

FHWA-WI-EIS-2024-01-D
PROJECT I.D. 1012-05-02, 1012-05-01, 1015-05-00

INTERSTATE 39 / 90 / 94 CORRIDOR



US 12/18 TO WIS 60
WIS 60 TO LEVEE ROAD
US 16/WIS 12 TO I-39
DANE, COLUMBIA, SAUK AND JUNEAU COUNTIES, WISCONSIN

DRAFT ENVIRONMENTAL IMPACT STATEMENT
and
Section 4(f) Evaluation

Submitted pursuant to 42 U.S.C. 4332(2)(c), 49 U.S.C. 303 and 23 U.S.C. 139 by the
U.S. Department of Transportation, Federal Highway Administration,
State of Wisconsin Department of Transportation

Cooperating Agencies:
U.S. Environmental Protection Agency
U.S. Army Corps of Engineers

APPROVALS

	<u>06/17/2024</u>		<u>06/17/2024</u>
For Federal Highway Administration	Date	For Wisconsin Department of Transportation	Date

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At the conclusion of the environmental process, FHWA will issue a single Final Environmental Impact Statement and Record of Decision document pursuant to 23 U.S.C. 139(n)(2), unless FHWA determines statutory criteria or practicability considerations preclude issuance of the combined document.

Comments on the Draft EIS are due by August 12, 2024, or 45 days after the Notice of Availability appears in the Federal Register, whichever is later and should be sent to:

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ABSTRACT

The I-39/90/94 Corridor Study area extends 67-miles from US 12/18 to US 12/WIS 16 and includes I-39 from its split with I-90/94 to Levee Road. This corridor has design and operational deficiencies, aging and outdated infrastructure, and growing traffic congestion, all of which contributes to safety issues. As traffic increases, safety and traffic operations in the corridor will continue to deteriorate. The corridor is also susceptible to flooding, resulting in repeated full or partial highway closures. The Draft EIS evaluated the social, environmental and economic impacts of a No Build alternative and build alternatives, as well as the extent to which these alternatives address the study's purpose and need.

NATIONAL ENVIRONMENTAL POLICY ACT STATEMENT

The National Environmental Policy Act (NEPA) of 1969, as amended in U.S. Code (U.S.C.) 42 U.S.C. 4332, became effective Jan. 1, 1970. Under this law, the Federal Highway Administration (FHWA) is required to prepare an Environmental Impact Statement (EIS) on proposals that are funded under its authority if the proposal is determined to be a major action that may significantly affect the quality of the human environment. The primary purpose of an EIS is to ensure agencies consider the environmental impacts of their actions in decision making.

The EIS process is done in two stages: draft and final. The draft environmental impact statement (draft EIS) is circulated for review and comment to federal, state and local agencies with jurisdiction by law or special expertise, and it is made available to the public. The draft EIS must be made available to the public at least 15 days before the public hearing. Per 23 CFR 771.123(k), a comment period of not fewer than 45 days nor more than 60 days is provided from the date the draft EIS availability notice is published in the Federal Register. The Wisconsin Department of Transportation (WisDOT) must receive agency comments on or before the date listed on the cover page of the draft EIS unless a time extension is requested and granted by WisDOT and FHWA pursuant to 23 U.S.C. 139(g)(2)(A). The final EIS will include:

- o Identification of the preferred course of action (preferred alternative) and the basis for its selection
- o Basic content of the draft EIS, along with any changes, updated information, or additional information gathered during the agency and public comment period
- o Summary of, and responses to substantive comments on social, economic, environmental and engineering aspects received during the public hearing and the agency and public comment period on the draft EIS
- o Resolution of environmental issues and documentation of compliance with applicable environmental laws and related requirements

To conclude the NEPA process, FHWA will issue a single final EIS and record of decision (final EIS/ROD) as one combined document pursuant to 23 USC 139(n)(2), unless the final EIS makes substantial changes to the proposed action that are relevant to environmental or safety concerns or there are significant new circumstances or information relevant to environmental concerns that bear on the proposed action or the impacts of the proposed action. If no substantive new information is received at the public hearing or during the agency and public comment periods, FHWA and WisDOT may proceed with the combined issuance of a final EIS and ROD.

Both the draft EIS and final EIS/ROD are full disclosure documents, which provide a full description of the proposed project, the existing environment, and an analysis of the anticipated beneficial and/or adverse environmental effects. A federal agency may publish a notice in the Federal Register, pursuant to 23 U.S.C. 139(l), indicating that one or more federal agencies have taken final action on permits, licenses or approvals for a transportation project. If such notice is published, claims seeking judicial review of those federal agency actions will be barred unless such claims are filed within 150 days after the date of publication of the notice, or within such shorter period as is specified in the federal laws pursuant to which judicial review of the federal agency action is allowed. If no notice is published, then the periods of time that otherwise are provided by the federal laws governing such claims will apply.

ACRONYMS AND ABBREVIATIONS

AADT	Annual Average Daily Traffic
ACONN	Aquatic Connectivity at Road-Stream Crossings
AEA	Agricultural Enterprise Area
AIS	Agricultural Impact Statement
AMM	Avoidance and Minimization Measures
ANSI	American National Standards Institute
APE	Area of Potential Effects
ATC	American Transmission Company
ATV/UTV	All-Terrain Vehicle/Utility Task Vehicle
BAC	Business Advisory Committee
BCA	Benefit Cost Analysis
BMP	Best Management Practice
BOD	biological oxygen demand
BRT	Bus Rapid Transit
CAA	Clean Air Act
CARPC	Capital Area Regional Planning Commission
CDC	Centers for Disease Control
CEO	Chief Executive Officer
CFR	Code of Federal Regulations
CPR	Canadian Pacific Railway
CSRP	Conceptual Stage Relocation Plan
CWA	Clean Water Act
DATCP	Wisconsin Department of Agriculture, Trade and Consumer Protection
dB/dBA	Decibel/A-weighted Decibel
DNAE	Determination of No Adverse Effect
DO	dissolved oxygen
DPCED	City of Madison Department of Planning, Community & Economic Development
ECIP	Erosion Control Implementation Plan
EIS	Environmental Impact Statement
EJ	Environmental Justice

EMCC	East Madison Community Center
EMS	Emergency Medical Service
EO	Executive Order
EV	Electric Vehicle
FAA	Federal Aviation Administration
FDM	Facilities Development Manual
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
FTA	Federal Transit Administration
FRA	Federal Railroad Administration
FS	Field Site
GHG	Greenhouse gas
GIS	Geographic Information System
HOV	High Occupancy Vehicle
HPV	High Potential Zone
I-##	Interstate Number
IPaC	Information for Planning and Consultation
IRIS	Integrated Risk Information System (USEPA)
L_{eq}	The equivalent steady-state noise level, as measured in decibels on the A-weighted scale (dBA), which in a stated period of time contains the same acoustic energy as the time-varying noise level during the same period.
$L_{eq(h)}$	The hourly value of L_{eq}
LOAC	Local Officials Advisory Committee
LOS	Level of Service
LUST	Leaking Underground Storage Tank
LWCF	Land and Water Conservation Fund
MBTA	Migratory Bird Treaty Act of 1918
MCD	Minor Civil Division
MLS	Multiple Listing Service
MMT	Million Metric Tons

MOU	Memorandum of Understanding
MOVES	MOtor Vehicle Emissions Simulator
MPH	Mile(s) per hour
MPO	Metropolitan Planning Organization
MSAT	Mobile Source Air Toxics
NAAQS	National Ambient Air Quality Standards
NDP	Neighborhood Development Plan
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHI	Natural Heritage Inventory
NHPA	National Historic Preservation Act
NOI	Notice of Intent
NPS	National Park Service
NR	Natural Resources
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
OHWM	Ordinary High Water Mark
PCI	Pavement Condition Index
PFOS	perfluoro octane sulfonate
PIM	Public involvement meeting
PIP	Public Involvement Plan
PM	Particulate Matter
ROD	Record of Decision
RPBB	Rusty patched bumble bee
SHPO	State Historic Preservation Office
TAC	Technical Advisory Committee
TCGP	Transportation Construction General Permit
TDM	Transportation Demand Management
TLE	Temporary Limited Easement
TMDL	Total Maximum Daily Loads
TMP	Traffic Management Plan
TNM	Traffic Noise Model

TPC	Transportation Projects Commission
TS4	Transportation Separate Storm Sewer System
TSMO	Transportation Systems Management and Operations
TSS	Total suspended solids
US ##	U.S. Highway Number
U.S.C.	United States Code
USDA	U.S. Department of Agriculture
US DOT	U.S. Department of Transportation
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
UW	University of Wisconsin
VS	Validation Site
WDHS	Wisconsin Department of Health Services
WDNR	Wisconsin Department of Natural Resources
WIS ##	Wisconsin State Highway Number
WisDOT	Wisconsin Department of Transportation
WPDES	Wisconsin Pollutant Discharge Elimination System
WRP	Wetland Reserve Program
WSE	Water Surface Elevation
WSOR	Wisconsin and Southern Railroad

SUMMARY

Project Background

The I-39/90/94 Corridor Study area extends 67-miles from US 12/18 in Madison to US 12/WIS 16 in Wisconsin Dells and includes I-39 from its split with I-90/94 to Levee Road near Portage. Evaluation of the influence of the US 151/High Crossing Boulevard Interchanges extends the study corridor along US 151 to American Parkway/Nelson Road. A potential new interchange on I-94 at Milwaukee Street similarly extends the study corridor east along I-94. The existing I-39/90/94 corridor has a history of traffic congestion, design and operational deficiencies, aging and outdated infrastructure and safety issues. The corridor is also susceptible to flooding, resulting in repeated full or partial mainline closures. The Draft EIS evaluates the social, environmental and economic impacts of a No Build alternative and multiple build alternatives, as well as the extent these alternatives could address the study's purpose and need.

Purpose and Need

The purpose of the I-39/90/94 Corridor Study is to address the Interstate's existing and future operational, safety and condition needs. The study also strives to minimize impacts to the natural, cultural and built environment to the extent feasible and practicable. The need for the transportation improvements in the study corridor is demonstrated through a combination of factors including traffic demand, safety needs, pavement and bridge condition, corridor resiliency and other considerations as discussed in the following sections.

Traffic Demand

Sections of I-39/90/94 are beginning to operate poorly today and many portions of the corridor will operate unacceptably by 2050 without improvements.

Heavy recreational, commuting and freight traffic uniquely affect traffic operations in the study corridor. Recreational traffic occurs typically on Fridays and Sundays in the summer, reflecting tourism's importance to Wisconsin's economy. Commuting traffic occurs typically during weekday AM and PM peak hours throughout the year. Heavy freight traffic occurs throughout the week.

I-39/90/94 traffic volumes are highest between US 12/18 and US 151 due to the mix of local commuter travel with regional recreation and freight trips. In this section, heavy congestion currently occurs in both directions during weekday morning and afternoon rush hours. High levels of congestion currently occur in both directions on summer Fridays and Sundays when recreational traffic is heavy. By 2050, the heaviest levels of traffic congestion are projected for summer Fridays and traffic flow will result in stop-and-go conditions during morning and evening commutes. Traffic congestion is primarily due to weaving and overcapacity ramps.

Recreational traffic represents the highest traffic volumes on I-39/90/94 between WIS 60 and US 12/WIS 16, and I-39 from the I-39 I-90/94 Split to Levee Road. Poor traffic operations impact travel time reliability. The least reliable travel times tend to occur on summer Sundays between US 12/WIS 16 and the I-39 I-90/94 Split. Travel times that normally take 20 minutes can double or triple on summer Sundays because of congestion or crashes. Unreliable travel makes trip planning difficult and leads to driver frustration.

Safety Needs

Crash rates along portions of the study corridor, particularly at interchanges, exceed the statewide average crash rate. Congestion and geometric/design deficiencies contribute to the crashes. Crashes often lead to secondary crashes where unsuspecting drivers approaching a congestion backup at a high speed are not able to stop in time. Drivers are 70% more likely to be injured in such a secondary crash compared to all other crashes.

Pavement Condition

Pavement maintenance projects are anticipated in 24 of the next 30 years somewhere in the study corridor, which presents ongoing travel delay and congestion for daily commercial and recreational traffic. Once the original pavement has deteriorated, repair work can be performed to extend the life of the pavement. Eventually, full pavement replacement is more cost effective than more repair. Emergency pavement projects also occur, which disrupts regular maintenance and construction schedules. WisDOT's pavement performance goal is to have 90% of its backbone highway pavements rated fair or better.¹ By the year 2030, WisDOT projects that over 20% of pavement in the study corridor will be in poor or worse condition.

Bridge Condition

Although age is not a direct indicator of a bridge's needs, it is a gauge to assess the magnitude of potential future maintenance projects required. Within the I-39/90/94 study corridor there are 113 bridges, of which 84 will be over 50 years old in the year 2030. Further, many bridges do not meet current vertical and lateral design standards.

The I-90/94 bridges over Mirror Lake, constructed in 1961, are "fracture critical" meaning that failure of a steel girder could cause the bridge to collapse. Due to their substandard lane and shoulder width, the Mirror Lake bridges have a crash rate 2.5 times the statewide average. The narrow bridge and narrow shoulders reduce space for driver errors and contribute to the increased crash rate.

Corridor Resiliency

Flood events causing partial or full Interstate closures since 2008 impact corridor resilience. Both I-39 and I-90/94 are in a low area as they cross the Baraboo and Wisconsin Rivers. The Baraboo River near the I-39 I-90/94 Split Interchange flooded in 2008, closing both I-39 and I-90/94 for several days. The Baraboo River flooded again in 2018, which partially closed I-90/94. The Baraboo River flooding is problematic because it affects both I-90/94 and I-39, potentially closing both Interstates, which has substantial impacts to both state and national commerce as well as emergency services access.

Other Considerations

The I-39/90/94 Corridor Study addresses needs on existing interchanges in the study corridor. In response to a request from the city of Madison, WisDOT will also evaluate potential new interchange access at Hoepker Road on I-39/90/94, and at a proposed extension of Milwaukee Street on I-94, located east of the I-94/WIS 30 Interchange.

¹ Wisconsin Department of Transportation. MAPSS Performance Improvement Report. July 2023.

Alternatives

WisDOT developed alternatives for the I-39/90/94 freeway, as well as existing interchanges and two new interchanges. WisDOT developed an alternatives screening process to evaluate alternatives based on how well they addressed the study purpose and need factors. Alternatives that did not meet the study purpose and need were dismissed from further evaluation. WisDOT then advanced alternatives meeting the study purpose and need for further evaluation and screening based on preliminary environmental impacts, agency and public input and relative projected construction costs.

Initial Alternatives Considered

Initial alternatives that did not meet study purpose and need included:

- o **No Build.** 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. The No Build alternative does not meet the study purpose and need but is retained as a baseline alternative against which the other alternatives screened for continued study in the EIS.
- o **Transportation Demand Management (TDM)/Transportation Systems Management and Operations (TSMO).** This alternative includes TDM measures that reduce personal vehicular travel or shift travel to alternative times and routes. TSMO strategies maximize existing transportation facilities' capacity and travel efficiency. WisDOT eliminated this alternative from further study because it poorly addresses traffic demand and safety needs, does not address aging pavement and structure needs, nor does it address flooding risks. While this alternative did not meet the study purpose and need, WisDOT may include several of the alternatives' measures in other build alternatives. Some anticipated measures to be included are freeway monitoring and advisory information, crash investigation sites and law enforcement pads, traffic detectors, enhanced mile-marker posts and bicycle and pedestrian facilities.
- o **Off Alignment (East Reliever).** This alternative was part of a prior study that would bypass I-39/90/94 on a new route east of the Interstate and would not reconstruct a portion of I-39/90/94. WisDOT eliminated this alternative from further study primarily because of substantial impacts and lack of public support.
- o **Spot Improvements.** This alternative retains the existing Interstate in its current configuration and would only include spot safety and operational improvements with minimal or no right of way acquired. WisDOT eliminated this alternative from further study. While this alternative addresses some safety, pavement and bridge needs, it does not address those factors for the entire corridor, and it does not address existing and future travel demands or flood risk.

Build Alternatives – Freeway Modernization

Modernization alternatives reconstruct the Interstate to modern design standards whenever possible. All modernization alternatives would implement recommendations from WisDOT's Baraboo River flood minimization study completed as part of this study. The analysis recommends raising portions of I-39 and I-90/94 by about 3 to 4 feet and widening the existing I-39 Baraboo River bridge to 500 feet to reduce flood risks on the Interstate. In addition to also addressing safety needs, all modernization alternatives would:

- o Replace deteriorating pavement, bridges and culverts
- o Move all ramps to the right, eliminating lefthand entrances and exits
- o Improve ramp lengths and bridge clearances

- o Expand shoulders
- o Improve roadway curves, lighting and signage
- o 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. 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.

WisDOT evaluated three modernization alternatives described below. Plan views of recommended preferred Modernization Plus Added General-Purpose Lane alternative are included in the Draft EIS, Appendix A. The Modernization Hybrid alternative, which is also recommended for further study in the Draft EIS, is similar to the preferred freeway modernization, with overall pavement width being approximately 6 feet less on either side of the freeway. As such, plan views in Appendix A also approximate the Modernization Hybrid alternative.

Modernization of Existing Travel Lanes (dismissed from further consideration)

This alternative retains the existing number of freeway travel lanes but reconstructs the Interstate to modern design standards. This alternative does not meet purpose and need for addressing existing and future travel demands and safety compared to the two other modernization alternatives and was eliminated for further study.

Modernization Plus Added General-Purpose Lane (Recommended Preferred Alternative)

This alternative would reconstruct the Interstate with 12-foot shoulders, similar to the Modernization of Existing Travel Lanes alternative but add a general-purpose lane in each direction along the present freeway alignment throughout a majority of the study corridor. I-39 from the I-39 I-90/94 Split to Levee Road would maintain the same number of lanes as the existing condition. Where operationally prudent, the alternatives include collector-distributor (C-D) and auxiliary lanes. C-D lanes are barrier separated from the mainline freeway. They collect traffic from entrance ramps and distribute traffic to exit ramps on lanes dedicated for merging traffic. Auxiliary lanes are not barrier separated lanes, and used for traffic weaving as it enters and exits a freeway. WisDOT recommends this alternative as the preferred alternative primarily because the predicted crash reduction compared to the No Build alternative (30% reduction) is greater compared to the Modernization Hybrid alternative (1-3% reduction). This alternative is anticipated to perform better operationally when incidents, large snow events or other events limit access to managed lanes under the Modernization Hybrid alternative.

Modernization Hybrid (Recommended for Further Study)

This alternative would reconstruct the Interstate with a combination of adding a general-purpose lane or adding a managed lane, depending on location. This alternative also utilizes C-D lanes and auxiliary lanes to further manage traffic. The managed lanes under this alternative would be unavailable at times. By the year 2050, WisDOT anticipates the managed lanes would be open for about 40% of daylight hours on weekdays and for all daylight hours on weekends.

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. 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 Interchange to Levee Road would maintain the

same number of lanes as the existing condition. The predicted reduction in crashes compared to the No Build is low (1-3%), but because of the high level of local interest in the alternative WisDOT recommends the alternative for further study.

Build Alternatives – Interchanges

The study corridor includes 15 existing interchanges with a range of design deficiencies that contribute to poor traffic operations and crashes. At the request of the city of Madison, WisDOT also evaluated two potential new interchanges. WisDOT evaluated multiple conceptual alternatives at each of the interchanges. Like the freeway modernization alternatives, WisDOT evaluated interchange alternatives based on purpose and need factors as well as preliminary environmental impacts, agency and public input and projected construction cost.

Interchange alternatives recommended for further study are summarized below and identify WisDOT's recommended preferred alternative.

US 12/18

Any improvements to I-39/90 in the interchange area are limited to freeway improvements necessary to transition to the eventual preferred freeway alternative north of the interchange.

I-94/WIS 30 Interchange

WisDOT recommends the Full Modernization #2 alternative as the preferred alternative for further study. The alternative allows for a potential new interchange on Milwaukee Street on I-94. The I-94/WIS 30 Interchange and US 151/High Crossing Interchange alternatives would address weaving issues and remove left hand entrances and exits.

Milwaukee Street Interchange

WisDOT evaluated a new potential interchange at I-94 by extending existing Milwaukee Street in an area of planned neighborhood development east of the I-94/WIS 30 Interchange. WisDOT recommends the Partial Cloverleaf alternative as the preferred alternative for further study. The Partial Cloverleaf maximizes the weave distance between Milwaukee Street and the I-94/WIS 30 Interchange. The Milwaukee Street interchange would be dependent on a funding agreement with the city of Madison. If a funding agreement does not occur, WisDOT would select the No Build alternative.

US 151/High Crossing Boulevard Interchanges

WisDOT recommends the Directional alternative as the preferred alternative for further study. The alternative provides freeway-to-freeway movements between US 51 and I-39/90/94. A diamond interchange is embedded at East Washington Avenue to provide local access and slow traffic as it enters the commercial area of East Washington Avenue. This alternative maintains a half interchange at High Crossing Boulevard, but better separates the ramps to/from the south to address congestion and safety. The current US 151 Interchange at Nelson Road/American Parkway is moved slightly northeast to Eastpark Boulevard to provide appropriate weave distances between I-39/90/94 and the interchange.

Hoepker Road Interchange

WisDOT evaluated a new potential interchange where Hoepker Road crosses I-39/90/94. The interchange would be located in an area of existing and planned development on both sides of the Interstate. WisDOT recommends the Shifted Diamond alternative as the preferred alternative for further study. This standard interchange design is the most familiar interchange type with motorists and the ramps are easiest for freight vehicles to navigate. The Hoepker Road interchange would be dependent on a funding agreement with the city of Madison. If a funding agreement does not occur, WisDOT would select the No Build alternative.

US 51 Interchange

WisDOT recommends the Partial Cloverleaf alternative as the preferred alternative for further study. This alternative reconstructs the existing interchange in a similar footprint, increases the entrance and exit ramp lengths and adds an extended northbound ramp along the Interstate. The extended ramp improves traffic operations and safety by reducing merging and lane changes.

WIS 19 Interchange

WisDOT recommends the U-Ramp alternative as the preferred alternative for further study. The alternative maintains WIS 19 under the Interstate and the U-ramp crosses under extended Interstate bridges over the railroad. The U-ramp configuration would accommodate heavy northbound to westbound movement from the Interstate during evening peak travel times. The alternative increases capacity along WIS 19 from four lanes to six lanes between Tierney Crossing and Pepsi Way.

County V Interchange

The village of DeForest approved a large gas station/convenience store development at the interchange. The substantial traffic demand generated by the proposed development would require improvements to the County V interchange. The developer would complete a separate environmental review to privately fund the interchange reconstruction before construction could occur for a proposed project analyzed with this EIS. Should the development occur, WisDOT recommends the No Build alternative as the preferred alternative.

If the development at the interchange does not move forward, WisDOT recommends the Diamond alternative for further study. The Diamond alternative can accommodate traffic demands as currently provided by regional travel models.

County CS Interchange

WisDOT recommends the Diamond alternative as the preferred alternative for further study. The diamond ramp alignments improve driver comfort compared to existing loop ramps, providing improved sight distances and driver reaction time. This alternative is able to provide improved deceleration lanes for trucks with the expanded Interstate footprint. The longer southbound acceleration lane helps traffic operations during heavy travel times on Sunday afternoons.

I-39 I-90/94 Split Interchange

WisDOT recommends the Low Build alternative as the preferred alternative for further study. This alternative reconstructs the existing interchange as a 3-level interchange in a similar footprint. The alternative also

reconstructs the WIS 78 interchange as a diamond interchange and relocates Cascade Mountain Road access to the Interstate via the WIS 78 Interchange. The alternative also accounts for recommendations in WisDOT's flood minimization study in this area that would raise the Interstate roadways and widen the I-39 Baraboo River bridge to reduce flood risk on the Interstate.

WIS 33 Interchange at I-39

WisDOT recommends the Diamond alternative as the preferred alternative for further study. The alternative would reconfigure ramp alignments to improve sight distances for improved driver reaction time. A diamond interchange is the most favored interchange type for WisDOT as they help prevent wrong-way drivers and meet driver expectations. The interchange is located in a floodplain where past floods have closed all or parts of I-39 and WIS 33. The alternative also accounts for recommendations in WisDOT's flood minimization study in this area that would raise the Interstate by about 4 feet to reduce flood risk.

WIS 33 Interchange at I-90/94

WisDOT recommends the Partial Cloverleaf alternative as the preferred alternative for further study. This alternative would reconstruct the existing interchange in a similar footprint. Ramp curves would be realigned to improve driver comfort entering and exiting the Interstate. Acceleration and deceleration lanes would be lengthened. The alternative minimizes impacts to surrounding wetlands and floodplains compared to a standard diamond configuration. The alternative also accounts for recommendations in WisDOT's flood minimization study in this area that would raise the Interstate by about 3 feet to reduce flood risk.

WIS 12 Interchange

WisDOT recommends the Diverging Diamond alternative as the preferred alternative for further study. The alternative best addresses safety at this interchange, which has some of the worst safety statistics in the study corridor due to complex ramp configuration. The alternative provides free flow left turns to entrance ramps and the ramp alignments improve sight distances for improved driver reaction time. The alternative reduces the number of conflict points at intersections compared to a standard diamond interchange configuration. Improved geometrics of ramps allow vehicles to exit or enter the Interstate at speeds closer to the posted speed.

WIS 23 Interchange

WisDOT recommends the Diamond alternative as the preferred alternative for further study. This alternative reconfigures the interchange in a similar but slightly smaller footprint. Ramp alignments improve sight distances for improved driver reaction time. The Diamond alternative adequately manages existing and future traffic demand while addressing safety problems.

WIS 13 Interchange

WisDOT recommends the Trumpet alternative as the preferred alternative for further study. This alternative reconstructs the interchange to current design standards. Ramp curves would be realigned to improve driver comfort entering and exiting the Interstate. Due to local interest, WisDOT also recommends the Split Diamond alternative for further study. The Split Diamond alternative allows for ramps to and from WIS 13 and County H, providing Interstate access to both roads while connecting them with one-way frontage roads on either side of I-90/94. The Trumpet alternative would perform better than the Split Diamond alternative for safety because it has

fewer conflict points, which reduces the risk of crashes. The Trumpet alternative would also avoid permanent right of way impacts to the Hulburt Creek Fishery Area compared to the Split Diamond alternative.

US 12/WI 16 Interchange

WisDOT recommends the Diamond alternative as the preferred alternative for further study. This alternative reconstructs the existing interchange in a similar footprint with improved ramp design to provide better sight distance, which improves driver reaction time.

Alternatives Summary

Based on continued evaluation and input from its public involvement activities, WisDOT and FHWA identified recommended preferred alternatives, as well as additional alternatives carried forward for further study, see Table S-1. Plan views of alternatives listed below are included in Appendix A.

Table S-1: Alternatives Recommended for Further Study

Mainline or Interchange	Alternative
I-39/90/94 Freeway	Modernization Plus Added General-Purpose Lane (Preferred) Modernization Hybrid
I-94/WIS 30 Interchange	Full Modernization #2 (Preferred)
Proposed New Milwaukee Street Interchange	Partial Cloverleaf (Preferred)
US 151/High Crossing Boulevard	Directional (Preferred)
Proposed New Hoepker Road Interchange	Shifted Diamond (Preferred)
US 51 Interchange	Partial Cloverleaf (Preferred)
WIS 19 Interchange	U-Ramp (Preferred)
County V Interchange	No Build (Preferred); interchange constructed as a separate project Diamond
County CS Interchange	Diamond (Preferred)
I-39 I-90/94 Split Interchange	Low Build (Preferred)
WIS 33 at I-39 Interchange	Diamond (Preferred)
WIS 33 at I-90/94 Interchange	Partial Cloverleaf (Preferred)
US 12 Interchange	Diverging Diamond (Preferred)
WIS 23 Interchange	Diamond (Preferred)
WIS 13 Interchange	Trumpet (Preferred) Split Diamond
US 12/WIS 16 Interchange	Diamond (Preferred)

Environmental Impacts and Mitigation

Table S-2 summarizes environmental impacts of the No Build and build alternatives recommended for further study. Detailed information on potential environmental effects, along with proposed mitigation measures for unavoidable adverse effects is provided in Section 3. Appendix C provides a summary of the mitigation measures.

The build alternatives could convert up to 225 acres of residential, commercial and other land uses to highway right of way. The build alternatives, which include flood minimization measures near the I-39 I-90/94 Split Interchange would relocate residences, businesses, support buildings and structures, as well as buildings in the Baraboo River Waterfowl Production Area and the Pine Island Wildlife Area. WisDOT may also purchase flood easements from property owners impacted by flood minimization measures. The flood easement would restrict development on the property to those land uses compatible with uses allowed in a floodplain.

Wetland and floodplain impacts occur along the length of the study corridor due to freeway widening and interchange reconstruction. Wetland and floodplain impacts result from flood minimization measures that require filling to raise I-39 and I-90/94 out of the 100-year floodplain to reduce flood risks. Similarly, the build alternatives affect both state and federally listed threatened and endangered species whose habitats are affected by permanent and temporary habitat loss. WisDOT continues coordination with the Wisconsin Department of Natural Resources (WDNR) and the US Fish and Wildlife Service (USFWS) to develop avoidance, minimization and mitigation measures for affected resources.

The build alternatives would impact 1,598 noise receptor units. Of 39 noise barriers evaluated for the preferred alternative, 12 noise barriers were determined feasible and reasonable. There are two existing noise barriers in Madison; one will remain in place and the second existing barrier would be replaced. A final decision on the construction of noise barriers will be made during the final design phase. Of the 12 barriers determined feasible and reasonable, a noise barrier would be built if a simple majority of the benefited receptors vote in favor of it; otherwise, the noise barrier would not be built.

The preferred build alternative results in a *de minimis* Section 4(f) impact at three properties, including the Glacial Drumlin Trail, Baraboo River Waterfowl Production Area and Pine Island State Wildlife Area. The WIS 13 Split Diamond alternative, which is not the preferred alternative at the interchange, would result in an additional *de minimis* impact at the Hulburt Creek Fishery Area. WisDOT continues ongoing coordination with WDNR and USFWS and will request concurrence on the *de minimis* use after the public hearing on the DEIS. Section 4 summarizes potential use of Section 4(f) properties along the study corridor as result of the build alternatives.

Table S-2: Impact Summary Table

Environmental Factor	No Build	Modernization Plus General Purpose Lane (Preferred Alternative) + Preferred Interchange alternatives ¹	Modernization Hybrid + Preferred Interchange alternatives	County V Diamond	WIS 13 Split Diamond	WIS 13 Trumpet (Preferred Alternative)
Construction Cost Estimate (2024 dollars in millions)	\$950.4	\$2,571.9	\$2,557.3	\$0.5	\$26.1	\$19.2
New Right of Way (acres)	0	225	219.6	0	5.4	3.5
Residential Relocations (housing units)	0	1	1	0	0	0
Flood minimization Residential Relocations	0	1	1	0	0	0
Flood minimization Residential flood easements outside regulatory floodplain	0	9	9	0	0	0
Commercial Relocations	0	1 maintenance bldg.	1 maintenance bldg.	0	1 retail business 1 maintenance bldg. 1 shed	1 maintenance bldg.
Flood minimization Commercial Relocations	0	2, including 1 vacant	2, including 1 vacant	0	0	0
Flood minimization Commercial flood easements outside the regulatory floodplain	0	6, including 3 vacant	6, including 3 vacant	0	0	0
Farmland (buildings relocated/acres acquired)	0	1 barn 161.5 acres	1 barn 158.5 acres	0	1.7	15.5

Environmental Factor	No Build	Modernization Plus General Purpose Lane (Preferred Alternative) + Preferred Interchange alternatives¹	Modernization Hybrid + Preferred Interchange alternatives	County V Diamond	WIS 13 Split Diamond	WIS 13 Trumpet (Preferred Alternative)
Flood minimization farmland impacts (buildings relocated/acres impacted)	0	6 structures 189.8 acres	6 structures 189.8 acres	0	0	0
Institutional Public Building Relocations	0	1	1	0	0	0
Flood minimization Institutional Public Building relocations	0	4	4	0	0	0
100-Year Floodplain (acres)	0 Corridor resiliency not addressed	327	326.8	0	0.8	1.0
Wetland (acres)	0	171.6	170.4	1.3	0.5	0.1
Federally Listed Threatened and Endangered Species (Yes/No)	No	Yes	Yes	Yes	Yes	Yes
State Listed Threatened and Endangered Species (Yes/No)	No	Yes	Yes	Yes	Yes	Yes
Adverse Effects to Historic Properties	0	0	0	0	0	0
Archaeological Sites Affected	0	0	0	0	0	0

Environmental Factor	No Build	Modernization Plus General Purpose Lane (Preferred Alternative) + Preferred Interchange alternatives¹	Modernization Hybrid + Preferred Interchange alternatives	County V Diamond	WIS 13 Split Diamond	WIS 13 Trumpet (Preferred Alternative)
Environmental Justice Disproportionate and Adverse Impact (Yes/No)	No	No Alternative could facilitate access to employment centers, provide added bicycle and pedestrian connections	No Alternative could facilitate access to employment centers, provide added bicycle and pedestrian connections	No Alternative modifies exiting ramps	No Alternative could facilitate access to employment centers	No Alternative could facilitate access to employment centers
Receptor Units Impacted (design year 2050)	Not applicable	1,598 receptor units	1,598 receptor units	0 receptor units	9 receptor units	9 receptor units
Potential Contaminated Sites (sites recommended for additional field testing)	Not applicable	16	16	0	0	0
Section 4(f) Properties - De minimis use	0	3	3	0	1	0
Indirect Effects	Does not address study purpose of and need; may slow pace of planned development	Land use effect: facilitates planned redevelopment and development in study area	Land use effect: facilitates planned redevelopment and development in study area	No, replaces existing access	Land use effect: local land use controls avoid and minimize potential impact of new Interstate access at County H	No, replaces existing access

Environmental Factor	No Build	Modernization Plus General Purpose Lane (Preferred Alternative) + Preferred Interchange alternatives ¹	Modernization Hybrid + Preferred Interchange alternatives	County V Diamond	WIS 13 Split Diamond	WIS 13 Trumpet (Preferred Alternative)
Cumulative Effects	No	Limited effect: Mitigation measures minimize effects	Limited effect: Mitigation measures minimize effects	No, replaces existing infrastructure	Limited effect: Mitigation measures minimize effects	Limited effect: Mitigation measures minimize effects

1. Includes the recommended preferred interchange alternatives in Table S-1.

Time Frame for Implementing Proposed Action

If a build alternative is selected at the conclusion of the current environmental impact statement (EIS) phase, the I-39/90/94 Corridor Study would be considered for funding enumeration by the legislative Transportation Projects Commission (TPC) in fall 2024 along with several other statewide major transportation projects. If this study is enumerated by the TPC, it will proceed to the engineering design phase. Construction would depend on funding availability. The earliest construction would likely start in year 2030.

Public Involvement

WisDOT and FHWA implemented an extensive public involvement program during the Draft EIS preparation (Section 5). WisDOT held nearly 100 meetings with local governments, elected officials, community groups, businesses, state and federal agencies, and advisory committees since August 2022. Public involvement meetings were held in September 2022, April 2023 and January/February 2024.

During the public involvement meetings, there was general support for the study build alternatives, with mixed support regarding potential new interchanges at Hoepker Road and Milwaukee Street. Support for the interchanges noted new access would facilitate existing and planned development. Individuals opposing new interchanges noted the added disruption to neighborhoods, farmland, increased traffic and impacts to quality of life. Noise impacts and additional bike and pedestrian access across the Interstate were also a concern.

Other Approvals Needed

Beyond approval of this EIS by WisDOT and FHWA, there are additional laws, regulations, and guidance that WisDOT and FHWA must comply with for this project to move forward, as listed in Table S-3.

Table S-3: Other Approvals Needed

Authority	Action	Issuing Agency	Notes	Timing
Clean Water Act	Section 401 Water Quality Certification	Wisconsin Department of Natural Resources		Prior to construction
Clean Water Act	Section 404 Permit	U.S. Army Corps of Engineers	The U.S. Army Corps of Engineers must issue a Section 404 permit before any discharge of dredged or filled material into waters of the U.S.	Prior to construction
Wisconsin State Statute 283.3	Transportation Construction General Permit	Wisconsin Department of Natural Resources	The permit is required for WisDOT directed and supervised projects with one or more acres of land disturbance. The permit authorizes WisDOT to discharge stormwater to waterways in accordance with conditions set forth in the permit.	Prior to construction
23 CFR 650A	Determination	FHWA	FHWA must determine it has minimized risks associated with unavoidable floodplain impacts to the greatest extent practicable.	Final EIS/Record of Decision
44 CFR Part 60	Conditional Letter of Map Revision and Letter of Map Revision	Federal Emergency Management Agency	Before Construction, WisDOT will submit design drawings and request a Conditional Letter of Map Revision from FEMA. After construction, WisDOT will submit as-built plans, along with the final flood map and request a Letter of Map Revision from FEMA.	Before and After construction
Wisconsin Administrative Code NR116. Wisconsin Floodplain Management Program and NR320. Bridge & Culverts in/or Over Navigable Waterways	Concur the proposed action meets the intent of NR 116	Wisconsin Department of Natural Resources	Coordination via WisDOT-DNR Cooperative Agreement. WisDOT provides WDNR criteria used in the design and placement of structures regarding the regional flood.	Prior to construction
Wisconsin Administrative Code NR 116 and NR 320	Amended zoning ordinance	Local zoning authority	WisDOT submits design criteria, predicted water surface elevations and calculations to WDNR and local zoning authority. Local zoning authority amends zoning ordinance.	Either prior to or post construction
Executive Order 12898 and 14096 on Environmental Justice	Determination	FHWA	FHWA must determine whether the project would have a disproportionately high or adverse effect on low-income or minority populations	Final EIS/Record of Decision

Authority	Action	Issuing Agency	Notes	Timing
Section 106 of National Historic Preservation Act	Consultation	FHWA	FHWA must consult with the State Historic Preservation Office and other consulting parties to consider potential effects and mitigation measures related to historic properties. The Section 106 process seeks to accommodate historic preservation concerns with the needs of federal undertakings through consultation among parties (such as Wisconsin State Historic Preservation Office, Advisory Council on Historic Preservation,) with an interest in the effects of the undertaking on historic properties.	Final EIS/Record of Decision
Section 4(f) of the U.S. Department of Transportation Act	Approval	FHWA	For parks and historic resources that will be affected, FHWA anticipates a de minimis impact, or must find that there is no feasible or practicable alternative to their use and that all measures to minimize harm will be implemented	Final EIS/Record of Decision
Endangered Species Act	Biological Opinion	U.S. Fish and Wildlife Service	A Biological Opinion identifies all mitigation measures and terms of conditions applicable to the project	Final EIS/Record of Decision
National Wildlife Refuge System Administration Act of 1966, as amended by National Wildlife Refuge System Improvement Act of 1997	Compatibility Determination	USFWS	Refuge manager will not initiate or permit a new use of a national wildlife refuge unless the refuge manager has determined that the use is a compatible use.	Prior to construction
Wisconsin State Statute 29.604 and Administrative Code NR 27	Coordination	Wisconsin Department of Natural Resources	WisDOT will coordinate state threatened and endangered species impacts with the Wisconsin Department of Natural Resources.	Prior to construction
Wisconsin State Statute 157.70, Burial Sites Preservation	Request to disturb a burial site approval	Wisconsin Historical Society	Any person who intends to cause or permit any activity on a cataloged burial site or on a cataloged land contiguous to a cataloged burial site which in any way might disturb the burial site or the land shall apply to the director of the Wisconsin Historical Society for a permit to disturb the burial site or the land. The application shall include the purpose of the disturbance.	Prior to construction

Authority	Action	Issuing Agency	Notes	Timing
Clean Air Act National Ambient Air Quality Standards	Coordination	U. S. Environmental Protection Agency	No permit or approval is needed, but WisDOT will assess impacts to air quality in coordination with FHWA and U.S. Environmental Protection Agency as required under the Clean Air Act	Final EIS/Record of Decision

Information about the Draft EIS

The Draft EIS incorporates the most up-to-date data, updated environmental regulations, alternatives and public and agency input.