Appendix G
Indirect and Cumulative Effects Analysis

INDIRECT AND CUMULATIVE EFFECTS ANALYSIS

For the Supplemental Environmental Impact Statement

I-94 East-West Corridor Study

Wisconsin Department of Transportation

February 2024

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1 INTRODUCTION

The purpose of the report is to update and validate the indirect and cumulative effects (ICE) analyses completed for the I-94 East-West Corridor Study as part of the Supplemental Environmental Impact Statement (EIS) process. The validation process included stakeholder interviews. The original ICE analyses were completed as part of the 2014 Draft EIS and the 2016 Final EIS. This report supplements those prior analyses and should be considered in combination with those prior reports.

This report is divided into two parts: The first half updates the indirect effects analysis, and the second half updates the cumulative effects analysis.

This report is a standalone document that is a component of the I-94 East-West Corridor Supplemental EIS. A full description and evaluation of the project's alternatives, costs, proposed actions, and environmental impacts are provided in the Supplemental EIS.

1.1 I-94 East-West Corridor Study Background

The I-94 East-West corridor is in Milwaukee County, Wisconsin, and includes 3.5 miles of I-94 from 70th Street (west terminus) to 16th Street (east terminus). The termini for this study generally match the termini for two previously completed studies of the Southeastern Wisconsin freeway system: the Zoo Interchange study, located west of the I-94 East-West Corridor study area; and the Marquette Interchange study, located to the east of the study area.

The project includes the following interchanges: 68th Street/70th Street, Hawley Road, General Mitchell Boulevard, the Stadium Interchange (I-94/WIS 175/Brewers Boulevard), 35th Street, and 25th/26th/28th Street. The Bluemound Road/Wisconsin Avenue/ Wells Street Interchange with WIS 175 is also included.

The I-94 East-West freeway is one of the busiest routes in Southeastern Wisconsin. It is a vital link to downtown Milwaukee and the western suburbs, and it is part of a major east-west Interstate route serving national, regional, and local traffic for trips within and through the study area.

WisDOT completed a study of the corridor between 2012 and 2016 that resulted in a Record of Decision (ROD) in September 2016 (WisDOT, 2016). The approval of the ROD was rescinded in October 2017 due to a lack of funding.

Following a renewed focus on advancing the project in 2020, WisDOT announced it would complete a Supplemental EIS in April 2021 and the Federal Highway Administration issued the Notice of Intent in the Federal Register in June 2021 (FHWA, 2021). The project limits for the Supplemental EIS are the same as the limits that were evaluated in the 2016 Final EIS (WisDOT, 2016).

1.2 Purpose of and Need for the Project

The purpose of the I-94 East-West Corridor Project is to address the deteriorated condition of I-94, obsolete roadway and bridge design, existing and future traffic demand, and high crash rates on I-94 from 70th Street (western terminus) to 16th Street (eastern terminus). The project would provide a safer and more efficient I-94 while minimizing impacts to the natural, cultural, and built environment to the extent feasible and practicable.

A combination of factors demonstrates the transportation improvement need in the I-94 East-West Corridor:

- Regional land use and transportation planning
- System linkage and route importance
- High crash rates
- Existing freeway conditions and deficiencies
- Existing and Future Traffic Volumes

Purpose and Need factors for the I-94 East-West Corridor study remain the same as stated in the 2016 Final EIS. The supporting information regarding the needs for the project has been updated to reflect current conditions for traffic, crash data, demographic data, and the updated regional land use and transportation plan, Vision 2050. See Section 1 of Supplemental EIS for more information.

1.3 Freeway Corridor Alternatives

As part of the 2014 Draft EIS, the ICE analyses evaluated a range of 8-lane modernization alternatives for the I-94 East-West Corridor (WisDOT, 2014). The alternatives for the Draft EIS included At-grade and Double deck alternatives for the west segment (70th Street to Yount Drive) and On-alignment and Off-alignment alternatives for the east segment (Yount Drive to 16th Street). Each alternative explored different interchange access configurations but overall maintained the existing access. One exception was the Hawley Road Interchange under the at-grade alternative for the west segment. Under this alternative, the Hawley Road Interchange had two options: remove all access and provide an underpass or provide partial access to and from the west only.

As part of the 2016 Final EIS, the ICE analyses focused on the preferred alternative that was selected for the corridor (WisDOT, 2016). The preferred alternative in 2016 included the At-grade alternative with a half interchange at Hawley Road (access to and from the west) for the west segment and the On-alignment alternative for the east segment of the project. (See the 2014 Draft EIS and 2016 Final EIS for more information.)

As part of the current Supplemental EIS, the ICE analyses are evaluating 8-lane and 6-lane alternatives for the I-94 East-West Corridor Study. These alternatives are similar to the preferred alternative that was identified in the 2016 Final EIS with the primary difference between the two current alternatives being the number of travel lanes – 6-lanes and 8-lanes. Currently, the corridor has 6-lanes from 70th Street to the Stadium Interchange and there are 7-lanes (four westbound, three eastbound) in the area from the Stadium Interchange to 16th Street, the western limits of the Marquette Interchange. Both the 8- and 6-lane alternatives would reconfigure the interchanges at 68th/70th, 35th, and 25th-28th Street. These three interchanges when reconfigured would operate similar to how they operate today. WisDOT and FHWA are also considering modifications to improve bicycle and pedestrian connectivity on various local streets.

At the Stadium Interchange, WisDOT and FHWA are analyzing a hybrid interchange (a hybrid between a system interchange and service interchange) and a diverging diamond interchange for both the 8- and 6-lane alternatives.

The hybrid interchange was part of the preferred alternative from the 2016 Final EIS. With the hybrid interchange, all the exit ramps from I-94 to WIS 175/Brewers Boulevard would be free-flow ramps (no traffic signals). All entrance and exit ramps would be located on the righthand side of traffic. A traffic signal on WIS 175/Brewers Boulevard would control through traffic and left turns onto I-94. The reconstructed interchange would have a smaller footprint than the existing Stadium Interchange, however, it would be a 3-level interchange (not counting the local streets at the lowest level) and be approximately 25 feet higher than the existing interchange.

For the diverging diamond interchange, northbound and southbound WIS 175/Brewers Boulevard traffic would cross to the opposite side of the roadway at two signalized intersections north and south of I-94. Traffic on WIS 175/Brewers Boulevard would drive on the opposite side of the roadway than what is customary through the interchange. This allows left turns entering I-94 to occur without stopping or crossing oncoming traffic. The diverging diamond interchange would be a 2-level interchange (not counting the local streets at the lowest level) approximately the same height as the existing interchange.

With both the 8-lane and 6-lane alternatives the General Mitchell Boulevard Interchange would be removed to avoid impacts to the cemeteries and the usage merge distances on I-94. With the hybrid interchange option at the Stadium Interchange, the General Mitchell Boulevard interchange would be incorporated beneath the Stadium Interchange, new entrance and exit ramps to 44th Street and a new north-south local street (tentatively referred to as 46th Street) would be constructed to replace the General Mitchell Boulevard interchange. The new interchange would connect to the existing American Family Field ring road and a new 3-lane frontage road north of I-94. The new north frontage road would pass over Yount Drive and connect to Mitchell Boulevard near the existing westbound I-94 exit ramp at General Mitchell Boulevard.

With the Diverging Diamond Interchange, access to and from General Mitchell Boulevard would be via ramps within the Stadium Interchange. All entrance and exit ramps would be located on the righthand side of traffic. These connections would provide direct access to American Family Field parking, the VA campus, and the Story Hill neighborhood without traveling through new intersections. The total width of I-94 and its on-/off-ramps between General Mitchell Boulevard and WIS 175 would be slightly wider than the hybrid interchange. The additional width is shifted south and has a slightly greater impact on American Family Field parking.

Both the 8-lane and 6-lane alternatives include a half interchange option at Hawley Road, with access form the west only. To mitigate the traffic impacts of partially closing the Hawley Road interchange, the 2016 Final EIS preferred alternative included an extension of Washington Street between 68th Street and Hawley Road and improvements to 70th Street/Greenfield Avenue, National Avenue/Greenfield Avenue, and Brewers Boulevard/National Avenue intersections. there are two sub-options included at the Hawley Road Interchange.

The 6-lane alternative includes a sub-option at Hawley Road where a Full Hawley Road Interchange is being considered. The Full Hawley Road Interchange would be similar to the existing Hawley Road Interchange.

2 INDIRECT EFFECTS ANALYSIS

The Council on Environmental Quality (CEQ) defines indirect effects as project impacts “caused by the action and are later in time or farther removed in distance but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems” (40 C.F.R. 1508.08).

The *WisDOT Guidance for Conducting an Indirect Effects Analysis* (November 2014) was used to guide the evaluation of indirect effects for the I-94 East-West corridor (WisDOT, 2014). The WisDOT guide is based on the methodology outlined in the National Cooperative Highway Research Program (NCHRP) Report 466, *Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects* (Transportation Research Board, 2002).

The analysis used the following six-step methodology as provided in the guidance:

1. Scoping, selecting activities and determining the indirect effects study area.
2. Inventory the indirect effects study area and notable features.
3. Identify the impact-causing activities of the proposed project alternatives.

4. Identify the potentially significant indirect effects.
5. Analyze the indirect effects and evaluate assumptions.
6. Assess consequences and identify mitigation activities.

The original indirect effects analysis completed for the Draft EIS in 2014 and Final EIS in 2016 was based on the prior WisDOT guidance document from 2007 (WisDOT, 2007). The analysis steps from the 2014 guidance document remain the same, and therefore, the overall evaluation steps for the indirect effects remain valid.

The analysis steps for the original indirect effects analysis, summarized in the following subsections, were reviewed and updated as necessary to reflect changes to the project alternatives, current conditions, and stakeholder input, and to confirm any changes to the project's indirect effects.

2.1 Step 1: Conduct Scoping, Selecting Activities, and Determine Study Area

The first step for the updated indirect effects analysis was to confirm the overall approach that would be used including activities that would be conducted for the analysis, the study area, and the timeframe for the analysis.

2.1.1 Scoping Indirect Effects

The original indirect effects analysis completed for the Draft EIS in 2014 and Final EIS in 2016 undertook a detailed qualitative analysis based on local and regional trend data, land use, transportation, and economic development plans, natural and historic resource inventories, and input from local and regional stakeholders in accordance with WisDOT's indirect effects guidance document.

It was determined that a new detailed analysis would not be required for the supplemental indirect effects analysis. Instead, the prior analysis would be updated and validated as needed for the following reasons:

- The current 8-lane alternative is similar to the preferred alternative evaluated in the 2016 Final EIS and the primary difference between the current 8-lane and 6-lane alternatives is the number of lanes. Therefore, many of the project actions have not changed and any updates or changes related to the alternatives could be addressed within this report.
- Interchanges will maintain access in a manner that is similar to today, with some limited exceptions at Hawley Road (except the Hawley Road Interchange could be either a full interchange or a half interchange that is mitigated by a Washington street extension depending on the alternative) and at the General Mitchell Boulevard Interchange which would be replaced by a new local access interchange under the Stadium Interchange with the hybrid alternative. The hybrid interchange alternative would also not allow access from Brewers Boulevard to Wisconsin Avenue. The DDI interchange would allow this movement.
- The geographic setting conditions have not changed substantially as the communities and neighborhoods surrounding the project corridor are fully developed urban communities with relatively stable land-use patterns and socioeconomic trends and the project area remains a vital regional link between Milwaukee and Waukesha counties, the region's major population and economic centers.
- The purpose and need factors for the project have not changed, only the data and information has been updated.

Furthermore, the likely indirect effect issues of the current 8-lane and 6-lane alternatives largely remain the same as the prior alternatives including concerns about the project's potential to indirectly affect the quality of neighborhoods and the vitality of business areas adjacent to the project area, and the potential for the project to influence local and regional land-use patterns.

As a result, this updated indirect effect analysis uses a qualitative analysis approach informed by reviewing updated demographic data, local and regional land use and transportation plans and input from local stakeholders.

2.1.2 Stakeholder Interviews

The following stakeholder engagement was completed for the original indirect effects analysis in 2013:

- Stakeholder interviews were conducted early on in the analysis process (February and March 2013) and included meeting with local government representatives and economic development organizations to collect information and identify an indirect effects study area.
- A focus group meeting was conducted on June 6, 2013, to obtain input on the indirect effects analysis and to finalize the study area boundary. The meeting included representatives from public and private sectors such as local planners, regional planning commission staff, economic development organizations, representatives of large employers, and real estate professionals. WisDOT sought participants' feedback on land use and development trends; indirect effects study area delineations; and potential indirect effects.
- A series of meetings were held in August 2013 with private-sector real estate professionals to obtain additional feedback on local and regional development trends and potential land-use effects of the I-94 East-West corridor alternatives.
- A meeting was held on August 29, 2013, with stakeholders and government representatives who are familiar with land use and economic patterns in downtown Milwaukee. The purpose of this meeting was to seek feedback about potential indirect effects on the downtown area.

For the supplemental analysis, additional stakeholder meetings were held to confirm the study area boundaries, update land use and economic development trends, and obtain input on the potential indirect effects of the project's 8-lane and 6-lane alternatives. Table 1 provides a list of the stakeholder meeting attendees and dates. The stakeholders were chosen based on their knowledge of land use and socioeconomic trends in the study area and in coordination with local community partners to capture a comprehensive perspective. See Appendix A for meeting summary notes.

Based on the stakeholder interviews, the following common themes emerged about the study area with regards to transportation initiatives, development, and socioeconomic trends:

- Desire to reduce travel speeds and reckless driving on local arterials.
- Strong focus on pedestrian and bicycle safety and connectivity, especially north-south connections crossing the freeway.
- Redevelopment efforts continue within districts and corridors identified in the original indirect effects analysis.
- Ongoing efforts for neighborhood revitalization continue within the study area communities.
- Support for efficient and reliable vehicular travel and public transit to ensure transportation access for employees and freight travel.

Table 1: Stakeholder Meeting Participants for Supplemental Analysis

Organization	Representatives	Date
Menomonee Valley Partners*	Corey Zetts, Executive Director	November 3, 2021
Wiegand Development	Rick Wiegand, Owner/Developer	November 4, 2021

Organization	Representatives	Date
City of Milwaukee*	Sam Leichtling, Planning Manager Vanessa Koster, Deputy Commissioner (City Development) Tanya Fonseca, Long Range Planning Manager Monica Wauck Smith, Senior Planner Jerrel Kruschke, City Engineer	November 11, 2021
Milwaukee Downtown BID #21*	Beth Weirick, CEO Matt Dorner, Economic Development Director Gabriel Yeager, Downtown Environment Specialist Kristaleen Hernandez, Engagement	November 11, 2021
VIA CDC*	Cinthia Tellez Silva, Economic Development Lidia Villazaez, Outreach Manager – Silver City	November 11, 2021
Sixteenth Street Community Health Centers	Rosamaria Martinez, VP of Community Health Initiatives Kelly Moore Brands, Sustainability & Environment Project Manager Yesi Perez, Neighborhood Revitalization Jamie Ferschinger, Director of Environmental Health & Community Wellness	November 12, 2021
Near West Side Partners	Keith Stanley, Executive Director	November 17, 2021
City of Wauwatosa*	Paulette Enders, Development Director	November 19, 2021
SEWRPC*	Kevin Muhs, Executive Director Chris Hiebert, Chief Transportation Engineer Ryan Hoel, Deputy Chief Transportation Engineer Jennifer Sarnecki, Principal Transportation Planner	November 29, 2021
Commercial Association of Realtors	Tracy Johnson, President/CEO	November 29, 2021
Village of West Milwaukee*	Kim Egan, Village Administrator Len Roecker, DPW	December 1, 2021
Waukesha County Business Alliance	Suzanne Kelly, President Amanda Payne, Senior VP	December 6, 2021
UWM School of Architecture and Urban Planning	Bob Schneider, Professor	December 6, 2021
City of West Allis*	Steven Schaer, Planning & Zoning Manager Peter Daniels, City Engineer Traci Gengler, Engineer	December 10, 2021
Historic Mitchell Street, BID 4	Nancy Bush, Executive Director	December 10, 2021

** Organization/community interviewed in 2013 as part of the original indirect effects analysis*
BID = Business Improvement District

2.1.3 Study Area and Timeframe

Two study areas – primary and secondary – were evaluated for the indirect effects analysis in the original Draft EIS in 2014 and Final EIS in 2016 (WisDOT, 2014; WisDOT, 2016). The primary study area, shown in **Exhibit 1,** includes lands within portions of Milwaukee, West Milwaukee, Wauwatosa, and West Allis that are adjacent to the project corridor. The primary study area is generally bounded by Lake Michigan to the east, 84th Street to the west, North Avenue to the north, and Lincoln Avenue to the south. The primary study area is closest to the project, so it includes locations that have the greatest potential for indirect effects.

The secondary study area, shown in **Exhibit 2**, includes all of Milwaukee and Waukesha counties. The purpose of the secondary study area was to evaluate intraregional land-use trends that may be influenced by the I-94 East-West corridor. The study team included these two counties for the regional analysis because I-94 is a major transportation link between the region's two largest counties in terms of population and employment, and past trends show the largest redistribution of population and employment in the region has occurred between these two counties. The original ICE analysis, completed as part of the 2014 Draft EIS and the 2016 Final EIS, includes more detail on the development of the study areas.

For the supplemental indirect analysis, the study team primarily relied on reviewing updated local and regional land use and transportation plans, updated socioeconomic data, and stakeholder interviews that involved seeking feedback on the boundaries from stakeholders familiar with local and regional conditions. Based on this information, it was determined that the primary and secondary study areas identified in the 2014 Draft EIS and 2016 Final EIS remain valid, as they align with potential land use and development changes that could result from the project alternatives.

In the original indirect effects analysis, the study team determined the timeframe for the indirect effects analysis was 2040, which was about 20 years after the anticipated implementation of the proposed I-94 East-West corridor project at that time. Twenty years was long enough for indirect effects to unfold but it would not be so far into the future that the effects become too difficult for the study team to reasonably anticipate, or for local and regional stakeholders to provide meaningful feedback. For the supplemental analysis, the study team reviewed local plans and available forecast information and determined the timeframe for the updated analysis is 2050, approximately 25 years after the proposed implementation of the project. The 2050 timeframe aligns with the horizon year of Vision 2050, the region's long-range transportation and land use plan, and is also the forecast year for traffic analyses developed to support the project. This timeframe applies for analysis of all resources considered.

Exhibit 1: Primary Study Area

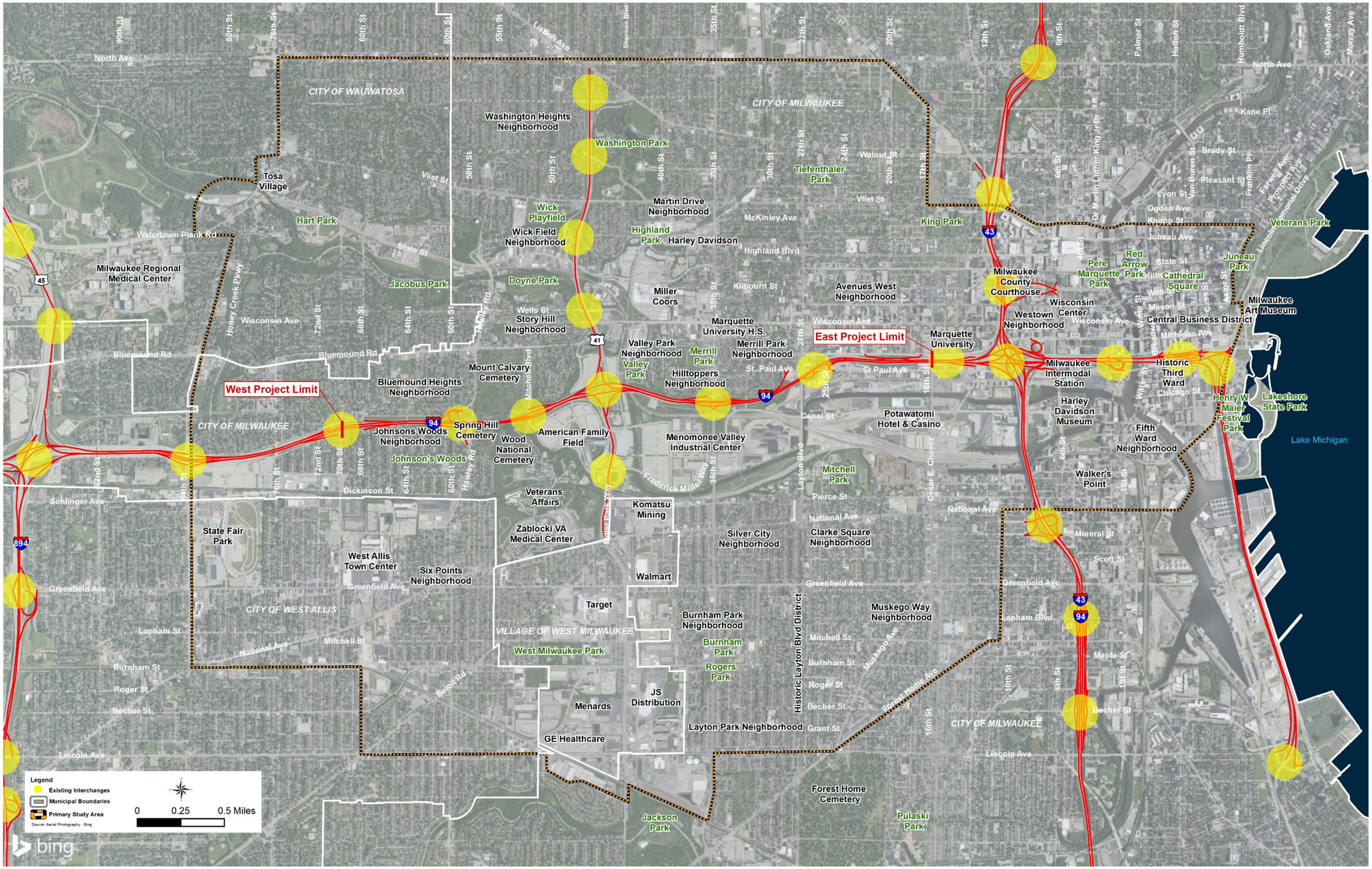
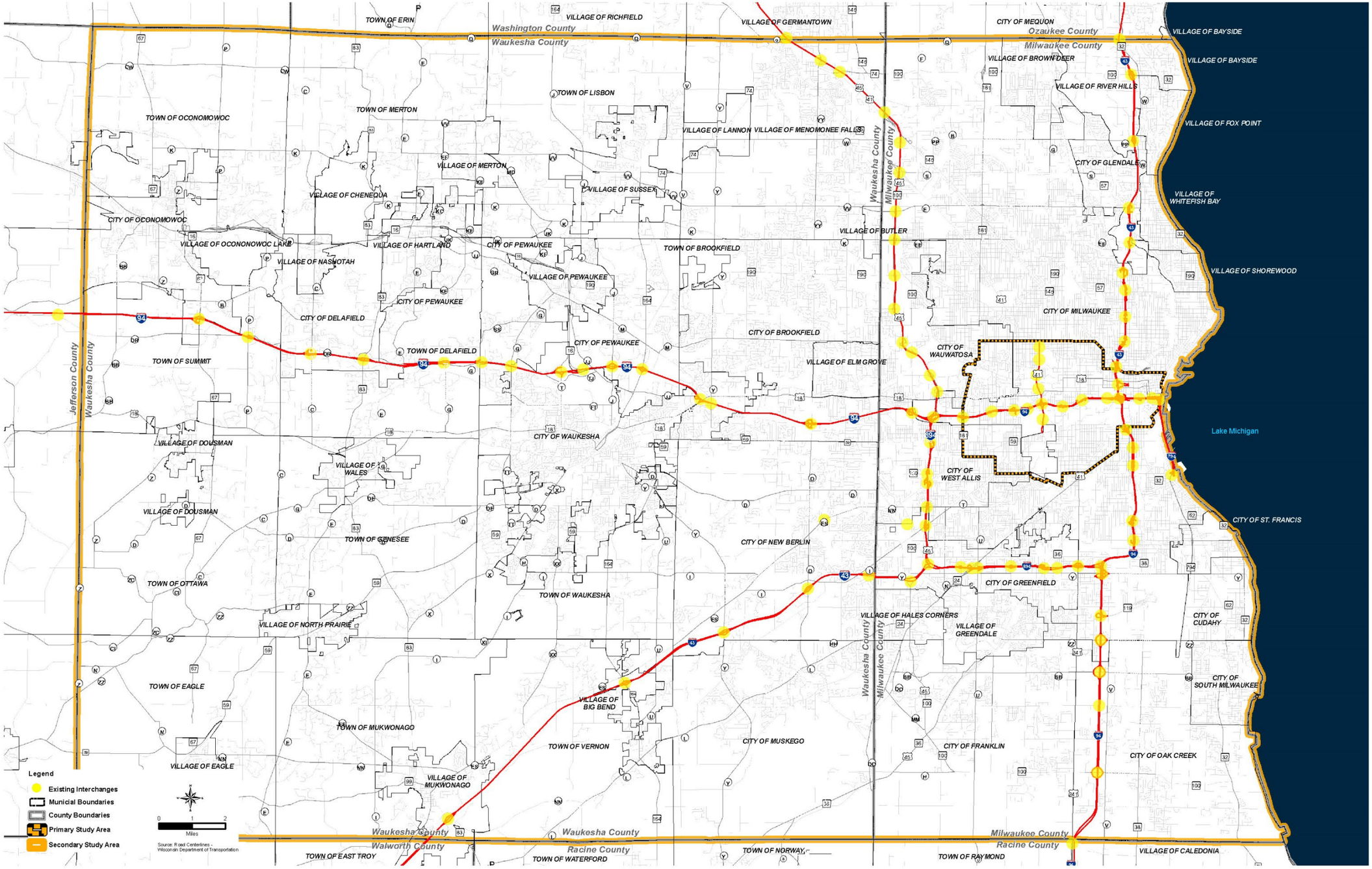


Exhibit 2: Secondary Study Area



2.2 Step 2: Inventory the Study Area and Notable Features

The purpose of Step 2 is to collect data and information to understand the general trends and goals associated with social, economic, natural and historic resources within the study areas. Documenting this information is important because research shows that transportation investments result in land-use changes only in the presence of other supportive non-transportation factors such as local government development policies and incentives; availability of infrastructure; the amount of developable land; and the overall economic conditions of an area (Transportation Research Board, 2012).

For the supplemental analysis, the project team updated socioeconomic data, reviewed local and regional plan updates, and discussed study area trends during stakeholder interviews to update the inventory for Step 2 of the analysis.

It should be noted that most data sources used for this supplemental analysis do not yet reflect the potential impacts of the ongoing COVID-19 pandemic. The long-term demographic and economic impacts of the pandemic are not yet known or are just now being studied. The stakeholder interviews conducted for this analysis were used to supplement the data and help understand the latest trends affecting the study areas and the potential effects to socioeconomic and land-use trends from the pandemic.

2.2.1 Socioeconomic Data and Trends

This section reviews updated socioeconomic data for the primary and secondary study areas to determine if the study areas have undergone change since the original indirect effects analysis. The updated data relies on the 2017-2021 American Community Survey 5-year estimates.

2.2.1.1 Population

The primary study area had a total population of 146,794 in 2021, which was a decrease of 29,138 people, or 16.6 percent, since 2010 (Table 2). This is a significant change from the population trends that were reported in the original indirect effects analysis that showed an increase of 887 people (0.5 percent increase) between 2000 and 2010 for the primary study area.

Between 2010 and 2021, the Milwaukee, West Milwaukee, Wauwatosa, and West Allis portions of the primary study area experienced decreases in population at 16.5 percent, 4.6 percent, 23.1 percent, and 12.8 percent, respectively.

Table 2: Primary Study Area Population – 2000, 2010, 2021

Location	2000	2010	2021	2000-2010		2010-2021	
				Absolute Change	Percent Change	Absolute Change	Percent Change
City of Milwaukee	134,590	135,042	112,720	452	0.3	-22,322	-16.5
City of West Allis	17,363	17,867	15,573	504	2.9	-2,294	-12.8
Village of West Milwaukee	4,249	4,259	4,108	10	0.2	-197	-4.6
City of Wauwatosa	18,843	18,718	14,393	-125	-0.7	-4,325	-23.1
Primary Study Area Total	**175,045**	**175,886**	146,794	**841**	**0.5**	-29,138	-16.6

Source: US Census Bureau, 2000 – Census of Population 2000; US Census Bureau, 2010 – Census of Population 2010; US Census Bureau, American Community Survey, 5-Year Estimates 2017-2021

Table 3 shows the historic population trends for Milwaukee County and Waukesha County that make up the secondary study area (SEWRPC, 2013a). Milwaukee County's population peaked in 1970 at over 1 million people. The most significant population loss (-89,261) occurred in Milwaukee County between 1970 and 1980. Milwaukee County continued to lose population during the 1980s and 1990s, but at a slower pace compared with the 1970s. The population decline reversed between 2000 and 2010 when Milwaukee County added 7,571 people. Between 2010 and 2021, Milwaukee County saw a slight decline in population with a loss of 8,612 people (-0.9 percent) (U.S. Census Bureau, 2010a; U.S. Census Bureau, 2021).

Waukesha County more than doubled its population between 1960 and 2010. The rapid growth of the county is evident going back to the 1950s. Between 1950 and 1960 the county added over 72,000 people and between 1960 and 1970 the county again added over 73,000. The county also experienced fairly rapid growth during the 1970s and 1990s but had more moderate growth during the 1980s and 2000s. Waukesha County continued with moderate growth between 2010 and 2021, gaining 15,441 people, a gain of 4.0 percent (U.S. Census Bureau, 2010a; U.S. Census Bureau, 2021).

Table 3: Population for Milwaukee and Waukesha Counties – 1960 to 2021

	Milwaukee County				Waukesha County			
		Change from Previous Decade		Percent of Region Total		Change from Previous Decade		Percent of Region Total
Year	Number	Absolute Number	Percent Change		Number	Absolute Number	Percent Change	
1960	1,036,041	164,994	18.9	65.8	158,249	72,348	84.2	10.1
1970	1,054,249	18,208	1.8	60.0	231,335	73,086	46.2	13.2
1980	964,988	-89,261	-8.5	54.7	280,203	48,868	21.1	15.9
1990	959,275	-5,713	-0.6	53.0	304,715	24,512	8.7	16.8
2000	940,164	-19,111	-2.0	48.7	360,767	56,052	18.4	18.7
2010	947,735	7,571	0.8	46.9	389,891	29,124	8.1	19.3
2021	939,123	-8,612	-0.9	N/A	405,332	15,441	4.0	N/A

Source: SEWRPC. The Population of Southeastern Wisconsin. Technical Report No. 11 (5th Edition). 2013. (For 1960-2010 data)
US Census Bureau, American Community Survey, 5-Year Estimates 2017-2021 (For 2021 data)

Table 4 reports current and projected population data for the corridor communities. The 2040 projections developed by the Department of Administration (DOA) have not been updated since the original indirect effects analysis (Wisconsin Department of Administration, 2013). The projections, which are based on 2010 Census Data (U.S. Census Bureau, 2010a), show the study area communities are expected to experience a small increase in population between 2010 and 2040. 2021 population data shows that the Wauwatosa population increased by 3.6 percent between 2010 and 2021 whereas the other communities experienced slight population declines during this time.

Table 4: Corridor Community Population Projections – 2010 to 2040

Location	2010 Population	2040 Projected Population	Absolute Change (2010-2040)	Percent Change (2010-2040)	2021 Population	Percent Change (2010-2021)
City of Milwaukee	594,744	627,400	32,656	5.5	578,198	-2.8
City of West Allis	60,411	61,850	1,439	2.4	60,220	-0.3
Village of West Milwaukee	4,259	4,580	321	7.5	4,108	-3.5
City of Wauwatosa	46,421	49,270	2,849	6.1	48,072	3.6

Source: Municipal Population Projections, 2010-2040. WDOA, Division of Intergovernmental Relations, Demographic Services Center. 2013.
US Census Bureau, 2010 – Census of Population (For 2010 Data)
US Census Bureau, American Community Survey, 5-Year Estimates 2017-2021 (For 2021 data)

The study team reviewed the comprehensive plans for the communities within the primary study area to identify and update another set of population projections. The summarized findings are as follows:

- City of Milwaukee: 622,738 by 2025 (City of Milwaukee, 2010), no updates since the original indirect effects analysis
- City of Wauwatosa: 54,039 by 2030 (City of Wauwatosa, 2008), no updates since the original indirect effects analysis
- City of West Allis: 61,850 by 2040, the plan relies on Wisconsin DOA projections
- Village of West Milwaukee: Up to 380 new residents by 2040

Table 5 shows SEWRPC's population projections for Milwaukee County and Waukesha County (SEWRPC, 2013a). Milwaukee County is expected to add 28,969 persons between 2010 and 2050, which is a 3.1 percent increase. Waukesha County is expected to add 91,478 persons by 2050, which is a 23.5 percent increase.

Between 2010 and 2050, Milwaukee County is expected to continue to decrease its share of the regional population, changing from 46.9 percent in 2010 to 41.5 percent in 2050, which is a decrease of 5.4 percentage points (SEWRPC, 2013a). This difference is much less compared with the previous 40-year period (1970 to 2010) when Milwaukee County's regional population share decreased by 13.1 percentage points. Waukesha County is expected to continue to increase its regional population share from 19.3 percent in 2010 to 20.4 percent in 2050. The percentage point change between 2010 and 2050, which is expected to be 1.1, is less than the 6.6 percentage point change that occurred during the previous 40-year period (1970 to 2010) for the Waukesha County population.

County population projections, as detailed below in Table 5, remain the same as analyzed in the original indirect effects analysis. SEWRPC reviewed the forecasts as part of the 2020 update of VISION 2050 and determined that the plan forecasts remain valid for long-range planning purposes (SEWRPC, 2020b). Census data for 2020 was not available and therefore not utilized in SEWRPC'S review of forecasts.

Table 5: Population Projections – Milwaukee and Waukesha Counties - 2050

Area	2010	2050	Absolute Change	Percent Change	Percent of Region (2010)	Percent of Region (2050)
Milwaukee County	947,735	976,704	28,969	3.1	46.9	41.5
Waukesha County	389,891	481,369	91,478	23.5	19.3	20.4
Region	2,019,970	2,354,000	334,000	16.5	100.0	100.0

Source: SEWRPC. The Population of Southeastern Wisconsin. Technical Report No. 11 (5th Edition). 2013.

2.2.1.2 Housing Units

Table 6 shows the housing units in the primary study area in 2010 compared to 2021. Since 2010, the number of housing units in the primary study area has decreased by 10.3 percent along with the overall population of the study area which declined during this time.

Table 6: Primary Study Area – Housing Units

Location	Housing Units (2010)	Housing Units (2021)	Absolute Change	Percent Change
City of Milwaukee	54,914	50,083	-4,831	-8.8
City of West Allis	8,468	7,878	-590	-7.0
Village of West Milwaukee	2,460	2,171	-289	-11.7
City of Wauwatosa	8,292	6,395	-1,897	-22.9
Total Primary Study Area	74,134	66,527	-7,607	-10.3

Source: U.S. Census Bureau, American Community Survey, 5-Year Estimates 2006-2010; U.S. Census Bureau, American Community Survey, 5-Year Estimates 2017-2021

Table 7 shows the housing units in the secondary study area in 2010 compared to 2021. Since 2010, the number of housing units in the secondary study area has increased by 3.4 percent.

Table 7: Secondary Study Area – Housing Units

Location	Housing Units (2010)	Housing Units (2021)	Absolute Change	Percent Change
Milwaukee County	415,603	423,363	7,760	1.9
Waukesha County	159,117	170,906	11,789	7.4
Total Secondary Study Area	574,720	594,269	19,549	3.4

Source: U.S. Census Bureau, American Community Survey, 5-Year Estimates 2006-2010; U.S. Census Bureau, American Community Survey, 5-Year Estimates 2017-2021

2.2.1.3 Employment

Table 8 shows the employment levels for the primary study area census tracts, comparing the 2006-2010 and 2012-2016 American Community Survey (ACS) reporting periods from the Census Transportation Planning

Products (CTPP) files (AASHTO, 2014). The data from 2012-2016 is the most recent data available but does not reflect recent economic trends or the COVID-19 pandemic. All primary study area communities experienced job losses between the two time periods with a decrease of jobs by 8.3 percent.

Table 8: Primary Study Area Employment – 2010 and 2016

Location	Primary Study Area			
	2010	2016	Absolute Change	Percent Change
City of Milwaukee	112,190	105,390	-6,800	-6.1
City of West Allis	10,835	8,910	-1,925	-17.8
Village of West Milwaukee	5,765	4,450	-1,315	-22.8
City of Wauwatosa	8,895	7,440	-1,455	-16.4
Primary Study Area Total	137,685	126,190	-11,495	-8.3

Source: Census Transportation Planning Products (CTPP), American Association of State Highway and Transportation Officials (AASHTO)

County employment projections, as detailed below in Table 9, are the same projections analyzed in the original indirect effects analysis. SEWRPC reviewed the forecasts as part of the 2020 VISION 2050 update and determined the plan forecasts remain valid for long-range planning purposes.

As noted in a 2019 Wisconsin Department of Workforce Development technical report, more workers travel from Milwaukee County to Waukesha County than from Waukesha County to Milwaukee County. More than 25 percent of the Waukesha County workforce lives in Milwaukee County while only 12 percent of the Milwaukee County workforce lives in Waukesha County (Wisconsin Department of Workforce Development, 2019)

Table 9: Employment Projections – Milwaukee and Waukesha Counties – 2050

Location	2010	2050	Absolute Change	Percent Change	Percent of Region (2010)	Percent of Region (2050)
Milwaukee County	575,400	608,900	33,500	5.8	48.9	43.9
Waukesha County	268,900	338,400	69,500	25.8	22.8	24.4
SE Region	1,176,600	1,386,900	210,300	17.9	100.0	100.0

Source: SEWRPC. The Economy of Southeastern Wisconsin. Technical Report No. 10 (5th Edition). 2013.

2.2.1.4 Racial Composition

Table 10 shows the racial composition for the census tracts in the primary study area. In comparison to data in the original indirect effects analysis, the primary study area still contains a majority-minority population at 64.4 percent of the population, compared to 57.1 percent in 2010 (U.S. Census Bureau 2021; U.S. Census Bureau, 2010a). Consistent with the original indirect effects analysis, the largest minority groups remain Hispanic and Black or African American. Between 2010 and 2021, Hispanic populations decreased by 6.3 percent and Black or African American populations decreased by 29.0 percent within the study area.

Table 10: Primary Study Area – Racial Composition

Race/Ethnicity	Total Primary Study Area (2010)	Total Primary Study Area (2021)	Percent Change
White	74,433	62,265	-16.3
Hispanic	46,821	43,885	-6.3
Black or African American	38,892	27,604	-29.0

Race/Ethnicity	Total Primary Study Area (2010)	Total Primary Study Area (2021)	Percent Change
American Indian/Alaska Native	1,250	985	-21.2
Asian	7,672	7,084	-7.7
Native Hawaiian/Other Pacific Islander	105	38	-63.8
Other	273	387	41.8
Two or More Races	3964	4,577	15.5
Total Population	173,410	146,825,	-15.3
Total Minority Population	98,977	94,559	-4.5
Percent Minority Population	**57.1**	**64.4**	**7.3**

Source: U.S. Census Bureau, 2010 Census of Population
U.S. Census Bureau, American Community Survey, 5-Year Estimates 2017-2021

Table 11 shows the racial composition for the secondary study area. The secondary study area contains a 39.2 percent minority population, compared to 35.1 percent in 2010 (U.S. Census Bureau, 2010a; U.S. Census Bureau, 2021). The largest minority groups remain Hispanic and Black or African American. Between 2010 and 2021, Hispanic populations increased by 19.1 percent, while Black or African American populations decreased by 0.5 percent within the secondary study area.

Table 11: Secondary Study Area – Racial Composition

Race/Ethnicity	Total Secondary Study Area (2010)	Total Secondary Study Area (2021)	Percent Change
White	868,072	817,027	-5.9
Hispanic	142,162	169,267	19.1
Black or African American	253,520	252,165	-0.5
American Indian/Alaska Native	6,075	4,279	-29.6
Asian	42,682	56,994	33.5
Native Hawaiian/Other Pacific Islander	413	356	-13.8
Other	1,391	4,399	216.2
Two or More Races	23,311	39,968	71.5
Total Population	1,337,626	1,344,455	0.5
Total Minority Population	469,554	527,428	12.3
Percent Minority Population	**35.1**	**39.2**	**4.1**

Source: U.S. Census Bureau, 2010 Census of Population
U.S. Census Bureau, American Community Survey, 5-Year Estimates 2017-2021

2.2.1.5 Poverty

Table 12 shows the percentage of the population in poverty for the primary study area in 2010 and 2021 (U.S. Census Bureau, 2021; U.S. Census Bureau, 2010b). Poverty declined slightly within the study area at 24.2 percent in 2021 compared to 30 percent in 2010.

Table 12: Primary Study Area – Persons in Poverty

Location	Percent in Poverty (2010)	Percent in Poverty (2021)
City of Milwaukee	34.4	29.0
City of West Allis	16.2	11.6
Village of West Milwaukee	16.7	12.8
City of Wauwatosa	6.2	7.34
Total Primary Study Area	**30.0**	**24.4**

Source: U.S. Census Bureau, American Community Survey, 5-Year Estimates 2006-2010; U.S. Census Bureau, American Community Survey, 5-Year Estimates 2017-2021

Table 13 shows the percentage of the population in poverty for the secondary study area in 2010 and 2021. Poverty declined within the secondary study area from 17.1 percent in 2010 to 14.0 percent in 2021 (U.S. Census Bureau, 2010b; U.S. Census Bureau, 2021).

Table 13: Secondary Study Area – Persons in Poverty

Location	Percent in Poverty (2010)	Percent in Poverty (2021)
Milwaukee County	21.5	17.9
Waukesha County	6.3	4.9
Total Secondary Study Area	**17.1**	**14.0**

Source: U.S. Census Bureau, American Community Survey, 1-Year Estimates 2010; U.S. Census Bureau, American Community Survey, 5-Year Estimates 2017-2021

2.2.1.6 Transportation to Work

Table 14 shows the modes of transportation to work for the primary study area for 2010 (U.S. Census Bureau, 2010b), which was analyzed in the original indirect effects analysis, and 2021 (U.S. Census Bureau, 2021). The overall distribution of modes to work is similar between 2010 and 2021. However, the study area saw a slight increase in workers who walked to work and worked from home. The percent of workers who drive alone, carpooled and took public transportation modes declined slightly between this time period.

Table 14: Primary Study Area – Modes of Transportation to Work of Workers 16 and Older

Mode	Percent (2010)	Percent (2021)
Drive Alone	67.4	66.9
Carpool	13.5	9.7
Public Transportation	7.3	5.9
Bicycle	0.6	0.6
Walked	7.7	8.2
Other/Worked from Home	3.2	8.7

Source: U.S. Census Bureau, American Community Survey, 5-Year Estimates 2006-2010
U.S. Census Bureau, American Community Survey, 5-Year Estimates 2017-2021

Table 15 shows the modes of transportation to work for the secondary study area for 2010 (U.S. Census Bureau, 2010b) and 2021 (U.S. Census Bureau, 2021). The overall distribution of modes to work is similar between 2010

and 2021. However, the secondary study area saw a slight increase in workers who worked from home. The percent of workers who drove alone, carpooled, took public transportation, biked, or walked to work declined slightly during this time period.

Table 15: Secondary Study Area – Modes of Transportation to Work of Workers 16 and Older

Mode	Percent (2010)	Percent (2021)
Drive Alone	79.3	76.5
Carpool	9.4	7.4
Public Transportation	4.2	2.9
Bicycle	0.5	0.4
Walked	2.9	2.4
Other/Worked from Home	3.7	10.4

Source: U.S. Census Bureau, American Community Survey, 5-Year Estimates 2006-2010
U.S. Census Bureau, American Community Survey, 5-Year Estimates 2017-2021

2.2.1.7 Vehicles Available

Table 16 shows the vehicles available by household for the primary study area for 2010, which was analyzed in the original indirect effects analysis, and 2021 (U.S. Census Bureau, 2021; U.S. Census Bureau, 2010b). Since 2010, vehicle availability has not changed significantly in the primary study area. Close to 20 percent of the study area households do not have a vehicle. The remaining households have one vehicle (44.1 percent) or two or more vehicles (37.9 percent).

Table 16: Primary Study Area - Vehicles Available by Household

Number of Vehicles Available (by household)	2010	
None	19.6	
One Vehicle	42.6	
Two or More Vehicles	37.7	

Source: U.S. Census Bureau, American Community Survey, 5-Year Estimates 2006-2010
U.S. Census Bureau, American Community Survey, 5-Year Estimates 2017-2021

Table 17 shows the vehicles available by household for the secondary study area for 2010 and 2021 (U.S. Census Bureau, 2021; U.S. Census Bureau, 2010b). Since 2010, vehicle availability has not changed significantly in the secondary study area. About 10 percent of the secondary study area households do not have a vehicle. The remaining households have one vehicle (37.7 percent) or two or more vehicles (52.4 percent).

Table 17: Secondary Area - Vehicles Available by Household

Number of Vehicles Available (by household)	2010	2021
None	10.7%	9.9%
One Vehicle	37.4%	37.7%
Two or More Vehicles	51.8%	52.4%

Source: U.S. Census Bureau, American Community Survey, 5-Year Estimates 2006-2010
U.S. Census Bureau, American Community Survey, 5-Year Estimates 2017-2021

2.2.2 Land Use, Transportation and Development Patterns

For the supplemental analysis, land use information and local and regional plans were reviewed, and stakeholder interviews were conducted to update the land use and development trends analyzed in the original indirect effects analysis.

Since the original indirect effects analysis, the regional transportation and land use plan, Vision 2050, has been updated (SEWRPC, 2020c). SEWRPC's *VISION 2050* guides the land use and transportation vision within the seven-county southeast Wisconsin region that includes both the primary and secondary study areas. VISION 2050 was adopted in 2016 and updated in 2020 to assess progress and changes within the region. The plan provides recommendations to state and local governments to guide land use and transportation development.

Exhibit 3 shows the land use pattern of the primary study area, updated with 2015 land use data, the most recent data available. It shows large compact residential areas surrounding the central business district in downtown Milwaukee and large pockets of industrial and government/institutional uses. Linear commercial corridors bisect the residential areas along the east-west and north-south arterials. Large blocks of recreational uses can be seen at the major regional entertainment facilities and county park system. Open lands mostly are associated with small strips of environmental corridors along the river corridors as well as a few vacant parcels of land. These general land uses, business/commercial corridors, redevelopment areas, neighborhood revitalization areas with the primary study area remain the same as the original indirect effects analyses as it is an existing urbanized area.

Exhibit 4 shows the land use pattern of the secondary study area, updated with 2015 land use data. The map shows the more urbanized and compact areas of Milwaukee County and the eastern side of Waukesha County (New Berlin, Elm Grove, Brookfield, Menomonee Falls, Waukesha) transition to areas of development surrounded by areas of open space and agricultural land use.

The following sections update notable land use, transportation and development patterns within the primary study area and secondary study area.

Exhibit 3: Primary Study Area - Existing Land Use

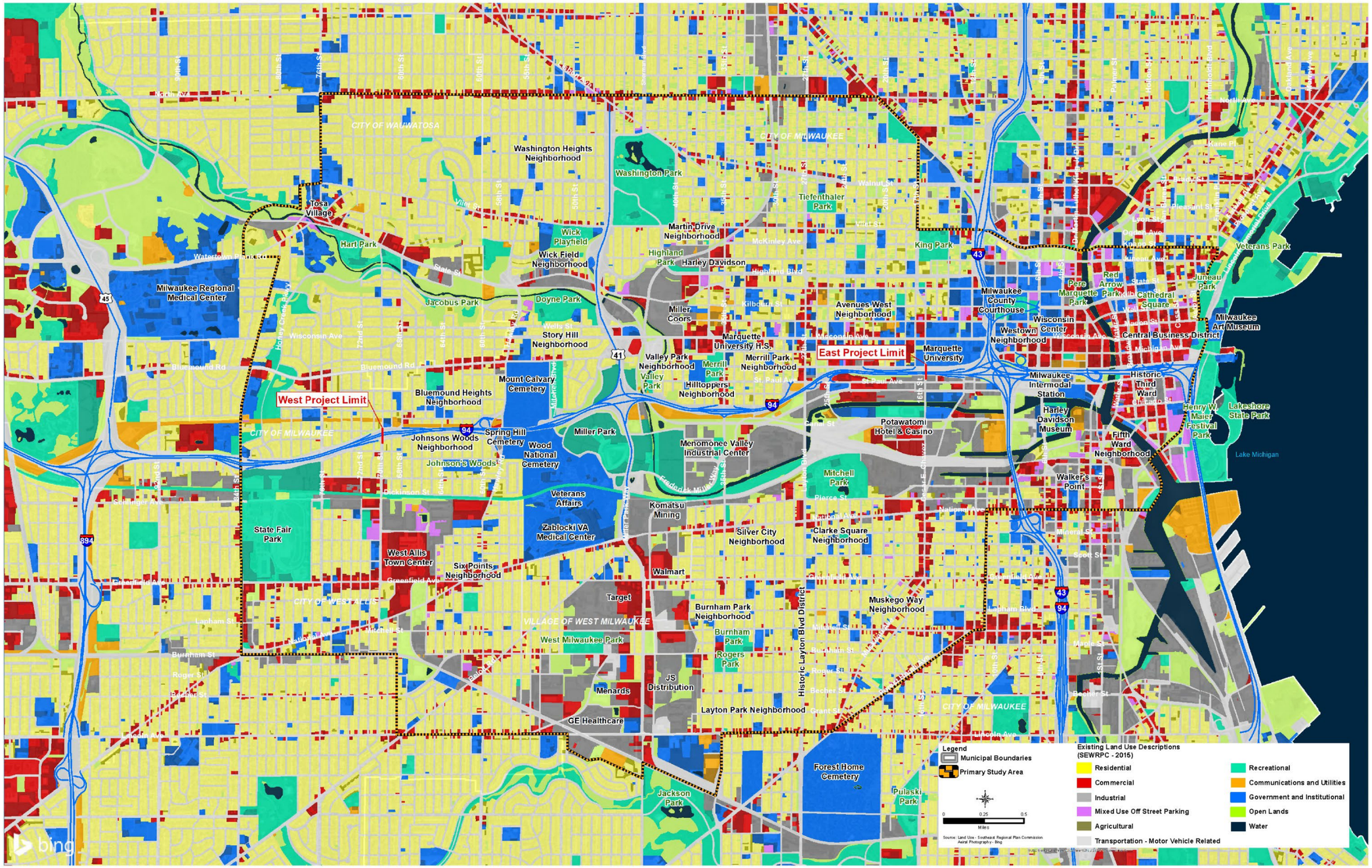
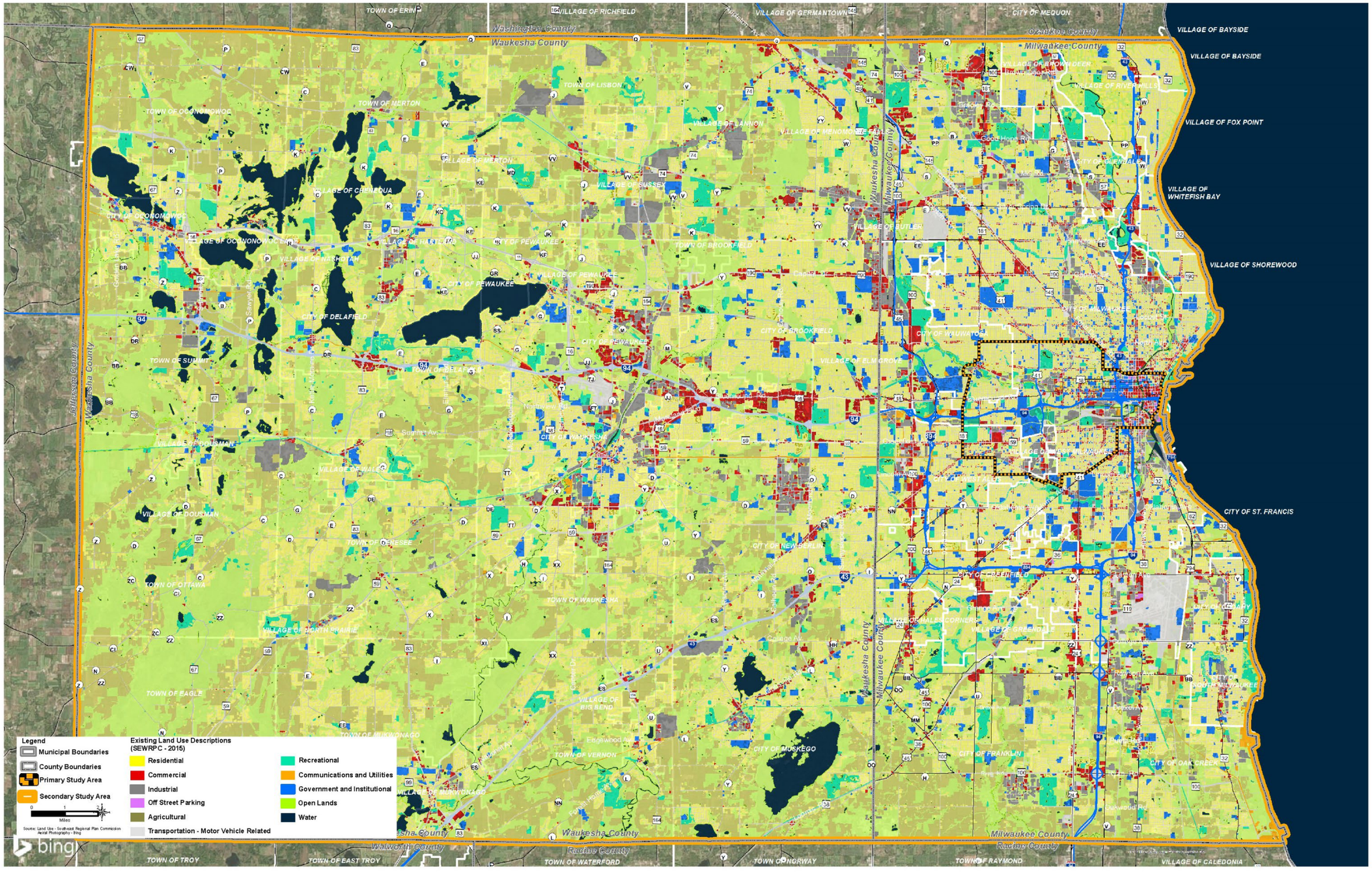


Exhibit 4: Secondary Study Area – Existing Land Use



2.2.2.1 Primary Study Area

City of Wauwatosa

As part of the supplemental analysis, the project team interviewed City of Wauwatosa staff to update and validate land use and development trends identified in the original indirect effects analysis. Staff noted several areas of redevelopment is occurring within the city in recent years, with most occurring in areas outside the primary study area along the I-41 corridor. As detailed in Section 2.2.1, the primary study area within Wauwatosa has seen considerable population growth over the past ten years. State Street in the primary study area has seen several redevelopments in recent years as industrial uses are redeveloped to multi-family, with over 700 new residents in the corridor since 2015 according to local staff.

The *City of Wauwatosa Comprehensive Plan* published in 2008 was analyzed in the original indirect effects analysis and remains the guiding document for land use and development in Wauwatosa (City of Wauwatosa, 2008). Similarly, the *Village of Wauwatosa Strategic Development Plan* continues to guide the development of the Tosa Village as analyzed in the original indirect effects analysis (City of Wauwatosa). The plan recommends several redevelopment sites that convert public lands or former industrial areas to new high-density residential and commercial uses in the primary study area. In 2019, the city completed the Village Reconstruction & Streetscaping project that provides a new vision for the streetscaping and pedestrian experience in the Village. The *Wauwatosa East Town North Avenue Plan*, as analyzed in the original indirect effects analysis, continues to guide development, land use and transportation along North Avenue in Wauwatosa (City of Wauwatosa). The city anticipates continued investment in small-scale neighborhood-oriented businesses within this corridor, redevelopment of key sites, and ongoing rehabilitation of existing buildings.

City of West Allis

The project team conducted an interview with the City of West Allis staff to confirm the development and land use trends identified in the original indirect effects analysis. City staff indicated the community is becoming more racially diverse and they expect that trend to continue. Development interest in West Allis's redevelopment areas remains strong with space to absorb more multi-family residential development and demand for neighborhood commercial redevelopment. The city's central location in the region and its existing freeway access was noted by City staff as a key factor driving business and residential demand within West Allis. City staff noted that the city's industrial past means many redevelopment opportunities require remediation of contaminated land, along with utilities and street infrastructure which often require city support using tax increment financing. As a result, developing in West Allis can be more complex and more costly and this can make it challenging for West Allis to compete for development with other suburban communities that do not have these challenges.

Redevelopment has continued in West Allis since the original indirect effects analysis. The Six Points area saw the completion of 177 apartments and a 20,000 square-foot medical clinic in 2018-2019 with another multi-family development proposed. The City continues to market and support the redevelopment of various properties within the Six Points area. The Milwaukee Mile area is identified as a redevelopment area due to its highly visible land with strong potential.

In 2021, the City updated its West Allis 2030 Comprehensive Plan to year 2040 (City of West Allis, 2021). The plan notes that over the past 10 years the City has seen growth in residential and commercial value and although the City is fully developed, property values continue to increase through various redevelopment efforts (City of West Allis, 2021). The City's equalized value has increased from $3.5 Billion in 2005 to over $4.0 Billion in 2019 (City of West Allis, 2021). In the plan update, the vision and goals of West Allis remain the same as the *2030 Comprehensive Plan*, which was analyzed in the original indirect effects analysis. The 2040 plan will continue to guide land use and development for the next 20 years. Regarding transportation, the plan aims to "provide a safe and efficient multi-modal transportation network that will effectively serve the travel needs

within the city and region." The transportation goals within the plan focus on the development of complete streets, efficient vehicular movement, and coordination with other agencies. The comprehensive plan recommends the extension of Washington Street to connect 60th Street and 70th Street, which could support the continued redevelopment of the Renaissance Faire building. West Allis continues to implement portions of its Bicycle and Pedestrian Master Plan in conjunction with other capital projects, including the addition of bike lanes along National Avenue as part of the National Avenue Project. In the supplemental interview with West Allis staff, transit service was noted as a key transportation asset for the community. Staff highlighted that Milwaukee County Transit System (MCTS) service in the city has been scaled back, reducing transit coverage. Furthermore, City staff support potential future opportunities for bus rapid transit (BRT) in West Allis and last-mile connections to transit.

Village of West Milwaukee

The project team interviewed the Village of West Milwaukee staff to confirm the development and land use trends identified in the original indirect effects analysis. In line with the original analysis, the Miller Park Way[1] corridor continues to be a focus of village redevelopment efforts. Local staff highlighted that there are two new key development areas within the village: the former Komatsu site and the former Rexnord site. The former Komatsu site is approximately 44 acres along National Avenue that will be available for redevelopment upon relocation of their corporate campus to the Harbor District in Milwaukee. The second major development site is Rexnord's campus on Greenfield Avenue. Local staff indicated that both of these redevelopments would likely take five to ten years to fully redevelop and would require local tax increment financing support. Beyond redevelopment sites, village staff noted strong retail vitality along Miller Park Way and a lack of space for any new residential development outside of the redevelopment sites detailed above. Staff also noted recently proposed development plans including a GE Healthcare plant on Electric Avenue. Finally, staff highlighted freeway access as a key factor for development as it provides efficient access to the village from the region.

Since the original indirect effects analysis, West Milwaukee adopted a new comprehensive plan, the *2019 Comprehensive Plan Update* (Village of West Milwaukee, 2019). The updated plan notes the built-out nature of West Milwaukee as a key challenge as the village looks to grow over the next 20 years. The plan reaffirms Miller Park Way as the key anchor for commercial and industrial redevelopment. Key redevelopment areas noted within the plan include Village Center (Rexnord campus), Gateway District (Komatsu), National Avenue, and Miller Park Way. The plan envisions the Komatsu redevelopment site as a gateway destination with mixed-use and commercial uses. The Rexnord redevelopment site is imagined as a village center with neighborhood-scale mixed-use that can serve as a downtown for the village. The rest of the plan does not recommend major changes to land use and development as the community is largely built-out except for the larger redevelopment opportunities. West Milwaukee identifies three transportation goals within the plan:

- Complete a Bicycle and Pedestrian Plan to Implement a Connected Bike and Pedestrian System
- Work with Regional Transportation Organizations to Implement Regional Plans
- Adopt an official map to guide future development

West Milwaukee staff identified bicycle and pedestrian transportation as a key focus for their community, putting special emphasis and support for the development of north-south connections past the freeway. Staff also noted the benefit that local businesses see from improved transit providing connections to employees.

City of Milwaukee

City of Milwaukee's development is guided by comprehensive planning efforts in the study area neighborhoods. Neighborhood land use, character, and cohesion remain largely the same as discussed in the original indirect effects analysis.

[1] South of National Avenue, what is now Brewers Boulevard is still called Miller Park Way.

According to interviews with City development staff, there is continued demand for residential homes in the city's traditional walkable neighborhoods. These traditional walkable neighborhoods are compact, dense neighborhoods anchored by strong commercial districts such as the Lower East Side and the Third Ward. Other walkable neighborhoods in Milwaukee's central city continue to struggle with declining populations and revitalization efforts hampered by poverty, such as Midtown and Washington Park. The Menomonee Valley development trends are similar to the original indirect effects analysis as it continues to be as an important employment center with many residents from adjacent neighborhoods employed in the valley.

The greater downtown area has seen continued strong residential demand with several multi-family developments completed in recent years, increasing the total housing units in the downtown area to over 20,000 housing units according to local officials. The downtown area has seen the development and ongoing planning of major projects in recent years such as the Deer District, the Couture, Wisconsin Center Expansion, and several multi-family residential developments. City of Milwaukee staff also expects continued strong demand for residential development near employment. Milwaukee Downtown Business Improvement District (BID) 21 staff echoed these trends, noting that despite the pandemic there have been a number of residential projects moving forward in recent years. The BID staff highlighted that the locational benefits of downtown and ease of transportation access were likely factors for the demand for ongoing residential development in the downtown area. City staff anticipate this demand will drive office to residential conversions in downtown and near-downtown areas in upcoming years.

Stakeholder interviews were completed with local neighborhood groups and organizations to better understand current development trends in neighborhoods outside the downtown area. VIA Community Development Corporation (CDC), which focuses on Milwaukee's near south side, noted a recent increase in small business development as more local residents are looking to start their own businesses. Near West Side Partners which represents an area north of I-94 and west of downtown, noted that anchor institutions remain key to the development trends of the neighborhood, such as Harley Davidson, the Ambassador Hotel, Marquette University, and Molson-Coors. Menomonee Valley Partners noted that the valley is close to being fully built out with the remaining available land being mostly brownfield which is more complex to develop. The Clarke Square neighborhood to the southeast of the project area is home to many local businesses along Cesar Chavez Drive. In recent years, the Clarke Square Neighborhood Initiative has worked with the Cesar Chavez BID to implement strategies to maintain and grow local businesses, including pop-up spaces to encourage small business development.

The supplemental analysis reexamined the following local plans and noted any updates since the original analysis :

- *Near West Side Area Comprehensive Plan:* The *Near West Side Area Comprehensive Plan was* amended on January 29, 2017. The 2017 amendment included an updated North 27th Street Corridor Strategy. The strategy focuses on the development of the corridor between Highland Avenue and W. St. Paul Avenue utilizing zoning and land use; transportation; urban design and landscaping; and Crime Prevention Through Environmental Design (CPTED). (City of Milwaukee, 2017)
- *Milwaukee West Side Area Plan*: The plan remains the same as when examined for the original indirect effects analysis. (City of Milwaukee, 2009a)
- *Redevelopment Plan for The Avenues West*: The redevelopment plan remains the same as when examined for the original indirect effects analysis. (City of Milwaukee, 2009b)
- *Menomonee Valley Area Plan*: The Menomonee Valley Area Plan was updated in 2015 and focuses on continued sustainable development that supports industry, entertainment, community, and natural resources. (City of Milwaukee, 2015)
- *Downtown Area Plan*: An update is currently underway for the Downtown Area Plan. The update, named Connec+ing MKE, aims to "shape the next two decades of development, policies, and programs

that enable a more walkable, vibrant, diverse, inclusive and resilient downtown." (City of Milwaukee, 2021)

Major development projects that have been proposed or completed in Milwaukee since the original indirect effects analysis include:

- The Couture: a 44-story residential development in downtown Milwaukee is currently under construction.
- Fiserv Forum and Deer District: 714,000 square foot entertainment arena with 30-acre entertainment district surrounding the arena. The arena was completed in 2018 and the Deer District is planned for additional development.
- Wisconsin Center Expansion: 112,000 square feet expansion of the convention center facility in downtown Milwaukee is underway.

The portion of Milwaukee in the primary study area has undergone recent updates to its transportation vision and planning. In 2018, the City of Milwaukee adopted a Complete Streets Policy. The policy defines Complete Streets as "facilities that are safe, comfortable and convenient for users of all travel modes, including walking, use of mobility aids, bicycling, riding public transportation, and driving motor vehicles." Milwaukee's Multimodal Transportation Department is tasked with implementing complete streets throughout the city. Recent projects within the primary study area include the Hawley Road Lane Reconfiguration and the 27th Street Rapid Implementation Initiative. Milwaukee County's East-West Bus Rapid Transit (E-W BRT), which began service in June 2023, travels through the primary study area in Milwaukee. The E-W BRT provides rapid transit service between downtown Milwaukee and the Milwaukee Regional Medical Center. Since the original indirect effects analysis, Milwaukee also initiated service for the streetcar, The Hop, which carries passengers between the Milwaukee Intermodal Station and Milwaukee's lower east side with stops throughout downtown.

2.2.2.2 Secondary Study Area

Milwaukee County

Milwaukee County is a largely developed area with limited undeveloped land. The county is dominated by the City of Milwaukee which is mostly built out with dense and compact historical development patterns. Franklin and Oak Creek are the only communities with greenfield development opportunities in the county with most other communities focusing on redevelopment and enhancing neighborhood quality of life. Outside the primary study area, Milwaukee County is home to several major economic activity centers as identified in VISION 2050 including Cudahy, General Mitchell Airport, Granville, and Bayshore. Major economic activity centers are defined as areas containing concentrations of commercial and/or industrial land with at least 3,500 employees or 2,000 retail employees. VISION 2050 also notes other planned economic activity centers at Park Place Business Park, 27th/College Avenue, and Northwestern Mutual (Franklin) (SEWRPC, 2020c).

Since the completion of the original indirect effects analysis, a number of transportation improvements have moved forward within Milwaukee County, including The Hop streetcar and Milwaukee County's E-W BRT. In 2021, MCTS underwent a system redesign branded as MCTS NEXT. MCTS NEXT resulted in higher frequency routes with more connection points to provide more reliable service to riders (Milwaukee County Transit System, n.d.). In addition, WisDOT is planning to add a new round trip passenger rail service along the Twin Cities-Milwaukee, Chicago corridor in 2024 and is working with Illinois to increase the number of round trips on Amtrak's Hiawatha route between Chicago and Milwaukee.

Waukesha County

Waukesha County contains a mixture of urbanized areas and non-urbanized areas. The most highly urbanized areas of Waukesha County are concentrated on the eastern side of the county in New Berlin, Brookfield,

Menomonee Falls, Waukesha, and Pewaukee. The Hartland-Delafield-Oconomowoc area in western Waukesha County is also urban, but the intensity of development in this area is less compared with eastern Waukesha County communities. The urbanized areas of Waukesha County contain large areas of medium- to low-density residential areas interspersed with industrial and commercial centers. The primary commercial and industrial job centers are located along major transportation corridors such as I-94 and I-41, and local arterials such as Bluemound Road and Moorland Road. In Waukesha County, VISION 2050 highlights several existing major economic activity centers including Bluemound Road and Pewaukee (SEWRPC, 2020c). The plan recommends major economic activity centers at New Berlin (south along I-43), Delafield, and Oconomowoc.

Waukesha Metro Transit provides transit service in Waukesha County, operating ten fixed routes services. Additionally, Wisconsin Coach Lines operates two routes between Milwaukee and Waukesha/Oconomowoc. In 2022, FlexRide Milwaukee was launched, providing a low-cost, on-demand transportation option between central city Milwaukee residents and Waukesha County employers (FlexRide Milwaukee, n.d.). FlexRide Milwaukee is a pilot service developed with the goal of mitigating the spatial mismatch in the region between affordable housing in Milwaukee and jobs in suburban communities. Waukesha County is also examining BRT as a future transportation option as officials monitor the progress of E-W BRT to determine if a similar line could be created or extended into Waukesha County.

SEWRPC'S VISION 2050 is the guiding document for land use and transportation in the secondary study area through the year 2050. The land use component of VISION 2050 recommends focusing development within planned urban service areas, preserving natural resources, and maintaining agricultural lands (SEWRPC, 2020c). To achieve that, VISION 2050 includes several recommendations that encourage infill development, support transit-oriented development, encourage housing near employment-supporting land uses, and encourage economic growth. Vision 2050 is an advisory plan which requires actions by local governments to implement its recommendations.

VISION 2050 also recommends transportation investments throughout the region. In the secondary study area, VISION 2050 recommends the widening of I-94 in Waukesha County with one new access point, a full interchange at Calhoun Road. Regarding public transit, VISION 2050 recommends the improvement and expansion of public transit in the secondary study area, including commuter rail lines; rapid transit lines; and significantly expanded local bus, express bus, commuter bus, shared-ride taxi, and other flexible transit services.

As part of the development of VISION 2050, SEWRPC completed an equity analysis, evaluating the impacts and benefits of the recommended plan. VISION 2050 concluded that, if implemented, VISION 2050 would help to reduce regional disparities between white populations and people of color by providing more equitable access to opportunities through improved access to jobs, education, healthcare, and other activities. The analysis also concluded that if there is no additional funding identified to implement the public transit element of the plan, a disparate impact on the Region's people of color, low-income populations, and people with disabilities is likely to occur (SEWRPC, 2020b).

The project team met with staff from SEWRPC to discuss development trends in the primary and secondary study areas. SEWRPC staff noted strong growth in the warehousing and industrial sector throughout the region leading to improved job growth compared to the past 20 years. In recent years the region has seen a stronger emphasis on multi-family residential developments, as opposed to single-family. In Milwaukee County, SEWRPC noted demand for neighborhoods with cultural and recreational amenities near downtown and easy transportation access are in high demand, while some other neighborhoods have struggled with divestment and its effects.

To confirm land use and development trends in Waukesha County, the project team interviewed the Waukesha County Business Alliance (WCBA) staff. WCBA staff noted strong development demand throughout Waukesha County as it continues to grow in population. Transportation was highlighted as a key development factor as

companies in the region continue to hire employees and access freight mobility. WCBA staff detailed continued industry growth as workforce and hiring remain a key challenge with transportation access important to attracting talent and commerce.

The *Comprehensive Development Plan for Waukesha County*, approved in 2009, remains the guiding document for development within Waukesha County and was analyzed in the original indirect effects analysis (Waukesha County Department of Parks and Land Use, 2009). Municipalities throughout Waukesha County maintain separate comprehensive plans that guide development for those communities.

2.2.3 Natural and Historic Resources

As detailed in the original indirect effects analysis, due to extensive urbanization, the remaining natural, biological and recreational resources within the primary study area generally lie within narrow bands of environmental corridors along the Menomonee River, Honey Creek, and Milwaukee River. The environmental corridors contain public parks and recreational trails and are owned by Milwaukee County, which preserves the resources from development. A few critical species habitat areas are located along the Menomonee River environmental corridor and within the VA campus. Since the original indirect effects analysis, these natural resources largely remain unchanged and preserved from development. Similarly, the historic resources identified as listed or eligible for listing on the National Register during the original EIS remain the same with some additional resources identified. Two properties in the study area have been listed in the National Register since completion of the 2016 Final EIS:

- West St. Paul Avenue Industrial Historic District
- 16th Street Viaduct

The natural, biological and recreational resources within the secondary study area largely remain intact since the original indirect effects analysis. Milwaukee County is highly urbanized, but still maintains a natural resource base including the shores of Lake Michigan, major rivers and streams, small inland lakes, and areas of quality woodlands and wetlands. According to SEWRPC, the most significant remaining natural resources in the county are contained in environmental corridors with approximately 94 percent of all primary environmental corridors within the region protected from incompatible development. The primary environmental corridors in Milwaukee County are typically located along major stream valleys and along the Lake Michigan shoreline. Most of the park and open space within Milwaukee County remain owned by Milwaukee County Parks and thus preserved from development.

The secondary study area in Waukesha County contains large intact environmental corridors that are generally located along rivers and streams, around inland lakes, and the Kettle Moraine. Many glacial features are present in Waukesha County, with vast tracts of these features preserved by state-owned natural areas and state parks. The environmental corridors have been somewhat more impacted by development on the eastern side, in the more urbanized areas of the county.

2.3 Steps 3 and 4: Identify Impact-Causing Activities of the Proposed Project Alternatives and Identify Potentially Significant Indirect Effects

Step 3 of the analysis examines the No-build alternative and identifies impact-causing activities for each Build alternative. Step 4 builds on Step 3 by identifying the indirect effects that may be caused by the project's impact-causing activities. The two types of indirect effects that are being considered include land use effects and encroachment-alteration effects. The effects are evaluated in greater detail in the next steps (Section 2.4, Steps 5 and 6).

2.3.1 No-Build Alternative

The impact-causing activities of the No-build alternative relate to its lack of action, which does not address the purpose of and need for the project with respect to safety concerns, existing highway deficiencies, and future traffic demand. Under this alternative, congestion and vehicle crashes would continue to increase, resulting in greater travel times and less reliable travel throughout the corridor. Additionally, more commuter traffic would shift to local arterials to avoid the congested freeway, which could diminish the neighborhood and business environments along several corridors in the primary study area by increasing pedestrian-vehicle conflicts.

The No-build alternative could have indirect effects on land use because transportation mobility would decline, hindering economic development potential in the primary study area, and causing development to shift to other areas of the region that are less congested and have more reliable travel times.

2.3.2 Build Alternatives

The impact-causing activities of the Build alternatives include the following:

- Modernization and adding a new travel lane in each direction (8-lane alternative).
- Modernization of existing lanes (6-lane alternative)
- Modifications to interchange access (8-land and 6-lane alternatives)
- Encroachment of infrastructure on adjacent resources. (8-lane and 6-lane alternatives)

The changes to mobility that would result from the project's new travel lanes or modernization of the existing travel lanes could influence decisions about local and intraregional development locations. Modifications to existing interchange access points could cause indirect land-use effects by changing the economic competitiveness of an area based on whether a Build alternative maintains, increases, or reduces local access to I-94. Encroachment of the I-94 freeway could indirectly affect neighborhood quality of life and the vitality of business corridors.

2.4 Steps 5 and 6—Analyze the Indirect Effects and Evaluate Assumptions; Assess Consequences and Identify Mitigation Activities

Step 5 evaluates the likelihood and magnitude of the indirect effects for the Build alternatives and the No-build alternative. Step 6 discusses the consequences of the indirect effects identified in Step 5 that may result from the Build alternatives and discusses potential mitigation measures that could be used by WisDOT and other agencies to minimize those effects.

For purposes of this document, these two steps were combined and are presented by the following types of indirect effects:

- Indirect Land Use Effects Related to New Travel Lanes – Primary Study Area
- Indirect Land Use Effects Related to New Travel Lanes – Secondary Study Area
- Indirect Land Use Effects Related to Interchange Modifications – Secondary Study Area
- Indirect Encroachment Alteration Effects – Primary Study Area

The following subsections update the analysis and conclusions from the original indirect effects analysis.

2.4.1 Indirect Land Use Effects Introduction

The reason for evaluating a transportation project's land-use effects is because several research studies have

shown that land-use effects can result from improved transportation access that enables faster or more reliable travel between destinations, or by new access to destinations. The most recent research on this topic was published in 2012 by the Transportation Research Board (TRB). The report titled *Interactions Between Transportation Capacity, Economic Systems, and Land Use* analyzed 100 transportation case studies that documented the long-term before-and-after economic impacts of a variety of highway capacity investments that increased the desirability of land and resulted in residential and business growth (Transportation Research Board, 2012).

It should be noted that improved transportation accessibility alone is not enough to cause land-use change. As documented in the TRB report, supportive local factors such as availability of land; local government development policies and incentives; availability of complementary infrastructure (i.e. sewer and water); and local economic conditions affect the magnitude of a transportation project's long-term economic impact (Strategic Highway Research Program 2012). The report states that transportation case studies with supportive local factors generated substantially more positive economic development outcomes. Conversely, transportation case studies that lacked local supporting factors or had distressed economies were associated with fewer economic development results.

Another important consideration that influences the magnitude of land-use effects is the extent and maturity of existing transportation infrastructure. As discussed in the NCHRP Report 466, the influence of highway projects on land use diminishes with successive improvements because each new improvement brings a successively smaller increase in accessibility (Transportation Research Board, 2002). This means that new highways have a much larger effect on land use compared with an existing facility that is expanded.

The following subsections update the original indirect effects analysis and evaluate the land-use effects that could result from the project's impact-causing activities, identified in Section 2.3, and consider the magnitude of those effects as they relate to the presence of supportive local development factors and the maturity of the transportation system.

2.4.1.1 Indirect Land Use Effects Related to New Travel Lanes – Primary Study Area

Based on supplemental stakeholder feedback and the updated inventory, the study team confirmed the findings in the original indirect effects analysis are still valid for the primary study area related to new travel lanes. Nearly all stakeholders interviewed stated that the reconstruction and modernization of the I-94 East-West corridor are important to the vitality of residential and business areas in the primary study area.

The Build alternatives would improve mobility and travel time reliability along I-94 and support development within the primary study area because people and businesses would not be detracted from the area by traffic congestion along the freeway and along adjacent arterial streets. As a result, improved mobility could have the following effects within the primary study area as detailed in the original analysis:

- Maintain the economic competitiveness of the existing business districts and neighborhoods by improving access to workers and facilitating freight movement.
- Encourage redevelopment of former industrial areas and underutilized parcels by maintaining and improving interchange access points.
- Improve the business environment along local arterial streets by reducing the amount of traffic that diverts from the freeway to local arterial streets which would improve pedestrian mobility and safety and increase customer patronage of businesses.
- Support the vitality of the numerous regional cultural, recreational, and entertainment venues that draw visitors from the region and beyond.

These land-use effects are expected for both the 8-lane and 6-lane alternatives as both alternatives would improve mobility over the No-Build alternative. However, traffic analysis shows that the 8-lane alternative would result in less traffic diversion to local arterial streets than the 6-lane alternative and therefore, may help facilitate local community plans to enhance the neighborhood and business vitality within existing business districts. Less congested local streets improve safety for other travel modes and potentially create opportunities for an enhanced pedestrian environment and more efficient transit and bike operations.

Although adding additional travel lanes would help facilitate planned development in the primary study area, the magnitude of this effect is not expected to be substantial. The primary study area is a fully developed urban area with established land-use patterns. Also, it has a mature transportation system that is composed of an extensive arterial network and numerous connections to the regional freeway system. As a result, the incremental mobility provided by new travel lanes in this context is not likely to be great enough to substantially change land-use patterns within the primary study area.

Based on stakeholder feedback, the study team determined that planned development that may be facilitated by the Build alternatives would generally be seen as positive and would help implement land use plans and economic development goals within the primary study area. Planned redevelopment and neighborhood revitalization would increase local tax bases and help pay for the cost of public services that are already in place. Redevelopment that could be facilitated by the Build alternatives would also increase the availability of goods and services and employment opportunities within close proximity to a large population base in the primary study area. This could benefit minority and low-income populations who tend to rely more on transit trips because most businesses within the primary study area are accessible by local transit services and in some cases by walking and biking. Furthermore, redevelopment and infill development help maintain the viability of existing urbanized areas and reduce the pressure to develop in outlying areas of the region.

The best way to manage indirect effects associated with the Build alternatives is through local land use and development policies that are under the jurisdiction of local governments. Municipalities in the primary study area are already using a number of tools (i.e., Tax Increment Districts, BIDs, façade grants, tax credits, brownfield grants) to encourage and manage development within their communities. All communities within the primary study area have plan commissions, comprehensive planning documents, and zoning regulations in place to direct the amount, type, and density of all development within their communities. Most of the communities also have planning and economic development departments to manage development and implement local plans.

2.4.1.2 Indirect Land Use Effects Related to New Travel Lanes – Secondary Study Area

Based on supplemental stakeholder feedback and the updated review of plans and trends in the inventory, the study team confirmed the findings in the original indirect effects analysis are still valid for the secondary study area. The effects for the secondary study area have been updated to reflect information from Vision 2050 and current conditions.

The 6- and 8- lane alternatives would support planned development in Milwaukee County and Waukesha County as the I-94 corridor is an important regional corridor connecting the region's two largest employment and population centers. The modernization of the freeway would improve mobility between these destinations by reducing peak period travel times for commuters and improving the reliability of freight distribution. As a result, improved mobility between Milwaukee and Waukesha counties could facilitate additional residential and business development as planned by local governments throughout the counties.

These land-use effects are expected for both the 8-lane and 6-lane alternatives as both alternatives would modernize the freeway and improve mobility over the No-Build alternative. However, the effect of induced

development is expected to be greater under the 8-lane alternative as it would reduce congestion more than the 6-lane alternative and provide more mobility and travel time reliability.

It is reasonable to assume the 8-lane alternative would support ongoing development of Waukesha County by reducing congestion and travel times. The magnitude of this development is not anticipated to be substantial compared to existing conditions or the levels of development anticipated by Vision 2050. Although the original construction of I-94 greatly improved accessibility to Waukesha County, adding a new travel lane in each direction is expected to have a much smaller effect on land use patterns for three reasons:

- I-94 throughout Milwaukee and Waukesha counties is an existing freeway corridor that is part of a mature regional transportation system that already has a high degree of accessibility via existing interchanges.
- Travel-time savings during peak travel periods are not expected to be great enough to substantially change regional land use patterns or to substantially shift development from one area of the region to another.
- Land use patterns and development have already established themselves around I-94 and other transportation corridors in the region. Because so much development has occurred, it is difficult to distinguish the role of the freeway from other factors that influence development, especially since the region already has a high level of transportation accessibility, and employment centers already are distributed throughout Milwaukee and Waukesha counties and other parts of the region.

The 6-lane alternative would also perpetuate the redistribution of population and employment between Milwaukee and Waukesha counties because I-94 already connects the two counties and already provides access to lands in Waukesha County. In addition, Waukesha County has an established arterial network that connects to the regional freeway system, and even the less-developed portions of the county already are accessible by the region's transportation system.

It was also noted in some of the supplemental stakeholder interviews and through demographic data that there is a continued trend of residents living in downtown Milwaukee and Milwaukee County working in Waukesha County, which results in increased levels of reverse commuting. The higher level of congestion of the 6-lane alternatives could make it more challenging for downtown residents and other Milwaukee County residents to commute to other counties, especially to Waukesha County which has the second-largest number of jobs in the region.

The primary concern raised by some local stakeholders is that adding new travel lanes could facilitate the continued redistribution of the population and employment between Milwaukee and Waukesha counties and induce development in Waukesha County. Development that may be facilitated in Waukesha County by the Build alternatives, particularly under the 8-lane alternative, could increase the number of jobs that are not accessible by transit in Waukesha County. A lack of transit access affects the ability of lower-income, transit-dependent populations in the City of Milwaukee to obtain employment and it concentrates poverty within central city neighborhoods.

MCTS provides good coverage to employment centers within Milwaukee County. However, access to employment centers outside Milwaukee County is limited due to the lack of routes that cross the county line, unreasonable travel times (greater than 90 minutes), or transit schedules that are not coordinated with worker shifts. Although the automobile is the dominant mode of travel for minority and low-income populations in the primary study area, these populations tend to have fewer vehicles available and as a result, are more likely to rely on transit to get to work (SEWRPC, 2020a)

The equity analysis completed for the *2020 Review and Update of Vision 2050* states that the significant improvement and expansion of transit recommended by VISION 2050 would drastically improve access to jobs

by transit and expand opportunities for people without access to a vehicle including people of color, low-income populations, and people with disabilities (SEWRPC, 2020b). However, the equity analysis concludes that without additional funding to implement the VISION 2050 public transit element, a disparate impact on these population groups is likely to occur within the region as access to jobs outside Milwaukee County for transit-dependent populations will continue to be limited (SEWRPC, 2020b).

The equity analysis states the funding disparity is likely to continue as current Wisconsin legislation places limitations on local government revenue generation and on WisDOT's ability to allocate funds between different programs (SEWRPC, 2020b). Under current law, WisDOT is not able to provide capital funding for transit outside traffic mitigation measures during construction projects. Also, local units of government and transit operators lack the state legislative authority to generate dedicated transit funds and form regional transit authorities.

Despite the challenges with transit funding in the region, some transit improvements are proceeding. MCTS recently implemented MCTS Next to better align routes with current job centers and destinations, improve the rider experience, and create faster service with more connections. Also, with the support of a federal Small Starts grant, MCTS constructed the state's first BRT route, East-West BRT, with revenue service beginning in June 2023, that connects downtown Milwaukee with the Regional Medical Center. At the same time, MCTS has begun planning for the system's next BRT route generally along 27th Street, which is also expected to seek funding through the federal Small Starts grant program. In addition, the FlexRide Milwaukee pilot program was launched in February 2022 to provide on-demand service between five stops served by MCTS in Milwaukee's north and northwest side neighborhoods and employers in the Menomonee Falls and Butler service area. Waukesha Metro Transit is working with SEWRPC to study potential route enhancements to provide improved transit service that would link to the MCTS' East-West BRT and extend along Bluemound Road to Waukesha.

The 30% TMP created in early 2022, reviews potential impacts of I-94 East-West construction on MCTS services and develops conceptual mitigation measures. A conceptual mitigation program was developed based on coordination with MCTS, traffic and construction analyses and impact assessments. The conceptual mitigation program includes measures for additional buses to maintain headways, infrastructure improvements, additional frequencies to mitigate traffic impacts and other funding to support MCTS staffing and outreach during construction. In addition, the 8-lane alternatives are expected to reduce the amount of traffic that diverts to local arterial streets. Fewer vehicles on local streets improve the pedestrian environment and can help provide opportunities to implement dedicated transit infrastructure such as transit-only lanes along arterials.

As previously identified, implementation of both the 8- and 6- lane alternatives would modernize the freeway, resulting in improved mobility between Milwaukee and Waukesha counties. The alternatives could facilitate additional residential and business development as planned by local governments throughout the counties. Residential and business developments may not have access to transit systems depending on location. As mentioned previously, a few transit improvements are underway to better connect co-workers with jobs outside Milwaukee County. However, as stated in the SEWRPC VISION 2050 equity analysis, the transit funding disparity is likely to continue. Although project alternatives may contribute to ongoing development in Waukesha County that is not transit accessible by Milwaukee county residents, the magnitude of this development is not anticipated to be substantial compared to existing conditions or the levels of development anticipated by Vision 2050 as stated above.

See the original indirect effects analysis[2] for additional discussion about potential mitigation measures and responsible agencies that could address the indirect land-use effects resulting from adding new travel lanes for the secondary study area.

[2] This information is available via Section 3.28 of the 2016 Final EIS as well as the January 2016 I-94 East-West Corridor Indirect and Cumulative Effects Analysis report that was part of the Supplementary CD Material for the 2016 Final EIS which can be accessed at: https://wisconsindot.gov/Documents/projects/by-region/se/94ew-study/supplementary-materials.pdf"

2.4.1.3 Indirect Land Use Effects Related to Interchange Modifications – Primary Study Area

The primary study area land uses have developed around the existing freeway access points which are important for the continued redevelopment of business areas and ongoing revitalization of neighborhoods within the primary study area. In most areas, the Build alternatives maintain the existing access points along the I-94 East-West project corridor and would continue to support neighborhood revitalization and planned redevelopment within the primary study area. In a few areas, access is modified or eliminated, which could result in some negative effects on development. Proposed mitigation would lessen these potential impacts. Proposed interchange modifications are generally the same for the 8-lane and 6-lane alternatives except as noted in the subsections below.

70th Street/68th Street, 35th Street and 25th-28th Street Interchanges

Access points at the 68th/70th, 35th, and 25th-28th Street interchanges will be configured to operate similar to how they operate today and are essentially the same configuration under the 8-lane and 6-lane alternatives. As a result, these interchange access points will continue to support the existing business areas and neighborhoods that are served by these interchanges within the primary study area. No indirect land-use effects are anticipated since these interchanges will be replaced in generally the same configuration at the same locations.

Stadium Interchange

The Stadium Interchange is a system interchange that connects I-94 with WIS 175/Brewers Boulevard. Both the 8- and 6-lane alternatives include two modernization options at the Stadium Interchange, a hybrid option and a diverging diamond option.

With the hybrid interchange, all exit ramps from I-94 to WIS 175/Brewers Boulevard would be free-flow (no traffic signals). All entrance and exit ramps would be located on the righthand side of traffic. A traffic signal on WIS 175/Brewers Boulevard would control through traffic and left turns onto I-94. The reconstructed interchange would have a smaller footprint to the existing Stadium Interchange; however, it would be a 3-level interchange (not counting local streets at the lowest level) and be approximately 25 feet higher than the existing interchange.

With the diverging diamond interchange, northbound and southbound WIS 175/Brewers Boulevard traffic would cross to the opposite side of the roadway at two signalized intersections north and south of I-94. Traffic on WIS 175/Brewers Boulevard would drive on the opposite side of the roadway than what is customary through the interchange. This allows left turns entering I-94 to occur without stopping or crossing oncoming traffic. The diverging diamond interchange would be a 2-level interchange (not counting the local streets at the lowest level) approximately the same height as the existing interchange.

The modernization of the Stadium Interchange with either the hybrid option or diverging diamond option is not expected to have indirect land-use effects as it will maintain the flow of traffic moving between the freeway and the land uses to the north and south including the Miller Park Way business district in West Milwaukee and the State Street district in Wauwatosa. In addition, the new interchange will not impact the existing interchanges along WIS 175 to the north and access points to the south of the project area.

General Mitchell Boulevard Interchange

The General Mitchell Boulevard interchange would be reconfigured to avoid impacting the cemeteries and improve the short and unsafe merge distances on I-94. Access to I-94 from General Mitchell Boulevard would differ between the hybrid interchange and the diverging diamond interchange.

For the hybrid option, the General Mitchell Boulevard Interchange would be removed and replaced with new entrance and exit ramps beneath the Stadium Interchange that would connect to 44th Street and a new north-south local street (tentatively referred to as 46th Street). The new interchange would connect to the existing American Family Field ring road and a new 3-lane frontage road north of I-94. The new north frontage road

would pass over Yount Drive and connect to Mitchell Boulevard near the existing westbound I-94 exit ramp at General Mitchell Boulevard.

With the Diverging Diamond Interchange, access to and from General Mitchell Boulevard would be via ramps within the Stadium Interchange. All entrance and exit ramps would be located on the righthand side of traffic. These connections would provide direct access to American Family Field parking, the VA campus, and the Story Hill neighborhood without traveling through new intersections. The total width of I-94 and its on-/off-ramps between General Mitchell Boulevard and WIS 175 would be slightly wider than the hybrid interchange. The additional width is shifted south and has a slightly greater impact on American Family Field parking.

No land-use effects are expected from either interchange option because the land around the interchange is developed, and the Menomonee River and Canadian Pacific Railway make access to the adjacent land challenging. Also, the area already has access through the WIS 175 interchange at Wisconsin Avenue and the new local road interchange within the Stadium Interchange would not have a noticeable change in traffic patterns in the area.

Hawley Road Interchange

Two options are being considered for the reconstruction of the Hawley Road Interchange. A full Hawley Road Interchange similar to today is included with the 6-lane alternative only. This option would continue to support the business districts and neighborhoods that rely on this access to the north and south of the freeway.

Another option under consideration is a half Hawley Road Interchange with access to and from the west only. This is an option for both the 8-lane and 6-lane alternatives. To mitigate the traffic impacts of partially closing the Hawley Road Interchange the extension of Washington Street between 68th Street and Hawley Road in West Allis is included to better accommodate traffic that currently uses the Hawley Road entrance and exit ramps to and from the east.

While the original indirect effects analysis indicated the partial closure of the Hawley Road Interchange could have a negative effect on development in the City of West Allis, current stakeholder interviews with City staff indicated that the Washington Street extension would mitigate this effect. The new road would support the city's planned development within the Summit Place redevelopment district that seeks to revitalize the vacant former Allis-Chalmers manufacturing buildings.

2.4.2 Indirect Encroachment Alteration Effects – Primary Study Area

Indirect encroachment-alteration effects are from alterations to the behavior and function of the physical environment farther from the corridor and later in time. Encroachment-alteration effects are often associated with direct project impacts that alter neighborhood quality of life and the vitality of business districts.

During this supplemental phase of the project, stakeholders expressed concerns about widening the footprint of the freeway, relocations, noise, and air quality and how those impacts could affect the quality of neighborhoods and business corridors beyond the project's footprint over time. Also, many stakeholders discussed concerns about vehicles speeding as they get on and off freeway ramps and how that reduces safety in adjacent neighborhoods.

The Build alternatives evaluated in the Supplemental EIS reflect efforts to reduce physical impacts outside the road right of way. In addition, right-of-way impacts are mostly associated with the interchanges, particularly the Stadium Interchange, and are similar between the 8-lane (49.8 acres), 6-lane with half Hawley Interchange (48.7 acres), and 6-lane with full Hawley Interchange (41.9 acres) alternatives. As such, the potential for encroachment-alteration effects on neighborhoods and business districts are reduced since the original indirect effects report was prepared.

2.4.2.1 Neighborhood Encroachment-Alteration Effects

The project includes one residential displacement (compared to eight displacements for the preferred alternative in the 2016 Final EIS), it would also move the freeway closer to some, but not all, adjacent neighborhoods. The single residential displacement is located in the area west of the Stadium Interchange just north of S. 68th street adjacent to the eastbound I-94 on-ramp. This displacement would be included with both the 8- and 6-lane alternatives. Although the right of way increases under all Build alternatives, the expansion of the freeway generally does not encroach upon residential areas as the right of way impacts are largely located on the south side of the freeway away from residential neighborhoods and/or associated with utility corridors or undeveloped land. Neighborhoods in S. 68th street area where the residential displacement discussed above is located in the area that would have the greatest likelihood for encroachment-alteration effects due to the combination of neighborhoods located on both the north and south sides of the freeway.

Nearly all access to neighborhoods along the project corridor will be maintained under both the 8-lane and 6-lane alternatives in generally the same location and interchange ramps and intersections with local streets will be improved to current design standards. One expectation is the Hawley Road Interchange which could be reconstructed as a half interchange with access to and from the west only under both alternatives. This access change will be mitigated by the extension of Washington Street in West Allis. Stakeholder interviews with West Allis staff confirmed that the Washington Street extension will support local plans for Summit Place redevelopment.

The project would also incorporate bike and pedestrian connections into all Build alternatives including new connections to the Hank Aaron State Trail, new bike lanes, and new sidewalks in certain areas. During the supplemental interview process, stakeholders indicated the trail connections along with other nonmotorized improvements contribute to neighborhood vitality and quality of life by providing amenities that make adjacent areas more desirable as places to live and recreate.

Local arterials serving neighborhoods would experience more traffic under the 6-lane alternative because more traffic is expected to divert from the freeway to local arterials because of expected freeway congestion with this alternative. The 8-lane alternative reduces congestion along the freeway which reduces the amount of through traffic that will divert to local arterials. During the supplemental interview process, stakeholders expressed concerns about excess traffic along local arterials and discussed how the amount of traffic and speed of traffic creates safety concerns and makes it more challenging to implement local plans for complete streets along local arterials.

Residential areas near arterials and highways may be exposed to higher levels of transportation-related air pollutants as lower speeds and starting/stopping associated with congestion can increase the level of air pollutants in the atmosphere. In comparison to the No Build alternative, both Build Alternatives would reduce congestion along the freeway and minimize traffic that diverts to local streets. This would improve air quality by reducing idling and stop-and-go traffic. As mentioned above, the 8-lane alternative is expected to have less congestion and fewer vehicles are expected to divert to local arterials, therefore, this alternative may provide more air quality benefits to nearby residential areas. Also, transportation-related air pollutants throughout the region have been declining and are expected to continue to decline through 2050 due to federal fuel and vehicle economy standards and improved emissions controls despite anticipated increases in regional traffic volumes (SEWRPC, 2020b). This trend will reduce the exposure of residents to transportation-related air pollutants in the region including minority and low-income residents along the I-94 East-West corridor regardless of the Build alternative that is selected for I-94.

Furthermore, WisDOT is likely to incorporate feasible and reasonable noise barriers into the project next to residential areas to mitigate noise impacts improving neighborhood quality of life for those in close proximity to

the freeway. The final decision on noise barriers will be determined in a later project phase with input from affected residents.

Local governments in the primary study area are also taking measures and planning for the improvement of neighborhood environments. The City of Milwaukee maintains a toolkit of various neighborhood investments and housing programs and is implementing various complete streets projects throughout the city. West Allis, Wauwatosa, and West Milwaukee are also engaged in community revitalization and preservation through a range of planning and economic development strategies. In addition, the continued presence of neighborhood associations and community-based organizations in the primary study area help maintain a stable and cohesive neighborhood environment.

Although neighborhoods adjacent to I-94 infrastructure are likely already affected by its proximity to various degrees, the project is not expected to diminish neighborhood quality of life or vitality within the primary study area. The neighborhoods west of the Stadium Interchange remain some of the city of Milwaukee's more stable, middle-class neighborhoods that have relatively lower poverty rates, higher homeownership rates and fairly stable population figures, which could moderate the encroachment effects. The attributes that make the neighborhoods adjacent to the freeway desirable places to live, such as central location, close proximity to downtown, historic architecture, and compact, walkable neighborhoods, would not be changed by this project.

The project presents an opportunity to replace aging infrastructure, provide noise barriers and minimize congestion along local arterials which may improve local air pollution concerns from stop-and-go traffic, and enhance the pedestrian and transit environment. At the same time, access will be maintained to neighborhoods and improved to current design standards making it safer for its users. New bike and pedestrian connections will also be incorporated into the project to improve local connectivity.

2.4.2.2 Business Encroachment-Alteration Effects

Six business relocations are anticipated for the project and are the same under the 8-lane and 6-lane alternatives. This is compared to 11 business displacements in the 2016 Final EIS. Of that, five businesses that will no longer be displaced due to design refinements, four were minority owned (St. Paul Veterinary Clinic and BP Pantry 41 gas station on 27th Street; TJ's bar on 35th Street; and Monreal's Encore Gentleman's Club north of I-94 on Dana Court (just east of Hawley Road)). Based on input from local stakeholders, the business relocations are not expected to impact the overall business vitality of the Menomonee Valley. The business relocations are also not expected to disrupt revitalizations efforts along the 27th Street corridor as the project will not impact anchor institutions throughout the Near West Side neighborhood.

WisDOT has worked closely with the Menomonee Valley Partners, the Near West Side Partners, and businesses and property owners in the area where business relocations will occur to design the reconstruction of access ramps in a manner that best serves the needs of its users. The access ramps will remain in generally the same locations between the 25th and 28th streets; however, improvements will be made to modernize the ramps to improve traffic flow and accessibility to the area, which is desired by local stakeholders. Also, the business relocations will be mitigated through WisDOT's relocation efforts, consistent with state and federal laws, to identify and relocate businesses to similar nearby locations.

Many local stakeholders noted that the local arterials in the primary study area experience large traffic volumes which can diminish the vitality of business districts along these corridors. Too much congestion can discourage people from patronizing local businesses. As noted previously, the 8-lane alternative is expected to reduce the number of vehicles diverting to local arterials because it will handle more traffic along the freeway. More traffic is expected to divert to local arterials under the 6-lane alternative because more traffic congestion would remain along the freeway. As a result, the 8-lane alternative may contribute to greater business district vitality within the primary study area.

Throughout the project corridor access to businesses will be maintained with reconstructed interchanges in generally the same configuration and location. One exception is the Hawley Road Interchange which could be rebuilt as a partial interchange with access to and from the west only under both Build alternatives. This reduction in access would reduce direct freeway access to the Renaissance Place offices and Summit Place Business Park in West Allis. However, the staff from the City of West Allis confirmed the extension of Washington Street mitigates this impact and provides needed local connectively to distribute traffic between Hawley Road and the 68th/70th Street Interchanges. As a result, the half Hawley Road Interchange is not expected to impact the business vitality of the area.

3 CUMULATIVE EFFECTS ANALYSIS

The Code of Federal Regulations (CFR) Title 40 defines cumulative effects as follows:

Cumulative effects are the impacts on the environment, which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such actions. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time (40 CFR § 1508.7).

This supplemental cumulative effects analysis updates the evaluation completed for the 2016 Final EIS. The analysis was updated to consider impacts accounting for:

- New Build alternatives, including an 8-lane alternative (identified as the preferred alternative in the 2016 Final EIS), a 6-lane alternative with a half interchange at Hawley Road, and a 6-lane alternative with a full interchange at Hawley Road and a diverging diamond interchange alternative at the Stadium Interchange.
- Changes in direct and indirect impacts

The assessment methodology remains unchanged from the 2016 FEIS. Section 3.1 describes the cumulative effects scoping process, and Section 3.2 describes the affected environment and environmental consequences for each resource.

3.1 Step 1: Scoping Cumulative Effects

The cumulative effects analysis considers the resources that could be affected directly or indirectly by the I-94 East-West Corridor Build alternatives when combined with other past, present, or reasonably foreseeable future actions that potentially affect the same resources or human communities. Based on the anticipated direct and indirect project effects, the analysis updated potential cumulative effects for the following resources within the project corridor:

- Environmental corridors and stream crossings
- Surface water quality and quantity
- Business areas
- Neighborhoods
- Municipal tax base
- Regional land-use patterns
- Air quality
- Construction impacts

The stakeholder input that was described in Section 2.1.2 above for the indirect effects analysis was utilized to help identify potential cumulative effects that need to be addressed in the EIS. In addition, Section 2 above was used to inform the cumulative effects analysis and contains information about demographics, land use trends and natural, recreational and cultural resources.

3.1.1 Cumulative Effects Issues

As discussed in WisDOT and Council on Environmental Quality guidance, the cumulative effects analysis should consider resources that may be directly or indirectly affected by the project, focusing on the most important cumulative effects issues. To determine the resources that would be evaluated in the cumulative effects section, the study team reviewed the updated direct impacts in Section 3 of the Supplemental EIS and the indirect effects in Section 2 of this report, considered stakeholder input described in Section 2.1 and considered the demographic, land use, and natural, recreational and historic resources information discussed in Section 2.2 of this report. Table 18 summarizes the resources evaluated for cumulative effects and lists the corresponding section in the EIS.

Table 18: Evaluated Resource Area and Corresponding EIS Section

Resource	Reference in EIS
Environmental corridors and stream crossings	EIS Section 3.12; Environmental Corridors and Natural Areas
Surface water quality and quantity	EIS Section 3.11; Surface Water and Fishery
Business areas	EIS Section 3.6; Commercial and Industrial Development
Neighborhoods	EIS Section 3.5; Residential Development and Section 3.8; Socioeconomic Characteristics
Municipal tax base	EIS Section 3.8; Socioeconomic Characteristics
Historical properties	EIS Section 3.24; Historic Properties
Regional land-use patterns	EIS Section 3.28, Indirect Effects and Section 3.29 Cumulative Effects; ICE Section 2, Indirect Effects Analysis
Air quality*	EIS Section 3.20, Air Quality
Construction impacts	EIS Section 3.27; Construction

** Air quality was included in cumulative effects discussion because air quality concerns have been raised by the public as a resource of concern. Based on the air quality analyses completed for the proposed improvements, the I-94 East-West corridor project will not contribute to any violation of the NAAQS. MSAT emissions will decrease with any of the Modernization Alternatives, and neither carbon monoxide nor $PM_{2.5}$ levels will exceed the air quality standards.*

3.1.2 Cumulative Effects Study Area

The study area for cumulative effects varies depending on the resource being discussed and remains unchanged from the 2016 FEIS and summarized in Table 19.

Table 19: Cumulative Effects Study Area by Resource

Resource	Study Area
Environmental corridors and stream crossings	Milwaukee County
Surface water quality and quantity	Menomonee River watershed in Milwaukee County
Business areas	Milwaukee County
Neighborhoods	Milwaukee County
Municipal Tax Base	Milwaukee County
Historical Properties	Milwaukee County
Regional land use patterns	Milwaukee and Waukesha counties
Air quality	Southeast Wisconsin Region
Construction impacts	Milwaukee County

3.1.3 Timeframe for the Analysis

The timeframe for analysis generally considers past actions that occurred within the past 30 years when WisDOT began evaluating needs in the I-94 E-W corridor. The timeframe for the analysis of future projects, assumes roughly 25 years after construction, or 2050. This coincides with the design year, but also reflects the availability of data. The current regional land use and transportation plan time horizons are 2050.

3.1.4 Identify Past, Present, and Reasonably Foreseeable Future Actions

Table 20 summarizes a current list of past, present and future actions that occurred within the timeframe for the analysis described in 3.1.3 and were considered in combination with the I-94 East-West Corridor. The table also describes resources impacted by those actions. The direct impacts that resulted from past projects adhered to the laws, rules and regulations that were in effect at the time the projects were evaluated. Appropriate mitigation measures, consistent with rules, regulations and laws were also implemented. Information specific to conditions and trends for the resources evaluated for cumulative impacts is documented in the indirect and cumulative effects analysis prepared for the 2016 FEIS with additional information presented in this supplemental indirect and cumulative effects analysis.

Table 20: List of Past, Present and Reasonably Foreseeable Future Actions

Timeframe	Action	Location within Study Area	Resources Impacted
Past	Canal Street reconstruction	City of Milwaukee	Environmental corridors and stream crossings; surface water quality and quantity; business areas; municipal tax base; historic properties; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Past	Fiserv Forum	Downtown Milwaukee	Business areas, municipal tax base
Past	Historic urban/suburban development	Milwaukee and Waukesha counties	Environmental corridors and stream crossings; surface water quality and quantity; business areas; neighborhoods; municipal tax base; historic properties; regional land-use patterns of transit, land use and jobs; air quality; construction impacts
Past	I-794 Lake Interchange ramp modifications and associated local road improvements (Lakefront Gateway Project)	Downtown Milwaukee	Surface water quality and quantity; business areas; municipal tax base; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Past	Marquette Interchange Reconstruction	City of Milwaukee	Surface water quality and quantity; business areas; municipal tax base; historic properties; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Past	MCTS Express Routes	Milwaukee County	Regional land-use patterns of transit, land use and jobs
Past	MCTS NEXT – System Redesign	Milwaukee County	Regional land-use patterns of transit, land use and jobs
Past	Menomonee Valley redevelopment	City of Milwaukee	Environmental corridors and stream crossings; surface water quality and quantity; business areas; municipal tax base; historic properties; regional land-use patterns of transit, land use and jobs; air quality; construction impacts

Timeframe	Action	Location within Study Area	Resources Impacted
Past	Miller Park/American Family Field reconstruction	City of Milwaukee	Surface water quality and quantity; business areas; municipal tax base; construction impacts
Past	Milwaukee Streetcar Phase 1 Route	Downtown Milwaukee	Business areas; neighborhoods; municipal tax base; historic properties; construction impacts
Past	MMSD flood management projects and creek restorations	Milwaukee County	Environmental corridors and stream crossings; surface water quality and quantity; business areas; neighborhoods; municipal tax base; historic properties
Past	Oak Creek Coal Power Plant expansion	Milwaukee County	Air quality
Past	Original construction of US 41 (now WIS 175), US 45 (now I-41), I-43, I-94, I-794 and I-894	Milwaukee and Waukesha counties	Environmental corridors and stream crossings; surface water quality and quantity; business areas; neighborhoods; municipal tax base; historic properties; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Past	Reconstruction and widening of I-94 North-South corridor	Milwaukee, Racine and Kenosha counties	Surface water quality and quantity; business areas; neighborhoods; municipal tax base; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Past	Redevelopment of former industrial areas	Milwaukee, West Allis, West Milwaukee and Wauwatosa	Business areas; municipal tax base; regional land-use patterns of transit, land use and jobs
Past	VA campus and medical center	City of Milwaukee	Regional land-use patterns of transit, land use and jobs; historic properties
Past	Valley Power Plant conversion	City of Milwaukee	Air quality

Timeframe	Action	Location within Study Area	Resources Impacted
Past	Zoo Interchange freeway reconstruction	Milwaukee County	Surface water quality and quantity; business areas; neighborhoods; municipal tax base; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Past	North Avenue expansion	Waukesha County	Surface water quality and quantity; business areas; neighborhoods; municipal tax base; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Past	Calhoun Road expansion	Waukesha County	Surface water quality and quantity; business areas; neighborhoods; municipal tax base; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Past	West Waukesha Bypass	Waukesha County	Surface water quality and quantity; business areas; neighborhoods; municipal tax base; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Past	WIS 164 expansion	Waukesha County	Surface water quality and quantity; business areas; neighborhoods; municipal tax base; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Past	New I-94/Drexel Avenue interchange	Milwaukee County	Surface water quality and quantity; business areas; neighborhoods; municipal tax base; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Past	MCTS East-West Bus Rapid Transit (E-W BRT)	City of Milwaukee	Business areas; neighborhoods; municipal tax base; historic properties; regional land-use patterns of transit, land use and jobs; construction impacts

Timeframe	Action	Location within Study Area	Resources Impacted
Present	County-Wide Sanitary Sewer Repairs	Milwaukee County	Surface water quality and quantity; business areas; neighborhoods; municipal tax base; construction impacts
Present	Development of former Park East freeway corridor (including Deer District at Fiserv Forum)	Downtown Milwaukee	Surface water quality and quantity; business areas; neighborhoods; municipal tax base; historic properties; regional land-use patterns of transit, land use and jobs; construction impacts
Present	Freeway reconstruction and rehabilitation of US 45/I-41	Milwaukee, Waukesha and Washington counties	Environmental corridors and stream crossings; surface water quality and quantity; business areas; neighborhoods; municipal tax base; historic properties; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Present	Freeway reconstruction and modernization/expansion of I-43	Milwaukee and Ozaukee counties	Environmental corridors and stream crossings; surface water quality and quantity; business areas; neighborhoods; municipal tax base; historic properties; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Present	New I-43/Highland Road interchange	Ozaukee County	Stream crossings; surface water quality and quantity; business areas; municipal tax base; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Present	Milwaukee Streetcar Lakefront Line	Downtown Milwaukee	Business areas; neighborhoods; municipal tax base; historic properties; construction impacts
Present	MMSD flood management and fish passage projects	Menomonee River watershed	Environmental corridors and stream crossings; surface water quality and quantity; business areas; neighborhoods; municipal tax base

Timeframe	Action	Location within Study Area	Resources Impacted
Present	MMSD flood management of Kinnickinnic River Watershed	Kinnickinnic River Watershed	Environmental corridors and stream crossings; surface water quality and quantity; business areas; neighborhoods; municipal tax base
Present	MMSD flood management of Milwaukee River Watershed	Milwaukee River Watershed	Environmental corridors and stream crossings; surface water quality and quantity; business areas; neighborhoods; municipal tax base
Present	Ongoing downtown Milwaukee redevelopment	City of Milwaukee	Business areas; neighborhoods; municipal tax base; historic properties
Present	MMSD Menomonee River restoration projects	Milwaukee County	Environmental corridors and stream crossings; surface water quality and quantity; business areas; neighborhoods; municipal tax base
Present	FlexRide Milwaukee	Milwaukee and Waukesha counties	Regional land-use patterns of transit, land use and jobs
Future	Freeway reconstruction and potential widening of I-94 through Waukesha County	Waukesha County	Environmental corridors and stream crossings; surface water quality and quantity; business areas; neighborhoods; municipal tax base; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Future	I-794 Lake Interchange Reconstruction	Milwaukee County	Business areas; neighborhoods; municipal tax base; historic properties; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Future	Lakefront Gateway Plaza	City of Milwaukee	Business areas; neighborhoods; municipal tax base; regional land-use patterns of transit, land use and jobs; construction impacts

Timeframe	Action	Location within Study Area	Resources Impacted
Future	WIS 175 Study	City of Milwaukee	Surface water quality and quantity; business areas; neighborhoods; municipal tax base; historic properties; regional land-use patterns of transit, land use and jobs; noise; air quality; construction impacts
Future	Ongoing development in Waukesha County	Waukesha County	Environmental corridors and stream crossings; surface water quality and quantity; business areas; neighborhoods; municipal tax base; regional land-use patterns of transit, land use and jobs; air quality; construction impacts
Future	Ongoing redevelopment of former industrial areas	Milwaukee, West Allis, West Milwaukee, and Wauwatosa	Business areas; municipal tax base; historic properties; regional land-use patterns of transit, land use and jobs
Future	Redevelopment of Milwaukee Mile at State Fair Park	West Allis	Business areas; municipal tax base; regional land-use patterns of transit, land use and jobs
Future	Schlitz Park Expansion	City of Milwaukee	Business areas; municipal tax base; historic properties; regional land-use patterns of transit, land use and jobs
Future	Streetcar Phase 2 – Arena, Bronzeville and Walker's Point Extensions	City of Milwaukee	Business areas; neighborhoods; municipal tax base; historic properties; construction impacts
Future	Wisconsin Convention Center expansion	City of Milwaukee	Business areas; municipal tax base; construction impacts
Future	North-South Bus Rapid Transit	Milwaukee County	Business areas; neighborhoods; municipal tax base; historic properties; regional land-use patterns of transit, land use and jobs; construction impacts

3.2 Describe the Affected Environment, and Determine the Environmental Consequences and Potential Mitigation Measures

This section supplements the description of resources presented in the indirect and cumulative effects analysis prepared for the 2016 FEIS, that could experience cumulative effects as a result of the I-94 East-West Build alternatives and the other past, present and reasonably foreseeable actions listed in Table 20. For each resource, the supplemental analysis reviews the affected environment established as the baseline condition and the resources' capacity to withstand stress in relation to regulatory thresholds. The environmental consequences analysis for each resource is updated or validated based on updated direct and indirect effects of the Build alternatives. The evaluation also updates or validates avoidance, minimization and mitigation measures WisDOT can undertake for the Build alternatives to minimize cumulative effects to the greatest practical extent, as well as local, state, and federal ordinances and laws that can further manage effects. The findings of the analysis are summarized by resource in the following sections.

3.2.1 Environmental Corridors and Stream Crossings

This section updates the potential cumulative effects to environmental corridors in Milwaukee County.

Affected Environment

I-94 crosses the Menomonee River, which is in a primary environmental corridor. SEWRPC reports the environmental corridors are home to the most important elements of the natural resource base, including wetlands, woodlands, prairies, wildlife habitat and streams, as well as historic, recreational and scenic sites throughout the region.

Milwaukee County contains over 9,000 acres of primary environmental corridors, which is 5.8 percent of the county. The corridors typically follow stream valleys and surround major lakes and flood lands. Historically, land development has impacted natural resources throughout Milwaukee County. According to SEWRPC, nearly 83 percent of pre-European-settlement vegetation in Southeastern Wisconsin had been removed by 1990 (SEWRPC 1997). Past development has altered the Menomonee River corridor through removal of native vegetation and channelization, which in turn has led to soil erosion, increased stormwater runoff and flood flows, and lost wildlife habitat. At the time of I-94 construction, which crosses the river on bridges, prior industrial development relocated and channelized the Menomonee River in the project area. In light of historical and planned development in Milwaukee County, the preservation of this resource base is especially important. SEWPRC reports that the preservation of environmental corridors reduces flooding and noise pollution; improves water quality; and reduces impacts to the man-made environment.

While historic land development has impacted natural resources throughout Milwaukee County, local communities have preservation zoning and policies protecting remaining environmental resources, and SEWRPC reports 94 percent of primary environmental corridors are protected in the region (SEWRPC, 2020b). In Milwaukee County, the majority of environmental corridors are publicly owned to ensure their preservation. MMSD continues investment in the Menomonee River watershed to manage flooding and reestablish stream habitats, most recently removing the concrete bed in the Menomonee River north of Wisconsin Avenue to about 500 feet south of I-94 (MMSD, n.d.).

Environmental Consequences/Potential Mitigation

All Build alternatives would maintain the one stream crossing of the Menomonee River; no new crossings would be created. The construction of new bridges for the reconstructed Stadium Interchange under the Build alternatives do not impact the environmental corridor along the Menomonee River. When considered with data presented in the indirect and cumulative effects analysis prepared for the 2016 FEIS and information presented

in this supplemental indirect and cumulative effects analysis, the project, in combination with past, present, and reasonably foreseeable future actions would not cumulatively affect the Menomonee River environmental corridor.

MMSD's ongoing investment in the Menomonee River watershed, SEWRPC's regional land use plan and local plan implementation continue the long-term preservation of environmental corridors. The likelihood of a cumulative effect to primary environmental corridors from other development actions would be limited. Clear-spanning the river can minimize the potential direct impact and the cumulative effect of highway development in the environmental corridor.

Potential temporary effects from construction would be avoided and minimized by using WisDOT's *Standard Specifications for Road and Bridge Construction* (2022) and complying with Wisconsin's Trans 401 regulations (WisDOT, 2013) that oversee construction-site erosion control and stormwater management. Local governments would continue to be responsible for regulating through land-use policies, zoning, and permitting rules development that could affect environmental corridors.

3.2.2 Surface Water Quality and Quantity

This section updates the potential cumulative effects to surface water quality and quantity within the Menomonee River watershed in Milwaukee County.

Affected Environment

The I-94 East-West corridor is located in the Menomonee River watershed. The watershed drains 136 square miles into Milwaukee, Ozaukee, Washington and Waukesha counties. A substantial amount of land cover within the watershed is urban or suburban (67 percent) with the remainder a mix of agriculture and other uses.[3] The Menomonee River is 32 miles long and is a tributary to the Milwaukee River. The river originates in the Village of Germantown and the City of Mequon, and it flows in a southeasterly direction before it meets the Milwaukee and Kinnickinnic rivers in the Milwaukee Harbor Estuary. Water quality in the watershed has been affected by historic human activities, such as farming practices and urban development. Stormwater runoff from farm fields carry suspended solids from soil erosion, nutrients, and pesticides to streams. Runoff from urban environments contains suspended solids from eroding stream banks and impervious surfaces like parking lots, buildings, streets, and highways. Urban development is also the source of water pollutants such as fecal coliform bacteria, salts, and nutrients. As a result of pollutant loads in the watershed, the Menomonee River is listed on WDNR "Impaired Waters" list. It also has a Section 303(d) designation, which means that the water body does not meet federal Clean Water Act standards. The pollution types present include fecal coliform, unspecified metals, chlorides, polychlorinated biphenyls (PCBs), total phosphorus, and E. coli. Recreational restrictions are in place due to pathogens, chronic aquatic toxicity, contaminated fish tissue, and low dissolved oxygen. Sources of pollution are defined as either point or nonpoint sources of pollution.[4] Point sources are pollutants that are discharged to surface waters at discrete locations (SEWRPC 2007). Common sources of point source pollution include discharges from sewage treatment plants and industrial discharges. Nonpoint sources of pollution are discharges of pollutants to the surface waters, which cannot be readily identified as point sources of pollution (SEWRPC 2007). Nonpoint sources enter surface waters via stormwater runoff from rural and urban land uses.

Existing state and federal water quality regulation of point and non-point pollutants have moderated the impact of human development to water quality. Furthermore, in 2018 MMSD developed total maximum daily load (TMDL) limits[5] as a third party on behalf of the WDNR for the watersheds within the Milwaukee area, including

[3] Water Detail - Menomonee River, Menomonee River Watershed (MI03) (wi.gov). Accessed October 10, 2023.

[4] Watershed Detail - Menomonee River (wi.gov). Accessed October 10, 2023.

[5] TMDL is the maximum amount (expressed in load per day) of a pollutant a waterbody can receive from both point and nonpoint sources and still meet water quality standards or targets.

the Menomonee River. TMDLs were established for fecal coliform bacteria, phosphorous and sediment. (USEPA, 2018)

The 2016 cumulative effects analysis identified the quantity of stormwater runoff as a concern for Milwaukee County and the Menomonee River watershed. According to MMSD, depending on soil conditions, as much as 50 percent of rainfall can be absorbed directly into the ground in areas with low levels of development, with only about 10 percent of this water running off the land. In contrast, where the land has been extensively developed as in highly urbanized areas such as Milwaukee County, very little water is absorbed into the ground. Instead, more than half of the water runs off the land and across the hard, impervious surfaces of buildings, streets, highways, and parking lots. According to MMSD, low-flow conditions can be equally as stressful, creating conditions of lower flow and higher water temperature extremes during dry periods. This occurs because rainfall sheds off the land too quickly in urbanized areas, not allowing rainwater time to replenish the groundwater flow to the stream in a slow, sustainable manner. The amount of stormwater runoff from highways increases proportionately to the amount of impervious surface. Runoff from roadways can increase the amount of water in area streams above normally carried capacities. Stormwater runoff from I-94 is collected in storm sewers. About half of the storm sewers eventually discharge to the Menomonee River. The east end of the project corridor, from roughly 35th Street through the eastern project limit is in MMSD's combined sewer service area. Stormwater collected in this area is directed to combined sewers, which flow to the sewage treatment plant, and is treated before discharging to Lake Michigan.

MMSD and its partners continue ongoing investment in the Menomonee River watershed to manage flooding. In addition to the concrete bed removal described in Section 3.2.1, other investments include flood management projects in the Milwaukee County Grounds, Hart Park, Valley Park, Underwood Creek Reach 1 Phase 2, Honey Creek Flood Management and Habitat Restoration and Western Milwaukee Phases 2A and 2B. (MMSD, n.d.). Redevelopment activities in the Menomonee Valley have also allowed restoration to occur along the riverfront through re-established natural banks and vegetation.

Environmental Consequence/Potential Mitigation

The 8-lane alternative would increase the freeway's impervious area by 31 percent, while the 6-lane alternatives (both Hawley Road Interchange options) would increase the freeway's impervious area by 25 percent. This would be less than a 0.1 percent increase in the total amount of impervious surface in the Menominee River watershed. In comparison, the preferred alternative in the 2016 Final EIS (At-grade alternative in the west segment and On-alignment alternative in the east segment) would increase impervious surface by 23 to 67 percent. The Build alternatives could cumulatively impact water quality and quantity along with other past, present and future actions, as described in Table 20.

While runoff volumes would increase under the Build alternatives, WisDOT would use best management practices to reduce the level of pollutants in stormwater runoff compared with existing conditions and provide the opportunity to bring I-94 and the local roadway system in compliance with Wisconsin's stormwater management regulations. Best management practices can also minimize the amount of runoff entering water bodies and reduce flow velocity. The use of retention/detention basins to manage stormwater from the proposed improvement is being evaluated along all sections of the project as the most practical and efficient practice.

Short-term highway construction impacts to water quality would be avoided or minimized by using WisDOT's *Standard Specifications for Highway and Structure Construction* and complying with Trans 401 (WisDOT, 2013), which regulates construction site erosion control and stormwater management for transportation facilities. WisDOT would monitor the performance of its control measures through its WisDOT-WDNR cooperative agreement ("Memorandum of Understanding on Erosion Control and Stormwater Management"). This memorandum of understanding requires WisDOT to implement a stormwater management program for its projects that is consistent with Section 402(p) of the Clean Water Act, Chapter 283 of the State Statutes (including the

Wisconsin Pollution Discharge Elimination System Transportation Construction General Permit), and NR 216 (Wisconsin Department of Natural Resources, 2014). WisDOT is required to implement stormwater management measures to remove 40 percent of the total suspended solids discharged from their storm sewers after construction. Best management practices required under stormwater and nonpoint runoff rules are expected to improve water quality as future projects and ongoing redevelopment occur.

In addition to Trans 401 requirements, a regional policy is in place to maintain the peak discharge rate at the design year storm event, which would be determined by location but is generally the 25-year or 50-year storm event. Additional coordination with WDNR will determine stormwater management measures if a build alternative is selected as the preferred alternative. WisDOT would implement best management practices for stormwater control and, therefore, would not cumulatively contribute to water quality impacts.

Compared with the No-build alternative, implementing best management practices for stormwater control under the preferred alternative can mitigate the direct effects of existing and increased stormwater runoff, which reduces the cumulative effects of past projects and other reasonably foreseeable future roadway projects resulting in overall fewer effects than the current condition as a result of project implementation. These measures, which would include stormwater retention, focus on stormwater quality but have a secondary benefit of managing stormwater volume.

WDNR and local governments are responsible for monitoring the performance of stormwater management measures and taking corrective actions for non-WisDOT projects. To mitigate the impact of nonpoint source runoff, NR 151 sets forth performance standards for stormwater quality-control measures. For example, 80 percent of the total suspended solids from site runoff must be removed on new construction sites 1 acre or larger. After construction, permanent measures must be in place to continue removing 80 percent of total suspended solids in stormwater runoff from the site.

3.2.3 Businesses

This section updates the potential cumulative effects to businesses within Milwaukee County.

Affected Environment

Milwaukee County continues to contain the largest number of jobs compared with the other counties in the region. SEWRPC anticipates a 5.8 percent employment growth between 2010 and 2050 (SEWRPC 2013a). According to the Wisconsin Department of Workforce Development, workforce availability is a primary challenge for economic and business development and cited transportation as one of the barriers preventing people from fully participating in the labor market. Other barriers include affordable housing, access to childcare and access to broadband internet service.[6] There are several economic development organizations in Milwaukee County, including the Milwaukee Economic Development Corporation and the Metropolitan Milwaukee Association of Commerce, that focus on attracting and maintaining workforce talent and supporting business expansion, attraction and entrepreneurship. The communities within the primary study area continue redeveloping former industrial areas, taking advantage of proximity and access to I-94 and the presence of a large population base and workforce.

Environmental Consequences/Potential Mitigation

The Build alternatives would displace up to six businesses. In addition to the six displacements (7 acres), the 8- and 6 lane alternatives would acquire property-only from an additional nine commercial properties, resulting in an additional 1.1 acres of new right-of-way required from business properties. This direct project impact when combined with other past, present and future freeway reconstruction projects could cumulatively affect businesses within Milwaukee County. Southeastern Wisconsin freeway reconstruction projects in Milwaukee

[6] Wisconsin Department of Workforce Development. 2023 Milwaukee County Workforce Profile. June 2023. Milwaukee County 2023 Workforce Profile (jobcenterofwisconsin.com)

County that have been completed, are under construction, or are in the planning phase have impacted up to 16 businesses. Additional businesses may be relocated in Milwaukee County as the remaining segments of the freeway network are reconstructed along I-894 and I-41 in the future. Maintaining jobs in Milwaukee County remains important for minority and low-income populations dependent on transit because most areas of the county are accessible by transit.

When considered with data presented in the indirect and cumulative effects analysis prepared for the 2016 FEIS and information presented in this supplemental indirect and cumulative effects analysis, business impacts are not expected to have a substantial cumulative effect on the Milwaukee County economy. Business displacements are expected to be offset by business development in other nearby areas, including those referenced in Table 20. As discussed in Section 2.4, the Build alternatives are expected to have the indirect effect of facilitating planned redevelopment within the primary study area. Adequate commercial sites are available in the City of Milwaukee such that businesses can be relocated within Milwaukee County. WisDOT's acquisition and relocation program would facilitate relocation assistance and it is likely that many of the displaced businesses would be relocated within Milwaukee County.

3.2.4 Neighborhoods

This section updates the potential cumulative effects to neighborhoods within Milwaukee County.

Affected Environment

Historically, many transportation options have been developed within Milwaukee County, including city streets. The faster moving interurban routes operated along dedicated rights-of-way, which were somewhat more intrusive to neighborhoods. One example of such an interurban route within the study area is a line that operated from downtown Milwaukee and extended west between Clybourn Street and the former Milwaukee Road railroad line, past the north side of the former Milwaukee Road's Menomonee Valley Shops, adjacent to the 35th Street Viaduct, and continued west between the Veteran's Administration complex and the Calvary Cemetery, west of Hawley Road. The route turned south at about 100th Street, turned west between Greenfield Avenue and Lincoln Avenue, and continued west to Waukesha, Oconomowoc, and Watertown. The portion of the interurban line that ran along the north side of the Menomonee Valley had little effect on neighborhood connectivity because the industrial area that developed in the valley to the west/southwest of downtown largely separated the north side of the city from the south side of the city. To the west of Hawley Road, the right-of-way for the interurban line bisected residential neighborhoods, but historical aerial photography indicates that local street connectivity in this area was maintained. Some of the former interurban right-of-way is still present on the north side of I-94 (west of Hawley Road) and is currently right- of-way for ATC power lines. Construction of the first I-94 East-West freeway segment began in the March 1952 and ended in January 1962. It included I-94 between 13th and 68th Streets and the Stadium Freeway (US 41/Miller Park Way) between Wisconsin and National Avenues. In contrast to the interurban line, I-94 disconnected several local roads along the west segment of the freeway west of Hawley Road. Following construction of I-94, four out of the nine streets that originally connected Fairview Avenue north of I-94 and Dixon Street to the south, remained: Hawley Road; 64th Street, 68th Street, and 70th Street. The I-94 freeway construction resulted in a split of north/south neighborhoods west of Hawley Road, which is still present today. In the east segment, the original I-94 freeway construction did not split neighborhoods, since this area was already separated from the industrial land uses associated with the Menomonee Valley. While the original construction of I-94 resulted in the relocation of homes and businesses, it also provided many benefits to those living along what would become the I-94 East-West Corridor. The construction of I-94 removed through traffic from local roads and placing it on a higher-capacity freeway better equipped to handle the larger volume of traffic. The construction of I-94 also afforded local residents access to I-94 to allow for more efficient and convenient travel to destinations outside of the local community and more efficient and convenient access to the local community and businesses from locations further away. Many of these benefits are similar to the Purpose and Need of the current I-94 East-

West Corridor study, such as improving safety, decreasing crashes, and accommodating existing and future traffic volumes at an acceptable level of service.

Today, well-established residential neighborhoods remain throughout the study area in the cities of Milwaukee, Wauwatosa and West Allis, and the Village of West Milwaukee. Maintaining infrastructure is important to a community's quality of life. Highways and other transportation infrastructure generally provide reliable access to employment and cultural centers and improve mobility of people and goods— both of which encourage continued investment throughout the community and within neighborhoods.

Conversely, infrastructure in and adjacent to neighborhoods, particularly neighborhoods that have been impacted by past infrastructure development, can cause direct and proximity impacts such as right of way acquisition, displacements, and increased air, noise and visual impacts. The combination of these impacts can negatively impact quality of life. Neighborhoods close to large infrastructure become more vulnerable to these impacts as the infrastructure expands.

Environmental Consequences/Potential Mitigation

The I-94 East-West Corridor project includes one residential displacement (compared to eight displacements for the preferred alternative in the 2016 Final EIS). In addition to the one displacement (0.13 acre), the 8- and 6-lane alternatives would acquire property-only from an additional 15 residences, resulting in less than 0.2 acre of new right-of-way required from residential properties. Southeastern Wisconsin freeway reconstruction projects in Milwaukee County that have been completed, are under construction or are in the planning phase have impacted up to 33 residential properties. Additional residences may be relocated in Milwaukee County as the remaining segments of the freeway network are reconstructed along I-94, I-894, I-43 and I-41 in the future. This is particularly true for the City of Milwaukee, which has multiple freeway corridors within its boundaries and had substantial loss of residences from the original construction of the freeway system.

When considered with data presented in the indirect and cumulative effects analysis prepared for the 2016 FEIS and information presented in this supplemental indirect and cumulative effects analysis that identifies residential displacements have been reduced from eight to one, the I-94 East-West Corridor project would not contribute a substantial cumulative impact to neighborhoods. Other project features can also minimize the potential cumulative effect of the Build alternatives. Noise barriers are feasible and reasonable in six locations along the project corridor. Traffic currently using local streets to avoid freeway congestion would also divert back to I-94, potentially reducing congestion on local streets and improving air quality from less stop and go traffic. Improved traffic operations reduce emissions, which benefits air quality.

However, there is a potential cumulative impact to vulnerable Milwaukee neighborhoods where past and future freeway construction, as noted in Table 20, has and could occur as remaining segments of I-94, I-894, I-43 and I-41 are reconstructed in the future. As roadways are reconstructed, WisDOT develops design measures that avoid and minimize impacts to adjacent neighborhoods to the greatest practicable extent. Where reasonable and feasible, noise barriers are constructed to mitigate unavoidable noise impacts. Neither the 6-lane nor 8-lane alternatives would eliminate existing bicycle or pedestrian facilities. Local roads reconstructed as part of the project would include pedestrian accommodations as well as bike lanes or shared-use lanes. Both build alternatives would provide new connections to and from the Hank Aaron State Trail along 44th Street and 64th Street, as well as new connections along Greves Street and on 25th Street near St. Paul Avenue in the Menomonee Valley. Additionally, as noted in EIS Section 3.5.3, per the Uniform Act, WisDOT will provide relocation assistance, including providing money for acquisition price, replacement dwelling costs, moving expenses, increased rental or mortgage payments, closing costs, and other relocation costs. Additional mitigations are developed specific to individual projects to further minimize the cumulative impact of freeway reconstruction on adjacent neighborhoods.

3.2.5 Municipal Tax Base

This section updates the potential cumulative effects to municipal tax bases within Milwaukee County.

Affected Environment

Local taxes are used for many basic services by local governments including garbage collection, police and fire protection, local road construction and maintenance, public facilities, and other services. A loss of tax base can affect a community's ability to provide municipal services. This is particularly true for the City of Milwaukee that has multiple freeway corridors within its boundaries and had substantial tax base loss from the original construction of the freeway system. Local government tax revenues in Wisconsin have become more challenging in recent years as new development slowed due to the economic recession of the late 2000s, state aid for local governments has declined, and strict levy limits have been created that cap the amount of money local governments can raise through property taxes. The 2023 Wisconsin Act 12 authorized both the city of Milwaukee and Milwaukee County to approve new sales and use taxes to address needed increased revenue and funding for local government services. The City of Milwaukee had a full-value tax base of $39.4 billion in 2022, while the City of West Allis had a full-value tax base of $5.5 billion, and the Village of West Milwaukee had a full-value tax base of $459 million (Wisconsin Department of Revenue, 2022). Opportunities to expand the municipal tax base focus on supporting property retention and enhancement that, in turn increase tax revenues.

Environmental Consequences/Potential Mitigation

The Build alternatives for the I-94 East-West corridor project reduce the impact on the municipal tax base compared to the impact reported in the 2016 FEIS. Impacts are reduced from approximately $6.5-$7.6 million in assessed value loss to approximately $2.9 million. The impact on lost annual local tax revenue is reduced from $59,100-$63,200 to less than $30,000. While the project could cumulatively affect local government tax bases in Milwaukee County when combined with past, present, and future freeway reconstruction projects (Table 20), the impact is reduced and would be offset by the benefit of freeway modernization on adjacent redevelopment areas. Enhanced access to these areas may indirectly attract new investments in the area. The planned redevelopment would increase local tax bases and help pay for the cost of public services that are already in place. Build alternatives would also ease the movement of goods and access to services and employment opportunities near a large population base in the primary study area, which can lead to enhanced business operations and potentially new development opportunities.

3.2.6 Historic Properties

This section updates the potential cumulative effects to historic properties within the Area of Potential Effect.

Affected Environment

The study area is densely developed and includes a wide array of historic properties. Historic properties include buildings, structures, sites, objects, and districts. Ongoing development in the study area, including initial freeway construction has removed historic structures in some areas of Milwaukee County. Economic redevelopment in the Menomonee Valley removed railyards that were active in the late 19th Century and throughout much of the 20th Century. Additional economic redevelopment in the village of West Milwaukee and the city of West Allis continue to remove or renovate former manufacturing properties.

In response to removal of notable and significant historic properties, Section 106 of the National Historic Preservation Act requires federal agencies (in this case FHWA) to consult with SHPO and consulting parties on the effects of proposed projects on historic properties. A similar state law, the Wisconsin Historic Preservation Act requires similar consulting requirements for state-funded projects.

Federally funded US Department of Transportation projects are also subject to Section 4(f) of the Department of Transportation Act. This law requires that projects can use land from historic resources only if there is no prudent and feasible alternative to using the land, and measures to minimize harm are included in the project.

WisDOT updated the area of potential effect (APE) and survey of historic properties in 2020 to confirm previously identified properties and identify new potentially historic properties along I-94 and other roads that would be reconstructed as part of the action to identify historically significant resources within the study area corridor for the I-94 East-West Corridor project. WisDOT has identified historic properties, which are further described in the EIS.

The following lists the historic properties found in the original APE for this project:

- Calvary Cemetery
- Northwestern Branch, National Home for Disabled Volunteer Soldiers National Historic Landmark (NHL)
- Northwestern Branch, National Home for Disabled Volunteer Soldiers Historic District
- Soldiers' Home Reef NHL
- Story Hill Residential Historic District 1
- Story Hill Residential Historic District 2 and 3

Two properties in the study area have been listed in the National Register since completion of the 2016 Final EIS:

- West St. Paul Avenue Industrial Historic District
- 16th Street Viaduct

The following are the identified historic properties within the APEs for the off-interstate intersection improvements, outside the original APE:

- Northwestern Branch, National Home for Disabled Volunteer Soldiers NHL (Brewers Boulevard/National Avenue intersection)
- Paradise Theater (National Avenue/Greenfield Avenue intersection)

Environmental Consequences/Potential Mitigation

Ongoing development and redevelopment activities listed in Table 20 and lack of investment to maintain historic properties within the communities adjacent to the freeway could potentially affect historic properties through demolition or alterations that affect the property's historic integrity. Both federal and state laws help protect properties that are NHLs, or are eligible for or listed in the National Register (all NHLs are listed in the National Register). These laws require sponsors of state and federally funded projects to consult with the SHPO; however, these laws do not always apply to privately initiated actions that could affect historic resources where neither federal nor state permits/approvals are required. In addition to listed state and federal historic properties, local governments take measures to protect properties that are historically significant to their communities. To help avoid and minimize impacts to locally designated historic properties, the cities of Milwaukee, West Allis and Wauwatosa have historic preservation commissions to review plans and make recommendations before local approval.

During the 2016 Final EIS, FHWA and WisDOT developed measures that avoid and minimize effects on historic properties. As part of the Supplemental EIS process, Section 106 consultation has been reinitiated and is ongoing. It is anticipated that the build alternatives would be designed to have No Adverse Effect on the Soldiers' Home NHL and Historic District. The project's Programmatic Agreement which was completed as part of the 2016 Final EIS and is being updated stipulates the appropriate design review process and other steps to be taken to ensure there will be No Adverse Effect on the Soldiers' Home NHL and Historic District. Additional avoidance and minimization measures developed for the build alternatives would have No Adverse Effect on the remaining historic properties in the APE. Although consultation is ongoing, it is anticipated that there will be No Adverse Effect to the newly designated properties as well. With consultation on-going a conclusion cannot be made at this time specific to cumulative effects to historic properties. If build alternatives result in no adverse effect, there would not be a cumulative impact as a result of the project.

Existing federal and state laws, as well as local historic preservation policies, help preserve properties that are NHLs, or are eligible for or listed in the National Register (all NHLs are listed in the National Register of Historic Places), which avoid and minimize the cumulative effect.

3.2.7 Regional Land Use Patterns

The updated evaluation of cumulative effects on regional land use patterns considered the recommendations for the regional freeway system in Southeastern Wisconsin and the status of its implementation in combination with the proposed Build alternatives for the I-94 East-West corridor and the other past, present and future actions in Table 20 to fully assess the potential cumulative effect to regional land uses and its consequences.

To date, WisDOT has finished reconstructing the Marquette Interchange in downtown Milwaukee and completed the Milwaukee County portion of the I-94 North-South corridor. WisDOT recently completed I-94 reconstruction in Racine and Kenosha counties as part of the I-94 North-South project, as well as the Zoo Interchange. Two segments of I-43 between Capitol Drive in Milwaukee County and WIS 60 in Ozaukee County are also under rehabilitation and/or reconstruction.

Other non-transportation actions that affect regional land use patterns include past suburban development in Waukesha County, ongoing and future infill development and redevelopment within the urbanized areas of Waukesha County, ongoing and future development of low-density subdivisions within the non-urbanized/non-sewered portions of Waukesha County that is not consistent with the SEWRPC 2050 regional land use plan. Also, several redevelopment projects are occurring or are in the planning phase in Milwaukee County (See Section 2.2.2.2 for more information about land use and development patterns).

Affected Environment

The analysis of historic and current land-use patterns is described in the original cumulative effects analysis. This section describes updates with the publication of SEWRPC's VISION 2050 long-range land use and transportation plan.

The SEWRPC land use component of VISION 2050 recommends focusing development within planned urban service areas but recognizes the implementation of land use recommendations relies on the local, county, state, and federal agencies, local municipal governments, and the private sector (SEWRPC, 2020c). The plan update recognizes that most residential development is within planned urban service areas, but new single-family residential development is occurring at lower densities than recommended and development of prime agricultural land is occurring in locations inconsistent with the plan. SEWRPC continues to recommend land use development as described in its updated plan.

VISION 2050 continues to recommend significant improvement and expansion of the public transit system, implementing programs that improve access to suburban employment and implementing initiatives promoting transit use and improved quality of service. While there has been a modest increase in transit service, MCTS reduced service on five freeway flyer routes and five special service routes in response to funding shortfalls. SEWRPC also identified that without additional funding, service levels are expected to decline by about 35 percent by 2050 under the fiscally constrained transportation system rather than double as recommended in the Vision 2050 plan (SEWRPC, 2020b).

As described in the original cumulative effects analysis, historic land use and transportation development have resulted in concentrating low-income residents in central city locations as people with economic means moved to suburban locations (WisDOT, 2016). Also, as jobs decentralized, it became increasingly difficult for transit-dependent and low-skilled workers to obtain employment in areas of the region not served by public transportation.

Environmental Consequences

The changes in the regional land use pattern discussed in the original cumulative effects analysis raised concerns about the social and economic implications for portions of the population. The primary concern raised by local stakeholders during the original analysis is that adding new travel lanes to the freeway system in Milwaukee and Waukesha counties could continue to facilitate low-density development patterns in Waukesha County and increase the number of jobs that are not accessible by transit (WisDOT, 2016). The American Civil Liberties Union, Sierra Club, Black Health Coalition, NAACP, Milwaukee Inner-city Congregations Allied for Hope, and the City of Milwaukee specifically raised the issue of the cumulative impact of highway expansion and the lack of transit investment on segregated communities of color.

Wisconsin legislation (Section 85.062(2), Wisconsin Statutes) limits WisDOT's ability to provide capital funding for transit outside traffic mitigation measures during construction projects. WisDOT provides funds to local transit agencies for operating expenses. On average, state operating assistance covers about 34 percent of transit operating expenses statewide (Wisconsin Legislative Fiscal Bureau, 2021). In 2023, MCTS received approximately $66.4 million in state mass transit operating assistance and paratransit aid, representing 41.4 percent of MCTS's 2023 operating budget (Wisconsin Policy Forum, 2023)

A SEWRPC analysis compared the Milwaukee metropolitan area to its peer metro areas on key measures including transportation (SEWRPC, 2020a; SEWRPC, 2020c). Of 28 metro areas evaluated, Milwaukee is one of the few metro areas that does not have a dedicated source of local funding for transit. The analysis concluded that while the Milwaukee metro area highway system performs well compared to peer areas, it lags with respect to public transit. The Milwaukee area has among the highest transit service levels per capita but has seen a 39 percent decline in ridership since 2010, among the most severe decline among peer areas. Other peer metro areas that do not have dedicated transit funding provide substantially less (one-half to a fifth) service per capita when compared to Milwaukee. SEWRPC concludes that action is needed to fund transit services to avoid further service reductions to levels below other peer metro areas with no dedicated funding (SEWRPC, 2020b).

SEWRPC's VISION 2050 plan identifies equitable access as one of the key plan themes. As part of the VISION 2050 plan development and 2020 update, SEWRPC completed an equity analysis of the long-range transportation plan. The analysis concluded no areas within SEWRPC's planning area would disproportionately bear the impact of the planned freeway and surface arterial capacity improvements. While VISION 2050 transit recommendation would improve transit access for communities of color, as well as low-income populations and persons with disabilities to goods and services, the analysis concluded that without additional funding for transit, a disparate impact to these populations is likely. SEWRPC does not have the authority to implement transit recommendations and relies on local, county, state, or special districts to implement transit investments based on local policies and available funding.

Magnitude and Significance of Cumulative Effect

As the original cumulative effects analysis notes, the original construction of I-94 in Milwaukee and Waukesha counties in combination with post-1950s historic development patterns played a large cumulative role in the decentralization of development and jobs in the past. The study team has determined the subsequent improvements and widening to I-94 in Milwaukee and Waukesha counties would have a much smaller cumulative effect on regional land-use patterns and redistribution of population and employment between Milwaukee and Waukesha counties. [7] (Transportation Research Board, 2002) (Boarnet & Haughwout, 2000). As

[7] In the report, *Do Highways Matter? Evidence and Policy Implications of Highways' Influence on Metropolitan Development,* researchers found that the first limited access or interstate highway built in an urban area brought large improvements in transportation access and resulted in large increases in land prices. However, the researchers found that "as more highways are built, and the metropolitan highway network matures, the incremental effect on accessibility from new or improved highways decreases, thus accounting for a smaller change in land prices due to any access premium." The researchers

described in the indirect effects analysis, population (Section 2.2.1.1), employment (Section 2.2.1.3), and development trends (Section 2.2.2) observed in the original cumulative effects analysis remain valid. That is, population and employment trends show that the redistribution of population and employment between Milwaukee and Waukesha counties has slowed in recent decades and land use patterns in Milwaukee and Waukesha counties have developed around a mature transportation system that already has a great deal of transportation accessibility. The 2020 update of VISION 2050 recognizes the impact of market forces on the location, intensity and character of future urban development, as well as the role local communities play in development decisions (SEWRPC, 2020b).

Several stakeholders that participated in outreach in 2021 for the updated ICE analysis affirmed freeway modernization is not the primary driving force behind housing and employment decisions within the region. The majority of stakeholders emphasized the importance of reliable transportation infrastructure, including freeways, and maintaining transportation access are key to maintaining business investment and growing development regardless of location. In addition to freeway investment, many stakeholders, particularly in Milwaukee County, supported investment in transit and bike and pedestrian access; not only for employees, but for the value the investment brings to improved quality life. (See Appendix A for stakeholder outreach summaries).

The SEWRPC 2020 update to Vision 2050 notes that freeways improvements under the VISION 2050 transportation plan or the financially constrained transportation system, would serve areas of minority populations and low-income populations, who would benefit from improved highway accessibility to employment as the personal automobile is the dominant mode of transportation for all residents. While the I-94 East-West Corridor Build alternatives may not have a substantial adverse cumulative effect on low-income and minority populations, the anticipated transit funding that would be available in the financially constrained transportation system will likely result in a disparate impact to transit dependent populations and their ability to access jobs and services.

Among recommendations to improve access to jobs and services in the region, the updated VISION 2050 transportation plan notes the following progress:

- Provide a mix of housing types near employment-supporting land uses: The update notes providing a mix of housing types near concentrations of employment, along with a multimodal transportation system is key to promoting accessibility to jobs. Milwaukee County has seen most of the new multifamily residential development in the region, but similar development is occurring in other counties, which may increase access to jobs. Most single-family residential development has occurred at lower than recommended densities, which may not improve access to jobs for moderate wage workers. Only 25 percent of low-income housing development occurred outside Milwaukee County, and more development of this type of housing would support SEWRPC's recommendation. Housing types are controlled by local government zoning regulations.
- Encourage and accommodate economic growth: The update recommends development of major economic activity centers to encourage growth. Fifty-one percent of new economic development occurred in major activity centers. Twenty-five percent of multifamily development occurred in 27 of 37 communities with a major economic activity center. Forty-eight percent of affordable housing constructed in communities with major activity centers since 2010 have been family units (SEWRPC, 2020b).
- Develop a rapid transit network, develop commuter rail corridors and improve and expand commuter bus services, improve existing express bus service and add service in new corridors, and increase the

further discuss that metropolitan highway investments still influence land use, but at a much smaller geographic scale, rather close to the project. (Boarnet & Haughwout, 2000)

frequency and expand the service area of local transit: Progress has been minimal implementing the VISION 2050 transit element. The plan recognizes that without additional revenue the region will not be able to achieve the recommended transit system. The funded portion of the transit system identified under the fiscally constrained transportation plan (FCTP) includes an anticipated reduction of about 10 percent in service levels from 2014 levels, despite added service including MCTS express bus routes, new streetcar service and E-W BRT service.

- Implement programs to improve access to suburban employment centers: The update found progress on programs created to support the "last-mile" journey from bus stops to employment. In 2018 the State of Wisconsin awarded approximately $2.7 million supporting transportation services and vehicle purchases that connected employees to jobs in areas lacking comprehensive transit services. SEWRPC also created the Workforce Mobility Team in coordination with the Regional Transit Leadership Council (now MobiliSE) to assist connections between jobs and workers in Southeast Wisconsin. The FlexRide Milwaukee service was launched in February 2022 to connect north and northwest side residents in Milwaukee with jobs in Menomonee Falls and Butler. The program has been successful and will continue through at least 2024. MobiliSE launched FlexRide service between the south side of Milwaukee and the Franklin Business Park in April 2023. Other FlexRide service launched in 2023 include a new service zone in New Berlin and extension of the Franklin service to include Oak Creek. FlexRide for Working Parents, in partnership with Employ Milwaukee offers parents the option of a trip to daycare and a trip to work and back again.

Mitigation Measures

Because population, employment and land use trends described in the original cumulative analysis remain valid, potential mitigation measures described in the original analysis to reduce the cumulative impact of insufficient transit access remain valid, including:

- Freeway Project-Related Measures: WisDOT could allow transit buses to operate in the freeway shoulders, where it is safe and practicable to do so, in cooperation with local governments such as Milwaukee County and/or Waukesha County, and their designated transit service providers (MCTS and Waukesha Metro). WisDOT coordination with local transit providers and funding transit access improvements during freeway construction.
- Regional Transit Implementation-Related Measures: Implement regional transit recommended by VISION 2050 – would require action by local governments including Milwaukee County and Waukesha County.
- Transit Funding-Related Measures: Transit funding-related measures continue to rely on existing local, state, and federal funding sources. According to SEWRPC, without legislation for dedicated local transit funding or more substantial increases in state funding, the expansion of public transit service recommended in the regional plan may not be implemented. MCTS has been obtaining federal grants to implement enhanced transit services such as BRT. The Build alternatives for the I-94 East-West Corridor study do not preclude transit, and the 30% Traffic Management Plan for construction recommends a commitment of $25 million on transit for operational and infrastructure costs for construction traffic mitigation.
- Housing: Local government implementation of VISION 2050 recommendations to help to address the existing and projected jobs/housing imbalance.
- Land Use: Local government consistency with the VISION 2050 land use recommendations would help the region develop in a more compact manner that can support transit.

3.2.8 Air Quality

This section updates the potential cumulative effects to air quality in the I-94 East-West corridor.

Affected Environment

The study area freeway system is located within the Southeastern Wisconsin Intrastate Air Quality Control Region #239. Milwaukee County remains in attainment status for five of the six criteria pollutants and has been redesignated to a maintenance area for $PM_{2.5}$ (see EIS Section 3.20, Air Quality, for more information). The most recent update of SEWRPC's financially constrained transportation system, which is based on the regional land use and transportation plan (VISION 2050) conforms with air quality standards (SEWRPC, 2020b).

Environmental Consequences/Potential Mitigation

WisDOT updated air quality analyses based on projected 2050 traffic volumes. Analyses validated the finding in the 2016 FEIS that the I-94 East-West Corridor project will not contribute to any violation of the NAAQS. MSAT emissions decrease with any of the Build alternatives compared to existing conditions, and neither carbon monoxide (CO) nor $PM_{2.5}$ levels would exceed the air quality standards.

As noted in EIS Section 3.20.2, the localized level of MSAT emissions for the Build alternatives could be higher relative to the No-build alternative, but increased speed, reduced congestion and traffic shifts from local streets could offset MSAT emissions. However, as shown with the MSAT results presented in Appendix F-3 in the Supplemental EIS, on a regional basis, USEPA's vehicle and fuel regulations, coupled with fleet turnover, will over time cause substantial reductions that, in almost all cases, will cause region-wide MSAT levels to be significantly lower than today.

WisDOT completed a greenhouse gas (GHG) emissions analysis of the I-94 E-W Corridor project for this Supplemental EIS. When compared to the 2019 existing conditions, emissions from vehicle operations in 2030 and 2050 for the build and No-build alternatives are lower even when the future year VMTs are higher. The GHG emissions in 2030 are 17 to 19 percent lower than 2019 while GHG emissions in 2050 are 22 to 24 percent lower than in 2019. The lower GHG emissions in future years are due to the fleet turnover, improved fuel economy, and increased use of alternative fuel vehicles.

When compared to the No-build alternative in future years, the build alternatives would have slightly increased emissions. The 8-lane alternative would increase GHG operation emissions 9,082 to 9,613 carbon dioxide equivalents (MT CO_2e) (2.3 to 2.4 percent) in 2050 compared to the No-build alternative. The 6-lane alternative would increase GHG operation emissions by 1,819 MT CO_2e to 2,320 MT CO_2e (0.5 to 0.6 percent) in 2050 compared to the No-build alternative. The operational GHG emission increases from the 8-lane alternative would be .7 to 1.8 percent higher 1 than the emissions increases from the 6-lane alternative in 2050.

Cumulative project GHG emissions were estimated by adding the project construction emissions during construction phase, and the O&M and vehicle operation emissions during 2030 and 2050. Year-by-year GHG emissions from vehicle operation between 2030 and 2050 were estimated by linearly interpolating the vehicle emissions. Cumulative GHG emissions of the project are in Table 21. Emission trends between alternatives are consistent with the trends of the annualized emissions. The cumulative GHG emission would be in addition to local and regional GHG emissions which were estimated at 12.5 million MT CO_2e in 2018, which was approximately 9.9 percent of statewide net GHG emissions.

Table 21: Cumulative GHG Emissions (Construction and Operation in 2030-2050), MT CO2e

	No-Build	8-Lane Hybrid	6-Lane Half Hawley Hybrid	6-Lane Full Hawley Hybrid	8-Lane DDI	6-Lane Half Hawley DDI	6-Lane Full Hawley DDI
Cumulative	8,659,435	9,641,203	9,483,194	9,485,105	9,614,257	9,462,314	9,465,525

Source: WisDOT, 2023.

When considered with data presented in the indirect and cumulative effects analysis prepared for the 2016 FEIS and information presented in this supplemental indirect and cumulative effects analysis, the I-94 East-West Corridor would meet air quality standards. Table 20 lists several past, present and reasonably foreseeable activities with potential air quality impacts. The cumulative impact of project-level GHG emissions and that of local emissions can be minimized through regional and local efforts to reduce emissions, as well as project level mitigation measures. SEWRPC's *VISION 2050: A Regional Land Use and Transportation Plan (RTP)* found that implementing the plan, along with the fiscally constrained transportation system would result in about a 20 percent reduction in GHG emissions between 2017 and 2050. Milwaukee County is also developing a Climate Action 2050 Plan to reduce carbon emissions from county operations to achieve, among other goals, a zero net carbon emissions in county operations no later than 2050.

WisDOT will further minimize GHG emissions by following *Standards and Provisions for Road and Bridge Construction*, which include measures to address contractor pollution reduction and containment measures. Other measures include strategies to reduce idling, encourage contractor ridesharing, recycle construction and demolition materials, use LED bulbs, plant stormwater trees and transit operations and infrastructure funding support for construction traffic mitigation.

3.2.9 Construction Impacts

This section updates the potential cumulative effects from ongoing freeway construction within Milwaukee County.

Affected Environment

WisDOT continues to reconstruct the 270-mile Southeastern Wisconsin freeway system, as it nears the end of its service life. As a result, WisDOT has begun construction on major portions of the freeway system and is planning for the reconstruction of additional segments. To date, WisDOT has completed the reconstruction of the Marquette Interchange in downtown Milwaukee, the Zoo Interchange and the Milwaukee County portion of the I-94 North-South corridor (Mitchell Interchange). WisDOT is currently reconstructing the north leg of the Zoo Interchange and began rehabilitation and/or reconstruction of the I-43 North-South corridor between Capitol Drive and WIS 60 in Ozaukee County.

Environmental Consequences/Potential Mitigation

Potential cumulative construction impacts include increased traffic diverted to the local street network and the lack of transit options allowing travelers to choose alternate transportation and help alleviate local street traffic congestion. Other construction related impacts could include noise and vibration, air quality and water quality. Table 20 lists several past, present and reasonably foreseeable activities with potential construction impacts.

Ongoing construction activities are consistent with those described in the original cumulative impacts discussion and measures to avoid and minimize cumulative impacts remain valid including:

- Evaluating the diversion routes to determine needed route improvements. Additional congestion management measures on local roads include signal timing modifications, temporary signals, parking restrictions, intersection improvements, incident management, and demand management options.
- Promote transit or carpool use. WisDOT will fund additional transit routes, as warranted, to mitigate impacts to traffic within the project area during the construction phase of the project.
- Holding workshops with stakeholders to determine methods to reduce the effects of construction on area businesses, residents, commuters, community services, and special events.
- Implementing a community involvement plan to engage and inform the public. Information sources would include radio, internet, print, and television.

- Improving detour routes and other routes due to increased traffic resulting from freeway construction.

These measures would be implemented by WisDOT through WisDOT's In this Together program with cooperation from local businesses.

The cumulative effect of temporary noise and vibration impacts managed through WisDOT special provisions for construction and include requirements for contractors to maintain equipment and operate in compliance with relevant state, federal and local laws, and regulations. Other ongoing construction projects are also typically subject to nuisance ordinances, including the City of Milwaukee's Chapter 80 nuisance ordinance.

The cumulative effect of temporary air quality impacts are managed through contractor adherence to EPA dust and air emissions standards for equipment and on-site management strategies. Standard dust control measures such as on-site watering and equipment cleaning minimize impacts. For other construction projects, the City of Milwaukee's nuisance ordinance also regulates the excessive discharge of air-polluting materials such as dust.

Cumulative effects on water quality from construction activities is managed through compliance with WisDOT's *Standards and Provisions for Road and Bridge Construction*, Wisconsin Administrative Code Chapter Trans 401, the WDNR Transportation Construction General Permit, and the WisDOT/WDNR Cooperative Agreement (2022). For other construction projects, existing WDNR and City of Milwaukee stormwater regulations enforce water quality.

Due to WisDOT's ability to implement mitigation measures, cumulative construction related impacts are not anticipated to be substantial.

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APPENDIX A: STAKEHOLDER MEETING SUMMARIES

I-94 East-West Corridor Study
Indirect and Cumulative Effects
Meeting Minutes for Stakeholder Interviews

Meeting	West Milwaukee
Date, Time	December 1, 12pm
Location	Microsoft Teams (virtual)
Attendees	Josh Leveque, WisDOT Carolyn Seboe, HNTB Michael Hammond, HNTB Kim Egan, West Milwaukee Len Roecker, West Milwaukee

Meeting Summary

A meeting was conducted with West Milwaukee to discuss indirect and cumulative effects for the Supplemental Environmental Impact Statement being prepared for the I-94 East-West Corridor Study.

Prior to the discussion, Josh Leveque and Carolyn Seboe provided an overview of the project, alternatives, schedule, and indirect and cumulative effects.

The following is a summary of the comments and questions heard from the City:

- West Milwaukee: When will Preferred Alternative be selected in 2022?
    - A: Early to mid-2022
- West Milwaukee: Presentation notes bicycle and pedestrian improvements north of the freeway. Is there sufficient connections/consideration to the south? Want to make sure that bike/ped is reviewed to/from the Village
    - A: Still looking into bicycle and pedestrian amenities within our footprint. We are not only targeting those areas on the slide.
- West Milwaukee: Was any input received from Milwaukee on WIS-175 and boulevard?
    - A: We have received that comment from a few stakeholders.
- West Milwaukee: Village Board is interested in WIS-175 and speeding cars coming onto Miller Park Way.
    - A: That would be part of a separate study. When WIS-175 needs improvement, then the idea will be examined.
- West Milwaukee: Hawley Road Interchange – Are elected officials worried that traffic would pass to National Avenue or Greenfield Avenue?
    - A: Half Hawley Road interchange is an option in an 8-lane freeway design. Could maintain full Hawley Road interchange with 6-lane.
- West Milwaukee: Is WisDOT leaning towards a certain alternative?
    - A: Both options are still on the table.
- West Milwaukee: Village worries that traffic will get diverted to local roads with the six-lane alternative. Would it help decision-making if the Village of West Milwaukee passed a resolution to support an alternative?
    - A: Yes, would help.
    - West Milwaukee: When would you want that resolution?
        - A: Early next year. March could work.

Land use and development trends?

- Two large parcels will be aiming for redevelopment in the next five years in West Milwaukee
    - Komatsu moving – unknown on what will happen

    - Rexnord, 50 acres, being vacated and will be redeveloped, the potential for large development (housing, retail, commercial)
    - Both parcels are in the comprehensive plan as dense mixed-use.
- Another property – Malt Europe, 20 acres, recently shut down production
    - Likely will be an industrial use
- Another development could be at the GE campus
    - The facility has been selected for global imaging HQ
    - Anticipating hundreds more employees at their campus

Who is taking the lead on redeveloping Komatsu?

- Currently, we are not sure. The Village is under an NDA with Komatsu.

Timeframe for these redevelopments?

- Both large sites may take 5-10 years to redevelop fully
- GE work will happen over the next couple of years
- Malt Europe could be reused in the next five years

Strong interest from developers?

- Yes, we hear lots of interest in the sites because of their location.

Is the Village taking an active role in redevelopment?

- Assuming 2-3 TIDs to support Komatsu, Rexnord, and GE redevelopments

What is the existing business vitality along Miller Park Way?

- Strong retail vitality
- From National Ave to Lincoln Ave is one of the highest volume urban arterials in the region/state

Residential Developments?

- Nothing major unless larger redevelopments have residential
- Have nowhere else for new residential in West Milwaukee
- If both larger sites fully redevelop with residential, could go from 4,000 to 6,000 residents

Freeway role in development?

- Attractiveness for redevelopment is based on geographic location in the region
- The business sector sees a draw from Downtown Milwaukee coming to Miller Park Way for retail
    - Access is great with the freeway nearby, a key factor for the development

Access changes with project impacting development?

- Depending on the timing of construction and other redevelopments, the potential for some conflicts/changes in geometry at National Avenue that will need to be integrated with off-freeway improvements with I-94
- Modernization of stadium interchange will benefit congestion, access to and from the south
    - Village has a concern about half Hawley Road interchange and impact to east-west arterials in the Village (National and Greenfield) adding local traffic to EW arterial
- Lots of complaints about traffic and reckless driving, with half-Hawley more traffic would cut through residential

Six-lane vs. eight-lane alternative?

- With 8-lane would leave more traffic on the interstate. This would likely be Village Board's preference.
- More traffic that can be facilitated on the freeway would result in less diversion to EW arterial
- Brewers games are difficult for the Village
    - It would be good if the project could resolve some of those issues

Does the project impact minority/Low-income populations?

- We are now a majority-minority community, difficult to forecast impacts

What is the Bike/Ped Improvements impact from the project?

- Bike/Ped improvements are important to our elected officials
- Bike/ped transportation is happening in the Village (Brewers games, trail access)
- Bike/ped access north-south connectivity past freeway has been an emphasis for Village

What is the Transit Improvements' impact from the project?

- Routes have recently been cut due to low ridership
- Not sure what changes we will see with transit from the project occurring.
- In general, Village businesses see a benefit for labor forces with an improved transit
    - The draw for transit is often from the City (east) to the Village.

Other projects in the area?

- Miller Park Way is close to being built out
- City of Milwaukee National Avenue project
- Working with WisDOT on Greenfield Ave reconstruction (2024 construction)

Other comments?

- Potential for gateway redevelopment timing which need lots of coordination with I-94 EW and off-freeway improvements
    - Improvements show off-freeway work at that location and not much flexibility in changing it
    - Those improvements may conflict with redevelopment and may need to be ripped out soon after

Notes prepared by Mike Hammond, HNTB

I-94 East-West Corridor Study
Indirect and Cumulative Effects
Meeting Minutes for Stakeholder Interviews

Meeting	City of West Allis
Date, Time	December 10, 9:30am
Location	Microsoft Teams (virtual)
Attendees	Josh Leveque, WisDOT Carolyn Seboe, HNTB Michael Hammond, HNTB Steven Schaer, Planning & Zoning Manager Peter Daniels, City Engineer Traci Gengler, Engineer

Meeting Summary

A meeting was conducted with the City of West Allis, to discuss indirect and cumulative effects for the Supplemental Environmental Impact Statement being prepared for the I-94 East-West Corridor Study.

Prior to the discussion, Josh Leveque and Carolyn Seboe provided an overview of the project, alternatives, schedule, and indirect and cumulative effects.

The following is a summary of the comments and questions heard from the staff:

- West Allis: Would the WisDOT sign shop be relocated with this project?
  - A: Would only occur with partial Hawley interchange
    - WisDOT is looking into alternate locations, but not sure how land would be owned following construction.
- Development Trends?
  - Population has risen just slightly in recent years, but becoming a more diverse community
    - West Allis staff expect the community to become even more diverse in the future
  - The city recently completed a housing market study – which noted they have room to absorb more residential
    - Staff is expecting multi-family development in future years
- Role of Current Freeway?
  - City is attractive as it's "15 minutes from everywhere"
  - Geographic location within the region has helped strengthen business and residential demand in West Allis
- Challenges to development?
  - Staff noted that West Allis has to compete with other suburban communities with less industrial past – meaning redevelopment often requires remediation and TID funds to support those efforts
  - Rarely a turnkey opportunity in West Allis
- Freeway Access Points and Development?
  - Staff highlighted changes to access at Hawley may make that area less desirable – Washington Street addition/extension could help mitigate
  - Renaissance Faire office building was noted by staff as still a viable office site and Washington Street could help open up areas for redevelopment
- Washington Street and Hawley Access?
  - West Allis staff noted Washington Street extension could be better for development than Hawley, but the difference is close between the two

    - Staff noted that some local elected officials prefer an 8-lane alternative as it will remove traffic from local streets
    - Greenfield Avenue has a large amount of pass-through traffic and people will avoid an area if it's too congested
- 6-lane vs. 8-lane alternative?
    - Staff were not sure if congestion in West Allis is from people avoiding the freeway
    - Greenfield Avenue can't handle any additional traffic as staff are receiving consistent complaints about congestion, reckless driving, and drivers cutting through residential neighborhoods
    - Off-freeway improvements and bicycle/pedestrian improvements are important. City staff would appreciate the connection to the Hank Aaron State Trail near the Renaissance Faire building.
- 68th/70th Street Access?
    - Staff felt that if Hawley is closed that 70th would need to accommodate that traffic
    - Access point reconstruction was noted as unlikely to change development patterns unless congestion increases
- Minority and Low-income Populations?
    - Partial Hawley closure would impact large minority tracts, could be discriminatory
    - Ramp metering could also impact these communities when there is no metering in western suburbs
- Transit Service?
    - City supports transit service through and to West Allis
    - Staff were supportive of BRT and would welcome service in West Allis
    - Staff noted MCTS seems to have scaled back transit routes in West Allis recently, reducing transit coverage
    - City supports the development of last-mile connections and complete streets.

Notes prepared by Mike Hammond, HNTB

I-94 East-West Corridor Study
Indirect and Cumulative Effects
Meeting Minutes for Stakeholder Interviews

Meeting	Waukesha County Business Alliance
Date, Time	December 6, 12pm
Location	Microsoft Teams (Virtual)
Attendees	Josh Leveque, WisDOT Carolyn Seboe, HNTB Michael Hammond, HNTB Suzanne Kelly, President of WCBA Amanda Payne, Senior VP of WCBA

A meeting was conducted with Waukesha County Business Alliance (WCBA) to discuss indirect and cumulative effects for the Supplemental Environmental Impact Statement being prepared for the I-94 East-West Corridor Study.

Prior to the discussion, Josh Leveque and Carolyn Seboe provided an overview of the project, alternatives, schedule, and indirect and cumulative effects.

The following is a summary of the comments and questions heard from the WCBA:

- WCBA: Is there concern that the pinchpoint at the cemetery would be less safe? Does DOT have talking points for narrow lanes and shoulders?
    - A: Narrowing lanes is a safety concern and increasing capacity does improve safety.
- WCBA: Have you looked at national implications of corridor – busiest corridor in the state and connections to other state. With all supply chain issues, this is an important corridor.
    - A: DOW has looked at this from a qualitative perspective as it has been one of the main f reasonings for the improvements.
- WCBA: Port Of Milwaukee is very busy and should be noted as key selling point for corridor.
    - A: Noted.

Market trends/development?

- WCBA has noted continuing trends of equal flow of people between Milwaukee and Waukesha County in terms of employment with 250,000 people working in Waukesha County and 30% living in Milwaukee County.
- Development is strong in Waukesha County and the county continues to grow in population.
- Transportation is one of the key factors for companies in Waukehsa County to continue to grow and hire employees
- WCBA just finished a survey of businesses and is anticipating strong growth across all industries, especially manufacturing
    - Manufacturing relies heavily on I-94 EW as materials come in, products out and employees travel both in and out
    - Many industries in Waukesha County are looking to expand their workforce.
- One of WCBA's biggest challenges is attracting workforce into the county and the state. Quality of life is important for employees and having transportation access in this corridor between Milwaukee and Waukesha is important for commerce and attracting talent.

Would project accelerate any development trends?

- WCBA felt that it likely would but would make region an attractive place to live, work and play while maintaining quality of life
- WCBA has been a strong supporter of the 8-lane alternative as they believe an additional lane is important for freight capacity.
- WCBA is supportive of alternative transportation (BRT, RTLC flexible transportation). Both roadways and alternative transportation options are important.
- Businesses would benefit from the 8-lane alternative

Improvements in transit system?

- WCBA advocates for investment in transit as employers are looking for flexible, on-demand transit options. Fixed route transit doesn't work as well in Waukesha County.

Any other projects that could contribute to cumulative impact?

- WCBA noted continued population/business growth in Waukesha County and specifically the Bluemound Road corridor in Brookfield

Other improvements to I-94 – change development patterns?

- I-94 between Milwaukee and Madison is an important corridor as it connects research and development with commerce. WCBA would support the modernization, maintenance and expansion of the corridor as it could have a large positive economic impact on the state.

Certain areas of the county that are strong with development?

- WCBA has seen growth all over the county: Mukwonago, Waukesha, Pewaukee, Oconomowoc, Menomonee Falls
- Brookfield conference center development could increase traffic in that area
- New Berlin has seen strong industrial development
- City of Waukesha is mostly redevelopment opportunities
- There is a new business park in Mukwonago with lots of space for industrial development
- Oconomowoc has seen strong development in residential and retail.

What holds back development?

- WCBA noted that workforce, transportation access and customer connections, and supply movement as the key determinants of development

Is developable land available with utilities?

- WBA noted that developable land with utilities varies by municipality

Notes prepared by Mike Hammond, HNTB

I-94 East-West Corridor Study
Indirect and Cumulative Effects
Meeting Minutes for Stakeholder Interviews

Meeting	VIA CDC
Date, Time	November 11, 11am
Location	Microsoft Teams (virtual)
Attendees	Josh Leveque, WisDOT Carolyn Seboe, HNTB Michael Hammond, HNTB Cinthia Tellez Silva, VIA CDC (Economic Development) Lidia Villazaez, VIA CDC (Outreach Manager – Silver City)

Meeting Summary

A meeting was conducted with VIA CDC, to discuss indirect and cumulative effects for the Supplemental Environmental Impact Statement being prepared for the I-94 East-West Corridor Study.

Prior to the discussion, Josh Leveque and Carolyn Seboe provided an overview of the project, alternatives, schedule, and indirect and cumulative effects.

The following is a summary of the comments and questions heard from VIA:

- VIA: Will public involvement meetings be recorded/live stream?
    - A: The meetings will be in-person but all the information will be posted online
- VIA: Does DOT consider other project timelines that could overlap? National Avenue is around the same time?
    - A: The project does consider other projects. I-94 EW would start on the west leg so there wouldn't be any overlap near National Avenue
    - VIA: We worry about projects right after one another having an effect on local businesses
- VIA: How are stakeholders across the project engaged? Want to make sure business are not impacted as Komatsu leaves, are there jobs available with the project? How are documenting feedback?
    - A: Jobs are available as a part of the project. DOT utilizes many DBE and local companies
    - A: Project team member, Beth Foy, can provide more detail on the extensive PI approach for the project
- VIA: How would the project impact emissions? Other environmental resources?
    - A: SEIS will have detailed emissions/air quality information – can provide contact with Air Quality analysis team if you have further questions
- VIA: Would like to ensure that feedback you receive is transparent and democratic and that impacts are shared with communities.
- VIA: We would like to see stakeholder input that you receive from other groups before report is final.

- Overall Development Trends?
    - Komatsu is leaving the neighborhood
    - Smaller businesses are just as important to the community
    - VIA has seen an uptick in residents and community members desire to open a brick-and-mortar businesses
    - Additionally, VIA staff Lots of concerns from business owners about National Avenue construction
- Komatsu Departure?
    - VIA noted that the majority of Komatsu workers didn't live in the neighborhood
    - Large vacant areas, like those left by Komatsu, could lead to deterioration and make the areas feel empty

    - VIA would like to see the reuse of Komatsu space to benefit the community
- Rise in small storefronts
    - VIA has notice that following the outbreak of the COVID-19 pandemic people want to work for themselves
    - VIA has identified several grant opportunities to support small businesses
    - COVID-19 helped people see all the support available for small businesses
    - Generally, VIA has noted increased interest in opening businesses, but often obtaining the building is the biggest obstacle as lots of non-local landlords hold property
        - Language access is always key for small businesses owners to offer their feedback
- Residential Development Demand
    - VIA runs the turnkey program where VIA purchases property, improves it, and then resells to residents based on certain criteria
    - VIA staff have noticed a large increase in property taxes lately, which is a concern of residents who want to grow in -place
    - Residents are also concerned about traffic/congestion in the neighborhood
- Freeway Impact on Development
    - For businesses, parking is their biggest concern, according to VIA staff. The freeway (I-94) is not as big of a concern
    - VIA noted that the bridges connecting north-south are important for neighborhood
    - The freeway helps to get goods delivered to the neighborhood, but parking and traffic are more important to residents and businesses
- 6-lane vs 8-lane?
    - From the business perspective, VIA staff believe traffic diversion onto National Avenue corridor is the biggest concern with the project.
        - VIA has not engaged companies in the area on the 6-lane vs. 8-lane alternatives
    - Opportunities for bicycle and pedestrian connections were noted by VIA staff as key to highlighting/enhancing neighborhood places
        - 35th Street bridge has large pedestrian volumes
        - Transportation to/from the Menomonee Valley is vital
    - VIA noted it is as a benefit if there is less congestion from an alternative, but also important to understand how the alternatives will impact bicycle and pedestrian travel
    - Staff also noted the historic context of highways dividing cities and adding more lanes may exacerbate the problem
- Bicycle and Pedestrian Connections, Impact on Neighborhoods?
    - VIA staff highlighted bicycle and pedestrian connections as important. Key to look at both bicycle/pedestrian but also vehicle travel, not one or the other.
    - VIA recommended using the historic context of freeways to better inform the public and connect with communities in a transparent manner
- Transit Impact on Community?
    - VIA noted transit is very important to the community
        - Transit can have traffic calming effects that make streets safer
        - Many residents don't have access to cars to get to work, so they rely on transit
        - This project should go hand in hand with transit funding and recent loss of funding for MCTS

Notes prepared by Mike Hammond, HNTB

I-94 East-West Corridor Study
Indirect and Cumulative Effects
Meeting Minutes for Stakeholder Interviews

Meeting	Sixteenth Street Community Health Center
Date, Time	November 12, 9am
Location	Microsoft Teams (virtual)
Attendees	Josh Leveque, WisDOT Carolyn Seboe, HNTB Michael Hammond, HNTB Rosamaria Martinez, VP of Community Health Initiatives Kelly Moore Brands, Sustainability & Environment Project Manager Jamie Ferschinger, Director of Environmental Health & Community Wellness Yesi Perez, Neighborhood Revitalization

Meeting Summary

A meeting was conducted with Sixteenth Street Community Health Center (SSCHC), to discuss indirect and cumulative effects for the Supplemental Environmental Impact Statement being prepared for the I-94 East-West Corridor Study.

Prior to the discussion, Josh Leveque and Carolyn Seboe provided an overview of the project, alternatives, schedule, and indirect and cumulative effects.

The following is a summary of the comments and questions heard from SSCHC:

General Project Questions from SSCHC

- SSCHC: Why was the project defunded in 2015?
  - A: The defunding was a political decision completed through the legislative process
- SSCHC: Where are the bicycle and pedestrian connections with this project? Connection to HAST?
  - A: The HAST connections will be near American Family Field, connected via shared use path along 44th street and connection to the Oak Leaf Trail north of Bluemound
- SSCHC: Is this project addressing a current problem with traffic or just forecasted traffic growth? Could this accommodate public transit? Longer term vision beyond just adding lanes? SEIS topics – what are the impacts to those items?
  - A: Design is addressing congestion now, but also considers future traffic forecasts. Takes both into consideration. Project does not preclude any transit. DOT is looking into mitigation measures that could involve transit. WisDOT has coordinated the project with SEWRPC, Vision 2050 and MCTS. Operational improvements realized from the project would improve any freeway flyers. All SEIS analyses for resource impacts are underway, but no results available yet. The original EIS is available online, but info is being updated with this SEIS effort. There are some relocations planned, with similar impacts between 6-lane and 8-lane alternatives
- SSCHC: How would this affect noise and air pollution? Runoff, soil?
  - A: WisDOT is completing a detailed noise analysis for project. An 8db+ increase is the threshold for potential noise barriers with a detailed process with voting to implement barriers. Regarding other environmental impacts, the project is part of the regional/state improvement plan, which is in conformance with air quality. There will be detailed environmental resource analyses within the SEIS.
- SSCHC: Regarding bike lanes/connections - are those linkages in the 2010 Milwaukee Bicycle plan?
  - A: WisDOT is not sure how the improvements align with the plan.
  - SSCHC: Would make sense to take that study/plan into account

        - A: WisDOT has a working group that is assisting and advising on bike/ped. connections
- SSCHC: What about rapid transit? Isn't under the purview of this project? Moving forward into the future, we are concerned about access in neighborhoods – fewer cars on the freeway – less pollution, less impacts. Transit is a long-term solution? Why not include in this project considerations?
    - A: The project is reconstructing areas where there are noted bike connections/improvements so DOT can easily work to include those improvements, so it is a little different than transit. Transit can still be accommodated on the project area streets. MCTS is the lead agency for transit, the North-South transit study is being led by SEWRPC but under purview of MCTS. SEWRPC sets the vision for transit corridor. WisDOT is coordinating with these agencies to look at transit mitigation during construction and long-term improvements.
- SSCHC: Our team loves the idea of fewer cars, and more public transit. Is there a way to construct the roadways now that would best accommodate light rail in the future? Need a better way to accommodate trips in the future.
    - A: LRT may fit within our corridor but could be on a different EW corridor in the future. EW transit was looked at some decades ago and was eliminated on the freeway corridor due to space needs - which is why transit is on parallel corridors. In the future, transit could be on this corridor. SEWRPC has other corridors for transit noted in Vision 2050.
- SSCHC: Leveraging one project with another is key. Is there regular communication with other projects to make sure timelines are cross referenced? Are you also engaging with neighborhood groups?
    - A: Yes, DOT works with all other agencies to understand and coordinate adjacent projects. Have community advisory committee including many entities and stakeholder, also transit and business.
- SSCHC: Are committees reflective of diverse neighborhood groups? Smaller businesses too?
    - A: Yes, DOT tries to accommodate nearby communities/neighborhoods into advisory groups, working with groups like SSCHC and VIA to reach out and distribute info to residents.
- SSCHC: Are meetings in different languages?
    - A: All meetings are in English. PIMs and web materials accommodate other languages when needed.
- SSCHC: Might want to consider other languages, like Burmese.
    - A: Noted
- SSCHC: On the bike lane connecting HAST to OLT – what type of facility connects the two?
    - A: Would be shared use path up until Wells Street, where it would utilize sharrows on the street
    - SSCHC: Sharrows don't feel safe enough, would advocate for protected bike lane.

ICE Discussion

- LU and Development trends/patterns?
    - In the area around 35th street, SSCHC has noted an increase in small local businesses. In project area the highway ramps near communities can make things unsafe. SSCHC has noticed a high volume of reckless driving and organization is focused on street safety through design (bumpouts, etc). SSCHC noted that with new development, there is a desire to maintain historical and cultural context of neighborhoods. Placemaking is another desire of the locl communities with a focus on art with function. There are not a lot of vacant lots on the south side with a strong demand for housing. The neighborhoods also have a lot of transitional residents, like refugees, who are not a large portion of owner-occupied units.
- Does existing freeway play a role in development?
    - SSCHC noted that congestion plays a large role in concerns with traffic on local streets. Traffic is currently funneled into neighborhoods in an unsafe manner, which has a major impact on neighborhoods. National Avenue and Greenfield Avenue are like highways with people driving fast.
    - Q: Does that traffic and speed affect business vitality?
    - A: Yes, and neighborhood quality of life as with reckless driving people are less likely to support businesses. Safety and speed of cars where there aren't a lot of delineated areas for bikes/peds is a safety concern. SSCHC completed a community health assessment which noted traffic safety as an issue. When SSCHC interfaces with BIDs in the area, often hear businesses are concerned about reckless driving.
- 6-lane vs. 8-lane Alternatives?

- SSCHC noted that with the 8-lane alternative as you go wider you likely have more relocations that affect nearby neighborhoods. How long will these properties be vacant? And period of construction can exacerbate issues? An increased number of lanes means more options to stay on the freeway, reduce traffic on arterials, but do more lanes invite more driving?
    - A: Traffic analysis shows less local diversion under the 8-lane alternative. The project area sees a small amount of induced demand and established access points are not changing.
- SSCHC noted concerns regarding climate change as the region is in a good position with the climate and resources and will likely be a target for people to move to. Long-term the region is going to keep running into the need for more lanes but should be forward thinking about climate refugees.
- Q: Do wider lanes increase speed?
    - A: 12' is standard right now and 11' in some spots. New design would be 12' throughout.
- Q: In other cities, we see thru lanes vs. local lanes vs. commuter lanes? Why not an option?
    - A: Hasn't been an option. Corridor has a lot of local traffic. 75% either enter/exit in the corridor.

SSCHC: Demographics are changing in neighborhood. Traditionally the neighborhood has been segregated but recent sense that it is changing. The south side of Milwaukee is not just Latino populations anymore. Over the last 2-5 years, SSCHC has seen demographic change and anticipate it will continue changing as black and refugee community members are becoming more prevalent.

Notes prepared by Mike Hammond, HNTB

I-94 East-West Corridor Study
Indirect and Cumulative Effects
Meeting Minutes for Stakeholder Interviews

Meeting	SEWRPC
Date, Time	November 29, 11:30am
Location	Microsoft Teams (virtual)
Attendees	Josh Leveque, WisDOT Carolyn Seboe, HNTB Michael Hammond, HNTB Kevin Muhs – SEWRPC Chris Hiebert – SEWRPC Ryan Hoel – SEWRPC Jennifer Sarnecki – SEWRPC

Meeting Summary

A meeting was conducted with SEWRPC, to discuss indirect and cumulative effects for the Supplemental Environmental Impact Statement being prepared for the I-94 East-West Corridor Study.

Prior to the discussion, Josh Leveque and Carolyn Seboe provided an overview of the project, alternatives, schedule, and indirect and cumulative effects.

The following is a summary of the comments and questions heard from SEWRPC:

Development Trends/Patterns in the region?

- SEWRPC has seen strong growth in warehousing and industrial sector throughout the region. There has been relatively strong jobs growth compared to past 20 years. SEWRPC also noted the region has seen a stronger emphasis on multi-family development
- SEWRPC noted that available land is one major constraint to development

What features impact what land is developed?

- SEWRPC detailed that public utilities play a major role in what land is developable as all the land near freeway interchange with utilities has been developed
- Almost every site that is being developed now has environmental corridors in it as the region is increasingly running out of “easy” development sites.
- SEWRPC stated that incrementally anything that improves congestion does make it easier to move further away, but travel times are not the defining factor in development patterns in the region

Induced demand in our region?

- SEWRPC noted there is some degree of induced demand when you improve travel times, but our region doesn’t have much suppressed demand.
- Over the long-term as travel times improve then there is some opportunity for induced demand, according to SEWRPC. The regional plans show that over 30-35 years freeway improvements are just maintaining current congestion levels, therefore in the long-term SEWRPC doesn’t expect parcels further out to perform differently because congestion stays level.

Socioeconomic Trends? Redistribution of population?

- SEWRPC has noted some continued population redistribution based on early community population totals from 2020 U.S. Census
- Schools and crime are likely major factors for population changes

Milwaukee County changes?

- There are neighborhoods that are strong or growing in Milwaukee County, those with amenities, closer to downtown, easier access. However, there are also large areas that are struggling with divestment and its affects.

Project impacts to neighborhood or busines vitality?

- In the primary study area, SEWRPC noted the primary benefit is shifting traffic off surface arterials to freeways area, which allows for repurposing of surface arterial ROW and shrinking parallel arterials
- This improvement will benefit the entire region to move goods and making other sites more attractive

Cumulative effect of all freeways being improved?

- The regional plan recommends additional capacity on the freeway system where it warrants it and use surface arterials to reprioritize to focus on safety. SEWRPC noted that the project team should think carefully about adding turn lanes on surface arterials and its impact on pedestrian travel as it increases distance from curb to curb.

Project impacts transit service?

- Reducing the congestion on surface arterials is generally good for transit, making it more reliable and improving travel times. However, improved travel times on freeway could also take riders from transit as more people choose to drive.
- SEWRPC noted the need to ensure transit system remains attractive in our region. The state government restricts county funding mechanisms, so removing riders could exacerbate the situation.
- Adding the bus on shoulder ability would improve freeway running routes
- SEWRPC recommended the incentivization of transit use over free parking downtown. DOT should not preclude significant transit benefits on the freeway corridor and now is the time to decide. The 6-lane alternative could allow for shoulder use of buses.

Minority/Low-income populations – how would project impact?

- The regional plan shows that demographics are different for transit users vs automobiles and without a substantial investment in transit, the region has cumulative impact on EJ populations. Connectivity between north and south and connecting residents to jobs are both key considerations.

Other projects in the area?

- SEWRPC noted the rebuilding entire freeway system and lack of transit investment as the key items to note in the region.

Improvement in stormwater management?

- SEWRPC noted the region is doing a better job managing stormewater than 20-30 years ago. However, competing against the backdrop of climate change, stormwater management requires a comprehensive/regional approach

Notes prepared by Mike Hammond, HNTB

I-94 East-West Corridor Study
Indirect and Cumulative Effects
Meeting Minutes for Stakeholder Interviews

Meeting	Rick Wiegand - Developer
Date, Time	November 4, 12pm
Location	Ambassador Hotel
Attendees	Josh Leveque, WisDOT Carolyn Seboe, HNTB Michael Hammond, HNTB Rick Wiegand , Developer

Meeting Summary

A meeting was conducted with Rick Wiegand, local developer, to discuss indirect and cumulative effects for the Supplemental Environmental Impact Statement being prepared for the I-94 East-West Corridor Study.

Prior to the discussion, Josh Leveque and Carolyn Seboe provided an overview of the project, alternatives, schedule, and indirect and cumulative effects.

The following is a summary of the comments that were made by Rick:

- Developments/Business
  - Wiegand is the owner of the Ambassador Hotel and is currently developing several properties along 27th Street: Ambassador Suites, City Campus and Cecelia Buildings.
  - Access to the freeway is important for the hotel and other developments and on/off ramps need to be designed to accommodate traffic and ease of access
- Current Development Trends and Patterns
  - Wiegand started 27th Street developments 6 years ago and working to improve the neighborhood
  - The pandemic slowed interest from tenants, but interest is starting to pick up
- Would the 8-lane alternative change any development patterns?
  - 8-lane will get people through the area quicker, which is beneficial to business as you increase the number of people you can move in and out of the area.
  - EW-BRT will remove a travel lane on Wisconsin, so the additional lane on freeway will help with traffic
- Transportation Access Issues?
  - Wiegand sees issues with transportation access in this area and will sometimes drive further to utilize WIS 175 to access I-94 rather than nearby entrance ramps
  - Wiegand has noticed higher traffic volumes opposite the traditional commute patterns
- Would the proposed interchanges have any impact to development?
  - Wiegand noted the 27th Street ramps need to be improved to provide better access to 27th Street/neighborhoods
- Transit Access and development
  - Wiegand noted the transit access does benefit developments in this area
  - Transportation access of local roads and freeways is key to development in these neighborhoods
  - Wiegand noted that bicycle and pedestrian access does not impact developments
- Wiegand is not aware of other projects in the area that should be considered and there is adequate infrastructure in the study area to support development.

After discussing Indirect and Cumulative Impacts, Mr. Wiegand and Josh Leveque discussed the design of the 27th Street ramps.

Notes prepared by Mike Hammond, HNTB

I-94 East-West Corridor Study
Indirect and Cumulative Effects
Meeting Minutes for Stakeholder Interviews

Meeting	Near West Side Partners (NWSP)
Date, Time	November 17, 11am
Location	Microsoft Teams (virtual)
Attendees	Josh Leveque, WisDOT Carolyn Seboe, HNTB Michael Hammond, HNTB Keith Stanley, NWSP – Exec. Director

Meeting Summary

A meeting was conducted with the Near West Side Partners (NWSP), to discuss indirect and cumulative effects for the Supplemental Environmental Impact Statement being prepared for the I-94 East-West Corridor Study.

Prior to the discussion, Josh Leveque and Carolyn Seboe provided an overview of the project, alternatives, schedule, and indirect and cumulative effects.

The following is a summary of the comments and questions heard from NWSP:

- NWSP noted that a large percentage of the project area is in the near west side area
- NWSP highlighted that bicycle and pedestrian connections are important for our communities. For many people on near west side, focus on safer/vibrant/inviting access – most important to our community members. Cultural and branding opportunities for communities are important too.
- Q: How does the state evaluate cumulative effects? The 16th Street viaduct has a history – sometimes there is a racial component to the impacts of projects. Is there a consideration about communities of color/poverty? Should ensure communities of color won't be negatively impacted by development? 45% of near west side is African American.
    - A: We look at social, economic and transportation effects. We make sure all voices are represented. We look a full spectrum of local planning efforts, rules and regulations. Looking at relocations to ensure community/business vitality is not impacted
    - Follow-up from NWSP: What are the best practices for this type of redesign of interstate? What should we as a community considers (other case studies). Project can be overwhelming for communities to understand. Need the tools to discuss impacts.
- NWSP: Neighborhood quality of life is important. WisDOT needs to explain this impact to the neighborhoods and residents. More important than design is explaining the quality-of-life changes from the project.
    - Biggest impact noted by NWSP is change to access points (35th/Park Hill) with the request for a meeting with property owner regarding access to gas station.
        - DOT has met with him and has some solutions. DOT will reach out again and continue coordination.
- Development Trends/Patterns?
    - NWSP noted that anchor institutions are not really impacted by the project (Harley, Ambassador, Rave, Marquette, Molson-Coors). Most important focus for NWSP is that entrances/exit concerns can be addressed. There are some concerns with Harley – 35th Street exit, people treat it like a highway and travel too fast. NWSP encouraged DOT to work with City to slow traffic down coming off the highway
    - NWSP also wants to avoid dead zones resulting from the project

- NWSP also noted transit considerations are important
- Lighting and cameras were also noted as important by NWSP as there is a lot of undesirable activities in the project area and small items like cameras can help.
- NWSP noted that wayfinding signage is important for anchor institutions
- NWS highlighted that the public meetings for the project are good at sharing at information but need to connect with community members, for example a booth at community spaces.

Notes prepared by Mike Hammond, HNTB

I-94 East-West Corridor Study
Indirect and Cumulative Effects
Meeting Minutes for Stakeholder Interviews

Meeting	Menomonee Valley Partners, Inc. (MVP)
Date, Time	November 3, 11am
Location	Microsoft Teams
Attendees	Josh Leveque, WisDOT Carolyn Seboe, HNTB Michael Hammond, HNTB Corey Zetts, Executive Director, MVP

Meeting Summary

A meeting was conducted with Corey Zetts, MVP Executive Director, to discuss indirect and cumulative effects for the Supplemental Environmental Impact Statement being prepared for the I-94 East-West Corridor Study.

Prior to the discussion, Josh Leveque and Carolyn Seboe provided an overview of the project, alternatives, schedule, and indirect and cumulative effects.

The following is a summary of the comments that were made by Corey:

- Current Development Trends and Patterns
  - Menomonee Valley is close to being built out, has 40 acres of land, lots of interest from light manufacturing. The available land is mostly brownfield land like under freeway, also has interest in DMV site. Interest in development but every site remaining is complicated – either is being held for staging or has lots of infrastructure work required to make it feasible. Many sites were historically cold storage and have inadequate water, sewer, electricity, and roads.
- Demand for Development
  - Hearing strong demand for development in conversations with valley businesses, City, and conversations with We Energies
  - The strong demand is limited as no one has the patience to move on complicated sites that need infrastructure to prepare them for development
  - MVP has been looking at TIDs and WEDC Idle Sites Grant; the City's attempts to get federal funding to assist with readying sites for development. Currently, struggling to get sites into "ready to build" status.
- Changes from pandemic
  - Pandemic initially slowed activity and development as some companies closed temporarily. Most manufacturers kept going. Two companies recently moved out because they outgrew their space. Two new companies are moving in. As soon as space is vacant, we have someone to take it. Nothing for lease right now as property moves quickly. Interest is back to pre-pandemic levels.
- Freeway impact development in Menomonee Valley?
  - In the last 20 years, there have been over 1 billion private sector development. Compared to other areas of the City with similar land availability, the freeway is critical to the valley's success, especially because we have so much manufacturing – connect to markets, workforce accessibility throughout the region. Something MVP companies talk about often.
- Would the 8-lane alternative change any development patterns?
  - Recently, at an MVP business event, there was a survey of employees about I-94 EW. The most frequent change requested was transit access to the valley (lost in 2020) and adding another lane. We don't hear much directly from businesses about 3 lanes vs. 4, more about safety, especially at 25th street intersection having lots of accidents. The primary thing we hear is safety – often correlated with additional lane being safer.

- Would the proposed interchanges have any impact on development?
    - Businesses who are most concerned with interchange access are involved in various committees and understand the constraints of the corridor
    - Most opportunity in this corridor is in bike/ped connections on local roads, adding bikes lanes, and widening sidewalks to make it feel safer. Hear from many businesses – hard to get from the north side down into the valley. Additionally, the corridor has perceived safety issues, including walking under the underpass because dark and not well lit.
        - More about connecting workforce to jobs than actual development
        - MVP is working on the design of Riverwalk for the whole valley – could change development if it feels like a more walkable community
    - Access points are important to business and the workforce, but bike/ped connectivity and safety are more related to neighborhood quality of life and overall business vitality.
    - Collectively working with DOT to see where the opportunities are to improve connections to make it feel vibrant. Businesses want it to feel more attractive to potential employees.
- Low-income and minority populations
    - These populations are a big part of the Menomonee Valley workforce, with many walking to work. We have low-income populations on both sides of the valley. We are trying to connect residents to jobs. We have heard that it's not safe to walk to jobs and can't work there without a car. Project improvements to bike/ped will help, improving bridges that feel unsafe/crumbly. Valley would also benefit from connecting the neighborhoods to Hank Aaron Trail – which connects throughout the region.
    - With EW BRT, potential NS BRT and the rebuilt interchanges will connect residents to jobs. 27th Street has low-income and minority populations, and these projects will connect them to job centers. Last-mile solutions to the valley are key.
- Transit Access
    - The corridor lost a bus route in January 2020. As companies reopened, transit access is still an issue. Improving transit is key. The Project shouldn't preclude transit in the future (buses turning movements). Any transit improvement would help.
- Employer concern with transportation access has been cyclical with lots of interest in 2019. Have had Lyft pilot for last-mile connections. Good preliminary work before the pandemic and now starting conversations again.
- Other projects in the area
    - Komatsu
    - Muskego Yards Bypass – beneficial, removing freight traffic away from St. Paul
        - Make 13th street a more viable entrance with fewer freight conflicts – more walkable/bikeable/vehicular entrance
        - Valley has floodplain challenges causing concern with flooding and stormwater
        - We have localized flooding issues; any more surface stormwater in the valley could exacerbate problems
    - Milwaukee Estuary AOC – water restoration, habitat
        - A lot is invested in water quality and green infrastructure
        - Being mindful of water impacts from the project could impact those efforts

Notes prepared by Mike Hammond, HNTB

I-94 East-West Corridor Study
Indirect and Cumulative Effects
Meeting Minutes for Stakeholder Interviews

Meeting	Mitchell Street BID
Date, Time	December 10, 11am
Location	Microsoft Teams (virtual)
Attendees	Josh Leveque, WisDOT Carolyn Seboe, HNTB Michael Hammond, HNTB Nancy Bush, Exec. Dir. Mitchell Street BID

Meeting Summary

A meeting was conducted with the Mitchell Street BID, to discuss indirect and cumulative effects for the Supplemental Environmental Impact Statement being prepared for the I-94 East-West Corridor Study. Prior to the discussion, Josh Leveque and Carolyn Seboe provided an overview of the project, alternatives, schedule, and indirect and cumulative effects.

The following is a summary of the comments and questions heard from the Mitchell Street BID:

Development Trends?

- The Mitchell Street BID is not expecting much change in the corridor. The BID is a small district with a commercial corridor. The BID starts at 5th/Mitchell and goes to 15th/Maple/Burnham and is surrounded by dense residential neighborhoods. Have two potential sizable developments:
    - The Old Modjeska Theater is a potential redevelopment with the BID and ownership trying to advance redevelopment
    - The area at Mitchell to Maple 11th/12th was recently purchased. The new ownership and BID are looking for a developer for that building.
- Other than those development sites, most businesses in the corridor are small, diverse culturally and the owners don't complete much rehabilitation work on buildings due to historic constraints.
- Most of the east-west traffic on Mitchell Street comes off I-43
- The BID noted the I-94 project is exciting and much needed and not anticipating much effect that this project will have on the business corridor

Did I-43 Improvements change development?

- Mitchell Street is on the west side of I-43 and all the growth from downtown is east of expressway, which is often cited as reasoning for why the corridor hasn't seen much growth

Access points impact neighborhood?

- The BID noted that dense residential populations in this area likely use the I-94 corridor to access jobs.

Six-lane vs. Eight-lane alternatives?

- The BID noted not much difference between the two alternatives.

East – west traffic on Mitchell?

- BID has issues with E-W traffic as Mitchell isn't wide, just one lane in each direction. During peak times, the BID notes there is congestion on the corridor and they are trying to work with City to address congestion and reckless driving issues.

Notes prepared by Mike Hammond, HNTB

I-94 East-West Corridor Study
Indirect and Cumulative Effects
Meeting Minutes for Stakeholder Interviews

Meeting	City of Wauwatosa
Date, Time	November 19, 10:00am
Location	Microsoft Teams (virtual)
Attendees	Josh Leveque, WisDOT Carolyn Seboe, HNTB Michael Hammond, HNTB Paulette Enders, City of Wauwatosa

Meeting Summary

A meeting was conducted with the City of Wauwatosa, to discuss indirect and cumulative effects for the Supplemental Environmental Impact Statement being prepared for the I-94 East-West Corridor Study.

Prior to the discussion, Josh Leveque and Carolyn Seboe provided an overview of the project, alternatives, schedule, and indirect and cumulative effects.

The following is a summary of the comments and questions heard from the City:

- Wauwatosa: Back when you had the ROD, what was the plan near cemeteries?
    - A: similar to now, double deck was eliminated

Development Trends in Wauwatosa

- Wauwatosa has seen quite a bit of redevelopment in recent years, including multi-family housing development. There has also been considerable development at MRMC too with office and medical uses.
- The city has also seen considerable development along I-41 and Bluemound/Mayfair Road
- During the Zoo interchange project, staff noted that traffic moves on to local roads during construction
- MRMC is a large employment center in Wauwatosa which sees a doubling of daytime population with many employees using the freeway to access the area.
    - A better I-94 is better for Wauwatosa, as it means less people getting off the freeway and onto local roads. For that reason, the City believes I-94 is a critical project.

Development Impacts of the 6-lane v 8-lane?

- Wauwatosa: What is the footprint of the alternatives?
    - A: Footprint is relatively similar between the two and the main difference is traffic as congestion is worse under the 6-lane alternative.
- Regarding development, eight lane is preferred because it could calm traffic and make things safer. Eight lanes would mean more people can stay on the freeway without congestion or diversion to local roads. Wauwatosa prefers eight lanes, as long as the 68th/70th access stays as it is today.

Thoughts on Hawley Interchange?

- The closure of the Hawley interchange would impact the east side of Wauwatosa as it is important access for State Street
- Wauwatosa would prefer keeping the Hawley Road Interchange, as there is some general concern about impacts to State Street businesses, but do not prefer the 6-lane alternative

Thoughts on bicycle and pedestrian changes?

- The city is very supportive and interested to learn more about the proposed bicycle trail connections (OLT and HAST)
- All these connections will benefit Wauwatosa, even connections to the east as they connect to other bicycle and pedestrian resources
- Connecting the HAST to the OLT is good, however staff were unsure about the on-road portion of those connections

Other Development in the Project Area?

- Wauwatosa has seen strong development along State Street with the conversion of many industrial uses to multi-family. The area is also adding residents with 700+ residents in these developments since 2015.

Would project have any impact on business vitality?

- Staff noted positive impacts for business with improved access as under existing conditions, some cars avoid the freeway and use local streets

Future plans/communication:

- Wauwatosa: Are you sharing what we looked at today with the public and other stakeholders?
    - A: Yes, the PIM will have lots of this information
- Wauwatosa: Is there an email update list?
    - A: Yes, Josh will add Paulette to the list

Notes prepared by Mike Hammond, HNTB

I-94 East-West Corridor Study
Indirect and Cumulative Effects
Meeting Minutes for Stakeholder Interviews

Meeting	City of Milwaukee
Date, Time	November 11, 12:10pm
Location	Microsoft Teams (virtual)
Attendees	Josh Leveque, WisDOT Carolyn Seboe, HNTB Michael Hammond, HNTB Sam Leichtling, DCD – Planning Manager Vanessa Koster, DCD – Deputy Commissioner Tanya Fonseca, DCD - Long Range Planning Manager Monica Wauck Smith, DCD – Senior Planner Jerrel Kruschke, DPW – City Engineer

Meeting Summary

A meeting was conducted with the City of Milwaukee, to discuss indirect and cumulative effects for the Supplemental Environmental Impact Statement being prepared for the I-94 East-West Corridor Study.

Prior to the discussion, Josh Leveque and Carolyn Seboe provided an overview of the project, alternatives, schedule, and indirect and cumulative effects.

The following is a summary of the comments and questions heard from the City:

- Development Trends/Patterns
    - The City is seeing a continued demand for residential areas in traditional walkable neighborhoods
    - More than 20,000 housing units are in greater downtown Milwaukee in recent years
    - Downtown and near-downtown areas are expecting to see conversion from offices to residential
    - The City is seeing strong demand for development to get people closer to their jobs
    - City just completed Industrial Land Analysis, available at: https://city.milwaukee.gov/DCD/Planning/PlansStudies/Plans/Industrial-Land-Analysis
        - Plan supports manufacturing centers (Menomonee Valley, Harbor District, Riverworks, etc.)
        - The analysis did not have many specific recommendations
        - Plan notes that manufacturing centers have a difficult time filling positions because of transportation access to/from areas
        - Critical infrastructure, like freeways, is acknowledged as a key
        - Plan primarily focused on land use and zoning. The proximity to freeway/rail impacts the land use and zoning decisions.
            - Freeways should be safe and serve OSOW trucks.
            - Transit access is more critical for jobs.
    - City completed TOD studies in 2018, available at: https://city.milwaukee.gov/DCD/Planning/PlansStudies/Plans/MovingMKEForward
        - The City studied zoning and development trends along the streetcar extensions into Walker's Point and Bronzeville.
        - There is a demand to live in close proximity to one's work
        - A clear goal in plans is to use all tools to direct medium/high-density development along future transit corridors
        - TOD study saw an increase in short bike/walk trips

- Factors/Obstacles to development:
    - Higher cost to develop in urban areas (try to use tools at DCD disposal to make it easier)
    - COVID will change the Downtown market, which will result in the need of mix uses
    - Economic and racial desegregation intertwined with freeway development
- Changes in Demographic and Impact on Development?
    - Have gradually decreasing population, factors into overall development trends
    - Housing units are growing, but the population is shrinking (shrinking household size)
    - New units are primarily in traditional walkable neighborhoods
- How will the project impact development?
    - Keeping access the same is important to existing businesses
- 6-lane vs. 8-lane Alternatives?
    - City of Milwaukee: What does the traffic analysis show?
        - A: Still developing LOS data for 6-lane. In general, not seeing much of an induced demand
    - Mayor Barrett stated the goals of the City with this project are to: improve mobility, mode choice, and environmental quality/sustainability
    - Expanding the freeway may conflict with some of those goals
- What are the Bicycle and Pedestrian improvements and impacts to the neighborhood?
    - Improved connectivity at HAST
    - More work to be done with connections at 35th & 25th
- What are the Transit improvements and their impact on neighborhoods?
    - BRT will be a fantastic improvement for this corridor
    - There is still a long way to go for transit
    - Local bus services are not as robust as they should be
    - Goal is to expand the streetcar to other neighborhoods
    - City is looking at improving transit and access to stops
    - We would like to see long-term transit improvements as a mitigation measure
- Existing freeway and development
    - Want corridor to be modern and safe, recognize job benefits, and negative impacts of doing nothing
    - Understand existing deficiencies of the freeway
    - Need better connections across the freeway
    - WI 175 to the North – we believe the status quo at that location does not make sense
        - Long-term City would prefer 175 at-grade
        - This should be considered during design not to preclude that change
- Other Projects in the area?
    - DPW: National Avenue, N-S BRT
    - DCD: Development goals along Mt. Vernon, updating Downtown plan (vibrancy, walkability, density), more creative use of under freeway space, complete streets focus

Notes prepared by Mike Hammond, HNTB

I-94 East-West Corridor Study
Indirect and Cumulative Effects
Meeting Minutes for Stakeholder Interviews

Meeting	CARW
Date, Time	November 29, 1pm
Location	Microsoft Teams (virtual)
Attendees	Josh Leveque, WisDOT Carolyn Seboe, HNTB Michael Hammond, HNTB Tracy Johnson - CARW

Meeting Summary

A meeting was conducted with CARW (President/CEO, Tracy Johnson), to discuss indirect and cumulative effects for the Supplemental Environmental Impact Statement being prepared for the I-94 East-West Corridor Study.

Prior to the discussion, Josh Leveque and Carolyn Seboe provided an overview of the project, alternatives, schedule, and indirect and cumulative effects.

The following is a summary of the comments and questions heard from CARW:

- CARW: Under the 6-lane alternative, what about the east leg that already has seven?
    - A: The alternative has at least six lanes throughout, but section between the Marquette and Stadium interchanges already has seven and that would stay under the six-lane alternative.
- CARW: What is and would be the width of travel lanes?
    - A: Current travel lanes are 11-feet. Under the 8-lane alternative, the project will have 12-foot lanes, except at the cemetery.
- CARW: We are preferential towards the 8-lane alternative and the difference in cost between the alternatives is small.

What does CARW see as the benefits of the 8-lane alternative?

- CARW: The 8-lane alternative would help with flow of traffic, as wider lanes mean less accidents. Reducing congestion is important for the movement of goods and services. Leaving this section of freeway unfinished seems irresponsible. Access to infrastructure is one of the key reasonings for real estate decisions. There is a lot of property value near this project area and modernizing the freeway is helpful for real estate and realizing that value. A large portion of goods from Chicago come through this corridor, making it an important corridor to improve.

Development and Market Trends?

- CARW noted the vacancy is low in the immediate project area but there is opportunity for development with Komatsu leaving.
- Buyers and developers need access to reliable highway infrastructure. Transportation is the top consideration outside of labor for companies, that is likely why we aren't seeing development in Century City. Properties closer to the freeway are more valuable and more likely for commercial development, which helps keep property tax low and creates jobs.
- CARW appreciates the investment going into mitigation (BRT and bicycle infrastructure). CARW would like to see a broad understanding among stakeholders that those improvements (BRT and bicycle infrastructure) don't happen without this freeway project. CAW views the 6-lane alternative as throwing money away.
- CARW has noted high freight and delivery traffic and a return to in-person work.

Downtown commercial development?

- CARW has noted people are returning to work in-person (50-60% returned)

Regional Development Patterns?

- The I-94 EW corridor is the connection point between areas south/east to areas west with a large portion of goods in the state traveling through the corridor
- Development in Waukesha will benefit from this corridor being modernized
- Investment in this corridor is a selling point for developers throughout the region
    - Downtown Milwaukee and West Milwaukee benefit from this and the project not being implemented would harm the rest of the region.
    - This project, with mitigation measures, could be a benefit to nearby neighborhoods
    - If the 6-lane alternative is selected CARW noted uncertainty about when this corridor would ever expand
    -

Pent-up demand in Waukesha?

- CARW highlighted pent-up demand in Waukesha is driven by many factors but access to workforce is key and the 8-lane modernization would provide better access for companies in Waukesha with available land.
- Developers and companies are looking for places to build as there is nowhere else to build in Milwaukee and it is difficult to develop there
- Companies would rather build new developments in Waukesha than take existing buildings in Milwaukee

Notes prepared by Mike Hammond, HNTB

I-94 East-West Corridor Study
Indirect and Cumulative Effects
Meeting Minutes for Stakeholder Interviews

Meeting	Professor Bob Schneider, UWM
Date, Time	December 6, 11am
Location	Microsoft Teams (virtual)
Attendees	Josh Leveque, WisDOT Carolyn Seboe, HNTB Michael Hammond, HNTB Professor Bob Schneider, UWM

Meeting Summary

A meeting was conducted with Professor Schneider, to discuss indirect and cumulative effects for the Supplemental Environmental Impact Statement being prepared for the I-94 East-West Corridor Study.

Prior to the discussion, Josh Leveque and Carolyn Seboe provided an overview of the project, alternatives, schedule, and indirect and cumulative effects.

The following is a summary of the comments and questions heard from Professor Schneider:

- Professor Schneider: Are 35th Street property relocations needed under both alternatives?
    - A: Yes, due to side road work, independent of the freeway. Bike lanes and turn lanes are what cause the work/relocations.
- Professor Schneider: How much consideration is for other demands in the corridor along other EW arterials? How are they considered in the traffic analyses of the corridor? If there are more transit options, it may allow for I-94 to have less capacity.
    - A: SEWRPC traffic analysis includes side roads. With regards to transit funding, DOT has limited options. The project will include transit mitigation dollars to mitigate impacts. EW BRT under construction and other BRT corridors in planning. Traffic analyses show more diversion to local roads under the 6-lane alternative, whereas 8-lane shows more traffic staying on the freeway.
- Professor Schneider: How much mode shift is considered in SEWRPC modeling? If driving becomes more constrained, other options become more attractive.
    - A: Difficult to be compared to other states because we don't have the same type of congestion/demand as other high-growth states. We have talked with SEWRPC about this topic.
    - Professor Schneider: Opportunity for local-oriented traffic, that supports local business. A larger system has to consider the vitality of commercial development corridors. More dense neighborhoods create opportunities for other corridors. Some advocacy groups mention induced demand as immediate, occurs over time, and occurs with growth in a metro area. I don't see the freeway filling up just because it is there. I do think it's important to be aware of the long-term implications of investing in corridor on regional land use patterns. If there isn't a strong demand, then if it's built with 6-lanes you could accommodate traffic locally with other modes that support economic vitality. Helps redirect investment from further out to the west back into existing neighborhoods.

Additional lane impact population redistribution in our region?

- Yes, in the long term. Increases the mobility between downtown and Waukesha County. Decreasing travel time during congested periods. Drivers will be able to make the choice to live further away because of less time to travel. Won't see congestion for another 20-30 years so allows for an easier decision. If we invest differently in local streets with a multimodal approach, sending signal to

homebuyer/real estate that edge of the region may see congestion e-w. Building closer to the city will allow for taking advantage of these investments. Could be good for local neighborhoods.
- Housing location choice is difficult to analyze. Freeway travel time would be one consideration. Businesses will also locate differently with freeway being one factor.

Does access point change impact land use?
- Depends on how access is designed. Access points can add high speeds, reckless driving – could present a safety problem. Have serious safety problems in the project area. Design is important to reinforce safe driving. From a pedestrian perspective, getting to Menomonee Valley – some people will still cross ramp access and more lanes will make walking less comfortable. Signalize and tighter turning radii would help but needs to be balanced with freight needs. Could determine specific freight routes to provide safer access points for bike/peds.

Bike/Ped improvements and impact on neighborhoods?
- Connections are needed and will be appreciated. Finding a way to connect HAST and OLT is important. Route of the badger envisions that connection too. MVP is interested in pedestrian access to the valley. A broader scope for the project – any intersecting corridor and their access to neighborhoods – if those could be improved as part of this project would be a big improvement for the neighborhoods. E-W corridor improvements would also help neighborhoods.
- High injury networks are key corridors to improve. As part of the Safe and Healthy streets grant – surveyed people across the cities. Safety is a much bigger concern in neighborhoods targeted for revitalization. The culture of driving and streets is less safe in these neighborhoods.

Minority/Low-income impacts from the project?
- Air pollution – living really close (100-200m from the corridor), this is where these populations live.
- Noise
- Traffic safety of people going on/off the freeway
- System-wide – if someone doesn't own a vehicle, they can't personally travel on the freeway the same as others who have vehicles. They get less benefit/opportunity than others. Some concerned with that discrepancy. Some areas near the project have 20-30% without a vehicle.

Any benefits from the project to minority/low-income populations?
- Bike/ped connections will be a benefit
- Design improvements at access points could improve safety.

Do transit improvements impact neighborhoods?
- Could be a big benefit if transit can be improved with the project. Would be one of the most important benefits. BRT corridors can improve travel times.
- Both transit access to jobs and local transit improvements are important. Working on the study with on-demand shuttle services to connect people to jobs. Could also be commuter transit that supports TOD.

From a cumulative standpoint, are there other projects in the area that could cumulatively impact?
- Transit investments and complete streets investments in arterial streets near the corridor. That system will likely support a different type of mobility. Flexibility changes how the system functions and could change the stress on the system during peak hours. Would be good to make all these local improvements at the same time – working with local partners, distributing money to these entities.

Notes prepared by Mike Hammond, HNTB

I-94 East-West Corridor Study
Indirect and Cumulative Effects
Meeting Minutes for Stakeholder Interviews

Meeting	City of Milwaukee
Date, Time	November 11, 12:10pm
Location	Microsoft Teams (virtual)
Attendees	Josh Leveque, WisDOT Carolyn Seboe, HNTB Michael Hammond, HNTB Beth Weirick , BID 21 Matt Dorner, BID 21 Gabriel Yeager, BID 21 Kristaleen Hernandez, BID 21

Meeting Summary

A meeting was conducted with the Milwaukee Downtown BID 21, to discuss indirect and cumulative effects for the Supplemental Environmental Impact Statement being prepared for the I-94 East-West Corridor Study.

Prior to the discussion, Josh Leveque and Carolyn Seboe provided an overview of the project, alternatives, schedule, and indirect and cumulative effects.

The following is a summary of the comments and questions heard from Milwaukee Downtown BID 21:

- BID 21: What is bringing the project back now?
  - A: State budget has enumerated the project
- BID 21: Expansion to the 8th lane was previously the preferred alternative, is 6-lane an option?
  - A: Heard a lot of concerns about the 8th lane so that's why we are undertaking the SEIS. 6 and 8 lanes were studied previously, 8 lanes was the preferred alternative.
- BID 21: What differs between 8 lanes vs. 6 lanes?
  - A: Primarily the number of lanes. Not the same footprint but very close between the two alternatives. Interchange design is what dictates the footprint. Modernizing the design has the biggest impact on the footprint.
- BID 21: Are relocations avoided?
  - A: We have a few areas we can avoid through new design alternatives. There are other relocations that can't be avoided.
- BID 21: Any consideration for lighting or art projects/aesthetic projects? Would help MVP make a few improvements.
  - A: Not that much detail yet. Working with MVP on connectivity. Will consider aesthetic considerations.
- BID 21: Have you spoken with DOT about transportation fairs/outreach at downtown offices? What is the timeline for those types of activities?
  - A: Beth W. is working with Beth Foy – don't know details on timeframe. If about construction will be a few years still.
- BID 21: How will the freeway be impacted during construction?
  - A: Would likely keep 2 lanes in each direction, with some overnight closures.
- BID 21: How does traffic let you pick 6 lane v 8 lane? Pandemic traffic impacts?
  - A: Traffic is almost back to 2019 levels. What option we select will depend on traffic results but will weigh public input as well.
- BID 21: Will the project include commuter lanes? Express lanes? Dedicated lanes?
  - A: Not looking at that currently, could change during the design

- BID 21: Is there a cost difference between the two alternatives?
    - A: Only 5-10% difference between the two.
- BID 21: What is the project budget?
    - A: ~$1.2 billion

ICE Discussion

Land Use Development Patterns?

- Seeing projects continue to move forward throughout downtown
    - Large residential towers
        - Ascent
        - Couture
        - Hines Third Ward Tower
    - Convention Center Expansion
    - Strong position compared to peer downtowns
    - The residential and commercial market is strong, Hospitality as well
- What's driving demand?
    - Quality of life, locational benefits of downtown
    - Lakefront
    - Easier to get around
    - Space programming
        - Public spaces
        - Art projects
- How does the freeway impact the downtown market?
    - East of the river we see congestion getting on/off the freeway
    - Not even at 40% back in office yet
    - With regards to 6-lane v 8-lane, we don't want downtown to become a bottleneck
- How would a bottleneck affect downtown?
    - BID wants the integration of multi-modal uses for people coming into and out of downtown
    - During construction – keep some other mode improvements in place after construction
- 6-lane v 8-lane for Downtown?
    - Limited footprint differences between the two
    - Don't see much difference in development between 6 v 8 with actual acreages
    - Need to be balanced in our long-term planning. Launching update to our Downtown plan – should be considered in EIS planning
        - BID often hears about sustainability and multi-modal access
        - Accessibility is key, need alternate options for those without cars
- Access Points and Development?
    - Not a major factor with this project
    - Some drivers will travel west to get on the freeway, using local roads
- Under 6-lane, would likely see more local street usage – would that impact downtown?
    - Beth: Whenever we add capacity, we will fill it up, but the footprint isn't that different so not opposed to 8-lane
    - BID understands the safety and congestion needs, but need a well thought out strategy around multi-modal transportation
- Will this project impact development shifting elsewhere from downtown? Regional Landscape of development?
    - Don't think so, not a significant change
    - Could help people smoothly travel in and out of downtown which could help downtown
    - Wouldn't change regional development patterns
    - Regionally this investment is needed, BID sees the need for work to be done in this corridor
    - Strengthening the connections to CHI/MAD will only make the region stronger
    - Not worried about development further outside cities/suburbs
    - 8-lane will help congestion if we can do it safely without negatively impacting too many businesses/residents while honoring the sentiments of residents and honoring the cemetery
- BID 21: Communication for us is important to stakeholders/constituents in downtown during construction. Look forward to working relationships – transportation fairs, communication to constituents
- BID 21: Any difference in speed limit (8-lane v 6-lane)?

    - A: Should be the same between the two alternatives, but don't know yet
- BID 21: How come the speed limit is 50/55 in the city vs. 70 elsewhere?
    - Not as many curves, interchanges – safety
- BID 21: Next steps with EIS?
    - PIMs in December
    - Reviews of SEIS most of 2022
    - Middle of 2023 for approval of SEIS

Notes prepared by Mike Hammond, HNTB