Appendix E
Indirect and Cumulative Impacts
Technical Memorandum
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Technical Memorandum

South Bridge Connector Study
Brown County, Wisconsin

June 15, 2020
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Introduction

Brown County, the Wisconsin Department of Transportation (WisDOT) and the Federal Highway Administration (FHWA) (the Lead Agencies) are studying the environmental consequences of a new Fox River bridge and connecting arterial street system, referred to as the South Bridge Connector Study. The purpose of the Indirect and Cumulative Impacts Technical Memorandum is to assess the potential for indirect and cumulative impacts of the corridor alternatives, as required by the National Environmental Policy Act (NEPA). The technical memorandum consists of two parts: the first half describes the indirect impacts analysis, and the second half describes the cumulative impacts analysis. The technical memorandum is a standalone document that is a component of the South Bridge Connector Tier 1 Draft Environmental Impact Statement (Draft EIS).

The Tier 1 Draft EIS focuses on broad issues such as the general location of the project. Tier 1 will not authorize the construction of any portion of a new bridge or improvements to the connecting arterial street system. The Tier 1 analysis of indirect and cumulative impacts will be qualitative.

The goal of Tier 2 assessments will be to determine an alignment location, and data sources will include project-level data, including field data collection as appropriate. Subsequent Tier 2 environmental documents will be prepared as funding becomes available for portions of the corridor construction, which will include a greater level of engineering detail and more detailed impact analysis.

The study team developed an impact assessment methodology report to identify and document which resource evaluations would be completed during the Tier 1 Draft EIS and which evaluations would be completed during Tier 2. The study team shared the report at the agency scoping meeting on December 11, 2019, subsequently mailed it to Participating and Cooperating Agencies and updated it based on agency comments. The Draft EIS contains a more detailed discussion of the tiered NEPA documentation approach and impact assessment methodology.

This Tier 1 indirect impacts analysis will broadly consider the growth-inducing impacts that could result from the corridor alternatives, including potential redevelopment or secondary development, population/job growth, economic benefits or other impacts that may result from project-influenced development. It will also present other indirect impacts of the proposed action for resources. It will contain a high-level qualitative discussion of the potential impacts, the type of mitigation strategies that could be employed, and the agency that would be responsible for implementation.

The cumulative impacts analysis will focus on resources with the greatest potential for cumulative impacts that can be completed at Tier 1. The discussion will be at a high level and will not delve into specific parcels of land, with additional detail being provided for sensitive resources as identified through scoping, agency coordination and/or readily available information. A detailed cumulative impacts analysis will be completed in Tier 2 when detailed resource impacts are complete.

1.1 Project Overview and Need for the Project

The concept of a new Fox River bridge and connecting street system south of the City of De Pere was first identified in the 1968 Brown County Comprehensive Plan. Since then, the concept has been incorporated into many local community plans and studies as an important component of future development patterns.

The study area is in Brown County, Wisconsin. The west project terminus is the intersection of County F and County EB in the Town of Lawrence, and the east terminus is the intersection of County X and County GV in the Town of Ledgeview. See Exhibit 1-1, Project Location Map.
The purpose of the South Bridge Connector Study is to identify the most appropriate improvements for addressing existing transportation demand and demand that will be generated by the planned development in the southern portion of the Green Bay metropolitan area.

The project is needed to:

- Address congestion in the vicinity of the existing Fox River bridges.
- Accommodate existing and planned land use and future travel demand generated by planned development.
- Reduce travel time by improving east-west connectivity.
- Address higher-than-average crash rates and safety issues in the vicinity of the existing Fox River bridges.

Section 1 of the Tier 1 Draft EIS contains additional information.

### 1.2 Proposed Action

Brown County, WisDOT, and FHWA developed and evaluated a wide range of corridor alternatives for this study. See Section 2 Alternatives Considered, of the Tier 1 Draft EIS. This technical memorandum evaluates the two build alternatives for a new Fox River bridge and connecting arterial road network south of the Claude Allouez Bridge in the City of De Pere, and a No Build Alternative.
1.2.1 Description of Alternatives

A high-level description of the two build alternatives and the No Build Alternative is presented in this section. Additional information can be found in Section 2, Alternatives Considered, of the Tier 1 Draft EIS. Changes to these alternatives are possible as they are analyzed for impacts and reviewed by the Participating and Cooperating Agencies, and the public. Exhibit 1-2 illustrates the general location of the two build alternatives.

1.2.1.1 No Build Alternative

The No Build Alternative would not include any safety or capacity improvements. Only routine maintenance and minor improvements would be performed.

1.2.1.2 Corridor Alternative 1

Corridor Alternative 1 would be approximately 5.5 miles long. It begins at County EB (Packerland Drive) and passes through the existing I-41 interchange at the northern edge of Preserve Park. It continues along County F (Scheuring Road) in the Town of Lawrence, crosses the Fox River, and continues along County X (Heritage Road). The corridor ends at the previously improved County GV (Monroe Road) in the Town of Ledgeview. The corridor would be a four-lane arterial with a median, shared-use path or sidewalk, and in some locations, ditches.

1.2.1.3 Corridor Alternative 2

Corridor Alternative 2 is approximately 6 miles long. It would begin at County EB (Packerland Drive) in the Town of Lawrence and continue along a new alignment to connect to a new full-access interchange at I-41. The corridor would continue east on Southbridge Road and Red Maple Road, cross the Fox River, and continue along Rockland Road. At the intersection of Rockland Road and County PP (Broadway Street), the corridor would continue northeast along a new alignment and end at the intersection of County X (Heritage Road) and the previously improved County GV (Monroe Road) in the Town of Ledgeview. The corridor would be a four-lane arterial with a median, shared-use path or sidewalk and, in some locations, ditches.
SECTION 1 – INTRODUCTION

Exhibit 1-2. Study Alternatives
Indirect Impacts Analysis

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

- Indirect effects are 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 the 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 CFR § 1508.8).

The study team used the following documents to guide the analysis:

- Wisconsin Department of Transportation, Guidance for Conducting an Indirect Effects Analysis, November 2014
- 40 CFR, Chapter 1, Section 230.11(g)(h); Protection of Environment, Environmental Protection Agency, Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material
- 33 CFR, Part 230, Section 320.4(a)(1); Navigation and Navigable Waters, General Regulatory Policies, General Policies for Evaluating Permit Applications

The WisDOT Guidance for Conducting an Indirect Effects Analysis (2014) identifies two categories of indirect impacts:

1. Project-influenced impacts: Project-influenced development related to improved accessibility to an area, which may change land use, promote development, or influence an increase in the rate of development. One example of an induced growth impact identified in AASHTO’s Practitioner’s Handbook 12 (2016) is commercial development occurring around a new interchange.

2. Project encroachment impacts: Project encroachment impacts occur when a project action could potentially change the natural, cultural, historic, or socioeconomic conditions at some time in the future. These impacts are caused by the proposed action but occur later in time or farther removed in distance. One example of an encroachment effect identified in AASHTO’s Practitioner’s Handbook 12 (2016) is a long-term decline in the viability of a population of a particular species as a result of habitat fragmentation caused by the project.

2.1 Methodology

The indirect impacts analysis used the following systematic six step approach as outlined in WisDOT’s Guidance for Conducting an Indirect Effects Analysis (2014):

- Step 1: Scoping, selecting activities, and determining the study area.
- Step 2: Inventory the study area and notable features.
- Step 3: Identify the impact-causing activities of the proposed corridor alternatives.
- Step 4: Identify the potentially significant indirect impacts.

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1 Effects and impacts are used interchangeably. WisDOT staff preference is to use “impacts;” however, this technical memorandum uses the term “effects” when indicated by the guidance that is cited.
• Step 5: Analyze the indirect impacts, describe their significance for the corridor alternatives, and evaluate assumptions.

• Step 6: Assess consequences and identify mitigation activities.

The analysis is supported by input and information from local officials, agencies, and community outreach activities, including nine stakeholder interviews. The six steps are summarized in the following section.

2.2 Step 1: Scoping, Selecting the Tools/Activities, and Determining the Study Area

The first step of the analysis has three overall goals:

• Gather information on the issues to be evaluated in the analysis.
• Determine the tools and techniques to be employed in the analysis.
• Determine the location and extent of the indirect impacts study area.

2.2.1 Scoping

During an agency scoping meeting\(^2\) held on December 11, 2019, the study team presented the following:

• Lead Agency roles and responsibilities
• Project background
• Purpose and need
• Agency coordination
• Impact assessment methodologies
• Project schedule

No comments related to indirect impacts were received.

2.2.2 Selecting the Tools/Activities

The study team employed an array of tools/activities recommended in WisDOT *Guidance for Conducting an Indirect Effects Analysis* (2014), such as reviewing a variety of technical and statistical data, local and regional information sources and plans, and other data/analyses collected in the environmental documentation process to conduct the qualitative analysis. Additionally, the study team conducted nine stakeholder interviews in January 2020, with local planners, developers, agency officials, and tribes who are knowledgeable of growth and development activities in the region, including representatives from:

• City of De Pere
• Town of Lawrence
• Town of Ledgeview
• Brown County Planning and Land Services Department
• Brown County Land and Water Conservation Department
• River City Realtors
• Wisconsin Department of Agriculture, Trade and Consumer Protection
• Wisconsin Department of Natural Resources (DNR)
• Oneida Nation

\(^2\) The scoping process involves the public, local government, Native American tribes, and regulatory agencies on the scope of issues to be addressed in the environmental review process.
The study team interviewed the stakeholders separately and used their input to identify available information and data, as well as major indirect impact issues (see Attachment 1).

### 2.2.3 Determining the Study Area

The Indirect Impacts Study Area is the geographic area that may experience indirect impacts from the proposed project. The boundaries for the analysis need to extend beyond the potential footprint of the proposed transportation project, since indirect impacts can occur at some distance from a proposed project. The study team considered a combination of accepted approaches for delineating the Indirect Impacts Study Area, including the 20-year growth boundary (sewer service area [SSA] boundary [Brown County Planning Commission, Planning and Land Services Department 2015]), traffic analysis (SRF Consulting Group 2018), and stakeholder interviews. See Exhibit 2-1, Indirect Impacts Study Area Boundary.

The Indirect Impacts Study Area is approximately 65 square miles and encompasses the social, historic, and natural resources that have the greatest likelihood for indirect impacts.

### 2.3 Step 2: Inventory the Study Area and Notable Features

This section summarizes the socioeconomic trends; local, regional, and state plans; state and local regulations, including the regulatory framework for future growth (e.g., zoning and other ordinances); regional land use patterns and development trends; natural and historic resources; and other pertinent location-specific information for the Indirect Impacts Study Area.

#### 2.3.1 Socioeconomic Data and Trends

This section describes socioeconomic trends based on available data and input from stakeholder interviews. These trends have the potential to influence transportation demand and land use in the Indirect Impacts Study Area.

##### 2.3.1.1 Population

Population in Brown County and the Indirect Impacts Study Area communities has been growing steadily and is forecast to continue to increase (see Table 2-1). According to the US Census, between 2000 and 2018, the county’s population increased by 16.1 percent, from 226,778 to 263,378. This is the eighth highest growth rate among Wisconsin’s 72 counties over that period, and the second highest among counties with over 200,000 people (Wisconsin Department of Administration Demographic Services Center 2019). Communities in the area grew by 17,718 (23 percent) during that same time period, with Lawrence and Ledgeview experiencing the greatest population increases. According to Wisconsin Department of Administration population projections, Brown County’s population is expected to increase by 48,942 to 312,320 by 2040, an increase of more than 18 percent over 2018 population. The population of the communities in the area is forecast to increase by 23,690 to 118,395, which is a 25.0 percent increase.

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3 Attachment 1 contains meeting summaries of the stakeholder interviews held in January 2020.
C-D = Collector-Distributor

Exhibit 2-1. Indirect Impacts Study Area
Table 2-1. Historic and Future (2040) Population

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>City of De Pere</td>
<td>20,559</td>
<td>23,800</td>
<td>24,836</td>
<td>20.8%</td>
<td>31,280</td>
<td>25.9%</td>
</tr>
<tr>
<td>Village of Bellevue</td>
<td>11,828</td>
<td>14,570</td>
<td>15,515</td>
<td>31.2%</td>
<td>20,780</td>
<td>33.9%</td>
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<tr>
<td>Village of Hobart</td>
<td>5,090</td>
<td>6,182</td>
<td>8,606</td>
<td>69.1%</td>
<td>12,480</td>
<td>45.0%</td>
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<tr>
<td>Village of Ashwaubenon</td>
<td>17,634</td>
<td>16,963</td>
<td>17,181</td>
<td>-2.6%</td>
<td>17,440</td>
<td>1.5%</td>
</tr>
<tr>
<td>Town of Rockland</td>
<td>1,522</td>
<td>1,734</td>
<td>1,893</td>
<td>24.4%</td>
<td>2,370</td>
<td>25.2%</td>
</tr>
<tr>
<td>Town of Lawrence</td>
<td>1,548</td>
<td>4,284</td>
<td>5,044</td>
<td>225.8%</td>
<td>7,965</td>
<td>57.9%</td>
</tr>
<tr>
<td>Town of Ledgeview</td>
<td>3,363</td>
<td>6,555</td>
<td>7,739</td>
<td>130.1%</td>
<td>12,480</td>
<td>61.3%</td>
</tr>
<tr>
<td>Village of Allouez</td>
<td>15,443</td>
<td>13,975</td>
<td>13,891</td>
<td>-10.0%</td>
<td>13,600</td>
<td>-2.1%</td>
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<tr>
<td>Community Totals</td>
<td>76,987</td>
<td>88,063</td>
<td>94,705</td>
<td>23.0%</td>
<td>118,395</td>
<td>25.0%</td>
</tr>
<tr>
<td>Brown County</td>
<td>226,778</td>
<td>248,007</td>
<td>263,378</td>
<td>16.1%</td>
<td>312,320</td>
<td>18.6%</td>
</tr>
</tbody>
</table>

Sources:

2.3.1.2 Employment

Between 2010 and 2045, employment in Brown County is forecast to increase to nearly 186,000 jobs, an increase of over 41,299 (a 29 percent increase; WisDOT. n.d.).

There are several business/industrial parks in the Indirect Impacts Study Area, which serve as major employment hubs. Some of them (Town of Lawrence Business Park, West De Pere Business Park, East De Pere Industrial Park, I-43 Business Center) have plans for future expansion.

The Indirect Impacts Study Area is experiencing ongoing development and is attracting major employers. For example, UnitedHealth Group is building a $35 million, 174,000-square-foot corporate headquarters northwest of the intersection of Innovation Court and Southbridge Road, in the Town of Lawrence.

New commercial development, such as the 200-acre Lawrence Parkway Development, which is intended to be a destination-type baseball tournament facility, will lead to new jobs in the area. See Table 3-2, Notable Past, Present, and Reasonably Foreseeable Future Actions, Land Use and Development, for other notable developments in the study area.

2.3.2 Local, Regional, and State Plans

Regional and local comprehensive plans provide insight to the growth-related goals and aspirations of a community. Understanding community goals and aspirations within the Indirect Impacts Study Area provides a basis for assessing project compatibility and potential impacts. Exhibit 2-1 illustrates the

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4 2040 employment projections are not available.
location of local jurisdictions in the Indirect Impacts Study Area. In addition, several jurisdictions include a potential southern bridge in their plans. See Attachment 2.

2.3.2.1 Wisconsin Land Legacy Report

The *Wisconsin Land Legacy Report* identifies 229 Legacy Places and 8 statewide needs and resources that the public and DNR staff believe are the highest priority for conservation going forward (DNR 2006). The report identifies one resource within the Indirect Impacts Study Area, the Niagara Escarpment, as a Legacy Place. The Niagara Escarpment is a 1,000-mile-long limestone cliff that begins in east-central Wisconsin and continues northeast through Canada and into upstate New York. It is one of the most frequently visited geologic features in Wisconsin. In addition to offering spectacular views, it harbors unusual habitats, that in turn support many uncommon species (DNR 2006). Approximately 1.5 miles east of the proposed action, within the Indirect Impacts Study Area, the Niagara Escarpment runs roughly north and south through the middle of the Town of Ledgeview. See Exhibit 2-2.

![Exhibit 2-2. Niagara Escarpment](image_url)

Source: Town of Ledgeview Park & Recreation Plan 2019-2014

2.3.2.2 Brown County Comprehensive Plan

Because Brown County does not have subdivision or zoning authority over any community in the Indirect Impacts Study Area (or elsewhere in the county), its Comprehensive Plan (2004) reflects the land use plans adopted by each community. The plan also provides best practices, guidance, and policy recommendations related to transportation and other elements, but it does not require communities to implement them. The entire plan is geared toward promoting future development in Brown County in a manner that is attractive to people and new and existing businesses. The County’s economic development goal is to “broaden the County’s tax base and strengthen its economy and employment base through the retention and attraction of existing businesses, development of new businesses, and continued diversification of industries.” Brown County is in the process of updating its comprehensive plan, anticipated to be adopted by the Brown County Board of Supervisors and Brown County Executive in 2020.

2.3.2.3 2040 Brown County Sewage Plan

The *2040 Brown County Sewage Plan* has two main objectives: to identify sewer service areas (areas that have been identified for sewer services through 2040) and to identify Environmentally Sensitive
Areas\(^5\) (areas within the 2040 SSA where public sanitary sewer service and development should not be allowed; Brown County Planning Commission, Planning and Land Services Department 2015).

The Brown County Planning Commission is the appointed local management agency for SSA planning within Brown County. In defining an SSA, local comprehensive plans are formally acknowledged and considered. The 2040 Brown County Sewage Plan establishes an acreage allocation for individual municipalities based on the area’s population, 2040 population projection, and proposed growth (per comprehensive plans). The acreage allocation is the base acres that would be needed for each municipality through 2040.

2.3.2.4 2017-2027 Brown County, WI Farmland Preservation Plan Update

In May 2017, the Brown County Planning Commission adopted the 2017-2027 Brown County, WI Farmland Preservation Plan Update, which was also certified by the Department of Agriculture, Trade, and Consumer Protection (DATCP). The plan serves as the Agricultural Chapter for the Brown County Comprehensive Plan. Although land use zoning is administered at the local level, under Wisconsin State Statutes Chapter 91, the County is responsible for preparing the farmland preservation plan, with which local zoning ordinances and maps must be consistent. Agricultural land in Brown County has continued to be converted to non-agricultural uses, such as homes, businesses, roads and schools, as a result of population and employment growth in the county. A primary goal of the plan is to balance the development of agricultural lands with the long-term sustainability of agricultural production in Brown County.

2.3.2.5 Brown County Parks and Outdoor Recreation Plan 2017-2022

Adopted in 2017, the Brown County Parks and Outdoor Recreation Plan stresses the importance of maintaining its current parks and trail facilities for the expanding county population. It offers general recommendations and implementation priorities for adding county park lands in partnership with local municipalities, improving park access specifically for bicycles and pedestrians, and preserving and managing natural resources. The Plan outlines specific recommendations for its parks. Within the Indirect Impacts Study Area, these include:

- Brown County Fairgrounds
  - Develop a Master Plan for buildings and use of property
  - Implement priorities from Master Plan
- Fonferek’s Glen
  - Develop and improve existing and future trails
  - Prairie enhancements
  - Develop Master Plan
  - Purchase adjacent property and house
- Fox River Trail
  - Extend asphalt
  - Additional trailhead access
  - Install lighting along urban section

\(^5\) Environmentally Sensitive Areas include parts of the landscape generally associate with surface water features, which should be protected from intensive development. They include all lakes, rivers, streams, wetlands, floodways, and other locally designated significant and unique natural resource features.
2.3.2.6  City of De Pere 2010 Comprehensive Plan Update

The City of De Pere is largely built-out, which limits the potential for expanding its boundaries, except through annexation of lands. The City anticipates that most of the existing farmland in their community will be developed in the future.

The City of De Pere 2010 Comprehensive Plan Update (2010) bases future development on the themes of sustainability, efficiency, integration, and neighborhoods. The plan recommends the City’s growth be orderly and cost-effective, making maximum use of existing and planned services. For instance, the plan recommends that areas most easily serviced by municipal sewer and water develop first, with infill areas and areas contiguous to existing development given priority before other more costly areas are developed.

Additionally, the plan recommends existing vacant or underused sites, which are prime for redevelopment, be given priority through the use of tax-increment financing districts or other grant/loan programs to encourage redevelopment activity.

The City of De Pere Comprehensive Plan is geared toward promoting future development in a manner that supports a high-quality community that is attractive to existing and new businesses. The City’s economic development goal is to “broaden the tax base and strengthen the City’s economy and employment base through the expansion of the current balance of commercial and industrial activity.”

2.3.2.7  City of De Pere Comprehensive Outdoor Recreation Plan 2018-2023

The City of De Pere Comprehensive Outdoor Recreation Plan 2019-2023 was adopted to assist the City in the maintenance of existing parks and development of future parks in De Pere. This plan outlines more than 45 park and recreation amenities, including mini-parks, neighborhood parks, community parks, large urban parks, natural resource areas, special use areas, private parks, and school parks. According to the plan, the City already has enough neighborhood and mini-park land through 2040. However, they will need 86 acres of community parkland by 2030 and 95 by 2040 to meet the National Recreation and Park Association standard of minimum acceptable facilities. The plan outlines a few additional needs and recommendations, including: boat landings and water access on the Fox River in the southern portion of the City; larger tracks of lands to expand sports facilities; and a second bridge across the Fox River south of the City.

2.3.2.8  Town of Lawrence Comprehensive Plan

The Town of Lawrence has a rapidly increasing population and is planning for growth accordingly. The Town’s Comprehensive Plan (2016) recommends that future growth be orderly and cost-effective, maximizing use of existing and planned services. For instance, the plan recommends that areas most easily serviced by municipal sewer and water develop first, with infill areas and areas contiguous to existing development given priority before other more costly areas are developed.

The plan recommends development policies focus on mixing and joining compatible land uses rather than the conventional method of separating residential, commercial, and other land uses. For example, the plan’s residential recommendations encourage the development of neighborhoods that include mixed housing types rather than single-use residential subdivisions, as well as mixed-use commercial and residential developments. The idea of creating diverse neighborhoods rather than standalone single-use developments is a common theme throughout the Future Land Use section.

The Town of Lawrence Comprehensive Plan is geared toward promoting future development in a manner that supports a high-quality community that is attractive to existing and new businesses. The Town’s economic development goal is to “broaden the tax base and strengthen the Town of

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6 De Pere has a boundary agreement with Lawrence and Memorandums of Understanding (MOUs) with Ledgeview. The City is working towards a boundary agreement with Rockland.
Lawrence economy and employment base through the expansion of business activity in a sustainable manner that does not detract from the rural character of the Town and that does not detract from the rapidly developing urban areas.”

2.3.2.9 Town of Lawrence Parks & Outdoor Recreation Plan

The Town of Lawrence Parks & Outdoor Recreation Plan, included the Town’s Comprehensive Plan, reflects the need for retention of natural open space and preservation of fish and wildlife habitat, as well as the need for new parks as the Town continues to develop. In the short-term, the Town’s focus is to meet the immediate facility needs of existing parks and acquire land for future parks. In the long-term, the Town will continue to focus on these same needs, but also consider the facilities within each park to ensure the population uses the park system.

2.3.2.10 Town of Ledgeview Comprehensive Plan 2035

To accommodate a growing population, the Town of Ledgeview Comprehensive Plan 2035 (2015a) recommends that future growth be orderly and cost-effective, making maximum use of existing and planned services. For instance, the plan recommends that areas most easily serviced by municipal sewer and water develop first, with infill areas and areas contiguous to existing development given priority before other more costly areas are developed.

The plan recommends that development policies focus on mixing and joining compatible land uses rather than the conventional method of separating residential, commercial, and other land uses. For example, the plan’s residential recommendations encourage the development of neighborhoods that include mixed housing types rather than single-use residential subdivisions, as well as mixed-use commercial and residential developments. The idea of creating diverse neighborhoods rather than standalone single-use developments is a common theme throughout the Future Land Use section.

The comprehensive plan includes a chapter on Economic Development. Its goal is to “encourage a competitive and diverse economic atmosphere that attracts investment and employment in Ledgeview.” In the Town, opportunity exists for high-end employment centers or corporate headquarters. Other opportunities exist for light manufacturing, niche or destination retail, dining, and tourism, as well as “grow your own” start-ups. The plan identifies four Economic Development Focus Areas: Ledgeview Industrial Park Area, County GV/County G Corridor, Olde School Square, and I-43 Business Park.

2.3.2.11 Town of Ledgeview Park & Recreation Plan 2019-2024

The Town of Ledgeview Park & Recreation Plan outlines goals, objectives, strategies, and recommendations to guide the development and improvement of outdoor recreation facilities to meet the recreational needs and demands of residents. Recommendations include acquiring and developing a series of neighborhood parks, the timing of which coincide with the development of future growth areas; continued development of and improvements to Scray Hill Park; protection of Environmentally Sensitive Areas; protection and enhancement of important natural resource features (e.g., Niagara Escarpment, East River); and improving the Town’s trail network.

2.3.2.12 Town of Rockland Comprehensive Plan

Future development within the Town of Rockland is currently limited by the City of De Pere generally not permitting new land divisions less than 10 acres within its 3-mile extraterritorial land division review area. The Town’s Comprehensive Plan (2015) recognizes this fact; however, the Town has established a future land use plan should this limitation be removed at some point in the future.

The plan contains land use recommendations that are designed to maintain the community’s rural atmosphere. For example, it encourages developers to take advantage of the existing natural features, terrain, and vegetation when laying out and designing new subdivisions in the Town to help screen the development from views along the town roads. In addition, the Town supports conservation by design...
development, which focuses on maintaining open space and conserving significant natural and/or cultural features.

According to the Comprehensive Plan, the key to an economic development strategy is having a quality product to market. Community assets supporting this strategy include Rockland’s natural setting, close proximity to the Green Bay and Appleton metropolitan areas, and many acres of developable land. Rockland’s mixture of desirable natural attributes, including the Niagara Escarpment, Fox River, and Fox River State Trail and local food production also lends itself to tourism opportunities. The Town of Rockland Comprehensive Plan is geared toward capitalizing on these attributes and promoting future development in Rockland that helps to create a community that is even more attractive to new residents, businesses, and visitors.

2.3.2.13 Village of Allouez Comprehensive Plan

The Village of Allouez is almost entirely developed and is unable to expand its borders. Therefore, its Comprehensive Plan (2013) focuses on development of the Village’s few remaining vacant parcels, rehabilitation of existing homes, and redevelopment of aging commercial, industrial, and institutional properties.

The plan recommends expanding many of the development concepts that have already been implemented in the Village, such as integrating compatible commercial uses with residential neighborhoods and designing commercial uses to conform with surrounding neighborhoods.

The entire Village of Allouez Comprehensive Plan is geared toward promoting future development in Allouez in a manner that supports a high-quality community that is attractive to existing and new businesses. The plan outlines recommendations for supporting economic development, which include encouraging infill development, focusing attention on existing businesses, and capitalizing on the limited amount of land available for business development.

2.3.2.14 Village of Allouez 2016-2020 Comprehensive Outdoor Recreation Plan

As the Village is relatively developed, Allouez’s Outdoor Recreation Plan focuses on improvements to its existing facilities and beautification of the community’s aesthetic. Additionally, the plan recommends upgrading existing facilities and parklands in accordance with the Americans with Disabilities Act Accessibility Guidelines; exploring the development of an aquatic facility; implementing an urban forestry program; programming more usage at the community center; implementing a dedication and naming rights policy; and improving access to water at the Fox and East rivers.

2.3.2.15 Village of Ashwaubenon Comprehensive Plan

The Village of Ashwaubenon Comprehensive Plan (2016) establishes a future land use plan for neighborhoods, districts, and corridors in the Village. This method views the community as a mix of places rather than as isolated land uses. The plan identifies the desirable, allowable, and undesirable land uses for each area and establishes a vision. In general, neighborhoods should be pedestrian-friendly and, while predominantly residential, offer a mix of uses and amenities. Districts should generally emphasize a special single use, while corridors should represent regional connectors of neighborhoods and districts.

Ashwaubenon enjoys an exceptional position as one of the most economically diverse, transportation rich, and demographically stable communities in the Green Bay metropolitan region. The Ashwaubenon economy derives benefits from the Oneida Nation Casino complex, Austin Straubel International Airport, Lambeau Field, and customer traffic from I-41 and Hwy 172. The Economic and Community Development chapter of the Village’s Comprehensive Plan outlines several goals, which include working collaboratively to strengthen the airport as an economic development opportunity, building on I-41 marketing efforts to strengthen the corridor and recruit businesses, and improving the quality of retail businesses.
2.3.2.16  **Village of Ashwaubenon Comprehensive Outdoor Recreation Plan**

Adopted in 2014, the Village’s Comprehensive Outdoor Recreation Plan outlines goals, objectives, and specific recommendations to continue to meet and exceed recreation demands. The Plan encourages developing more recreational opportunities on or near the Fox Riverfront, including trails. It also identifies the need for new parks and amenities, open space, and outdoor recreation to accompany new development. The plan’s recommendations are integrated into a five-year Capital Improvements Action Plan, and the Village is currently in the process of updating its Comprehensive Outdoor Recreation Plan.

2.3.2.17  **Village of Bellevue Comprehensive Plan 2012-2032**

To accommodate a growing population, the *Village of Bellevue Comprehensive Plan 2012-2032* (2012) recommends that future growth be orderly and cost-effective, making maximum use of existing and planned services. For instance, the plan recommends that areas most easily serviced by municipal sewer and water develop first, with infill areas and areas contiguous to existing development given priority before other more costly areas are developed.

The plan recommends that development policies should focus on mixing and joining compatible land uses rather than the conventional method of separating residential, commercial, and other land uses. For example, the plan’s residential recommendations encourage the development of neighborhoods that include mixed housing types rather than single-use residential subdivisions, as well as mixed-use commercial and residential developments. The idea of creating diverse neighborhoods rather than standalone single-use developments is a common theme throughout the Future Land Use section.

The *Village of Bellevue Comprehensive Plan* is geared toward promoting future development in Bellevue in a manner that supports a high-quality community that is attractive to existing and new businesses and their employees. The Village is expected to continue to grow its economic base and has large tracts of undeveloped land available for new business ventures. The plan identifies four primary economic activity areas: Schmitt Industrial Park Plat, Brice/Schettler Industrial Park Plat, Allouez Ave/Lime Kiln Rd/Monroe Rd intersection, and I-43/County JJ interchange area.

2.3.2.18  **Village of Bellevue 2015-2020 Comprehensive Outdoor Recreation Plan**

The Village of Bellevue’s Comprehensive Outdoor Recreation Plan establishes goals, objectives, policies, and recommendations to guide the acquisition, preservation, and development of land for parks, trails, and other open spaces to meet the needs of Bellevue’s growing and changing population. Recommendations include acquiring and/or developing local parks (mini-parks/pocket parks, neighborhood parks, and community parks); acquiring/preserving environmentally significant lands; constructing a swimming/aquatic facility; developing an off-leash dog park; and improving existing parks.

2.3.2.19  **Village of Hobart Comprehensive Plan (2016)**

The *Village of Hobart Comprehensive Plan* (2016) establishes strategies to guide future development. These include conservation design, new urbanism, and traditional neighborhood development. Generally, future development should maintain and enhance community character, which, for the Village of Hobart, is a mix of high-quality residential living options; a balanced and diversifying local economy; a growing commercial core in northern Hobart; a healthy agricultural sector; abundant natural resources; and safe and friendly neighborhoods.

The Village of Hobart has an increasingly diverse economic base. The Village’s Comprehensive Plan identifies opportunities for additional economic development, particularly at the Centennial Centre at Hobart, and within the Southeast Hobart Business Park. The Plan’s vision is to “maintain a proactive approach to economic development by strongly supporting existing local businesses while actively engaging new start-ups” and to “encourage economic diversity through quality commercial, manufacturing, high-tech, and healthcare industries.”
2.3.2.20 Village of Hobart Comprehensive Outdoor Recreation Plan

The Village of Hobart Comprehensive Outdoor Recreation Plan outlines goals, objectives, and recommendations to guide land acquisitions, development, and maintenance activities of recreation facilities. Recommendations include expanding its pedestrian and bicycle trail system; developing several parks at Centennial Centre, a mixed-use, master-planned community; creating other pocket, neighborhood, and community parks throughout the Village; and maintenance of existing parks and trails.

2.3.2.21 Oneida Reservation Comprehensive Plan

The Oneida Reservation Comprehensive Plan (2014) establishes a Land Use Policy Framework (updated 2008) to guide future development within the Reservation. The Land Policy Framework depicts the Reservation as a series of “places.” The distinction of “places” recognizes that the Reservation is not one, homogenous area but a collection of several, integrated places. Each place has a unique cultural, social, economic, and/or natural character or a special identity within the Reservation.

The types of “places” on the reservation area are categorized into Neighborhoods, Districts, and Corridors, and the framework identifies the desirable, allowable, and undesirable land uses for each area. In general, neighborhoods should be pedestrian-friendly and, while predominantly residential, offer a mix of uses and amenities. Districts should generally emphasize a special single use, while corridors should represent regional connectors of neighborhoods and districts.

2.3.2.22 Oneida Nation Economic Development Strategic Plan

The Oneida Nation Economic Development Strategic Plan (2018) builds on the Nation’s past and present economic development efforts and expands the scope of the Nation’s activities. The plan is structured around 12 initiatives. The initiatives are areas where the Nation should focus its programs and investments to encourage business development, job growth, and real-estate development over the next 10 years and beyond. These include:

- Entrepreneurship and Innovation. Support the growth and profitability of Oneida businesses.
- Oneida Business Park. Reinvent the Oneida Business Park as an anchor for tribal economic activity.
- Agricultural Business Development. Leverage the Nation’s agricultural lands for sustainable business growth.
- Alignment with the Packers. Launch new partnerships with Green Bay Packers on multiple fronts.
- Residential and Mixed-Use Development. Encourage new residential and mixed-use development to generate a larger, more diverse customer base in support of Oneida businesses.
- Marketing and Image. Raise the Oneida Nation’s profile through marketing efforts aimed at internal and external audiences.
- Airport Development. Capitalize on the Green Bay Austin Straubel International Airport’s economic potential.
- Visitor Attraction. Elevate the role of the Oneida Reservation as a visitor destination with events, conferences, and new tourist attractions.
- Regional Education and Training Partnerships. Partner with area higher-education institutions to create new training and education opportunities for Oneida members.
- Global Talent Recruitment. Launch a global talent recruitment strategy for Oneida members.
- Oneida Development Holdings. Establish Oneida Development Holdings, LLC, as the primary organizational structure for tribal business acquisition and new enterprise development efforts.
- Futures Committee. Create a task force to explore the future of gaming and other sectors.

In addition, the Plan identifies six target industries (Agriculture and Food Processing; Software and Data Analytics; Manufacturing; Tourism and Entertainment; Professional Services; Health Care Services and
Product), along with three performance measures: (1) Growth of tribal revenue and profits, (2) Job growth, especially middle- to high-wage jobs, and (3) Real-estate development.

2.3.3 State and Local Regulations

2.3.3.1 Wisconsin’s Comprehensive Planning (Smart Growth) Law

Wisconsin’s comprehensive planning and smart growth law became effective May 25, 2000. It requires that as of 2010, county and local land use actions be consistent with comprehensive plans. Effectively, all local governments in Wisconsin were required to have a comprehensive plan in place by 2010, if they were to engage in land use. Key provisions as highlighted by the University of Wisconsin Extension include (University of Wisconsin Extension, Local Government Center 2000):

- Planning is to guide the development and redevelopment of the local unit for a 20-year period, with projections for 5-year increments shown for the land use element.
- The transportation element must compare the local units’ programs with state and regional transportation plans, and must incorporate those and other applicable transportation plans.

2.3.3.2 Land Use Regulations

Local jurisdictions have employed regulations to manage future growth. These include:

- **Zoning Ordinance.** A zoning ordinance is a written regulation and law that defines how property in specific geographic zones can be used (residential, commercial, industrial, institutional, etc.). Zoning ordinances may also regulate lot size, placement, bulk (or density), and the height of structures. Zoning ordinances describe not only the acceptable use for specified areas of land but also the procedures for handling infractions (including any penalties), granting variances, and hearing appeals.

- **Land Division Ordinance.** Land division regulations govern the process by which lots are created out of larger tracts of land. These regulations seek to ensure that the land divisions appropriately relate to the geography of the site and existing and future public facilities.

- **Subdivision Ordinance.** Subdivision regulations govern the process by which lots are created out of larger tracts of land. These regulations seek to ensure that the subdivisions appropriately relate to the surroundings, as well as existing and future public facilities.

- **Official Map.** An Official Map is a regulatory tool used by a community to project and record future municipal improvements. It is commonly used to identify existing streets and planned improvements, but an Official Map can also be used to identify planned school sites, recreation areas, and municipal facilities. Once an area is identified on an Official Map, no building permit for a use other than the proposed use on the Official Map may be issued for that site unless the map is amended.

- **Tax Incremental Financing (TIF) Districts.** A TIF District is a designated area designed to encourage development by freezing the allocations to various taxing bodies (e.g., park districts, etc.) at their levels as of the start of the TIF. For the life of the TIF, the amount received by these taxing bodies from property taxes collected within the TIF will remain constant, unless the City decides to redirect TIF funds back to one or more taxing bodies because of an increased need for that body’s services, which is not uncommon. Any increased tax revenues collected as a result of an increase in property values then go into the TIF fund and can be used by the city for a wide range of purposes within the TIF to promote redevelopment.

- **Extraterritorial Jurisdiction.** Extraterritorial jurisdiction is the extension of cities and villages beyond their municipal boundaries into unincorporated areas of towns. Under Wisconsin Statutes, cities and
villages have the authority – by right – to exercise extraterritorial land use planning, subdivision review, official mapping, and, with town approval, zoning outside their incorporated boundaries. In order to exercise extraterritorial zoning, cities and villages must work cooperatively with adjoining towns.

Table 2-2 identifies the regulations each jurisdiction employs.

### Table 2-2. Land Use Regulations

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Zoning Ordinance</th>
<th>Land Division Ordinance</th>
<th>Subdivision Ordinance</th>
<th>Official Map</th>
<th>TIF Districts</th>
<th>Extraterritorial Jurisdiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brown County</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>City of De Pere</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Town of Lawrence</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Town of Ledgeview</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Town of Rockland</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Village of Allouez</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Village of Ashwaubenon</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Village of Bellevue</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Village of Hobart</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Oneida Nation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* The Village of Hobart follows the Brown County Subdivision Ordinance

### 2.3.3.3 Environmental Regulations

Five Brown County-administered ordinances and NR 121 Water Quality Planning\(^7\) provide the tools for environmental preservation in the county (see Table 2-3). Local governments and the Oneida Nation also have ordinances that contain additional environmental protection measures.

### Table 2-3. Environmental Preservation Ordinances

<table>
<thead>
<tr>
<th>Ordinance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Shoreland Management Ordinance</td>
<td>The ordinance requires the creation of a 35-foot-wide vegetative buffer along all stream corridors in the unincorporated areas of Brown County. The intent of the ordinance is to improve surface water quality by minimizing the impact of suspended solids, pesticides, and fertilizers create from agricultural practices.</td>
</tr>
<tr>
<td>Animal Waste Management Ordinance</td>
<td>This ordinance regulates the location, construction, installation, alteration, design and use of animal waste storage facilities and animal feedlots so as to protect the groundwater and surface water resources.</td>
</tr>
<tr>
<td>Land Division and Subdivision Ordinance and NR 121 Water Quality Planning</td>
<td>The ordinance regulates all land divisions of 10 acres or less outside of the designated SSA and land divisions of 40 acres or less inside of the SSA.</td>
</tr>
</tbody>
</table>

\(^7\) Wisconsin Administrative Code NR 121 establishes regulations specifying policies, procedures, and requirements for Wisconsin's areawide water quality planning process. This process results in the preparation of areawide plans for managing the quality of waters of the state, ground and surface, public and private, including consideration of the relationship of water quality to land and water resources and uses.
### Table 2-3. Environmental Preservation Ordinances

<table>
<thead>
<tr>
<th>Ordinance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shorelands and Wetlands Ordinance</td>
<td>The ordinance requires permits be obtained from the Brown County Zoning Office prior to any land disturbing activity or construction within the shoreland zone (all lands and wetlands within 300 feet of a navigable stream or river and 1,000 feet of a navigable lake, pond, or flowage).</td>
</tr>
<tr>
<td>Floodplains Ordinance</td>
<td>The ordinance regulates all development activity within identified flood fringe and floodway.</td>
</tr>
<tr>
<td><strong>City of De Pere</strong></td>
<td></td>
</tr>
<tr>
<td>Shoreland-Wetland Zoning Ordinance</td>
<td>The ordinance regulates development activity within shoreland areas and wetlands.</td>
</tr>
<tr>
<td>Stormwater Management Ordinance</td>
<td>The ordinance sets forth stormwater requirements and criteria, which will diminish the threats to public health, safety, welfare, and the aquatic environment due to runoff of storm water from development or redevelopment.</td>
</tr>
<tr>
<td>Conservancy Zoning District</td>
<td>The purpose of this district is to provide adequate natural areas for the drainage of surface and storm waters and to protect natural resource areas containing swamp, wildlife habitat, and natural water or drainage courses.</td>
</tr>
<tr>
<td><strong>Town of Lawrence</strong></td>
<td></td>
</tr>
<tr>
<td>Erosion and Stormwater Control Ordinance</td>
<td>The ordinance controls the impact of development on runoff, groundwater recharge, and overall water quality. It includes standards for compliance and guidelines to assist developers in choosing appropriate storm water management techniques.</td>
</tr>
<tr>
<td><strong>Town of Ledgeview</strong></td>
<td></td>
</tr>
<tr>
<td>Stormwater Management Ordinance</td>
<td>The ordinance sets forth storm water requirements and criteria, which will diminish the threats to public health, safety, welfare, and the aquatic environment due to runoff of storm water from development or redevelopment.</td>
</tr>
<tr>
<td>Erosion Control Ordinance</td>
<td>The ordinance establishes standards and specifications for conservation practices and planning activities that minimize soil erosion.</td>
</tr>
<tr>
<td>Conservancy Zoning District</td>
<td>The purpose of the district is to provide adequate natural areas for the drainage of surface and storm waters, and to protect natural resource areas containing swamp, wildlife habitat, and natural water or drainage courses.</td>
</tr>
<tr>
<td><strong>Village of Allouez</strong></td>
<td></td>
</tr>
<tr>
<td>Stormwater Management Ordinance</td>
<td>The ordinance sets forth storm water requirements and criteria that will diminish the threats to public health, safety, welfare, and the aquatic environment due to runoff of storm water from development or redevelopment.</td>
</tr>
<tr>
<td><strong>Village of Ashwaubenon</strong></td>
<td></td>
</tr>
<tr>
<td>Stormwater Management Ordinance</td>
<td>The ordinance sets forth storm water requirements and criteria that will diminish the threats to public health, safety, welfare, and the aquatic environment due to runoff of storm water from development or redevelopment.</td>
</tr>
<tr>
<td><strong>Village of Bellevue</strong></td>
<td></td>
</tr>
<tr>
<td>Stormwater Management Ordinance</td>
<td>The ordinance manages the long-term, post-construction storm water discharges from land development and redevelopment activities by setting performance standards.</td>
</tr>
<tr>
<td>Conservancy Zoning District</td>
<td>The purpose of this district is to provide adequate natural areas for the drainage of surface and storm waters and to protect natural resource areas containing swamp, wildlife habitat, and natural water or drainage courses.</td>
</tr>
</tbody>
</table>
### Table 2.3. Environmental Preservation Ordinances

<table>
<thead>
<tr>
<th>Ordinance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Village of Hobart</strong></td>
<td></td>
</tr>
<tr>
<td>Erosion Control and Stormwater Management Ordinance</td>
<td>The ordinance sets forth stormwater requirements and criteria that will diminish the threats to public health, safety, welfare, and the aquatic environment due to runoff of storm water from land development activity.</td>
</tr>
<tr>
<td><strong>Oneida Nation</strong></td>
<td></td>
</tr>
<tr>
<td>Shoreland Protection Ordinance</td>
<td>The ordinance establishes regulations for land uses within 300 feet of a navigable waterway of 625 feet of Duck Creek.</td>
</tr>
<tr>
<td>Water Resources Ordinance</td>
<td>The ordinance establishes water quality standards and addresses all present and potential sources of pollution from land uses to protect Reservation water resources.</td>
</tr>
<tr>
<td>Conservancy Zoning District</td>
<td>The purpose of district is to protect and preserve the health and integrity of natural systems and areas of cultural and historic importance.</td>
</tr>
</tbody>
</table>

#### 2.3.4 Regional Land Use Patterns and Development Trends

Since 1990, the Green Bay metropolitan area has experienced very strong residential, commercial, and industrial growth, extending south following the Fox River. The metropolitan area’s development pattern has continued to extend southward in a relatively efficient manner, and the communities that are affected by the two corridor alternatives have prepared and adopted comprehensive (Smart Growth) plans that contain long-term development concepts. The land use plans of Lawrence, De Pere, Ledgeview, and Rockland have included a new Fox River crossing in the vicinity of Rockland-Red Maple/Southbridge Road since 1996, consistent with the recommendation in the 1996 Brown County Transportation and Land Use Plan.

Exhibit 2-3 illustrates existing and future land use in Brown County, and Table 2-4 identifies existing land use within the Indirect Impacts Study Area. Existing land use in the Indirect Impacts Study Area is mostly agricultural (39.9 percent), while residential, commercial, and industrial uses make up approximately one quarter (24.0 percent) of the total acres. Parks, recreation, and open space also comprise a large portion of the Indirect Impacts Study Area (24.3 percent).

Development is most dense in the north-central portion of the Indirect Impacts Study Area, in downtown De Pere. Commercial uses are primarily along I-41 and industrial uses are concentrated within various business/industrial parks. Land use patterns are more rural south of Rockland Road (Corridor Alternative 2).
SECTION 2 – INDIRECT IMPACTS ANALYSIS

Exhibit 2-3. Existing and Future Land Use in Brown County

Source: Brown County 2019
Table 2-4. Existing Land Use within the Indirect Impacts Study Area

<table>
<thead>
<tr>
<th>Land Use Category</th>
<th>Acres</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>8,492</td>
<td>20.1</td>
</tr>
<tr>
<td>Commercial</td>
<td>1,116</td>
<td>2.7</td>
</tr>
<tr>
<td>Industrial</td>
<td>1,610</td>
<td>3.8</td>
</tr>
<tr>
<td>Transportation/Communications/Utilities</td>
<td>2,914</td>
<td>6.9</td>
</tr>
<tr>
<td>Institutional</td>
<td>723</td>
<td>1.7</td>
</tr>
<tr>
<td>Agriculture</td>
<td>16,827</td>
<td>39.9</td>
</tr>
<tr>
<td>- within 2040 Brown County Sewer Service Area</td>
<td>6,376</td>
<td>15.1</td>
</tr>
<tr>
<td>- outside 2040 Brown County Sewer Service Area</td>
<td>10,451</td>
<td>24.8</td>
</tr>
<tr>
<td>Parks, Recreation, and Open Spacea</td>
<td>10,228</td>
<td>24.3</td>
</tr>
<tr>
<td>Land Under Development</td>
<td>256</td>
<td>0.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>42,166</td>
<td>100.00</td>
</tr>
</tbody>
</table>

*a* Includes parks, recreation, open space, fallow fields, natural areas, woodlands, and undeveloped open space.

Although approximately 40 percent of the study area is in agricultural production, approximately 15 percent of agricultural lands is within the 2040 Brown County SSA; these areas have been identified for development in future land use plans. Substantial residential development is anticipated in Lawrence, Ledgeview, and Rockland (along the Fox River).8 According to the Wisconsin Department of Administration’s 2040 population projections (2013), all municipalities in the Indirect Impacts Study Area will continue to experience rapid growth. In fact, the Towns of Lawrence and Ledgeview are expected to be the first and third fastest-growing municipalities in Wisconsin between 2010 and 2040 (Wisconsin Department of Administration Demographic Services Center 2013).

Table 2-5 identifies anticipated future housing needs in the several study area communities. In February 2018, the West De Pere School District, which roughly follows the Indirect Impacts Study Area west of the Fox River, estimated the need for 2,693 new housing units in the district between January 2018 and 2030. This represents an average of approximately 200 new units per year, which is slightly less than residential growth experienced between 2010 and 2017. It is anticipated that nearly two-thirds of these units will be single-family homes (School District of West De Pere 2018). The Town of Ledgeview on the east side of the river is estimated to need 200 to 300 new housing units a year to meet forecast population growth (Town of Ledgeview 2019a). While the majority of existing housing is single-family, future residential development will focus on providing a broader mix of housing types, such as townhouses, duplexes, and smaller apartment buildings.

Table 2-5. Projected Housing Needs of Select Study Area Communities

<table>
<thead>
<tr>
<th>Municipality</th>
<th>Existing Housing Units</th>
<th>Additional Required Housing Units (year)</th>
<th>Estimated Annual New Housing Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>West of the Fox River</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Town of Lawrence</td>
<td>1,766 (2010)</td>
<td>2,018 (2040)</td>
<td>~ 67 units</td>
</tr>
<tr>
<td><strong>East of the Fox River</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Town of Ledgeview</td>
<td>2,689 (2015)</td>
<td>4,000 – 6,000 (2035)</td>
<td>200-300 units</td>
</tr>
<tr>
<td>Town of Rockland</td>
<td>537 (2010)</td>
<td>189 units (2035)</td>
<td>~ 8 units</td>
</tr>
</tbody>
</table>

In addition, there will be increased commercial development along I-41 in Lawrence, along County GV in Ledgeview, and in southeast Hobart.

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8 Future development within the Town of Rockland is currently limited by the City of De Pere generally not permitting new land divisions less than 10 acres within its 3-mile extraterritorial land division review area. The Town’s Comprehensive Plan recognizes this fact; however, the Town has established a future land use plan should this limitation be removed at some point in the future.
There are several ongoing and planned development projects in the Indirect Impacts Study Area, including the following projects:

- **Southeast Hobart Business Park (Village of Hobart Tax Incremental District [TID] #2).** This 400-acre park southeast of the Fernando Drive/Pine Tree Road intersection contains several businesses and industries, and approximately 25 percent of the park had been developed or sold as of 2007.

- **Town of Lawrence Business Park.** This 113-acre park along the west side of I-41, north and south of Scheuring Road, contains several businesses and industries, and approximately 80 percent of the park’s acreage had been developed or sold as of 2005. The Town plans to expand the park to the south over the next 20 years, and it is expected to eventually extend to Birchwood Road.

- **West De Pere Business Park (City of De Pere TID #6 and TID #8).** This 800-acre park southeast of the I-41/Scheuring Road interchange contains several businesses and industries that employ several thousands of people, and most of the park’s acreage has been developed or sold for development. However, De Pere plans to expand the park in the future, and the City purchased 200 acres of land south of Red Maple Road to accommodate the planned expansion.

- **East De Pere Industrial Park.** This 410-acre park south of the WIS 32/Broadway Street intersection contains several businesses and industries, and approximately 25 percent of the park is available for development. The City’s comprehensive plan recommends expanding the industrial park by filling existing lots within the park and adding new developments along Rockland Road to WIS 57.

- **Ledgeview Neighborhood Commercial Centers.** The Town recommends developing commercial centers at major intersections throughout the community, and two of these centers are planned for the intersections of County GV and G and County GV and X. The centers are planned to contain small-scale retail stores, service shops, offices, and other commercial developments that will serve the community and region.

- **Sand Lake Apartments.** This 252-unit multi-family residential development in the northwest quadrant of the potential I-41/Southbridge Road interchange (Corridor Alternative 2) offers luxury condominiums in west De Pere/Lawrence.

- **Various Residential Developments.** Several residential developments are underway or planned in southwest Ledgeview. These include Grand Ridge Estates (north of County X, east of County GV, 56 homes), Trellis Ridge Estates (south of County X, east of Cottonwood Lane, 92-unit multi-family development), and Red Hawk Landing (north of Dickinson Road, west of Bower Creek Road, 87 homes).

- **BelGioioso Cheese.** BelGioioso Cheese’s corporate headquarters is in east Ledgeview along I-43, north of Pine Grove Road. It intends to add 2,700 square feet to its facility.

- **Lawrence Parkway Development (Town of Lawrence TID #1).** This 200-acre development along I-41, north of Little Rapids Road, will include commercial and residential development. It is planned to be home to the Impact Sports Academy, a $6 million indoor baseball training facility. The vision is for it to be a destination-type tournament facility that could generate tourism.

- **Town of Lawrence TID #2.** Located near the intersection of Scheuring Road and Packerland Drive, TID #2 includes plans to construct an Aurora BayCare outpatient center in its northwest corner.

- **City of De Pere TID #5 West Downtown.** The West Downtown TID was created to spur downtown redevelopment and encompasses much of the historic west side of downtown from the railroad tracks on the west, to Third Street on the east, Main Avenue on the north, and Grant and College Streets on the south. Potential future uses of district proceeds include façade grants and Grant Street redevelopment.

- **City of De Pere TID #7 East Downtown.** The East Downtown TID encompasses much of the southern part of the historic east side of downtown De Pere and includes both sides of George Street to Merrill Street on the south, the Fox River on the west, and the lock and dam facilities on the north. The TID was developed to help spur redevelopment and building restoration activities in the downtown.

- **Town of Ledgeview TID #1.** The Town of Ledgeview’s TID #1 encompasses the Olde School Square area along the County GV corridor and around the County GV/County G intersection. The purpose of
TID #1 is to kick-start stagnant development in the Olde School Square development, a mixed-use retail and office condominium community made up of original and replica nineteenth century buildings. The complex is a mix of restaurants, retail stores, and office suites. TID #1 will also assist with site preparation and attracting development to the high-profile County GV corridor.

- **Village of Allouez TID #1.** The Village of Allouez’s TID #1 encompasses much of Webster Avenue, Riverside Drive, and Marine Street corridors. The TID is intended to encourage development and redevelopment, primarily for residential and commercial uses.

- **Village of Ashwaubenon TID #3 and TID #4.** TID #3, located in the northeast portion of the Village, is a large multi-use district. The district has seen a variety of smaller commercial developments; however, the district has a large hotel development under construction. A sizable development project is beginning adjacent to the Green Bay Packers Lambeau Field, called Titletown. The development investment from the Packers and its partners is estimated at $120-130 million, and the first phase includes a large four-diamond hotel, sports medicine clinic, and large microbrewery and restaurant. Further phases will include retail and housing. TID #4 is within TID #3.

- **Village of Ashwaubenon TID #5.** This district, located at the southern end of the Village, will focus on redevelopment of older housing and industrial buildings.

- **Village of Bellevue TID #1.** TID #1 encompasses the area surrounding the interchange of WIS 172 and County GV (Monroe Road). It is envisioned to be a mixed-use development area with retail, commercial, residential, and other complimentary uses but is just a small part of over 500 acres of developable land in this area.

- **Village of Bellevue TID #2.** TID #2 surrounds the Huron Road (County EA) and Eaton Road (County JJ) intersection and comprises approximately 216 acres of land identified for a mix of uses including retail, commercial, office, light industrial, and residential.

- **UnitedHealth Group.** UnitedHealth Group is relocating to a proposed $35 million, four-story, 174,000-square-foot office building in De Pere, off Innovation Court just north of Southbridge Road. Currently, the company employs more than 1,000 people in the Green Bay area.

- **Mulva Cultural Center.** The Mulva Cultural Center, southeast of the Wisconsin Street and Broadway Street roundabout on the east side of the Claude Allouez Bridge, will be a three-story, 75,000-square-foot cultural destination in downtown De Pere. It is intended to showcase the finest traveling exhibits in the world and be a premier cultural attraction.

Communities in the Indirect Impacts Study Area have growth management policies and land use controls in place to direct and manage future growth. These include zoning and subdivision ordinances, TIF districts, and extra-territorial zoning (see Section 2.3.3). Further, as described in Section 2.3.2, communities within the Indirect Impacts Study Area have adopted comprehensive plans to guide future growth. Communities in the area prioritize infill development and areas contiguous to existing development given before other more costly areas are developed. Based on stakeholder interviews, communities do not often veer from their comprehensive plans.

### 2.3.5 Agriculture

As the Green Bay metropolitan area continues to grow, this growth results in the conversion of agricultural lands to non-agricultural uses such as homes, apartments, businesses, roads, and schools. This is true in the study area as development of the Green Bay metropolitan area continues to move south. According to the 2017-2027 Brown County, WI Farmland Preservation Plan Update (Brown County Planning Commission 2017) in 2016, for the first time, agricultural land was less than half of all land in Brown County (168,686 acres; 49.2 percent).

Agriculture comprises approximately 40 percent of the land in the Indirect Impacts Study Area and is concentrated in Rockland, Lawrence, Ledgeview, and Hobart (see Exhibit 2-3). However, future land use
plans show a substantial reduction in agricultural lands as they are converted to residential, commercial, and industrial development as the area continues to grow and the metropolitan area expands to the south.

Wisconsin has a Farmland Preservation Program, which helps farmers and local governments preserve farmland, protect soil and water, and minimize land use conflicts with agriculture. Through participation in the program, counties develop farmland preservation plans; local governments can develop farmland preservation zoning districts; landowners and local governments together form Agricultural Enterprise Areas; and landowners meet soil and water conservation standards to become eligible to claim an income tax credit. There are no Agricultural Enterprise Areas in Brown County, although within the Indirect Impacts Study Area, Farmland Preservation Program lands are present in Hobart, Lawrence, Ledgeview, and Rockland. Local governments and landowners renew their commitment to the Farmland Preservation Program annually.

Adjacent to Corridor Alternative 1, there is agricultural land at the west end of the corridor surrounding the County F/Packerland Drive intersection. The farmland in the southeast quadrant of this intersection has been identified as a farmland preservation area by Brown County and is expected to continue to be used for agricultural activities. Smaller chunks of agricultural land are also present along the easternmost 0.5-mile of County X in the study area. Recently, a large portion of agricultural land in this area was converted to residential land use.

More lands are in agricultural use along Corridor Alternative 2 than Corridor Alternative 1. West of I-41 are several parcels of agricultural land, including the farmland preservation area previously noted at the County F/Packerland Drive intersection adjacent to the Town of Lawrence’s TID #2. Agricultural land is also present immediately east of I-41 along Southbridge Road; however, in recent years, some of agricultural land has been converted to commercial land use. Portions of agricultural land east of the Fox River were recently converted to residential land use. Approximately one-third of the land within Corridor Alternative 2 is agricultural. During the stakeholder interviews, it was noted that much of the “undeveloped” land has been purchased for development.

2.3.6 Natural and Historic Resources

This section describes the notable natural and historic resources in the Indirect Impacts Study Area that may be subject to indirect impacts, based on site visits, resource studies, and stakeholder interviews conducted in January 2020.

2.3.6.1 Water Resources

Exhibit 2-4 identifies water resources (surface waters, wetlands, and floodplains) in the Indirect Impacts Study Area. For more information on water resources, refer to Section 3.9, Water Resources, of the Draft EIS.

Tier 2 will further evaluate surface waters, wetlands, and floodplains based on the detailed design available at that time. Tier 2 assessments will delineate surface waters to determine more precise boundaries for evaluating impacts; include surveys that may be needed to make formal delineations or determinations for wetlands; and determine transverse and longitudinal floodplain crossings by the Tier 2 alternative(s).

Surface Waters

The Indirect Impacts Study Area is in the Lower Fox River basin and the East River and Apple and Ashwaubenon Creeks watersheds. Major waterways include the Fox River, Hemlock Creek, Ashwaubenon Creek, and the East River. None of these waterways are trout streams or Outstanding or

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9 Agricultural Enterprise Areas (AEAs) are comprised of large blocks of generally contiguous agricultural lands, consisting of at least five separate landowners.
Exceptional Resource Waters.\textsuperscript{10} The Fox River, which is the largest river in the study area, empties into the Bay of Green Bay about 5 miles north of the study area.

The Fox River, Ashwaubenon Creek, and the East River are all considered impaired waterbodies under Section 303(d) of the Clean Water Act (DNR 2020a). While Hemlock Creek is considered to be in “good” condition, all waterways receive agricultural and urban storm water runoff contributing to reduced quality. Despite poor water quality conditions, all four waterways are used by fish for spawning. Additionally, the Fox River is used by recreational boaters, for example, the St. Norbert’s College crew team uses the Fox River for practice and regattas.

**Wetlands**

Wetlands are defined by the Clean Water Act as “areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (40 CFR 230.3). Wetlands are typically associated with waterbodies and pockets of wet, depressional areas. Wetlands along Corridor Alternative 1 are mostly associated with waterways, while wetlands along Corridor Alternative 2 are also associated with waterways but also depressions in less developed portions of the corridor. The Indirect Impacts Study Area is a mixture of developed, undeveloped, and agricultural land uses and, as such, wetlands are found sporadically throughout the study area.

The majority of these scattered wetlands are located along the Fox River, East River, and Ashwaubenon Creek. While the largest areas of wetlands in Brown County are outside the Indirect Impacts Study Area, there is a large wetlands complex on the northeastern side of I-43 adjacent to the railroad tracks in the far eastern part of the Town of Ledgeview. This wetland area serves as the headwaters of the Neshota River, which flows southeasterly and eventually drains into Lake Michigan.

During the stakeholder interviewers, it was noted that due to development and agricultural practices, there are not many high-quality wetlands in the study area. The primary threat to wetlands is filling. Although an array of federal, state, and local regulations helps protect wetlands, wetlands (especially smaller ones) are still lost to road construction and other development activities. The draining of wetlands can also occur through tiling and rerouting of surface water. Some agricultural areas are actually former wetlands that would revert back to wetlands if left undisturbed. Even if wetlands are not directly filled, drained, or developed, they still could be impacted by adjacent uses.

**Floodplains**

The Federal Emergency Management Agency defines “regulatory floodway” as “the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.” A 100-year floodplain is an area that has a 1 percent chance of being inundated by a flood event in a given year. All rivers and streams in the Indirect Impacts Study Area possess floodplains. Notably, the Fox River, Ashwaubenon Creek, and East River have a 100-year floodplain and/or regulatory floodway.

Many of the floodplains associated with the larger rivers and streams in the study area have experienced significant amounts of development. Filling, grading, impediments, and impervious surfaces pose threats to floodplains and the resource values that they represent. While communities in the Indirect Impacts Study Area discourage development in floodplains, development could occur within the flood fringe areas through appropriate permits and approvals, and agricultural activities could continue within the floodplain.

\textsuperscript{10} Outstanding Resource Water (ORW) is defined as a lake or stream that has excellent water quality, high recreational and aesthetic value, and high-quality fishing and is free from point source and nonpoint source pollution. Exceptional Resource Water (ERW) is defined as a lake or stream that exhibits the same high-quality resource values as outstanding waters, but which may be impacted by point source pollution.
Exhibit 2-4. Water Resources
2.3.6.2 Cultural Resources

Based on a review of existing archaeological and historic property data on file with the Wisconsin Historic Preservation Database (WHPD), previous cultural resource studies have occurred within the Indirect Impacts Study Area, including the Archaeological Investigations for the Southern Brown County Environmental Impact Statement Project #1436 in Brown County, Wisconsin (Brown County Planning Commission 2012), a Phase I investigation completed for this project in 2012, which included archival and background research, a field investigation for archaeological resources (which included shovel testing), and laboratory analysis of field data.

On February 13, 2020, Brown County, WisDOT, and FHWA met with the Oneida Nation of Wisconsin, Menomonee Indian Tribe of Wisconsin, and Ho-Chunk Nation to discuss cultural resources important to the tribes that may be in or near the study area. They stated that there are no known cultural properties or sacred sites at this time, but properties may be identified by tribes during the Tier 2 process.

A search of WHPD data indicated that there are previously recorded archaeological sites within the Indirect Impacts Study Area, which include pre-contact sites, post-contact sites, and mixed-component sites. WHPD data also indicated that there are no previously identified potentially eligible National Register architectural resources within the 500-foot-corridor footprints.

Tier 2 assessments will follow the process identified in Section 106 of the National Historic Preservation Act, 11 including formal determinations of eligibility, assessment of impacts, consultation, and resolution of adverse impacts, if necessary. As part of the Tier 2 assessment, archeological investigations will take place to cover any areas in the study area not previously surveyed. These Phase 1 investigations will take place in accordance with the Guidelines for Public Archaeology in Wisconsin, as revised (Wisconsin Archeological Survey 1997). The investigations will be designed to partially fulfill responsibilities for identifying, recording, and managing cultural resources as stipulated under Section 106 of the National Historic Preservation Act of 1966. The Phase 1 investigation will include an extensive literature search of documentation of previously recorded sites and visual inspections, pedestrian field survey, surface collection, and shovel testing to verify the presence or absence of archaeological material along the corridor alternatives.

2.3.6.3 Northeast Asphalt Quarry

Nonmetallic mining is widespread in Wisconsin, as well as in Brown County. In Wisconsin, there are an estimated 2,000 mines that provide aggregate for construction, sand, gravel, and crushed stone for road building, and limestone for agricultural lime applications. In Brown County, there are a number of active quarries that mine dolomite, sandstone, limestone, or crushed stone (sand or gravel). The Northeast Asphalt Quarry in the Town of Lawrence is a sand and gravel pit at the intersection of County F and Quarry Park Drive on the northern end of the Town. It is an active quarry with heavy truck traffic, blasting, and machinery operations.

The Town of Lawrence Comprehensive Plan (2016) encourages that as the Town continues to grow, it should ensure that incompatible developments (if not kept from locating near the quarry) provide adequate buffers and notification to potential homeowners that an active quarry is nearby.

2.4 Step 3: Identify Impact-Causing Activities

Step 3 of the analysis examines the No Build Alternative and Corridor Alternatives 1 and 2 and identifies potential impact-causing activities that may be associated with the project, including construction,
operation, and maintenance relevant to indirect impacts. Impact-causing activities have the potential to be substantial and could affect resources in the Indirect Impacts Study Area.

2.4.1 No Build Alternative

The impact-causing activities of the No Build Alternative relate to its lack of action. It does not address the purpose of and need for the project to address east-west travel efficiency and congestion; accommodate existing and planned land use and future travel demand generated by planned development; and reduce crashes.

2.4.2 Corridor Alternatives 1 and 2

Table 2-6 identifies the components of the build alternatives that may have identifiable indirect impacts.

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Impact-Causing Activity</th>
</tr>
</thead>
</table>
| Corridor Alternative 1 - Scheuring Road-Heritage Road (County F-County X) Arterial with new river crossing | New bridge across the Fox River
| | Capacity expansion (new travel through lanes along Heritage Road and Scheuring Road)
| | Improved interchange at I-41
| | Changes in access to specific parcels<sup>a</sup>
| Corridor Alternative 2 - Rockland Road-Red Maple Road with I-41 Interchange with new river crossing | New bridge across the Fox River
| | Capacity expansion (new travel through lanes along existing Rockland Road, Red Maple Road, and Southbridge Road)
| | New alignment connecting County GV to Rockland Road
| | New interchange at I-41
| | Changes in access to specific parcels<sup>a</sup>

<sup>a</sup> Changes in access to specific parcels are not assessed in Tier 1 and will be assessed in Tier 2.

The changes in travel patterns from constructing a new arterial and interchange have been assessed as direct impacts and are discussed in Section 1, *Purpose of and Need for the Project*, of the Tier 1 Draft EIS.

2.5 Steps 4 and 5: Identify Potentially Significant Indirect Impacts; Analyze the Indirect Impacts and Evaluate Assumptions

This section identifies and analyzes the potential for project-influenced development and project encroachment impacts. At this Tier 1 stage in the project development process of the South Bridge Connector there is no alignment being evaluated; the project team has identified a broad corridor for each build alternative. As described in Section 2 of the Draft EIS, the representative working alignments were developed within 500-foot corridors for each alternative (see Sections 2.3.1 and 2.3.2). Resource impacts were then calculated using these representative working alignments (125 to 150 feet for Corridor Alternative 1 and the 150 feet for Corridor Alternative 2). Then, to account for the uncertainty inherent in a Tier 1 NEPA document, impact estimates were revised to represent a range. The low end of the impact ranges presented in this EIS is 0.75 percent of the calculated impact number, and the high end of the range is 1.25 times the calculated number. As a result, the indirect impacts analysis presented
in this section describe the types of impacts that could potentially occur if the South Bridge Connector was constructed with the high-level Tier 1 information provided in Section 3 Existing Conditions, Impacts, and Next Steps of the Draft EIS. During Tier 2 the indirect impacts analysis should be revisited based on the design available at that time.

2.5.1 Project-Influenced Development

The first type of indirect impact is project-influenced development or induced growth impacts. WisDOT describes project-influenced development as “the potential for land use changes to occur as a result of the project action that could reasonably occur sometime in the future.” An example of project-influenced development would include a commercial development occurring around a new interchange and the environmental impacts associated with this development (AASTHO 2016).

The project is anticipated to have minimal impacts on the location, magnitude and/or pace of future planned development because growth and development in the study area is already being driven by its proximity to both the Green Bay and Appleton job markets, diverse economic base, schools, and low cost of living, as identified by stakeholders. Local and regional planning agencies have strong land use controls and regulatory constraints that direct future development to areas consistent with local and regional plans that are served by municipal sewer and water and protect environmentally sensitive areas. Key underlying issues contributing to the conclusion that the project is not likely to contribute to substantial project-influenced development are summarized in Table 2-7.

**Table 2-7. Assessing the Potential for Project Influenced Land Use Change**

<table>
<thead>
<tr>
<th>Key Issues to Consider</th>
<th>Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth Trends and Projections</td>
<td>There is ongoing population and employment growth in the study area due to proximity to both the Appleton and Green Bay job markets without the proposed new bridge and roadway improvements. Based on the number of ongoing and future developments identified during stakeholder interviews, current growth trends are likely to continue regardless of whether the project is implemented.</td>
</tr>
<tr>
<td>Constraints on Growth Potential</td>
<td>The region’s strong regional and local land use controls and regulatory constraints will direct new development in the study area to locations consistent with regional and local plans (see Section 2.3.2).</td>
</tr>
<tr>
<td>• Stakeholders indicated that study area communities follow their land use plans. It is difficult to depart from comprehensive plans because sewer service has been allocated to municipalities based on population (existing and 2040 projections), anticipated residential needs, as well as anticipated commercial and industrial areas (per comprehensive plans).</td>
<td></td>
</tr>
<tr>
<td>Land Use</td>
<td>The project has been a part of long-range plans since 1968. Broad changes in future land use patterns are not anticipated.</td>
</tr>
<tr>
<td>• Corridor Alternative 1 is mostly developed; land use changes and redevelopment as a result of the proposed action is unlikely.</td>
<td></td>
</tr>
<tr>
<td>• Corridor Alternative 2 has been a part of long-range plans since 1996; some of the &quot;undeveloped&quot; land adjacent to Corridor Alternative 2 is being held by developers waiting for a decision on the bridge. Stakeholders commented that if the bridge is not built the mix of development may change, but development is anticipated either way. Much of the development adjacent to the route identified in long-range plans has been developed with the corridor in mind; thus, to some extent the planned route has already influenced development patterns.</td>
<td></td>
</tr>
<tr>
<td>Changes in the Intensity of Development</td>
<td>The project would not affect regional travel patterns nor induce additional traffic on I-41 from the no-build condition north and south of the study area. Thus, the proposed action is unlikely to change the amount and intensity of development in the study area from the no-build condition.</td>
</tr>
</tbody>
</table>

Development is occurring in the Indirect Impacts Study Area without the South Bridge Connector and is planned to continue (see Exhibit 2-5). Over one dozen ongoing and future planned developments were identified during the stakeholder interviews. West of the Fox River development in the vicinity of the proposed interchange of Corridor Alternative 2 and I-41 includes United Health Group (174,000 square foot office building) and Sand Lake Apartments (252-unit complex), and two TIF districts in Lawrence. East of the Fox River includes several residential developments in the vicinity of the eastern project...
terminus, such as Grand Ridge Estates (56 homes), Red Hawk Landing Subdivision (87 homes), a new neighborhood development (60 homes), and Trellis Ridge Estates (multifamily development); two neighborhood commercial centers (small-scale retail stores, service shops, office); as well as a cluster of industrial-type businesses at the border of Ledgeview and De Pere.

When asked the likely impact of not constructing the bridge, stakeholders noted that the mix of development may change (for example, land slated for commercial use based on the assumption that the bridge will be built may be better suited for residential use if the bridge is not constructed), but development is anticipated to continue in the area either way. Lands available for development are identified for development in future land use plans. For example, there are parcels available for commercial/industrial development in the De Pere East Industrial Park. Additionally, there is agricultural land south of Rockland Road within the 2040 sewer service area, that is identified on land use plans for expansion of the De Pere East Industrial Park, along with other isolated agricultural lands identified for future development. During the stakeholder interviews it was noted that some undeveloped land in the area is being held in speculation in anticipation of the bridge being built in Corridor Alternative 2; nonetheless, local plans and land use controls will guide the development of this land.

Stakeholders consistently stated that development in the region does not depart from comprehensive plans. They also stated that it is difficult to depart from comprehensive plans because sewer service has been allocated to municipalities based on population (existing and 2040 projections), anticipated residential needs, as well as anticipated commercial and industrial areas (per comprehensive plans). Due to sewer constraints, study area communities follow smart growth principals and prioritize infill development and areas contiguous to existing development. The project is unlikely to cause development in locations where it is not planned by local and regional planning agencies due to land use policies and regulations.

While both corridor alternatives may improve the attractiveness of land in the study area, in consideration of stakeholder input and strong regional and local land use policies and regulation, the proposed project would not substantially change the location, magnitude, or pace of future development within the study area. Although the mix of land use may change on those parcels being held in speculation and the pace of development has been slowed down in some instances waiting for a decision on the project, it is not anticipated to lead to a substantial change. As demonstrated by the traffic analysis, travel patterns within the study area may change with Alternatives 1 and 2, but the proposed action would not result in additional future traffic on I-41 from the no-build condition north and south of the study area, and thus it is unlikely to change the amount and intensity of development from the no-build condition. The corridor alternatives would contribute to a more efficient transportation system in the general study area and is not driving planned development in the area.

Section 2.6.1 assesses the potential consequences and mitigation measures of project-influenced development.

2.5.1.1 Impacts Related to Project-Influenced Development

Substantial changes in development patterns are not anticipated from the construction of the South Bridge Connector (see Section 2.5.1 Project-Influenced Development). Therefore, it is anticipated that there would be minimal impacts to air, water, natural systems and cultural resources from project-influenced development. The analysis will be revisited during Tier 2 assessments.
Notable Existing and Planned Developments

- A. Southeast Hobart Business Park
- B. Town of Lawrence Business Park
- C. West De Pere Business Park
- D. East De Pere Industrial Park
- E. Ledgeview Neighborhood Commercial Centers
- F. Sand Lake Apartments
- G. Various Residential Developments
- H. BelGioioso Cheese
- I. United Health Group
- J. Mulva Cultural Center
- K. Lawrence Parkway Development
- L. Town of Lawrence TID #2
- M. City of De Pere TID #5 West Downtown
- N. City of De Pere TID #7 East Downtown
- O. Town of Ledgeview TID #1
- P. Village of Allouez TID #1
- Q. Village of Ashwaubenon TID #3 and TID #4
- R. Village of Ashwaubenon TID #5
- S. Village of Belview TID #1
- T. Village of Belview TID #2

Note: Additional information on each development can be found in Table 3-2.
2.5.2 Project Encroachment Impacts

Table 2-8 identifies the resources considered for potential project encroachment impacts based on direct impacts described in Section 3 Existing Conditions, Impacts, and Next Steps of the Draft EIS, and stakeholder input. One resource, agriculture, was identified as having a potential project encroachment impact and is discussed in more detail following the table.

Table 2-8. Resources Considered for Indirect Impacts in Tier 1*

<table>
<thead>
<tr>
<th>Resource</th>
<th>Would this resource be directly affected?</th>
<th>Would this resource experience substantial project encroachment impacts?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parks: Corridor Alternative 1 may have an edge impact to Preserve Park; Corridor Alternative 2 may impact Preserve Park and Kiwanis Park.</td>
<td>Parks: No. Potential impacts of the corridor alternatives are not anticipated to change the use of park facilities.</td>
<td></td>
</tr>
<tr>
<td>Schools: Yes. There is a potential impact to school access under Corridor Alternative 1. No direct impacts are identified under Corridor Alternative 2.</td>
<td>Schools: No. Area schools are anticipated to have sufficient capacity to accommodate students that may be relocated as a result of the corridor alternatives.</td>
<td></td>
</tr>
<tr>
<td>Places of Worship: Corridor Alternative 1 could result in several impacts to churches, from acquisition of a strip of land on church property to displacement. Corridor Alternative 2 could cause acquisition of a strip of land along the edge of one church property.</td>
<td>Places of Worship: No. Potential impacts of the corridor alternatives are not anticipated to change parishioner ability to attend places of worship. If a place of worship is relocated, some parishioners may be closer or farther away to the new location; future studies would identify parcels/properties for potential relocation, if needed.</td>
<td></td>
</tr>
<tr>
<td>Fire, Ambulance, and Police Protection: Corridor Alternative 1 may require acquisition of a strip of land from the Town of Ledgeview Fire Station No. 2. Corridor Alternative 2 could enhance the ability of emergency responders to quickly travel throughout the expanding southwest and southeast sections of the City of De Pere. In general, a new Fox River crossing along both corridor alternatives will improve the ability of all emergency services to respond to calls on opposite sides of the river due to an additional river crossing.</td>
<td>Fire, Ambulance, and Police Protection: No. Indirect impacts are not anticipated.</td>
<td></td>
</tr>
<tr>
<td>Community Owned Buildings/Property: Corridor Alternative 1 could result in acquisition of strips of land on the edges of two properties. Corridor Alternative 2 could result in acquisition of a strip of land from the edge of one property and alter access.</td>
<td>Community Owned Buildings/Property: No. Indirect impacts are not anticipated.</td>
<td></td>
</tr>
<tr>
<td>Community Cohesion: No. Project encroachment impacts are not anticipated. Community Cohesion: No. Project encroachment impacts are not anticipated. Environmental Justice: No. Project encroachment impacts are not anticipated.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Socioeconomic Characteristics (Community Cohesion)/Environmental Justice

<table>
<thead>
<tr>
<th>Resource</th>
<th>Would this resource be directly affected?</th>
<th>Would this resource experience substantial project encroachment impacts?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corridor Alternative 1 mainly follows existing roads; therefore, the splitting of existing residential areas would be limited. Much like Corridor Alternative 1, Corridor Alternative 2 mainly follows the alignment of existing roads. Where the corridor does not follow existing roads, the alignment cuts through open land and does not bisect any existing neighborhoods.</td>
<td>Environmental Justice: No. Project encroachment impacts are not anticipated.</td>
<td></td>
</tr>
<tr>
<td>Environmental Justice: No. There does not appear to be a high percentage of low-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PPS0224202245MKE 2-29
### Table 2-8. Resources Considered for Indirect Impacts in Tier 1

<table>
<thead>
<tr>
<th>Resource</th>
<th>Would this resource be directly affected?</th>
<th>Would this resource experience substantial project encroachment impacts?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income and/or minority persons in the study area</strong>. In addition, no concerns regarding low-income or minority populations were raised at public meetings or raised by local governments. Therefore, it is not anticipated that the project will have disproportionately high and adverse impacts on low-income and/or minority populations.</td>
<td>Potential impacts to farmland include remnant sections outside the construction footprint that are no longer suitable for agricultural production. Construction of the South Bridge Connector is anticipated to acquire some agricultural land, which will impact the amount of land available for the spreading of manure. See discussion following this table.</td>
<td></td>
</tr>
<tr>
<td><strong>Agriculture</strong></td>
<td>Yes. Corridor Alternative 1 – between 13 and 23 acres from “strip” impacts along the side of a property. Corridor Alternative 2 – between 47 and 78 acres, mostly in the locations of new alignment.</td>
<td>Surface Waters/Stormwater: Yes. Under both corridor alternatives, impacts to waterways could occur where crossings are modified to accommodate the new/widened roadway, as well as during construction. Stormwater runoff would increase where the roadway will be added or widened. Direct impacts will be mitigated per regulations. Floodplains: Yes. Under both corridor alternatives, impacts to floodplains and floodways could occur. Direct impacts will be mitigated per regulations. Wetlands: Yes. Direct impacts are identified as a range of potential impacts. Direct impacts will be mitigated per regulations.</td>
</tr>
<tr>
<td><strong>Water Resources</strong></td>
<td>Surface Waters/Stormwater: Yes. Under both corridor alternatives, impacts to waterways could occur where crossings are modified to accommodate the new/widened roadway, as well as during construction. Stormwater runoff would increase where the roadway will be added or widened. Direct impacts will be mitigated per regulations. Floodplains: Yes. Under both corridor alternatives, impacts to floodplains and floodways could occur. Direct impacts will be mitigated per regulations. Wetlands: Yes. Direct impacts are identified as a range of potential impacts. Direct impacts will be mitigated per regulations.</td>
<td>Surface Waters/Stormwater: No. There may be potential water quality improvements associated with anticipated storm water detention facilities and other best management practices to be implemented with the improvements per local, state and federal regulations, which could have benefits for wildlife living in and along the Fox River and recreational use by study area residents. Mitigation is anticipated to address potential indirect impacts. Floodplains: No. Project encroachment impacts are not anticipated as improvements within floodplains would be in accordance with the Federal Emergency Management Agency Regulations on Floodplain Management, Executive Orders and local regulations. Wetlands: No. Project encroachment impacts could result from disturbances that occur in areas outside the wetland, such as uplands, other wetlands or waterways. Impacts could include the influx of surface water and sediments, fragmentation of a wetland from a contiguous wetland complex, loss of recharge area, or changes in local drainage patterns. Mitigation is anticipated to address potential indirect impacts.</td>
</tr>
<tr>
<td><strong>Protected Species</strong></td>
<td>Yes. The Corridor Alternatives may impact one federally listed species and two state-protected species. One state special concern species, the bald eagle, and migratory birds could be affected during construction. Avoidance and minimization efforts will be mitigated per local, state, and federal regulations.</td>
<td>No. Project encroachment impacts could result from habitat disturbances and losses that occur in wetlands, uplands, or waterways. Direct impacts to protected species after avoidance and minimization efforts will be mitigated per local, state, and federal regulations.</td>
</tr>
</tbody>
</table>
### Table 2-8. Resources Considered for Indirect Impacts in Tier 1*

<table>
<thead>
<tr>
<th>Resource</th>
<th>Would this resource be directly affected?</th>
<th>Would this resource experience substantial project encroachment impacts?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traffic Noise</td>
<td>The corridor alternatives may impact noise levels for sensitive receptors to varying degrees depending on where they are located.</td>
<td>No. Indirect impacts of traffic noise would be assessed as part of future traffic noise modeling. Noise analysis use traffic volumes that include the future users attracted to the proposed action. Receptors would be identified for undeveloped land and undeveloped land permitted for development. Therefore, the noise levels predicted by traffic modeling already incorporate anticipated indirect traffic noise impacts and would be analyzed and mitigated for as a direct impact.</td>
</tr>
<tr>
<td>Air Quality</td>
<td>A conformity analysis demonstrates that the emissions projections in the TIP from on-road sources (cars, trucks, etc.) are within the emission limits established by the federal regulations as identified in the statewide transportation improvement program. Brown County is in attainment for all criteria pollutants, thus the project is exempt from conformity requirements. MSAT emission analysis is not part of the Tier 1 study. In Tier 2, the appropriate level of MSAT analysis will be conducted based on FHWA’s guidance on evaluating MSAT compounds in NEPA documents.</td>
<td>No. The corridor alternatives are not anticipated to violate the NAAQS nor increase MSAT compounds. Future air quality analyses would include anticipated future users of the build alternative. Therefore, the air quality analyses would incorporate anticipated indirect impacts. It is anticipated that the improvements under consideration would be beneficial to regional air quality because it would relieve congestion and reduce delay from incidents.</td>
</tr>
<tr>
<td>Cultural Resources (historic, archeological, and Oneida Nation)</td>
<td>Yes. Corridor Alternative 1 - two archeological sites may be affected. Corridor Alternative 2 – Five archaeological sites could be affected. One potentially historic site in the area is anticipated to be avoided. Due to the proximity of the two corridor alternatives to the Fox River, it is possible that previously unrecorded cultural resources could be discovered during future assessments or construction activities.</td>
<td>Indirect impacts to archaeological sites are not anticipated. Indirect impacts to the potentially National Register-eligible architectural/historic site could include new visual, atmospheric, or audible elements that may diminish the integrity of a NRHP property, if eligible.</td>
</tr>
<tr>
<td>Aesthetics</td>
<td>Yes. For both corridor alternatives, the biggest aesthetic change will be the new bridge over the Fox River.</td>
<td>No. Indirect impacts are not anticipated.</td>
</tr>
<tr>
<td>Hazardous Materials</td>
<td>Yes. Both corridor alternatives could directly impact hazardous material sites. Direct impacts will be mitigated per regulations.</td>
<td>No. Indirect impacts are not anticipated.</td>
</tr>
</tbody>
</table>

* The indirect impacts analysis examines project encroachment impacts because the project is not anticipated to have substantial project-influenced development impacts (see Section 2.5.1).

MSAT = mobile source air toxics; NAAQS = National Ambient Air Quality Standards
### 2.5.2.1 Agriculture

Project encroachment impacts to farmland include remnant sections outside the construction footprint that are no longer suitable for agricultural production. For example, the remaining sections of a bisected property that are either impractical or uneconomical to farm. Typically, these remaining sections are difficult for farm equipment to access. During future studies, when the design is available, an assessment of the amount of remnant sections would be assessed.

Another important issue facing farming in the study area mentioned during a stakeholder interview and cited in the Brown County Comprehensive Plan is the increasing number of cattle combined with a decreasing availability of agricultural lands for the spreading of manure. Brown County is one of Wisconsin’s premier dairy counties, resulting in the production of over 900 million gallons of manure in the Lower Fox River Basin annually (Dynamic Concepts, LLC 2017). Farmers use the manure as fertilizer for crop production, as it is rich in nitrogen, phosphorus, potassium, and other micro nutrients. Construction of the South Bridge Connector is anticipated to acquire up to 78 acres agricultural land (amount varies based on the alternative), which will reduce the amount of land available for the spreading of manure. This could result in over application of manure on remaining farmland.

### 2.6 Step 6: Assess Consequences and Identify Mitigation Activities

This section assesses the consequences of the indirect impacts that were discussed in Step 5 above. It also identifies potential mitigation measures WisDOT and other agencies could use to minimize the indirect impacts.

#### 2.6.1 Project-Influenced Development

##### 2.6.1.1 Potential Consequences

The South Bridge Connector is not anticipated to substantially alter the course of development trends in the area.

##### 2.6.1.2 Potential Mitigation Measures

As mentioned in Section 2.3.3, communities within the Indirect Impacts Study Area have dedicated staff/departments, comprehensive planning documents, and zoning regulations in place to direct the amount, type, and density of development within their communities. No mitigation is recommended.

#### 2.6.2 Project Encroachment Impacts

##### 2.6.2.1 Agriculture

**Potential Consequences**

Potential consequences of the potential indirect impacts to agriculture include remnant sections of agricultural lands that are either impractical or uneconomical to farm.

Additionally, decreases in available land for the spreading of manure has several implications. It increases conflicts with rural residents and creates the potential for increased runoff into surface water and groundwater resources, if proper spreading and nutrient management techniques are not followed.

**Potential Mitigation Measures**

If Tier 2 assessments determine direct impacts to prime farmland soils would be unavoidable, the Farmland Conversion Impact Rating Form (NRCS CPA-106) and Agricultural Impact Notice for Highway
Projects (form ARM-LWR-359) would be completed and coordinated with the Natural Resources Conservation Service (NRCS) and DATCP in accordance with standards and applicable laws. Potential mitigation measures for indirect affects would be assessed at this time, which could include compensating for the impact by providing substitute resources.

A community-scale manure digester that takes in nutrients from multiple farms may be a means to address excess manure, reduce nutrient flow to the surface waters, and generate a consistent source of renewable electricity at the same time. The excess manure could be used to generate methane and subsequently electricity (Brown County Planning Commission 2017). This strategy is identified in the 2017-2027 Brown County, WI Farmland Preservation Plan Update. It is a current effort outside of the South Bridge Connector project and is being spearheaded through a partnership between DNR, DATCP, Public Service Commission, and BC Organics, which is a consortium of farms, technology suppliers, renewable natural gas buyer, fertilizer buyer, and investors (Hubbuch, C. 2019).
Cumulative Impacts

Cumulative impacts on the environment result from the incremental impact of an 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).

Several guidance documents were used to guide the analysis, including:

- 40 CFR, Chapter 1, Section 230.11(g)(h); Protection of Environment, Environmental Protection Agency, Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material.

The methodology used to assess cumulative impacts for the South Bridge Connector Study is based on the WisDOT *Guidance for Conducting a Cumulative Effects Analysis* (2007), which includes the Council on Environmental Quality’s (CEQ) 11-step process identified in the handbook *Considering Cumulative Effects under the National Environmental Policy Act* (1997). The 11-step process can be subclassified into three primary steps: scoping, describing the affected environment, and determining the environmental consequences.

- **Scoping** – step 1, identify the significant issues associated with the proposed action and define the assessment; steps 2 and 3, establish geographic scope and timeframe of the analysis; step 4, identify other actions affecting the resources, ecosystems and human communities of concern.

- Describe the affected environment – step 5, characterize resources identified in scoping in terms of their response to change and capacity to withstand stress; step 6, characterize the stresses affecting these resources and their relation to regulatory thresholds; step 7, define a baseline condition for the resources.

- Determine the environmental consequences – step 8, identify the important cause and effect relationships between human activities and resources; step 9, determine the magnitude and significance of cumulative impacts; step 10, modify or add alternatives to mitigate significant cumulative impacts; step 11, monitor the cumulative impacts of the selected alternative and adapt management.

The following subsections describe the cumulative impacts scoping process, the affected environment, and environmental consequences.

### 3.1 Scope of Cumulative Impacts Analysis

As indicated in AASHTO’s Practitioner’s Handbook *Assessing the Indirect Effects and Cumulative Impacts Under NEPA* (2016), the resources assessed for cumulative impacts “are typically a subset of the range of environmental resources considered in the assessment of direct and indirect effects—in many cases, just two or three topics are chosen for analysis.” Resources on which the proposed project would not
have an impact, or those for which impacts could be mitigated, are not included in the cumulative impact analysis.

CEQ’s document Considering Cumulative Effects Under the National Environmental Policy Act (1997) was used to determine which resource topics to analyze for cumulative impacts. The document notes the following about cumulative impacts: “In a broad sense, all the impacts on affected resources are probably cumulative; however, the role of the analyst is to narrow the focus of the cumulative effects analysis to important issues of national, regional, or local significance... Not all potential cumulative effect issues identified during scoping need to be included in an EA [environmental assessment] or an EIS. Some may be irrelevant or inconsequential to decisions about the proposed action and corridor alternatives. Cumulative effects analysis should count what counts, not produce superficial analysis of a long laundry list of issues that have little relevance to the effects of the proposed action or eventual decisions.”

Cumulative impacts of the build alternatives were qualitatively assessed by reviewing long-range plans developed by WisDOT, Brown County, local communities (De Pere, Bellevue, Hobart, Ashwaubenon, Rockland, Lawrence, Ledgeview, Allouez), and Oneida Nation, and interviews with local stakeholders including local planners, developers, and agency and tribal representatives. Because of the limited design and operational detail available in Tier 1 of this EIS, as well as limited direct impact information for several resources, the expectation is that a full cumulative impacts analysis would be conducted during subsequent Tier 2 assessments and may include a cumulative impacts analysis of additional resources.

The direct and indirect effects of the proposed action are a building block of the cumulative impact analysis (AASTHO 2012). A cumulative impact analysis is required when there is a direct and/or indirect effect on a specific natural, historic, cultural resource or population for the proposed action to exert a cumulative influence (WisDOT 2007). If no direct and/or indirect impact to a specific resource is suspected, or the impact could be mitigated, then there is no need to consider cumulative impacts to that resource.

### 3.1.1 Scoping Cumulative Impacts

The cumulative impact analysis considers the resources that could be affected directly and/or indirectly by the South Bridge Connector 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 impacts, stakeholder interviews, and demographic, land use, and natural resources information, two resources were reviewed for potential cumulative impacts in Tier 1:

- Agriculture
- Surface Water

The stakeholder input described in Section 2.2.2 of the indirect impacts analysis was also utilized to help identify potential cumulative impacts to be addressed in the Tier 1 EIS. In addition, information on demographics, land use trends, and agricultural and water resources in Section 2 of this technical memorandum was used to inform the cumulative impact analysis.

As discussed in Section 2, at this Tier 1 stage each build alternative is represented by a broad 500-foot corridor, rather than detailed roadway alignment. Similar to the indirect impact analysis, the cumulative impacts presented in this section describe the types of impacts that could potentially occur if the South Bridge Connector is constructed. During Tier 2 the cumulative impacts analysis should be revisited, including the resources evaluated.

Table 3-1 summarizes the resources considered but not included in the cumulative impact analysis.
# Table 3. Resources Considered but not Included in the Tier 1 Cumulative Impact Analysis

<table>
<thead>
<tr>
<th>Resource</th>
<th>Cumulative impact assessed?</th>
<th>Comments</th>
</tr>
</thead>
</table>
| Community Resources (Parks; Trails; Schools/Early Childhood Care Centers; Fire, Ambulance and Police Protection) | No – Parks; Trails; Schools/Early Childhood Care Centers; Fire, Ambulance and Police Protection | **Parks:**  
• A range of potential direct impacts to Preserve Park and Kiwanis Park.  
• Potential indirect impacts include noise and/or visual quality. The future I-41 Expansion Project (Grand Chute to De Pere) is adjacent to Preserve Park and may contribute to cumulative impacts depending on the design of the improvement.  
• Due to the lack of detailed information on the direct impact of the South Bridge Connector and future I-41 Expansion Project; cumulative impacts are not assessed.  
**Fox River State Trail:**  
**Corridor Alternatives 1 & 2 –**  
• An at-grade crossing of the Fox River State Trail is proposed; trail users would need to cross additional lanes of traffic.  
• Several businesses in the East De Pere Business Park back to the Fox River State Trail but are not anticipated to have an indirect impact on the use of the trail. No other projects (identified in Table 3-2) were identified that would affect the trail.  
No cumulative impacts are anticipated.  
**Schools/Early Childhood Care Centers:**  
**Corridor Alternative 1 –**  
• Potential acquisition of a strip of land and potential impacts to parking for Creative Kids, Syble Hopp School, and Creekside Christian Montessori.  
• No indirect impacts are anticipated.  
• No other projects (identified in Table 3-2) were identified that would impact the schools/early childhood care centers parking affected Corridor Alternative 1 leading to a cumulative impact.  
• No cumulative impacts are anticipated.  
**Corridor Alternative 2 –**  
• No direct or indirect are anticipated.  
• No cumulative impacts are anticipated.  
**Fire, Ambulance and Police Protection:**  
**Corridor Alternative 1 –**  
• May require acquisition of a strip of land from the Town of Ledgeview Fire Station No 2.  
• No indirect impacts are anticipated.  
• No other projects (identified in Table 3-2) were identified that would fire, ambulance and police protection affected by the South Bridge Connector leading to a cumulative impact.  
• No cumulative impacts are anticipated.  
**Corridor Alternative 2 –**  
• No direct or indirect are anticipated.  
• No other projects (identified in Table 3-2) were identified that would fire, ambulance and police protection affected by the South Bridge Connector leading to a cumulative impact. |
Table 3-1. Resources Considered but not Included in the Tier 1 Cumulative Impact Analysis

<table>
<thead>
<tr>
<th>Resource</th>
<th>Cumulative impact assessed?</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socioeconomic Characteristics (Community Cohesion)/Environmental Justice</td>
<td>No</td>
<td>Community Cohesion:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridor Alternatives 1 &amp; 2 –</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No direct or indirect impacts to community cohesion are anticipated, therefore no cumulative impact is anticipated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Environmental Justice:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridor Alternatives 1 &amp; 2 –</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No disproportionately high and adverse direct or indirect impacts are anticipated; therefore, no cumulative impact is anticipated.</td>
</tr>
<tr>
<td>Water Resources (Surface Water Quality, Floodplains, and Wetlands)</td>
<td>Yes – Surface Water Quality</td>
<td>Floodplains:</td>
</tr>
<tr>
<td></td>
<td>No – Floodplains and Wetlands</td>
<td>Corridor Alternatives 1 &amp; 2 –</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Direct impacts are anticipated after avoidance and minimization measures; however, impacts would be mitigated per regulations. Wetplains would be in accordance with the Federal Emergency Management Agency Regulations on Floodplain Management, Executive Orders and local regulations.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No direct or indirect impact to floodplains, after mitigation; therefore, no cumulative impact is anticipated.</td>
</tr>
<tr>
<td>Protected Species (Federally Protected Species [Threatened and Endangered Species, Bald Eagles, and Migratory Birds] and State-Protected Species)</td>
<td>No</td>
<td>Threatened and Endangered Species:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridor Alternatives 1 &amp; 2 –</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Direct impacts could occur to one threatened and endangered species after avoidance and minimization measures; however, impacts would be mitigated per regulation. Mitigation is anticipated to address potential indirect effects.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No direct or indirect impacts to threatened and endangered species, after mitigation; therefore, no cumulative impact is anticipated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bald Eagle:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridor Alternatives 1 &amp; 2 –</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Direct impacts could occur after avoidance and minimization measures; however, impacts would be mitigated per regulation. Mitigation is anticipated to address potential indirect effects.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No direct or indirect impacts to the bald eagle, after mitigation; therefore, no cumulative impact is anticipated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Migratory Birds:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridor Alternatives 1 &amp; 2 –</td>
</tr>
</tbody>
</table>
### Table 3-1. Resources Considered but not Included in the Tier 1 Cumulative Impact Analysis

<table>
<thead>
<tr>
<th>Resource</th>
<th>Cumulative impact assessed?</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>• The study area does contain bridges that are common nesting sites for migratory birds. If future studies determine the presence of active migratory birds and nests in the study area, direct impacts could occur after avoidance and minimization measures; however, impacts would be mitigated per regulation. Mitigation is anticipated to address potential indirect effects.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No direct or indirect impacts are anticipated; therefore, no cumulative impact is anticipated.</td>
</tr>
<tr>
<td>State-Protected Species:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corridor Alternatives 1 &amp; 2 –</td>
<td></td>
<td>• Direct impacts could occur after avoidance and minimization measures; however, impacts would be mitigated per regulation. Mitigation is anticipated to address potential indirect effects.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No direct or indirect impacts to state-protected species, after mitigation; therefore, no cumulative impact is anticipated.</td>
</tr>
<tr>
<td>Traffic Noise</td>
<td>No</td>
<td>• Not an environmental resource, thus traffic noise was not evaluated for cumulative impacts.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Quality</td>
<td>No</td>
<td>• The project is not subject to transportation conformity requirements, and conformity analysis is not required. The corridor alternatives are not anticipated to violate the NAAQS nor increase MSAT compounds. Future studies will confirm this anticipated result.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No indirect air quality impacts are anticipated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No direct or indirect impacts are anticipated; therefore, no cumulative impact is anticipated.</td>
</tr>
<tr>
<td>Cultural Resources (Historic and Archeological)</td>
<td>No</td>
<td>Historic and Archeological:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridor Alternative 1 –</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Two previously recorded archeological resources. Future Section 106 reviews will determine if there are direct, indirect or cumulative impacts.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Corridor Alternative 2 –</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Five previously recorded archeological resources. One historic farmstead, improvements are anticipated to avoid impacts to the property. Future Section 106 reviews will determine if there are direct, indirect or cumulative impacts.</td>
</tr>
<tr>
<td>Aesthetics</td>
<td>No</td>
<td>Corridor Alternatives 1 &amp; 2 –</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Two groups are anticipated to be impacted (1) individuals with a view from the road, roadway users, and (2) individuals with a view of the road, roadway viewers. In general, views would change from the perspectives of both parties. To the extent possible, the South Bridge Connector would be designed to create an aesthetically and visually pleasing experience for both roadway users and roadway viewers.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No indirect impacts are anticipated.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Past, present and other reasonably foreseeable future actions listed in Table 3-2 have changed and will continue to change the visual character of the study area, but it is difficult to gather indirect impact information of other projects to assess cumulative impacts.</td>
</tr>
</tbody>
</table>
Table 3-1. Resources Considered but not Included in the Tier 1 Cumulative Impact Analysis

<table>
<thead>
<tr>
<th>Resource</th>
<th>Cumulative impact assessed?</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous Materials</td>
<td>No</td>
<td>Corridor Alternatives 1 &amp; 2 —</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Include properties which require future investigations. If contaminations were confirmed, WisDOT would develop appropriate soils and/or groundwater management plans for activities within these areas.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Indirect impacts are not applicable.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• No direct impacts are anticipated after mitigation; therefore, no cumulative impact is anticipated.</td>
</tr>
</tbody>
</table>

3.1.2 Cumulative Impacts Study Area and Timeframe for Analysis

Exhibit 3-1 illustrates the cumulative impacts study area for agricultural resources and surface water. The study team used guidance from CEQ, WisDOT, AASHTO, traffic analysis and stakeholder interviews to develop the study area. CEQ recommends that a cumulative effects analysis should be conducted on the scale of human communities, landscapes, watershed or airsheds. Thus, the study area for the impact analysis varies by resource and the distance an effect can travel. AASHTO points out that a study area for a cumulative impact analysis should be “large enough to provide the context necessary for understanding the health of the resource and compact enough to present a proper perspective.” Further, the guidance recommends the cumulative effects assessment boundaries must be at least as large as the direct and indirect effect study areas because direct and indirect effects are components of cumulative impacts.

The timeframe for the analysis is 2040, which coincides with the Agriculture Chapter of the Brown County Comprehensive Plan (2017-2027 Farmland Preservation Plan Update) and the availability of population, employment, and land use information. In addition, this timeframe is long enough for cumulative impacts to unfold, but not so far into the future that the impacts become too difficult to reasonably anticipate.

3.1.3 Notable Past, Present, and Reasonably Foreseeable Future Actions

Since 1990, the Green Bay metropolitan area has experienced very strong residential, commercial, and industrial growth, extending south following the Fox River. The metropolitan area’s development pattern has continued to extend southward in a relatively efficient manner, and the communities that are directly and indirectly affected by the two corridor alternatives have prepared and adopted comprehensive (Smart Growth) plans that contain long-term development concepts. The land use plans of Lawrence, De Pere, Ledgeview, and Rockland have included a new Fox River crossing in the vicinity of Rockland-Red Maple/Southbridge Road since 1996, consistent with the recommendation in the 1996 Brown County Transportation and Land Use Plan. These communities have constructed streets and approved developments consistent with a new bridge and improved connecting arterial system, similar to Corridor Alternative 2.

Table 3-2 identifies notable past, present or reasonably foreseeable future actions, that when considered with the South Bridge Connector Study build alternatives, may have cumulative impacts on environmental resources. Exhibit 3-2 illustrates the locations these planned developments and transportation projects.
Exhibit 3-1. Cumulative Impacts Study Areas
SECTION 3: CUMULATIVE IMPACTS

Exhibit 3-2. Major Transportation Projects and Notable Developments
### Table 3-2. Notable Past, Present, and Reasonably Foreseeable Future Actions

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Past, Present, or Future Action</th>
<th>Label on Exhibit 3-2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transportation</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pilgrim Way (County YY) Widening. This project reconstructed Pilgrim Way (County YY) to six lanes between Holmgren Way and Ashland Avenue.</td>
<td>Past (2016)</td>
<td>1</td>
</tr>
<tr>
<td>I-41 Expansion (De Pere to Howard). This project added lanes and upgraded interchanges, between Orange Lane in De Pere to Lineville Road in Howard.</td>
<td>Past (2010-2017)</td>
<td>2</td>
</tr>
<tr>
<td>WIS 32/57 Preservation and Access Management Study. This study determined the potential impacts of the proposed Southern Bridge.</td>
<td>Past (2017)</td>
<td>N/A</td>
</tr>
<tr>
<td>South Huron Road (County EA) Expansion (Willow Road to WIS 29). This project included expansion of South Huron Road (County EA) from Willow Road to WIS 29 (Kewaunee Road).</td>
<td>Past (2017)</td>
<td>3</td>
</tr>
<tr>
<td>County GV Expansion. This project converted County GV from a two-lane road to a four-lane thoroughfare between Allouez Avenue in Bellevue to County X (Heritage Road) in Ledgeview.</td>
<td>Past (2019)</td>
<td>4</td>
</tr>
<tr>
<td>Main Street Intersection Modifications. This project included intersection modifications along Main Street in the Town of Ledgeview at USH 141 and WIS 29.</td>
<td>Past (2019)</td>
<td>5</td>
</tr>
<tr>
<td>WIS 32 (Ashland Ave) and Parkview Road Intersection Improvement. This project modified access and constructed safety improvements at the intersection of WIS 32 (Ashland Ave) and Parkview Road in the City of De Pere.</td>
<td>Past (2019)</td>
<td>6</td>
</tr>
<tr>
<td>South Huron Road (County EA) Expansion (WIS 29 to I-43). This project will expand South Huron Road (County EA) from WIS 29 to I-43.</td>
<td>Future (TBD)</td>
<td>7</td>
</tr>
<tr>
<td>I-41 Expansion (Grand Chute to De Pere). This project will study widening I-41 from two to three lanes in each direction between WIS 96 (Wisconsin Avenue) in Grand Chute and County F in De Pere.</td>
<td>Future (2025-2029)</td>
<td>8</td>
</tr>
<tr>
<td><strong>Land Use and Development</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southeast Hobart Business Park (Village of Hobart TID #2). This 400-acre park southeast of the Fernando Drive/Pine Tree Road intersection contains several businesses and industries, and approximately 25 percent of the park had been developed or sold as of 2007.</td>
<td>Present and future (development ongoing)</td>
<td>A</td>
</tr>
<tr>
<td>Town of Lawrence Business Park. This 113-acre park on the west side of I-41, north and south of Scheuring Road, contains several businesses and industries, and approximately 80 percent of the park’s acreage had been developed or sold as of 2005. The Town plans to expand the park to the south over the next 20 years, and it is expected to eventually extend to Birchwood Road.</td>
<td>Present and future (development ongoing)</td>
<td>B</td>
</tr>
<tr>
<td>West De Pere Business Park (City of De Pere TID #6 and TID #8). This 800-acre park southeast of the I-41/County F interchange contains several businesses and industries that employ several thousand people, and most of the park’s acreage has been developed or sold for development. However, De Pere plans to expand the park in the future, and the city purchased 200 acres of land south of Red Maple Road to accommodate the planned expansion.</td>
<td>Present and future (development ongoing)</td>
<td>C</td>
</tr>
<tr>
<td>East De Pere Industrial Park. This 410-acre park south of the WIS 32/ Broadway Street intersection contains several businesses and industries, and approximately 75 percent of the park has been developed. De Pere’s comprehensive plan recommends expanding the industrial park by filling existing lots within the park and adding new developments along Rockland Road to WIS 57.</td>
<td>Present and future (development ongoing)</td>
<td>D</td>
</tr>
<tr>
<td>Ledgeview Neighborhood Commercial Centers. The Town recommends developing commercial centers at major intersections throughout the community, and two of these centers are planned for the intersections of County GV and G and County GV and X. The centers are planned to contain small-scale retail stores, service shops, offices, and other commercial developments that will serve the community and region.</td>
<td>Present and future (development ongoing)</td>
<td>E</td>
</tr>
<tr>
<td>Sand Lake Apartments. This 252-unit multi-family residential development in the northwest quadrant of the potential I-41/Southbridge Road interchange (Alternative 2) offers luxury condominiums in west De Pere/Lawrence.</td>
<td>Present and future (development ongoing)</td>
<td>F</td>
</tr>
</tbody>
</table>
### Table 3-2. Notable Past, Present, and Reasonably Foreseeable Future Actions

<table>
<thead>
<tr>
<th>Project</th>
<th>Past, Present, or Future Action</th>
<th>Label on Exhibit 3-2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Various Residential Developments.</strong> Several residential developments are underway or planned in southwest Ledgeview. These include Grand Ridge Estates (north of County X, east of County GV, 56 homes), Trellis Ridge Estates (south of County X, east of Cottonwood Lane, 92-unit multi-family development), and Red Hawk Landing (north of Dickinson Road, west of Bower Creek Road, 87 homes).</td>
<td>Present and future (development ongoing)</td>
<td>G</td>
</tr>
<tr>
<td><strong>BelGioioso Cheese.</strong> BelGioioso Cheese’s corporate headquarters is in east Ledgeview along I-43, north of Pine Grove Road. It intends to add 2,700 square feet to its facility.</td>
<td>Present and future (development ongoing)</td>
<td>H</td>
</tr>
<tr>
<td><strong>Lawrence Parkway Development (Town of Lawrence TID #1).</strong> This 200-acre development along I-41, north of Little Rapids Road, will include commercial and residential development. It is planned to be home to the Impact Sports Academy, a $6 million indoor baseball training facility. The vision is for it to be a destination-type tournament facility that could generate tourism.</td>
<td>Present and future (development ongoing)</td>
<td>K</td>
</tr>
<tr>
<td><strong>Town of Lawrence TID #2.</strong> Located near the intersection of Scheuring Road and Packerland Drive, TID #2 includes plans to construct an Aurora BayCare outpatient center in its northwest corner.</td>
<td>Present and future (development ongoing)</td>
<td>L</td>
</tr>
<tr>
<td><strong>City of De Pere TID #5 West Downtown.</strong> The West Downtown TID was created to spur downtown redevelopment and encompasses much of the historic west side of downtown from the railroad tracks on the west, to Third Street on the east, Main Avenue on the north, and Grant and College Streets on the south. Potential future uses of district proceeds include façade grants and Grant Street redevelopment.</td>
<td>Present and future (development ongoing)</td>
<td>M</td>
</tr>
<tr>
<td><strong>City of De Pere TID #7 East Downtown.</strong> The East Downtown TID encompasses much of the southern part of the historic east side of downtown De Pere and includes both sides of George Street to Merrill Street on the south, the Fox River on the west, and the lock and dam on the north. The TID was developed to help spur redevelopment and building restoration in the downtown.</td>
<td>Present and future (development ongoing)</td>
<td>N</td>
</tr>
<tr>
<td><strong>Town of Ledgeview TID #1.</strong> The Town of Ledgeview’s TID #1 encompasses the Olde School Square area along the County GV corridor and around the County GV/County G intersection. The purpose of TID #1 is to kick-start stagnant development in the Olde School Square development, a mixed-use retail and office condominium community made up of original and replica nineteenth century buildings. The complex is a mix of restaurants, retail stores, and office suites. TID #1 will also assist with site preparation and attracting development to the high-profile County GV corridor.</td>
<td>Present and future (development ongoing)</td>
<td>O</td>
</tr>
<tr>
<td><strong>Village of Allouez TID #1.</strong> The Village of Allouez’s TID #1 encompasses much of Webster Avenue, Riverside Drive, and Marine Street corridors. The TID is intended to encourage development and redevelopment, primarily for residential and commercial uses.</td>
<td>Present and future (development ongoing)</td>
<td>P</td>
</tr>
<tr>
<td><strong>Village of Ashwaubenon TID #3 and TID #4.</strong> TID #3, located in the northeast portion of the Village, is a large multi-use district. The district has seen a variety of smaller commercial developments; however, the district has a large hotel under construction. A sizable development project is beginning adjacent to the Green Bay Packers Lambeau Field, called Titletown. The investment from the Packers and their partners is estimated at $120-130 million and the first phase includes a four-diamond hotel, sports medicine clinic, and large micro-brewery and restaurant. Further phases will include retail and housing. TID #4 is within TID #3.</td>
<td>Present and future (development ongoing)</td>
<td>Q</td>
</tr>
<tr>
<td><strong>Village of Ashwaubenon TID #5.</strong> This district, located in the southern end of the Village, will focus on re/development of older housing and industrial buildings.</td>
<td>Present and future (development ongoing)</td>
<td>R</td>
</tr>
<tr>
<td><strong>Village of Bellevue TID #1.</strong> TID #1 encompasses the area surrounding the interchange of WIS 172 and County GV. It is envisioned to be a mixed-use development area with retail, commercial, residential, and other complimentary uses but is just a small part of over 500 acres of developable land in this area.</td>
<td>Present and future (development ongoing)</td>
<td>S</td>
</tr>
</tbody>
</table>
Table 3-2. Notable Past, Present, and Reasonably Foreseeable Future Actions

<table>
<thead>
<tr>
<th>Project</th>
<th>Past, Present, or Future Action</th>
<th>Label on Exhibit 3-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village of Bellevue TID #2.</td>
<td>Present and future (development ongoing)</td>
<td>T</td>
</tr>
<tr>
<td>UnitedHealth Group.</td>
<td>Future</td>
<td>I</td>
</tr>
<tr>
<td>Mulva Cultural Center.</td>
<td>Future</td>
<td>J</td>
</tr>
<tr>
<td>Water Resource Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower Fox River and Green Bay Superfund Site.</td>
<td>Past and Present</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Sources:

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

This section describes the resources that could experience cumulative impacts as a result of Alternatives 1 and 2, and other past, present, and reasonably foreseeable actions listed in Section 3.1.3. The affected environment is summarized first, including an established baseline condition and the resource’s capacity to withstand stress. Where possible at Tier 1, a quantitative assessment of the current health or condition, and the trend it is experiencing, is provided. The evaluation of the environmental consequences will be reevaluated during Tier 2 when design and operational detail are available. This Tier 1 analysis includes a general examination the potential cause-and-effect relationship between human activities and affected resources and identifies the potential magnitude and significance of the cumulative impact. The evaluation also considers potential mitigation measures that
could be undertaken for Corridor Alternatives 1 and 2 to minimize cumulative impacts, regardless of the
agency with jurisdictional authority. It also considers if there are other local, state, and federal
ordinances and laws that can manage cumulative impacts resulting from the project’s potential direct
and indirect impacts.

The following resources have been assessed for potential cumulative impacts:

- Agriculture
- Surface Water

3.2.1 Agriculture

3.2.1.1 Affected Environment

Resource Condition, Trends, and Other Future Actions

Brown County and the Green Bay metropolitan area is urbanizing, however the county has undertaken
planning and implemented zoning ordinances, such as the Animal Waste Management Ordinance and
Land Division and Subdivision Ordinance, to ensure the continued success of agricultural production and
supportive industries consistent with community goals. The 2017-2027 Brown County, WI Farmland
Preservation Plan Update (2017) identifies the following goal for agricultural resources, “Balance the
development of agricultural lands with the long-term sustainability of agricultural production in Brown
County.”

As illustrated in Table 3-3, there has been a decrease in farmland in Brown County since 1970. The
Brown County Farmland Preservation Plan identified that from 1987 through 2012 the number of farms
in Brown County decreased from 1,263 to 1,111 farms. Between 1970 and 2016, approximately 58,600
acres of land transitioned from agriculture to other land uses, such as homes, businesses, roads and
schools. Agricultural land in 2016 was approximately 50 percent of the land uses in Brown County
(Brown County Planning Commission 2017).

<table>
<thead>
<tr>
<th>Year</th>
<th>Acres</th>
<th>Percentage of County</th>
<th>Absolute Change (in acres)</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1970</td>
<td>227,254</td>
<td>66.33%</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>1980</td>
<td>216,809</td>
<td>63.28%</td>
<td>-10,445</td>
<td>-4.6%</td>
</tr>
<tr>
<td>1990</td>
<td>201,668</td>
<td>58.86%</td>
<td>-15,141</td>
<td>-7.0%</td>
</tr>
<tr>
<td>2000</td>
<td>176,695</td>
<td>52.63%</td>
<td>-24,973</td>
<td>-12.4%</td>
</tr>
<tr>
<td>2016</td>
<td>168,686</td>
<td>49.23%</td>
<td>-11,645</td>
<td>-6.46%</td>
</tr>
</tbody>
</table>


The farms adjacent to Corridor Alternatives 1 and 2 are under 400 acres with most between 30 and
200 acres. The farmland in these corridors is considered prime farmland which means the soils in the
area can be cultivated and is suited for all crops grown in Brown County.

The land surrounding Corridor Alternative 1 is mostly developed, with a mixture of residential,
commercial, industrial, and institutional uses. There is agricultural land at the west end of the corridor
surrounding the County F/Packerland Drive intersection, and a small section of agricultural land along
the easternmost half-mile of County X. The farmland in the southeast quadrant of the County
F/Packerland Drive intersection, as well as adjacent to the Town of Lawrence’s TID #2, is part of the
farmland preservation program. At the eastern end of the corridor, a large portion of agricultural land
was recently converted to residential land use. Approximately six percent of the land within Corridor Alternative 1 is agricultural.

Land surrounding Corridor Alternative 2 is mostly developed, with a mixture of residential, commercial and industrial uses. More lands are in agricultural use along Corridor 2 than Corridor 1. West of I-41 are several parcels of agricultural land, including the farmland preservation area previously noted at the County F/Packerland Drive intersection adjacent to the Town of Lawrence’s TID #2. Agricultural land is also present immediately east of I-41 along Southbridge Road, however, in recent years some of agricultural land has been converted to commercial land use. Portions of agricultural land east of the Fox River were recently converted to residential land use. Approximately 1/3 of the land within Corridor Alternative 2 is agricultural. During the stakeholder interviews it was noted that much of the “undeveloped” land\textsuperscript{12} has been purchased for development.

Table 2-4 identifies existing land use within the agriculture cumulative impacts study area. Within this study area, land use is approximately 40 percent agricultural, while residential, commercial, and industrial uses make up approximately 27 percent. Parks, recreation, and open space comprise approximately 24 percent of the study area. These agricultural lands are mostly located south of the proposed corridor alternatives.

Within the study area, population and employment growth has resulted in a gradual loss of farmland. This trend is anticipated to continue. The land use plans of study area communities illustrate a gradual development of remaining agricultural land within the 2040 Brown County SSA. These communities have established incremental growth areas in their comprehensive plans, which encourage growth to occur adjacent to existing development to minimize the costs of extending infrastructure and impacts on natural resources. Tables 3-5 through 3-7 show the growth in acreages for residential, commercial, industrial, and agricultural land uses in De Pere, Lawrence, and Ledgeview.

Residential land uses are forecast to increase by approximately 3,000 acres in the three communities. Commercial and industrial land uses will also increase (590 acres in De Pere, 255.9 acres in Lawrence, and 107 acres in Ledgeview). De Pere and Lawrence do not identify future acres for agriculture but note that agricultural land uses will continue to decrease as they are converted to other uses as the communities grow. In Ledgeview, agricultural lands are expected to decrease by more than 1,000 acres. During stakeholder interviews, local planners stated that farmers are aware of development opportunities in the area, regardless of whether a new bridge is constructed. For many farmers in the area, selling their land is their retirement plan.

<table>
<thead>
<tr>
<th>Land Use Category</th>
<th>Existing (2009)</th>
<th>Future (2030)</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>2,454</td>
<td>3,456</td>
<td>1,002</td>
</tr>
<tr>
<td>Commercial</td>
<td>475</td>
<td>665</td>
<td>190</td>
</tr>
<tr>
<td>Industrial</td>
<td>985</td>
<td>1,385</td>
<td>400</td>
</tr>
<tr>
<td>Agriculture</td>
<td>917</td>
<td>N/A\textsuperscript{a}</td>
<td>N/A</td>
</tr>
</tbody>
</table>

\textsuperscript{a}It is expected that agricultural land uses within the City will continue to decrease as they are converted to other uses and as the City continues to grow.

\textsuperscript{12}Undeveloped land is assumed to be farmland.
Table 3-6. Existing and Future Land Use in the Town of Lawrence

<table>
<thead>
<tr>
<th>Land Use Category</th>
<th>Acres</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Existing (2014)</td>
<td>Future (2040)</td>
<td>Difference</td>
</tr>
<tr>
<td>Residential</td>
<td>1,508.7</td>
<td>2,530.4</td>
<td>1,021.7</td>
</tr>
<tr>
<td>Commercial</td>
<td>136.9</td>
<td>229.6</td>
<td>92.7</td>
</tr>
<tr>
<td>Industrial</td>
<td>241.2</td>
<td>404.4</td>
<td>163.2</td>
</tr>
<tr>
<td>Agriculture</td>
<td>5,289.6</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* It is expected that agricultural land uses within the Town of Lawrence will continue to decrease as the land is converted to other uses and as the Town of Lawrence continues to grow.

Table 3-7. Existing and Future Land Use in the Town of Ledgeview

<table>
<thead>
<tr>
<th>Land Use Category</th>
<th>Acres</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>2,002</td>
<td>3,023</td>
<td>1,021</td>
</tr>
<tr>
<td>Commercial</td>
<td>112</td>
<td>169</td>
<td>57</td>
</tr>
<tr>
<td>Industrial</td>
<td>98</td>
<td>148</td>
<td>50</td>
</tr>
<tr>
<td>Agriculture</td>
<td>4,866</td>
<td>3,738</td>
<td>-1,128</td>
</tr>
</tbody>
</table>

Another important issue facing farming in Brown County is the production of manure in excess of available land for its spreading, as well as the high levels of phosphorus reaching the Fox River, its tributaries, and the Bay of Green Bay (Brown County Planning Commission 2017). If current trends continue, this will become an increasing important issue for study area communities.

**Resource Management**

Under Chapter 91 of the Wisconsin Statutes, the county is given the task of identifying farmland preservation areas as part of a county-wide Farmland Preservation Plan. The Brown County plan identifies farmland for preservation based on the following criteria:

- Include areas with soils suitable for agricultural production
- Include lands that have historically been used for agricultural use or agriculture related uses
- Include lands in close proximity to agricultural infrastructure
- Include undeveloped natural resource or open space areas that connect other farmland parcels to create a large, uninterrupted block
- Exclude areas that will be developed within the next 15 years as identified in the local comprehensive plans
- Locally identified areas may not be based primarily on landowner preferences

The plan acknowledges that there are portions of municipalities where the planned farmland preservation areas appear to be somewhat fragmented. Participation in the program is renewed annually by landowners. As local communities update their farmland preservation areas it will be reflected in their local comprehensive plans. When the Brown County Farmland Preservation Plan is revised in the future, the local comprehensive plans will serve as the primary source of information for the update (Brown County Planning Commission 2017).
Summary – Baseline Condition for the Resource

Development, as a result of population and employment growth in the study area, has resulted in a gradual decrease of land within agricultural production since 1970. Population and employment projections indicate that the area will continue to grow. Study area communities that intend to allow development within areas that are currently farmed have established incremental growth areas in their comprehensive plans. The plans encourage infill development and growth next to existing development to minimize the costs of extending infrastructure and consistent with the 2040 Brown County Sewage Plan.

3.2.1.2 Environmental Consequences

Cumulative impacts to agricultural land would include those general direct impacts to agriculture discussed in Section 3.8 Agriculture of the Draft EIS and indirect impacts discussed in the previous section, as well as the impacts of the projects listed in Table 3-2.

Population and employment growth will contribute to the continued decline in the amount of land in agricultural production in the study area. This growth is driven by the area’s proximity to both the Appleton and Green Bay job markets and its attractive quality of life. As discussed in Section 2.5.1, the proposed action’s contribution to this decline is anticipated to be minimal. Although some developers are holding onto land waiting for a decision on the project, the land is anticipated to be developed, possibly with a changed mix of land use. As demonstrated by the traffic analysis, travel patterns within the study area may change with the build alternatives, but the proposed action does not change traffic volumes on I-41 from the no-build condition north and south of the study area. The growth which is leading to a decline in agricultural land in the study area is driven by factors other than the proposed action.

Additionally, the loss of agricultural land is impacting opportunities to spread manure on agricultural lands for break down by soil microorganisms. This could contribute to additional loads of phosphorus reaching the Fox River, its tributaries, and the Bay of Green Bay, if more manure is spread than can be accommodated on the land.

3.2.1.3 Potential Mitigation

If Tier 2 assessments determine direct impacts to prime farmland soils would be unavoidable, the Farmland Conversion Impact Rating Form (NRCS CPA-106) and Agricultural Impact Notice for Highway Projects (form ARM-LWR-359) would be completed and coordinated with NRCS and DATCP in accordance with standards and applicable laws. Potential mitigation measures for cumulative impacts would be assessed at this time, which could include compensating for the impact by providing substitute resources.

As discussed in Section 2.3.3.3, environmental regulations, local governments, and the state have regulations and management practices in place to mitigate potential impacts from the South Bridge Connector and other current and future developments illustrated on Exhibit 3-2. Conforming with land use planning and regulation tools such as comprehensive planning, SSA planning, zoning and subdivision ordinances, extraterritorial review and approval, farmland preservation program and official mapping, will play an important role in minimizing and mitigating the cumulative impacts to agriculture.

A community-scale manure digester that takes in nutrients from multiple farms may be a means to address excess manure and reduce phosphorus flow to the surface waters (see Section 2.6.2.1 for additional information).
3.2.2 Surface Water Quality

3.2.2.1 Affected Environment

Resource Condition, Trends, and Other Future Actions

The South Bridge Connector is located in the Lower Fox River basin, and the East River Watershed and Apple and Ashwaubenon Creek Watershed. The East River Watershed includes the 206 square mile area of land extending inland from the Fox River and lower Bay of Green Bay, stretching from the town of Red Banks on the shore of the Bay of Green Bay to the village of Wrightstown along the Fox River (DNR 2020b). The Apple and Ashwaubenon Creek Watershed is 113 square miles extending from Ashwaubenon to Appleton (DNR 2020c). Land use in both watersheds is a mix of agriculture and residential, though industrial areas do exist in the urban areas of Green Bay and the north side of Appleton. Creeks and streams in both watersheds drain to the Fox River, which flows northeasterly to the Bay of Green Bay.

Water quality in the watersheds has been affected by human activities, such as farming practices and urban development. Due to past point-source pollution, the Fox River and lower Bay of Green Bay has been designated an Area of Concern under the United States-Canada Great Lakes Water Quality Agreement. The causes of the impairment have historically been thought to be the result of point sources of pollution, such as industrial discharges and sewage treatment plants (Brown County Planning Commission 2019). The Fox River is currently undergoing a multi-year process to remediate polychlorinated biphenyls (PCBs) within the sediments of the river, see Table 3-2 (Lower Fox River and Green Bay Superfund Site). The effort is referred to as The Fox River Natural Resource Damage Assessment (NRDA)/PCB Releases Superfund Site, also known as the Lower Fox River and Green Bay Superfund Site.

Nonpoint source pollution cannot be as readily identified as a point source, and typically enters surface waters via storm water runoff of excess fertilizers from agricultural lands or urban land uses. Nonpoint source pollution is also a contributor to poor water quality in the Fox River and lower Bay of Green Bay. The Fox River through the study area is listed on the federal “303(d)” impaired waters list (i.e., does not meet federal Clean Water Act standards) due to excessive total phosphorus and total suspended solids loadings from nonpoint sources (Brown County Planning Commission 2019).

There are 10 waterbodies near the proposed corridor alternatives. Table 3-8 describes the characteristics of each of the waterways, including current uses and impairment status. Ashwaubenon Creek and the East River have also been identified as “303(d)” impaired waters. While Hemlock Creek and unnamed streams are considered to be in “good” condition, all waterways receive agricultural and urban storm water runoff contributing to reduced quality. None of the waterways are Trout Streams or Outstanding or Exceptional Resource Waters (DNR 2020d and 2020e).
In 2012, the U.S. Environmental Protection Agency approved the Total Daily Maximum Load Report for the Lower Fox River as required under the Clean Water Act for all "303(d)" impaired waters. The Brown County Comprehensive Plan Update indicates that 63.0 percent of the sources of total phosphorus and 97.6 percent of total suspended solids within the Lower Fox River basin are from nonpoint sources (Brown County Planning Commission 2019).

**Resource Management**

- Point source pollution is regulated through the federal Clean Water Act and the National Pollutant Discharge Elimination System.
• Nonpoint source pollution is regulated by DNR through performance standards for runoff management in NR 151 of the Wisconsin Administrative Code.

• Brown County’s Agricultural Shoreland Management Ordinance (see Table 2-3) and Environmentally Sensitive Areas identified in the 2040 Brown County Sewer Service Plan13 (areas within the 2040 sewer service boundary where public sanitary sewer service and development should not be allowed) are important for reducing total phosphorus and total suspended solids in surface waters.

• Section 404(b)(1) requires the U.S. Army Corps of Engineers to determine the potential short- or long-term effects of a proposed discharge by determining the nature and degree of effect that the proposed discharge would have individually or cumulatively, if applicable. If impacts remain after avoidance and minimization actions are implemented, they would be mitigated.

Summary – Baseline Condition for the Resource

Water quality in the watersheds of the cumulative surface waters study area has been affected by human activities, such as farming practices and urban development. Several streams in the study area are considered impaired waterbodies under Section 303(d) of the Clean Water Act. Brown County’s comprehensive plan indicates that water quality in the both the lower Bay of Green Bay and in the Fox River has improved from historical conditions. This is likely from resource regulation and management, and water quality improvement efforts.

Environmental Consequences

Cumulative impacts to surface water quality would include those general direct impacts to surface water discussed in Section 3.9 Water Resources of the Draft EIS and indirect impacts discussed in the previous section, as well as the impacts of the projects listed in Table 3-2.

Current and future land development (see Table 3-2) within the East River and Apple and Ashwaubenon Creek watersheds could cumulatively impact water quality despite any improvements that could result from the improvements implemented as part of the South Bridge Connector. Increased impervious area in the study area would increase the likelihood of storm water carrying sediment and other nonpoint source pollutants to the Fox River and lower Bay of Green Bay.

The increase in impervious area for the South Bridge Connector will vary between Corridor Alternative 1 and Corridor Alternative 2. Stormwater detention facilities, hydraulic features and other best management practices are anticipated to offset any increase in flows due to the addition of impermeable cover which will provide some water quality benefits and reduce erosion and sedimentation. After mitigation, the increase in impervious area from the corridor alternatives are anticipated to have a small contribution, when compared to total impervious area for the East River and Apple and Ashwaubenon Creek watersheds. Local, state and federal regulations will limit the adverse impacts of other current and future land development.

3.2.2.2 Potential Mitigation

Implementing storm water detention facilities, hydraulic features and other best management practices is anticipated to mitigate the direct impacts of the South Bridge Connector. As discussed in Section 2.3.3.3 Environmental Regulations, local governments and the state have regulations and management practices in place to mitigate potential impacts from other current and future developments identified in Table 3-2.

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13 Environmentally Sensitive Areas include parts of the landscape generally associate with surface water features, which should be protected from intensive development. They include all lakes, rivers, streams, wetlands, floodways, and other locally designated significant and unique natural resource features.
References


Brown County Planning Commission, Planning and Land Services Department. 2015. 2040 Brown County Sewage Plan. September.


2016 Update. March.  


https://dnr.wi.gov/topic/lands/landlegacy/.

Wisconsin Department of Natural Resources (DNR). 2020a. Surface Water Data Viewer. 

Wisconsin Department of Natural Resources (DNR). 2020b. Watershed-East River. Accessed February 19, 2020, 

Wisconsin Department of Natural Resources (DNR). 2020c. Watershed-Apple and Ashwaubenon Creeks. Accessed February 19, 2020, 

Wisconsin Department of Natural Resources (DNR). 2020d. Trout stream maps. 

Wisconsin Department of Transportation (WisDOT). n.d. *Wisconsin Northeast Regional Travel Demand Model (NERTDM)*.


Attachment 1
Stakeholder Interview Notes
Project team members met with Sarah Burdette of the Town of Ledgeview on January 15, 2020, to gather information for the indirect effects analysis for the South Bridge Connector Study. The purpose of the meeting was to gain local insight into the potential for growth in the project study area, both with and without the South Bridge Connector, as well as strategies for managing growth.

Two maps were available for mark-up during the meeting (see attached). The first map illustrates known past, present and reasonably foreseeable future projects in the study area, and the second map illustrates major environmental features. Both maps illustrate the build alternatives presented at Public Information Meeting #1 in December 2019.

Following is a summary of the key points made during the meeting.

- The Town of Ledgeview is a high growth area. The population has increased from 3,000 to 9,000 in 18 years.
- The Town has Tax Incremental Districts (TIDs), that are intended to have neighborhood businesses surrounded by residential land use.
- There is a new residential development off Cottonwood Lane bounded by the two proposed alignments. Olde School Square is a mixed-use retail and office condominium community made up of original and replica nineteenth century buildings and represents a unique development opportunity.
- Between 2002-2006, the Town built a 4-lane urbanized roadway (County GV) in collaboration with the County in response to growth and development pressure.
- A bridge was expected to be built years ago. Property is being held for future development opportunities (speculation) in anticipation that the bridge will be built in the area illustrated as Alternative 2 on the map.
- The Town of Rockland doesn’t necessarily welcome growth.
- BelGioioso Cheese (adjacent to I-43) has their corporate headquarters in east Ledgeview. They intend to add 2,700 square feet to their facility.
- At County NN/I-43, a future business park is planned.
- There is a cluster of industrial-type businesses at the border of Ledgeview and De Pere.
- With the construction of a new bridge near Alternative 2 on the map, the Town expects commercial development.
- Subdivisions were built in the 2000s with the expectation that a bridge would be built in the area illustrated as Alternative 2 on the map.
• Everything will flow from County GV regardless of the alignment chosen.
• A southern bridge will help facilitate traffic flow.
• The Niagara Escarpment preservation is important and serves as a gravity feed for water. The Town also strives to protect Environmentally Sensitive Areas (ESAs).
• The Town has conducted an extensive flood study and has a sanitary and sewer district plan. There are some elevation issues with installing feed, but the Town has a good plan.
• The Town is improving sewer and water services out to I-43.
• The Town has over 60 ponds to manage stormwater.
Project team members met with Peter Schleinz of the City of De Pere on January 15, 2020, to gather information for the indirect effects analysis for the South Bridge Connector Study. The purpose of the meeting was to gain local insight into the potential for growth in the project study area, both with and without the South Bridge Connector, as well as strategies for managing growth.

Two maps were available for mark-up during the meeting (see attached). The first map illustrates known past, present and reasonably foreseeable future projects in the study area, and the second map illustrates major environmental features. Both maps illustrate the build alternatives presented at Public Information Meeting #1 in December 2019.

Following is a summary of the key points made during the meeting.

- Southeast De Pere includes a mix of land use including commercial and industrial.
- In 2016, the City annexed Becker Farm from the Town of Rockland.
- The area south of the City limits becomes rural very fast. We should consider revising the ICI Study Area according to the Green Bay Metropolitan sewer service area, or to County ZZ. The east side of the boundary should follow roads.
- Development is frowned upon in Rockland unless property is annexed by De Pere. North of County ZZ, lot sizes must be at least 10 acres.
- The Brown County Sewage Plan identifies acreage allocations for each municipality.
- De Pere strictly follows its comprehensive plan and is intending to update it. However, the 2010 plan is written well so changes will not be drastic. The City is also doing a complete rewrite of its zoning code, anticipated to be complete in 2020.
- The City is mostly built out. There is a subdivision planned south of Southbridge Road, east and west of the Fox River.
- The City is anticipating Alternative 2 and is upfront with developers about this. The City doesn’t allow driveway access to Southbridge Road and strives to create centralized access points to Southbridge Road.
- Most of the existing farmland in the City will be developed because the City is landlocked, with the exception of annexation opportunities in Rockland. The City isn’t focused on farmland preservation.
- Alternative 2 has the least impact to ESAs, except along the river, which is inevitable. It crosses over the East River where the floodplain is narrowest.
• Without the bridge, the mix of uses might change but future development is designed with the knowledge of the bridge being there, and the bridge not being there.

• United Health Group is moving to De Pere to the NE of I-41 and Southbridge Road, near Foth Engineering and the proposed Alternative 2 interchange. It will bring in 500-1000 employees.

• There is a $50-$60 million Mulva Cultural Center planned for downtown De Pere. The plan is to host museum exhibits that one would see in larger cities, like Chicago.

• The City has development agreements with Lawrence and Rockland.
South Bridge Connector Study

Project team members met with Chuck Lamine, Dan Teaters, and Devin Yoder of the Brown County Planning and Land Services Department on January 15, 2020, to gather information for the indirect effects analysis for the South Bridge Connector Study. The purpose of the meeting was to gain local insight into the potential for growth in the project study area, both with and without the South Bridge Connector, as well as strategies for managing growth.

Two maps were available for mark-up during the meeting (see attached). The first map illustrates known past, present and reasonably foreseeable future projects in the study area, and the second map illustrates major environmental features. Both maps illustrate the build alternatives presented at Public Information Meeting #1 in December 2019.

Following is a summary of the key points made during the meeting.

- Subdivision plats under development or areas being considered for development include southwest Ledgeview (Cottonwood Road, Grand Ridge Estates, Van Straten’s Farm), southwest De Pere, I-41/Alternative 2 interchange, and Lawrence (Town Center).
- The goal is to have the new bridge located so it doesn’t lead to a leapfrog development pattern. It should serve the population but not create sprawl. The timing needs to be right. If development is occurring in the vicinity of the proposed bridge, it’s a good thing.
- There is potential for residential development in southeast Hobart, near the new Hemlock Creek Elementary School. This will generate more traffic.
- Oneida Nation has an ongoing effort to acquire property and preserve land within its boundaries; however, Hobart within the Oneida Nation boundaries, is concerned about its tax base. Oneida land is served by its own utilities, which can create development difficulties for Hobart.
- Much of the land adjacent to the south bridge alignment is being held in speculation. People are sitting on property waiting for the bridge.
- Along I-41 there is increased activity. Existing business parks have capacity for growth.
- There is a large multifamily development proposed at the northwest corner of the I-41/Alternative 2 interchange. This proposed interchange is a lightning rod for future development.
- United Healthcare is developing a new $35M office in the northeast quadrant of the proposed interchange at I-41 and Southbridge Road in De Pere. There is potential for development on the south side of the interchange, too.
• The County owns land near the airport that can be developed. Additionally, there is potential for development of overnight freight parking.

• Wrightstown has pushed economic development in the last three years, particularly along County U. The Village is also making sewer service amendments.

• Along County GV in Ledgeview, the commercial area is going to “take off” if a new bridge is constructed. Recent developments along the road include Costco and Target. Development along County GV is also increasing development along County X and Creamery Road. However, this area is prone to flooding issues.

• Brown County has good schools, which contributes to attracting new residents to the area. Brown County has 3 of 10 top fastest growing communities in Wisconsin (based on percent of population): Hobart, Lawrence, and Ledgeview. In addition, there is a diverse economic base (insurance, banking, and manufacturing), which has helped the area weather recessions.

• Rockland, Glenmore, and the Town of Wrightstown don’t have sewer districts. As a result, a lot of annexations have occurred in these municipalities. Glenmore is committed to farmland preservation, while the Town of Wrightstown has focused development around Greenleaf Road.

• County staff suggested revising the ICI Study Area by overlaying the Green Bay Metropolitan sewer district service areas with 2040 Brown County Sewage Plan service areas.

• Water comes from Lake Michigan and there are no concerns with water supply.

• If the bridge is not constructed, development will still occur, but there may be delays. This could have financial impact to Lawrence and De Pere due to lagging development in their TIDs. It would also impede the logical extension of development. There will be additional congestion in the future at the already congested Claude Allouez bridge if the bridge is not constructed.

• Alternative 1 would have significant impacts at the existing interchange at I-41 and Scheuring Road.
Project team members met with Mike Mushinski of the Brown County Land & Water Conservation Department on January 15, 2020, to gather information for the indirect effects analysis for the South Bridge Connector Study. The purpose of the meeting was to gain local insight into the potential for growth in the project study area, both with and without the South Bridge Connector, as well as strategies for managing growth.

Two maps were available for mark-up during the meeting (see attached). The first map illustrates known past, present and reasonably foreseeable future projects in the study area, and the second map illustrates major environmental features. Both maps illustrate the build alternatives presented at Public Information Meeting #1 in December 2019.

Following is a summary of the key points made during the meeting.

- Altmayer Elementary School in De Pere is newer (opened in 2007) and serves children on the east side of the river, generally the southern portion of the De Pere Unified School District. (GV/Monroe Road) General thought that is the area is prime for development with the school.
- Becker Farm was recently annexed by De Pere.
- There are small parcels that have been lotted, which will be challenging to develop.
- The Rockland Road corridor is prime for development.
- County PP and State Highway 57 are congested during the morning commute with traffic destined for the Claude Allouez bridge.
- The Farmland Preservation Program is an annual contract for municipalities can get out of each year.
- The EPA’s Nine Key Elements provides a framework for watershed-based plans and improving water quality for waterbodies in Brown County, including Bower Creek, Lower East River, and Lower Fox River.
- NEW Water (owns and operates two wastewater treatment facilities in Green Bay and De Pere) is starting adaptive management for Apple, Ashwaubenon, and Dutchman Creeks. It’s a 20-year effort to get the creeks to permit levels.
- Brent Brown (in the Jacobs Milwaukee office) has assisted with water quality efforts in Brown County.
• Development generally has a negative impact on water quality, and results in fewer natural areas.

• There are not a lot of high-quality wetlands in the study area. Wetlands have been lost due to development and agricultural practices.

• Areas of Brown County are intensively farmed, and cow manure is spread, which negatively impacts water quality due to runoff. Additionally, the study area contains tight clay soils which are slow to absorb water and during heavy rains the water runs off the land.

• The Fox River is a more productive fishery (Walleye, Northern Pike) than the East River, and provides recreation opportunities for fishing and boating.

• The East River looks like chocolate milk in the summer and is not generally used for recreation purposes.

• A new bridge itself won’t cause indirect effects but development after the bridge is built could affect water quality and fisheries.

• Alternative 1 is crowded and a 4-lane arterial is not very feasible. Alternative 2 would make a lot of sense.

• Glenmore and the Town of Wrightstown want to maintain their rural character.
Project team members met with Patrick Wetzel and Scott Beining of the Town of Lawrence on January 16, 2020, to gather information for the indirect effects analysis for the South Bridge Connector Study. The purpose of the meeting was to gain local insight into the potential for growth in the project study area, both with and without the South Bridge Connector, as well as strategies for managing growth.

Two maps were available for mark-up during the meeting (see attached). The first map illustrates known past, present and reasonably foreseeable future projects in the study area, and the second map illustrates major environmental features. Both maps illustrate the build alternatives presented at Public Information Meeting #1 in December 2019.

Following is a summary of the key points made during the meeting.

- The Town opened two TIF districts in 2018.
- There hasn’t been a lot of marketing done yet for the Town’s plans. The location of the Town Center has yet to be determined.
- A lot has changed since the 2015 comprehensive plan. For example, it does not include the TIDs. If the project team has questions on the comprehensive plan please call the Town.
- The Town is expanding water services along I-41 near the Town Hall.
- Parcels are ½-mile long by 530 feet wide. The Town is making an effort to buy multiple parcels in a row to be able to zone land use in a manner that makes sense (commercial areas along the main road with residential land use behind the commercial areas.)
- Rather than showing large areas of mixed use in its comprehensive plan, the Town wants to maintain flexibility.
- The comprehensive plan shows Orange Lane as connecting Southbridge Road to Packerland Drive, representative of Alternative 2.
- Land is privately owned at the west terminus of the two build alternatives, Packerland Drive. There is a property for sale at Orange Lane/Mid Valley Drive. Developers are hesitant to buy land due to the uncertainty of the location of the bridge.
- TID#2 is mapped/consistent with sewered service area. Knowing there are multiple alternatives for the bridge, and it has been a concept since 1968, the Town has begun to plan as if the bridge will not be built.
- There is a $400 million apartment complex (Sand Lake) being built at the proposed interchange of Alternative 2 and I-41.
- North of Scheuring Road is a quarry.
• Within TID #2 (L-166 and L-167), there are 80-acres of land that the owners are looking to sell.
• At the northwest corner of TID #2, Aurora Baycare is developing an outpatient center.
• Hemlock Creek Elementary is a new school (School District of West De Pere). The residential subdivisions in the school district boundaries have seen extensive growth. The boundaries include portions of De Pere and Hobart.
• Two years ago, the West De Pere School District published a report, which included projected residential growth within the district. The largest growth is shown at the west end of the study build alternatives.
• The challenge is ensuring there’s room for supporting uses (commercial, industrial) while creating a buffer with the residential uses.
• Growth within the area is being driven by good schools, easy access to Appleton and Green Bay metropolitan areas, little traffic between Appleton and Green Bay, and access to I-41.
• Sewer service allowance is based on performance; once 20 acres are developed, the Town can move its serve allowance to the next 20 acres. South along I-41, there are smaller, light industrial uses with well water and septic sewers.
• Farmers are aware of the development potential of the area. For a lot of them, selling the land is their retirement plan. The Town can better plan development if it knows where/when the farmers are planning to sell. The Town is frequently approached by farmers wanting to sell their land.
• 40 percent of agricultural land is under the Farmland Preservation Program.
• TID #1 is a 200+-acre development (Lawrence Parkway Development).
  o Commercial development fronting the major road with residential land uses behind the commercial/at the back (60-80 lots). The Town is currently building out the road pattern for residential development.
  o Plans include the Impact Sports Academy, a $6 million indoor baseball training facility. The Town is partnering with the organization to develop outdoor baseball fields. Currently, the Town only has two parks, and the organization could help cost-share on building out the Town’s park facilities. The vision is for it to be a destination-type tournament facility that could generate some tourism.
  o There is also a local rugby foundation and indoor soccer organization looking at a similar concept.
  o Once planned commercial development occurs, there is potential for a hotel or restaurant.
  o If the interchange at I-41 and Southbridge Road is constructed, it provides another access point to this area.
• The proposed interchange under Alternative 2 provides relief to American Drive in De Pere and the business park there. WisDOT is providing $75 million in grant funding for roadway projects, and the town submitted an application to construct a section of American Drive. Hickory Road is currently being reconstructed to County standards and the vision is to connect American Drive to Hickory Road, which will provide a connection to De Pere.
Project team members met with Pat Kaster of River City Realtors on January 16, 2020, to gather information for the indirect effects analysis for the South Bridge Connector Study. The purpose of the meeting was to gain local insight into the potential for growth in the project study area, both with and without the South Bridge Connector, as well as strategies for managing growth.

Two maps were available for mark-up during the meeting (see attached). The first map illustrates known past, present and reasonably foreseeable future projects in the study area, and the second map illustrates major environmental features. Both maps illustrate the build alternatives presented at Public Information Meeting #1 in December 2019.

Following is a summary of the key points made during the meeting.

- River City Realtors has several developments throughout Brown County (Lawrence, De Pere, Howard, Ledgeview, and Scott).
- The Nascar Track subdivision was built 15-20 years ago in anticipation that the southern bridge was coming. People were excited about relocating to that area.
- The Freedom Road (County S) interchange works well.
- The area provides easy access to Appleton and Green Bay.
- Due to the uncertainty of the bridge, it’s difficult to sell because there’s hesitancy to buy. The lack of knowing affects development and the housing marking.
- Alternative 1 has multi-million dollar homes along it.
- The bridge will have a great impact on what will happen. There is room for development near Packerland Drive once the location of the bridge is determined.
- The Claude Allouez bridge in De Pere is very congested.
- There is a lot of development occurring in Ledgeview, along Dickinson Road/County Truck S, and Heritage Road/County X in Scray’s Hill.
- There is a tremendous amount of growth in Hobart. Hemlock Creek Elementary is a new school that is spurring residential growth around it.
- Howard has TIF districts and there are 3 to 4 developments occurring.
- Communities have been planning around the bridge for 20 years.
- The area has good school districts, reasonable taxes, little traffic, low crime, and a low cost of living. Amenities include a zoo, amusement park (Bay Beach), and National Railroad Museum.
Brown County is family oriented. People like to live here; it’s a comfortable place to live. Additionally, the area has not been affected much by recessions.

- There is competition with the Valley. The area needs to bring in attractions other than the Packers.
- The municipalities move fast. Once the bridge is constructed, the area will see more annexation of Rockland by De Pere and subsequent development.
- There is potential for development on the east side of Green Bay. The City wants to extend its business park off Mason Street/I-43. The bridge could help facilitate movement to/from the business park.
- River City Realtors is a proponent of conservation design and tree planting in their developments; however, most communities do not want conservation design. There are three developments in Howard and one in Ledgeview where wetlands/natural areas have been preserved. In some cases, the municipality has taken ownership of the green space and constructed walking trails.
Project team members met with James Petitjean of Oneida Nation on January 16, 2020, to gather information for the indirect effects analysis for the South Bridge Connector Study. The purpose of the meeting was to gain local insight into the potential for growth in the project study area, both with and without the South Bridge Connector, as well as strategies for managing growth.

Two maps were available for mark-up during the meeting (see attached). The first map illustrates known past, present and reasonably foreseeable future projects in the study area, and the second map illustrates major environmental features. Both maps illustrate the build alternatives presented at Public Information Meeting #1 in December 2019.

Following is a summary of the key points made during the meeting.

- A new bridge across the Fox River would bring traffic to the heart of Oneida Nation and provide economic development opportunities. It will affect businesses in the southern portion of the reservation.
- There is currently a One Stop gas station, restaurant, and casino across from Schneider National on the east side of the reservation.
- Oneida Nation has a 25-year comprehensive plan in the process of being updated.
- Oneida Nation is considering relocating its museum, developing a new One Stop, and increasing the number of reservation signs.
- The Oneida Nation’s main casino is located off Hwy 172. The reservation also has a farm, farmer’s market, and community center (Central Oneida).
- Oneida Nation is developing 36 housing sites with trails. A new arterial with bike trails will improve connectivity and provide walking/biking opportunities to improve health/quality of life, as a lot of Native Americans are at high risk for diabetes.
- A new bridge across the Fox River will affect businesses in the southern portion of the reservation and be beneficial from a tourism standpoint. Oneida Nation is always considering new economic development opportunities.
- Oneida Nation is a foreign trade zone (free-trade zone).
- A new bridge, in particular Alternative 1, would feed directly into the reservation and could serve as a gateway into the community, which could include a sign for the reservation.
- Oneida Nation has its own transit system. It provides on-call service and services to the elderly (65+) to transport people to local retail, such as Walmart and Festival Foods.
• Oneida Nation would like to increase opportunities for people to come to the reservation besides gambling. The reservation holds the Oneida Pow Wow on July 4th, and the Thornberry Creek golf course has hosted the LPGA tournament the last three years.

• Without the project, there would be less traffic to the reservation.
South Bridge Connector Study

ATTENDEES:  
Alice Halpin, DATCP  
Jill Kramer, Jacobs  
Carly Dutkiewicz, Jacobs

PREPARED BY:  
Jill Kramer and Carly Dutkiewicz

DATE:  
February 13, 2020

Project team members conducted a phone interview with Alice Halpin of the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) on January 31, 2020, to gather information for the indirect effects analysis for the South Bridge Connector Study. The purpose of the meeting was to gain local insight into the potential for growth in the project study area, both with and without the South Bridge Connector, as well as strategies for managing growth.

Two maps were available for mark-up during the meeting (see attached). The first map illustrates known past, present and reasonably foreseeable future projects in the study area, and the second map illustrates major environmental features. Both maps illustrate the build alternatives presented at Public Information Meeting #1 in December 2019.

Following is a summary of the key points made during the meeting.

- Alice anticipates that the main indirect effect of the project would be an increased push for development, particularly to the south.
- The Brown County Farmland Preservation Plan Update is a good resource to use to inform our analysis.
- There are no other projects that need to be added to the “Major Transportation Projects and Notable Developments” map.
- There are no resource management plans that we should be aware of.
- The Indirect Effects Study Area doesn’t need to extend beyond Brown County.
- The crossing would be beneficial to the area for development.
- Contacts at the NRCS and Brown County Extension Ag Agent might be helpful to reach out to.
Project team members conducted a phone interview with James Doperalski of the Wisconsin Department of Natural Resources (DNR) on January 31, 2020, to gather information for the indirect effects analysis for the South Bridge Connector Study. The purpose of the meeting was to gain local insight into the potential for growth in the project study area, both with and without the South Bridge Connector, as well as strategies for managing growth.

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Following is a summary of the key points made during the meeting.

- The sizing of structures is important to consider to correctly hold back water as water levels rise.
- MS4 and TS4 permits serve as stormwater controls.
- Impervious surfaces can affect runoff. The bridge could affect storage capacity of stormwater and timing of runoff.
- There are no resource management plans that were identified.
- Projects are evaluated individually, but as development increases, wildlife corridors are further constricted, which adversely affects the wildlife using those corridors.
- The waterways are used for spawning and the flow velocity can affect fish. As development increases, so does the velocity.
- A floodplain engineer is in contact with the municipalities regarding the high water levels.
- There is an active project to redo County ZZ.
- The two alternatives intersect wetlands. In particular, Alternative 2 hits two wetlands on its east side, which could increase the potential for invasive species.
- The Fox River riverbed is contaminated and cleanup efforts are underway.
- There is potential for mussel impacts in Ashwaubenon Creek and the East River. Depending on where the bridge goes, if an endangered species is impacted it would require relocation.
- Any additional development prior to the bridge being built is going to foreclose options for an alignment.
- Alternative 2 is likely what most people are going to push for.
Attachment 2
Consideration of a Future Southern River Crossing in Local Plans
Consideration of a Future Southern River Crossing in Local Plans

Table 1. Consideration of a Future Southern River Crossing in Local Plans

<table>
<thead>
<tr>
<th>Municipal Plans</th>
<th>Comprehensive Plan</th>
<th>Consideration of a Future Southern River Crossing</th>
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<tbody>
<tr>
<td>City of De Pere Comprehensive Plan (2010)</td>
<td>The Plan outlines community goals and objectives, the top ranked issue being “to being to build a southern bridge sooner than the planned construction year of 2020 to reduce traffic in downtown De Pere.” Other specific goals related to a new river crossing within their document include:</td>
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<td>• work to ensure the southern bridge is visually appealing as well as functional;</td>
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<td>• work with surrounding communities, County, and WisDOT to plan for the southern bridge</td>
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<td>Their Plan considers and incorporates various recommendations for future uses (business park expansion, uses at a potential new interchange at US 41, trail extension) based on a southern bridge and associated arterial road.</td>
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<td>Their future land use map shows “neighborhood residential (including multi-family)” use on both sides of the Fox River in the vicinity of the potential southern bridge location. East of WIS 32 (on east side of river) and west of the railroad line (On west side of river), is planned for “Business Park Use”.</td>
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<td>The Transportation section of the plan identifies a special emphasis area (Special Emphasis Area 2: Southern Bridge and Connecting Arterial Streets or Highways) which summarizes the status of the potential new bridge project, and future actions underway by WisDOT and Brown County.</td>
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<td>Town of Ledgeview Comprehensive Plan 2035 (2015)</td>
<td>The Plan states that the Town supports the MPO and county recommendations and proposed Southern Bridge Project and supports continued collaboration to ensure its efficient implementation. The Plan specifically supports the environmental studies and eventual implementation of the project, if supported by the environmental document.</td>
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<td>The Plan identifies the Southern Bridge and connecting arterial streets, noting that the project will provide an important connection for residents that work or shop on the west side of the Fox River. It recommends bicycle lanes to the proposed new bridge and arterials in order to provide links between the urban and fringe portions of Brown County.</td>
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<td>Town of Lawrence Comprehensive Plan (2016)</td>
<td>The Plan acknowledges the potential southern bridge and notes various considerations in terms of future development. Within the Transportation section of the document is a section documenting the community’s role in working with WisDOT, Brown County, and other communities to prepare for the land use and transportation impacts of the Southern Bridge and connecting street system. Their Existing &amp; Proposed Bike &amp; Pedestrian Facilities Map designates a future bicycle lane across the proposed bridge.</td>
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<td>Town of Rockland Comprehensive Plan (2015)</td>
<td>Planning for the impacts of a Southern Bridge that connects Red Maple and Rockland Road is identified in Goals and Objectives section of the Plan. It’s also further discussed and identified as a transportation objective. The document makes several references to the need to work with the surrounding communities, Brown County, and WisDOT to plan the Southern Bridge, STH 32/57, and other highway corridors that affect the Town, as well as to prepare for transportation and land use impacts of the bridge.</td>
<td>Planning for the impacts of a Southern Bridge that connects Red Maple and Rockland Road is identified in Goals and Objectives section of the Plan. It’s also further discussed and identified as a transportation objective. The document makes several references to the need to work with the surrounding communities, Brown County, and WisDOT to plan the Southern Bridge, STH 32/57, and other highway corridors that affect the Town, as well as to prepare for transportation and land use impacts of the bridge.</td>
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<td>Village of Ashwaubenon Comprehensive Plan (2016)</td>
<td>Their plan recommends consideration of trails and bicycle routes as part of a Southern Bridge project.</td>
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<tr>
<td>Village of Hobart Comprehensive Plan (2016)</td>
<td>A southern river crossing is not mentioned.</td>
</tr>
<tr>
<td>Village of Allouez Comprehensive Plan (2014)</td>
<td>A southern river bridge crossing is not mentioned.</td>
</tr>
<tr>
<td>Village of Bellevue Comprehensive Plan (2012)</td>
<td>A southern river crossing is not mentioned.</td>
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**County Plans**

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<td>Brown County Comprehensive Plan (2004)</td>
<td>The Plan identifies the “Southern Bridge and Connecting Arterial Streets” project as an important highway project that will occur in Brown County during the long-range planning period. The Plan summarizes the history of this proposed project and various studies that have been undertaken, including travel demand, land use, and population and employment analysis. One of the Plan’s transportation recommendations states that the County and communities should work together to develop an implementation schedule for the project.</td>
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References:


