# Appendix H. Indirect and Cumulative Impacts Analysis


**I-39/90/94 Corridor Study**

Technical Memorandum

# Indirect and Cumulative Impacts Analysis

**May 2024**

Wisconsin Department of Transportation

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# 1. Introduction

The Wisconsin Department of Transportation (WisDOT) and the Federal Highway Administration (FHWA) are studying the environmental consequences of transportation improvements to I-39/90/94 between US Highway (US) 12/18 in Madison and US 12/ Wisconsin State Highway (WIS) 16 in Wisconsin Dells. The study is also evaluating I-39 from its split with I-90/94 (I-39 I-90/94 Split) to Levee Road near Portage, see Figure 1-1. The study corridor is 67 miles long and travels through Dane, Columbia, Sauk, and Juneau counties. The study considers separate ongoing projects in the corridor:

- I-39/90/94 bridge replacement over the Wisconsin River (Columbia County)
- WIS 60 Interchange reconstruction (Columbia County)
- County V Interchange reconstruction (Dane County)[1]

I-39/90/94 in the study corridor is a major recreational corridor providing access to the Wisconsin Dells (hosts 4-5 million visitors each year), as well as a commuter and freight corridor providing access the Madison metropolitan area and the state capital, regional airport, educational institutions and universities, regional shopping centers, entertainment districts, residences, and hospitals. I-39/90/94 is part of Wisconsin's "backbone system," a network of multi-lane highways connecting major population and economic regions of the state. As part of the National Highway System and the Dwight D. Eisenhower National System of Interstate and Defense Highways, the I-39/90/94 corridor is of vital importance to the region, the state, and the nation and is relied on for its freight mobility, tourism accessibility, and employment access. The I-39/90/94 study corridor is a multi-lane interstate with 15 interchanges and over 100 bridges.

This technical memorandum describes the potential indirect and cumulative environmental impacts that could result from implementation of the I-39/90/94 build alternatives, as required by the National Environmental Policy Act (NEPA). It is divided into two parts: the first half describes indirect impacts, and the second half describes cumulative impacts. It is a standalone document that is a component of the I-39/90/94 Draft Environmental Impact Statement (EIS), which provides a full description and evaluation of the project's alternatives, costs, proposed actions, and environmental impacts.

## 1.1. Project Purpose and Need

The purpose of the I-39/90/94 Corridor Study is to address existing and future traffic demands, safety issues, aging and outdated infrastructure, and corridor resiliency.

The following factors informed the need for the transportation improvements:

- Traffic demands
  - Sections of I-39/90/94 are beginning to operate at unacceptable levels of service today and most of the corridor will operate unacceptably by 2050 in the absence of improvements.
  - Heavy recreational, commuting, and freight traffic uniquely affect traffic operations in the study corridor.
- Safety needs

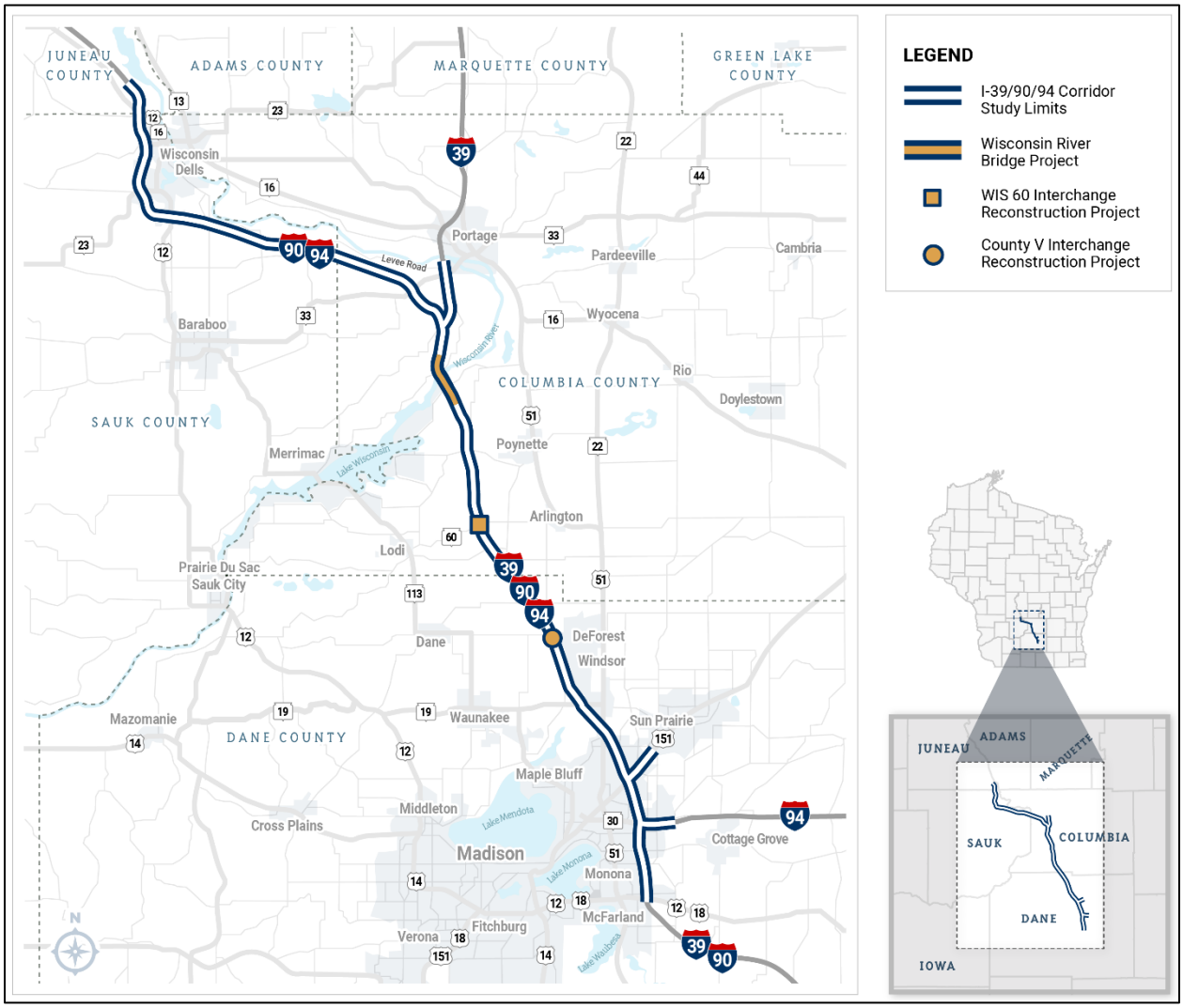
[1] *A national convenience store is proposing to construct a new store at the County V Interchange and privately fund interchange reconstruction as a separate project in coordination with the village of DeForest, Dane County, WisDOT and FHWA. The private developer would complete an environmental document as an action separate from the I-39/90/94 Corridor Study. Should the development not occur, WisDOT would retain the existing interchange with minor improvements.*

- Crashes tend to occur at the interchanges and congestion and geometric/design deficiencies contribute to the crashes.
- Crash rates exceeded the statewide average crash rate at many interchanges.

- Pavement condition
  - By the year 2030, WisDOT projects that over 20% of pavement in the study corridor will be in poor or worse condition.
- Bridge condition
  - Many bridges do not meet current design standards.
- Corridor resiliency
  - Corridor flooding resulting in closures that disrupt vital connections for commerce and emergency services.

Section 1 of the Draft EIS provides more information on the Project Purpose and Need.

### Figure 1-1: Location Map



## 1.2. Recommended Alternative

WisDOT and FHWA developed and evaluated a wide range of corridor alternatives for this project, including the No Build alternative and a range of build alternatives, including several configuration options at interchanges along the I-39/90/94 study corridor. The build alternatives recommended to be retained for more detailed evaluation in the Draft EIS were evaluated as part of the indirect and cumulative impacts analysis and compared to the No Build alternative. Refer to Section 2, Alternatives, in the Draft EIS for more information about the full range of alternatives.

### 1.2.1. No Build Alternative

The No Build alternative assumes no improvements to the existing I-39/90/94 freeway or interchanges. This alternative would not reconstruct the interstate or interchanges to modern design standards. This alternative also assumes the separate Wisconsin River Bridge replacement, the WIS 60 Interchange, and the County V Interchange reconstruction projects will be completed as scheduled. Only routine maintenance and minor improvements would be performed. Safety and operations would decrease as traffic on I-39/90/94 continues to increase. Roadway users would begin to experience extensive delays without expansion, and more potential roadway closures due to corridor flooding.

While this alternative does not meet the study purpose and need, it does serve as a baseline for a comparison of impacts related to the Build alternatives.

### 1.2.2. Build Alternatives

#### Freeway Modernization Alternatives

Three Freeway Modernization Alternatives were considered to reconstruct and upgrade I-39/90/94 to current WisDOT and American Association of State Highway and Transportation Officials (AASHTO) design standards whenever possible.

- Modernization of Existing Travel Lanes
- Modernization plus Added General Purpose Travel Lane
- Modernization Hybrid

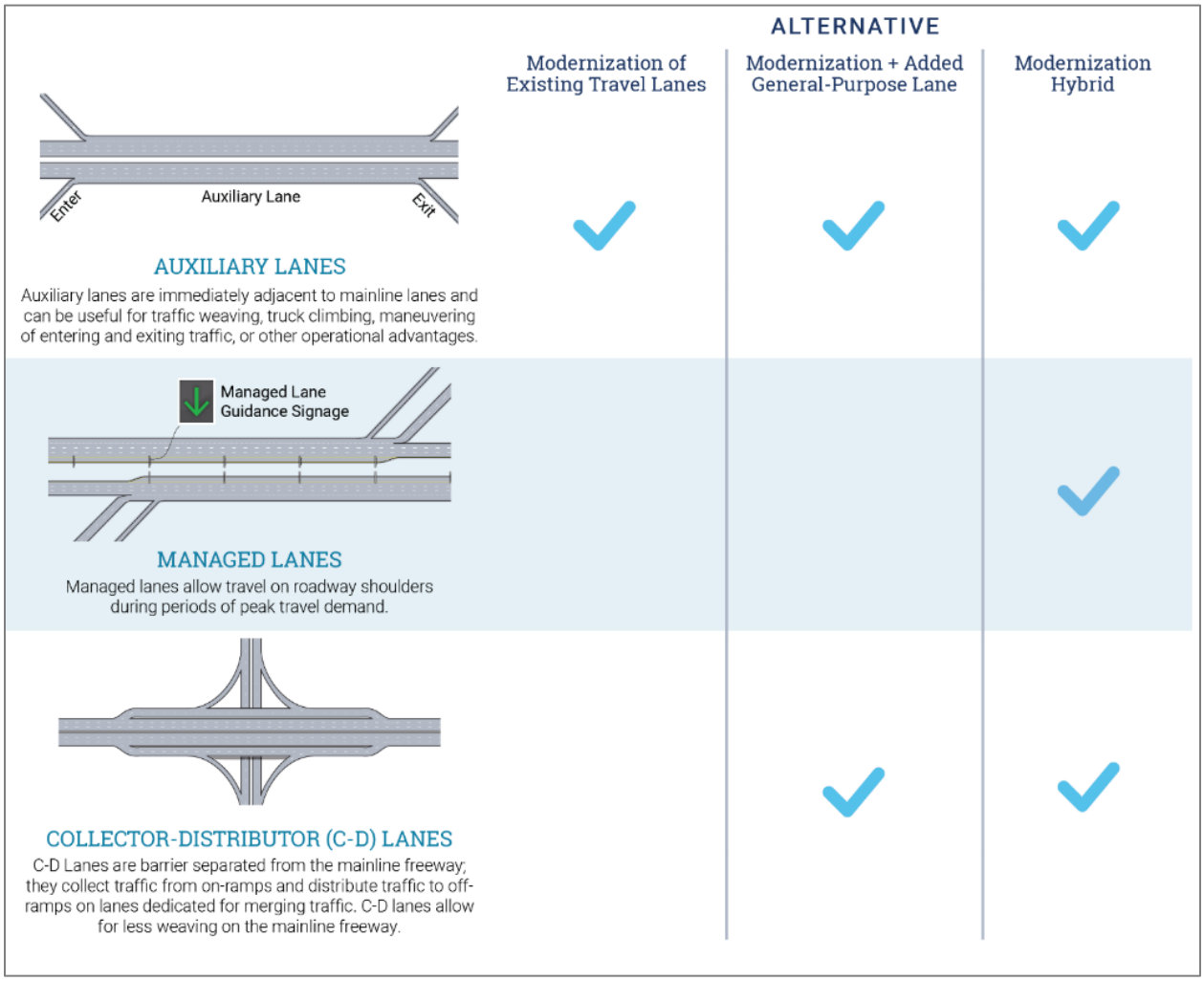
The Freeway Modernization Alternatives would implement recommendations from WisDOT's Baraboo River floodplain analysis completed as part of this study. The analysis recommends raising I-39 and I-90/94 near the river and lengthening the I-39 Baraboo River bridge to reduce flood risks on the Interstate. In addition to also addressing safety needs, all modernization alternatives would:

- Replace deteriorating pavement, bridges and culverts
- Move all ramps to the right, eliminating left hand entrances and exits
- Improve ramp lengths and bridge clearances
- Expand shoulders
- Improve roadway curves, lighting and signage
- Consider opportunities to add bike and pedestrian facilities

WisDOT also considered implementing strategies to improve operations, including Auxiliary Lanes, Managed Lanes, and/or Collector-Distributor (C-D) Lanes in each of the modernization alternatives, see

Figure 1-2. All modernization alternatives are generally within the existing right of way but depending on specific site conditions and alternative design, additional impacts outside the right of way could occur.

**Figure 1-2: Specialty Lanes as Applied to Modernization Alternatives**




Two Freeway Modernization are recommended for further study in this Draft EIS: Modernization Plus Added General-Purpose Lane and Modernization Hybrid. Refer to Section 2 of the Draft EIS for a detailed description of the alternatives considered and dismissed.

### *Modernization Plus Added General-Purpose Lane*

This alternative would reconstruct the Interstate and provide an additional general-purpose lane in each direction along the present freeway alignment throughout a majority of the corridor. I-39 from the I-39 I-90/94 Split to Levee Road would be reconstructed with the same number of lanes as the existing condition. Where operationally prudent, the alternative includes C-D and auxiliary lanes. Figure 1-3 shows the number of proposed interstate general-purpose lanes for this alternative.

### *Modernization Hybrid*

This alternative would reconstruct the Interstate with a combination of adding a general-purpose lane or adding a managed lane (depending on location, see Figure 1-4); this alternative also utilizes C-D lanes and auxiliary lanes to further manage traffic. Managed lanes could be used in a variety of situations including part-time hard shoulder running, high-occupancy vehicle (HOV) lanes, transit only lanes, or Connected and Automated Vehicles.

From US 12/18 to WIS 19, the Interstate would feature the same number of general-purpose lanes as are currently present and include an 18-foot inside shoulder that would be utilized as a managed lane. C-D lanes are proposed between the I-94/WIS 30 and US 151/High Crossing Boulevard interchanges. Auxiliary lanes are proposed between the US 12/18 and I-94/WIS 30 interchanges and between the US 151/High Crossing Boulevard and WIS 19 interchanges.

A general-purpose lane would be added to the Interstate from WIS 19 to the I-39 I-90/94 Split and to I-90/94 from the I-39 I-90/94 Split to the US 12/WIS 16 Interchange. I-39 from the I-39 I-90/94 Split to Levee Road would be reconstructed with the same number of lanes as the existing condition. Figure 1-4 shows the number of Interstate general-purpose lanes for this alternative.

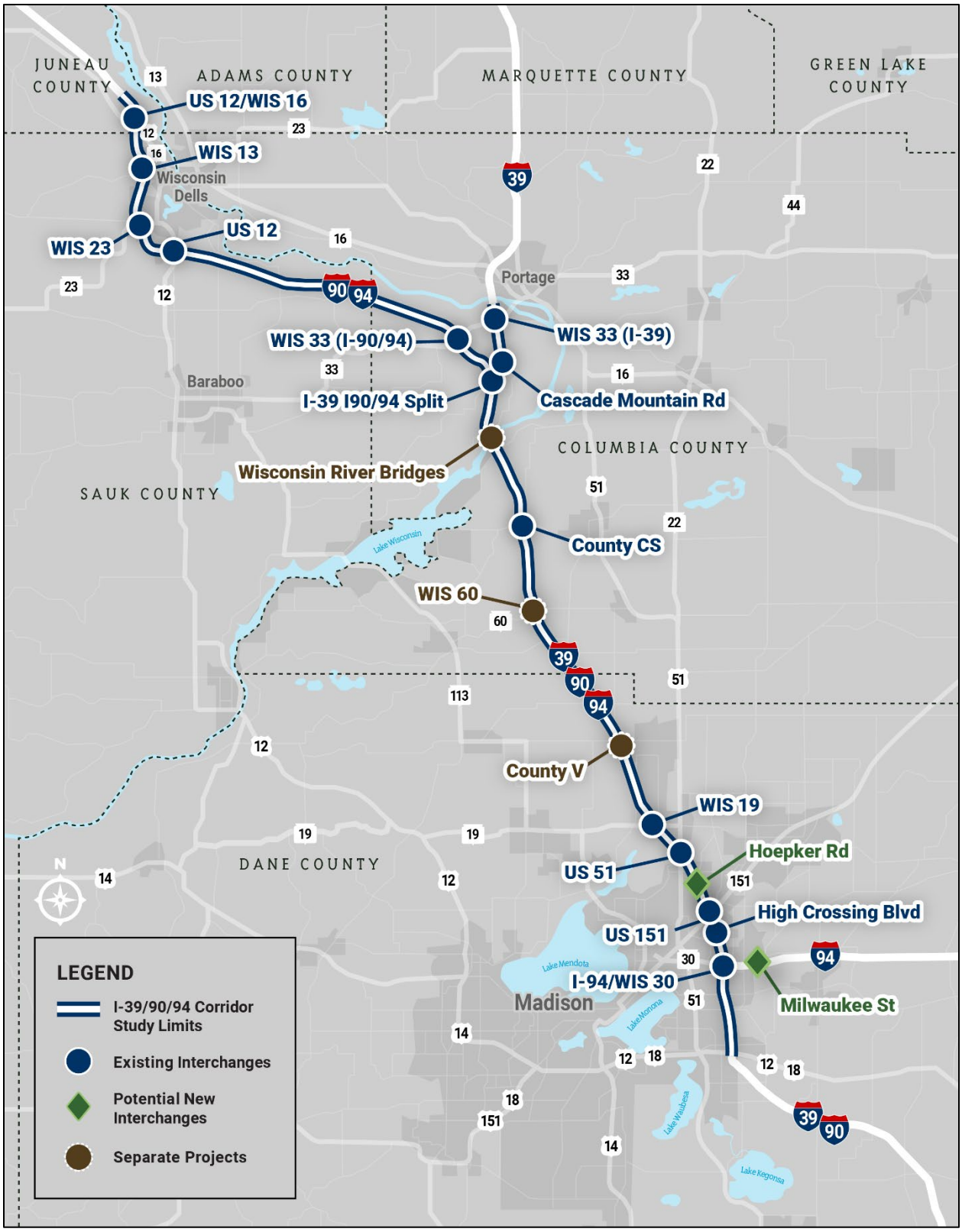
## Figure 1-3: Modernization Plus Added General-Purpose Lane

## Figure 1-4: Modernization Hybrid

### *Interchanges*

WisDOT considered interchange concepts at 17 interchange locations (15 existing interchanges and two proposed new interchanges) along the study corridor with the two modernization alternatives. Refer to Figure 1-5. The study does not include the WIS 60 interchange, currently under construction. Each of the existing 15 interchanges and two proposed new interchanges have multiple conceptual alternatives that WisDOT evaluated. Similar to the interstate conceptual alternatives, WisDOT evaluated these alternatives based on how well they would meet purpose and need, minimize impacts, address public and agency input and costs. Table 1-1 summarizes the interchange concepts considered as part of this Draft EIS.

## Figure 1-5: Corridor Interchanges



### Table 1-1: Interchange Concepts Recommended for Further Study

| Existing Interchange | Design Concept(s) Considered in the Draft EIS | Description of Recommended Design |
|---|---|---|
| I-94/WIS 30 Interchange | Full Modernization #2 | • Reconstructs the existing interchange with modernization features<br>• Removes left hand entrances and exits, and weave movements are reduced providing safer movements from the I-39/90/94 exit to the US 151/High Crossing Boulevard Interchange |
| Proposed New Milwaukee Street Interchange | Partial Cloverleaf | • Utilizes a loop ramp for the westbound entrance ramp to maximize distance from the I-94/WIS 30 Interchange and allows a longer distance for traffic to weave between the proposed new Milwaukee Street entrance ramp and the I-94/WIS 30 interchange<br>• Recommended in adjacent neighborhood plans |
| US 151/High Crossing Boulevard | Directional | • Reconstructed such that the freeway-to-freeway movements to/from the east are free-flow movements<br>• Maintains a half interchange at High Crossing Boulevard, but better separates the ramps to/from the south to address congestion and safety<br>• US 151 interchange at Nelson Road/American Parkway is moved slightly northeast |
| Proposed New Hoepker Road Interchange | Shifted Diamond | • Provides access to ongoing business and residential development, including the American Family campus and UW Health hospital<br>• Standard interchange design, the most familiar interchange type with motorists |
| US 51 Interchange | Partial Cloverleaf | • To improve traffic operations, the design closes access to US 51 at North American Lane and Daentl Road; diverted traffic would use existing nearby intersections to access US 51<br>• Provides extended ramps improving traffic operations and safety |
| WIS 19 Interchange | U-Ramp | • Maintains WIS 19 under the Interstate and the U-ramp crosses under extended Interstate bridges over the railroad<br>• Increases capacity along WIS 19 from four lanes to six lanes between Tierney Crossing and Pepsi Way while reducing the number of signalized intersections |
| County V Interchange | 1. No Build; interchange constructed by others as a separate project<br>2. Diamond (if development does not occur) | 1. No Build: To be evaluated in a separate environmental review<br>2. Diamond: Improve existing interchange with traffic signalization and providing dual left-turn lanes on County V |

| Existing Interchange | Design Concept(s) Considered in the Draft EIS | Description of Recommended Design |
|---|---|---|
| County CS Interchange | Diamond | • Reconfigures the ramps to create a diamond interchange and reconstructs County CS and the bridge over the Interstate.<br>• County CS would include a divided median and protected left turns onto Interstate entrance ramps |
| I-39 I-90/94 Split Interchange | Low Build | • 3-level interchange in a similar footprint to the existing interchange<br>• Relocates Cascade Mountain Road access to the Interstate via WIS 78 ramps which are embedded into the interchange |
| WIS 33 at I-39 Interchange | Diamond | • Reconfigures ramp alignments to improve sight distances for improved driver reaction time<br>• Adds a divided median to protect WIS 33 left turning traffic onto entrance ramps<br>• Raises the road to reduce flood risk |
| WIS 33 at I-90/94 Interchange | Partial Cloverleaf | • Reconstructs the existing interchange in a similar footprint, ramp curves would be realigned to improve driver comfort, acceleration and deceleration lanes would be lengthened<br>• Raises the road to reduce flood risk |
| US 12 Interchange | Diverging Diamond | • Reconstructs the existing interchange in a smaller footprint<br>• Provides free flow left turns to entrance ramps<br>• Reduces the number of conflict points at intersections compared to other alternatives |
| WIS 23 Interchange | Diamond | • Reconfigures the existing interchange in a smaller footprint<br>• Ramp alignments improve sight distances for improved driver reaction time |
| WIS 13 Interchange | 1. Split Diamond<br>2. Trumpet | 1. Split Diamond: Provides Interstate access to and from WIS 13 and County H, while connecting them with one-way frontage roads on either side of I-90/94<br>2. Trumpet: Reconstructs the existing interchange to current design standards |
| US 12/WIS 16 Interchange | Diamond | • Reconstructs the existing interchange in a similar footprint with improved ramp design to provide better sight distance |

# 2. Indirect Effects Analysis

The *Code of Federal Regulations* (CFR) Title 40 defines indirect impacts[2] as follows:

- Indirect effects, which 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 1508.1(g)).

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

- WisDOT, Guidance for Conducting an Indirect Effects Analysis, November 2014
- AASHTO, Practitioner's Handbook 12, Assessing Indirect Effects and Cumulative Impacts Under NEPA, 2016
- National Cooperative Research Program Report 466, Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects, 2002
- FHWA, Questions and Answers Regarding the Consideration of Indirect and Cumulative Impacts in the NEPA Process, January 2003
- FHWA, Position Paper: Secondary and Cumulative Impact Assessment in the Highway Project Development Process, 1992
- National Cooperative Research Program, Project 25-25, Task 22: Forecasting Indirect Land Use Effects of Transportation Projects, December 2007
- 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 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):

[2] *Effects and impacts are used interchangeably. WisDOT preference is to use "impacts;" this technical memorandum uses the term "effects" only when indicated by the guidance that is cited.*

- 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.
- 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 following sections summarizes the six steps.

## 2.2. Step 1: Scoping, Selecting Activities and Determining 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 Area of Potential Effect (referred to as the Indirect Impacts Study Area).

### 2.2.1. Scoping Indirect Effects

WisDOT and FHWA published a notice of intent (NOI) to the Federal Register on July 18, 2023 to solicit comment and advise the public, agencies and stakeholders that an EIS will be prepared for the study. WisDOT announced the NOI on the study website and provided a link to a narrated presentation explaining the scoping process and opportunities to provide comments during the scoping period.[3] WisDOT also notified study subscribers and cooperating and participating agencies of the NOI via email. The NOI scoping comment period closed on August 17, 2023.

WisDOT and FHWA received seven comments from federal, state and local government agencies in response to the NOI for I-39/90/94 Corridor Study. Comments requested consideration of the potential for land use change at interchanges, as well as the potential for indirect air quality, wetlands, and surface water impacts, which this analysis has accounted for in considering potential impacts.

### 2.2.2. Selecting the Tools and Activities

The study team employed an array of tools and activities recommended in WisDOT's *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, including past indirect and cumulative impacts analyses completed for projects in the study area, and other data/analyses collected in the environmental documentation process to conduct the analysis. The study team also conducted a survey and five expert panel meetings in March 2023 with local planners and agency officials in the region, including representatives from:

- Greater Madison MPO
- Dane County

[3] *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.*

- City of Madison
- City of Sun Prairie
- Village of DeForest
- Village of Windsor
- Columbia County
- City of Portage
- Town of Arlington
- Town of Caledonia
- Sauk County
- City of Wisconsin Dells
- University of Wisconsin, Madison
- Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP)
- Wisconsin Department of Natural Resources

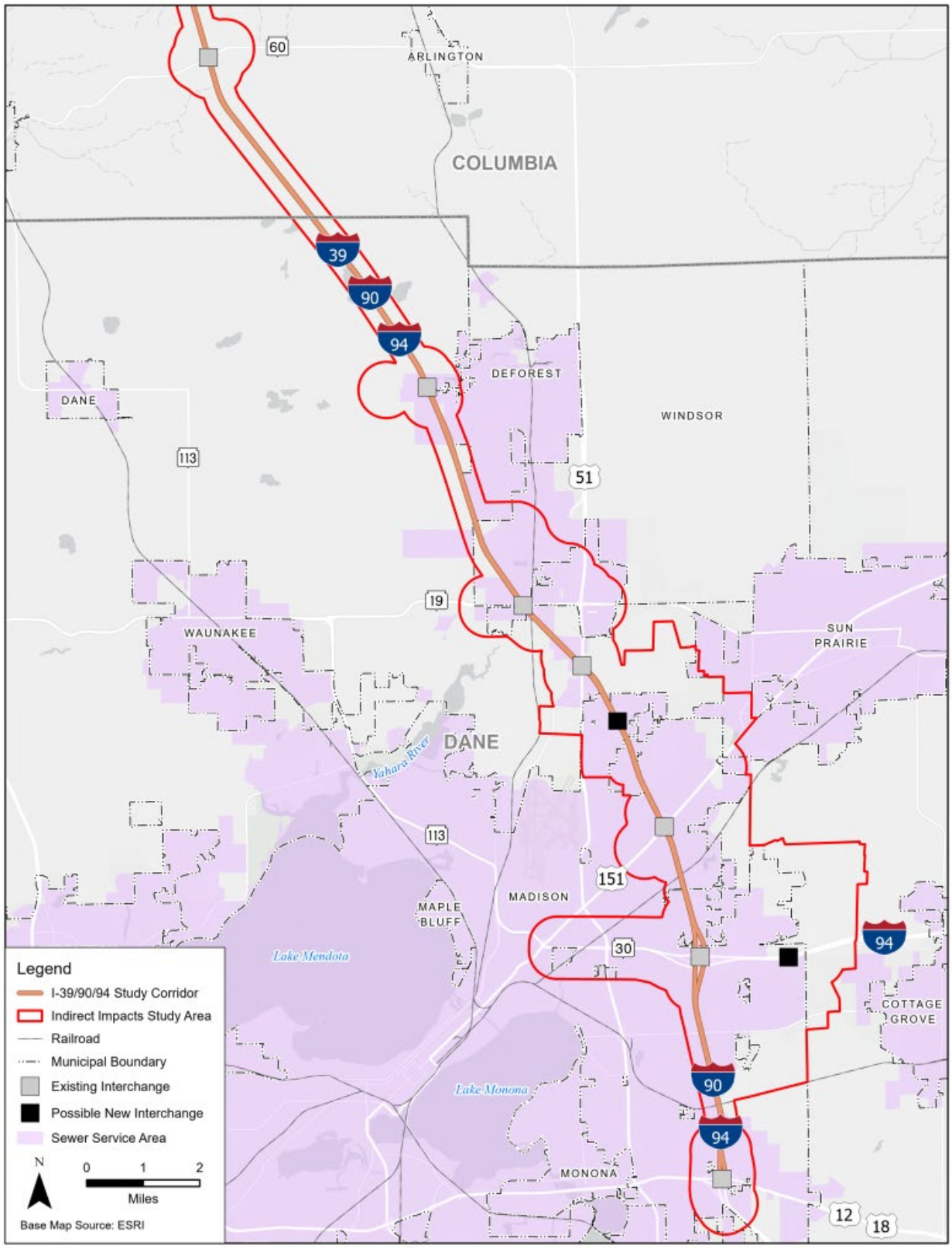
WisDOT interviewed expert panel members and used their input to identify available information and data, the indirect impacts study area as well as garner input on indirect impact issues, see Attachment A.

### 2.2.3. Determining the Indirect Effects Study Area

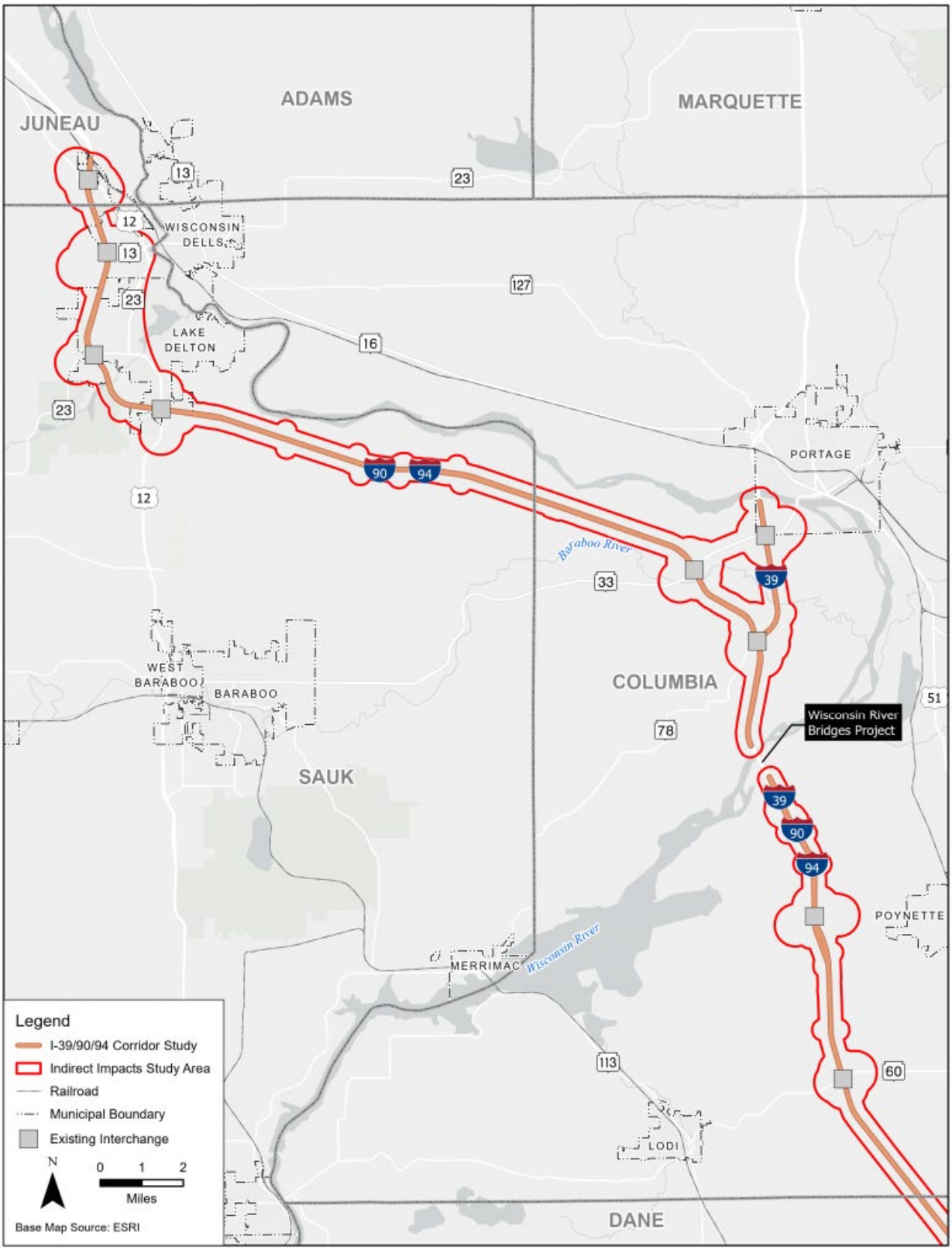
The Indirect Impacts Study Area is the geographic area that may experience indirect impacts from the proposed project. The boundaries for the analysis need to extend beyond the potential footprint of the proposed transportation project, since indirect impacts can occur at some distance from a proposed project. Several techniques are available to determine the study area for indirect impacts. These include adopting geographical or political boundaries, watershed or habitat boundaries, and incorporating input from stakeholders. The study team used a combination of accepted techniques for delineating the study area for indirect effects, including political boundaries, resources boundaries, professional judgement, data collection, and stakeholder interviews. Refer to Figure 2-1 and Figure 2-2, Indirect Impacts Study Area Boundary.

The Indirect Impacts Study Area is approximately 76.4 square miles and encompasses the social, historic, and natural resources that have the greatest likelihood for indirect impacts.

## Figure 2-1: Indirect Impacts Study Area Dane County



## Figure 2-2: Indirect Impacts Study Area Columbia, Sauk and Juneau Counties



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

This section summarizes the local, regional, and state plans; state and local regulations, including the regulatory framework for future growth (e.g., zoning and other ordinances); socioeconomic trends; land use and development; natural and historic resources; and other pertinent location-specific information that could be affected by indirect impacts.

### 2.3.1. Regional and Local 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.

The proposed action is mostly consistent with community comprehensive plans. The city of Madison and the Greater Madison Metropolitan Planning Organization (MPO) explicitly support the potential new interchange at Milwaukee Street. The Greater Madison MPO and Capital Area Regional Plan Regional Planning Commission support the potential new interchange at Hoepker Road, which is not addressed in the city of Madison's plans. The *Columbia County Comprehensive Plan 2030* references adding lanes to I-90/94 between I-39 and the Wisconsin Dells but does not explicitly identify a position (i.e., support or opposition to the improvements). The *Sauk County Comprehensive Plan* does not address improvements to I-90/94 but recognizes the importance of investing in traditional transportation corridors while encouraging alternative modes.

Local communities along the project corridor recognize I-39/90/94 as an asset and identify opportunities for commercial, business, and industrial development near interchanges. During the expert panel process the city of Sun Prairie in Dane County mentioned that although their community plans do not explicitly mention the I-39/90/94 improvements the community recognizes the potential benefits of improved access and an improved transportation network in the area. Two neighborhood development plans (Sprecher, and Northeast) in the city of Madison in the vicinity of the Milwaukee Street Interchange have expressed support for a new interchange. Towns in Columbia and Sauk counties, including Arlington, Caledonia, Dekorra, and Delton, prefer to see new commercial development take place in areas near the interchanges with I-39/90/94.

#### Capital Area Regional Planning Commission (CARPC) 2050 Regional Development Framework

Dane County is expected to add nearly 200,000 people by 2050 and the *2050 Regional Development Framework (2022)* lays a foundation for supporting growth that reduces greenhouse gas emissions and fosters resilience to climate change; increases access to opportunities for all people; and conserves natural, agricultural, and fiscal resources. The framework supports directing growth towards already developed areas by making better use of existing infrastructure including roads. This strategy is both a cost saving measure and reduces pressure on farmland and natural areas. Reducing stormwater runoff is one of the development practices that the framework highlights to reduce flooding potential, among other things. Additionally, the plan prioritizes equitable development and advocates for applying an equity lens when creating plans and policies.

The plan supports the potential new interchange at Hoepker Road.

#### Connecting Greater Madison 2050: Regional Transportation Plan

*Connecting Greater Madison 2050* (2022) is the region's long range transportation plan and complements CARPC's Regional Development Framework. Integration of land use and transportation

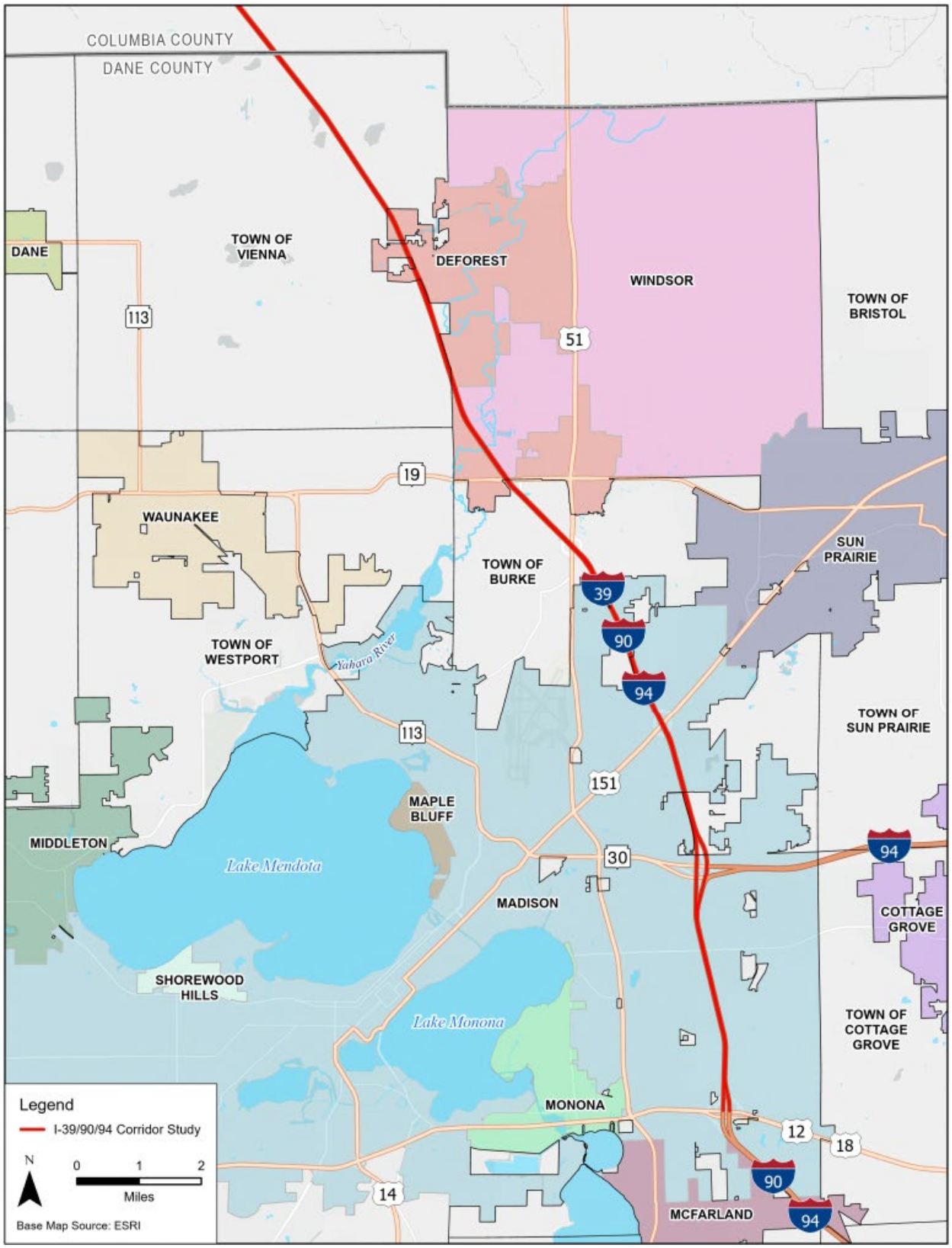
planning is central to both documents. The Regional Transportation Plan (RTP) identifies how the region intends to invest in its transportation system to meet current travel demand and future growth, while setting investment priorities to leverage limited funds. Three critical issues, identified in the RTP, will drive planning and decision making: equity, climate change, and health. With respect to climate change, the plan seeks to ensure that transportation systems can withstand and recover quickly from extreme weather events, while also reducing the greenhouse gas emissions of the transportation sector. The plan's stated goals are creating livable communities; ensuring transportation safety; building a transportation system that fosters prosperity, equity, environmental sustainability, and system performance. The I-39/90/94 Corridor Study is referenced in the RTP as one of three ongoing major state highway corridor studies, with a note that specific projects related to these corridors will be added to the RTP pending the outcomes of the studies. The two potential new interchanges that are being considered as part of the I-39/90/94 Corridor Study - Hoepker Road and Milwaukee Street - are both mentioned in the RTP. Several Transportation Demand Management (TDM) and Transportation System Management and Operations (TSMOs) strategies highlighted in the RTP will be considered as part of the I-39/90/94 Corridor Study.

### Dane County Comprehensive Plan

Developed in accordance with the state's comprehensive planning legislation, the *Dane County Comprehensive Plan* (2007, amended 2016) integrates or addresses state planning goals including, but not limited to, redevelopment of land with existing infrastructure; protection of natural areas; and provision of an integrated, efficient, and economical transportation system that meets the needs of all citizens. Survey respondents identified "planning for future growth" as the single most important issue facing Dane County. To address land use, the comprehensive plan incorporates several long-established county and regional plans built around four foundational planning principles farmland preservation; parks and open space; urban service areas; and environmental corridors. The comprehensive plan aims to coordinate land use and transportation plans as well as ensure that future transportation planning examines the full range of costs associated with infrastructure improvements.

Figure 2-3 illustrates the municipalities in Dane County near the Indirect Impacts Study Area.

## Figure 2-3: Dane County Municipalities Near the Study Area



## Dane County Farmland Preservation Plan

The *Dane County Farmland Preservation Plan* (2022) sets the county's goals, objectives, and policies for protecting working agricultural lands and the farm economy. Dane County has both the largest agricultural economy in Wisconsin and the state's second largest and fastest growing metropolitan area. The preservation plan is one tool for balancing these competing demands and is developed to be consistent with the county's comprehensive plan. It identifies areas suitable for long term farmland preservation. Additionally, the preservation plan makes farmers eligible for state benefits under the Working Lands Initiative, including income tax credits.

## Dane County Land and Water Resource Management Plan

The *Land and Water Resource Management Plan* (2019) is a ten-year plan intended to guide Dane County's efforts to protect and improve its natural resources. The five goals identified in the plan to spearhead these efforts are assess, protect and improve surface water and groundwater resources; maintain viable agricultural lands for long-term production; develop, explore and implement innovative ideas; protect and enhance in-stream, riparian, wetland and upland habitats; and partner with and involve citizens on soil and water protection initiatives.

## Dane County Parks and Open Space Plan

The *Dane County Parks and Open Space Plan 2018-2023* (2018) is a countywide comprehensive outdoor recreation and natural resource plan that is updated every five years to identify significant cultural, historical, and natural resources that should be considered for possible protection, preservation, or restoration. The plan also identifies recreation needs and the county's role in providing facilities to meet projected demand. Connecting people to the land, water, and cultural resources of Dane County is the stated vision of the plan.

## Dane County Climate Action Plan

The *Dane County Climate Action Plan* (2020) aims to reduce greenhouse gas emissions 50% county-wide by 2030 and put the county on a path to be carbon-neutral by 2050. The plan is consistent with the latest recommendations from the Intergovernmental Panel on Climate Change. Dane County outlines strategies to reduce vehicle miles traveled including smart growth, urban villages, active transportation, and regional transit.

## Dane County Water Quality Plan

The *Dane County Water Quality Plan* (2004) strives to protect, improve, and enhance water quality in Dane County. The plan provides the policy framework and guidance for state and local water quality protection programs. A key component of the plan is the identification of urban service areas and environmental corridor boundaries, which may be modified to reflect changes in land use plans.

## City of Madison Comprehensive Plan

It is estimated that Madison's population could grow by 25% between 2015 and 2040. The *City of Madison Comprehensive Plan* (2018) was developed with this growth, as well as changing demographics, in mind. The guiding lenses for the plan are equity, sustainability, health, and adaptability. Twelve goals were chosen to reflect the community's long-term objectives. Goals for land use and transportation consist of compact, interconnected neighborhoods anchored by a network of mixed-use activity centers; and a regional transportation network that offers a variety of safe, efficient, and affordable modes. The

comprehensive plan identifies priority growth areas where the city should accommodate much of the anticipated new housing units and jobs including large peripheral growth areas adjacent to the I-39/90/94 corridor. The plan also supports the potential new interchange at Milwaukee Street, one of the two new interchanges that are being considered as part of the I-39/90/94 Corridor Study.

## Madison in Motion

*Madison in Motion* (2017), the city of Madison's sustainable transportation plan, is intended to guide future transportation decisions in Madison in order to help make the city more walkable, bikeable, and transit oriented. It provides a framework to strengthen neighborhoods with context-appropriate future development.

## Neighborhood Development Plans

The city of Madison has developed neighborhood development plans to address the growth and development of the City's peripheral urban expansion areas where development is expected to occur in the foreseeable future. Figure 2-4 illustrates the location of Interstate-Area Neighborhood Development Plans. A summary of applicable Neighborhood Development Plan follows.

### *Sprecher Neighborhood Development Plan*

The *Sprecher Neighborhood Development Plan* (1998, amended 2012) was prepared to guide future growth in a new neighborhood located on the east side of Madison between I-90 and the Door Creek lowlands. Sprecher is part of the peripheral growth areas identified in Madison's Comprehensive Plan. The neighborhood development plan supports the potential new Milwaukee Street Interchange which would provide quicker freeway access in an area of the city primed for development.

### *Northeast Neighborhoods Development Plan*

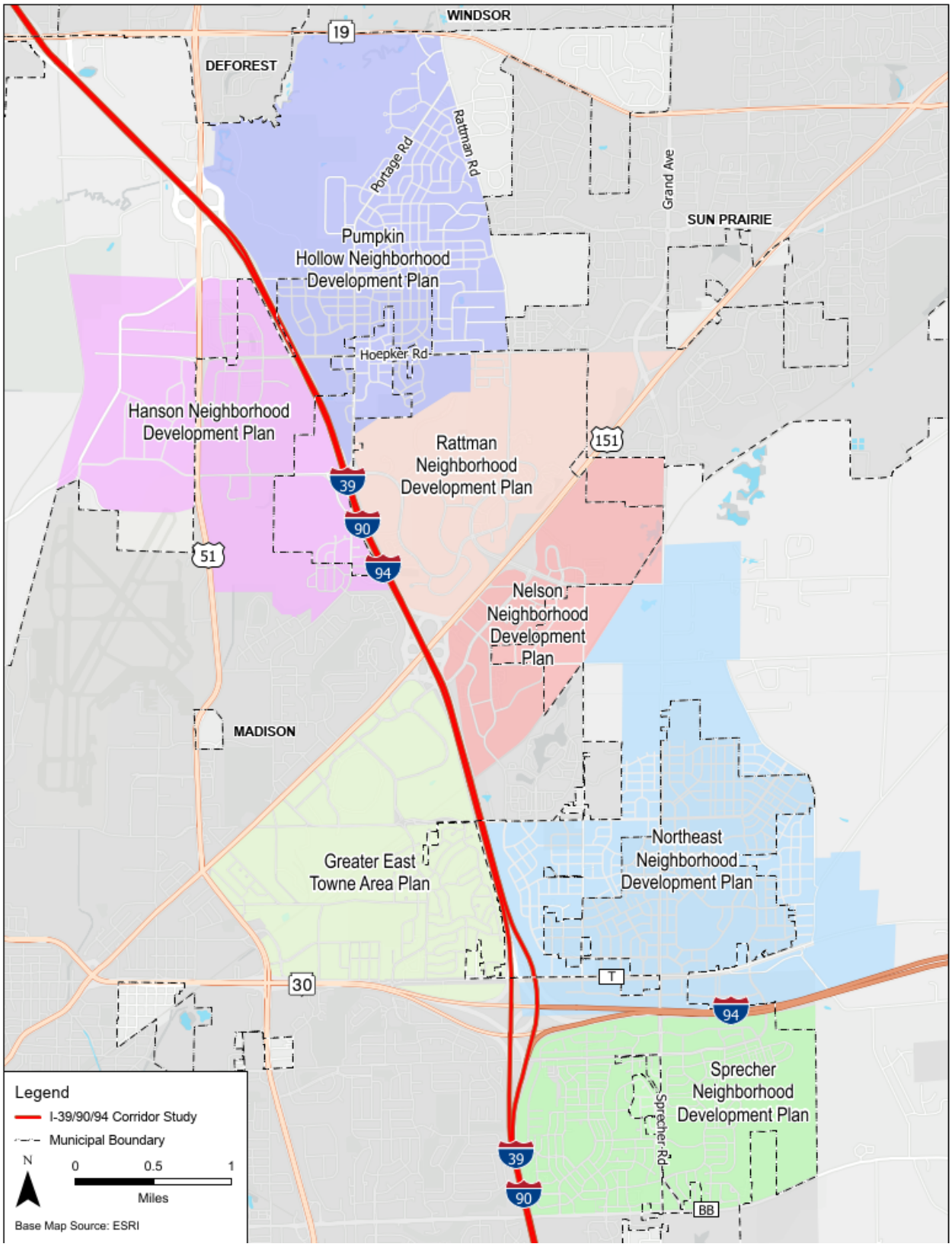
The *Northeast Neighborhoods Development Plan* (2009) was prepared to guide the future growth and development of new neighborhoods located on the city of Madison's northeast side. The 2006 city of Madison comprehensive plan identified the planning area as having near-term potential for urban development. The area is comprised of lands within the city of Madison or the towns of Burke, Blooming Grove, Sun Prairie and Cottage Grove. The plan includes a statement that the Sprecher Neighborhood Development Plan, south of the planning area, identified a location of a potential interchange at the planned northerly extension of Milwaukee Street.

The plan identifies a future major employment district to be developed in the area generally north of I-94, to include corporate and professional offices, services and ancillary uses such as business services, conference centers, childcare, small-scale retail and lodging.

### *Nelson Neighborhood Development Plan*

The *Nelson Neighborhood Development Plan* (2019) lays out detailed land use recommendations and provides for an efficient expansion of the city of Madison in a planning area bordering I-39/90/94 to the west. The Nelson neighborhood is part of the peripheral growth areas identified in Madison's comprehensive plan. Select parcels within the neighborhood are currently part of the town of Burke but will become part of Madison by 2036. The plan includes a proposed redesign of the US 151 and Nelson Road Interchange, including an extension of High Crossing Boulevard to American Family Drive to connect the Nelson and Rattman neighborhoods, as well as provide easier access from 151 southbound into The American Center.

## Figure 2-4: City of Madison Interstate-Area Neighborhood Plans



### *Greater East Towne Area Plan*

This planning area is generally made up of a single-use retail development surrounded by large parking lots, including the East Towne Mall. In the 1980's, 1990's and early 2000's businesses catering to the users of I-39/90/94 thrived. However, with the downturn of 2008, by the early 2010's the area saw vacant buildings, business turnover, and lack of new investment. The *Greater East Town Area Plan* (2022) sets a vision for the next 20-plus years for the area to guide the transition and redevelopment of predominantly commercial areas into mixed-use activity centers. A new bus rapid transit line is anticipated to start in 2024. It will provide service from the East Towne Mall connecting the Greater East Towne area to downtown Madison, the UW Campus, and out to the West Towne Mall.

### *Rattman Neighborhood Development Plan*

The general development concept for the planning area envisions primarily an office and commercial development with limited areas of residential development (largely already developed); along with a 238 acre open space and community separation area known as the Northeast Greenspace. This planning area includes The American Center between I-39/90/94 and American Parkway, which is an office park supporting corporate headquarters, facilities, research and development facilities, and supporting uses. The *Rattman Neighborhood Plan* (2019) indicates there are opportunities to add additional development to existing sites within The American Center. Hoepker Road is generally the north boundary of the planning area, although the planning area is east of the potential new Hoepker Road Interchange with I-39/90/94. The plan indicates that Hoepker Road provides an east-west linkage between the Madison and Sun Prairie urban areas.

### *Hanson Road Neighborhood Development Plan*

The *Hanson Road Neighborhood Development Plan* (2000, amended 2021) has been prepared to guide the future growth and urban development of a new neighborhood located on the north edge of the city of Madison, north and east of the Dane County Regional Airport and west of I-39/90/94. The plan recognized that the area's highway accessibility and location near the Dane County Regional Airport would make much of the land attractive for storage/distribution or light industrial uses. The plan facilitates planning for the design and construction of infrastructure such as streets, pedestrian and bicycle trails, sanitary sewer service, water systems, and stormwater management facilities. Provisions for the protection of environmentally sensitive features are also incorporated into the plan. Most of the lands in the planning area are currently in agricultural uses, vacant, or in various forms of natural open space (approximately 74 percent).

### *Pumpkin Hollow Neighborhood Development Plan*

The *Pumpkin Hollow Neighborhood Development Plan* (2008, amended 2019) was prepared to guide the future growth and development of a new residential neighborhood located on the northeast side of the city of Madison. The Pumpkin Hollow neighborhood encompasses the area northeast of the potential new Hoepker Road Interchange. The interchange is not included as a recommendation in the plan because area residents and property owners did not support an interchange during the planning process. While a new interchange would improve the connectivity of the neighborhood, it would also increase traffic and support development inconsistent with the primarily residential and open space land uses recommended in the plan. If an interchange were constructed at Hoepker Road, the city of Madison would modify the Pumpkin Hollow NDP.

### Town of Burke Comprehensive Plan

Regional cooperation is an overarching principle of the *Town of Burke Comprehensive Plan* (2013). Burke is located at the US 51 interchange with I-39/90/94 and is next to the Dane County Regional Airport. A 2007 cooperative agreement between the town of Burke, village of DeForest, city of Sun Prairie, and the city of Madison plans for the transfer of land from the town to adjacent municipalities by 2036. Accommodating steady population growth and planning for the gradual dissolution of the town are key components of the plan. The town of Burke wishes to maintain its exurban character and low-density, single-family housing.

### Sun Prairie Comprehensive Plan 2019-2039

Northeast of Madison, Sun Prairie saw a substantial share of Dane County's population growth in the decade preceding the *Sun Prairie Comprehensive Plan 2019-2039* (2019). Sun Prairie uses its comprehensive plan to reinforce its commitment to sustainability, looking at the impact of planning decisions on the City's economy, natural environment, and social vibrancy. Sun Prairie's planning area extends beyond its current boundary. Balanced growth in coordination with an investment in public services is key to the city's plans for expansion. Traffic congestion is a concern for residents and the plan lays out policies for improving multi-modal transportation connections between Sun Prairie and surrounding communities.

### Village of Windsor Comprehensive Plan: 2035

The village of Windsor incorporated in 2015. The *Village of Windsor Comprehensive Plan* (2016) is an update to the town of Windsor Comprehensive Plan, a component of the Dane County Comprehensive Plan. US 51 runs through the village and I-39/90/94 crosses the southwest corner. The plan emphasizes the importance of balancing the effects of improvements to US 51 on surrounding land uses and maintaining the rural character and identity of the village.

### Village of DeForest Comprehensive Plan

The village of DeForest is in northern Dane County between US 51 and I-39/90/94. The village experienced substantial growth in population and jobs over the last decade. The focus of the *Village of DeForest Comprehensive Plan* (2023) is on supporting growth and change, while maintaining the fundamental character of the village. DeForest has two non-contiguous parts due to intergovernmental agreements between the village and adjacent municipalities. The comprehensive plan aims to establish complementary land use patterns and roles for the original village area and "DeForest South." The village has detailed planning areas for future growth and development east of the WIS 19 Interchange, centered around the WIS 19 and US 51 Interchange, and at the County V Interchange with I-39/90/94.

### Town of Vienna Comprehensive Plan

Agricultural preservation, the elimination of conflicts between agriculture and other land use, and the maintenance of rural character provide the foundation for the *Town of Vienna Comprehensive Plan* (2006, amended 2012). The town of Vienna desires to maintain its integrity as a town and therefore must be able to provide adequate levels of service to its own territory to avoid annexation.

## Figure 2-5: Columbia County Jurisdictions

### Columbia County Comprehensive Plan 2030

The *Columbia County Comprehensive Plan 2030* (2007, amended 2013) serves to guide the use of resources in order to find a balance between economic development, agricultural preservation, protection of natural and cultural resources, and the recognition of private property rights. Moderate and steady population growth that maintains quality of life and is matched by adequate jobs and housing is a goal for Columbia County. Agriculture and tourism are recognized as economic drivers and the comprehensive plan works to support their preservation and enhancement. To further the plan's transportation goals, Columbia County will work with WisDOT to ensure adequate access control management on highways in the county. Figure 2-5 illustrates the location of municipalities in Columbia County.

### Columbia County Farmland Preservation Plan

The *Columbia County Farmland Preservation Plan* (2013) focuses on the county's land use and zoning approaches to farmland preservation by identifying farmland preservation areas and accommodating compatible growth in predetermined locations. Access to Madison via I-39/90/94, as well as US 151 and 51, has led to commuter development pressure in the southern part of the county. The county anticipates the consolidation of farm tracts to continue and a renewed interest in new rural homesites.

### Town of Arlington Comprehensive Plan 2030

The overall vision statement in the *Town of Arlington Comprehensive Plan 2030* (2009) says that the town "will continue to be a community of family farms." The Plan encourages slow and steady growth that preserves personal property rights, natural resources, and the town's rural atmosphere. Restricting access to arterial highways and through-town road corridors to protect traffic-carrying capacity is a goal of the town of Arlington.

### Town of Dekorra Comprehensive Plan

Most of the land in Dekorra is undeveloped and the purpose of the *Town of Dekorra Comprehensive Plan* (2014, amended 2016) is to preserve Dekorra's rural character while also attracting development to specific areas of the town to help balance its tax base. Preserving natural areas from development, thoughtfully siting new housing, limiting housing density in agricultural areas, and protecting the appeal of the waterfront are strategies identified in the comprehensive plan. The land around the County CS Interchange with I-39/90/94 is identified as an area for future mixed-use development, primarily commercial and industrial. Dekorra will work with WisDOT and Columbia County to control highway access for the planned development area, including access consolidation where possible.

### Town of Caledonia Comprehensive Plan 2030

The *Town of Caledonia Comprehensive Plan 2030* (2009) envisions low to moderate population growth. To manage development, the plan outlines goals including limited housing growth and restricted access to arterial highways and through-town road corridors. Supporting the town's agricultural economy by ensuring prime farmland is permanently retained for agriculture use is a priority. Caledonia also wants to protect undeveloped recreation areas.

### People Planning Portage: 2030 Comprehensive Plan

The city of Portage adopted the motto "Where the North Begins" since regional traffic headed to the northern parts of Wisconsin typically exits I-90/94 onto I-39 and US 51, traveling through Portage. One of

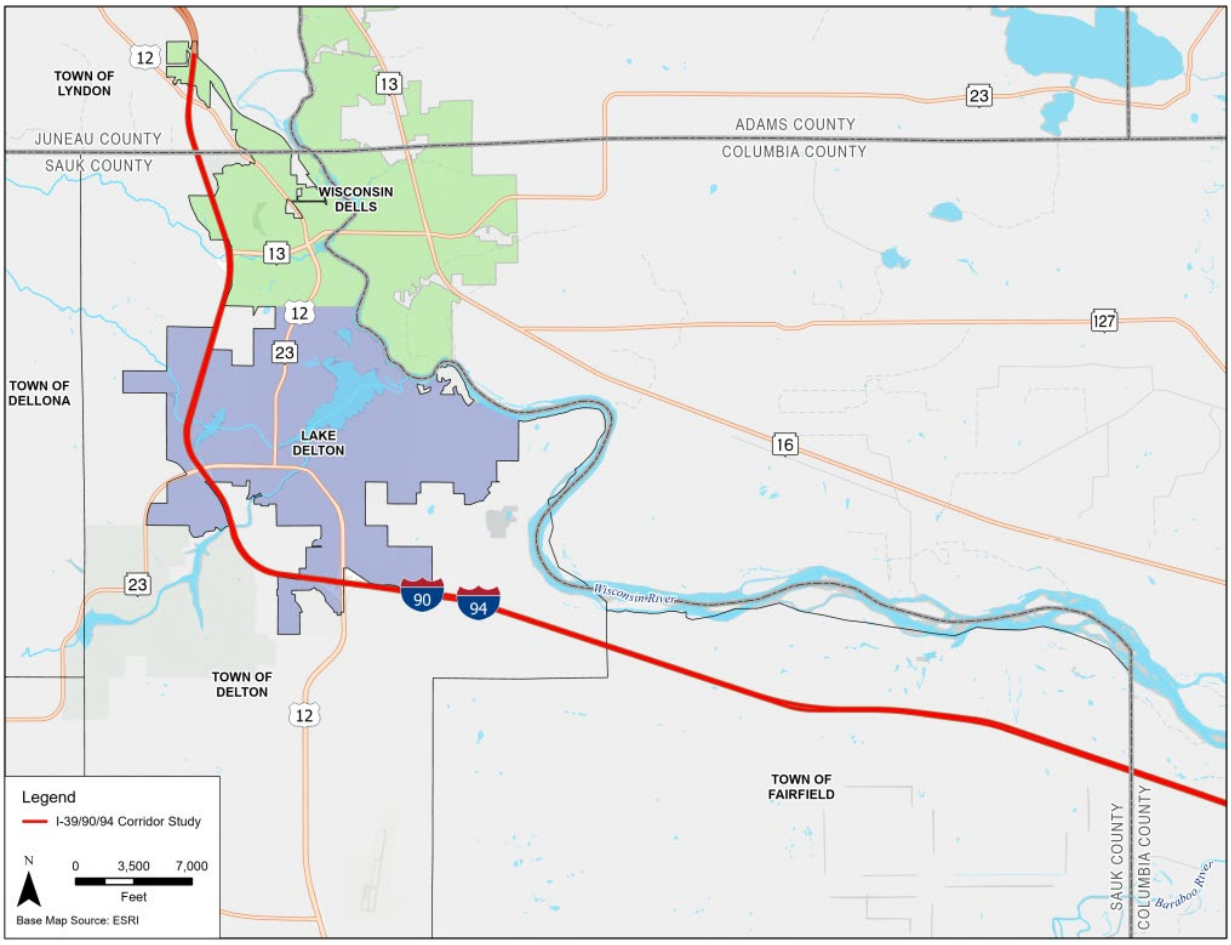
the City's goals in the *2030 City of Portage Comprehensive Plan* (2020) is to support transportation improvements which promote tourism. Portage sees transportation as an opportunity to advertise its assets and guide visitors through improved wayfinding. When planning for growth, Portage intends to promote infill development and new development that is contiguous to already developed areas, while protecting natural resources. Columbia County and the city of Portage's comprehensive plans both support a WIS 33 bypass of downtown Portage to facilitate the movement of through traffic between I-39/90/94 and destinations to the east.

## Sauk County Comprehensive Plan

Sauk County is one of the fastest growing counties in Wisconsin. The *Sauk County Comprehensive Plan's* (2009) mission is to "Position Sauk County for the Future." The comprehensive plan was developed using a sustainability lens, and identifies workable methods for implementing the plan's stated goals. When envisioning the county's transportation future, the plan recognizes the importance of investing in traditional transportation corridors while encouraging alternative modes. The county wants to remain a leader in preserving agricultural lands, promoting recreational opportunities, and maintaining natural resource areas. The need to plan for development along US 12, which connects to I-90/94, is emphasized in the comprehensive plan. Preservation of the region's natural and cultural resources is seen as a key component of transportation corridor planning.

Figure 2-6 illustrates the location of municipalities in Sauk and Juneau counties near the study area.

**Figure 2-6: Sauk and Juneau County Jurisdictions**



### Sauk County Farmland Preservation Plan

Sauk County's major land uses are agriculture and natural areas, and one of the main goals of the *Sauk County Farmland Preservation Plan* (2013) is balancing the development of non-agriculture land uses with agricultural preservation. The development of farmland preservation maps by towns within Sauk County is central to meeting this goal. In addition to land preservation, Sauk County also supports agriculture by encouraging information sharing, continuing education, and the promotion of agriculture as a career path, as well as creating a structure that fosters innovation and a diversity of operations within the agricultural sector.

### Sauk County Comprehensive Outdoor Recreation Plan 2020-2024

The vision of the *Sauk County Comprehensive Outdoor Recreation Plan 2020-2024* (2020) is to connect people to the rich natural, cultural, and historical resources of Sauk County, and create outstanding outdoor recreational opportunities now and in the future. The plan serves as a guidance tool for outdoor recreation decisions and encourages an integrated and connected system of public lands, recreation spaces, and unique places that are accessible to a diverse population for a range of uses.

### Making Sauk: A Place Plan

*Making Sauk: A Place Plan* (2017) was developed to help Sauk County take a more progressive approach to attracting and retaining residents. The plan identifies strategies for, and opportunities to, distinguish the county as a unique place and create emotional connections. The county's robust network of natural resources is central to its placemaking efforts. Weaknesses that the plan identifies include an aging population, labor shortage, lack of rental housing, gaps in amenities, and psychological distance between towns.

### Town of Fairfield Comprehensive Plan 2005-2025

An emphasis of the *Town of Fairfield Comprehensive Plan 2005-2025* (2006) is the preservation of natural resources and the protection of farm operations through planned growth. Economic development that enhances Fairfield's agriculture and conservation-based economy is encouraged. Fairfield wants the design of its transportation system to enhance the town's rural character, which includes minimizing new access points on public roads.

### Town of Delton Comprehensive Plan

The *Town of Delton Comprehensive Plan* (2009) is intended to help a rural community during a time of transition and growth. Delton is planning for change by identifying areas for both development and preservation, while emphasizing the need to build out transportation and utility infrastructure. Economic development that is local and recreation-based is prioritized. The town plans to focus tourist-oriented development on the US 12 corridor and redevelop US 12 for multimodal transportation.

### Village of Lake Delton 2042 Comprehensive Plan

The village of Lake Delton is located along the I-39/90/94 corridor and the Wisconsin River. It is one of the major tourist destinations in the state of Wisconsin and is known for its landscapes, both natural and man-made. Balanced development is central to the *Village of Lake Delton 2042 Comprehensive Plan* (draft 2022). Linking housing and employment is an important component of balanced growth and workforce housing is an area of opportunity for the village since very few people both live and work in Lake Delton. Almost half the land in the village is classified as commercial and pollution of watersheds is

a concern due to intense commercial development pressures in the region. Lake Delton wants to manage access to existing and future major arterials to maintain safety and operational efficiency.

### City of Wisconsin Dells Comprehensive Plan

The *City of Wisconsin Dells Comprehensive Plan* (2003) lays out a strategy for balancing the City's position as a major recreation and tourist destination with its residential setting, natural areas, and cultural heritage. Wisconsin Dells identifies the US 12/WIS 16 Interchange as an alternative gateway option to WIS 13. It would provide additional opportunities for branding and wayfinding as well as help to ease traffic on other routes. One of the areas designated for future commercial development is along US 12/WIS 16 to the I-90/94 Interchange.

### Juneau County Comprehensive Plan 2010-2030

Protection of natural and agricultural resources is at the forefront of the *Juneau County Comprehensive Plan 2010-2030* (2009). Natural resources and amenities as well as agriculture have a significant impact on the rural character of the county. The comprehensive plan strives to mitigate conflicts between agricultural and non-agricultural land uses while still promoting an expansion of the current economic base. From a transportation perspective, this means utilizing street and roadway access control measures where appropriate to aid in preserving travel capacity along major streets and roadways. Balancing individual property rights with community goals is part of the comprehensive plan's vision. Figure 2-6 illustrates the location of municipalities in Sauk and Juneau counties near the study area.

### Juneau County Land and Water Resource Management Plan 2019-2028

The *Juneau County Land and Water Resource Management Plan 2019-2028* (2018) describes the county's approach to improving natural resources over a ten-year period. Some goals identified in the plan include reducing soil erosion from agricultural runoff and targeting watersheds for focused conservation efforts that have a greater chance of improving water quality. In the land use section, the plan addresses flooding that limits crop production and impacts residential areas and locations where the transition of forests to agricultural land may be linked to water quality problems.

### Town of Lyndon Comprehensive Plan

The primary goal of the *Town of Lyndon Comprehensive Plan* (2021) is intentional growth that preserves the town's rural character and farmland. Lyndon has experienced development pressure due to its location along I-90/94 and the Wisconsin River near the Wisconsin Dells. Business corridors along US 12/WIS 16 are the preferred locations for economic development. The US 12/WIS 16 Interchange with I-90/94 is an entry point to Lyndon and was also identified as a gateway by the city of Wisconsin Dells. Lyndon does not intend to address the US 12/WIS 16 gateway because of past and expected annexation of this area by Wisconsin Dells.

## 2.3.2. State and Local Regulations

### Wisconsin's Comprehensive Planning (Smart Growth) Law

Wisconsin's comprehensive planning and smart growth law requires that as of 2010, county and local land use actions be consistent with comprehensive plans. Effectively, the law required all local governments in Wisconsin to have a comprehensive plan in place by 2010, to be able to engage in

programs or actions that affect 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.

## Land Use Regulations

Local jurisdictions have employed the following regulations to manage future growth:

- **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.
- **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 protect 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.
- **Cooperative Boundary Plans.** Cooperative boundary plans are long-term or permanent boundary agreements between two or more communities. They require review and approval by the Wisconsin Department of Administration.

Table 2-1 identifies the regulations each jurisdiction employs.

### Table 2-1: Land Use Regulations

| Jurisdiction | Zoning Ordinance | Subdivision Ordinance | Official Map | TIF Districts | Extraterritorial Jurisdiction | Cooperative Boundary Plan |
|---|---|---|---|---|---|---|
| Dane County | ✓ | ✓ | | | | |
| City of Madison | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Town of Burke | Covered by Dane County Zoning | ✓ | | | | ✓ |
| City of Sun Prairie | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Village of Windsor | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Village of DeForest | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Town of Vienna | Covered by Dane County Zoning and Vienna-DeForest ETZ | ✓ | | | | |
| Columbia County | ✓ | ✓ | | | | |
| Town of Arlington | Covered by Columbia County Zoning | ✓ | | | | |
| Town of Dekorra | Covered by Columbia County Zoning | ✓ | | | | |
| Town of Caledonia | Covered by Columbia County Zoning | | | | | |
| City of Portage | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Sauk County | ✓ | ✓ | | | | |
| Town of Fairfield | ✓ | ✓ | | | | |
| Town of Delton | Covered by Sauk County Zoning | | | | | |
| Village of Lake Delton | ✓ | ✓ | ✓ | ✓ | | |
| City of Wisconsin Dells | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Juneau County | ✓ | ✓ | | | | |
| Town of Lyndon | ✓ | ✓ | | | | |

## Environmental Regulations

Six Dane County-administered ordinances, three Columbia County-administered ordinances, four Sauk County-administered ordinances, three Juneau County-administered ordinances, and NR 121 Water Quality Planning[4] provide the tools for environmental preservation in the study area (Table 2-2). Additionally, local governments have the following ordinances with further environmental protection measures:

- **Floodplain Ordinance.** Regulates development activity in all areas that would be covered by the regional flood or base flood as shown on the Flood Insurance Rate Map or other maps approved by the Wisconsin Department of Natural Resources.
- **Erosion Control and Stormwater Management Ordinance(s).** Sets minimum requirements for erosion control and stormwater management for land disturbing activities.
- **Natural Resources Protection Ordinance.** Regulates development in natural resource areas.
- **Shoreland Wetland Zoning Ordinance.** Regulates development activity within shoreland and wetland areas.
- **Wellhead Protection Ordinance.** Regulates development activity within 1,200 feet of municipal wells. May also apply additional protection zones.
- **Agricultural Performance Standards and Agricultural Waste Management.** Provides standards for proper and safe storage, handling, and land application of manure in order to reduce the delivery of manure, other waste materials, fertilizers, and sediment to surface waters and groundwater.

**Table 2-2: Environmental Preservation Ordinances**

| Jurisdiction | Floodplain | Erosion Control and Stormwater Management | Natural Resources Protection | Shoreland Wetland Zoning | Wellhead Protection | Agricultural Performance Standards and Agricultural Waste Management |
|---|---|---|---|---|---|---|
| Dane County | ✓ | ✓ | | ✓ | | ✓ |
| City of Madison | ✓ | ✓ | | ✓ | ✓ | |
| Town of Burke | | | | | | |
| City of Sun Prairie | | ✓ | ✓ | | ✓ | |
| Village of Windsor | ✓ | ✓ | | ✓ | ✓ | |
| Village of DeForest | ✓ | ✓ | | ✓ | ✓ | |
| Town of Vienna | | | | | | |
| Columbia County | ✓ | | | ✓ | | ✓ |

[4] *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.*

| Jurisdiction | Floodplain | Erosion Control and Stormwater Management | Natural Resources Protection | Shoreland Wetland Zoning | Wellhead Protection | Agricultural Performance Standards and Agricultural Waste Management |
|---|---|---|---|---|---|---|
| Town of Arlington | | ✓ | | | | |
| Town of Dekorra | | ✓ | | | | |
| Town of Caledonia | | | | | | |
| City of Portage | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Sauk County | ✓ | ✓ | | ✓ | | ✓ |
| Town of Fairfield | | | ✓ | | | |
| Town of Delton | | | | | | |
| Village of Lake Delton | ✓ | ✓ | | ✓ | | |
| City of Wisconsin Dells | ✓ | | | ✓ | | |
| Juneau County | ✓ | | | ✓ | | ✓ |
| Town of Lyndon | | | ✓ | | | |

### 2.3.3. Socioeconomic Data and Trends

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

#### Population Trends

This section describes the past and projected population trends for the Indirect Impacts Study Area. Table 2-3 shows the population estimates for the state, counties and communities of the Indirect Impacts Study Area.

Dane County is the most populous county in the study area. In 2021 it had a population of 555,474, and Dane, Columbia, Sauk, and Juneau counties had a combined population of 705,716. Between 2010 and 2021, Dane, Columbia, Sauk, and Juneau counties experienced approximately one percent average annual rate of growth, with Dane County experiencing the highest average annual rate of growth at approximately 1.25% (approximately 6,000 new residents to the county each year). This was faster than the average annual rate of growth across the state of Wisconsin, with an average annual rate of growth of approximately 0.3% between 2010 and 2021.

The Wisconsin Department of Administration forecasts that Dane, Columbia, Sauk, and Juneau counties will experience average annual growth rate between 0.5% and 1.0% over the period 2021 to 2040. The municipalities and minor civil divisions in the study area will experience a combined average annual growth rate of 0.5% to 2040, with established communities like Madison in Dane County experiencing a

0.3% average annual growth rate, while the small town of Lyndon in Juneau County (population 988) experiencing a 4.2% average annual growth rate.

**Table 2-3: Community Populations 2010-2021 and 2040 Projected Population**

| Community | 2010 Population | 2021 Population | Percent Change (2010-2021) | 2040 Population Projection | Percent Change (2021-2040) | Forecast Annual Growth Rate |
|---|---|---|---|---|---|---|
| State of Wisconsin | 5,686,986 | 5,871,661 | 3.2% | 6,491,635 | 10.6% | 0.3% |
| **Dane County** | 488,073 | 555,474 | 13.8% | 606,620 | 9.2% | 0.5% |
| City of Madison | 233,209 | 265,447 | 13.8% | 281,150 | 5.9% | 0.3% |
| Town of Burke | 3,284 | 3,295 | 0.3% | 3,875 | 7.6% | 0.4% |
| City of Sun Prairie | 29,364 | 35,528 | 21.0% | 45,580 | 28.3% | 1.5% |
| Village of Windsor | 6,345 | 8,589 | 35.4% | 8,675 | 1.0% | 0.1% |
| Village of DeForest | 8,936 | 10,700 | 19.7% | 12,010 | 12.2% | 0.6% |
| Town of Vienna | 1,482 | 1,631 | 10.1% | 1,720 | 5.5% | 0.3% |
| **Columbia County** | 56,833 | 58,219 | 2.4% | 68,450 | 17.6% | 0.9% |
| City of Portage | 10,324 | 10,351 | 0.3% | 11,680 | 12.8% | 0.7% |
| Town of Arlington | 806 | 803 | -0.4% | 835 | 4.0% | 0.2% |
| Town of Caledonia | 1,378 | 1,714 | 24.4% | 1,890 | 10.3% | 0.5% |
| Town of Dekorra | 2,311 | 2,125 | -8.0% | 2,650 | 24.7% | 1.3% |
| **Sauk County** | 61,976 | 65,428 | 5.6% | 77,815 | 18.9% | 1.0% |
| Village of Lake Delton | 2,914 | 3,413 | 17.1% | 4,320 | 26.6% | 1.4% |
| City of Wisconsin Dells | 2,678 | 2,685 | 0.3% | 3,055 | 13.8% | 0.7% |
| Town of Delton | 2,391 | 2,869 | 20.0% | 3,320 | 15.7% | 0.8% |
| Town of Fairfield | 1,077 | 1,192 | 10.7% | 1,240 | 4.0% | 0.2% |
| **Juneau County** | 26,664 | 26,595 | -0.3% | 29,465 | 10.8% | 0.6% |
| Town of Lyndon | 1,384 | 988 | -28.6% | 1,770 | 79.1% | 4.2% |

*Source: U.S. Census Bureau, 2010 Census, 2021 American Community Survey 5-Year Estimates; Wisconsin Department of Administration, 2013 Population and Household Projections from 2010 Census, Wisconsin Minor Civil Divisions and Municipal Population Projections, 2010-2040*

## Households

Similar to population growth, most municipalities and jurisdictions experienced growth in the number of households between 2010 and 2021. All communities are projected to see more households by 2040, see Table 2-4. The largest municipality, the city of Madison in Dane County, is projected to experience a 0.6% average annual growth rate in households, while the small town of Lyndon in Juneau County (459 households in 2021) is projected to experience a 3.7% average annual growth rate in households.

### Table 2-4: Households 2010-2021 and 2040 Projected Households

| Community | 2010 Households | 2021 Households | Percent Change (2010-2021) | 2040 Household Projection | Percent Change (2021-2040) | Forecast Annual Growth Rate |
|---|---|---|---|---|---|---|
| State of Wisconsin | 2,279,768 | 2,401,818 | 5.4% | 2,790,322 | 16.2% | 0.9% |
| **Dane County** | 196,383 | 236,036 | 20.2% | 268,336 | 13.7% | 0.7% |
| City of Madison | 98,216 | 117,324 | 19.5% | 131,206 | 11.8% | 0.6% |
| Town of Burke | 1,251 | 1,099 | -12.2% | 1,563 | 42.2% | 2.2% |
| City of Sun Prairie | 10,941 | 14,701 | 34.4% | 19,256 | 31.0% | 1.6% |
| Village of Windsor | 1,379 | 3,136 | 127.4% | 3,546 | 13.1% | 0.7% |
| Village of DeForest | 3,240 | 4,012 | 23.8% | 4,873 | 21.5% | 1.1% |
| Town of Vienna | 560 | 559 | -0.2% | 668 | 19.5% | 1.0% |
| **Columbia County** | 22,735 | 24,016 | 5.6% | 29,404 | 22.4% | 1.2% |
| City of Portage | 4,060 | 4,119 | 1.5% | 4,832 | 17.3% | 0.9% |
| Town of Arlington | 309 | 308 | -0.3% | 346 | 12.3% | 0.6% |
| Town of Caledonia | 549 | 670 | 22.0% | 813 | 21.3% | 1.1% |
| Town of Dekorra | 974 | 920 | -5.5% | 1,208 | 31.3% | 1.6% |
| **Sauk County** | 25,192 | 26,850 | 6.6% | 33,887 | 26.2% | 1.4% |
| Village of Lake Delton | 1,269 | 1,634 | 28.8% | 1,997 | 22.2% | 1.2% |
| City of Wisconsin Dells | 1,148 | 1,317 | 14.7% | 1,410 | 7.1% | 0.4% |
| Town of Delton | 924 | 1.052 | 13.9% | 1,377 | 30.9% | 1.6% |
| Town of Fairfield | 424 | 472 | 11.3% | 525 | 11.2% | 0.6% |
| **Juneau County** | 10,527 | 10,363 | -1.6% | 13,082 | 26.2% | 1.4% |
| Town of Lyndon | 541 | 459 | -15.2% | 778 | 69.5% | 3.7% |

*Source: U.S. Census Bureau, 2010 Census, 2021 American Community Survey 5-Year Estimates; Wisconsin Department of Administration, 2013 Population and Household Projections from 2010 Census, Wisconsin Minor Civil Divisions and Municipal Population Projections, 2010-2040*

## Minority Population

In 2021 the state had a minority population of 19.9%. In Dane County, the cities of Madison and Sun Prairie are the only communities with a higher percentage of minorities than the state (Table 2-5) with 28.0% and 21.8% respectively. Asians are the largest minority group in both cities. Hispanics are the largest minority group in all other communities in Dane County. In Columbia County, the municipalities in the Indirect Impacts Study Area have a lower percent of minority population than the state. In Sauk County, the village of Lake Delton, and in Juneau County, the town of Lyndon have a higher percentage of minorities than the state. Hispanics are the largest minority group in Lake Delton. Two or more races is the largest minority category in the town of Lyndon, followed by American Indians/Alaska Native.

### Table 2-5. Population by Race and Ethnicity

| Community | White | Hispanic | Black or African Ameri-can | Ameri-can Indian/ Alaska Native | Asian | Native Hawaiian /Other Pacific Islander | Other | Two or More Races | Total Minority Popu-lation |
|---|---|---|---|---|---|---|---|---|---|
| State of Wisconsin | 80.1% | 7.2% | 6.2% | 0.7% | 2.8% | 0.0% | 0.2% | 2.7% | 19.9% |
| **Dane County** | 78.2% | 6.7% | 5.0% | 0.2% | 6.0% | 0.0% | 0.3% | 3.6% | 21.8% |
| City of Madison | 72.0% | 7.8% | 6.7% | 0.3% | 8.9% | 0.0% | 0.4% | 4.0% | 28.0% |
| Town of Burke | 91.9% | 2.3% | 0.0% | 0.0% | 5.1% | 0.0% | 0.0% | 0.7% | 8.1% |
| City of Sun Prairie | 78.2% | 3.7% | 7.5% | 0.3% | 5.9% | 0.2% | 0.0% | 4.2% | 21.8% |
| Village of Windsor | 92.2% | 5.5% | 0.9% | 0.0% | 0.6% | 0.0% | 0.0% | 0.9% | 7.8% |
| Village of DeForest | 80.3% | 8.5% | 1.4% | 0.3% | 3.1% | 0.0% | 0.0% | 6.4% | 19.7% |
| Town of Vienna | 98.8% | 0.8% | 0.0% | 0.0% | 0.0% | 0.0% | 0.2% | 0.2% | 1.2% |
| **Columbia County** | 91.6% | 3.8% | 1.7% | 0.3% | 0.9% | 0.0% | 0.1% | 1.7% | 8.4% |
| City of Portage | 84.5% | 7.1% | 4.9% | 0.3% | 0.7% | 0.0% | 0.0% | 2.5% | 15.5% |
| Town of Arlington | 93.2% | 0.0% | 0.0% | 1.0% | 5.7% | 0.0% | 0.0% | 0.1% | 6.8% |
| Town of Caledonia | 91.2% | 3.7% | 0.8% | 0.2% | 0.0% | 0.0% | 0.0% | 4.2% | 8.8% |
| Town of Dekorra | 91.7% | 3.7% | 1.6% | 0.2% | 0.0% | 0.0% | 0.0% | 2.7% | 8.3% |
| **Sauk County** | 89.8% | 5.6% | 0.8% | 1.1% | 0.5% | 0.0% | 0.1% | 2.1% | 10.2% |
| Village of Lake Delton | 69.8% | 19.8% | 4.6% | 0.0% | 3.5% | 0.0% | 1.6% | 0.7% | 30.2% |
| City of Wisconsin Dells | 88.3% | 7.3% | 4.3% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 11.7% |
| Town of Delton | 87.1% | 5.5% | 0.5% | 6.1% | 0.7% | 0.0% | 0.0% | 0.0% | 12.9% |
| Town of Fairfield | 95.5% | 1.0% | 0.0% | 0.5% | 0.0% | 0.0% | 0.5% | 2.5% | 4.5% |
| **Juneau County** | 89.9% | 3.3% | 2.4% | 0.7% | 0.5% | 0.0% | 0.0% | 3.1% | 10.1% |
| Town of Lyndon | 75.0% | 6.4% | 2.3% | 7.7% | 0.3% | 0.0% | 0.0% | 8.3% | 25.0% |

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

## Median Household Income

Communities in the Indirect Impacts Study Area have varying levels of income and poverty rates (Table 2-6). The median household income for the State of Wisconsin was $67,080 in 2021, and 6.6% of families statewide were below the poverty level. Median income was higher than the state as whole in Dane and Columbia counties and lower in Juneau County. Sauk County was comparable to the state. The village of Lake Delton in Sauk County and town of Lyndon in Juneau County had the two lowest median incomes.

The percentage of families below the poverty level was higher than the state as a whole in Juneau County, and lower than the state in Dane, Columbia and Sauk counties.

**Table 2-6: Median Household Income and Families Below Poverty Level by Community**

| Community | Median Household Income | Number of Families Below Poverty Level | Percentage of Families Below Poverty Level |
|---|---|---|---|
| State of Wisconsin | $67,080 | 98,322 | 6.6% |
| **Dane County** | $78,452 | 6,527 | 5.0% |
| City of Madison | $70,466 | 3,096 | 5.9% |
| Town of Burke | $94,738 | 0 | 0.0% |
| City of Sun Prairie | $83,409 | 371 | 4.1% |
| Village of Windsor | $104,179 | 86 | 3.8% |
| Village of DeForest | $88,664 | 253 | 8.7% |
| Town of Vienna | $121,023 | 13 | 2.8% |
| **Columbia County** | $73,786 | 745 | 4.7% |
| City of Portage | $56,303 | 202 | 8.7% |
| Town of Arlington | $106,923 | 2 | 0.8% |
| Town of Caledonia | $90,948 | 56 | 10.7% |
| Town of Dekorra | $96,111 | 21 | 3.1% |
| **Sauk County** | $67,702 | 1055 | 5.9% |
| Village of Lake Delton | $48,598 | 29 | 3.0% |
| City of Wisconsin Dells | $60,351 | 18 | 2.9% |
| Town of Delton | $75,646 | 45 | 5.3% |
| Town of Fairfield | $72,338 | 40 | 10.3% |
| **Juneau County** | $58,561 | 556 | 8.5% |
| Town of Lyndon | $53,875 | 17 | 6.4% |

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

## Environmental Justice

WisDOT performed an analysis to identify socioeconomic characteristics of the corridor and to identify minority and low-income populations. The full analysis is described in Section 3.8 of the Draft EIS. The analysis also reviewed age, disability, vehicle ownership, and language characteristics. The analysis used U.S. Census Bureau block groups within a half-mile of I-39/90/94 study corridor and was supplemented by the WisDOT's public involvement program discussed in Section 5.1 of the Draft EIS.

The environmental justice analysis used this data and information from the study's public involvement process to assess any potential adverse effects and disproportionately high and adverse effects to minority populations and low-income populations resulting from the I-39/90/94 Corridor Study.

Throughout the study corridor, populations are predominately white, non-minority residents. The Census block groups that have the highest percentage of minorities are in the Madison metropolitan area and near the Wisconsin Dells. Median household incomes vary across the study corridor, with higher incomes in Dane County and lower incomes in Sauk and Juneau counties. See Section 3.8 of the Draft EIS for more information about race, income, disability, and language characteristics.

Construction of I-39/90/94 Corridor Study build alternatives are not expected to result in disproportionately high and adverse effects to environmental justice populations within the study area.

## Employment Trends

Dane County's largest industry is health care and social assistance which employs more than 50,000 people, while the retail trade industry in Dane County produces the highest sales. The manufacturing industry employees the largest number of people in Columbia County – more than 5,000 – and produces the highest sales. Accommodation and food services (7,430), followed by manufacturing (5,312), are the industries which employ the most people in Sauk County. Manufacturing is the largest industry in terms of sales volume. Manufacturing is also the largest industry in Juneau County by both sales and number of employees (2,130).[5]

Wisconsin is split into 11 Workforce Development Areas (WDAs) and employment projections are made every two years for the WDAs. Dane, Columbia, and Sauk counties are part of the South Central WDA along with Dodge, Jefferson, and Marquette counties. Regional employment is expected to grow by 11.2% from 2020 to 2030, amounting to 55,901 additional jobs. This growth rate outpaces the state, which is projected to grow by 6.3% during the same period.[6] Juneau County is part of the Western WDA that also includes Buffalo, Crawford, Jackson, La Crosse, Monroe, Trempealeau, and Vernon counties. Regional employment is expected to grow by 6.5% (10,029 jobs) over the 10-year period.[7]

Dane County added more than 41,000 jobs between 2000 and 2010 and nearly another 10,300 from 2010 to 2020. CARPC expects the region to add 98,000 additional jobs by 2050.[8] As Dane County's population ages, labor force participation rates have fallen, and this trend is projected to continue through 2050. With fewer residents participating in the labor force, commuters from outside Dane County are projected to make up a larger share of the labor force, increasing from 13% in 2020 to 16% by 2050. At developments within the Indirect Impacts Study Area, 130 new jobs are anticipated at the East Park Medical Center[9] and up to 100 jobs at PinSeekers.[10]

See Table 3-1, Notable Past, Present, and Reasonably Foreseeable Future Actions, Land Use and Development, for other notable developments in the study area.

[5] *U.S. Census Bureau, 2017.*

[6] *Wisconsin Department of Workforce Development, 2023.*

[7] *Wisconsin Department of Workforce Development, 2023b.*

[8] *Capital Area Regional Planning Commission, 2021.*

[9] *UW Health, 2022.*

[10] *DeForest Times-Tribune, 2023.*

## 2.3.4. Land Use and Development Trends

### Existing and future land use/planned developments

Land uses in the Indirect Impacts Study Area vary from urban to rural, and generally consists of residential, commercial, industrial, agricultural, and public land, and open spaces. Dane County, which includes the Madison metropolitan area, is more urbanized compared to other counties in the study corridor. Outside of the Wisconsin Dells and village of Lake Delton in Sauk County, a major tourist destination, land use is predominantly agriculture, woodland, and wetland areas.

The I-39/90/94 study corridor has experienced continued growth over the years, primarily in the Madison metropolitan area. In the more rural sections of the study corridor, there has been modest residential, commercial, and industrial growth. Communities in the study area have prepared and adopted comprehensive (Smart Growth) plans that describe long-term development concepts to manage land use and growth in the future.

Figure 2-7 illustrates land use along the corridor in Dane County. Land uses at the interchanges along the I-39/90/94 study corridor are primarily commercial and industrial with some park, open space, and environmental corridors. Land uses transition to predominantly residential neighborhoods and parks associated with the surrounding cities and villages, moving further away from the study corridor. Residential land uses are present in and around Buckeye Road, Cottage Grove Road, and near the I-94/WIS 30 Interchange. The northern portion of the corridor in Dane County also includes parks and environmental corridors, including Token Creek Park and the Cherokee Marsh complex near US 51 and WIS 19 and the Upper Yahara River Environmental Corridor in the village of DeForest. North of WIS 19 the land use is predominantly rural open space and agricultural, with rural residential farther off the corridor in the villages of Windsor and DeForest.

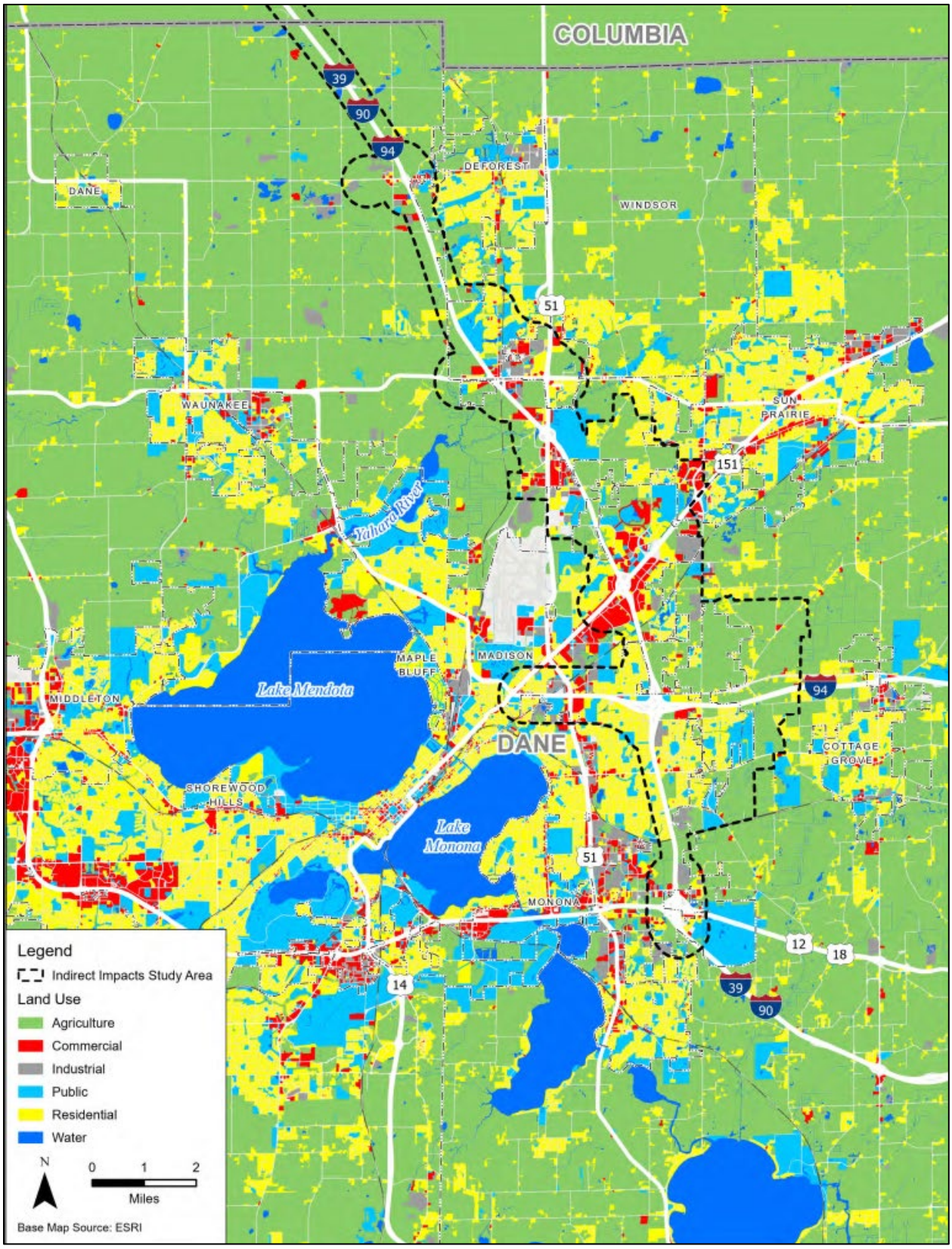
Figure 2-8 shows land uses as the study corridor travels north through Columbia, Sauk, and the southern portion of Juneau County. Land uses in Indirect Impacts Study Area are largely agricultural, low-density residential, and open space. Development in Columbia County is focused around the five interchanges with I-39/90/94. These interchanges have commercial and residential land uses adjacent to them. Industrial land is only found at the I-39 and I-90/94 Split Interchange. There is a large undeveloped, low-lying area between I-90/94 and the Wisconsin River. Part of this area is the U.S. Fish and Wildlife Service's 950-acre Baraboo River Waterfowl Production Area and the WDNR's 5,499-acre Pine Island State Wildlife and Natural Area. Additionally, a 176-acre ski resort, Cascade Mountain, is on the south side of I-90/94 north of the I-39 I-90/94 Split Interchange.

In Sauk County, south of the Wisconsin Dells, land uses in Indirect Impacts Study Area are similar to Columbia County – agricultural, public/open space, and low-density residential. Tourism is prevalent along the study corridor in northeastern Sauk County, primarily related to the resorts in the Wisconsin Dells and the village of Lake Delton. The three interchanges in Sauk County (US 12, WIS 23 and WIS 13) are within or near the Wisconsin Dells and the village of Lake Delton.

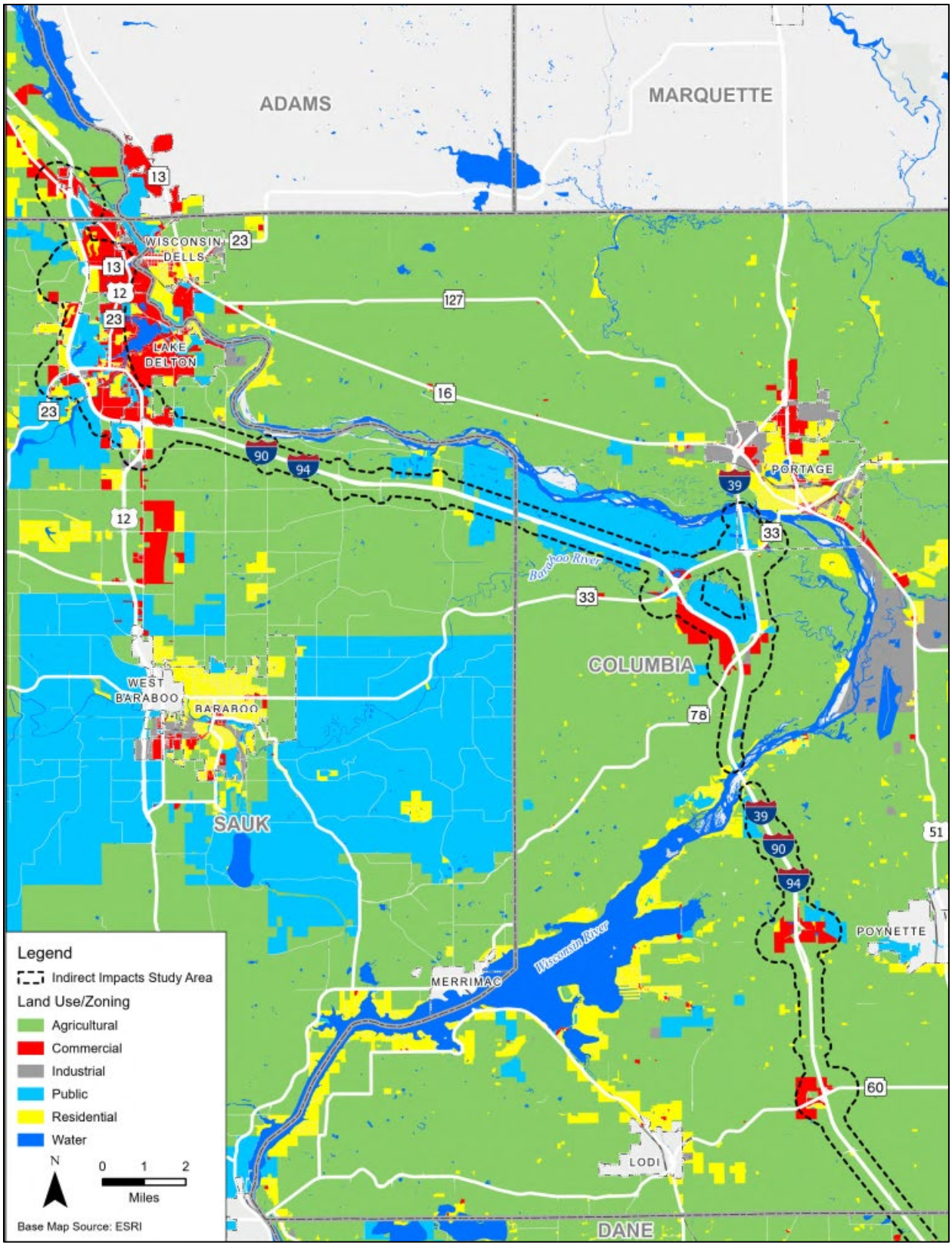
This part of the Indirect Effects Study Area also has large amounts of land dedicated to commercial and open space/recreational uses. Two state parks, Mirror Lake and Rocky Arbor are next to I-90/94. Tourism is the main industry and land use in the area.

A small portion of Juneau County is in the Indirect Impacts Study Area, including the US 12/WIS 16 Interchange. Land use in this portion of Juneau County is low density commercial, agricultural, and low-density residential.

## Figure 2-7: Existing Land Use: Dane County



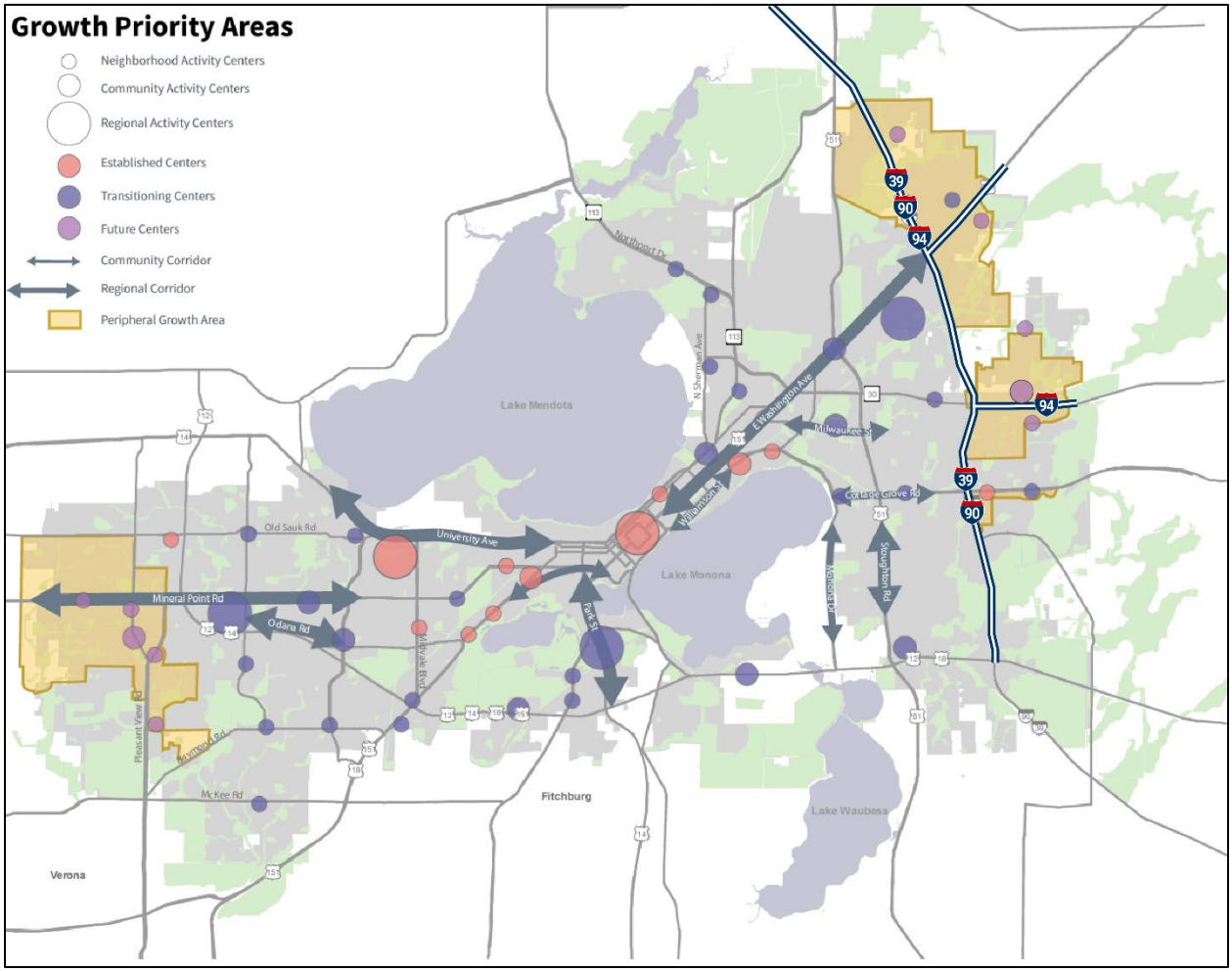
## Figure 2-8: Existing Land Use: Columbia, Sauk, and Juneau Counties



## Development trends

In Dane County, the study area is experiencing ongoing development, attracting major employers and jobs. Figure 2-9 shows the general growth priority areas for the city of Madison, with peripheral neighborhood expansion and future mixed-use centers. Some of these future growth areas occur in the Indirect Impacts Study Area, including adjacent to the two proposed new interchanges (Milwaukee Street and Hoepker Road). City and neighborhood development plans include the proposed new interchange at Milwaukee Street, which will facilitate near-term planned development.

### Figure 2-9: City of Madison Priority Growth Areas




*Source: https://www.cityofmadison.com/dpced/planning/documents/Part%201_Comprehensive%20Plan.pdf*

In Madison, the area east of the I-39/90/94 study corridor between WIS 30 and US 151 / High Crossing Boulevard is platted for development. Much of the areas north and south of US 151 east of the US 151 / High Crossing Boulevard Interchange are built out, including at The American Center, a 447-acre business park. Within The American Center, the UW Health Eastpark Medical Center is under construction and the Commons District is planned. UW Health Eastpark Medical Center is a 469,00 square-foot ambulatory facility across from East Madison Hospital and UW Health Rehabilitation Hospital, and the Commons District is an approved project that will provide a total of up to 950 dwelling units and 14,000 square-feet of commercial space across multiple buildings.

Along Hoepker Road and I-39/90/94 study corridor much of the land is developed or only available for limited development: to the west is largely developed; to the northeast much of the area is planned for stormwater management and open space; and to southwest there are development constraints due to the airport. To support planned development near Hoepker Road and I-39/90/94, the city of Madison requested WisDOT to evaluate an interchange at Hoepker Road.

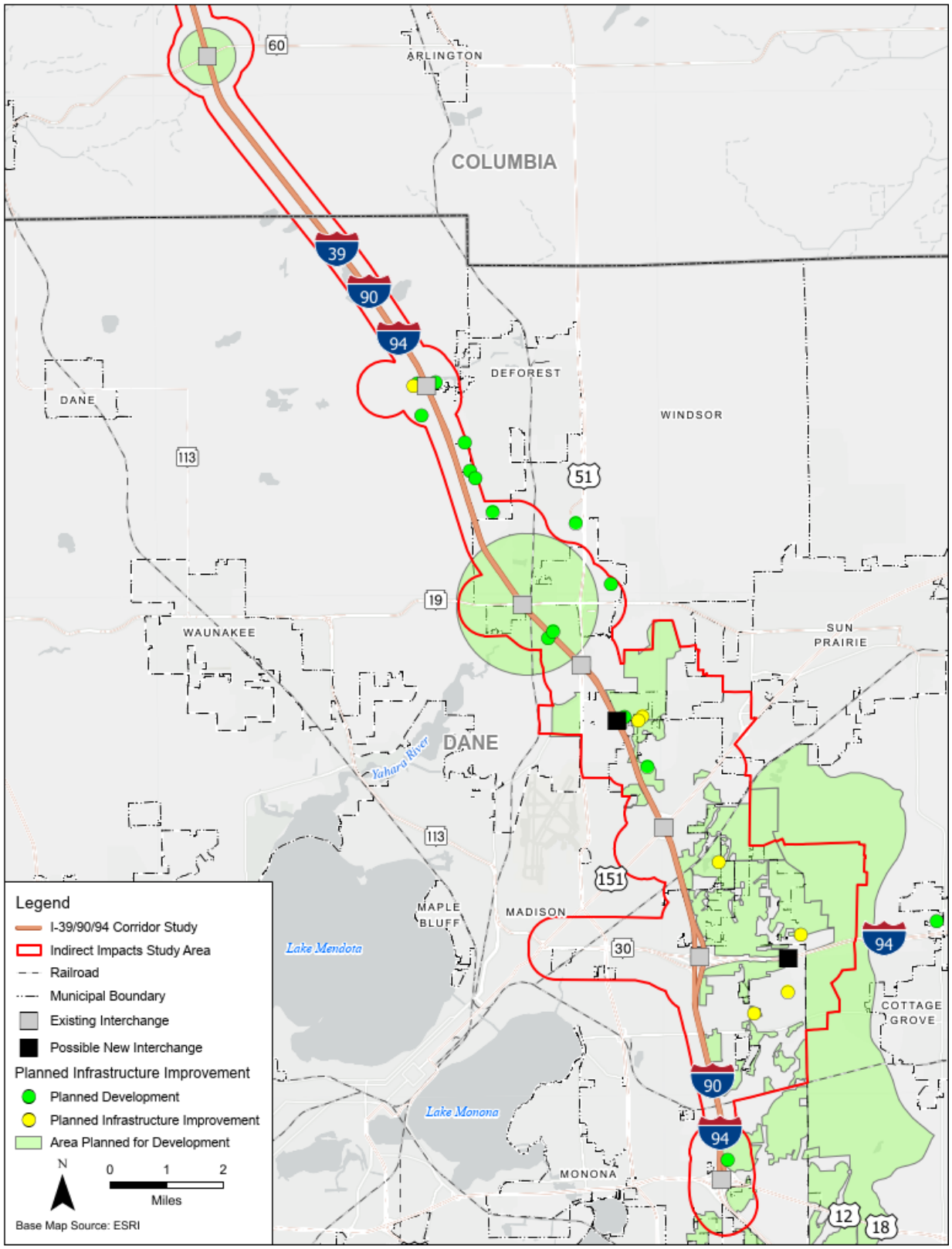
North of Madison in DeForest, a number and variety of developments are planned or ongoing. Development includes an industrial/transshipment facility (approximately 50 acres) along Daentl Road west and south of the WIS 19 Interchange, an industrial and distribution development south of Cake Parkway and west of County Road V, a commercial development on the east side of I-39/90/94 near County Road V, and a large retail and fueling station near County Road V. Residential and commercial development is also ongoing at Conservancy Place, a planned mixed-use neighborhood in DeForest located between the WIS 19 and County V interchanges. PinSeekers, a golf and entertainment facility, recently opened and expansion of ABS's headquarters is underway.

Outside of Dane County, development is more limited within the Indirect Impacts Study Area, though tourist-oriented development continues in the Wisconsin Dells area including an expansion of the Kalahari Resort at the US 12 Interchange. The $50 million project will add 237 new rooms.

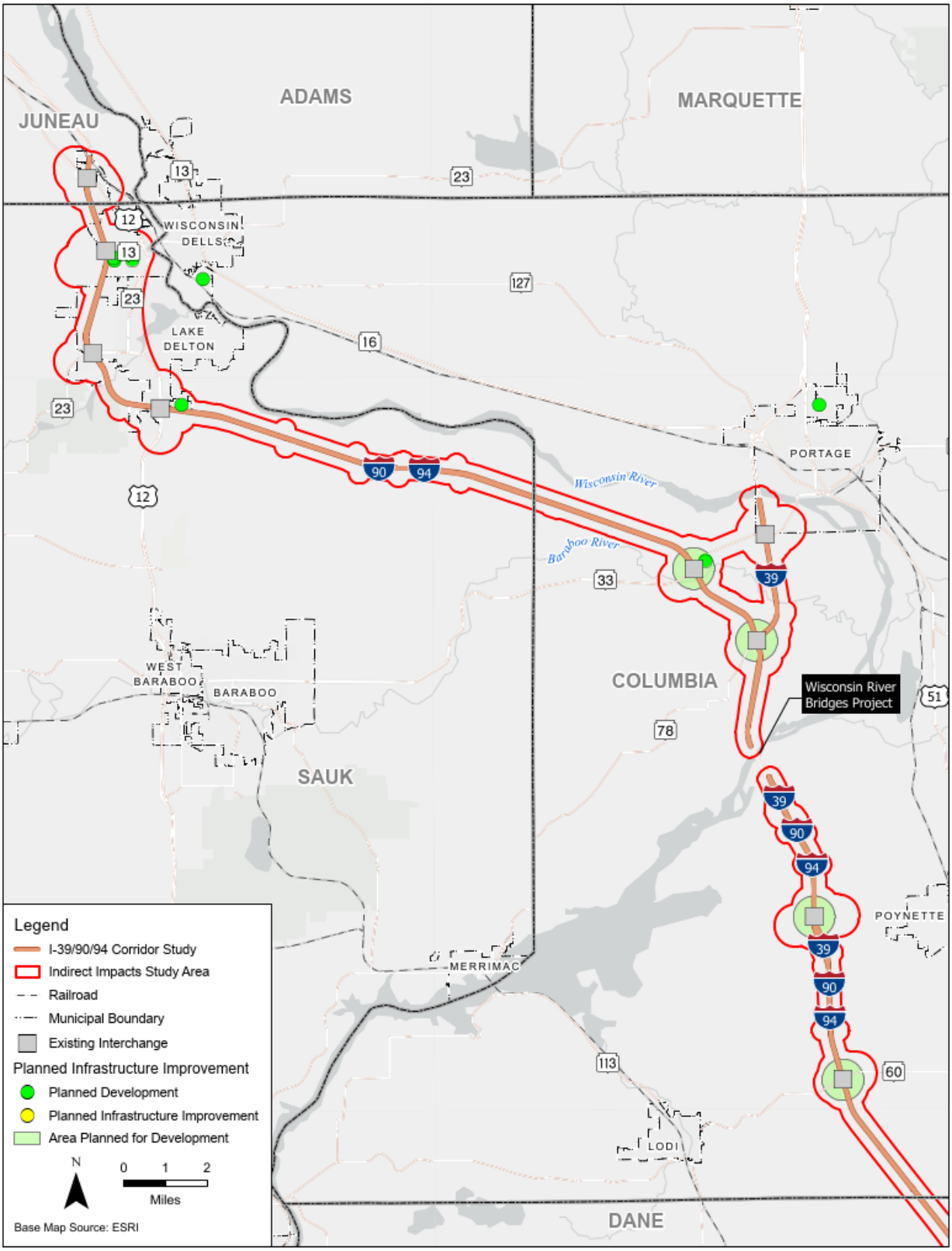
Additional ongoing and planned development projects in the Indirect Impacts Study Area identified during meetings with local and regional planners can be found in Table 3-1.

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, extraterritorial zoning, and cooperative boundary agreements, see Section 2.3.2. Further, as described in Section 2.3.1, 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 before other more costly areas are developed. Based on input received at expert panel meetings, communities do not often veer from their comprehensive plans, see Attachment A.

## Figure 2-10: Ongoing and Planned Developments Dane County



## Figure 2-11: Ongoing and Planned Developments Columbia, Sauk and Juneau Counties



## Agriculture

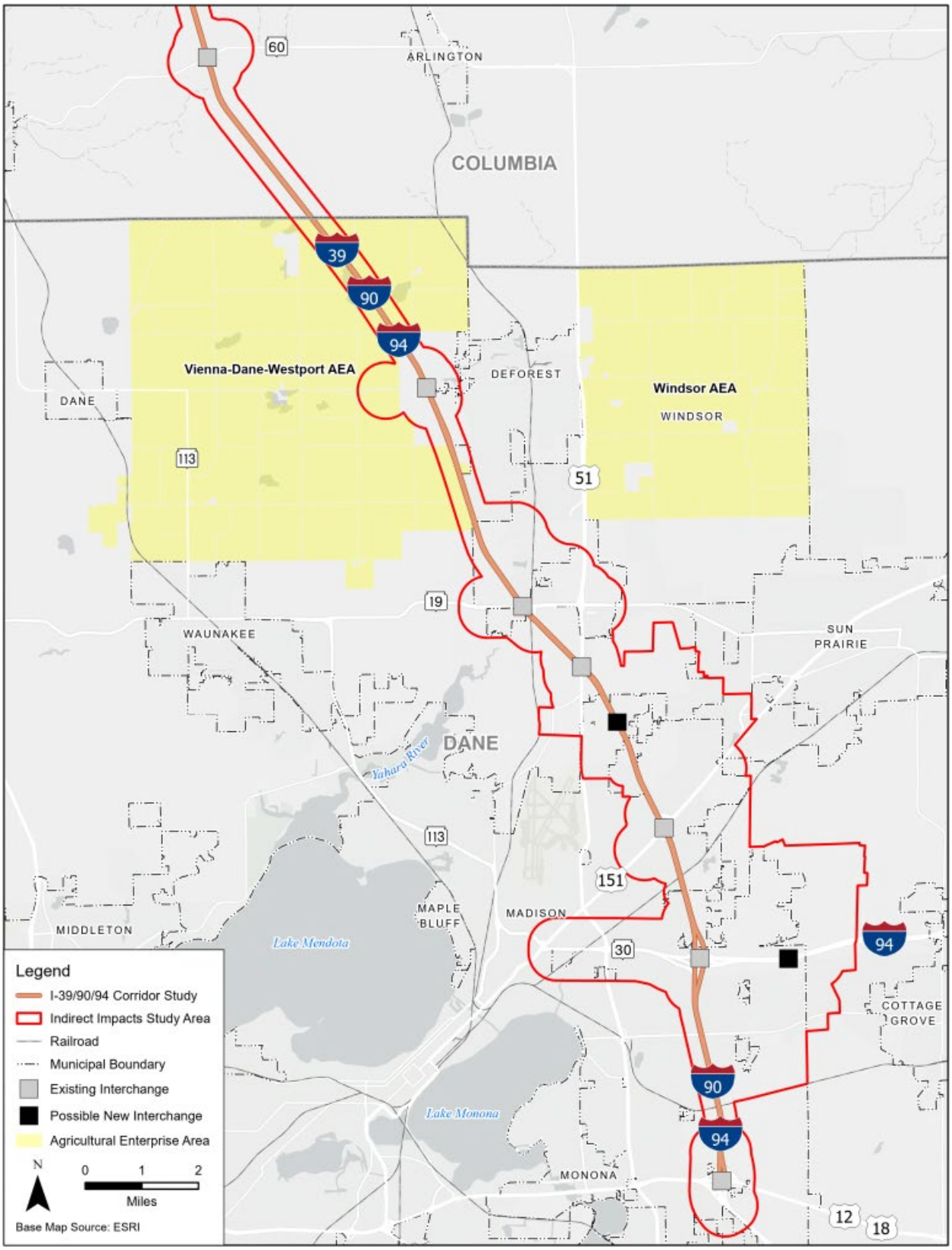
There is agricultural land next to I-39/90/94 in Dane, Columbia, Sauk, and Juneau counties. According to the 2017 Census of Agriculture, farmland accounts for the majority of the total land in Dane (66.2%), Columbia (62.1%), and Sauk (56.2%) counties. In Dane County, the land surrounding the Indirect Impacts Study Area is a mix of urban and farmland. In Columbia and Sauk counties, most land in the Indirect Effects Study Area is agricultural.

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; and landowners and local governments together form Agricultural Enterprise Areas (AEAs). Dane, Columbia, Sauk, and Juneau counties have county farmland preservation plans; Dane, Columbia and Sauk counties also have farmland preservation zoning. There are two AEAs in the Indirect Impacts Study Area, the Vienna-Dane-Westport AEA in Dane County and the Fairfield AEA in Sauk County, see Figure 2-12 and Figure 2-13. The Vienna-Dane-Westport AEA covers 20,604 acres and intersects the I-39/90/94 corridor from Windsor Road to the county line. The Fairfield AEA abuts I-90/94 in the town of Fairfield and encompasses 9,501 acres.

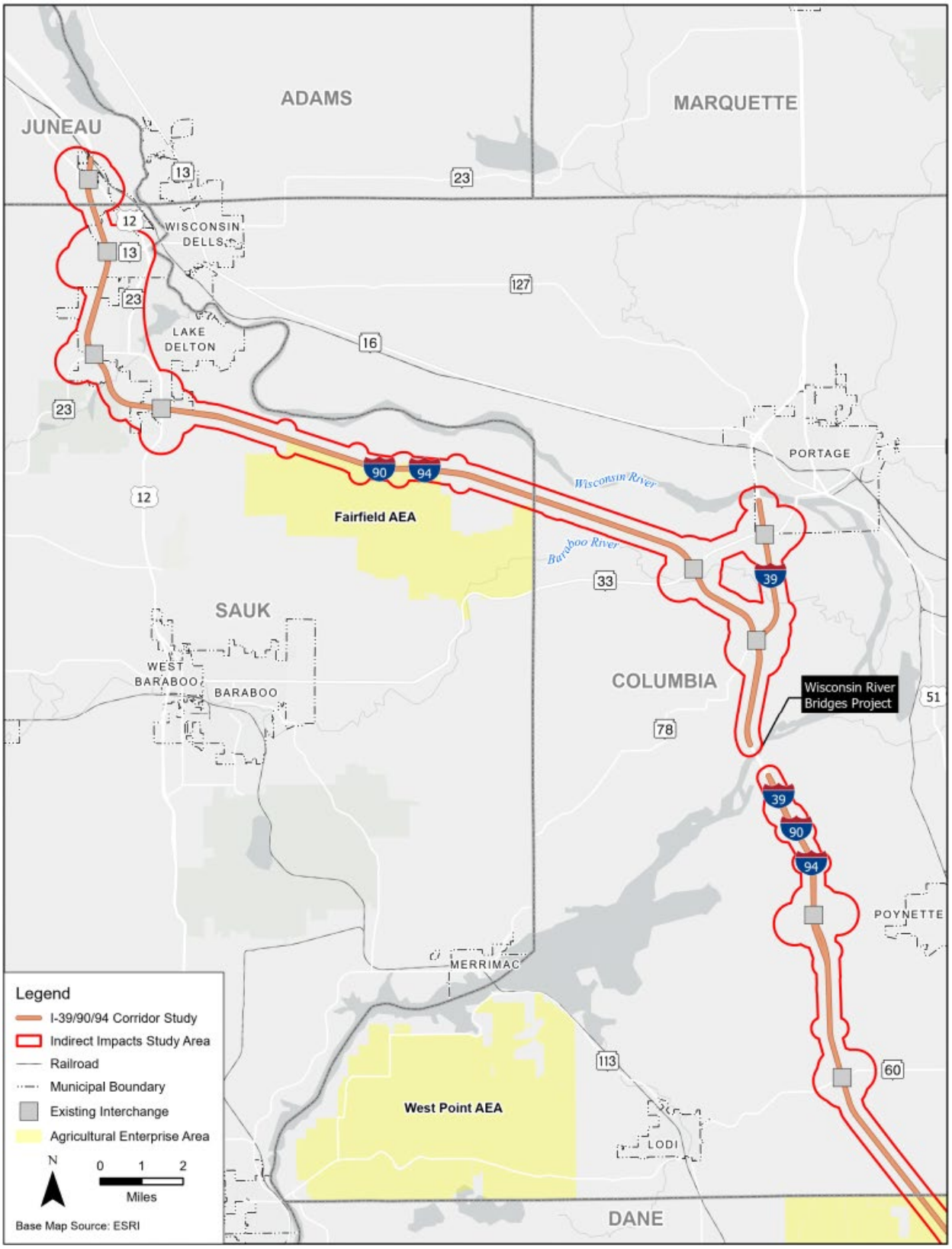
Landowners within the AEAs can apply for a farmland preservation agreement, which requires the land to be kept in agricultural use for 15 years and meet state soil and water conservation standards. In return, the agreement enables the landowner to claim a farmland preservation tax credit. As of 2020, there was one 90-acre agreement in the Vienna-Dane-Westport AEA and 4 agreements in the Fairfield AEA totaling 2,431 acres.

Drainage districts are special purpose districts formed to primarily drain agricultural land. Counties oversee districts to ensure compliance with DATCP regulations. In Dane County, Indirect Impacts Study Area crosses five drainage districts. In Columbia County, Indirect Impacts Study Area crosses through one drainage district. The Indirect Impacts Study Area also crosses the Leach Creek Subdistrict of the Lower Baraboo drainage district, which straddles Columbia and Sauk counties. Local farmers raised concerns at public involvement meetings about how the Interstate interacts with drainage on farmland. Current uncontrolled runoff is a result of the natural topography and increased precipitation in southern Wisconsin, leading to high groundwater and standing water, which are unrelated to Interstate operations.

## Figure 2-12: Agricultural Enterprise Areas: Dane County



## Figure 2-13: Agricultural Enterprise Areas: Columbia, Sauk and Juneau Counties



## 2.3.5. Natural and Cultural Resources

This section describes the notable natural and historic resources in the Indirect Impacts Study Area that may be subject to indirect impacts, see Figure 2-14 and Figure 2-15.

### Water Resources

#### *Surface Waters*

The Indirect Impacts Study Area is in the Yahara River and Lake Kegonsa, Yahara River and Lake Monona, Yahara River and Lake Mendota, Lake Wisconsin, Lower Baraboo River, and Dell Creek Watersheds. Waterways included Door Creek, Starkweather Creek, Token Creek, Yahara River, Wheeler Wilcox Creek, Rowan Creek, Wisconsin River, Baraboo River, Mirror Lake, Spring Brook, Hulburt Creek, and 31 unnamed streams.

Token Creek and Rowan Creek are trout streams. Upstream of the I-90/94 crossing, Hulbert Creek is a Class I trout stream and classified as an exceptional resource water by WDNR.[11] Portions of Starkweather Creek, Yahara River, Rowan Creek, Baraboo River, Mirror Lake, and Hulburt Creek are considered impaired waterbodies under Section 303(d) of the Clean Water Act.

Common indirect impacts to surface waters include encroachment impacts to water quality and aquatic habitats as a result of the increase in stormwater runoff from the increase in impervious cover.

#### *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 are present throughout the Indirect Impacts Study Area and wetland delineations identified 653.3 acres of wetlands next to I-39/90/94 study corridor. They can be found where the interstate crosses waterways, in agricultural fields, and alongside I-39/90/94 serving as swales or drainage basins for stormwater runoff from the roadway.

Common indirect impacts to wetlands include an increase in surface water and sediments, fragmentation of a wetland, loss of recharge area, or changes in local drainage patterns. Although an array of federal, state, and local regulations help to protect wetlands, wetlands (especially smaller ones) are sometimes lost due to the indirect effects of road construction and other development activities.

#### *Floodplains*

The floodplain is land that has been or may be covered by floodwater during the 100-year flood. A 100-year flood is a storm that has a 1 percent chance of occurring in any given year. The floodplain includes the floodway and flood fringe areas. The floodway is the channel of a river or stream and the area next to the channel that must remain open to carry the deeper, faster moving water during a flood. The flood fringe is the portion of the floodplain outside of the floodway that is covered by flood water during the 100-year flood. Locations where the 100-year floodplain crosses the Indirect Impacts Study Area are shown on Figure 2-14 and Figure 2-15.

[11] *Exceptional resource waters are surface waters that provide outstanding recreational opportunities, support valuable fisheries and wildlife habitat, have good water quality, and are not significantly impacted by human activities.*

The WIS 33 interchanges at I-39 and I-90/94 have been the site of several notable floods in the past two decades. WIS 33 and the two interstate highways are within the floodplains of both the Wisconsin and Baraboo Rivers which meet about 2.5 miles east of the I-39 I-90/94 Split Interchange. High flows on either or both rivers have the potential to cause large-scale flooding on the freeway. Indirect impacts include traffic interruptions through delayed traffic and closed roads.

Communities in the Indirect Impacts Study Area discourage development in floodplains, and development in the flood fringe is subject to local ordinances. Common indirect impacts of development in floodplains include changes in drainage patterns, change in hydraulics of receiving waters, reduced floodwater storage, disruption to transportation routes and economic activity, and impacts to water quality.

### Habitat and Protected Species

The Indirect Impacts Study Area includes three main habitat types: upland, wetland, and aquatic habitat (i.e., rivers, streams, lakes). The WDNR defines some forested and grassland upland community types in the study corridor as critically imperiled or imperiled in Wisconsin due to a restricted range, few populations or occurrences, steep declines, severe threats, or other factors.[12] Although much of the land next to the Interstate is developed or farmed, there are undeveloped areas of upland and wetland habitat and larger public parks and natural areas.

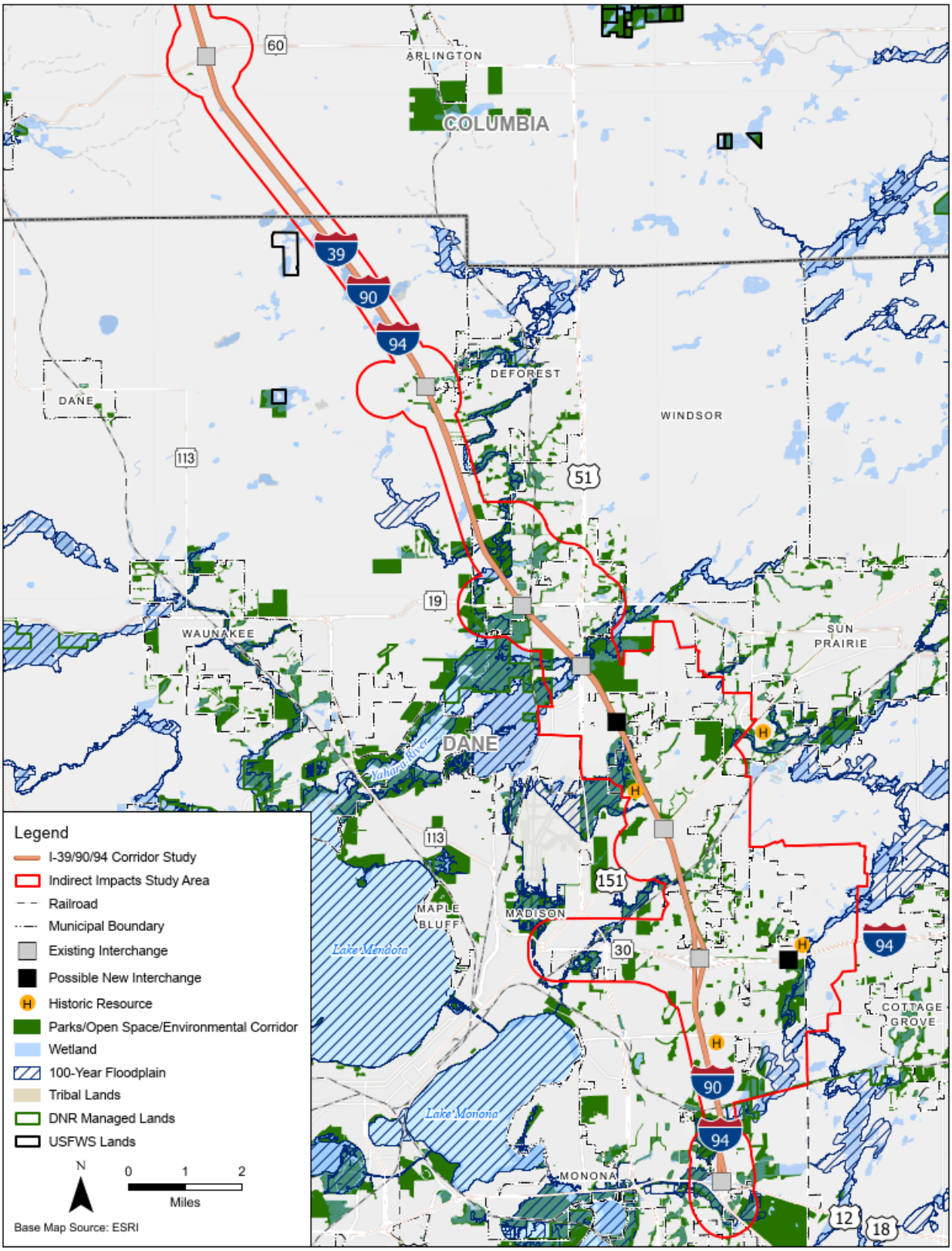
There are 13 federal-listed and 35 state-listed threatened and endangered species that are known or expected to be near the study area. No current federally designated critical habitat areas are found along the I-39/90/94 study corridor. Impacts to federal-listed and state-listed threatened and endangered species may occur as a part of the project activities. Common indirect impacts include habitat disturbances and losses, noise and lighting effects, and altered predator-prey relationships.

### Cultural Resources

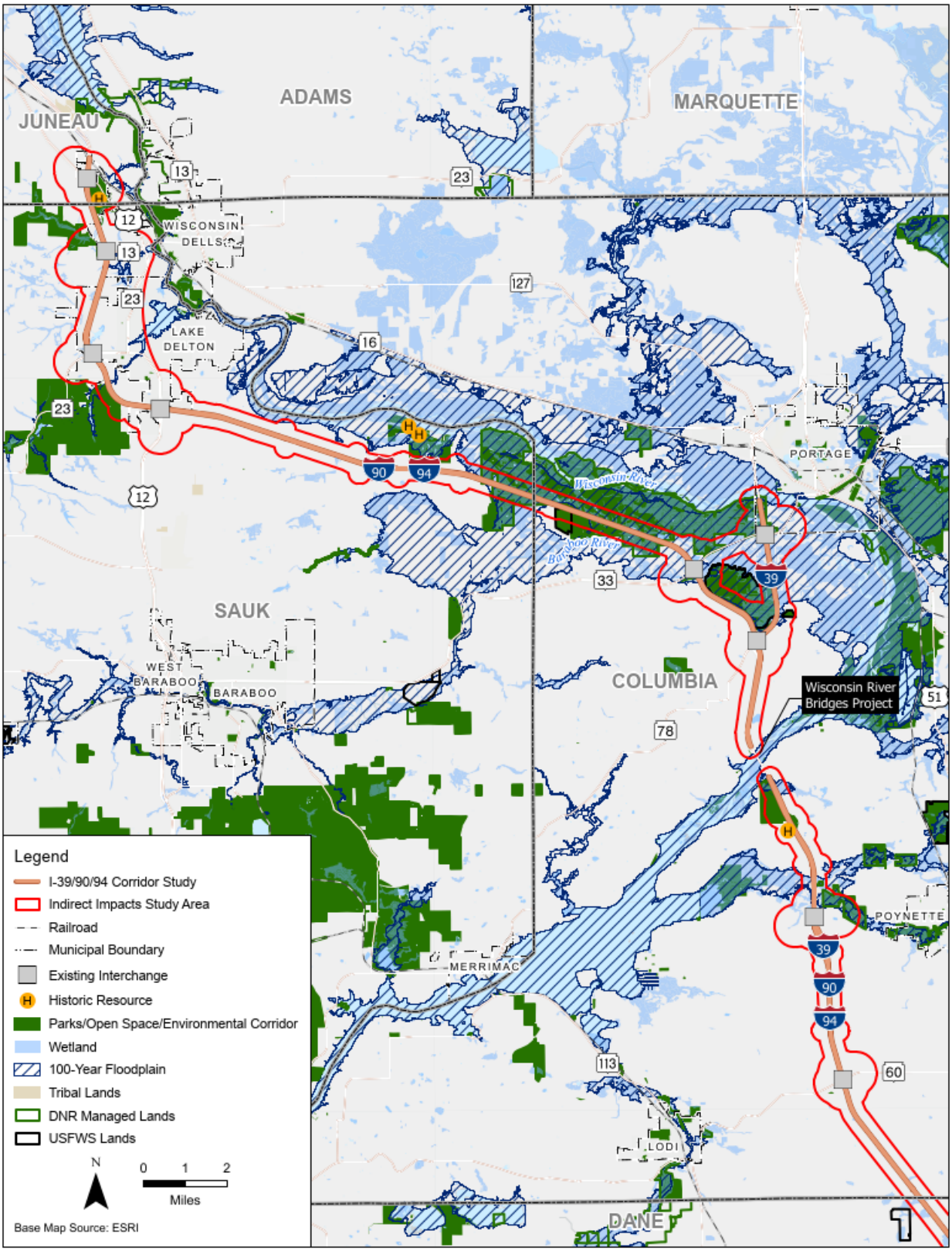
There are nine historic properties within a quarter mile of I-39/90/94 between existing interchanges and grade separations, and within a half-mile of existing interchanges and grade separations. Based on a literature review, 42 previously reported archeological sites and 9 burial sites are located completely or partially within the Indirect Impacts Study Area.

[12] *WDNR. (n.d.). Wisconsin Natural Heritage Inventory Working List. Retrieved December 18, 2023, from Wisconsin Department of Natural Resources. https://dnr.wisconsin.gov/topic/NHI/WList*

## Figure 2-14: Notable Natural and Cultural Resources: Dane County



## Figure 2-15: Notable Natural and Cultural Resources: Columbia, Sauk and Juneau Counties



## 2.4. Step 3: Identify Impact Causing Activities of the Proposed Project Alternative

Step 3 of the analysis examines the No Build alternative and build alternatives 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. While the No Build alternative would avoid any specific impact-causing activities to land use or environmental factors, it does not address the purpose of and need for the project to provide a safe, efficient highway that meets interstate standards and corrects existing safety and operational deficiencies.

### 2.4.2. Build Alternatives

The following components of the build alternatives may have identifiable indirect impacts:

1. Capacity expansion of I-39/90/94 corridor, with the new travel lane(s) along most of the corridor:[13]
   a. Freeway Modernization Plus Added General-Purpose Lane Alternative
   b. Freeway Modernization Hybrid
2. Change in access at Hoepker Road and I-39/90/94, and Milwaukee Street and I-94
3. The encroachment of the interstate could indirectly impact the quality of residential neighborhoods, business districts, and natural resources.

## 2.5. Steps 4 and 5: Analyze the Indirect Effects, and Evaluate Assumptions and Identify Potentially Significant Indirect Effects

This section identifies and analyzes the potential for project-influenced development and project encroachment impacts.

### 2.5.1. Project-Influenced Development

WisDOT describes project-influenced development or induced growth 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 (AASHTO 2016).

The build alternatives could potentially induce growth in the Indirect Impacts Study Area in select locations where there is currently vacant/undeveloped land or agriculture. However, availability of land alone is not enough to cause land use change. WisDOT used two different approaches to assess the potential for project-influenced land use change. The first approach relied on the National Cooperative Highway Research Program (NCHRP) *Project 25-25*, *Task 22: Forecasting Indirect Land Use Effects of*

[13] *No new capacity is proposed from the I-39 I-90/94 Split Interchange to Levee Road (I-39 segment): existing and proposed lane configuration consists of two (2) lanes in each direction.*

*Transportation Projects*, which identifies several factors such as local government land use policies, availability of supporting infrastructure (i.e., water and sewer), expected growth, and change in accessibility as indicators of the potential for project-influenced land use change. Table 2-7 summarizes key underlying issues considered by WisDOT when assessing the potential for project-influenced land use change.

### Table 2-7: Assessing the Potential for Project-Influenced Land Use Change

| Key Issues to Consider | Assessment |
|---|---|
| Public Policy and Constraints on Growth Potential | 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. The **potential for project-influenced land use change from the build alternatives is weak** in areas with strong policy and a strong record of policy enforcement and implementation.[14]<br>Wisconsin's Smart Growth Law requires county and local land use actions to be consistent with adopted comprehensive plans. During expert panel meetings, communities indicated that they do not often veer from their comprehensive plans. |
| Project Purpose and Need | The **build alternatives do not have an explicit economic development purpose** and is not intended to produce land use change. |
| Growth Trends and Projections | There is ongoing population and employment growth occurring in the study area without the proposed build alternatives due to proximity to both Madison and Wisconsin Dells job markets and other factors identified during expert panel meetings. Study area population growth is estimated at an average annual rate of 0.5 percent for municipalities and municipal civil divisions and between 0.5 percent and 1.0 percent for study area counties. Employment growth in the South Central Workforce Development Area (WDWD 2023) is estimated at an average annual rate of 1.1 percent. NCHRP technical reports identify **the potential for project-influenced land use change from population and employment growth at this annual rate of growth as weak**.[15] |

[14] *NCHRP Project 25-25, Task 22: Forecasting Indirect Land Use Effects of Transportation Projects identifies communities with strong policy, strong record of policy enforcement, and implementation, then the potential for land-use change is probably as none to very weak.*

[15] *NCHRP Project 25-25, Task 22: Forecasting Indirect Land Use Effects of Transportation Projects identifies average annual population and employment growth of less than 1 percent as none to very weak potential for project-influenced land use change, and between 1 and 2 percent as weak to moderate potential for project-influenced land use change.*

| Key Issues to Consider | Assessment |
|---|---|
| Change in accessibility | The **potential for land use change is generally low when a travel time savings is less than 5 minutes**. The build alternatives improve an existing freeway to improve travel reliability, and travel time savings between the build and no-build condition is below this threshold.<br><br>The change in accessibility at the two proposed new interchanges is not anticipated to result in unplanned land use change. The proposed improvement at Milwaukee Street is included in community comprehensive plans (Madison, Sprecher Neighborhood Development Plan, and Northeast Neighborhood Development Plan), and WisDOT was asked by local communities to evaluate a potential new interchange at Hoepker Road to support planned development. As discussed in Section 2.3.4, much of the land near the Hoepker Road Interchange is:<br><br>▪ protected from development (Cherokee Marsh, Token Creek County Park, Token Creek corridor, Starkweather Creek corridor, and areas with steep slopes to the southeast of the Hoepker Road/Portage Road),<br><br>▪ constrained by the presence of the Dane County Regional Airport (limits development on the substantial airport property as well as building height limitations on adjacent properties), or<br><br>▪ under construction or recently been approved for development (University of Wisconsin Health's Eastpark Clinic, new residential development [approximately 1,000 units] along Eastpark Boulevard just south of the clinic).<br><br>The proposed Hoepker Road Interchange is supported by the city of Sun Prairie. Local land use controls and regulatory constraints will direct new development to locations consistent with local plans.<br><br>The change in accessibility at the WIS 13 Interchange where two configurations are under consideration is not anticipated to result in unplanned land use change. There are two reconstruction configurations: a split diamond interchange, and a trumpet interchange. Both options provide similar accessibility to WIS 13 as the existing interchange and the split diamond provides improved accessibility to County H. Reconstructing the interchange is not anticipated to result in unplanned land use change.<br><br>The reconstruction of other existing interchanges is not anticipated to change accessibility. Improvements at existing interchanges are designed to meet modern standards and to improve safety. No capacity is being added at existing interchanges.<br><br>During the expert panel meetings, local planners indicated that the additional capacity of the build alternatives could potentially affect the pace of development at remaining undeveloped areas at Hoepker Road, at the County V Interchange east of I-39/90/94 (DeForest), at the commercial area east of the WIS 13 Interchange, and the Wisconsin Dells area in general. |

WisDOT also considered AASHTO's *Practitioner's Handbook 12: Assessing Indirect Effects and Cumulative Impacts Under NEPA,* which describes several questions to consider in analyzing the potential for growth-related indirect effects.

1. Does the project have an economic development purpose?

   The I-39/90/94 Corridor Study does not have an explicit economic development purpose and is not intended to change land use.

2. Does the project have the potential to increase mobility and/or accessibility?

   New interchanges have the potential to improve accessibility. The build alternatives includes two new interchanges. If an interchange is constructed at Hoepker Road or Milwaukee Street it would improve accessibility.

   Reconstructing the existing interchange at WIS 13 provides improved accessibility to County H. Land use adjacent to County H east of I-90/94 includes resort and commercial developments. Land use adjacent to County H west of I-90/94 include residential, the WDNR's Hulbert Creek Fishery and Woods, and agricultural land.

   During the expert panel meetings staff from the village of DeForest and city of Wisconsin Dells identified that additional interstate capacity provided by build alternatives has the potential to improve mobility to County Road V, east of I-39/90/94 in DeForest, and the commercial area near the WIS 13 Interchange and the Wisconsin Dells area in general.

   In addition, raising the elevation of the Interstate out of the floodplain near the I-39 and I-90/94 Split Interchange to past the WIS 33 interchanges maintains accessibility and infrastructure resiliency during high flood events.

3. Is the increased accessibility likely to cause changes in development patterns (i.e., timing, type, locations, or amount)?

   The proposed Milwaukee Street Interchange is consistent with local plans. If the interchange is built development may happen sooner, but in 2050 the regional transportation plan estimates that population and employment is similar both with and without the proposed improvements. During the expert panel interviews city of Madison staff shared that development projects have not occurred near the proposed Milwaukee Street Interchange as identified in local plans due to lack of Interstate access. If the interchange is not built, city planners noted that it will be removed from the Sprecher Neighborhood Development Plan.

   The proposed Hoepker Road Interchange is supported by the city of Sun Prairie. City of Madison staff shared if an interchange is developed at Hoepker Road, they would add the interchange to the Pumpkin Hollow Neighborhood Development for the area northeast of the interchange. The Hoepker Road Interchange is not anticipated to change development. During the expert panel interview city planners commented that potentially, the pace of already-approved development would increase with an interchange. However, much of the land at the Hoepker Road Interchange is protected from development, constrained by the presence of the Dane County Regional Airport, or is under construction or recently been approved for development, see Figure 2-10.

   At the proposed Milwaukee Street Interchange and Hoepker Road Interchange, local land use controls and regulatory constraints direct new development to locations consistent with local plans. Similarly at the reconstructed WIS 13 Interchange, local land use controls and regulatory constraints direct new development to locations consistent with local plans.

   The village of DeForest has planned for a range of different industrial, commercial, recreational, and residential development. There are several ongoing and planned development projects in the village, see Figure 2-10. During the expert panel meeting local officials noted that additional capacity on I-39/90/94 could potentially increase the pace of development near the County V Interchange east of I-39/90/94. In DeForest local land use controls and regulatory constraints direct development to locations consistent with local plans.

Development trends in Columbia, Sauk, and Juneau counties are not being driven by proposed improvements to I-39/90/94. However, during the expert panel meeting local officials shared that the additional capacity of the build alternatives has the potential to increase the pace of development of commercial development near the WIS 13 Interchange and in the Wisconsin Dells area in general. There are local land use controls and regulatory constraints in the Wisconsin Dells area that direct development to locations consistent with local plans.

4. What impacts are likely to result from changes in development patterns that are caused by the project?

   The build alternatives improve an existing freeway, and travel time savings estimates are less than 5 minutes for a trip through the 67-mile corridor (build alternatives compared to No Build alternative). When travel time savings are less than 5 minutes the potential for land use change is generally low. Further, the potential for land use change inconsistent with existing plans is low as the proposed action is included in regional and community comprehensive plans, and local land use controls and regulatory constraints direct new development to locations consistent with local plans. The build alternatives are unlikely to change development patterns that are not consistent with local plans.

   Development is occurring in the study area without the build alternatives and is planned to continue. In the Indirect Impacts Study Area, there are over one dozen ongoing and future planned developments that would use the existing County Road V, WIS 13, and WIS 23 (access to Wisconsin Dells) service interchanges, locations identified as having the potential for increased pace of development from improved mobility and accessibility, see Section 2.3.4 and Table 3-1. When asked the likely impact of constructing the build alternatives, several local planners noted that the pace of development may be modestly strengthened in the future with implementation of the build alternatives; however, the build alternatives are not expected to cause development patterns to change.

   Several regional and local plans identify support for the build alternatives, including the Connecting Greater Madison 2050: Regional Transportation Plan, Columbia County Comprehensive Plan 2030, the city of Madison Comprehensive Plan, the Sprecher Neighborhood Development Plan, and the Northeast Neighborhood Development Plan. The Pumpkin Hollow Neighborhood Development Plan does not include the Hoepker Road Interchange as a recommendation in the plan because area residents and property owners did not support an interchange in 2008 during the plan development process. Opinions on the proposed Hoepker Road Interchange have been mixed but at the most recent public information meeting (PIM 3) most comments were positive.

   Expert panel participants noted that development in the region does not often depart from comprehensive plans as study area communities follow smart growth principals and prioritize infill development and areas contiguous to existing development. The build alternatives are unlikely to cause development in locations where it is not planned by local and regional planning agencies due to land use policies and regulations.

   Due to the region's strong regional and local land use controls and regulatory constraints, the build alternatives would likely have minimal impact on development patterns identified in regional and local plans. While the build alternatives may improve the timing of the attractiveness of land in select locations for development, in consideration of key causal variables identified in Table 2-7, the build alternatives would not substantially change the location of future development within the study area.

5. What are the growth trends in the absence of the project?

   Growth trends in the study area would continue in the absence of the build alternatives. Planned employment and mixed-use development in the area of the proposed Milwaukee Street Interchange area would likely occur over a longer time horizon.

6. Are there constraints on potential growth?

   There are a number of constraints on potential growth. Regional and local planning agencies have strong land use controls and regulatory constraints that direct future development to areas consistent with regional and local plans that are served by municipal sewer and water and protect environmentally sensitive areas. Communities in the study area also prioritize infill development. Environmental preservation ordinances (see Table 2-2), environmental corridors, Agricultural Enterprise Areas, and A1 agricultural zoning (1 residential unit per 35 acres) in Columbia County also place limits on development.

Based on a review of key causal variables identified in Table 2-7 and the considerations identified in AASHTO's practitioner handbook, the potential for project-influenced land use change is generally low. However during the expert panel meetings, local planners indicated that the build alternatives could affect the pace of development at undeveloped lands near Hoepker Road, at the County V Interchange east of I-39/90/94, and in the Wisconsin Dells area, and facilitate planned development at the proposed Milwaukee Street Interchange.

### Impacts Related to Project-Influenced Development

WisDOT does not anticipate substantial changes in land use and development from constructing the build alternatives. The exception is at the potential new Milwaukee Street Interchange, which would facilitate planned development with improved accessibility to an area where land is available for residential and business development. The communities' comprehensive plan anticipates that undeveloped or agricultural lands in this area will continue to transition to residential and employment uses and have planned for new development in this area. The magnitude of this change is expected to be moderated by the factors mentioned above; that is, this new interchange is located in a mature transportation system, and limited travel time savings are anticipated. If the interchange is built this may affect the timing of development, that is development may happen sooner, but in 2050 the regional transportation plan estimates that land use is similar both with and without the proposed improvements.

New travel lanes along the study corridor have the potential to increase the pace of planned development at undeveloped lands near Hoepker Road, near the County V Interchange east of I-39/90/94, at the commercial area east of the WIS 13 Interchange and in the Wisconsin Dells area. The magnitude of this change is expected to be moderated by the factors mentioned in Section 2.5.1, that is this new capacity is along an existing freeway, limited travel time savings are anticipated, and the affect communities' have comprehensive plan and supporting development policies promote an efficient growth pattern.

## 2.5.2. Encroachment-Alteration Impacts

Table 2-8 identifies the resources considered for potential project encroachment impacts based on direct impacts described in the Draft EIS, and stakeholder input.

### Table 2-8: Resources Considered for Encroachment-Alteration Impacts

| Resource | Will this resource be directly affected? | Would this resource experience project encroachment impacts? |
|---|---|---|
| Commercial and Industrial Development | The build alternatives improve traffic operations and safety on I-39/90/94, but it would not change the economic characteristics of the study area. During construction, there may be short-term ramp closures, delays, and inconvenience for roadway users. Access to local businesses would be maintained during construction.<br>The WIS 13 Interchange Split Diamond alternatives would acquire and relocate an active business, and two maintenance-related sheds. The WIS 13 Interchange Trumpet alternative would acquire one maintenance-related shed. Flood minimization measures would result in increased 100-year flood elevation at one existing business and one vacant business in the regulatory floodplain which could require relocation or other measures to mitigate impacts.<br>Permanent access changes would occur at the proposed Milwaukee Street and Hoepker Road Interchanges and at the US 151/High Crossing Boulevard, US 51, I-39 I-90/94 Split, and WIS 13 (Split Diamond alternative) interchanges. Long-term economic disadvantages in the study area are not anticipated. WisDOT would provide property owners whose property is acquired by the project with mitigation. | No. WisDOT does not expect project encroachment impacts to occur, either within or outside the project footprint. Access changes, business relocations and strip acquisitions would not result in the loss of economic viability of remaining businesses, business centers, or districts. |
| Residential Development | Flood minimization measures would result in increased 100-year flood elevation at one residence in the regulatory floodplain which would require relocation or other measure to mitigate impacts. A new interchange at Hoepker Road would acquire a vacant single-family residence in the southeast quadrant of the interchange. | No. Residential relocations would not result in the loss of community cohesion. |

| Resource | Will this resource be directly affected? | Would this resource experience project encroachment impacts? |
|---|---|---|
| Institutional and Public Services | There may be short-term ramp closures, delays, and inconvenience during construction for roadway users, but access to institutional and public services would be maintained during construction. The proposed new interchange at Hoepker Road would enhance access to the UW Health East Madison Hospital east of I-39/90/94. Flood minimization measures would impact two USFWS maintenance and storage garages and some parking. One to two buildings on WDNR property would also be impacted. | No. WisDOT does not expect project encroachment impacts to occur, either within or outside the project footprint. Access changes and strip acquisitions would not impact the functions of institutional and public services. |
| Socioeconomic Characteristics and Environmental Justice | *Socioeconomic Characteristics:* The Build Alternatives would not split any neighborhoods and all existing roads across I-39/90/94 would remain.<br>*Environmental Justice*: Changes in access, stormwater runoff, noise, and construction impacts would be experienced by minority and/or low-income populations, but the impacts do not result in any adverse impacts considered disproportionately high and adverse. | *Socioeconomic Characteristics*: No. Project encroachment impacts are not expected to occur, either within or outside the project footprint. Access changes and strip acquisitions would not result in the loss of community cohesion.<br>*Environmental Justice:* No. Project encroachment impacts are not anticipated. During the expert panel meetings, participants noted that in Madison the proposed project would have a positive impact on low-income neighborhoods west of I-39/90/94 by reducing traffic on the local network; and provide a benefit to low-income areas next to US 51, west of I-39/90/94 by reducing traffic volumes and adding bicycle and pedestrian facilities at the Stoughton Road (US 51) intersection. |
| Visual Character and Aesthetics | The project would not substantially change views to/from the freeway. Impacts are limited because the freeway would be widened to the inside to minimize impacts. However, the build alternatives include two proposed new interchanges at Milwaukee Street and Hoepker Road. The new interchanges would be prominent visual features. The project would replace the bridge over Mirror Lake, which would affect views of the bridge from the lake and adjacent properties not screened by trees, which may be negatively perceived, depending on the bridge type selected. | No. Indirect impacts to visual quality are typically associated with growth. Limited growth is anticipated as a result of this project. Strong regional and local land use controls and regulatory constraints direct new development in the study area to locations consistent with regional and local plans. |

| Resource | Will this resource be directly affected? | Would this resource experience project encroachment impacts? |
|---|---|---|
| Agricultural Resources | The build alternatives require acquisition of about 171 to 186 acres (depending on WIS 13 alternative) of agricultural land, including at the two proposed new interchanges, Milwaukee Street Interchange and Hoepker Road Interchange. Most impacts are linear strips of agricultural land. One farm would be severed by the proposed improvements at the Milwaukee Street Interchange, causing the relocation of a barn and the creation of two parcels (one 40-acre parcel and one 30-acre parcel), however access to both parcels would be provided.<br>Flood minimization measures would result in an increase in 100-year flood elevation for over three hundred acres of farmland. This agricultural land is already prone to flooding because it is in the floodplain.<br>WisDOT will also follow up with local county drainage districts during preliminary engineering to determine where drainage tiles might be located and determine potential impacts, and design and construction measures to maintain drainage patterns. | Yes. Project encroachment impacts to farmland are not anticipated to include remnant sections outside the construction footprint that are no longer suitable for agricultural production. However, there may be project encroachment impacts to agricultural resources as a result of flood minimization measures. The floodplains analysis considered potential encroachment impacts of the expected higher water surface elevations with the Build Alternatives on agriculture. Flood minimization measures increase the 100-year water surface elevations on farmland, which is already prone to flooding because it is in the floodplain. During normal conditions the flood minimization options would not affect farmland but during flood events the land may take longer to drain than it would today. This could affect planting or increase the crops lost to a flood. Both direct and encroachment impacts will be mitigated with avoidance and minimization efforts and compensated per state and federal regulations.<br>See discussion following this table. |
| Section 4(f) | The build alternatives would result in a *de minimis* impact to the Glacial Drumlin State Trail, Baraboo River Waterfowl Production Area and Baraboo River Floodplain Forest (No. 212) Station Natural Area, Pine Island State Wildlife Area, Mirror Lake State Park, Hulbert Creek Fishery Area, and Rocky Arbor State Park. | No. The build alternatives are not anticipated to change the use of Section 4(f) properties; therefore, project encroachments are not expected to occur. |

| Resource | Will this resource be directly affected? | Would this resource experience project encroachment impacts? |
|---|---|---|
| Wetlands | The build alternatives stay within existing right-of-way as much as possible. While wetlands occur in the right- of -way, the build alternatives limit impacts to wetlands that have historically been affected by roadway construction and operation. The Build Alternatives could impact up to 172 acres. Impacts would be mitigated in accordance with state and federal regulations. | Yes. Indirect wetland impacts are typically disturbances that reduce or eliminate wetland functions without directly filling or excavating wetland soils. Project encroachment impacts could result from disturbances that occur in areas outside of wetlands, such as uplands, other wetlands or waterways, and 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. Another potential impact could include a change in wetland type due to changes in vegetation composition, wetland hydrology, and wetland size. Flood minimization measures that raise the 100-year flood elevation within the existing 100-year floodplain could change the types of plants that grow in the wetlands or even change the wetland boundary. The risk of wetland impacts due to flood minimization is low as the wetlands are already functioning as floodplain wetlands. The frequency of flooding would not increase. The increased water surface elevation is unlikely to change the functionality of these wetlands. Wetland mitigation requirements for the project would be subject to federal and state regulations, and project encroachment impacts are not anticipated to be substantial.<br>See discussion following this table. |
| Surface Water | The build alternatives would replace structures – primarily box culverts or bridges – conveying streams in the I-39/90/94 study corridor. Between County CS and Smokey Hollow Road up to 6,500 feet of constructed stormwater drainage swales and weirs would be realigned under the build alternatives.<br>The build alternatives would increase impervious surface and contribute to increased stormwater runoff. However, construction of permanent stormwater treatment and detention facilities would partially offset increases in stormwater runoff. | Yes. There may be project encroachment impacts to water quality and aquatic habitat as a result of the increase in stormwater runoff from the increase in impervious cover. However, project encroachment impacts are not anticipated to be substantial.<br>Regulatory protections exist for water in many study area municipalities, as well as at the county, state, and national level, which when implemented, would serve to mitigate potential adverse impacts to water resources indirectly impacted by a proposed project.<br>See discussion following this table. |

| Resource | Will this resource be directly affected? | Would this resource experience project encroachment impacts? |
|---|---|---|
| Floodplains | The build Alternatives would result in up to 327 acres of impact or fill in the 100-year floodplain, including both floodway and flood fringe impacts. Crossings will be raised above 100-year floodplain wherever possible in line with federal and state regulations. The build alternatives include measures to minimize impacts such as by widening proposed improvements to the inside and steepening side slopes, where practicable. The flood minimization option on I-39 would expand the existing bridge opening over the Baraboo River bridge to 500 feet to convey flood water. Section 3.13 of the Draft EIS discusses the potential impacts of expected higher water surface elevations with the build alternative on land use, community facilities, agriculture, environmental justice populations, visual, wetlands, threatened and endangered species, cultural resources and recreation. | No. The floodplains analysis considered potential encroachment impacts of the expected higher water surface elevations with the Build Alternatives on land use, community facilities, agriculture, environmental justice populations, visual, wetlands, threatened and endangered species, cultural resources, and recreation as a direct impact. The proposed improvements may change the characteristics of the area's flooding near the confluence of the Baraboo River and Wisconsin River, but the extent is not expected to change. The proposed improvements within floodplains have been developed in accordance with the Federal Emergency Management Agency Regulations on Floodplain Management, Executive Orders, state, and local regulations. Both direct and encroachment impacts will be mitigated with avoidance and minimization efforts and compensated per state and federal regulations. |
| Threatened and Endangered Species | Four federal-listed threatened and endangered species (rusty patched bumble bee, Karner blue butterfly, northern long-eared bat, and eastern massasauga rattlesnake) may be adversely affected as part of the activities associated with the build alternatives. Impacts to state listed species may also occur where the build alternatives overlap with suitable habitat or known locations of individuals. Encroachment impacts could result from habitat disturbances and losses that occur in wetlands, uplands, or waterways. Sections 3.15 and 3.16 of the Draft EIS discuss impacts to suitable habitat. | No. The threatened and endangered species analysis considered project encroachment impacts in addition to direct impacts. Both direct and indirect impacts will be mitigated with avoidance and minimization efforts and compensated per state and federal regulations.<br>Flood minimization measures would not impact threatened or endangered species occurring in floodplains. These species are frequently found in floodplains or in habitats that exhibit a prolonged seasonally high water and/or standing surface water. It is unlikely that an increase in flood levels within the study area would negatively impact established populations of state-listed plant species that currently exist within the floodplain along the study corridor. |

| Resource | Will this resource be directly affected? | Would this resource experience project encroachment impacts? |
|---|---|---|
| Other Natural Resources | *Environmental Corridors:* The build alternatives would impact about 85.6 to 88.7 acres of mapped environmental corridors in Dane County. (There are no mapped environmental corridors in Columbia, Sauk or Juneau counties.) Environmental corridors include resources such as parks, woodlots, wetlands, surface waters, and floodplains.<br>*Upland Habitat:* The build alternatives would impact up to 222.4 acres of upland habitat. The primary impact associated with the loss of upland plant communities is the loss of wildlife habitat that serves as movement corridors and provides cover for breeding, foraging and resting. Other wildlife impacts caused by removing vegetation include interrupting the natural succession to mature communities, increasing the potential for soil erosion and reducing aesthetic value. | *Environmental Corridors:* Yes. There are encroachment impacts to wetlands and surface waters within environmental corridors. Impacts to these resources are addressed in the wetlands and surface water discussions following this table.<br>*Upland Habitat:* No. The analysis considered project encroachment impacts as a direct impact. Both direct and indirect impacts will be mitigated with avoidance and minimization efforts and compensation per state and federal regulations. |
| Air | The study area is in attainment for ozone and $PM_{2.5}$. The level of mobile source air toxics (MSAT) emissions for the study's build alternatives could be slightly higher than the No Build alternative but will be substantially lower than existing conditions.<br>Greenhouse gas (GHG) emissions from the build alternatives would not be substantially different from the No Build alternative. The annualized GHG emissions of the build alternatives would be slightly higher (4.7%) than the No Build alternative.<br>The Project will implement mitigation measure to reduce or offset GHG emissions from project construction. These measures will be further developed during final design. | The build alternatives are not anticipated to violate National Ambient Air Quality Standards, and the potential of MSAT impacts are low under the build alternatives. The analysis of GHG emissions considered indirect (upstream) emissions with direct impacts. |

| Resource | Will this resource be directly affected? | Would this resource experience project encroachment impacts? |
|---|---|---|
| Noise | The build alternatives produce a noise impact, changing existing sound levels by -8 to 16 A-weighted decibels (dBA) in the south section (i.e., the study area in Dane County) and -8 to 6 dBA in north section (i.e., the study area in Columbia, Sauk and Juneau counties).Three receptors in the south section would be exposed to an increase in sound levels of 15 dBA or more exceeding the Noise Level Criteria; these receptors are located west of I-39/90/94 north of the WIS 30/I-94 Interchange off of Tony Drive and Park Meadow Drive. No receptors in the north section would be exposed to an increase in sound levels of 15 dBA or more. Noise abatement measures will mitigate direct impacts where feasible. | No. The noise analysis considers traffic volumes that include the future users attracted to the proposed action. Therefore, the noise levels predicted by traffic modeling already incorporate project encroachment impacts and would be analyzed and mitigated for as a direct impact. |

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

### 2.6.1. Project-Influenced Development

#### Potential Consequences

The build alternatives have the potential to induce growth in the Indirect Impacts Study Area in select locations; however, it is not anticipated to substantially change land use and development in the area as discussed in Section 2.5.1.

#### Potential Mitigation Measures

As mentioned in Section 2.3.2, 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 further mitigation is recommended.

### 2.6.2. Encroachment-Alteration Effects

#### Agriculture Resources

*Potential Consequences*

Indirect impacts to agricultural resources are disturbances that make farmland no longer suitable for agricultural production without directly acquiring the land. Project encroachment impacts are discussed in Table 2-8. The flood minimization measures could have an indirect impact on farmlands in the Baraboo River and Wisconsin River floodplains.

### *Potential Mitigation Measures*

Potential mitigation measures are those that WisDOT or other agencies could implement to minimize indirect impacts. WisDOT will continue coordination with property owners affected by potential flood elevation changes and finalize measures to mitigate property impacts, if needed. WisDOT will minimize risks associated with unavoidable floodplain impacts to the greatest extent possible. Potential flood mitigation measures could include acquisition, relocating or elevating structures outside the 100-year flood elevation, floodproofing structures or purchasing a flood easement.

## Surface Water

### *Potential Consequences*

Potential indirect impacts to surface water quality may occur from stream bank erosion from increased stormwater volume. In addition, construction of waterway crossing structures may potentially impact waterway health through disturbance to the creek bed, banks, vegetation, and aquatic fauna movement. However, in consideration of mitigation measures, impacts are not anticipated to be substantial.

### *Potential Mitigation Measures*

Potential mitigation measures include those that WisDOT or other agencies could implement to minimize indirect impacts. Stormwater management will follow WisDOT/WDNR TRANS 401, WDNR 151/216, and TS4 requirements and conform to local municipal stormwater management regulations, which control potential indirect impacts to waterways. Per regulations, the I-39/90/94 Corridor Study is required to reduce annual total suspended solids loadings by 40 percent, based upon an average annual rainfall year, when compared to no runoff management controls. Stormwater best management practices, including, but not limited to, grass swales, vegetative filter strips, street-cleaning practices, catch basins, biofilters, and detention ponds, will be evaluated during more detailed project design to provide an appropriate measure to manage additional runoff from increased impervious surfaces. A stormwater management plan will be developed in coordination with the WDNR to reduce and/or minimize impacts to waterways by conforming to TS4, TRANS 401, and NR 151/216 requirements.

Where a waterway has the potential to offer passage of aquatic fauna, the road crossing would be designed in a manner that would not discourage fauna passage.

## Wetlands

### *Potential Consequences*

Indirect wetland impacts are typically disturbances that reduce or eliminate wetland functions without directly filling or excavating wetland soils. Project encroachment impacts are discussed in Table 2-8.

The build alternatives could have an indirect impact on wetlands receiving stormwater runoff. For most wetlands remaining adjacent to the roadway, the hydrology originates as direct precipitation or runoff from other areas or from adjacent streams. Only one hydrologic source – the unnamed stream between County CS and Smokey Hollow Road – would be modified by the roadway. Existing culverts will be extended, or new culverts will be installed to maintain flow across the roadway corridor.

### *Potential Mitigation Measures*

Potential mitigation measures include those that WisDOT or other agencies could implement to minimize indirect impacts. Buffers can eliminate or minimize the potential for losses of wetland functions from impacts occurring on adjacent uplands or wetlands. Dense grassy or herbaceous buffers on gradual slopes intercept overland runoff, trap sediments, remove pollutants, and promote ground

water recharge. For steeper slopes, greater buffer widths and denser vegetation (e.g., shrubs and trees) are necessary. The quality of stormwater runoff into wetlands adjacent to the construction footprint will be managed by stormwater best management practices such as grass swales, vegetative filter strips, street-cleaning practices, catch basins, biofilters, and detention ponds, which will filter runoff from the roadway before entering the adjacent wetland.

Mitigation could also include wetland restoration, which involves taking an existing wetland from a poor, unhealthy, or degraded state to the level of productivity and habitat value associated with undisturbed natural wetlands occurring in the vicinity. This process often can be accomplished by changing surrounding water inflow or drainage, eliminating erosion and siltation, and reducing pollution from adjacent areas.

# 3. Cumulative Effects

Cumulative effects[16] on the environment result from the incremental effect of an action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative effects can result from individually minor, but collectively significant, actions taking place over a period of time (40 CFR 1508.1(g)).

The following guidance documents were used to guide the analysis:

- WisDOT. 2007. Guidance for Conducting a Cumulative Effects Analysis.
- AASHTO. 2016. Practitioner's Handbook 12, Assessing Indirect Effects and Cumulative Impacts Under NEPA.
- Council on Environmental Quality. 1997. Considering Cumulative Effects Under the National Environmental Policy Act (NEPA), January.
- FHWA. 2003. Questions and Answers Regarding the Consideration of Indirect and Cumulative Impacts in the NEPA Process. January.
- FHWA. 1992. Position Paper: Secondary and Cumulative Impact Assessment in the Highway Project Development Process.
- 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 I-39/90/94 Corridor 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 has three primary elements: 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.

[16] *Effects and impacts are used interchangeably. This section will use the term impacts, except at locations where "effects" is used by the guidance that is cited.*

## 3.1. Scoping Cumulative Impacts

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." The cumulative impact analysis does not include resources on which the proposed project would not have an impact or those for which impacts could be mitigated.

WisDOT used CEQ's document *Considering Cumulative Effects Under the National Environmental Policy Act* (1997) 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 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."

The direct and indirect effects of the proposed action are a building block of the cumulative impact analysis (AASHTO 2016). 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 indirectly by the Preferred Alternative 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; demographic, land use, and natural resources information; and guidance described in Section 3.1, three resources were reviewed for potential cumulative impacts:

- Agriculture
- Surface Water Quality
- Wetlands

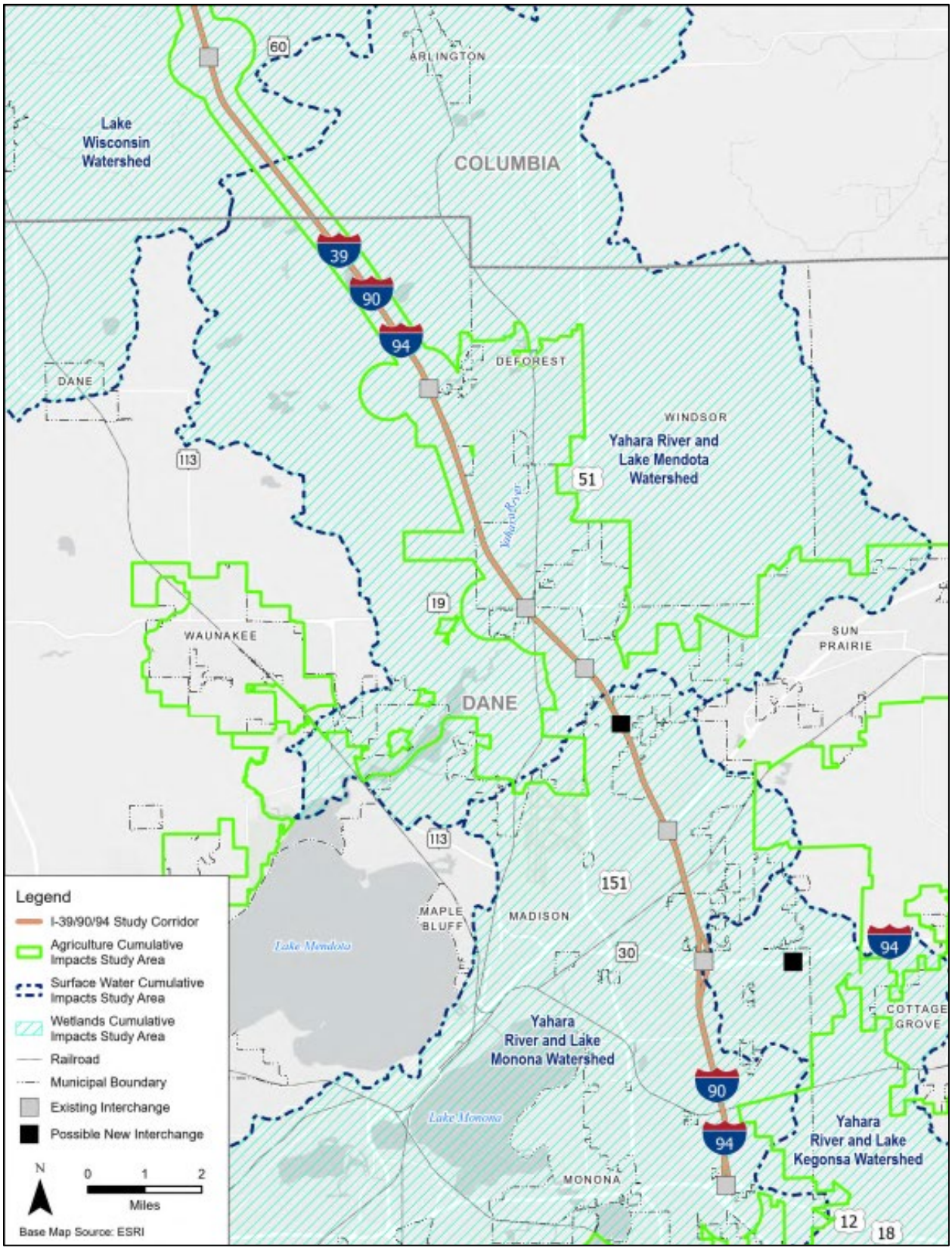
The stakeholder input described in Section 2.2.2 of the indirect impacts analysis was also used to help identify potential cumulative impacts. In addition, the cumulative impact analysis is informed by data on demographics, land use trends, and agricultural and water resources in Section 2.3 of this technical memorandum.

### 3.1.2. Cumulative Impacts Study Area and Timeframe for Analysis

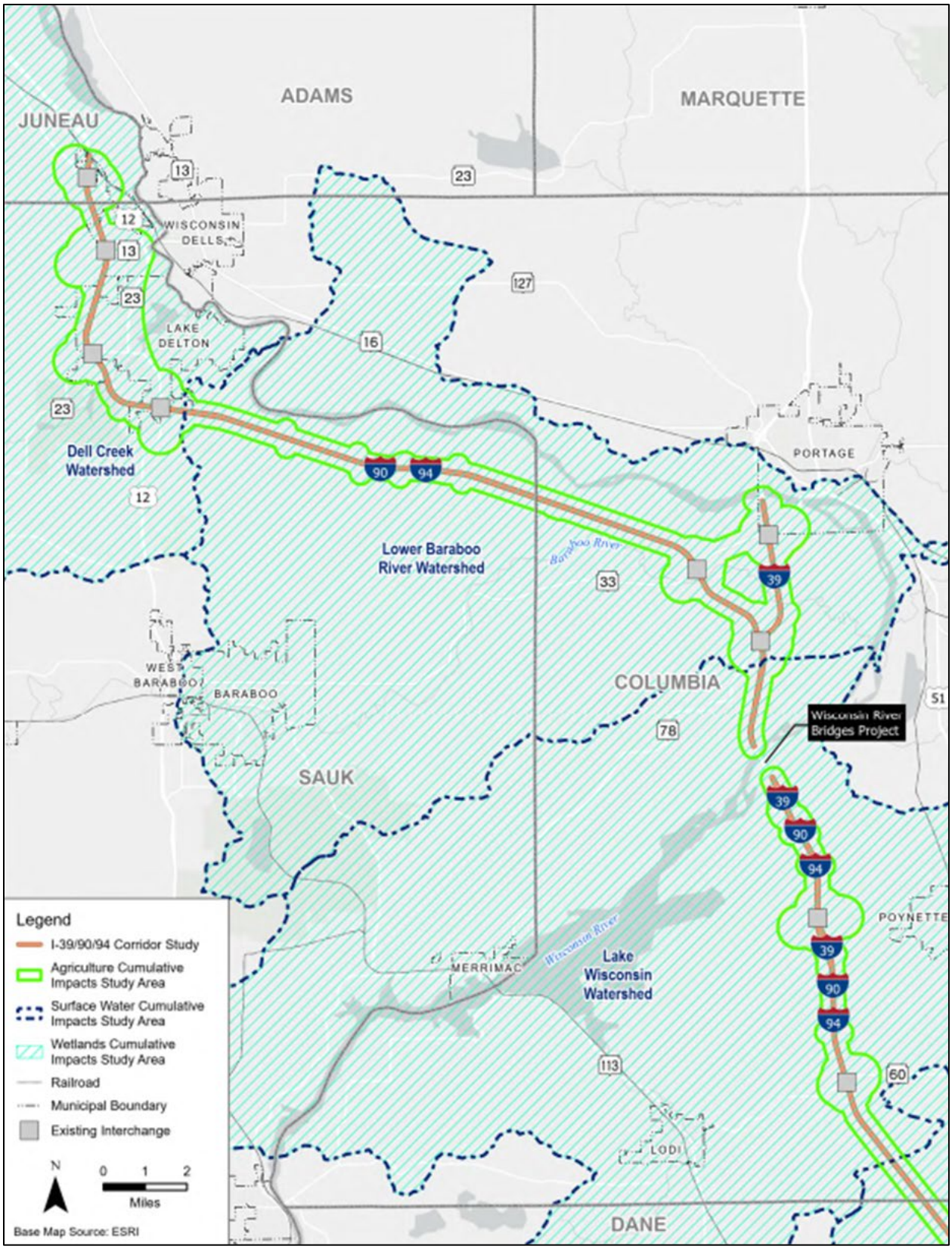
Figure 3-1 and Figure 3-2 illustrate the cumulative impacts study area for agricultural resources, surface water quality, and wetlands. The study team used guidance from CEQ, WisDOT, AASHTO, and traffic analysis to develop the study area. CEQ recommends that a cumulative effects analysis should be conducted 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.

## Figure 3-1: Cumulative Impacts Study Area: Dane County



## Figure 3-2: Cumulative Impacts Study Area: Columbia, Sauk and Juneau Counties



The timeframe for the analysis is 2040, which coincides with the availability of study area demographic and resource information, and 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.

## 3.2. Identify Past, Present and Reasonably Foreseeable Future Actions

The cumulative impacts study area varies from an urban to rural landscape, and generally consists of residential, commercial, industrial, agricultural, woodland, and wetland areas. Dane County in the southern portion of the cumulative impacts study area is more urbanized (which includes with the Madison metropolitan area) compared to other counties in the study area. Outside of the Wisconsin Dells and village of Lake Delton in Sauk County, a major tourist destination, the study area is predominantly agricultural lands, woodland, and wetland areas.

The study area has experienced continued growth over the years, primarily in the Madison metropolitan area. Most of the future growth in the Madison metropolitan area would occur on the edges of the cumulative impacts study area, including next to the two proposed new interchanges (Milwaukee Street and Hoepker Road). Outside of Dane County, development is more limited within the cumulative impacts study area, though tourist-oriented development continues in the Wisconsin Dells area including an expansion of the Kalahari Resort at the US 12 Interchange. Communities in the study area have prepared and adopted comprehensive (Smart Growth) plans that describe long-term development concepts to manage land use and growth in the future. Table 3-1 identifies notable past, present, or reasonably foreseeable future actions, that when considered with the build alternatives, may have cumulative impacts on environmental resources. Figure 3-3 shows notable past, present, and reasonably foreseeable future transportation projects. Transportation projects listed in Table 3-1 include a reference to where they are located on Figure 3-3 or Figure 3-4; studies are excluded from the maps. Active transportation projects include bicycle or pedestrian infrastructure.

**Table 3-1: Notable Past, Present and Reasonably Foreseeable Future Actions**

| Project | Past, Present, or Future Action | May Contribute to a Cumulative Impact on the Following Resources |
|---|---|---|
| ***Transportation*** | | |
| **I-39/90 Expansion Project (Illinois state line to US 12/18).** The 45 miles of existing 4-lane divided interstate highway were expanded to 6 lanes through most of the corridor and to 8 lanes through the Janesville area. (#1 on Figure 3-3) | Past (2022) | Agriculture, Surface Water Quality, Wetlands |
| **Beltline Interchange Reconstruction (US 12/18 and I-39/90).** This project reconstructed the interchange to improve safety and ensure compatibility with the I-39/90 Expansion Project. (#5 on Figure 3-3) | Past (2021) | Agriculture, Surface Water Quality, Wetlands |
| **Flex Lane on US 12/18 (I-39/90 to Whitney Way).** This project improved the inside median shoulders on US 12/18 to provide an additional travel lane (Flex Lane) during peak traffic periods. (#3 on Figure 3-3) | Past (2022) | Agriculture, Surface Water Quality, Wetlands |

| Project | Past, Present, or Future Action | May Contribute to a Cumulative Impact on the Following Resources |
|---|---|---|
| **Cottage Grove Road Reconstruction (I-39/90 to Sprecher Road).** This projected reconstructed Cottage Grove Road to a four lane, urban boulevard section with on-street buffered bike lanes in each direction and left turn lanes at intersections. (#8 on Figure 3-3) | Past (2020) | Agriculture, Surface Water Quality, Wetlands |
| **City View Drive Extension (Lien Road to Crossroads Drive).** This project constructed a new road, an extension of City View Drive, southeast of the US 151/High Crossing Boulevard interchanges. (#10 on Figure 3-3) | Past (2020) | Agriculture, Surface Water Quality, Wetlands |
| **WIS 19 Reconstruction and Widening (I-39/90/94 to River Road).** This project expanded the highway from 2 to 4 lanes. (#13 on Figure 3-3) | Past (2020) | Agriculture, Surface Water Quality, Wetlands |
| **I-39/90/94 and WIS 60 Interchange.** This project replaced the interstate bridges on I-39/90/94 at WIS 60. The existing ramps were reconfigured into a diamond interchange with roundabouts at the terminals, and WIS 60 reconstructed from Sunset Drive to Pine Hollow Road. (#18 on Figure 3-4) | Past (2023) | Agriculture, Surface Water Quality, Wetlands |
| **Commercial Avenue and Stand Rock Road Reconstruction.** (#23 on Figure 3-4) | Past (2023) | Surface Water Quality, Wetlands |
| **US 12/18 and County AB Interchange with Extension of Millpond Road to County AB.** The project includes a new overpass/interchange at US 12/18 and County AB, as well as a new frontage road connecting County AB and Millpond Rd. A pedestrian/bike path will be constructed along the new frontage road and a separated path on new overpass. It is a safety project, which will directly affect access to and from the Ho-Chunk Casino which is situated southeast of the US 12/18 Interchange. (#4 on Figure 3-3) | Present | Agriculture, Surface Water Quality, Wetlands |
| **Madison Beltline Study (US 14 to County N).** WisDOT is conducting a planning-level analysis, also called a "planning and environmental linkages" study. The study focuses primarily on addressing existing safety, capacity, and geometric issues. | Present | Surface Water Quality, Wetlands |
| **US 51 South Study (Voges Road to WIS 30).** WisDOT is beginning a study to assess how to best accommodate traffic volumes with a focus on safety and access, with consideration or incorporation of the goals for the corridor outlined in the city of Madison's Stoughton Road Revitalization Plan. | Present | Surface Water Quality, Wetlands |
| **US 51 North Study (WIS 30 to I-39/90/94).** WisDOT is beginning a study to assess how to best accommodate traffic volumes with a focus on safety issues that affect travel along US 51. (Figure # 12 on Figure 3-3) | Present | Agriculture, Surface Water Quality, Wetlands |
| **River Road Reconstruction (ABS Boulevard to South Street)**. (#17 on Figure 3-3) | Present | Agriculture, Surface Water Quality, Wetlands |

| Project | Past, Present, or Future Action | May Contribute to a Cumulative Impact on the Following Resources |
|---|---|---|
| **US 51 Reconstruction (I-39/90 to US 12/18).** This project consists of reconstruction, resurfacing and widening in certain segments. A 1.4-mile section of US 51 on the west side of Stoughton will be expanded from 2 lanes to 4 lanes. Intersections and bicycle accommodations will be improved, and pedestrian facilities provided in urban areas and some rural areas. (#2 on Figure 3-3) | Future (2024-2029) | Agriculture, Surface Water Quality, Wetlands |
| **Sprecher Road Realignment (Buckeye Road to Wyalusing Drive).** This project will realign and widen Sprecher Road to the east. (#7 on Figure 3-3) | Future | Agriculture, Surface Water Quality, Wetlands |
| **Clarmar Drive Extension to Bailey Road.** This project will extend Clarmar Drive south to Bailey Road. (#11 on Figure 3-3) | Future (2026) | Agriculture |
| **Lake Road/County CV Reconstruction (WIS 19 to Vinburn Road)**. (#16 on Figure 3-3) | Future (2024-2025) | Agriculture, Surface Water Quality, Wetlands |
| **North Towne Road Extension.** This project will connect the north and south segments of North Towne Road between WIS 19 and Windsor Road. (#14 on Figure 3-3) | Future | Agriculture, Surface Water Quality, Wetlands |
| **Windsor Road Reconstruction (County CV to River Road).** This project will reconstruct the road to an urban cross-section with a pedestrian/bike path. (#15 on Figure 3-3) | Future (2023-2024) | Agriculture, Surface Water Quality, Wetlands |
| **Wisconsin River Bridges Replacement.** This project will replace the existing I-39/90/94 Wisconsin River bridges. One new bridge will be located to the east of the existing bridges and the other will be located at approximately the same location as the existing bridges. (#19 on Figure 3-4) | Present (2024-2027) | Agriculture, Surface Water Quality, Wetlands |
| **New Mount Olympus Road.** This project will construct a new road in Lake Delton that will connect to US 12/Wisconsin Dells Parkway. (#21 on Figure 3-4) | Future (2024) | Agriculture, Surface Water Quality, Wetlands |
| **WIS 23 Resurfacing (WIS 16 to Gulch Road).** (#22 on Figure 3-4) | Future (2028) | |
| **US 12/Wisconsin Dells Parkway Safety Improvements (WIS 13 to Adams Street)**. This project will improve corridor safety by converting the existing four lanes to a five-lane roadway with two lanes in each direction separated by a Two-Way Left-Turn Lane (TWLTL) in the median. (#20 on Figure 3-4) | Future (2025-2026) | Agriculture, Surface Water Quality, Wetlands |
| ***Bicycle and Pedestrian*** | | |
| **Capital City Trail Extension (Connect to Glacial Drumlin State Trail).** This project would complete the final phase of the Capital City Trail and close the gap between Madison and the Glacial Drumlin State Trail in Cottage Grove. (#6 on Figure 3-3) | Future (2025-2026) | Agriculture, Surface Water Quality, Wetlands |

| Project | Past, Present, or Future Action | May Contribute to a Cumulative Impact on the Following Resources |
|---|---|---|
| **Autumn Ridge Path (Portland Parkway to Ziegler Road) and Bridge over US 30.** This project includes a bicycle/pedestrian overpass of WIS 30, a significant barrier to north/south travel by foot or by bike in the area between Stoughton Road/US 51 and I-39/90. It will provide access to the Milwaukee Street commercial area and provide a connection into the downtown. (#9 on Figure 3-3) | Future (2024) | Agriculture, Surface Water Quality, Wetlands |
| ***Land Use and Development*** | | |
| **3330 Marsh Road, Madison.** A 14,400 SF multi-tenant spec industrial building was built northwest of the US 12/18 Interchange. | Past (2022) | Agriculture, Surface Water Quality, Wetlands |
| **Hooper Corporation (6450 Pederson Crossing Boulevard, DeForest).** Hooper Corporation's new headquarters consists of a 68,860 square-foot office building and a 207,226 square-foot fabrication facility located on 50 acres two miles east of the WIS 19 Interchange. | Past (2021) | Agriculture, Surface Water Quality, Wetlands |
| **Olympus Water & Theme Park Expansion (1881 Wisconsin Dells Parkway, Wisconsin Dells).** The Medusa Slidewheel, a Lake Delton-incentivized project at Mount Olympus, opened in 2022. The slide is part of a $23 million expansion project at Mount Olympus which is located southeast of the WIS 13 Interchange. | Past (2022) | Agriculture, Surface Water Quality, Wetlands |
| **Elm Street Plaza (Wisconsin Dells).** A $4.5 million, 35,000 square-foot entertainment venue in downtown Wisconsin Dells (1.5 miles west of the WIS 13 Interchange). | Past (2023) | Surface Water Quality, Wetlands |
| **Tradesman Commerce Park (5525 Tradesmen Drive, Madison).** This project includes construction of an industrial development southwest of the US 12/18 Interchange; Phase I is 130,000 square feet and Phase II is 150,000 square feet. | Present (Under Construction) | Agriculture, Surface Water Quality, Wetlands |
| **Wyoming Project (4800 Voges Road, Madison).** This project is a commercial warehouse development southwest of the US 12/18 Interchange. Building 1 is 202,800 square feet and building 2 is 152,500 square feet. | Present (Under Construction) | Agriculture, Surface Water Quality, Wetlands |
| **Madison Industrial Campus (6002 Femrite Drive, Madison).** This project includes construction of a 169,000 square-foot industrial building northeast of the US 12/18 Interchange. | Present (Under Construction) | Agriculture, Surface Water Quality, Wetlands |
| **Village at Autumn Lake (2121-2157 Waterfall Way, Madison).** The village of Autumn Lake is a Traditional Residential-Planned (TR-P) District southeast of the US 151 & High Crossing Boulevard interchanges. | Present and Future (Development Ongoing) | Agriculture, Surface Water Quality, Wetlands |
| **UW Health Eastpark Medical Center (Eastpark Drive, Madison)**. This project is a 469,000 square-foot ambulatory facility across from East Madison Hospital and UW Health Rehabilitation Hospital. | Present (Under Construction) | Agriculture, Surface Water Quality, Wetlands |

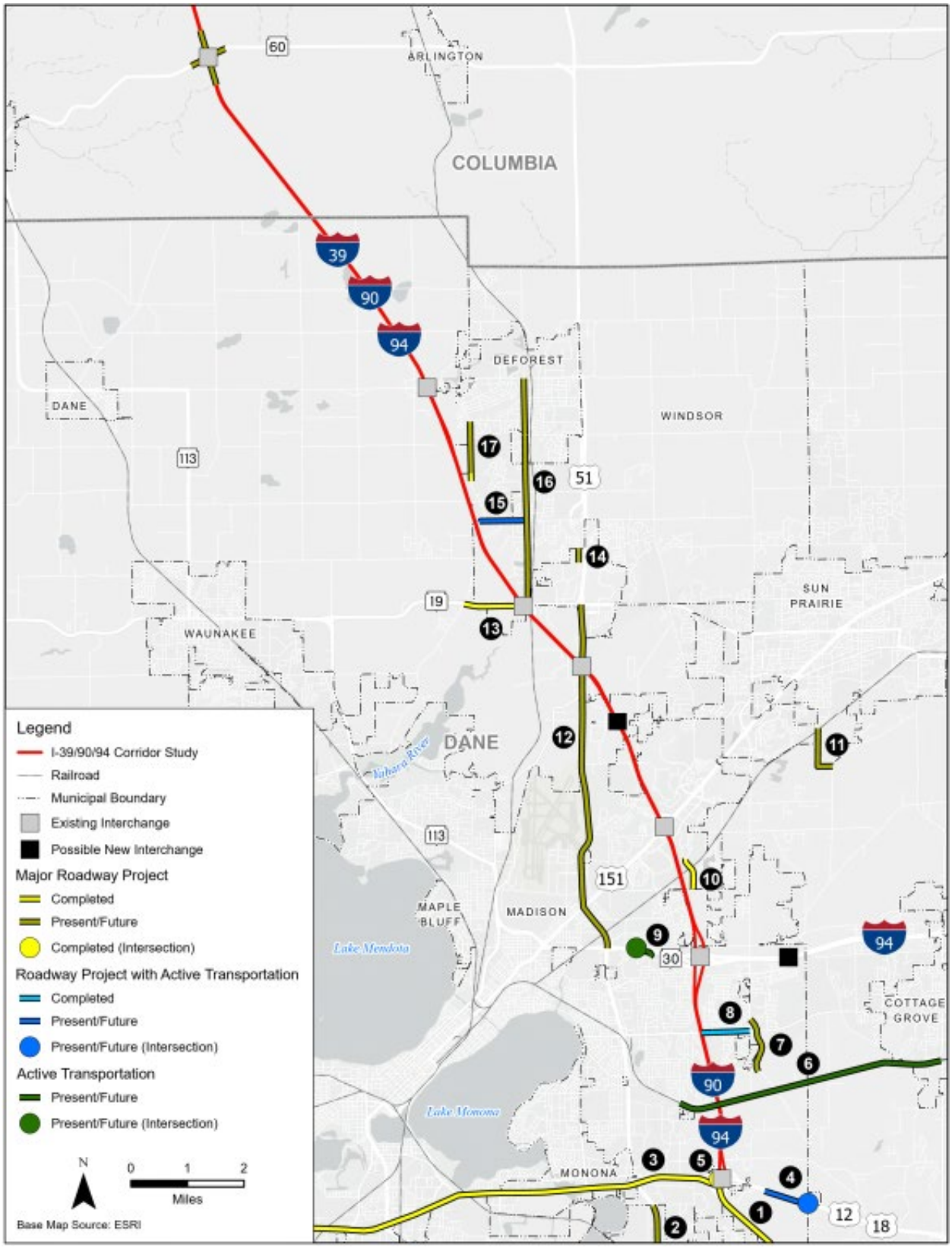
| Project | Past, Present, or Future Action | May Contribute to a Cumulative Impact on the Following Resources |
|---|---|---|
| **Windsor Crossing (Windsor)**. This project is a mixed-use development in Windsor adjacent to US 51 about 2.5 miles northeast of the WIS 19 Interchange. It includes 16 acres of commercial and retail; a conservancy area with stormwater management facilities and a trail system; and residential housing (74 single-family and 228 multi-family housing units). | Present and Future (Development Ongoing) | Agriculture, Surface Water Quality, Wetlands |
| **Conservancy Place (DeForest)**. Condominium development is ongoing at Conservancy Place, a planned mixed-use neighborhood. PinSeekers, a golf and entertainment facility, recently opened just east of I-39/90/94 between the WIS 19 and County V interchanges. The expansion of ABS's headquarters is also underway. | Present and Future (Development Ongoing) | Agriculture, Surface Water Quality, Wetlands |
| **Rolling Prairie Subdivision (Portage)**. The new subdivision will include 120 single family homes. The city of Portage is providing infrastructure for the development, installing water and sewer mains, and connecting Gunderson Drive with Hamilton Street. | Present (Under Construction) | Surface Water Quality, Wetlands |
| **Kalahari Resort Expansion (1305 Kalahari Drive, Wisconsin Dells)**. A $50 million expansion project will add 237 new rooms to the Kalahari Resort which is next to the US 12 Interchange. | Present (Under Construction) | Agriculture, Surface Water Quality, Wetlands |
| **Land of Natura (151 Grand Cambrian Drive, Wisconsin Dells)**. The planned development is a 150-acre natural adventure park located 3 miles southeast of the WIS 13 Interchange. The first phase opened in 2022 and the entire project is estimated to cost $60 million. | Present and Future (Development Ongoing) | Surface Water Quality, Wetlands |
| **Stoney Acres Apartments (701 Stony Acres Rd, Wisconsin Dells)**. The first of a three-building project opened in 2022 with 75 units southeast of the WIS 13 Interchange. | Present and Future (Development Ongoing) | Agriculture, Surface Water Quality, Wetlands |
| **Dane County Sustainability Campus (7101 US Hwy 12 & 18/4502 Brandt Road/County AB, Madison)**. Dane County plans to redevelop part of the Yahara Hills Golf Course (southeast of the US 12/18 Interchange) into a sustainable business park to divert waste and create local circular economies. One lot will be for a landfill and one lot for industrial development. | Future | Agriculture, Surface Water Quality, Wetlands |
| **All Metals Recycling Center (5651 Tradesmen Drive, Madison)**. This project includes the construction of a junkyard which will consist of a 50,000 square-foot warehouse building attached to a 4,000 square-foot office building southwest of the US 12/18 Interchange. | Future | Agriculture, Surface Water Quality, Wetlands |
| **Capitol View at Oak Park (5817 Halley Way, Madison)**. This project is a 99-unit senior housing development southwest of the potential Milwaukee Street Interchange. | Future | Agriculture, Surface Water Quality, Wetlands |
| **Door Creek Park Shelter (7035 Littlemore Drive, Madison)**. The city of Madison plans to construct a 4,000 square-foot community center in Door Creek Park, southeast of the potential Milwaukee Street Interchange. | Future (2025) | Agriculture, Surface Water Quality, Wetlands |

| Project | Past, Present, or Future Action | May Contribute to a Cumulative Impact on the Following Resources |
|---|---|---|
| **Sprecher and Milwaukee Apartments (102 S Sprecher Road, Madison)**. A four-story, 160-unit apartment building will be constructed southwest of the potential Milwaukee Street Interchange | Future | Agriculture, Surface Water Quality, Wetlands |
| **Metro Tech Apartments (6321 Town Center Drive, Madison)**. This project will include three multi-family buildings with a total of 74 units southwest of the potential Milwaukee Street Interchange. | Future | Agriculture, Surface Water Quality, Wetlands |
| **Eastwood Springs Subdivision (6602 Commercial Avenue, Madison)**. Located northwest of the potential Milwaukee Street Interchange, the planned subdivision includes six lots for multi-family development, one lot for mixed-use development, one lot for future development, one lot to be dedicated for public parkland, and one lot for public stormwater management. | Future | Agriculture, Surface Water Quality, Wetlands |
| **Jannah Village (804 Felland Road, Madison)**. This project is located northwest of the potential Milwaukee Street Interchange and includes the construction of a 134-unit residential building complex, 103 rowhouse units, and pool and clubhouse. | Future | Agriculture, Surface Water Quality, Wetlands |
| **Facility Conversion to New Behavioral Health Hospital (2335 City View Drive, Madison)**. Acadia Healthcare plans to construct a 33,375 square-foot addition and convert an office building into a behavioral health hospital southeast of the US 151/High Crossing Boulevard Interchange. | Future | Agriculture, Surface Water Quality, Wetlands |
| **Signature Pointe Apartments (2101-2115 East Springs Drive, Madison)**. A residential building complex with 463 apartments in four buildings will be constructed southwest of the US 151/High Crossing Boulevard Interchange. | Future | Agriculture, Surface Water Quality, Wetlands |
| **Home 2 Suites & Tru Dual Brand Hotel by Hilton (2403 East Springs Drive, Madison)**. This project includes the construction of a five-story, 219-room hotel southwest of the US 151/High Crossing Boulevard Interchange. | Future | Agriculture, Surface Water Quality, Wetlands |
| **The Winston (4205 Portage Road, Madison)**. This project includes the construction of a residential building complex containing 484 apartments in five buildings northwest of the US 151/High Crossing Boulevard Interchange. | Future | Agriculture, Surface Water Quality, Wetlands |
| **The Commons District at The American Center (4846 Eastpark Boulevard, Madison)**. The project will provide a total of up to 950 dwelling units and 14,000 square-feet of commercial space across multiple buildings northeast of the US 151/High Crossing Boulevard Interchange. | Future | Agriculture, Surface Water Quality, Wetlands |
| **Industrial Development (Daentl Road, DeForest)**. This project is still under review and would include 50 acres of industrial/transshipment development south of the WIS 19 Interchange. | Future | Agriculture, Surface Water Quality, Wetlands |
| **Buc-ee's (County Hwy V and County Highway I, DeForest)**. A travel center with 120 gas pumps, 613 parking spaces, and a 73,000 SF store is proposed just west of the County V Interchange. | Future | Agriculture, Surface Water Quality, Wetlands |

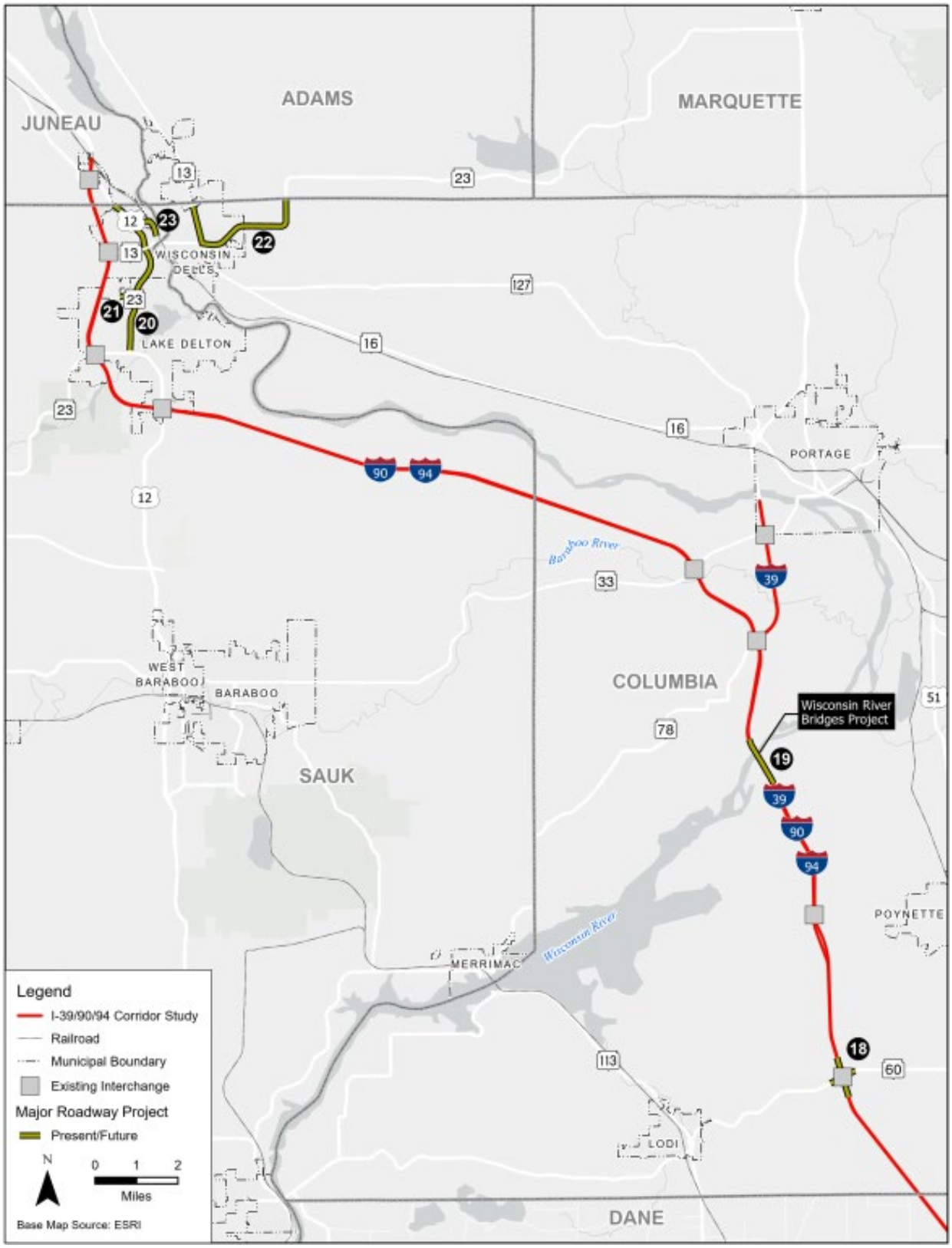
| Project | Past, Present, or Future Action | May Contribute to a Cumulative Impact on the Following Resources |
|---|---|---|
| **Hotel and Truck Stop (I-90/94 and WIS 33 Interchange)**. | Future | Agriculture, Surface Water Quality, Wetlands |

*Other future projects may be needed to mitigate traffic impacts due to the diversion of traffic to off-system roads during construction. The types of improvements include signalization projects or intersection improvements. After the construction staging plan is developed, WisDOT will analyze how much traffic would be diverted from the Interstate and the routes to which the traffic would divert. WisDOT, as part of their analysis, will determine if improvements to these routes are necessary before traffic diversions begin. Impacts of needed improvements on other routes will be evaluated in separate environmental review documents, in accordance with NEPA, as required.*

## Figure 3-3: Past, Present and Future Transportation Projects: Dane County



## Figure 3-4: Past, Present, and Future Transportation Projects: Columbia, Sauk and Juneau Counties



# 3.3. Describe the Affected Environment and Determine the Environmental Consequences and Potential Mitigation Measures

## 3.3.1. Agricultural Lands

### Affected Environment

*Resource Condition, Trends, and Other Future Actions*

Agriculture is a prevalent land use and important economic activity in the study area. As shown in Table 3-2, farmland occupied nearly 1.3 million acres, representing between 36 and 66 percent of land across Dane, Columbia, Sauk, and Juneau counties. According to the 2017 Census of Agriculture, farmland accounts for the majority of land in Dane, Columbia and Sauk counties. Agriculture is important for the economy in the counties in the study corridor, accounting for almost $6 billion in annual economic activity. Importantly, in Dane County, the cumulative impacts study area is mostly adjacent to urban lands and land planned for non-farmland uses.

**Table 3-2: Acres of Farmland, Agricultural Employment and Economic Activity**

| County | Number of Farms | Acres of Farmland | Acres of Land in Farms as Percent of Land Area | Employees | Economic Activity |
|---|---|---|---|---|---|
| Dane | 2,566 | 506,688 | 66% | 14,170 | $3.1 billion |
| Columbia | 1,357 | 304,058 | 62% | 5,262 | $1.5 billion |
| Sauk | 1,412 | 298,906 | 56% | 4,312 | $743 million |
| Juneau | 715 | 175,417 | 36% | 1,885 | $481 million |

*Sources: 2017 Census of Agriculture, U.S. Department of Agriculture The Contributions of Agriculture to the Wisconsin Economy: An Update for 2017*

In Dane County there has been a trend towards the consolidation of agricultural production to larger operations. The county has experienced an increase in farms larger than 500 acres while the smaller farms have been in decline. Between 2000 and 2020, single family residential development accounted for more permanent conversion of Dane County agricultural land (11,104 acres) than any other land use (Dane County 2022).

Table 3-3, from the Census of Agriculture, illustrates how farmland has changed in Columbia and Sauk counties since the 1990s. In both Columbia and Sauk counties trends in the number of farms and average farm size shifted after 2007. Since 2007 the number of farms has decreased while farm size increased in both counties. Of note though, the amount of farmland in Columbia and Sauk counties is difficult to compare between years as Wisconsin began using value assessment over this period, which may have resulted in more lands being self-reported as Agriculture (Sauk 2013). In Juneau County the number of farms decreased while farm size increased between 2012 and 2022.

**Table 3-3: Farmland Trends**

| County | 1992 | 1997 | 2002 | 2007 | 2012 | 2017 | 2022 |
|---|---|---|---|---|---|---|---|
| ***Columbia County*** | | | | | | | |
| Total Farms | 1,443 | 1,359 | 1,526 | 1,585 | 1,564 | 1,357 | 1,199 |
| Farmland (acres) | 327,185 | 325,723 | 348,369 | 316,193 | 307,973 | 304,058 | 290,003 |
| Average Farm Size (acres) | 227 | 240 | 228 | 199 | 197 | 224 | 242 |
| ***Sauk County*** | | | | | | | |
| Total Farms | 1,383 | 1,452 | 1,673 | 1,923 | 1,665 | 1,412 | 1,408 |
| Farmland (acres) | 335,517 | 357,633 | 353,104 | 358,919 | 332,649 | 298,906 | 298,103 |
| Average Farm Size (acres) | 243 | 206 | 211 | 187 | 200 | 212 | 212 |

*Source: Columbia County 2013, Sauk County 2013,* Census of Agriculture 2012, Census of Agriculture 2017, Census of Agriculture 2022

### *Resource Management*

Dane, Columbia, Sauk, and Juneau counties all have county farmland preservation plans; Dane, Columbia and Sauk counties also have farmland preservation zoning. A county farmland preservation plan identifies lands that will remain in agricultural use for the foreseeable future. Farmland preservation plans act as the foundation for other aspects of the DATCP's farmland preservation program including certified zoning, agricultural enterprise areas (AEA)[17] and farmland preservation agreements. A Farmland Preservation Plan identifies a set of policies, goals, and objectives that guide development in order to best protect working farmland and preserve the farm economy. A Farmland Preservation Plan makes farmers eligible to receive income tax credits from the State of Wisconsin.

An AEA is a contiguous land area devoted primarily to agricultural use and locally targeted for agricultural preservation and agricultural development. In Dane County, the cumulative impacts study area includes the Vienna-Dane-Westport AEA and Windsor AEA. In Sauk county, the cumulative impacts study area includes the Fairfield AEA along I-90/94 in the town of Fairfield, see Figure 2-12 and Figure 2-13. Landowners within these areas can apply for a farmland preservation agreement, which requires the land to be kept in agricultural use for 15 years and to meet state soil and water conservation standards. In return, the agreement enables the landowner to claim a farmland preservation tax credit.

### *Summary-Baseline Condition for the Resource*

Population and employment growth results in development competing with agriculture for the same land. In general, development has resulted in a gradual decrease of land within agricultural production in the cumulative impacts study area. Population and employment projections indicate that the study area

[17] *https://datcp.wi.gov/Pages/Programs_Services/DesignatedAEAs.aspx. Accessed September 2023*

will continue to grow to 2040, particularly in the Madison metropolitan area. Study area communities that intend to allow development within areas that are currently farmed encourage infill development and growth next to existing development to minimize the costs of extending infrastructure.

### Environmental Consequences

Cumulative impacts to agricultural land are possible and include those general direct impacts to agriculture discussed in the previous section, as well as the impacts of the projects listed in Table 3-1.

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 Madison area's job markets and its attractive quality of life, as well as the expansion of the tourism industry in the Wisconsin Dells area. As discussed in Table 2-7, the proposed action's contribution to this decline is anticipated to be minimal. The growth that is leading to a decline in agricultural land in the study area is driven by factors other than the proposed action.

### Potential Mitigation

Potential mitigation measures include those that WisDOT or other agencies could implement to minimize indirect impacts. WisDOT completed an Agricultural Impact Notice for Highway Projects (Form ARM-LWR-359) and coordinated with DATCP in accordance with standards and applicable laws. Potential mitigation measures for cumulative impacts WisDOT could implement include refining the design to avoid or minimize impacts during final design, and/or compensating for unavoidable impacts through the right-of-way acquisition process.

As discussed in Section 2.3.2, local governments, and the state have land use and environmental regulations and management practices in place to mitigate potential impacts from the build alternatives and other current and future developments listed in Table 3-1. Conforming with land use planning and regulation tools such as comprehensive 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.

## 3.3.2. Surface Water Quality

### Affected Environment

#### *Resource Condition, Trends, and Other Future Actions*

The study corridor lies within the Lower Rock River Basin and Lower Wisconsin River Basin. Each basin consists of several watersheds shown in Figure 3-1 and Figure 3-2. Watersheds are in a wide range of land uses, ranging from existing and emerging urbanized areas in Dane County and around Wisconsin Dells to agricultural and forested areas subjected to ditching and drainage. The study corridor crosses a total of 11 named waterways and 31 unnamed waterways, primarily with box culverts or bridges. Erosion and stormwater runoff are prevalent sources of water pollutants such as high chloride and sodium levels from winter street salting; oil, gas, and heavy metals from vehicle use on roadways; and sediments and contaminants attached to sediments and nutrients from agricultural runoff. Section 3.11 of the Draft EIS and Section 2.3.5 of this appendix provides more information on surface water features and conditions.

The Wisconsin Department of Natural Resources reports (WDNR 2024a) that overall, some of the Lower Rock River Basin's natural resources are slightly improved compared to 20 years ago. Land management

and forestry law changes have supported a small increase in forests in the basin. Better treatment at wastewater treatment plants has improved water quality in some stretches of streams. Yet today, most water bodies in the basin remain significantly impacted by soil and nutrients washing into the streams and lakes from urban and rural stormwater runoff. Wildlife habitat continues to be lost and fragmentation of habitat accelerates.

WDNR identifies the most serious challenges facing the basin today include:

- Water quality impacts and increased runoff quantity from agriculture and urban land uses, such that many of the rivers and streams are not meeting water quality standards
- Loss of agricultural lands, with its effect on wildlife habitat, recreational usages, the rural landowners and economy
- Loss of critical sensitive habitat and connection between habitats
- Lower urban groundwater levels due to increased use and decreased groundwater infiltration due to more acres of impervious land
- Significant groundwater contamination in areas of the basin

The Wisconsin Department of Natural Resources describes the water quality in the Wisconsin River Basin as generally good (WDNR 2024b). WDNR identifies the primary water quality problems are caused by nonpoint sources of pollution, particularly from agricultural operations, excessive populations of rough fish and hydrologic modifications such as dams, stream straightening and the ditching, draining or other alteration of wetlands.

*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 WDNR through performance standards for runoff management in NR 151 of the Wisconsin Administrative Code.
- County and local erosion control and stormwater ordinances, and agricultural performance standards and agricultural waste management ordinances (Table 2-2) 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 by determining the nature and degree of effect any 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 cumulative impacts study area has been affected by human activities such as farming practices and urban development. Portions of the Yahara River and its tributaries (i.e., Door Creek, Starkweather Creek, and Token Creek), and the Baraboo River in the cumulative impacts study area are considered impaired waterbodies under Section 303(d) of the Clean Water Act. Mirror Lake, an impoundment of Dell Creek, is on the state's list of impaired waters. Portions of Hulbert Creek, a tributary to the Wisconsin River, is also on the state's impaired waters list. Further, two unnamed streams between Hoepker Road and the I-94/WIS 30 interchanges are impaired. Impairment and water quality data on the remaining unnamed streams is not available. Resource regulation and management efforts are ongoing to improve water quality in the study area.

### Environmental Consequences

Cumulative impacts to surface water quality would include those general direct and indirect impacts to surface water discussed in Table 2-8, as well as the impacts of the projects listed in Table 3-1.

Current and future land development, including farming practices and urban development within the study area could cumulatively impact water quality. Increased impervious area in the study area would increase the likelihood of stormwater carrying sediment and other nonpoint-source pollutants to waterbodies. The I-39/90/94 project in combination with the other projects listed in Table 3-1, could incrementally further degrade water quality due to runoff. Excess nitrogen, phosphorus, and road salt can decrease the oxygen in water that fish and other aquatic life need to survive (see Section 2.6.2 titled *Potential Consequences*).

Stormwater best management practices are anticipated to partially offset increases 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 build alternatives is anticipated to have a small contribution, when compared to total impervious area for the Lower Rock River Basin and Lower Wisconsin River Basin.

### Potential Mitigation

Potential mitigation measures include those that WisDOT or other agencies could implement to minimize direct and indirect impacts. Stormwater management will follow WisDOT/DNR TRANS 401, DNR 151/216, and TS4 requirements, and conform to local municipal stormwater management regulations. New transportation facilities are required to reduce total suspended solids loadings by 80 percent, based upon an average annual rainfall year, when compared to no runoff management controls, while reconstruction projects are required to reduce total suspended solids loadings by 40 percent. Stormwater best management practices, including, but not limited to, retention basins (wet detention basins), dry detention basins, infiltration devices, grass-lined ditches, trapezoidal swale through infield, vegetated rock filters, swale blocks/ditch checks, inline storage, biofiltration basins, and stormwater trees, will be evaluated by WisDOT to provide an appropriate measure to manage additional runoff from increased impervious surfaces. As identified in Table 2-2, local governments have regulations and management practices in place (e.g., stormwater management ordinances) to mitigate potential impacts from other current and future developments.

## 3.3.3. Wetlands

### Affected Environment

#### *Resource Condition, Trends, and Other Future Actions*

The I-39/90/94 study corridor is in the Lower Rock River basin and Lower Wisconsin River basin. Each basin consists of several watersheds. The Yahara River and Lake Kegonsa watershed, Yahara River and Lake Monona watershed, and Yahara River and Lake Mendota watershed are within the Lower Rock River basin. Within the Lower Wisconsin River basin are the Lake Wisconsin watershed, Lower Baraboo River watershed, and Dell Creek watershed. Land use varies by watershed and is a mix of agriculture, forests, wetlands and open water, grassland, and developed land.

There are 93,589 acres of wetland in the Lower Rock River basin and 257,514 acres of wetland in the Lower Wisconsin River basin. In both basins, forested and emergent/wet meadow are the dominate wetland community types.[18]

On-site field delineations identified 1,484 wetlands, totaling nearly 570 acres in the vicinity of the study corridor. Table 3-4 summarizes the wetlands in the study corridor.

**Table 3-4: Wetlands along I-39/90/94 Study Corridor**

| Wetland Community Type | Number of Wetlands | Acres | Location (County) |
|---|---|---|---|
| Aquatic Bed | 118 | 44.7 | Dane, Columbia, Sauk, and Juneau |
| Deep Marsh | 21 | 27.3 | Columbia and Sauk |
| Riparian Emergent | 137 | 17.4 | Dane, Columbia, and Sauk |
| Riparian Wooded | 55 | 32.7 | Dane, Columbia, and Sauk |
| Shallow Marsh | 395 | 145.7 | Dane, Columbia, Sauk, and Juneau |
| Shrub Scrub | 45 | 14.6 | Dane, Columbia, Sauk, and Juneau |
| Wet Meadow | 651 | 209.1 | Dane, Columbia, Sauk, and Juneau |
| Wooded Swamp | 62 | 78.3 | Dane, Columbia, Sauk, and Juneau |
| **Total** | **1,484** | **569.8** | |

When a wetland functions properly, it provides water quality protection, fish and wildlife habitat, natural floodwater storage, and reduction in the erosive potential of surface water. A degraded wetland is less able to effectively perform these functions. The greatest threat to wetlands is posed by human activities, such as population growth, urbanization, and industrial development.

*Resource Management*

- Section 404 of the Clean Water Act regulates the discharge of dredged or fill material into waters of the U.S., including wetlands. Section 404 permits are authorized by the U.S. Army Corps of Engineers.
- County and municipal ordinances regulate development activity within wetlands.
- Point-source pollution is regulated through the federal Clean Water Act and the National Pollutant Discharge Elimination System.
- Nonpoint-source pollution is regulated by WDNR through performance standards for runoff management in NR 151 of the Wisconsin Administrative Code.

*Summary-Baseline Condition for the Resource*

There are a variety of wetlands and wetland community types throughout the cumulative impacts study area and study corridor. Wetland quality has been affected by population growth and urban development, overgrazing of pastures, cultivation, and stormwater runoff. Almost sixty percent of the

[18] *WDNR, 2017*

wetlands identified through wetland delineations are considered degraded. Resource regulations are in place to protect the quality of wetlands.

## Environmental Consequences

The Build Alternatives would impact about 172 acres of wetlands. These impacts, combined with existing and future development activities as outlined in Table 3-1, could have a cumulative impact of wetland resources in the study area. Increased development would increase the influx of surface water and sediments into wetlands, further fragment contiguous wetland complexes, increase the loss of groundwater recharge, and further modify drainage patterns.. The build alternatives' unavoidable impact to wetlands will be offset by mitigation.

Assuming no major modifications to Section 404 of the Clean Water Act, or county and local regulations in the future, all of these impacts would be subject to the same permitting requirements as the proposed action, regardless of the project sponsor or funding source. In consideration of federal and state permitting requirements and local regulations, cumulative impacts to wetlands are not anticipated to be substantial.

## Potential Mitigation

Potential mitigation measures include those that WisDOT or other agencies could implement to minimize impacts. There are strict wetland regulations at the federal, county, and municipal levels, promoting the continued preservation of wetland, and thus a reduction in future wetland losses.
In addition, more aggressive wetland regulations require higher mitigation ratios. Based on agreements with regulatory agencies (i.e., WDNR, USACE, USEPA), the WisDOT Wetland Mitigation Banking Technical Guideline (2002) requires WisDOT compensate for wetland losses at::

- 1:1 where wetland acreage losses are applied to an existing mitigation bank site for which WDNR and WisDOT agree that credits are available at the time of wetland loss (1:1 when replaced in-kind but may increase based on factors identified in the technical guideline), or
- 1.5:1 where wetland acreage losses are compensated as part of a concurrent transportation project design.

Thus, in many cases, more wetlands are being created than destroyed by individual projects. Replacement of the same or similar wetland amount and type is an objective, lessening the potential for changing wetland composition in the area. In coordination with WDNR and USACE, WisDOT continues to pursue opportunities for additional wetland mitigation sites close to the study corridor. These mitigation requirements are applicable to both private and public projects.

Dane, Columbia, Sauk, and Juneau counties, the city of Madison, village of Windsor, village of DeForest, city of Portage, village of Lake Delton, and city of Wisconsin Dells have shoreland-wetland zoning ordinances (Table 2-2) that regulate development activity within wetlands.

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# ATTACHMENT A: EXPERT PANEL MEETINGS

## Minutes: I-39/90/94 Expert Panel: Dane County

| | | |
|---|---|---|
| **Meeting Date:** Monday March 20, 2023 | | |
| **Meeting Time:** 10 AM - Noon | | |
| **Meeting Location:** WisDOT Southwest Region Office; 2101 Wright St., Madison, WI 53704 | | |
| **Meeting Attendees:** | Jamie Rybarczyk | Village of Windsor |
| | Ben Zellers | City of Madison |
| | Brian Grady | City of Madison |
| | Colleen Hoesly | Greater Madison MPO |
| | Alex Allon | Village of DeForest |
| | Bethaney Bacher-Gresock | FHWA |
| | Lisa Hemesath | FHWA |
| | Frank Pritzlaff | WisDOT |
| | Tom Koprowski | WisDOT |
| | Brian Taylor | WisDOT |
| | Charlie Webb | Jacobs |
| | Jill Kramer | Jacobs |
| | Sofia Becker | Jacobs |

### Introduction

The project team met with local and regional planners in Dane County on March 20, 2023, at WisDOT's Southwest Regional Office in Madison. The purpose of the meeting was to gain local insight into the potential for growth in the study area, both with and without the proposed I-39/90/94 improvements, as well as to understand local strategies for managing growth in the study area.

The project team developed five maps to gather input from participants on growth and development in the study area. The maps illustrated:

- Planned land developments and (non-transportation) infrastructure improvements
- Development constraints
- Past, present, and reasonably foreseeable future transportation projects
- Special populations that require additional consideration
- Initial proposed indirect effects study area

The maps were created from readily available GIS data sources, and input participants provided via an on-line survey. Refer to Appendix A for a copy of the survey results and meeting presentation. Following is a summary of the key points made by participants during the meeting.

## Discussion

1. **Planned land developments and infrastructure (water/sewer) improvements.**
   a. The map of planned land developments and infrastructure improvements identifies the location of planned land developments and non-transportation improvements, such as water and sewer improvements. Expert panel members were asked to identify additional planned improvements.

      Feedback:

      i. Expand the area planned for development at WIS 19 and Lake Rd. This is a village of Windsor business development area. Businesses in the area may be impacted by construction if the project moves forward.

      ii. There is industrial development planned on the east side of I-39/90/94, as well as the west, south of the WIS 19 interchange.

      iii. Hooper Corporation opened a large headquarters and manufacturing center in the village of DeForest in 2021, north of WIS 19 and west of US 51 on Pederson Crossing Boulevard.

      iv. Some of the development area shown on the map northeast of Hoepker Road is planned for stormwater management and open space. The development area due west of the possible Hoepker Road interchange is largely built out and the southern portion probably won't be developed due to the airport.

      v. The development areas north and south of US 151 east of the US 151 / High Crossing Boulevard interchange are largely built out.

      vi. The area just east of I-39/90/94 between the US 151 / High Crossing Boulevard and I-94/WIS 30 interchanges that is not shown as a development area on the map has been platted but not yet built.

      vii. The village at Autumn Lake by Veridian Homes neighborhood is still under construction. It is north of Lien Road southeast of the US 151 / High Crossing Boulevard interchange. There will be a future Sun Prairie elementary school north of the Autumn Lake development.

      viii. Jannah Village subdivision is under construction north of I-94 near the proposed Milwaukee Street interchange.

   b. Panel members were asked if these planned improvements, developments, or other land use designations would have occurred if there were no plans to improve I-39/90/94? Additionally, would these planned improvements, or developments, have occurred if there were no plans to construct a possible new interchange at Hoepker Road or Milwaukee Street? Further, would the proposed I-39/90/94 improvements affect the pace of land use change or development along the corridor?

      Feedback:

      i. A new Hoepker Road interchange wouldn't change development that much, just the anticipated timing or pace of development. A new Hoepker Road interchange is not in the city of Madison's comprehensive plan but is in Capital Area Regional Plan Regional Planning Commission's (CARPC).

      ii. A new Milwaukee Road interchange would have a greater effect on development than an interchange at Hoepker Road. Development projects have not happened near the proposed Milwaukee Road interchange due to lack of access. Planned employment and mixed-use development in the area is contingent on interstate access. The interchange has been in city plans for a long time, and it is the city of Madison's goal for it to be a full interchange.

iii. The city of Madison very closely follows their plans and rarely deviates from its plans. The city would need to update its plans if the Milwaukee Road interchange is not implemented.

iv. The I-39/90/94 project would promote growth at the County V interchange east of I-39/90/94.

v. A sound barrier is requested along the east side of I-39/90/94 south of the County V interchange by the village of DeForest, and between River Road/Windsor Road (north) to Kenworth Drive (south).

vi. The Yahara River turns near I-39/90/94 and causes flooding upstream.

vii. An overpass is requested by the village of Windsor south of the WIS 19 interchange in the area planned for industrial development. The I-39/90/94 project would have an impact on future planning for development based on infrastructure improvements.

viii. Madison has new intergovernmental agreement with town of Cottage Grove governing annexation.

ix. The city of Madison boundary on the map is a few years old. Madison will provide a new shapefile of the city boundary as well as a shapefile showing the dissolution of the town of Burke.

2. **Development constraints**

a. This map illustrates development constraints, either natural or man-made, that may affect the location of development. Expert panel members were asked to identify additional features that may either enable or inhibit growth.

Feedback:

i. Factors that might enable or inhibit growth at the possible Hoepker Road interchange include proximity to environment corridors (inhibit); already in sewer service area (enable).

ii. Factors that might enable or inhibit growth at the possible Milwaukee Street interchange include proximity to Door Creek (inhibit); already in sewer service area (enable); not in sewer service area yet (inhibit).

iii. Sewer Service Area: CARPC, in its capacity as an agent for the Wisconsin Department of Natural Resources, reviews applications for sewer service extensions. As communities in the region grow, they can request an amendment to the original sewer service areas. The process for sewer service area expansion will focus on water quality impacts going forward. The process got too political when the focus was on land use.

iv. Agricultural Enterprise Areas (AEA): AEAs are community led efforts establishing designated areas important to Wisconsin's agricultural future. More specifically, an AEA is an area of productive agriculture that has received designation from the state at the request of landowners and local governments. Another tool the county uses to preserve farmland is the establishment of Farmland Preservation Zoning.

1) For the Windsor AEA, the community policy is to limit new nonfarm development to a density of 1 unit per 35 acres.

v. Consider the runway protection zone of Dane County Regional Airport as a development constraint.

vi. Should the Dane County Sustainability Campus at the Yahara Hills Golf Course still be considered parks/open space? The eastern portion of the Yahara Hills Golf Course was sold to Dane County to develop as a future landfill, compost site, and sustainable business park. The map shows the entire site as parks and open space.

3. **Past, present, and reasonably foreseeable future transportation projects**

   a. This map illustrates past, present, and reasonably foreseeable future transportation projects. Expert panel members were asked to identify additional transportation projects.

      Feedback:

      i. Add the US 51 study. The I-39/90/94 project could have a cumulative impact with this project by pulling traffic off of US 51, making US 51 more bike and pedestrian friendly.

      ii. A more efficient interchange at US 151 could help attract development to the east.

      iii. Milwaukee Street will be extended regardless of whether an interchange goes in.

      iv. With Buc-ee's development, another turn lane is proposed at County V.

      v. Additional projects to include on the map:

         1) River Road bridge over I-39/90/94 (2023)

         2) Lake Road (County V) reconstruction from North Street to WIS 19 by Dane County, village of DeForest, and village of Windsor (2024-2026)

         3) North Towne Road extension

         4) Sprecher Road realignment

         5) Capital City Trail expansion under the interstate (2026)

         6) Planned connection across I-90 south of the US 12/18 interchange

         7) The city of Madison and Madison MPO will send shapefiles of proposed (but not necessarily programmed) transportation projects

   b. Expert panel members were asked if any of these projects would potentially interact with I-39/90/94 to create cumulative impacts on a resource? If so, what projects and resources.

      Feedback:

      i. Potential cumulative impact at WIS 19 with past capacity increase east of River Road. Recommend studying expansion of WIS 19 and WIS 113 west and south.

      ii. Potential cumulative impact on I-94. Increased traffic and development pressure along I-94 east to County N could lead to the need to improve I-94.

4. **Special populations**

   a. This map illustrates the location of census tracts that had been identified as areas of persistent poverty or historically disadvantaged consistent with the Executive Order on Advancing Racial Equity and Support for Underserved Communities through the Federal Government. This is a screening tool the USDOT has developed to understand how project locations may support or effect Title VI and environment justice. Expert panel members were asked to identify additional locations of underserved or overburdened communities along the corridor.

      Feedback:

      i. The map is missing Madison Fire Station 13 near the possible Milwaukee Street interchange. Madison Fire Department supports the interchange since it would greatly increase their access.

      ii. Madison MPO will send a shapefile of environmental justice areas; they are similar to the areas of persistent poverty.

b. Expert panel members were asked if there are potential indirect effects to these communities from the proposed alternatives? For example, would I-39/90/94 reconstruction and/or expansion – or possible new interchanges – impact their ability to get to work, or ability to assess community services such as grocery stores, or places of worship.

   Feedback:

   i. The potential Milwaukee Street interchange would have a positive impact on low-income neighborhoods west of I-39/90 by reducing traffic.

   ii. Reducing traffic volumes and adding active transportation, such as bicycle and pedestrian accommodations, on Stoughton Road (US 51) would benefit areas of persistent poverty next to US 51 west of I-39/90/94.

5. **Indirect effects area of potential effects**

   a. This map illustrates the initial indirect effects study area. Expert panel members were asked to review the study area and identify if this area is appropriate to capture the range of potential indirect effects from the proposed improvements.

      Feedback:

      i. Recommended changes to the indirect impacts study area:

         1) At the County V interchange extend the area west to County I

         2) At the US 151 / High Crossing Boulevard interchange extend the area east to River Road

   b. Additionally expert panel members were asked to identify the natural resources beyond the existing right-of-way that could be indirectly affected by the proposed action, and what other actions or projects in the area may affect natural resources in the area?

      Feedback:

      i. A new interchange at Hoepker Road may increase Portage Road traffic south to E Washington Avenue.

      ii. At the US 151 / High Crossing Boulevard interchange there is a potential for noise impacts.

      iii. Salting and winter maintenance will have an impact on the lakes.

## Action Items

At the close of the discussion, expert panel participants were informed of upcoming public involvement opportunities and milestones. Meeting minutes will be sent to all participants for review.

# Minutes: I-39/90/94 Expert Panel, Columbia County

| | | |
|---|---|---|
| **Meeting Date:** Tuesday March 21, 2023 | | |
| **Meeting Time:** 9-11 AM | | |
| **Meeting Location:** Columbia County Law Enforcement Center; 711 E Cook St, Portage, WI 5390 | | |
| **Meeting Attendees:** | Nate Moll | Town of Arlington |
| | James Zamzow | Town of Caledonia |
| | Steve Sobiek | City of Portage |
| | Kurt Calkins | Columbia County |
| | Colleen Harris | Exp |
| | Tom Koprowski | WisDOT |
| | Brian Taylor | WisDOT |
| | Jill Kramer | Jacobs |
| | Sofia Becker | Jacobs |

## Introduction

The project team met with local and regional planners in Columbia County on March 21, 2023, at the Columbia County Law Enforcement Center in Portage. The purpose of the meeting was to gain local insight into the potential for growth in the study area, both with and without the proposed I-39/90/94 improvements, as well as to understand local strategies for managing growth in the study area.

The project team developed five maps to gather input from participants on growth and development in the study area. The maps illustrated:

- Planned land developments and (non-transportation) infrastructure improvements
- Development constraints
- Past, present, and reasonably foreseeable future transportation projects
- Special populations that require additional consideration
- Initial proposed indirect effects study area

The maps were created from readily available GIS data sources, and input participants provided via an on-line survey. Refer to Appendix A for a copy of the survey results and meeting presentation. Following is a summary of the key points made by participants during the meeting.

## Discussion

1. **Planned land developments and infrastructure (water/sewer) improvements.**
   a. The map of planned land developments and infrastructure improvements identifies the location of planned land developments and non-transportation improvements, such as water and sewer improvements. Expert panel members were asked to identify additional planned improvements.

      Feedback:

i. Solar farms are a big topic of discussion in Columbia County. The county is being targeted for solar farm development because the Alliant Energy Portage Power Plant, a coal-fired electrical power station in the town of Pacific, is being taken offline by the end of 2025 and transmission lines are already in place.

ii. The city of Portage has five significant residential developments planned along I-39. The Rolling Prairie subdivision is starting construction in June and will include 120 single family homes. The city is providing infrastructure for the development, installing water and sewer mains, and connecting Gunderson Drive with Hamilton Street.

iii. There is some residential development occurring near Lake Wisconsin, but no large residential developments outside of the city of Portage.

iv. Energizer is closing its Portage plant and the city of Portage will lose 200 jobs.

v. The town of Caledonia approved a hotel and truck stop at the I-90/94 and WIS 33 interchange in 2022, but there has not been any action on the site yet. There are development challenges at the site due to the floodplain.

vi. There has been some interest from developers for the old auto auction site at the I-90/94 and WIS 33 interchange.

vii. The Parcel 365.10 development at the WIS 60 interchange is no longer going to be a subdivision. The town of Arlington vacated Best Drive.

b. Panel members were asked if these planned improvements, developments, or other land use designations would have occurred if there were no plans to improve I-39/90/94? Additionally, would the proposed I-39/90/94 improvements affect the pace of land use change or development along the corridor?

Feedback:

i. No developments are being driven by the proposed improvements to I-39/90/94. It would take a new interchange to be a catalyst for development.

2. **Development constraints**

a. This map illustrates development constraints, either natural or man-made, that may affect the location of development. Expert panel members were asked to identify additional features that may either enable or inhibit growth.

Feedback:

i. Columbia County is primarily zoned A1 Agriculture. Along the I-39/90/94 corridor, Columbia County limits non-residential development to within a half mile of the interchanges. Commercial development is restricted to interchange areas to preserve farmland. Outside of the interchange areas, development is focused on rural residential (1 unit per 35 acres). Rezoning is required to build rural residential on land zoned A1. Any other type of development on land zoned A1 would require an amendment to the Columbia County Comprehensive Plan. Columbia County intends to revise its Comprehensive Plan before the end of 2025, but there are unlikely to be any major changes.

ii. There is no complete dataset of easements in Columbia County which can create challenges with planning and development.

iii. Emergency watershed protection easements must also be considered a development constraint, but they should be in the existing floodplains.

iv. The Baraboo Range Preservation Organization works to preserve the Baraboo Range and could provide information on development restrictions in that area. The Baraboo Range lies west of I-39/90/94 north of the Wisconsin River.

v. The city of Portage can only grow north due to wetlands and floodplains which are captured on the map.

3. **Past, present, and reasonably foreseeable future transportation projects**

a. This map illustrates past, present, and reasonably foreseeable future transportation projects. Expert panel members were asked to identify additional transportation projects.

Feedback:

i. There has been an increase in people commuting from Madison north to Columbia County. The city of Portage has a lot of people who work in Portage and live elsewhere.

ii. Amtrak's Twin Cities-Milwaukee-Chicago intercity passenger service is starting in 2024; this will add an extra train in each direction from the Cities of Portage and Wisconsin Dells.

b. Expert panel members were asked if any of these projects would potentially interact with I-39/90/94 to create cumulative impacts on a resource? If so, what projects and resources.

Feedback:

i. The town of Arlington is concerned about the effect on local roads of people detouring from WIS 60 to County CS during construction.

ii. Question from town of Caledonia: Has there been any consideration of moving the flyover up to WIS 33 instead of at the Petro interchange?

iii. Question from the city of Portage: Has there been any study of how traffic patterns to and from Chicago and the Twin Cities might change?

4. **Special populations**

a. This map illustrates the location of census tracts that had been identified as areas of persistent poverty or historically disadvantaged consistent with the Executive Order on Advancing Racial Equity and Support for Underserved Communities through the Federal Government. This is a screening tool the USDOT has developed to understand how project locations may support or effect Title VI and environment justice. Expert panel members were asked to identify additional locations of underserved or overburdened communities along the corridor.

Feedback:

i. J-1 Visa holders should also be considered as a special population. There are up to 5,000 workers with a J-1 visa in the Wisconsin Dells. The city of Portage is working to build a transitional housing development and expand opportunities for local industries to employee J-1 visa holders.

ii. The city of Portage is seeing an increase in Puerto Rican citizens coming to work in local industries and expects the City's Hispanic population to rise.

b. Expert panel members were asked if there are potential indirect effects to these communities from the proposed alternatives? For example, would I-39/90/94 reconstruction and/or expansion – or possible new interchanges – impact their ability to get to work, or ability to assess community services such as grocery stores, or places of worship.

Feedback:

i. The town of Caledonia emphasized the need to consider the transportation of farm implements across I-39/90/94. Caledonia would like access for farmers at WIS 78 which is included in two of the three current proposals for the Petro interchange. Additionally, WisDOT should not remove road access at the Wisconsin River bridges during construction of that project.

5. **Indirect effects area of potential effects**
   a. This map illustrates the initial indirect effects study area. Expert panel members were asked to review the study area and identify if this area is appropriate to capture the range of potential indirect effects from the proposed improvements. Additionally expert panel members were asked to identify the natural resources beyond the existing right-of-way that could be indirectly affected by the proposed action, and what other actions or projects in the area may affect natural resources in the area?

      Feedback:

      i. There were no recommended changes to the proposed study area.

## Action Items

At the close of the discussion, expert panel participants were informed of upcoming public involvement opportunities and milestones. Meeting minutes will be sent to all participants for review.

# Minutes: I-39/90/94 Expert Panel, Sauk and Juneau Counties

| | | |
|---|---|---|
| **Meeting Date:** Tuesday, March 21, 2023 | | |
| **Meeting Time:** 1-3 PM | | |
| **Meeting Location:** City of Wisconsin Dells Municipal Building; 300 La Crosse Street, Wisconsin Dells, WI 5396 | | |
| **Meeting Attendees:** | Lisa Wilson | Sauk County |
| | Melissa Schlupp | Sauk County |
| | Chris Tollaksen | City of Wisconsin Dells |
| | Colleen Harris | Exp |
| | Tom Koprowski | WisDOT |
| | Brian Taylor | WisDOT |
| | Charlie Webb | Jacobs |
| | Jill Kramer | Jacobs |
| | Sofia Becker | Jacobs |

## Introduction

The project team met with local and regional planners in Sauk and Juneau counties on March 21, 2023, at the city of Wisconsin Dells Municipal Building. The purpose of the meeting was to gain local insight into the potential for growth in the study area, both with and without the proposed I-39/90/94 improvements, as well as to understand local strategies for managing growth in the study area.

The project team developed five maps to gather input from participants on growth and development in the study area. The maps illustrated:

- Planned land developments and (non-transportation) infrastructure improvements
- Development constraints
- Past, present, and reasonably foreseeable future transportation projects
- Special populations that require additional consideration
- Initial proposed indirect effects study area

The maps were created from readily available GIS data sources, and input participants provided via an on-line survey. Refer to Appendix A for a copy of the survey results and meeting presentation. Following is a summary of the key points made by participants during the meeting.

## Discussion

1. **Planned land developments and infrastructure (water/sewer) improvements.**
   a. The map of planned land developments and infrastructure improvements identifies the location of planned land developments and non-transportation improvements, such as water and sewer improvements. Expert panel members were asked to identify additional planned improvements.

      Feedback:

i. In the city of Wisconsin Dells, there is significant residential development happening near the WIS 13 interchange. One new apartment building has been completed, one is under construction, and one is expected. The city redeveloped Jones Road and will continue the public road up to the planned new commercial development. There is also development proposed on east side of Trout Road. Development would happen regardless of the I-39/90/94 project but access to the new commercial area from the WIS 13 interchange could affect the pace and scale.

ii. The Shire is a development of vacation rental homes inspired by Hobbiton that is proposed south of WIS 13 and west of US 12.

iii. There is a new Wisconsin Dells high school on Brew Farm Road north of US 12.

iv. In Sauk County, there has not been a lot of development pressure associated with US 12 bypass near the Ho-Chunk Gaming Casino, south of I-90/94.

v. There is a co-op internet provider on west side of I-90/94 and the city of Wisconsin Dells would like their service area to be farther east. It would be nice if WisDOT could work with them and see if I-90/94 is a barrier.

b. Panel members were asked if these planned improvements, developments, or other land use designations would have occurred if there were no plans to improve I-39/90/94? Additionally, would the proposed I-39/90/94 improvements affect the pace of land use change or development along the corridor?

Feedback:

i. More traffic lanes on I-90/94 would increase the pace of development in the Wisconsin Dells area in general.

2. **Development constraints**

a. This map illustrates development constraints, either natural or man-made, that may affect the location of development. Expert panel members were asked to identify additional features that may either enable or inhibit growth.

Feedback:

i. Lack of water and sewer infrastructure is a development constraint for the city of Wisconsin Dells south of the US 12/WIS 18 interchange.

ii. There is potential for a new park along the Wisconsin River north of I-90/94 at County A and T.

iii. Sauk County is looking at establishing and Agricultural Enterprise Area (AEA) west of study corridor in the town of Dellona. AEAs are community led efforts establishing designated areas important to Wisconsin's agricultural future. More specifically, an AEA is an area of productive agriculture that has received designation from the state at the request of landowners and local governments.

3. **Past, present, and reasonably foreseeable future transportation projects**

a. This map illustrates past, present, and reasonably foreseeable future transportation projects. Expert panel members were asked to identify additional transportation projects.

Feedback:

i. To complement the US 12 projects, the village of Lake Delton is building a new road in 2024 – Mt Olympus Road – that will connect to the parkway.

ii. There is a new road proposed east of the WIS 13 interchange.

iii. WisDOT is planning work on WIS 13 and WIS 23 on the east side of the city of Wisconsin Dells in 2028-2029.

b. Expert panel members were asked if any of these projects would potentially interact with I-39/90/94 to create cumulative impacts on a resource? If so, what projects and resources.

Feedback:

i. Improvements to the Wisconsin Dells Parkway (US 12) might pull people off I-90/94.

ii. Transportation projects may move traffic from one corridor to another during construction.

4. **Special populations**

a. This map illustrates the location of census tracts that had been identified as areas of persistent poverty or historically disadvantaged consistent with the Executive Order on Advancing Racial Equity and Support for Underserved Communities through the Federal Government. This is a screening tool the USDOT has developed to understand how project locations may support or effect Title VI and environment justice. Expert panel members were asked to identify additional locations of underserved or overburdened communities along the corridor.

Feedback:

i. There is a new affordable housing development in the city of Wisconsin Dells north of WIS 13 and west of US 12.

b. Expert panel members were asked if there are potential indirect effects to these communities from the proposed alternatives? For example, would I-39/90/94 reconstruction and/or expansion – or possible new interchanges – impact their ability to get to work, or ability to assess community services such as grocery stores, or places of worship.

Feedback:

i. The I-39/90/94 project will not have an effect on the affordable housing development.

5. **Indirect effects area of potential effects**

a. This map illustrates the initial indirect effects study area. Expert panel members were asked to review the study area and identify if this area is appropriate to capture the range of potential indirect effects from the proposed improvements.

Feedback:

i. The study area should include Wisconsin Dells Parkway (US 12).

b. Additionally expert panel members were asked to identify the natural resources beyond the existing right-of-way that could be indirectly affected by the proposed action, and what other actions or projects in the area may affect natural resources in the area?

Feedback:

i. Drainage from the WIS 13 interchange comes into a sensitive floodplain and flows to the Wisconsin River. An increase in stormwater from the project would have an impact.

## Action Items

At the close of the discussion, expert panel participants were informed of upcoming public involvement opportunities and milestones. Meeting minutes will be sent to all participants for review.

# Minutes: I-39/90/94 Expert Panel, Zach Zopp

| | | |
|---|---|---|
| **Meeting Date:** Thursday March 30, 2023 | | |
| **Meeting Time:** 10:30 – 11:30 AM | | |
| **Meeting Location:** Virtual | | |
| **Meeting Attendees:** | Zach Zopp | Wisconsin Department of Agriculture, Trade and Consumer Protection |
| | Frank Pritzlaff | Wisconsin Department of Transportation |
| | Jill Kramer | Jacobs |

## Introduction

The project team met with Zach Zopp of the Wisconsin Department of Agriculture, Trade and Consumer Protection virtually on March 30, 2023. The purpose of the meeting was to gain insight into the potential for growth in the study area, both with and without the proposed I-39/90/94 improvements, as well as to understand observed strategies for managing growth in the study area. Specifically the meeting focused on the potential for indirect and cumulative impact to agricultural resources.

The project team developed five maps to gather input from participants on growth and development in the study area. The maps illustrated:

- Planned land developments and (non-transportation) infrastructure improvements
- Development constraints
- Past, present, and reasonably foreseeable future transportation projects
- Special populations that require additional consideration
- Initial proposed indirect effects study area

The maps were created from readily available GIS data sources, and input participants provided via an on-line survey. Refer to Appendix A for a copy of the survey results and meeting presentation. Following is a summary of the key points made by participants during the meeting.

## Discussion

1. **Planned land developments and infrastructure (water/sewer) improvements.**
   a. The map of planned land developments and infrastructure improvements identifies the location of planned land developments and non-transportation improvements, such as water and sewer improvements. Are you aware of additional planned improvements?

      Feedback:

      i. Land development and infrastructure improvements are not under the jurisdiction of the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP).

2. **Development constraints**

   a. This map illustrates development constraints, either natural or man-made, that may affect the location of development. Are you aware of additional features that may either enable or inhibit growth?

      Feedback:

      i. Not aware of any new Agricultural Enterprise Areas (AEA) in the area.

      ii. The DOT has a special exemption for impacts to land within an AEA. A potential mitigation measure is for the DOT to pay for the conversion fee, if there are right-of-way needs within an AEA. The conversion fee is three times its sales value.

      iii. Each county can zone land for agriculture. If the farmland protection zoning is "certified" (an extra step) the land is eligible for a tax credit.

      iv. The maps illustrate the AEA boundaries. Please contact Wednesday Coye at (608) 224-4611, or DATCPWorkingLands@wi.gov for information on the location of specific parcels within the boundary enrolled in the AEA program. Landowners must complete several steps to enroll their lands in the AEA program. For example landowners need a nutrient management plan, be in good standing, etc.

      v. There is a potential for an indirect effect to the agricultural lands north of DeForest if additional impervious areas (e.g. if the project adds additional lanes) result from the project. At present there are some agricultural lands that are on the edge/margin of being profitable from wet fields. Additional impervious areas could increase the amount of water on the fields, making field unprofitable. Please consider retention ponds and other drainage strategies.

      vi. There are four drainage districts in the study area. Drainage districts are local governmental entities organized under a county drainage board for the primary purpose of draining lands for agriculture. A drainage district establishes a legal mechanism for managing drains and related facilities to ensure reliable drainage. Drainage districts have jurisdiction over surface and below ground drains. If the proposed improves impact a drainage district coordination would be required.

      vii. There is a potential cumulative impact at County V and I-39/90/94 on the Vienna-Dane-Westport AEA. This area is attractive to development (e.g., proposed Buc-ee's). Less concern at the Fairfield AEA near Baraboo.

3. **Past, present, and reasonably foreseeable future transportation projects**

   a. This map illustrates past, present, and reasonably foreseeable future transportation projects. Are you aware of any additional transportation projects.

      Feedback:

      i. Not applicable to DATCP.

4. **Special populations**

   a. This map illustrated the location of census tracts that had been identified as areas of persistent poverty or historically disadvantaged consistent with the Executive Order on Advancing Racial Equity and Support for Underserved Communities through the Federal Government. This is a screening tool the USDOT has developed to understand how project locations may support or effect Title VI and environment justice. Are you aware of any additional locations of underserved or overburdened communities along the corridor?

Feedback:

i. The proposed improvements could have an impact on farmland operations if access to their fields or ability to get gas for farm equipment is terminated.

5. **Indirect effects area of potential effects**

   a. This map illustrates the initial indirect effects study area. Is this area appropriate to capture the range of potential indirect effects from the proposed improvements.

      Feedback:

      i. Consider if the study area boundary is large enough at Wis 60. If the proposed improvements are going to impact a farmer's ability to access fields, loss of an access point, impact a crossing then the study area needs to be expanded to include these impacts.

      ii. Consider managed forest lands. Wisconsin DNR maintains a data set, not available to the public, that identifies managed forest lands. This data set has more information than the data available to the public. Zach has a contact at WDNR if needed.

## Action Items

At the close of the discussion there was a brief discussion of upcoming public involvement opportunities and milestones. Meeting minutes will be prepared and distributed for review.

# Minutes: I-39/90/94 Expert Panel, Carey McAndrews

| | | |
|---|---|---|
| **Meeting Date:** Thursday March 23, 2023 | | |
| **Meeting Time:** Noon -1 PM | | |
| **Meeting Location:** Virtual | | |
| **Meeting Attendees:** | Carey McAndrews | University of Wisconsin, Madison |
| | Colleen Harris | Exp |
| | Jill Kramer | Jacobs |
| | Sofia Becker | Jacobs |

## Introduction

The project team met with Carey McAndrews with the University of Wisconsin virtually on March 23, 2023. The purpose of the meeting was to gain insight into the potential for growth in the study area, both with and without the proposed I-39/90/94 improvements, as well as to understand observed strategies for managing growth in the study area.

The project team developed five maps to gather input from participants on growth and development in the study area. The maps illustrated:

- Planned land developments and infrastructure (non-transportation) improvements
- Development constraints
- Past, present, and reasonably foreseeable future transportation projects
- Special populations that require additional consideration
- Initial proposed indirect effects study area

The maps were created from readily available GIS data sources, and input participants provided via an on-line survey. Refer to Appendix A for a copy of the survey results and meeting presentation. Following is a summary of the key points made by participants during the meeting.

## Discussion

1. **Planned land developments and infrastructure (water/sewer) improvements.**
   a. The map of planned land developments and infrastructure improvements identifies the location of planned land developments and non-transportation improvements, such as water and sewer improvements. Are you aware of additional planned improvements?

      Feedback:

      i. The areas around the possible new Milwaukee Street and Hoepker Road interchanges are in the process of urbanizing. They are undergoing a huge transition from ex-urban/suburban to urban land use.

      ii. The Madison area does not have the strongest land use controls. The default planning method is to let growth occur and mitigate a little but not a lot. Development will likely happen as long as there is demand.

iii. Development trends south of the I-39/90/94 study corridor should be considered as well; there is a lot of development occurring south towards Janesville.

b. Are you aware if these planned improvements, developments, or other land use designations would have occurred if there were no plans to improve I-39/90/94? Additionally, would these planned improvements, or developments, have occurred if there were no plans to construct a possible new interchange at Hoepker Road or Milwaukee Street? Further, would the proposed I-39/90/94 improvements affect the pace of land use change or development along the corridor?

Feedback:

i. The expectation is that any improvements in travel time would induce some amount of growth. New interchanges would affect access roads and the mix of development. Development will happen anyway in the areas around the possible new interchanges, but the project will have an influence on that development. These are economically viable locations that will attract people and jobs.

2. **Development constraints**

a. This map illustrates development constraints, either natural or man-made, that may affect the location of development. Are you aware of additional features that may either enable or inhibit growth?

Feedback:

i. There are mitigation opportunities on sensitive sites throughout the study corridor.

3. **Past, present, and reasonably foreseeable future transportation projects**

a. This map illustrates past, present, and reasonably foreseeable future transportation projects. Are you aware of any additional transportation projects.

Feedback:

i. No additional transportation projects were identified.

b. Would any of these other projects potentially interact with I-39/90/94 to create cumulative impacts on a resource? If so, what projects and resources.

Feedback:

i. Network traffic would be distributed differently with improvements to I-39/90/94 and new interchanges. The project could anticipate its effect on the network and think about where those impacts will occur. The capacity of arterial roads often ends up being increased when they connect to highways.

4. **Special populations**

a. This map illustrates the location of census tracts that had been identified as areas of persistent poverty or historically disadvantaged consistent with the Executive Order on Advancing Racial Equity and Support for Underserved Communities through the Federal Government. This is a screening tool the USDOT has developed to understand how project locations may support or effect Title VI and environment justice. Are you aware of any additional locations of underserved or overburdened communities along the corridor?

Feedback:

i. The special populations included on the maps do not necessarily consider age or gender. As part of the I-39/90/94 study, it is important to understand the distribution of seniors, youth, non-drivers, and people with disabilities. Women are more likely to carry out care-giving travel. These populations defy the definition of a study area but are important to consider.

ii. Information from the Census on residential populations does not necessarily reflect the user population of an area. The study should look at data on worker populations as well, particularly the distribution of entry level jobs.

iii. Are the development locations that have been identified likely to be attractive for logistics? If so, they might have a higher concentration of lower-income workers.

b. Is there a potential for indirect effects to these communities from the proposed alternatives? For example, would I-39/90/94 reconstruction and/or expansion – or possible new interchanges – impact their ability to get to work, or ability to assess community services such as grocery stores, or places of worship.

Feedback:

i. It is unclear how future development might "sort" special populations and what demographic clustering might occur.

ii. Hoepker Road could become an important healthcare cluster; the study should consider populations associated with that cluster.

5. **Indirect effects area of potential effects**

a. This map illustrates the initial indirect effects study area. Is this area appropriate to capture the range of potential indirect effects from the proposed improvements.

Feedback:

i. Consider development in the city of Cottage Grove and its movement west towards Madison.

ii. The effects of the project will spread out along the network on corridors that provide access to I-39/90/94. Consider some of the main corridors going into Madison and south towards Janesville.

iii. The true area of effects will be much larger even though there is a need for a defined study area.

b. Are there any natural resources beyond the existing right-of-way that could be indirectly affected by the proposed action, and what other actions or projects in the area may affect natural resources in the area?

Feedback:

i. Micro-level highway design decisions matter a lot for urban form, and they can be leveraged to create positive effects.

## Action Items

At the close of the discussion there was a brief discussion of upcoming public involvement opportunities and milestones. Meeting minutes will be prepared and distributed for review.