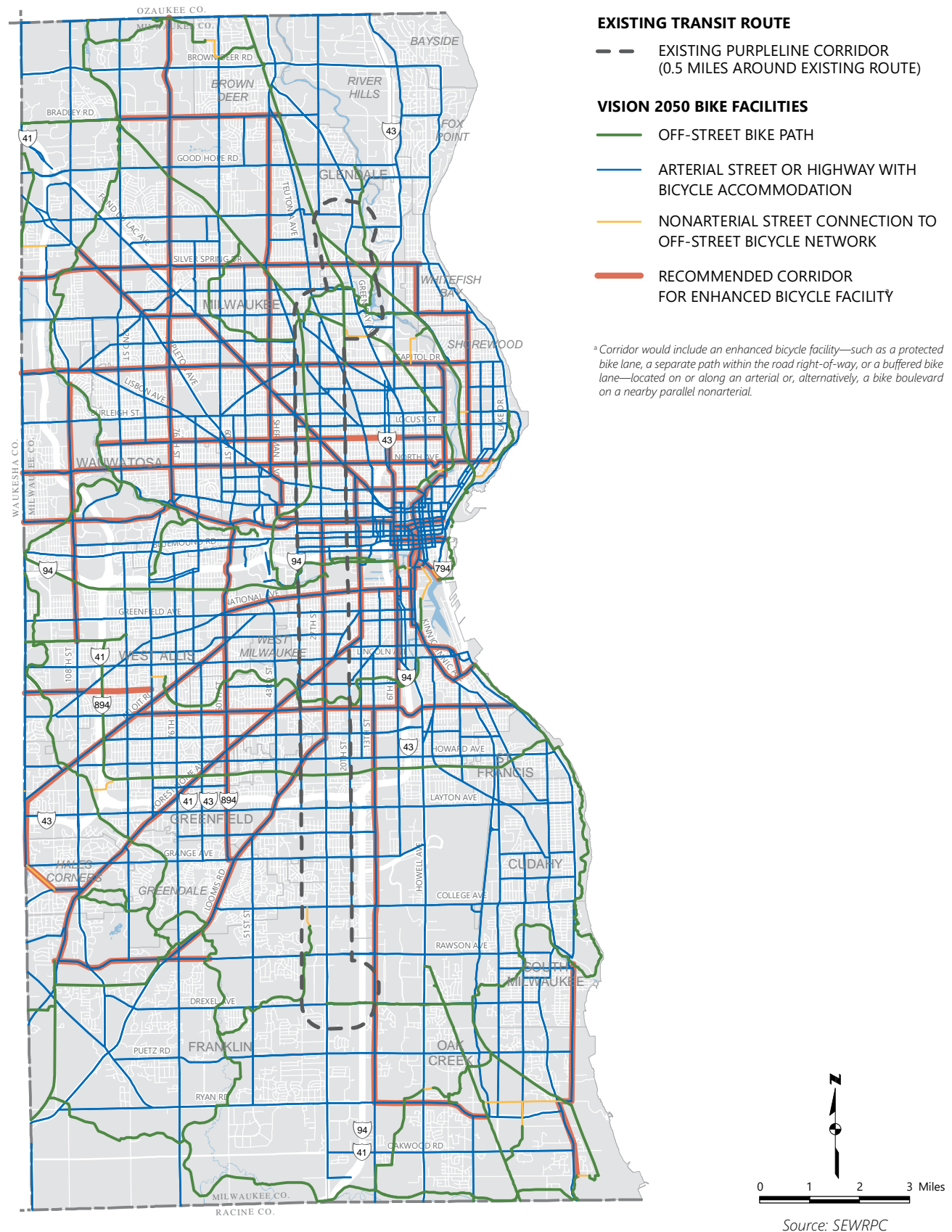


Existing Bike Facilities in the PurpleLine Corridor



Map 3.11

VISION 2050 Recommended Bike Facilities in the PurpleLine Corridor





Credit: SEWRPC Staff

4.1 POPULATION

Total estimated population and population density for the PurpleLine corridor as a whole are projected to remain about the same between 2020 and 2045, with 2045 forecasts for total population and population density within 1 percent of 2020 values, as shown in Table 4.1. In comparison, Milwaukee County as a whole is forecast to have a 3.6 percent change in total population during the same time period with a 5.6 percent change in population density.

While population in the corridor overall is projected to remain relatively unchanged, the composition of population within the corridor is expected to change with some areas projected to experience a modest reduction in population and others projected to experience modest to significant growth in population.

Total Population

Map 4.1 shows the estimated 2020 population in the PurpleLine corridor represented by 25 people per dot. The areas with the highest population are immediately north and south of the Menomonee Valley in the City of Milwaukee, with dense clusters north of the Menomonee Valley to W. Capitol Drive, and between W. Oklahoma Avenue and W. Howard Avenue. The areas with the lowest population are on the north end of the corridor (which includes a large amount of industrial development) and east of N. Green Bay Avenue in Glendale, near the Century City Business Park on the west side of N. 27th Street, the Menomonee Valley, northeast of S. 27th Street and W. Oklahoma Avenue (which includes parkland), southwest of S. 27th Street and W. Howard Avenue (which includes a cemetery), and in the Cities of Oak Creek and Franklin on the east and west sides of S. 27th Street (which includes low-density mixed-use development and undeveloped land).

Map 4.2 shows the projected 2045 population in the PurpleLine corridor represented by 25 people per dot. Total population patterns mirror those shown for 2020, with increases and decreases largely within the same ranges shown on the 2020 map.

Table 4.1
Estimated Population and Population Density: 2020 and 2045

	Total Population			Average Population per Acre		
	Estimated 2020	Estimated 2045	Percent Change	Estimated 2020	Estimated 2045	Percent Change
PurpleLine Corridor ^a	119,089	119,704	0.52	10.21	10.20	-0.04
Milwaukee County	974,871	1,010,090	3.61	7.84	8.28	5.62

^a PurpleLine Corridor defined by 0.5 mile buffer around existing route.

Source: SEWRPC

Map 4.3 shows the projected change in total population from 2020 to 2045 represented by population increases (green) and decreases (yellow) dots, which highlights where relatively modest population changes are expected to occur. A reduction in total population (due to decreases in average household size) is projected in several areas of the PurpleLine corridor from 2020 to 2045, with modest increases in population projected in the area between W. Burleigh Street and the Menomonee Valley, and on the southern end of the PurpleLine corridor, where greater opportunities for new development exist.

Population Density

Map 4.4 shows the estimated population density, or number of people per acre, for the PurpleLine corridor in 2020. The areas with the highest population density are north and south of the Menomonee Valley and on the east side of N. 27th Street north of W. Capitol Drive and just south of W. Burleigh Street. The areas with the lowest population density are on the southern end of the corridor, in the Cities of Oak Creek and Franklin.

Map 4.5 shows the forecast population density in the PurpleLine corridor for the year 2045. Population density patterns mirror those shown for 2020, with areas of higher and lower density remaining largely the same.

Map 4.6 shows the forecast change in population density from 2020 to 2045, which highlights where the relatively modest changes in population density are expected to occur. Many areas within the PurpleLine corridor show a reduction in density due to declining household average size; however, an increase of up to 5,000 people per square mile is projected in the residential areas surrounding the Glendale Industrial Park in the City of Glendale, in areas between W. Burleigh Street and the Menomonee Valley, west of S. 27th Street north of W. Oklahoma Avenue and south of W. Layton Avenue. The largest area with an increase in density of up to 5,000 people per square mile is projected on the far southern end of the corridor, on the east side of S. 27th Street near IKEA in the City of Oak Creek.

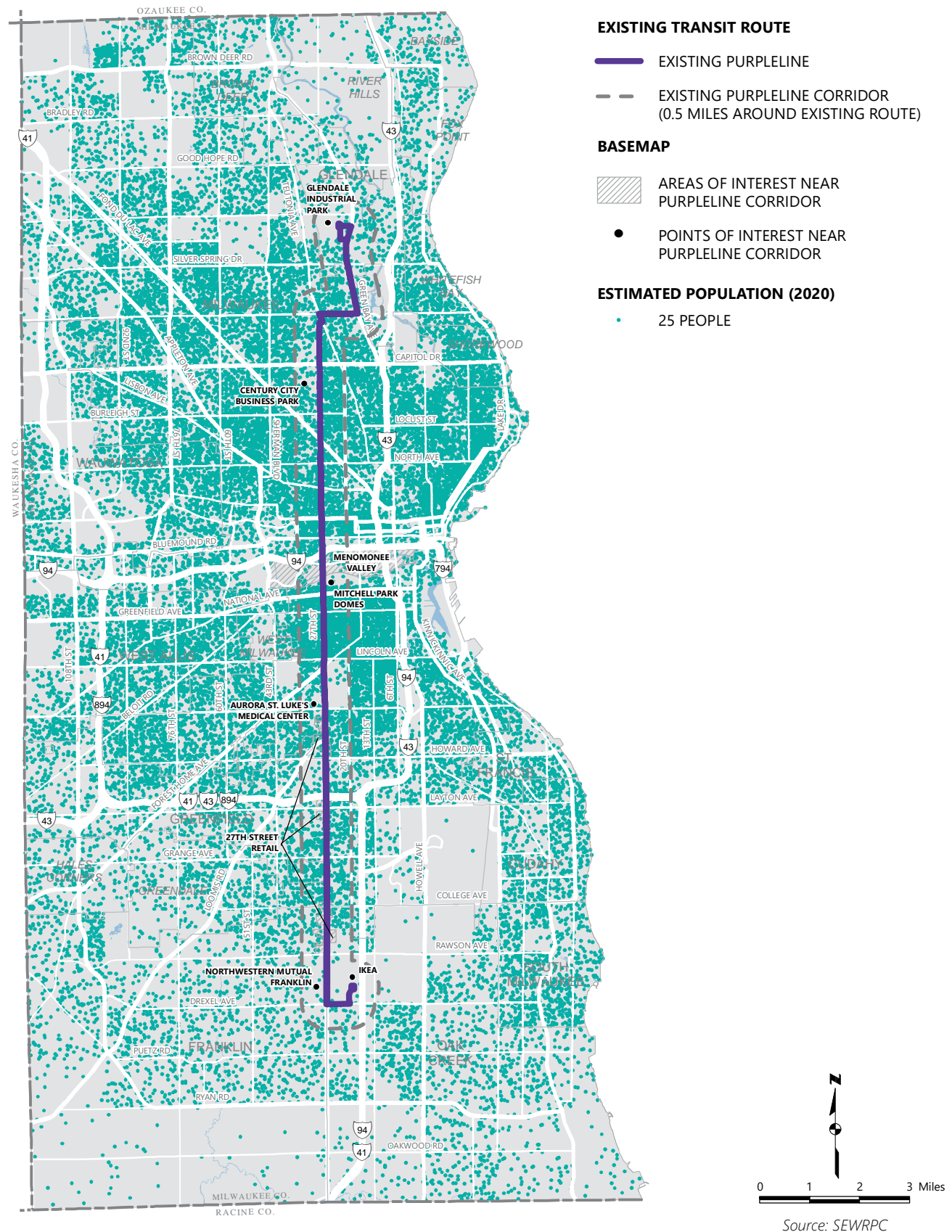
4.2 MEDIAN HOUSEHOLD INCOME

As shown in Figure 4.1, median household income in Milwaukee County stayed about the same between 2010 and 2018. Median Household income in the PurpleLine corridor decline by about 12 percent, from \$40,606 in 2010 to \$35,569 in 2018, although 2018 did represent a slight recovery from even lower income levels in 2014. Throughout this period, the median income in the PurpleLine corridor has also been consistently lower (27.5 percent lower in 2018) than in Milwaukee County as a whole. As is noted in “Families Living in Poverty” in Section 4.4, “Transit Reliant Populations” of this report, 28.1 percent of families in the PurpleLine corridor are living in poverty.

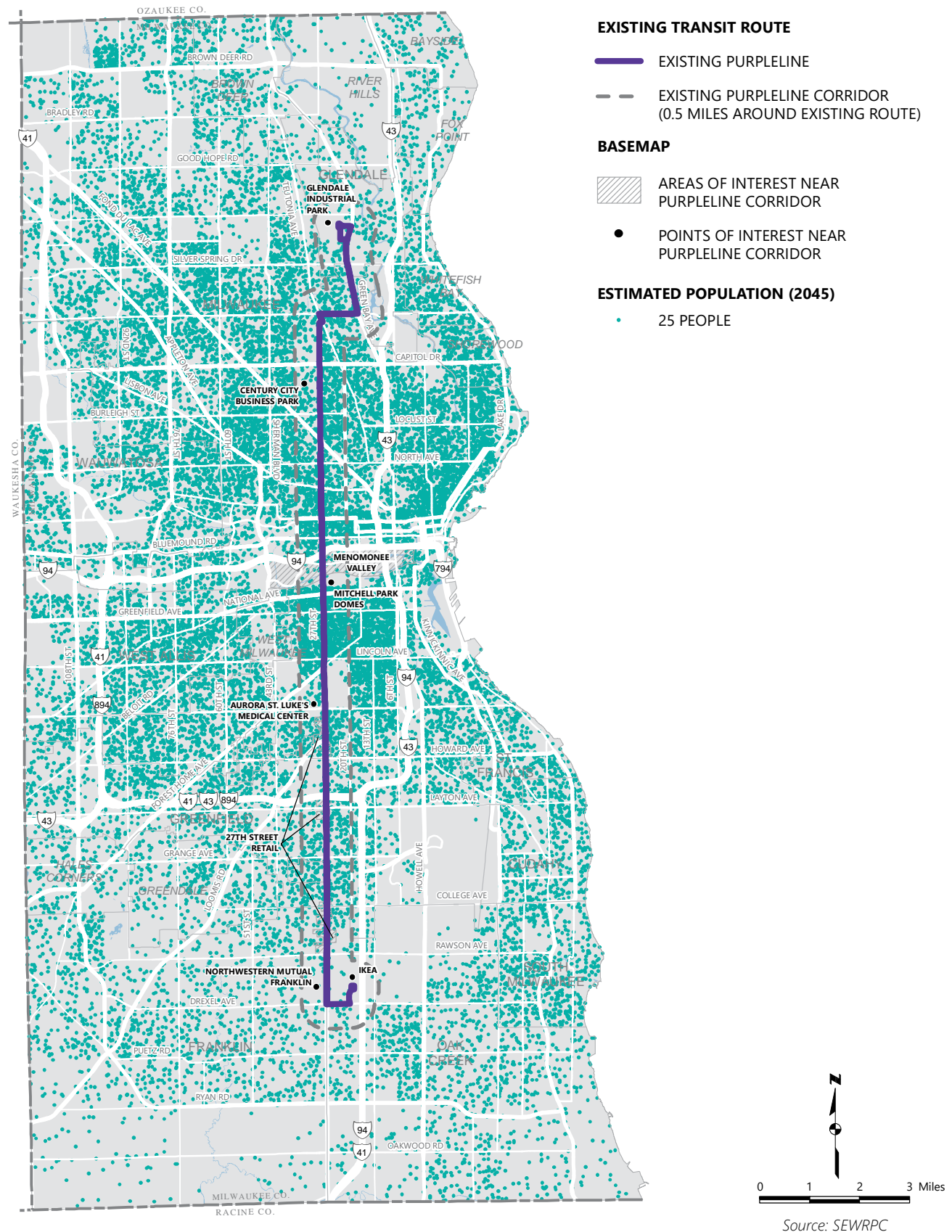
4.3 AGE OF THE POPULATION

Table 4.2 shows the population divided into four age cohorts living in the PurpleLine corridor and in Milwaukee County as a whole in the years 2010, 2014, and 2018. Within the PurpleLine corridor over the nine-year time period, the total population under 18 years old and between 18 and 34 years old has declined, the population between 35 and 64 years old has increased slightly, and the population aged 65 or older has stayed about the same, with a slight increase between 2010 and 2014 and a slight decline between 2014 and 2018.

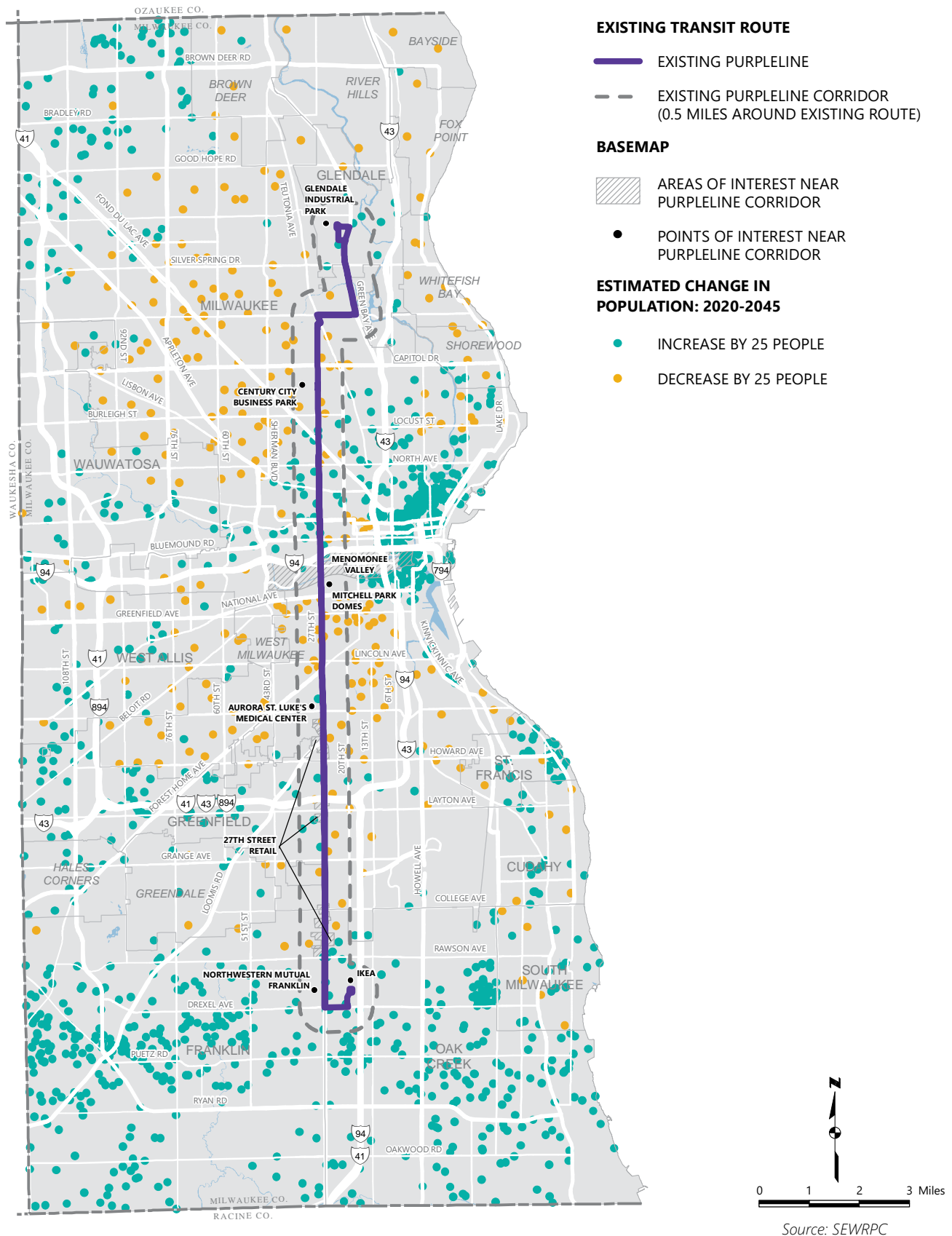
Total Population in the PurpleLine Corridor: Estimated 2020



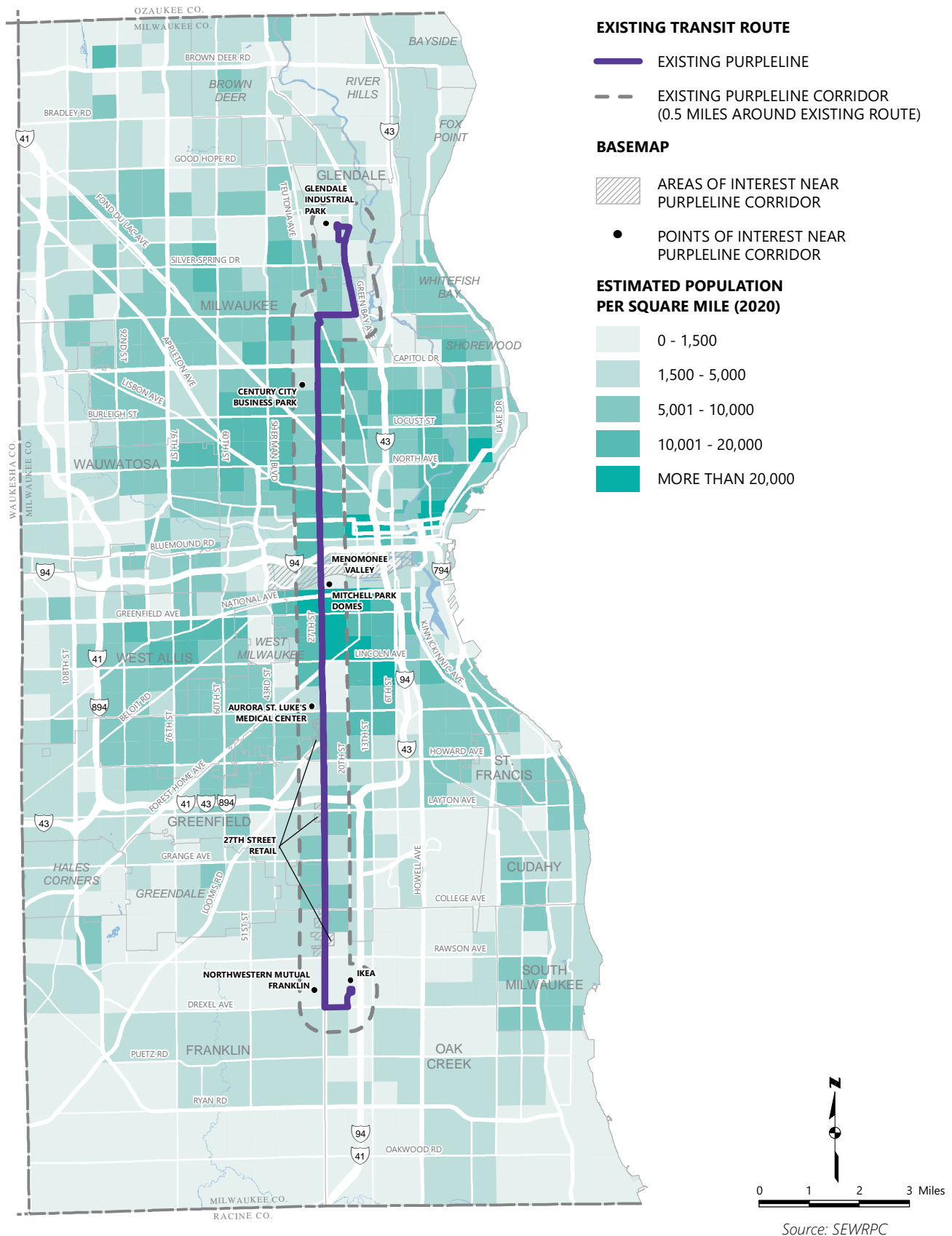
Map 4.2
Total Population in the PurpleLine Corridor: Estimated 2045



Map 4.3
Change in Estimated Total Population in the PurpleLine Corridor: 2020-2045



Map 4.4
Population Density in the PurpleLine Corridor: Estimated 2020



Map 4.5
Population Density in the PurpleLine Corridor: Estimated 2045

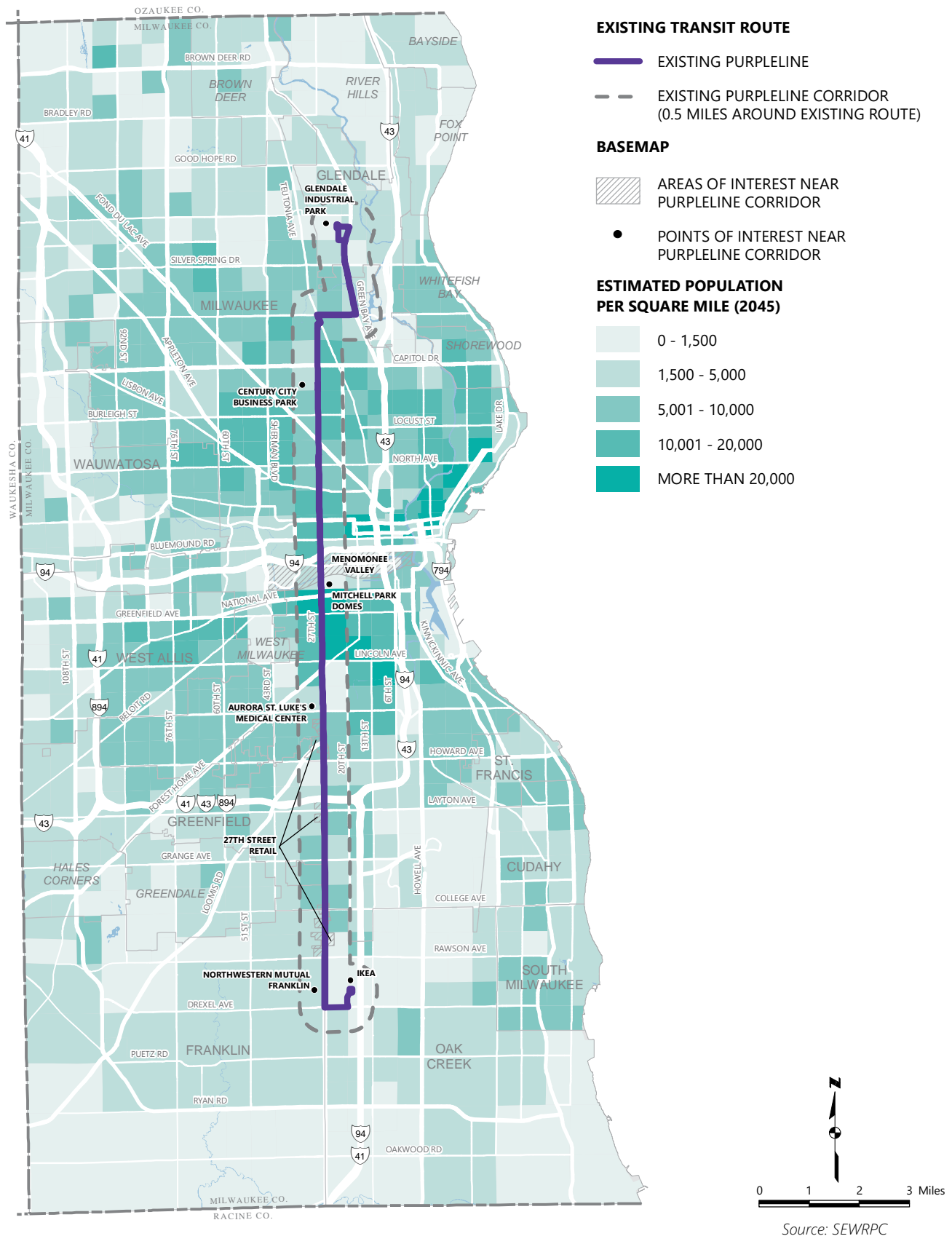
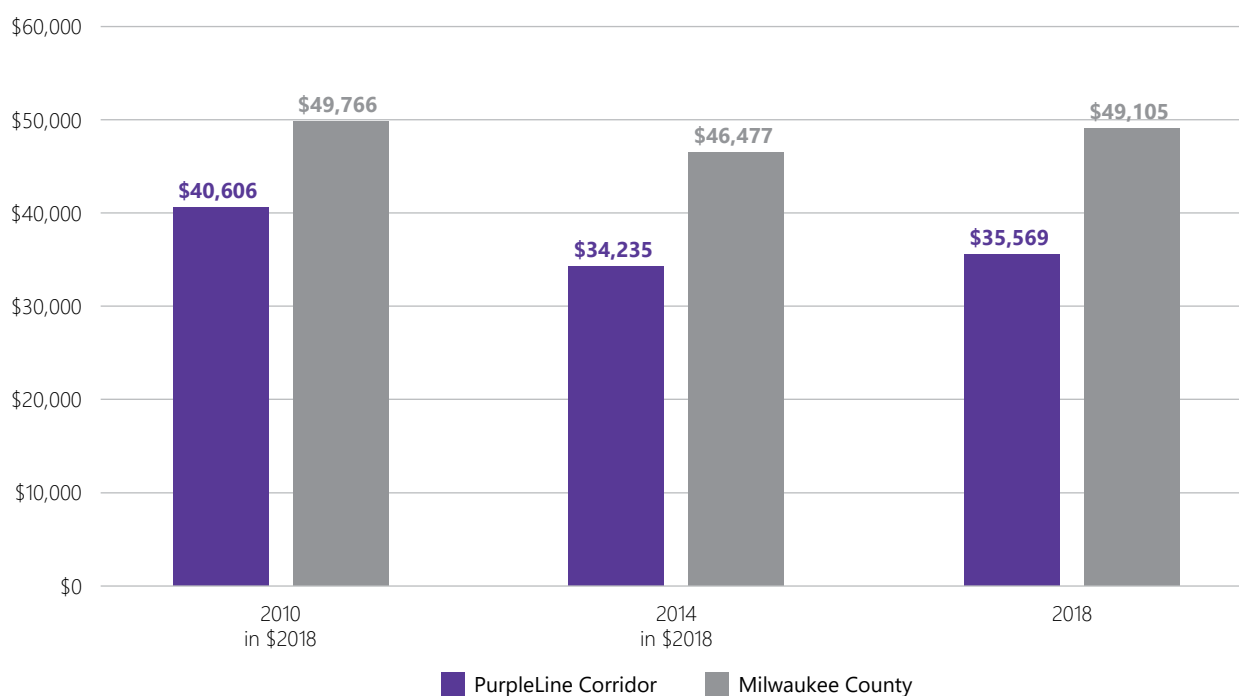


Figure 4.1
Average^a Median Household Income in the PurpleLine Corridor: 2010, 2014, and 2018



Note: PurpleLine Corridor defined by 0.5 mile buffer around existing route

^a Average of all census tracts within the geographies included in the table

Source: U.S. Census Bureau American Community Survey and SEWRPC

Table 4.2
Population by Age Cohort: 2010, 2014, and 2018

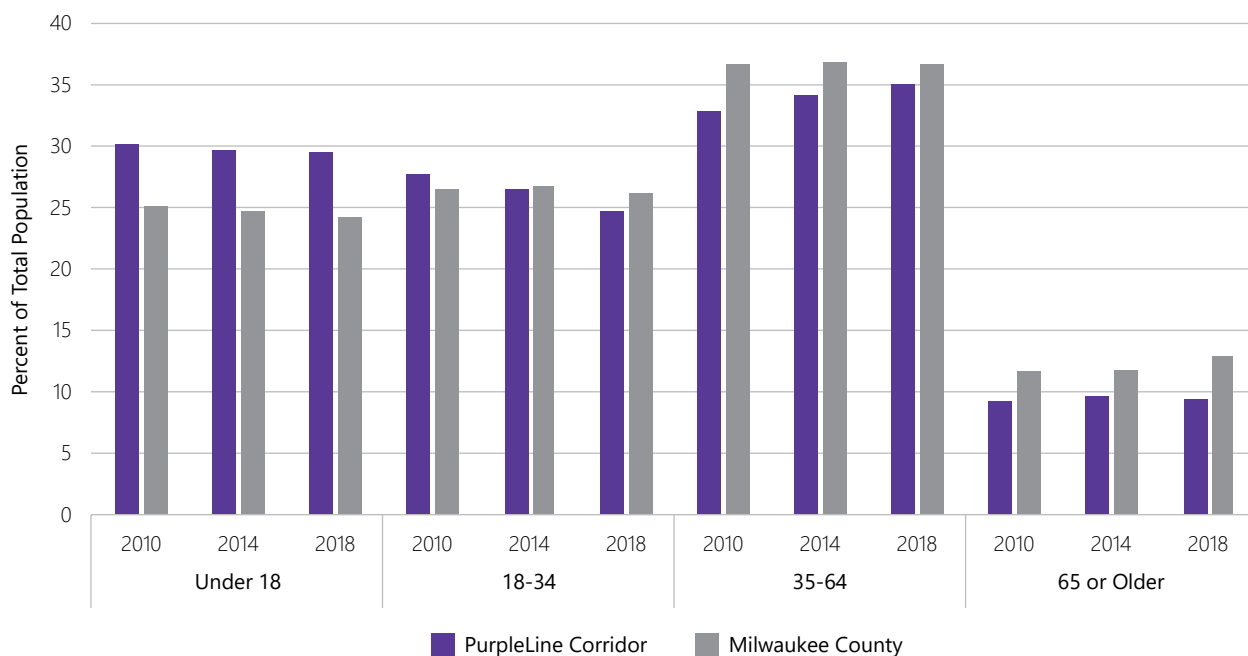
Age Cohort	PurpleLine ^a			Milwaukee County		
	2010	2014	2018	2010	2014	2018
Under 18	36,130	34,597	33,944	235,544	235,148	231,111
18-34	33,231	30,911	28,480	248,441	255,177	250,029
35-64	39,291	39,804	40,327	344,099	351,128	350,056
65 and Older	11,083	11,235	10,861	109,532	111,948	123,013
Total	119,735	116,547	115,141	937,616	953,401	954,209

^a PurpleLine Corridor defined by 0.5 mile buffer around existing route.

Source: U.S. Census Bureau American Community Survey and SEWRPC

Figure 4.2 depicts changes in the percent of the total population by each of these age cohorts. The PurpleLine corridor is younger than Milwaukee County as a whole, with a higher percentage of people in the under 18 and 18 to 34 cohorts and a lower percentage of people in the 35 to 64 and over 65 cohorts than the County overall. However, over time, the PurpleLine corridor has experienced a slight decrease in the portion of its population in the under 18 and 18 to 34 age cohorts from 2010 to 2018. Perhaps consequently, there has been an increase in the portion of the population in the age 35 to 64 cohort while the percent of the population within the age 65 and older cohort has remained about the same.

Figure 4.2
Population Distribution by Age Cohort as a Percent of Total Population: 2010, 2014 and 2018



Note: PurpleLine Corridor defined by 0.5 mile buffer around existing route

Source: U.S. Census Bureau American Community Survey and SEWRPC

4.4 TRANSIT RELIANT POPULATIONS

People use transit for a variety of reasons; however, many people rely on transit if they do not have access to a car due to the costs associated with car ownership or the inability to drive. People of color, families living in poverty, seniors, and people with disabilities are less likely to have access to a vehicle and, therefore, more likely to use transit. There is a strong correlation between those who are unable to drive, families living in poverty, seniors, people of color, and people with disabilities. This section describes these historically underserved populations who live in the PurpleLine corridor.

Households Without a Car

In the PurpleLine corridor, there are concentrations of households without a car in the portion of the corridor north of W. National Avenue and in a smaller area just north of W. Layton Avenue, as shown on Map 4.7.

The percentage of households without a car in the PurpleLine corridor is 23.1 percent, which is much greater than the average for Milwaukee County (13.7 percent) and the State (6.7 percent), as shown in Table 4.3. As almost a quarter of the PurpleLine corridor households do not have a car, demand for transit is expected to be high.

Families Living in Poverty

As defined by the Federal government, a family of four having an income of \$25,750 or less in 2020 is experiencing poverty. As shown in Table 4.4, 28.1 percent of families in the PurpleLine corridor are experiencing poverty. That compares to 22.1 percent of families in Milwaukee County and 11.9 percent of families in Wisconsin. The northern two-thirds of the corridor, primarily north of W. Cleveland Avenue in Milwaukee, contains the most concentrated areas of poverty, as shown on Map 4.8.

Map 4.7
Households Without a Car in the PurpleLine Corridor

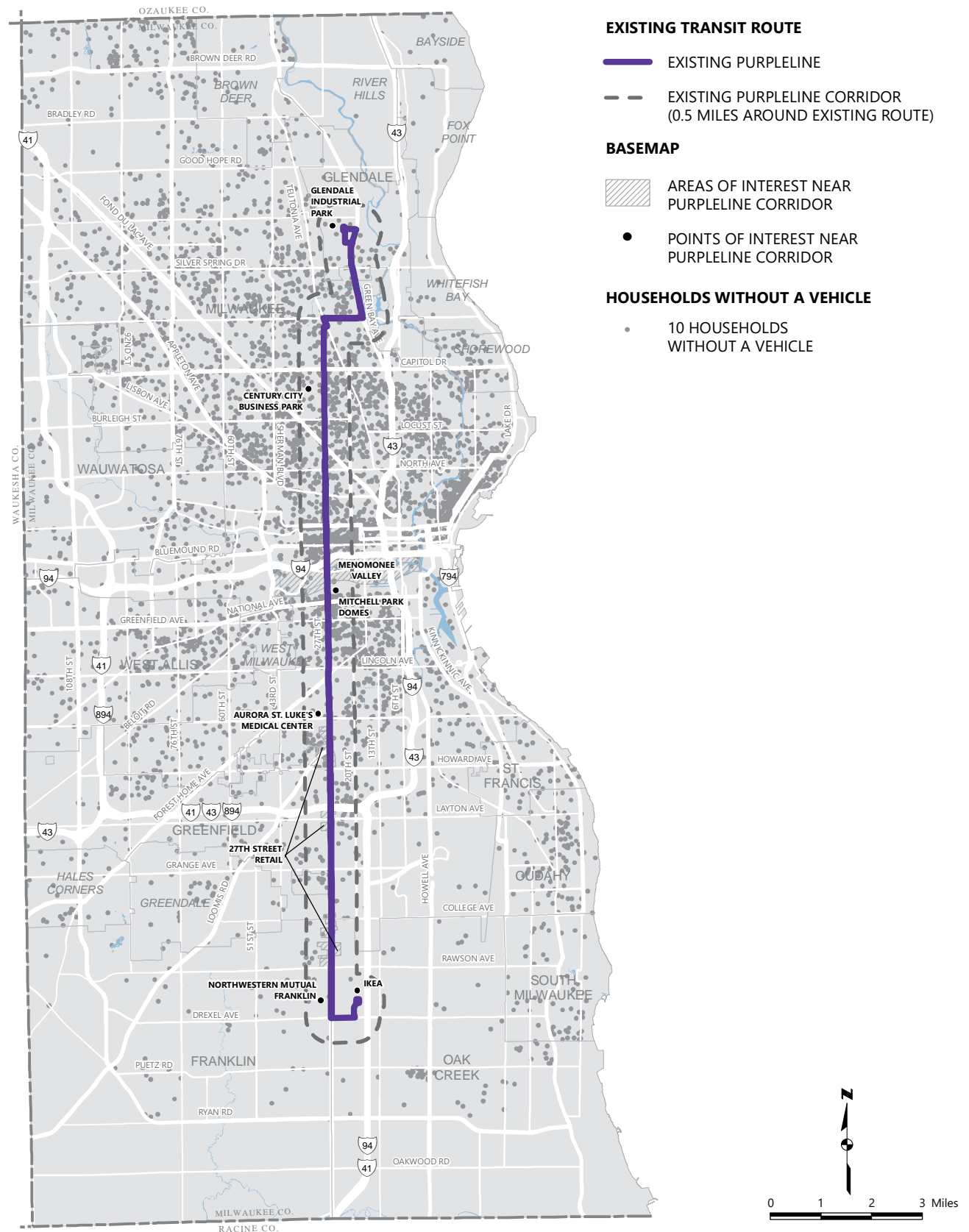


Table 4.3
Households Without a Car in the PurpleLine Corridor

	Total Households	Households Without a Car	Percent of Households Without a Car
PurpleLine Corridor ^a	42,765	9,859	23.1
Milwaukee County	382,070	52,231	13.7
Wisconsin	2,343,128	158,139	6.7
United States	119,730,128	10,424,934	8.7

^a PurpleLine Corridor defined by 0.5 mile buffer around existing route.

Source: U.S. Census Bureau American Community Survey, 2014-2018 and SEWRPC

Table 4.4
Families in Poverty in the PurpleLine Corridor

	Total Families	Families in Poverty	Percent of Families in Poverty
PurpleLine Corridor ^a	24,517	6,897	28.1
Milwaukee County	215,024	32,691	15.2
Wisconsin	1,484,455	176,650	11.9
United States	322,903,030	45,529,327	14.1

^a PurpleLine Corridor defined by 0.5 mile buffer around existing route.

Source: U.S. Census Bureau American Community Survey, 2014-2018 and SEWRPC

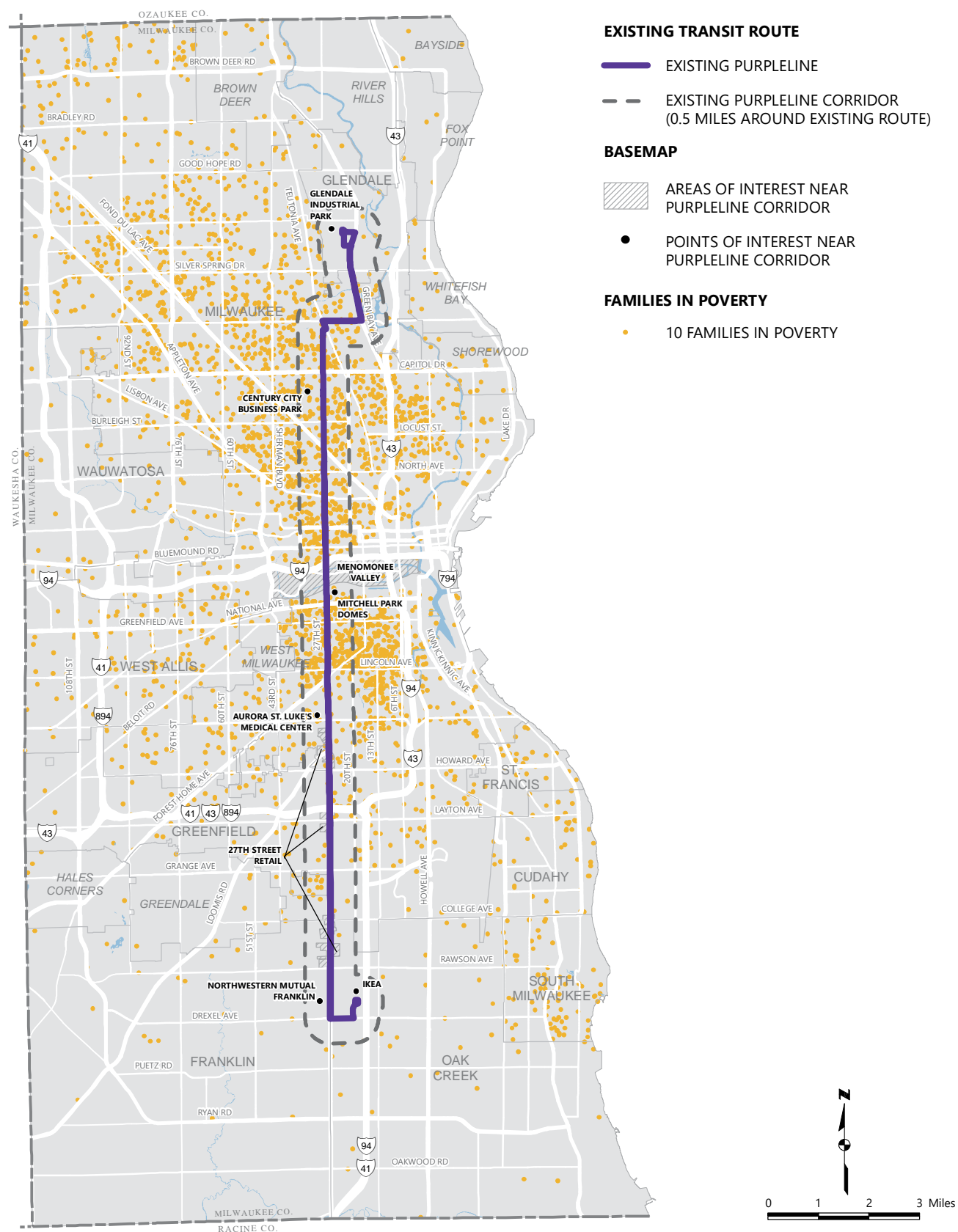
People of Color

People of color comprise approximately 75 percent of the population of the PurpleLine Corridor. The corridor serves areas with some of the most concentrated populations of people of color, as well as areas that are highly racially segregated, as shown in Map 4.9. The northern portion of the corridor is predominately Black/African American, comprising 38.4 percent of the population living in the corridor, as compared to 26.1 percent of the population in Milwaukee County. Similarly, there is a concentration of people of Hispanic or Latino ethnicity in the middle of the corridor, south of the Menomonee Valley, comprising 28.5 percent of the population living in the corridor, as compared to 14.7 percent of the population living in the County as shown in Table 4.5.

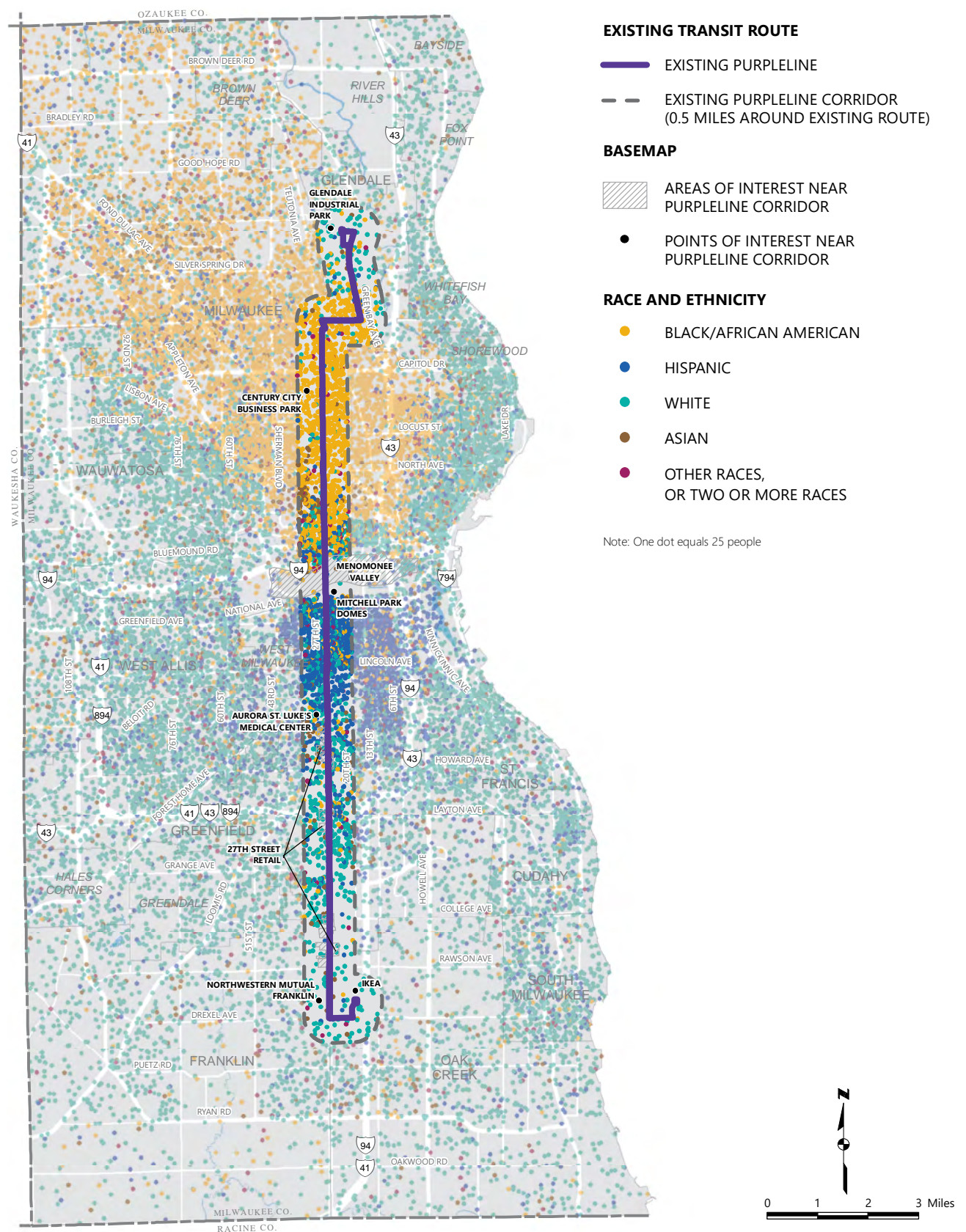
People with Disabilities

People with disabilities make up nearly 16 percent of the population of the PurpleLine Corridor— nearly three percentage points higher than the percent of people with disabilities in Milwaukee County and nearly four percentage points higher than that of Wisconsin, as shown in Table 4.6. People with disabilities are less likely to drive than people without disabilities and therefore are more likely to use transit. As shown in Map 4.10, people with disabilities are distributed throughout the corridor, with higher concentrations between W. Grange Ave. and W. Hampton Avenue.

Map 4.8
Families Living in Poverty in the PurpleLine Corridor



Map 4.9
Population by Race and Ethnicity in the PurpleLine Corridor



Source: U.S. Census Bureau,
 American Community Survey 2014-18

Table 4.5
Population by Race and Ethnicity in the PurpleLine Corridor

Location	Population by Race (not of Hispanic or Latino Ethnicity)										Hispanic or Latino Ethnicity of Any Race		Total Population
	White Alone		Black/African American Alone		Asian Alone		Other Races, or Two or More Races		Percent of Total				
	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total	Number	Percent of Total			
PurpleLine Corridor ^a	29,235	25.4	44,156	38.4	5,405	4.7	3,471	3.0	32,872	28.5	115,139		
Milwaukee County	493,723	51.7	249,011	26.1	40,443	4.2	30,457	3.2	140,575	14.7	954,209		
Wisconsin	4,711,038	81.5	361,909	6.3	158,198	2.7	161,470	2.8	385,779	6.7	5,778,394		
United States	197,181,177	61.1	39,715,917	12.3	17,367,169	5.4	11,120,832	3.4	57,517,935	17.8	322,903,030		

Note: This table reports population by race for individuals that are not of Hispanic or Latino ethnicity and for individuals of any race who are of Hispanic and Latino ethnicity. People of Hispanic or Latino ethnicity can be of any race or combination of races.

^a PurpleLine Corridor Defined by 0.5 mile buffer around existing route.

Source: U.S. Census Bureau American Community Survey, 2014-2018 and SEWRPC

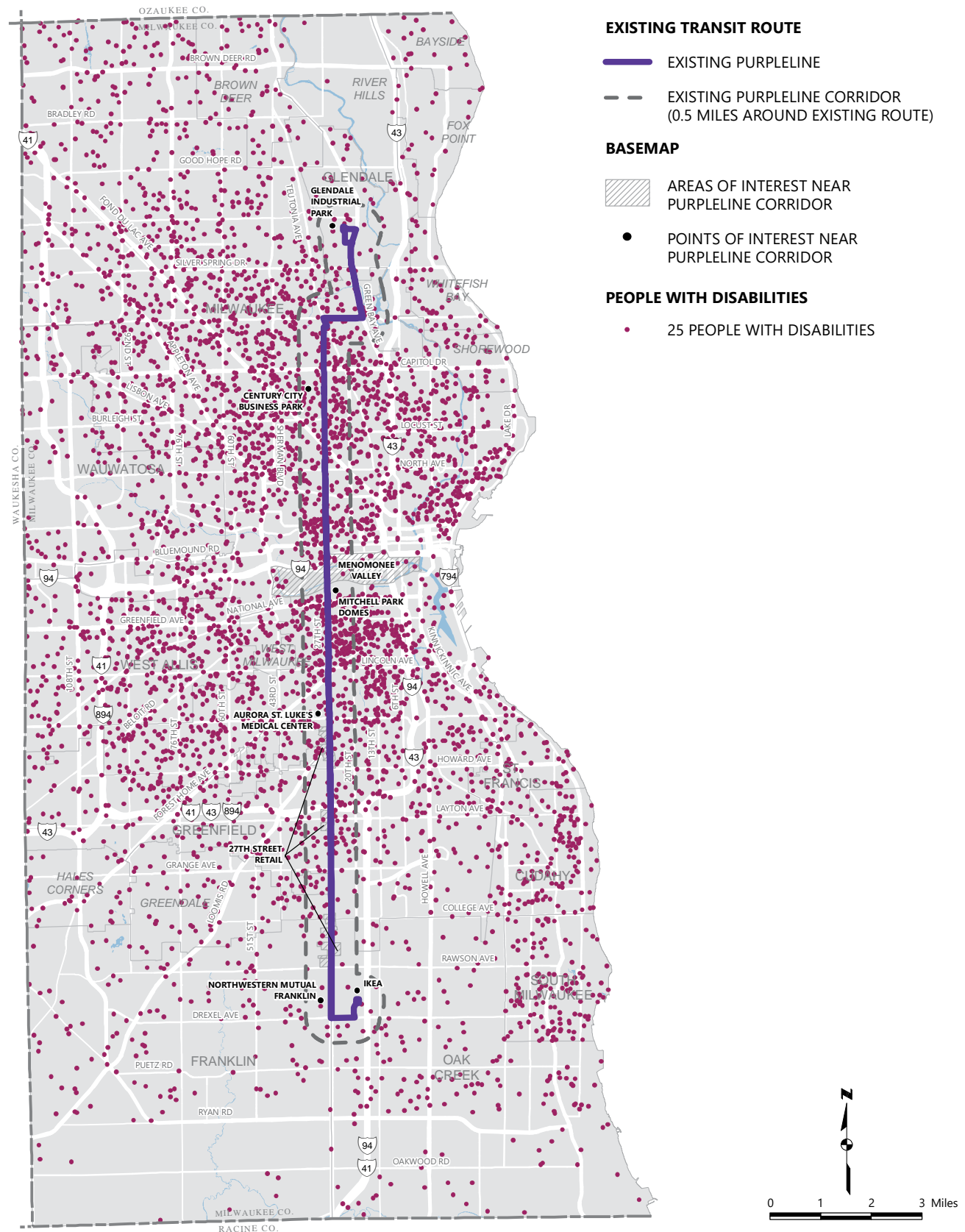
Table 4.6
People with Disabilities in the PurpleLine Corridor

	Total Population	People with Disabilities	Percent of People with Disabilities
PurpleLine Corridor ^a	115,139	17,998	15.6
Milwaukee County	954,209	121,326	12.7
Wisconsin	5,778,394	672,096	11.6
United States	322,903,030	40,071,666	12.4

^a PurpleLine Corridor defined by 0.5 mile buffer around existing route.

Source: U.S. Census Bureau American Community Survey, 2014-2018 and SEWRPC

Map 4.10
People with Disabilities in the PurpleLine Corridor



Source: U.S. Census Bureau,
 American Community Survey 2014-18



Credit: SEWRPC Staff

Employment in the PurpleLine corridor is projected to experience moderate growth between 2020 and 2045, with the areas of greatest growth occurring between IH 94 and W. Capitol Drive, and a slight decrease on the northern end of the corridor, north and south of W. Mill Road.

5.1 TOTAL EMPLOYMENT

Map 5.1 shows that in 2020, the area with the highest estimated number of jobs in the corridor contains Aurora St. Luke's Medical Center on S. 27th Street and W. Oklahoma Avenue. This remains true for the 2045 projected employment, shown in Map 5.2.

The portions of the PurpleLine corridor that are projected to see the greatest increase in jobs are between IH 94 and W. Capitol Drive, while a slight decrease is projected on the northern end of the corridor, north and south of W. Mill Road (see Map 5.3). As shown on Table 5.1, the corridor is expected to see a 3.5 percent increase in total jobs between 2020 and 2045.

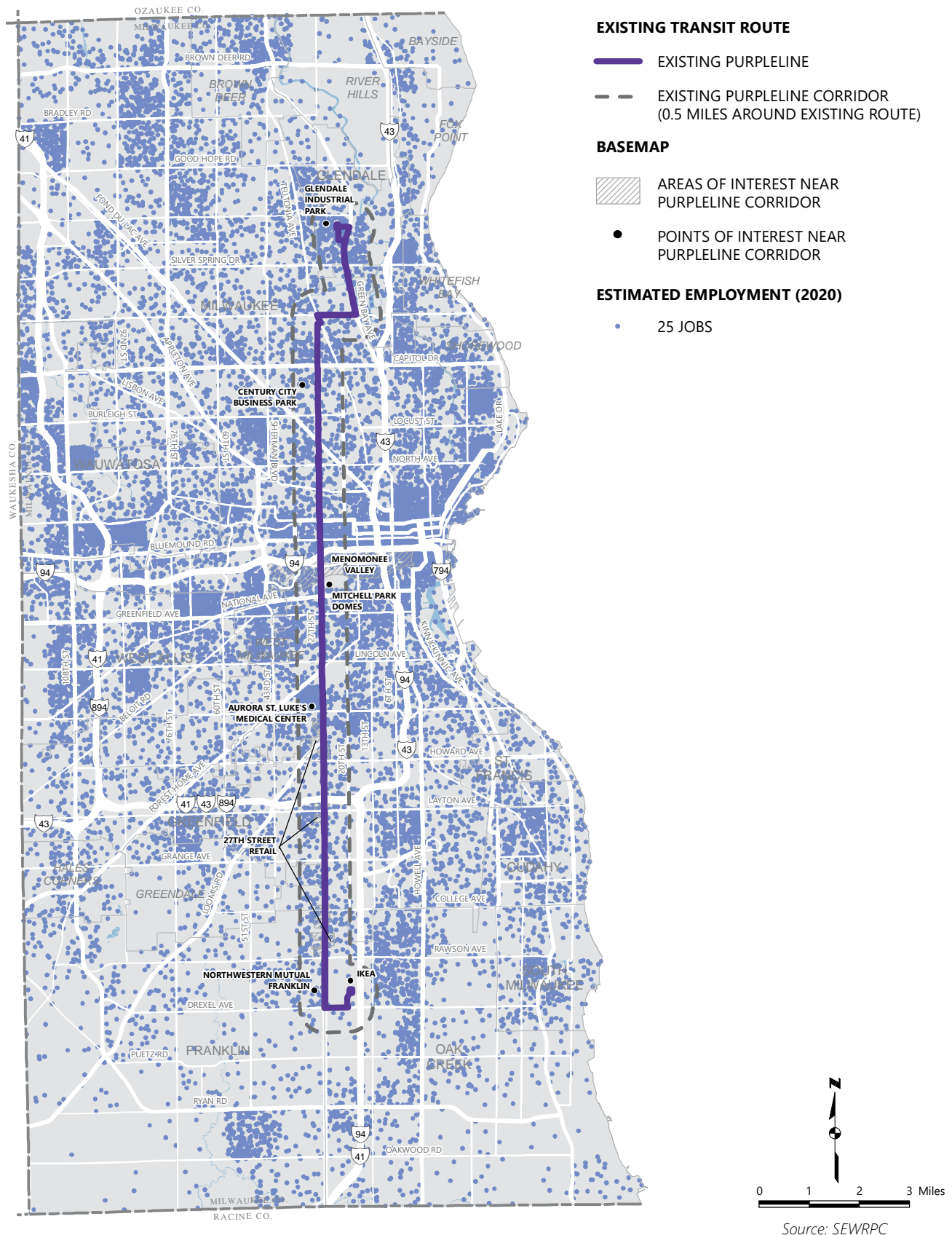
5.2 EMPLOYMENT DENSITY

As shown on Map 5.4, the estimated employment density in 2020 is well dispersed throughout the PurpleLine corridor, with the highest density occurring in the northwest corner of S. 27th street and W. Oklahoma Avenue, where Aurora St. Luke's Medical Center is located. The area with the least employment density is on the southern end of the corridor between W. Rawson Avenue and W. Drexel Avenue.

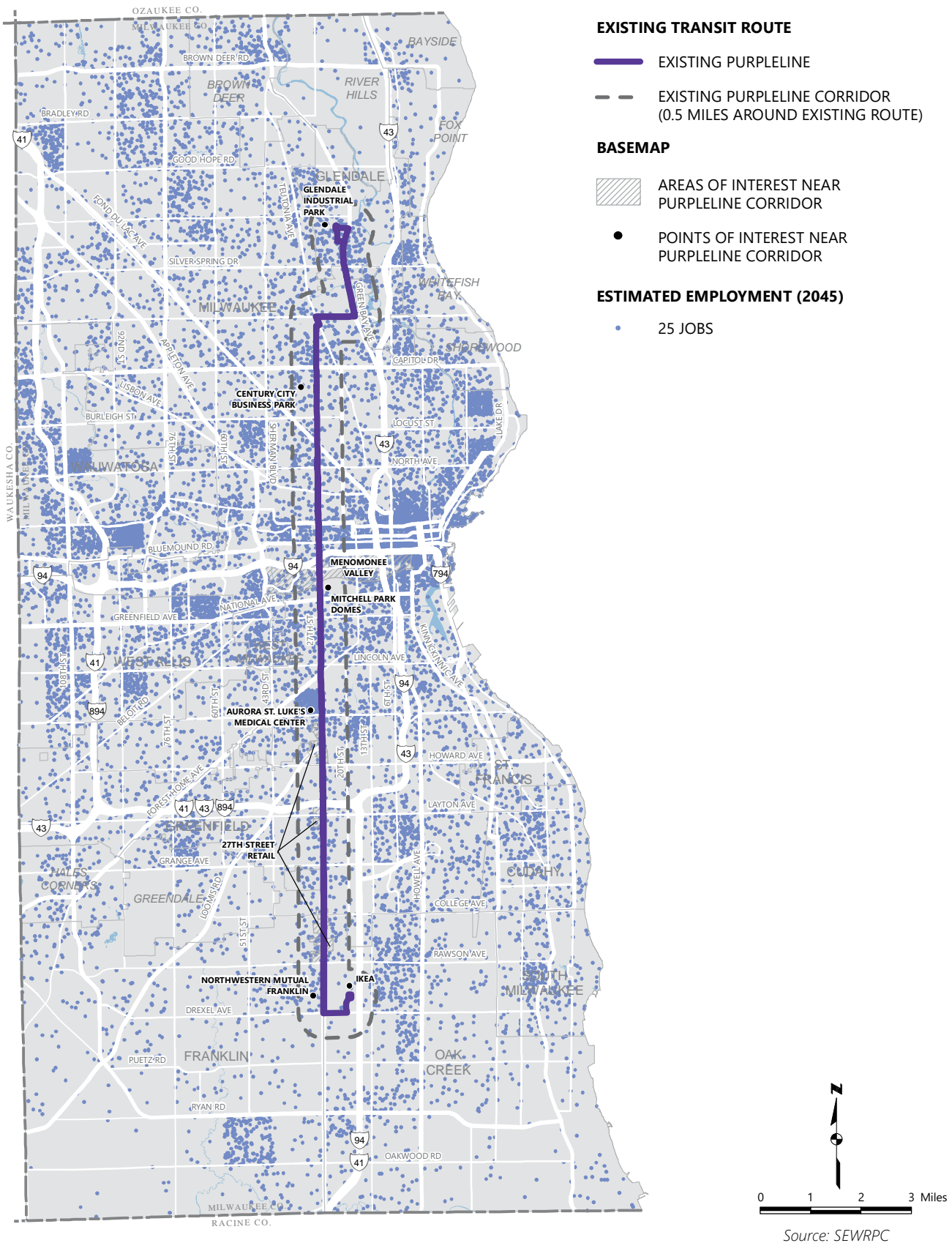
In 2045, it is projected that the pattern of employment density will stay about the same (see Map 5.5).

Map 5.6 illustrates change in employment density in the PurpleLine corridor from 2020 to 2045. The corridor shows moderate growth, with slight increases in density in the areas around the Century City Business Park, in and north of the Menomonee Valley, and in the area around Aurora St. Luke's Medical Center on S. 27th Street and W. Oklahoma Avenue. As shown on Table 5.1, employment density in the corridor is anticipated to increase 2.1 percent as measured in jobs per square mile.

Map 5.1
Total Employment in the PurpleLine Corridor: Estimated 2020



Map 5.2
Total Employment in the PurpleLine Corridor: Estimated 2045



Map 5.3
Change in Estimated Total Employment in the PurpleLine Corridor: 2020-2045

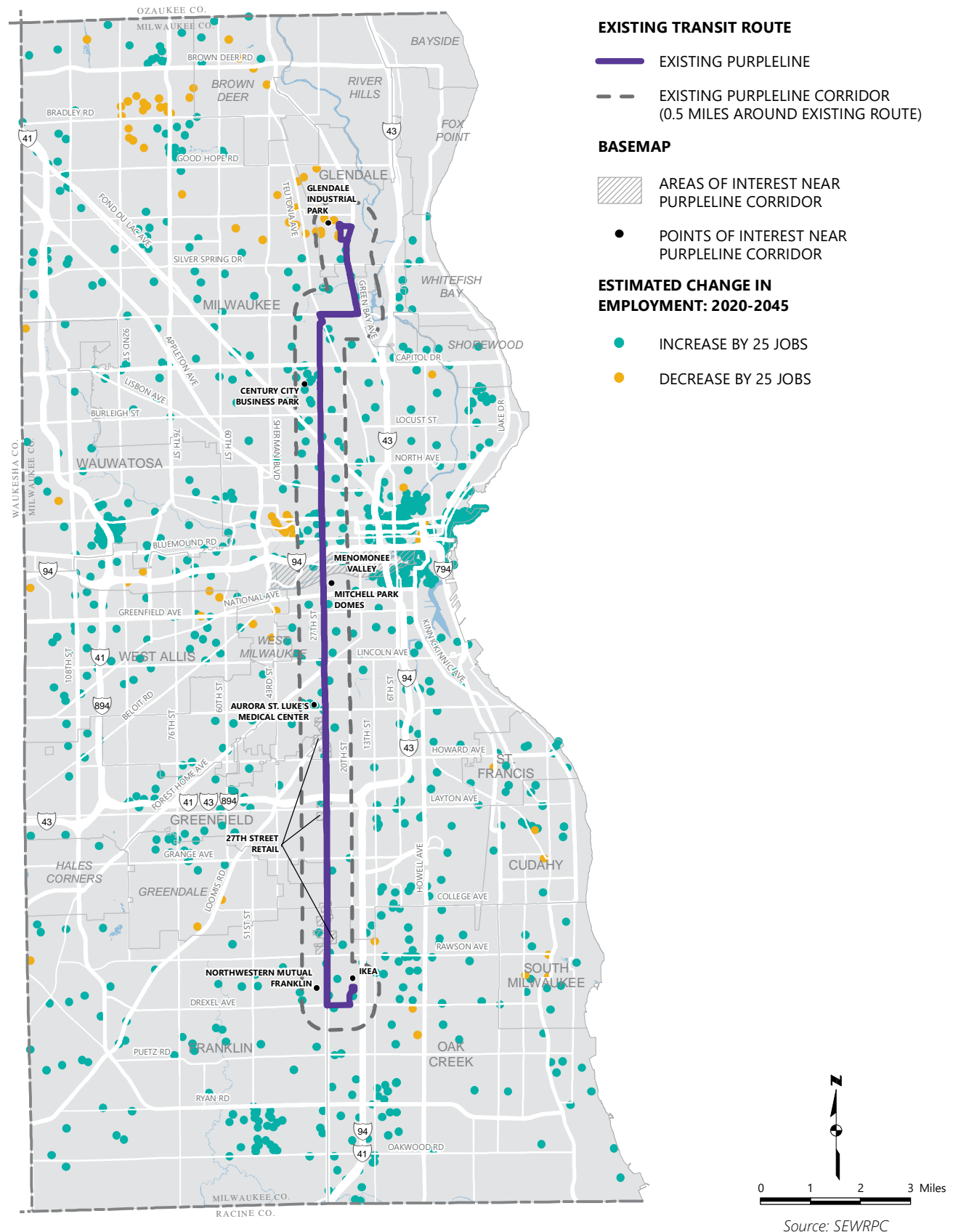


Table 5.1
Estimated Employment and Employment Density: 2020 and 2045

	Total Jobs			Average Jobs per Square Mile		
	2020	2045	Percent Change	2020	2045	Percent Change
PurpleLine Corridor ^a	54,976	56,882	3.5	3,706	3,786	2.1
Milwaukee County	602,769	630,746	4.6	5,214	5,408	3.7

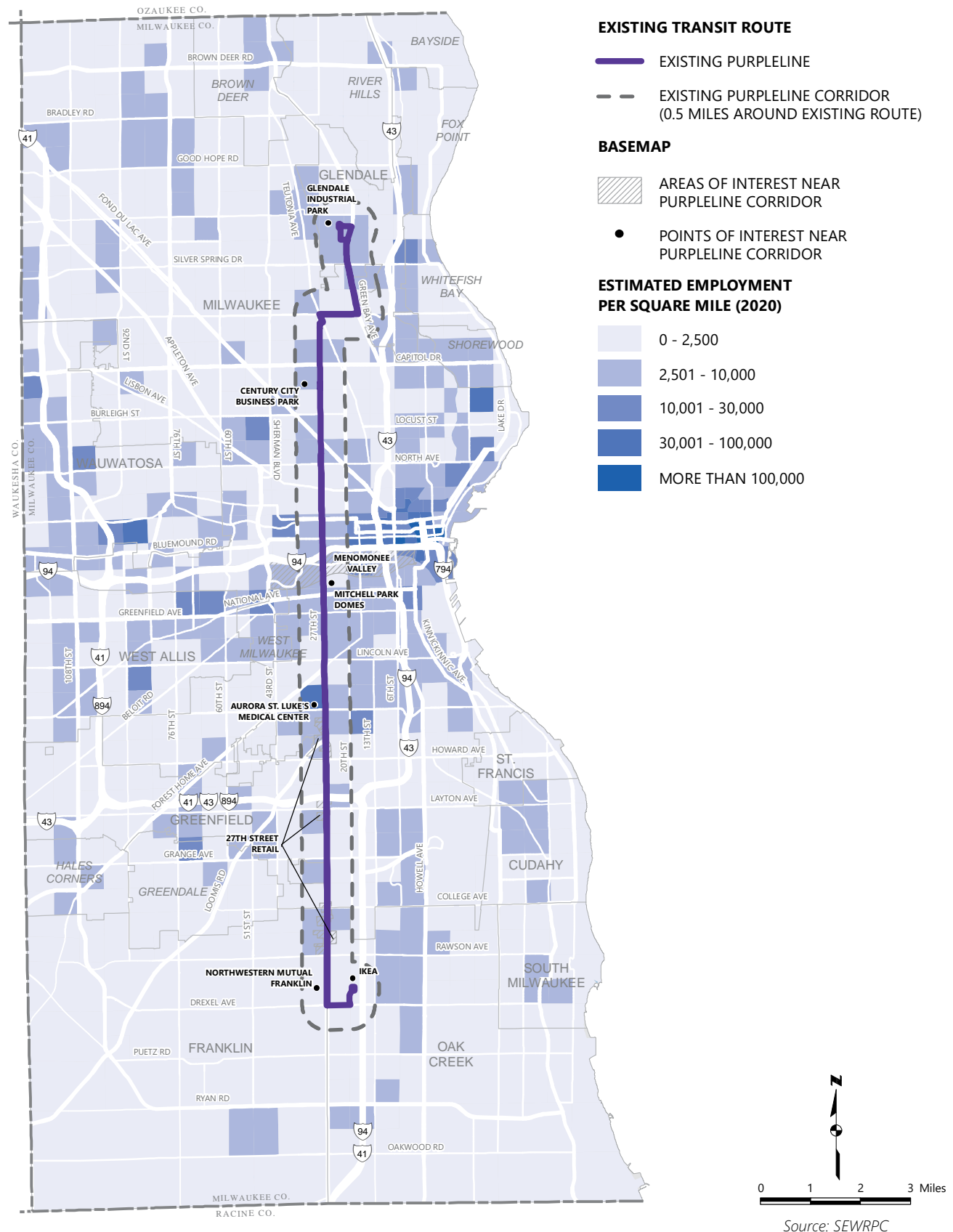
^a PurpleLine Corridor defined by 0.5 mile buffer around existing route.

Source: SEWRPC

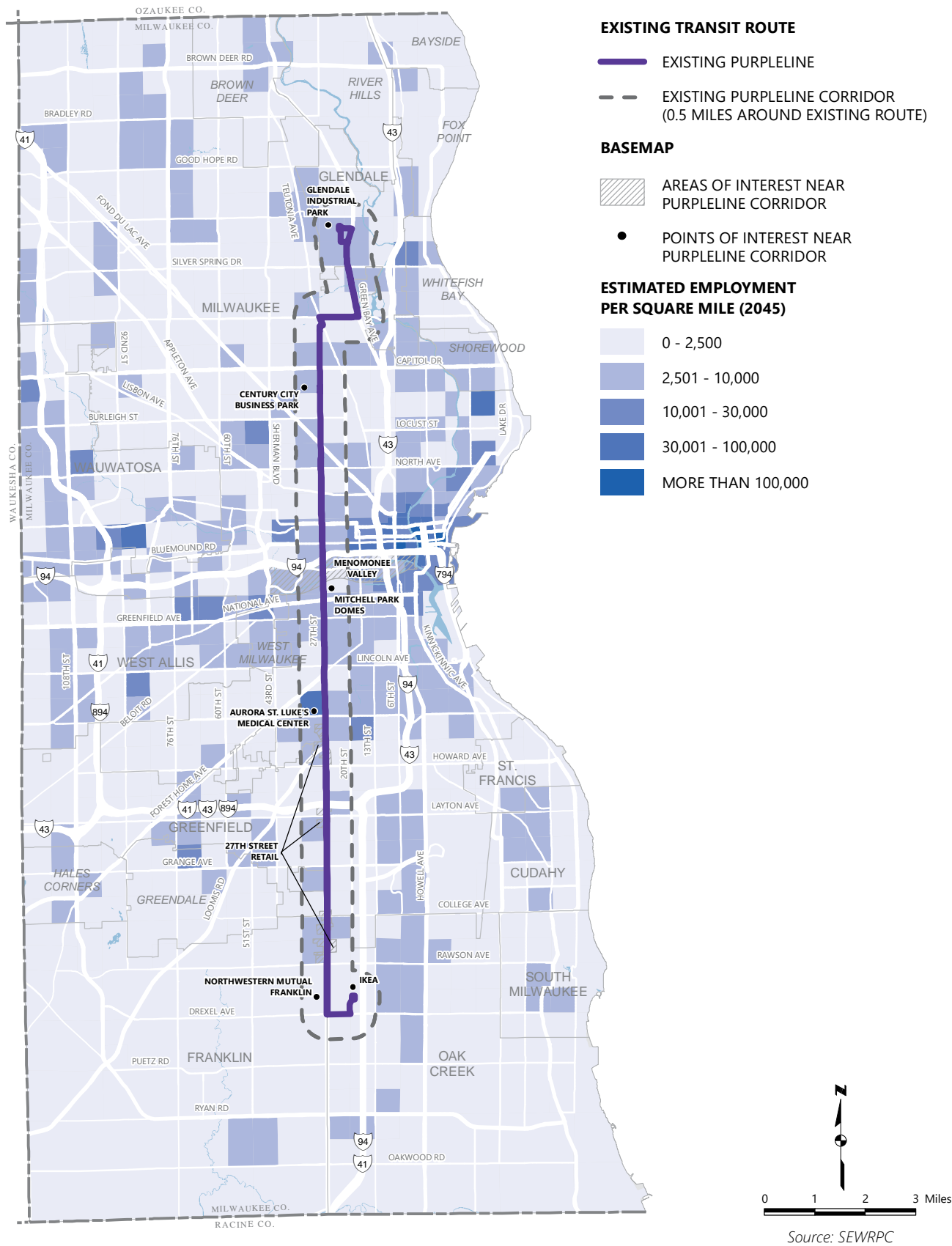
5.3 MAJOR EMPLOYERS

The distribution of major employers—defined as employers with 100 employees or more—in the PurpleLine corridor are shown on Map 5.7. Major employers are well dispersed throughout the corridor, but with notably fewer between, W. Capitol Drive and W. State Street, and between W. Oklahoma Avenue and W. College Avenue. The major employers within the corridor include those with industrial, car sales, and healthcare-based jobs.

Map 5.4
Employment Density in the PurpleLine Corridor: Estimated 2020

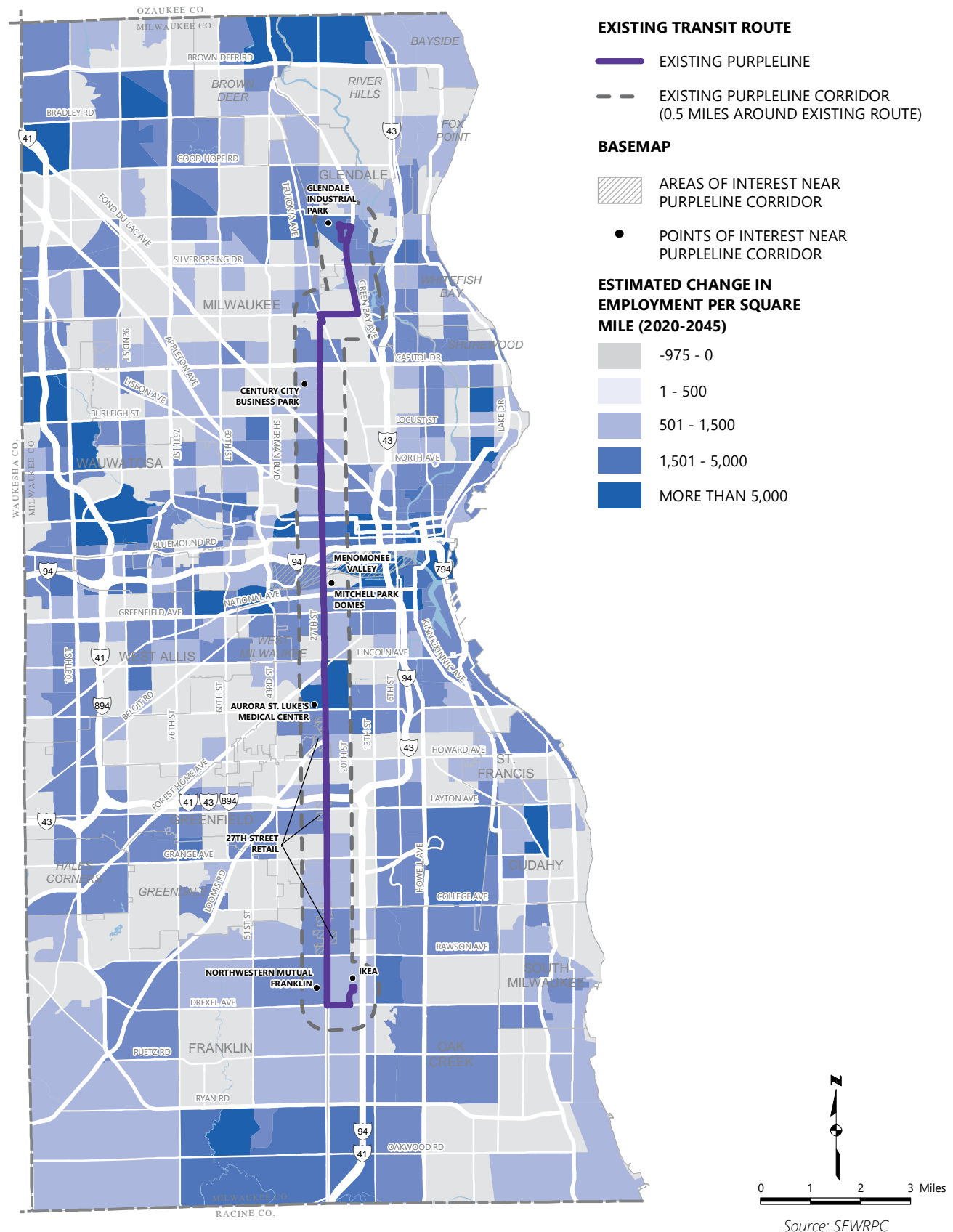


Map 5.5

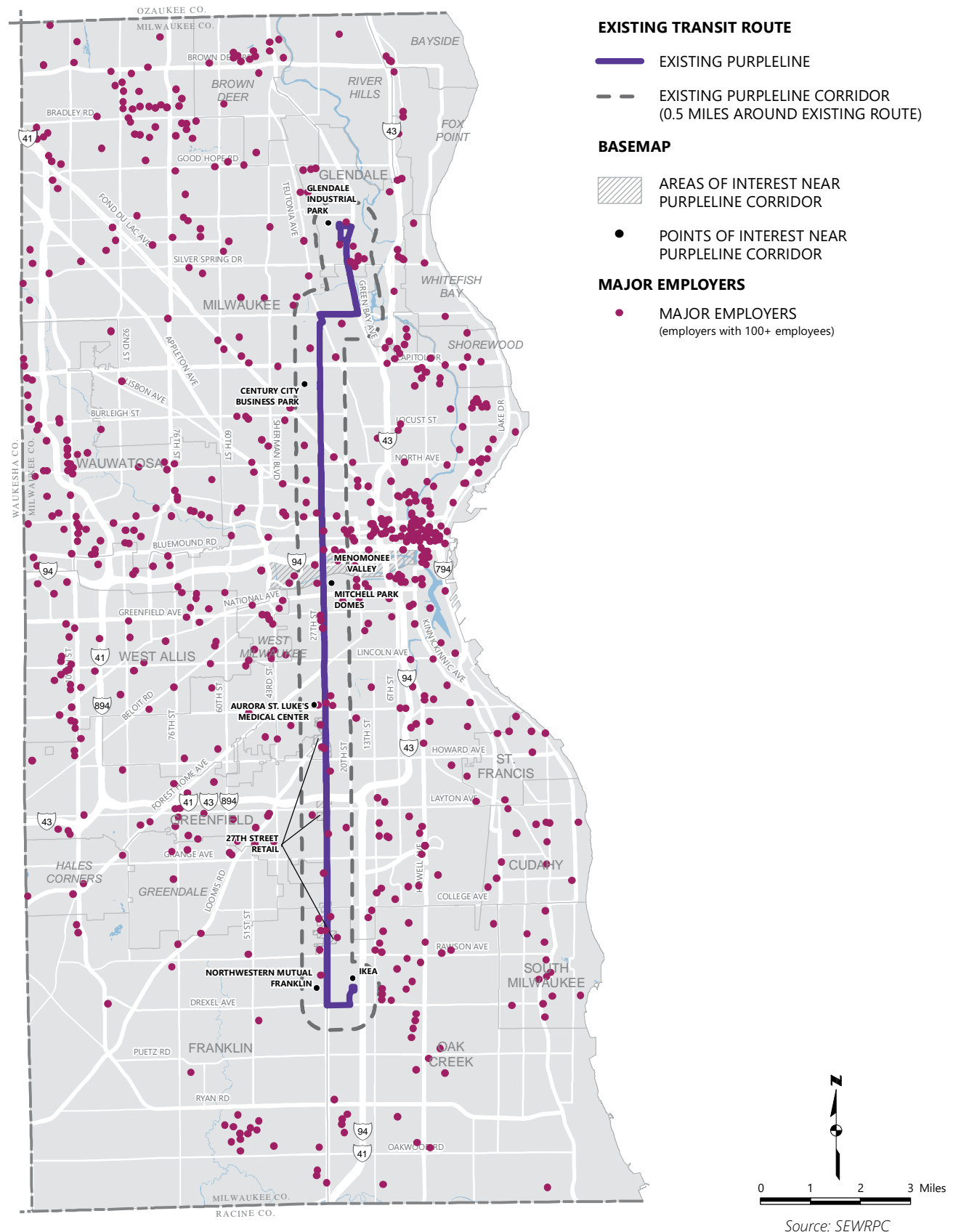


Map 5.6

Change in Estimated Employment Density in the PurpleLine Corridor: 2020-2045



Map 5.7
Major Employers in the PurpleLine Corridor





Credit: SEWRPC Staff

The PurpleLine Corridor is located along 27th Street in Milwaukee County, which contains varied and diverse land uses. The corridor includes the cities of Glendale in the north, Milwaukee in the center, and Greenfield, Franklin, and Oak Creek in the southern end. The corridor is mainly comprised of dense residential housing but is also dotted with industrial zones and commercial areas that include shopping space, office space, and major healthcare facilities.

6.1 EXISTING LAND USE MIX

The most common land use within the PurpleLine corridor is residential housing, making up about one-third of the land area. As shown in Table 6.1, about 12 percent of this housing is multifamily, with the remaining 22 percent single-family. Aside from land used for transportation and utility purposes and for open space; government and institutional uses, commercial uses, and industrial uses take up the next three largest portions of land in the corridor at 7.9 percent, 7.8 percent, and 5.5 percent, respectively. As shown on Map 6.1, commercial development and government and institutional uses are located along 27th Street at major intersections.

Notable large developments in the corridor from north to south include:

- The Glendale Industrial Park
- The Century City Business Park
- The Menomonee Valley industrial area, which, due to elevation differences, is not directly accessible from the PurpleLine
- Aurora St. Luke's Medical Center, the largest hospital in Wisconsin and the largest employer in the corridor
- Commercial retail along both sides of 27th Street between W. Oklahoma Avenue to W. Rawson Avenue

- Northwestern Mutual's Franklin campus, another major employer in the area
- IKEA located at the south terminus of the PurpleLine

With the exception of the major developments listed above, land use from W. Silver Spring Drive to W. Forest Home Avenue is primarily comprised of dense single- and multi-family housing. Commercial development and lower-density housing comprise the segment from W. Forest Home Avenue to W. Rawson Avenue. This segment was one of the first post-war, auto-oriented shopping strips developed in the Milwaukee area and remains an auto-oriented corridor today, with large intersections and wide setbacks that make pedestrian activity unpleasant and inconvenient, although some infill development has occurred in recent years. South of W. Rawson Avenue, the PurpleLine corridor has a more rural feel with expanses of woodlands and agricultural, unused, and other open lands.

Table 6.1
Land Use Mix Within the PurpleLine Corridor^a

Land Use	Acres	Percent of Corridor
Single-Family Residential	2,577.75	22.0
Multifamily Residential	1,385.90	11.9
Commercial	910.14	7.8
Industrial	645.80	5.5
Transportation, Communications, and Utilities	2,832.25	24.2
Government and Institutional	919.90	7.9
Recreation	516.43	4.4
Wetlands	282.26	2.4
Woodlands	218.92	1.9
Surface Water	128.12	1.1
Agricultural, Unused, and Other Open Lands	1,276.35	10.9
Total Area	11,693.82	100.0

^a PurpleLine Corridor defined by 0.5 mile buffer around existing route.

Source: SEWRPC

6.2 RECENT DEVELOPMENT AND PLANNING EFFORTS

Recent Investments

In the last 15 years, some more recent efforts have been initiated to develop and re-develop portions of land near and along this corridor. Some of the notable recent investments and major developments in and around the corridor include, from north to south:

City of Glendale:

- Bayshore Redevelopment
- Johnson Controls corporate headquarters improvements and expansion

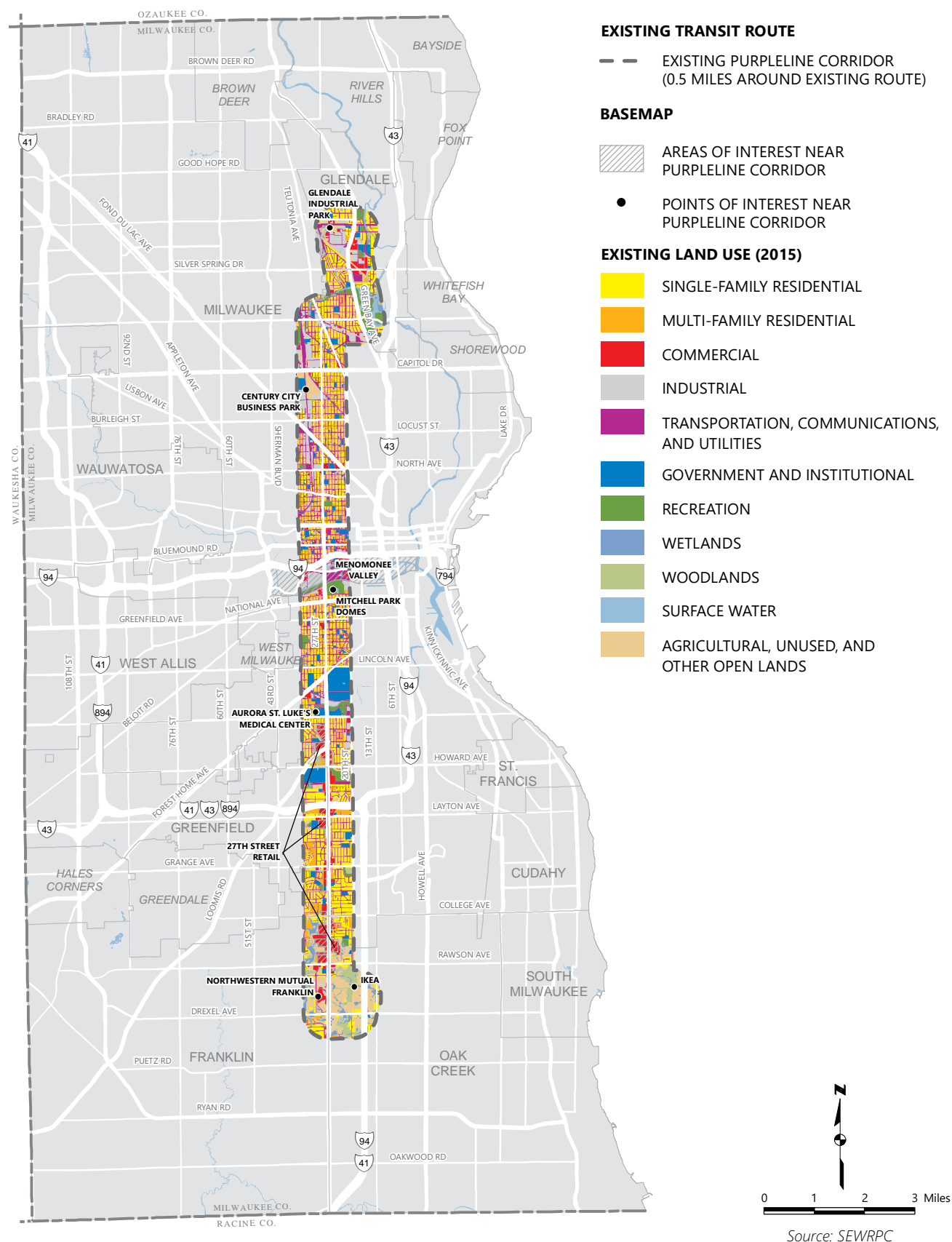
City of Milwaukee:

- Century City Business Park
- Good City Brewing
- Talgo rail car assembly and refurbishment
- Recent funding approval to convert a parking lot to the Century City Triangle Neighborhood Park
- Recent site acquisition by the State to develop a large office building at the intersection of N. 27th Street and Wisconsin Avenue
- City Lights Development (Menomonee Valley)
- Aurora St. Luke's Medical Center

City of Franklin:

- Northwestern Mutual Campus
- Ascension Medical Group
- Midwest Orthopedic Specialty Hospital

Map 6.1 Existing Land Use in the PurpleLine Corridor



City of Oak Creek:

- IKEA
- Drexel Town Square
- Amazon Distribution Center

Wisconsin Department of Transportation (WisDOT):

- In 2016, WisDOT opened traffic on the reconstructed 27th Street (WIS 241) project from College Avenue to Drexel Avenue which addressed safety concerns and included bike and pedestrian accommodations

Planning and Economic Development Efforts

The cities in the PurpleLine Corridor--Glendale, Milwaukee, Greenfield, Franklin, and Oak Creek--have prepared land use plans that include future recommendations for their respective cities. Below is a summary of the land use plans and recommendations as they pertain to the areas within the PurpleLine Corridor.

Glendale: City of Glendale Smart Growth Update as it Relates to: The Comprehensive Plan, City of Glendale and Amendments Thereto (August 2011)

Within the City of Glendale, the PurpleLine operates on N. Green Bay Avenue (STH 57) from W. Silver Spring Drive, north to its northern terminus at W. Bender Road and N. Green Bay Avenue. The update to Glendale's comprehensive plan includes recommendations for:

- Improving the sense of community identity
- Upgrading the City's shopping areas along N. Port Washington Road and W. Silver Spring Drive
- Improving the appearance of areas of the City including the south portion of N. Green Bay Avenue
- Improving pedestrian accommodation with sidewalks that allow the residents to walk to stores
- Improving the continuity of streetscapes

City of Milwaukee Plans

The City of Milwaukee has defined its neighborhoods and developed specific goals and recommendations as part of its thirteen separate area plans that collectively make up the City's Comprehensive plan. The area plans within the PurpleLine corridor are:

Near North Area Plan (December 2009, Amendment Currently Underway)

This plan includes the area approximately from W. Silver Spring Drive on the north to W. Burleigh Street on the south and from W. Fond Du Lac Avenue on the west to N. Green Bay Avenue on the east. The plan has recommendations for several areas that fall within the PurpleLine Corridor, including:

- Redeveloping the former Tower Automotive site as a touchstone and catalyst for the continued redevelopment of the 30th Street Industrial Corridor and the Near North Area generally with industrial and supportive commercial-retail uses
- Increased walkability
- Improving and expanding open space and community gathering space
- A potential repair and maintenance facility for a future light rail or bus rapid transit line as well as transit-oriented development nearby (N. 35th Street and Capitol Drive)

Connecting the Corridor: Strategic Action Plan for the Near North Side Area Plan (Amendment)

This strategic action plan, for which is a draft is currently in review, will serve as an amendment to the Near North Side Area Plan. The draft plan includes more than 45 recommended projects aimed to advance investment in the 30th Street Corridor, which is partially within the PurpleLine corridor boundary, and have the potential to impact transportation in the area. Specifically, the draft plan includes the following recommendations near the existing PurpleLine corridor:

- Traffic safety improvements along 27th Street, including implementing a road diet that will add bike lanes and reduce vehicular travel lanes between W. Atkinson Avenue and W. Capitol Drive
- Development of the Milwaukee Metropolitan Sewerage District (MMSD) West Basin which will sustainably address stormwater and significantly reduce flooding in the area, and could include new public green space
- Expand and improve the neighborhood park located at N. 29th Street and Melvina Park
- Expanding off-street trails

Fond Du Lac and North Avenue Plan (March 2004, Update Currently Underway)

This plan includes N. 27th Street from W. Burleigh Street on the north to W. Galena Street on the south and includes the following regarding the N. 27th Street area:

- A lack of goods and services in the area compared to the buying power of the surrounding neighborhoods
- YMCA on N. Teutonia Avenue and W. North Avenue noted as an anchor for the neighborhood; housing and mixed-use developments are recommended nearby
- Several clusters of housing recommended around the N. 27th Street area between W. Locust Street and W. Center Street
- W. Center Street and N. 27th Street redevelopment as a commercial and civic hub of the neighborhood, and the historic Kilbourn State Bank should be maintained
- Noted benefit of having transit stops available
- Residents commented (at a February 2020 Community Meeting) that they want to maintain and improve transit service within the area. There is also interest in expanding the streetcar from downtown Milwaukee to Fond du Lac Avenue.

Century City Implementation Plan (2011):

The Century City Development is within the boundaries of the Fond du Lac and North Avenue area plan. The City has been committed to the development of this site as noted above in Section 6.1.1. This plan includes the following for the site:

- Maintain the use of railroad infrastructure and facilitate coordination between the railroads and businesses
- Create a business park
- Continue work to attract businesses to locate within the Century City Development

The Near West Side Plan (March 2004, Amended March 2009), Includes North 27th Street Corridor Strategy (January 2018)

This plan includes N. 27th Street from W. State Street to W. Wisconsin Avenue and includes the following for the PurpleLine corridor along N. 27th Street:

- Enhance and build upon existing commercial assets along 27th Street to create an active Main Street and increase attractiveness of the surrounding residential properties.

North 27th Street Corridor Strategy: A Part of the Near West Side Area Plan (2018)

This plan is within the boundaries of the Near West Side, but is focused on the areas along 27th Street and includes the following recommendations:

- Continue reinvestment along N. 27th Street south of W. Highland Boulevard
- Vacate the segment of N. 28th Street between Wisconsin Avenue and Wells Street to facilitate redevelopment of the former Wisconsin Avenue School and City-Campus properties
- Improve pedestrian and bike accommodations
- Repurpose the vacant Wisconsin Avenue School with hospitality or office uses
- Revitalize the southwest block of N. 27th Street and W. Wisconsin Avenue with office or mixed-use developments
- Rebrand the 27th and Wells Commercial Historic District to as “Historic SoHi” and enhance storefronts and apartments for future residents and businesses.

The Menomonee Valley 2.0 Plan (June 2015)

This plan covers the Menomonee Valley (the Valley) below the 27th Street viaduct between W. St. Paul Avenue on the north and the Soo Line Railroad on the south. Currently, there is no direct access to the Valley from 27th Street due to the significant elevation difference. The plan recommends the follow related to PurpleLine corridor:

- Better connect the Valley: Connect 27th Street to Canal Street via a ramp from the viaduct, which would create a new connection to the Valley with better access from 27th Street to jobs and other amenities in the Valley
- Improve and expand bike facilities
- Continue development of industrial businesses and job creation alongside entertainment venues in the Valley

The Near South Side Plan (May 2009)

This plan includes Layton Boulevard/27th Street from just south of the Menomonee Valley to the Union Pacific Rail line, located just south of W. Cleveland Avenue. This plan includes the following recommendations for Layton Avenue/27th Street:

- Improve connections to the Menomonee Valley
- Enhance commercial corridors
- Expand public transportation options
- Provide affordable housing and promote mixed use developments

- Preserve and improve single family and duplex residential areas through housing rehabilitation programs
- Create and enhance pedestrian access to jobs and recreation in the Menomonee Valley
- Provide educational opportunities at the American System-Built homes site along Burnham Street, near 28th Street, for area students to learn about architecture, historic restoration, quality affordable housing, Frank Lloyd Wright, energy efficiency, and construction

The Southwest Side Plan (2009)

This plan covers the southwest side which includes the S. 27th Street commercial and shopping areas from W. Oklahoma Avenue to W. Howard Avenue. The plan recommends:

- A minimal number of curb cuts along the 27th Street corridor to reduce traffic congestion and safety problems
- Off-street parking lots should be safe, attractive, and efficient
- Landscaped walkways should be provided along all local streets
- Internal pedestrian walkways should be established to provide safe connections
- Safe pedestrian crossings (difficulty in crossing from one side of 27th to the other was noted)

Strategic Action Plan: A Part of the Southeast and Southwest Side Area Plans (March 2017)

This plan is within the boundaries of the Southwest Side, but it is focused on the areas along S. 27th Street and includes the following recommendations:

- Improved comfort for pedestrians and cyclists
- Redevelopment of the Wildenberg Hotel
- Improvements to the aesthetics along the corridor
- Improvements to the landscape with plantings

The Cities of Greenfield, Oak Creek and Franklin also have developed land use plans that include recommendations for the S. 27th Street area. The plans are listed below for their respective communities.

Greenfield: Comprehensive Land Use Plan, (2020 Update in Process)

Related to the PurpleLine Corridor, this plan focuses on:

- S. 27th Street community gateway treatments and wayfinding signage
- Higher quality developments with structures closer to S. 27th Street with parking on the side or rear of the buildings
- Celebration of the car-centric character on S. 27th Street
- Improvements for bike and pedestrian accommodation
- Recommendation of dense townhome redevelopment site also including office space, service-oriented businesses, and boutique shopping on the 22-acre former Target site, south of W. Layton Avenue on S. 27th Street

***Oak Creek: Draft Comprehensive Plan
(Out for Public Comments, an Open House was held in October 2019)***

Related to the S. 27th Street corridor, the Oak Creek Comprehensive Plan recommends:

- Expansion of public transit and support of rail service
- Improvement of the visual character of S. 27th Street
- Enhancement of pedestrian and cyclist connections to commercial areas
- Further development of the site across from Northwestern Mutual to include housing, commercial, and office spaces
- Intense commercial redevelopment at W. Drexel Avenue and S. 27th Street
- Business park developments north and south of W. Elm Road and S. 27th Street

Franklin: City of Franklin 2025 Comprehensive Master Plan (October 2009)

Related to the S. 27th Street corridor, this plan recommends:

- Maintenance of the planned urban character of the S. 27th Street corridor
- Incorporation of transit and improvement of bike and pedestrian accommodation
- Development of commercial and retail areas north of Rawson Avenue along S. 27th Street
- Mixed-use development from W. Ryan Road to north of W. Oakwood Road
- Development of business parks from south of W. Oakwood Road to W. County Line Road



Credit: VISIT Milwaukee

The PurpleLine corridor features varied transportation, employment, and land use conditions and is home to a racially and economically diverse population. This section summarizes some of the key conclusions from the existing conditions in the corridor and describes how they support the need to further study opportunities for transit enhancements. Improving or expanding transit along the PurpleLine corridor could improve the quality of life for residents and support businesses in the corridor by expanding and improving access to services and jobs, and catalyzing development and job growth within the corridor.

While the PurpleLine is a high frequency local bus route, it travels within the same roadway as other vehicular traffic. There are no dedicated transit lanes within the corridor as all travel lanes are intended for mixed vehicle use. The signalized intersections in the corridor do not have transit signal prioritization for transit vehicles, which would allow for shorter travel times. All existing bus stops served by the PurpleLine do not have raised platforms that would allow for level boarding, and generally do not have any enhanced features beyond bus shelters.

Historically, the PurpleLine has had the second highest ridership among all MCTS routes, and since the beginning of the COVID-19 pandemic, it has had the highest ridership on the system. It appears that many jobs located in the corridor are not amenable to remote work, and many of the retail and service establishments along the corridor lend themselves to in-person visits as well. The PurpleLine has 156 stops in both directions, which are approximately two-tenths of a mile apart—much closer than the traditional stop spacing for express or rapid transit services of one-half mile or more. A trip on the PurpleLine for the full length of the route would take approximately 65 to 80 minutes while driving in a car would take approximately 35 minutes. This does not offer a competitive travel option compared to the automobile.

The PurpleLine service travels on arterial roadways including state, county, and local trunk highways. Within the PurpleLine corridor there are two-, four- and six-lane roadways. Some roadway segments have medians and/or on-street parking, while others have neither. Some roadway sections in the corridor include bike lanes, separated bike paths within the roadway right-of-way or buffered bike lanes, although the bike network is not contiguous nor connected throughout the corridor. Overall, traffic in the corridor is relatively free flowing with various small segments operating with moderate to severe levels of congestion.

Population and population density in the corridor are projected to be relatively stable between 2020 and 2024 with areas of higher and lower density remaining largely the same. Some reduction in density is projected, largely due to the expected continuation in the decline of average household size. By 2045, population density on the north and south ends of the corridor are expected to increase around the Glendale Industrial Park and on the east side of 27th Street near IKEA in the City of Oak Creek where there is open space and land can be expected to be developed.

Employment within the corridor is projected to remain stable through 2045 and, relative to the Region average, there are disproportionately few jobs relative to population in the PurpleLine corridor. This requires many residents to travel outside of the corridor for employment. Milwaukee County is currently working on a Bus Rapid Transit (BRT) service, East-West BRT, which will provide enhanced transit service from downtown Milwaukee largely via W. Wisconsin Avenue and W. Bluemound Road to the Milwaukee Regional Medical Center in Wauwatosa. A north-south enhanced transit corridor could provide a connection to this BRT service as well as other MCTS transit routes, which would improve access to employment opportunities for PurpleLine corridor residents to the rest of Milwaukee County and beyond.

While median household income in Milwaukee County is about the same as it was in 2010, it has declined by over 12 percent in the PurpleLine corridor over the same period—signaling a trend of a growing income gap for residents in this area. The annual median income within the PurpleLine corridor in 2018 was \$35,500 per household, which is \$11,000 less than it was for Milwaukee County and \$25,000 less than it was for the state of Wisconsin for the same year.

People of color make up approximately 75 percent of the population in the corridor, which is comprised of concentrated areas of both Black/African American populations and Hispanic populations, as shown in Map 4.9. Segregation in the City of Milwaukee, fueled by discriminatory housing practices of the past and transportation investments that favor individuals with access to a car, has resulted in both the exodus of wealth and the disinvestment in communities of color. This segregation has led to disparities in the availability of and access to convenient transportation solutions for employment, education, healthcare, grocery stores, and other essential services—which, when available, can positively impact health and economic opportunity.³

Indicative of these disparities, the areas in the corridor with the highest concentrations of Black/African American and Hispanic populations also have particularly high proportions of families in poverty and households without access to a car. Specifically, 21 percent of families in poverty and nearly 1 in 5 households without access to a car in Milwaukee County reside within the PurpleLine corridor.

Perhaps unsurprisingly, households without access to a car utilize transit at a higher rate than households with access to a car. In Southeastern Wisconsin, individuals who rely on transit have access to just 10 to 20 percent of the jobs within 30 minutes when compared with those who have access to an automobile.⁴ In Southeastern Wisconsin, these households are substantially more likely to be experiencing poverty or be people of color, and experience disparities in educational attainment and access to jobs, medical services, grocery stores, and other essential services. A transit investment into the 27th Street area could catalyze development and job growth within the corridor—and the Region.

In 2019, Milwaukee County declared racism a public health crisis and is addressing these disparities by committing to a goal of social justice and racial equity in the county. In support of those commitments, the county is reviewing the projects it considers for funding in terms of the effect on its underserved residents. A study to enhance transit services in the corridor would align with those goals. While the existing PurpleLine transit service does provide relatively high-frequency service to access jobs, activity centers, and other essential services, an enhancement is needed in this area to provide transportation with travel times that are more competitive with automobile travel times, and to improve the overall quality of the service. Today,

³ These disparities are documented in SEWRPC Memorandum No. 221, *A Comparison of the Milwaukee Metropolitan Area to Its Peers*, which was updated as part of the 2020 Review and Update of VISION 2050.

⁴ Disparities in access to jobs and activity centers by transit are included in the Second Edition of SEWRPC Planning Report No. 55, *VISION 2050 – Volume III: Recommended Regional Land Use and Transportation Plan*, Appendix N, *Equitable Access Analysis of the VISION 2050 Transportation Component*.

there is approximately a 35-minute difference in one-way travel time for the length of the corridor, when comparing the PurpleLine to vehicular travel.

MCTS, regional, local, and neighborhood planning efforts in the corridor have included recommendations to expand transit, some specifically for the PurpleLine corridor. With this local support for transit and the needs in the corridor that have long gone underserved, consideration of enhanced transit services in the PurpleLine corridor is warranted.

Prepared for:

