

FHWA-WI-EIS-2022-01-D
PROJECT I.D. 1060-27-00, 1060-27-03

I-94 EAST-WEST CORRIDOR
70th STREET TO 16th STREET
MILWAUKEE COUNTY, WISCONSIN

SUPPLEMENTAL DRAFT ENVIRONMENTAL IMPACT STATEMENT
and
Section 4(f) Evaluation

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

Cooperating Agencies:
U.S. Department of the Interior, National Park Service
U.S. Army Corps of Engineers
Wisconsin Department of Natural Resources
(pursuant to 23 U.S.C. 139)

APPROVALS



For Federal Highway Administration

11/08/22

Date

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For Wisconsin Department of Transportation

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

Comments on this Supplemental Draft EIS are due by January 17, 2023, or 60 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-94 East-West Corridor study area is from 70th Street to 16th Street, a distance of about 3.5 miles. This corridor has safety issues, closely spaced interchanges, a combination of left-hand and right-hand exit and entrance ramps, and deteriorated pavement. As traffic increases, safety and traffic operations on this corridor will continue to deteriorate. By 2050, increased traffic volumes will cause nearly this entire section of I-94 to operate at level of service D to F during peak periods. The Final Environmental Impact Statement (EIS) was approved in 2016. The Final EIS evaluated the social, environmental, and economic impacts of the No-build alternative and a range of Build Alternatives, as well as the extent to which these alternatives address the project's purpose and need. WisDOT and FHWA prepared a Supplemental EIS to incorporate the most up-to-date data, updated environmental regulations, changes to the alternatives, and public and agency input since the 2016 Final EIS.

National Environmental Policy Act Statement

The National Environmental Policy Act of 1969, as amended (42 United States Code 4332) requires that all federal agencies prepare a detailed Environmental Impact Statement (EIS) for major federal actions that will significantly affect the quality of the human environment. The Federal Highway Administration (FHWA) is therefore required to prepare an EIS for proposals funded under its authority if such proposals are determined to be major actions significantly affecting the quality of the human environment.

In June 2021, FHWA issued a Notice of Intent to prepare a Supplemental EIS for the Interstate 94 (I-94) East-West Corridor project. Per 23 *Code of Federal Regulations* (CFR) 771.130, a draft or final EIS may be supplemented at any time if changes to the proposed action would result in significant environmental impacts not evaluated in the EIS, or new information or circumstances relevant to environmental concerns and bearing on the proposed action or its impacts would result in significant environmental impacts not evaluated in the EIS. The Supplemental EIS will follow the same process and format as the original EIS (i.e., draft, final, record of decision [ROD]), except that scoping is not required. Per 40 CFR 1506.13, the Supplemental EIS will follow Council on Environmental Quality regulations in effect prior to September 14, 2020.

The Supplemental EIS process is carried out in two stages. The Supplemental Draft EIS is circulated for review by federal, state, and local agencies with jurisdiction by law or special expertise, and made available to the public. The Supplemental 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 Supplemental 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 front cover of the Supplemental Draft EIS unless a time extension is requested and granted by WisDOT and FHWA pursuant to 23 USC 139(g)(2)(A). After the Supplemental Draft EIS comment period has elapsed, work may begin on the Supplemental Final EIS. The Supplemental Final EIS will include the following:

1. Selection of the preferred course of action (alternative) and the basis for its selection
2. Basic content of the Supplemental Draft EIS, along with any changes, updated information, or additional information as a result of agency and public review
3. Summary and disposition of substantive comments on social, economic, environmental, and engineering aspects resulting from the public hearing/public comment period and agency comments on the Supplemental Draft EIS
4. Resolution of environmental issues and documentation of compliance with applicable environmental laws and related requirements

At the conclusion of the environmental process, FHWA will issue a single Supplemental Final EIS and ROD as one combined document pursuant to 23 USC 139(n)(2), unless FHWA determines that statutory criteria or practicability considerations preclude issuance of the combined document. Both the Supplemental Draft and Supplemental Final EIS are full-disclosure documents that provide descriptions of the proposed action, the affected environment, alternatives considered, and an analysis of the expected beneficial or adverse environmental effects.



A federal agency may publish a notice in the *Federal Register*, pursuant to 23 United States Code §139(I), 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 time 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.

Summary

Project Background

In fall 2011, Wisconsin's Transportation Projects Commission approved the Interstate 94 (I-94) corridor for study. The scope of the proposed action is to rebuild the freeway, bridges, and interchanges to improve safety and traffic flow. The Wisconsin Department of Transportation (WisDOT) prepared an Environmental Impact Statement (EIS) for the I-94 East-West Corridor from 70th Street to 16th Street in the City of Milwaukee, Wisconsin. The Federal Highway Administration (FHWA) signed the Final EIS on January 29, 2016, and issued a Record of Decision (ROD) on September 9, 2016. The ROD was rescinded on October 11, 2017, due to the Wisconsin state budget not providing funding or authorization to advance the project. In July 2020, Wisconsin Governor Tony Evers announced that WisDOT would seek federal approval to move forward with the I-94 East-West Corridor project. In April 2021, WisDOT announced it would undertake a Supplemental EIS on the project. A Notice of Intent to prepare a Supplemental EIS was published in the *Federal Register* on June 15, 2021.

WisDOT and FHWA are preparing a Supplemental EIS to incorporate the most up-to-date data, updated environmental regulations, changes to the alternatives, and public and agency input since the 2016 Final EIS. The section at the end of this Summary provides more detail on the information covered in this Supplemental EIS.

The project would neither require nor preclude other future transportation improvements identified in the regional transportation plan. The project would provide a safer and more efficient transportation system in the I-94 East-West Corridor, while minimizing impacts to the natural, cultural, and built environment to the extent feasible and practicable.

The study area termini are 70th Street on the west and 16th Street on the east. The service interchanges along I-94 at 68th Street/70th Street, Hawley Road, General Mitchell Boulevard, 35th Street, and 25th/26th/28th Street are included in the study, as is the Stadium Interchange¹ (**Exhibit S-1**). The Bluemound Road/Wisconsin Avenue/Wells Street service interchange with Wisconsin State Highway (WIS) 175² is also included in this study. At each interchange, the project limit extends north-south until each crossroad ties into its existing alignment. The termini for the study generally match the termini for two previously completed projects: the Zoo Interchange reconstruction, west of the I-94 East-West Corridor, and the Marquette Interchange reconstruction to the east.

WisDOT and FHWA are the lead state and federal agencies, respectively, for the project.

¹ The current Stadium Interchange was designed and built to function as a system interchange in anticipation of planned freeway development. However, because US 41 (now WIS 175) was never fully developed as a freeway and the route does not function as a freeway for an appreciable distance north and south of the interchange, the interchange is not technically classified as a system interchange by FHWA. Throughout this document, the existing Stadium Interchange is generally referred to as a system interchange. FHWA's classification of the type of interchange, as it pertains to the existing interchange, has no bearing on the proposed design of the updated interchange. The proposed Stadium Interchange design, as part of the 2016 Final EIS preferred alternative, is referred to as a "hybrid" interchange. This term can also be synonymous with a high-level service interchange. Because previous project documentation referred to the current Stadium Interchange as a system interchange, and the proposed design as a "hybrid" interchange, and since the terminology has no bearing on the proposed design as part of the preferred alternative in the Supplemental EIS, the terminology has been retained in the Supplemental EIS.

² US 41 in the study area was redesignated as a state highway (WIS 175) in 2015 when US 41 was redesignated as Interstate 41 (I-41). As a result of the conversion, I-41/US 41 in the Milwaukee area has been rerouted along Interstate 894 and U.S. Highway 45. In addition, Miller Park Way was renamed Brewers Boulevard in early 2021.



Purpose and Need for the Project

The purpose and need describes why the project is being considered. Purpose and need factors for the I-94 East-West Corridor remain the same as the 2016 Final EIS. The supporting information regarding the needs for the project has been updated to reflect current conditions.

The purpose of the project is to address the deteriorated condition of I-94, obsolete roadway and bridge design, existing and future traffic demand, and high crash rates. A combination of the following factors demonstrates the need for the transportation improvements in the I-94 East-West Corridor:

- System linkage and route importance (Section 1.4.2)—I-94 is a major east-west freeway link across the northern United States and is part of the National System of Interstate and Defense Highways. I-94 is also designated a federal and state “long truck route” and a backbone route in WisDOT’s *Connections 2030 Long-Range Multimodal Transportation Plan*. I-94 is a critical link in Milwaukee County’s freeway system. In addition to serving long-distance travelers and freight movement, the study area freeway system is an important commuter route.
- High crash rates (Section 1.4.3)—From 2015 to 2019, there were approximately 2,300 crashes on the I-94 East-West Corridor (I-94 from 70th Street to 16th Street), or roughly 1.3 crashes per day. Approximately 21 percent of the crashes resulted in injuries and 4 crashes were fatal. Crash rates of most sections in the I-94 East-West Corridor are 1 to 2 times the statewide average for urban freeways, and several sections are 2 to 3 times the statewide average. The most common types of crashes were rear-end, single-vehicle off-road, and sideswipe.
- Pavement condition and obsolete design (Section 1.4.4)—This segment of I-94 was constructed in the early 1960s. Over the years, the concrete pavement has become worn and cracked. WisDOT resurfaced I-94 in the mid-1970s, late 1990s, and again in 2011 to 2012, which returned a smooth riding surface to the roadway, but did not address the cracks in the concrete or the voids in the gravel base under the pavement. In addition to the physical condition, there are other substandard design elements, such as inadequate ramp spacing, that must be addressed. Perhaps the most notable outdated design elements are the closely spaced service interchanges and the combination of left- and right-hand entrance and exit ramps, which are contrary to driver expectations and result in major safety and operational problems, such as traffic weaving and congestion. The condition of bridges in the study area has deteriorated over the years due to age, heavier-than-expected traffic, road salt, freeze-thaw cycles, and water entering cracks in the bridges. At some locations, bridge clearances (the vertical distance from the pavement to the lowest portion of the bridge above the roadway) are below current standards.
- Existing and future traffic volumes (Section 1.4.5)—This segment of I-94 carries 158,000 to 178,000 vehicles on an average weekday (2019 volumes). Currently, during the heaviest traffic periods, level of service on I-94 ranges between level of service D (moderate congestion) and level of service F (extreme congestion). By 2050 (the project’s design year), traffic volumes are expected to rise to approximately 167,000 to 187,500 vehicles per day, which represents a 5 to 6 percent traffic increase over the current conditions. By 2050, I-94 would generally operate at level of service E (severe congestion) or F during the morning and afternoon peak periods.

Section 1, Purpose and Need for the Project, discusses the factors in more detail. The need for the proposed improvements sets the stage for developing and evaluating improvement alternatives.

Alternatives Considered

Section 2, Alternatives Considered, describes the range of alternatives WisDOT and FHWA developed to address the factors identified in Section 1, Purpose and Need for the Project. For the 2014 Draft EIS and 2016 Final EIS, WisDOT and FHWA developed and evaluated a range of alternatives to address the deficiencies on I-94. The alternatives were presented to the public and assessed to determine their environmental impacts and the extent to which they fulfill the purpose of the project. The 2016 Final EIS describes the detailed analyses of each alternative.

WisDOT and FHWA identified an 8-lane alternative as its preferred alternative in the 2016 Final EIS (At-grade alternative in the west segment; Stadium Interchange reconstructed as a hybrid interchange³; On-alignment alternative in the east segment). This 8-lane alternative would replace the existing roadway and bridges and completely reconfigure I-94 to improve safety, while adding one new through lane in each direction to address congestion. As part of this 2016 Final EIS preferred alternative, the Hawley Road interchange would be reconstructed as a half interchange (only access to and from the west) and the General Mitchell Boulevard interchange would be removed and replaced with a new local road interchange within the Stadium Interchange. To mitigate the traffic impacts of partially closing the Hawley Road interchange, the 2016 Final EIS preferred alternative included an extension of Washington Street and improvements to three local road intersections. Transit and transportation systems management measures were included as part of the identified preferred alternative.

For this Supplemental Draft EIS, WisDOT and FHWA are reanalyzing the 8-lane alternative (preferred alternative from the 2016 Final EIS) along with a 6-lane alternative with similar alignment. Since the 2016 Final EIS, the 8-lane alternative has been refined to address current conditions and reduce impacts where practicable (see Section 2.2.1). Based on updated alternatives design and coordination with local municipalities, the alternatives analyzed as part of this Supplemental Draft EIS have less residential and commercial relocations, require less new right-of-way, and have improved bicycle and pedestrian connections when compared to the 2016 Final EIS preferred alternative.

A 6-lane alternative was analyzed in the 2016 Final EIS; however, WisDOT did not select the 6-lane alternative because it would not accommodate future traffic volumes at an acceptable level of service in 2040. Many areas were projected to operate at level of service E or F. Thus, the 6-lane alternative was eliminated from consideration.

This Supplemental Draft EIS reconsiders the previously dismissed 6-lane alternative using the most recent data and public input. The 6-lane alternative would reconstruct I-94 and maintain 6 through travel lanes (3 in each direction).

The 6-lane alternative would have the same alignment as the 8-lane alternative with one less through travel lane in each direction. In some locations there would be auxiliary lanes, resulting in more than 3 lanes.

³ The hybrid interchange takes elements of both a system interchange and service interchange. The hybrid interchange at the Stadium Interchange would have both free-flow and signal-controlled ramps, with a lower speed design than the existing Stadium Interchange. The ramps from southbound WIS 175 to eastbound I-94 and from northbound Brewer Boulevard to westbound I-94 would be controlled by a traffic signal.

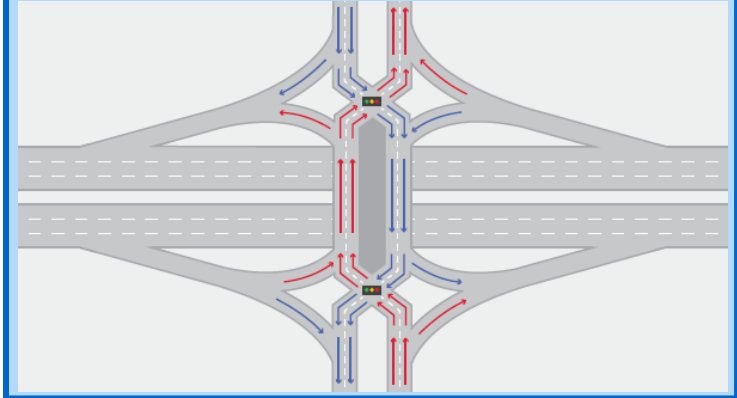


Since the 2016 Final EIS, updated traffic forecasts (certain Stadium Interchange movements are expected to have lower traffic volumes than the 2040 forecasts used for the 2016 Final EIS) and public comment caused WisDOT to relook at the Stadium Interchange design. In addition to the hybrid interchange (part of the preferred alternative in the 2016 Final EIS), WisDOT determined an at-grade diverging diamond interchange could handle anticipated future traffic volumes and turning movements (refer to the text box for explanation of a diverging diamond interchange). A diverging diamond interchange is considered at the Stadium Interchange as part of this Supplemental Draft EIS.

The following alternatives are retained for detailed study in this Supplemental Draft EIS (Section 2.2):⁴

- 8-lane alternative:
 - Reconstruct I-94 and add a fourth through lane in each direction. In some locations there would be auxiliary lanes, resulting in more than 4 lanes.
 - Reconstruct the interchanges at 68th Street/70th Street, 35th Street, and near 27th Street.
 - Construct a half interchange at Hawley Road (only access to and from the west).
 - Reconstruct the Stadium Interchange as either a hybrid interchange or diverging diamond interchange.
 - Revise access to and from General Mitchell Boulevard. For the hybrid interchange, new entrance and exit ramps to and from 44th Street and a new north-south local street (tentatively referred to as 46th Street) would be constructed beneath the Stadium Interchange. 44th and 46th Streets would connect to Selig Drive and a new 3-lane frontage road north of I-94, providing access to General Mitchell Boulevard. For the diverging diamond interchange, access to and from General Mitchell Boulevard is provided via ramps within the Stadium Interchange providing direct connections to General Mitchell Boulevard.
 - Generally have 12-foot travel lanes and 12-foot inside and outside shoulders, except for the narrow area between Hawley Road and General Mitchell Boulevard, where cemeteries are located on both sides of I-94. To avoid the cemeteries, the 8-lane alternative would have less than 12-foot driving lanes (11 feet at the narrowest) and narrow shoulders (2 feet at the narrowest) through this area.

A diverging diamond interchange requires traffic to cross over from the right side to the left side of the road at the ramp terminals through traffic signals. Once on the left side of the road, vehicles can turn left onto highway ramps without stopping and without conflicting with through traffic. For high-volume interchanges with substantial left turning movements, such as the Stadium Interchange, diverging diamond interchanges are safer, more efficient, and more cost-effective than traditional diamond interchanges. The following is a sample traffic pattern in a typical diverging diamond interchange and not a precise representation of the proposed Stadium Interchange.



⁴ The Double Deck alternative and Off-alignment alternative, which were studied in detail in the 2016 Final EIS, were ultimately dismissed in the 2016 Final EIS and are not considered in this Supplemental EIS (refer to Section 2 of the Supplemental EIS for more information).

- Extend Washington Street (approximately 0.6 mile south of I-94 between 70th Street and Hawley Road) and improve three local road intersections to make it easier for drivers on Hawley Road to access the 68th Street/70th Street interchange, mitigating the traffic impacts of partially closing the Hawley Road interchange.
- Remain nearly on the existing alignment the entire length of the project.
- 6-lane alternative:
 - Reconstruct I-94, maintaining 3 through lanes in each direction. In some locations there would be auxiliary lanes, resulting in more than 3 lanes. The 6-lane alternative would have the same alignment as the 8-lane alternative with one less through travel lane in each direction.
 - Reconstruct the interchanges at 68th Street/70th Street, 35th Street, and near 27th Street.
 - Construct a half interchange (only access to and from the west) or full interchange at Hawley Road.
 - Reconstruct the Stadium Interchange as either a hybrid interchange or diverging diamond interchange.
 - Revise access to and from General Mitchell Boulevard via new entrance and exit ramps to and from 44th Street. For the hybrid interchange, new entrance and exit ramps to and from 44th Street and a new north-south local street (tentatively referred to as 46th Street) would be constructed beneath the Stadium Interchange. 44th and 46th Streets would connect to Selig Drive and the new 3-lane frontage road north of I-94, providing access to General Mitchell Boulevard. For the diverging diamond interchange, access to and from General Mitchell Boulevard is provided via ramps within the Stadium Interchange providing direct connections to General Mitchell Boulevard.
 - The full interchange at Hawley Road would eliminate the need for the off-interstate improvements (Washington Street and the three local road intersections) and would require auxiliary lanes between Hawley Road and the Stadium Interchange due to the close proximity of the interchanges. The 6-lane alternative with full interchange at Hawley Road would have 11-foot driving lanes and narrow shoulders in the segment between the cemeteries, similar to the 8-lane alternative.
 - The half interchange at Hawley Road option was retained because it would maintain 12-foot lanes through the cemetery area just west of American Family Field. However, to avoid encroachment on the cemeteries, the reconstructed I-94 would have narrow shoulders between Hawley Road and Zablocki Drive. To mitigate the traffic impacts of partially closing the Hawley Road interchange, WisDOT would extend Washington Street (approximately 0.6 mile south of I-94 between 70th Street and Hawley Road) and improve three local road intersections to make it easier for drivers on Hawley Road to access the 68th Street/70th Street interchange.
 - Remain nearly on the existing alignment the entire length of the project.
- No-build alternative (retained for comparative purposes)

Table 2-4 in Section 2 summarizes how the alternatives meet purpose and need.



Preferred Alternative

Identification of a preferred alternative occurred after carefully reviewing input received from the public, agencies, and local governments since the completion of the 2016 Final EIS. Identification of the preferred alternative was based on engineering factors; impacts to the human/natural environment; cost; and input from the public, state and federal resource agencies, cooperating and participating agencies, and local officials. Identification of the preferred alternative was performed in accordance with Section 404 of the Clean Water Act, Sections 106 and 110(f) of the National Historic Preservation Act as amended, and the United States Department of Transportation's Section 4(f) law.

WisDOT identified the 8-lane alternative with a diverging diamond interchange at the Stadium Interchange as the preferred alternative (see Section 2.3).

As part of the preferred alternative, WisDOT would construct some off-interstate improvements to mitigate the traffic impacts of partially closing the Hawley Road interchange. WisDOT would extend Washington Street and improve three local road intersections (70th Street/Greenfield Avenue, National Avenue/Greenfield Avenue, Brewers Boulevard/National Avenue) to make it easier for drivers in the Hawley Road corridor to access the 68th Street/ 70th Street interchange.

Environmental Impacts and Mitigation

The Supplemental EIS updates the environmental impacts in the 2016 Final EIS using the most recent data, updated environmental regulations, and public and agency input. It also evaluates the impacts of the 6-lane alternatives (full Hawley Road interchange option and half Hawley Road interchange option), the revised 8-lane alternative, and the hybrid and diverging diamond interchange options at the Stadium Interchange.

Due to refined design, coordination with local municipalities, and consideration of public comments on the 2016 Final EIS preferred alternative, the alternatives studied as part of this Supplemental EIS have less impacts than the 2016 Final EIS preferred alternative. Key updates to the alternatives analysis include:

- *1 residential relocation, reduced from 8 with 2016 Final EIS preferred alternative*
- *6 commercial relocations, reduced from 11 with the 2016 Final EIS preferred alternative*
- *42 to 49 acres of new right-of-way required, reduced from 73 acres with the 2016 Final EIS preferred alternative*
- *Additional bicycle and pedestrian improvements*

Table S-1 summarizes the impacts of the No-build alternative, the 8- and 6-lane alternatives (refer to Section 3 for a detailed evaluation), and the 2016 Final EIS preferred alternative (At-grade alternative in the west segment; Stadium Interchange reconstructed as a hybrid interchange; On-alignment alternative in the east segment). The 8- and 6-lane alternatives would convert between 42 and 49 acres of residential, commercial, utility, and institutional land to highway right-of-way (Section 3.2). This is less than the 2016 preferred alternative, which required 73 acres of new right-of-way. Several factors went in to reducing the amount of new right-of-way required, including:

- Revisions to the design at the eastbound 68th Street entrance ramp, 35th Street interchange, and 27th Street interchange resulted in the reduction of residential and commercial relocations. With no

longer needing to acquire these full properties, the amount of new right-of-way required was reduced.

- Revisions to the Washington Street and Hawley Road alignments.
- It is anticipated that the two electrical substations impacted (see Section 3.4) will be relocated within existing highway right-of-way; thus, acreage for a new substation is not included in the new right-of-way needed like it was for the 2016 Final EIS preferred alternative.
- The 2016 Final EIS included temporary limited easements (TLEs) as part of the total new right-of-way required. A TLE is required when WisDOT must use a portion of land to construct a highway project and is limited in purpose and time. WisDOT's right to use the property will terminate upon completion of construction. Most of the TLEs required are associated with reconstruction of the Stadium Interchange. Due to the fact that TLEs will not become permanent new highway right-of-way, they were not included as part of the calculation of new right-of-way required.

The 8- and 6-lane alternatives would displace one residence and six businesses (Sections 3.5 and 3.6). The 8-lane alternative and 6-lane alternative with half interchange at Hawley Road would displace a WisDOT maintenance building on 60th Street (Section 3.7). The number of residential and business displacements were reduced from eight and 11, respectively, from the 2016 Final EIS preferred alternative due to design refinements. See Section 2.2.1 for details on the design refinements that have occurred since the 2016 Final EIS. Residential and business relocations and acquisitions will be in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act), as amended. The Uniform Act provides measures to minimize the hardships of relocation for the occupants.

The 8- and 6-lane alternatives would neither displace graves nor acquire property from the three cemeteries adjacent to I-94.

Regarding environmental justice (Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations"), the I-94 East-West Corridor project would not have a disproportionately high and adverse effect on minority and/or low-income populations (Section 3.9). This conclusion was the same for the 2016 Final EIS preferred alternative.

The 8- and 6-lane alternatives would impact between 59 and 73 noise receptors (Section 3.19), whereas the 2016 Final EIS preferred alternative would impact 59 noise receptors as well as 7 noise receptors for the Washington Street extension. The 8- and 6-lane alternatives would not impact any noise receptors for the Washington Street extension due to design refinements. WisDOT and FHWA will work with local officials and affected residents to determine the location of noise barriers in areas where the barriers are reasonable, feasible, and likely to be incorporated. Refer to Appendix A.

I-94 is adjacent to a National Historic Landmark (NHL), the Northwestern Branch, National Home for Disabled Volunteer Soldiers NHL (Soldiers' Home NHL), and several other historic properties. As part of the 2016 Final EIS, FHWA, in consultation with the Section 106 consulting parties, determined that the preferred alternative could be designed to result in No Adverse Effect on these properties. As part of this Supplemental EIS process, WisDOT and FHWA re-engaged the Section 106 consulting parties and re-opened the consultation process. FHWA will continue to work with the Section 106 consulting parties to arrive at an updated effects determination. It is anticipated the effects determination will be the same as the 2016 Final EIS determination. Additionally, the previously signed Programmatic Agreement for this project will be updated. If a No Adverse Effects determination is once again agreed upon for the Soldiers' Home NHL and other historic properties, the Amended Programmatic Agreement (available as part of the Supplemental Final EIS/ROD) will stipulate the appropriate design review processes and



other steps to be taken to ensure there will be No Adverse Effect on the Soldiers' Home Historic District, Soldiers' Home NHL, and other historic properties.

Much like the 2016 Final EIS, it is anticipated that the 8- and 6-lane alternatives would result in no more than *de minimis*⁵ impacts of any Section 4(f) properties. **Table 4-1** in Section 4 summarizes potential use of Section 4(f) properties in the study area as a result of the 8- and 6-lane alternatives. *De minimis* impacts are anticipated for the Soldiers' Home NHL and Soldiers' Home Historic District.

WisDOT completed a 30% Traffic Mitigation Plan (TMP) report in early 2022 to review potential impacts of I-94 East-West construction on Milwaukee County Transit Service (MCTS) operations and developed conceptual mitigation measures. A conceptual mitigation program was developed based on coordination with MCTS, traffic and construction analyses, and impact assessments. The conceptual mitigation program includes measures for additional buses to maintain headways, infrastructure improvements, additional frequencies to mitigate traffic impacts, and funding to support MCTS staffing and outreach during construction. This plan allows for flexibility during I-94 East-West construction to adjust the plan based on what measures are working well and any new measures or technology that may not currently be available. The plan also takes into consideration the potential for permanent transit facility structure measures that could serve as long-term transit system upgrades. The 30% TMP report was shared with the project's Community Advisory Committee and Transit Technical Advisory Committee, and they were provided an opportunity to comment on the report.

⁵ A *de minimis* impact on a public parkland, recreational area, or wildlife and waterfowl refuge is defined as that which does not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f). A *de minimis* impact determination is made for an historic site if FHWA makes a determination for a property of "No Adverse Effect" or "No Historic Properties Affected" through consultation under Section 106 of the National Historic Preservation Act, and the official with jurisdiction concurs with that determination.

Table S-1. Impact Summary Table

Environmental Factor	No-build	8-lane Alternative (Preferred Alternative)	6-lane Alternative (Half Interchange at Hawley Road)	6-lane Alternative (Full Interchange at Hawley Road)	2016 Final EIS Preferred Alternative (At-grade alternative [half interchange at Hawley Road] and On-alignment alternative)
Total Cost Estimate (2021 dollars in billions) ^a	- ^b	\$1.28 (Hybrid) \$1.20 (Diverging Diamond)	\$1.24 (Hybrid) \$1.16 (Diverging Diamond)	\$1.21 (Hybrid) \$1.13 (Diverging Diamond)	\$1.20 (2021 dollars) ^h
New Right-of-Way (acres) ^c	0	49 (Hybrid/Diverging Diamond)	48 (Hybrid/Diverging Diamond)	42 (Hybrid/Diverging Diamond)	73
Residential Displacements (housing units)	0	1	1	1	8
Commercial Displacements	0	6	6	6	11
Publicly Owned Building Displacements	0	1 ^d	1 ^d	0	1 ^d
100-year Floodplain Crossings (no new crossings)	1	1	1	1	1
Floodplain (acres)	0	0	0	0	0
Stream Crossings (no new crossings)	1	1	1	1	1
Wetland (acres)	0	0.05	0.05	0.05	0.6
Parkland (acres)	0	0	0	0	0
Threatened and Endangered Species (Yes/No)	No	Yes	Yes	Yes	Yes
Primary Environmental Corridor (acres)	0	0	0	0	0
Adverse Effects to Historic Properties	0	0	0	0	0
Archaeological Sites Affected	0	0	0	0	0
Environmental Justice Issues (Yes/No)	No	No ^e	No ^e	No ^e	No ^e
Air Quality Permit	No	No	No	No	No
Noise Receptors Impacted (design year 2040)	0	66 (Hybrid) 73 (Diverging Diamond)	60 (Hybrid) 66 (Diverging Diamond)	59 (Hybrid) 66 (Diverging Diamond)	59 ^f

Table S-1. Impact Summary Table

Environmental Factor	No-build	8-lane Alternative (Preferred Alternative)	6-lane Alternative (Half Interchange at Hawley Road)	6-lane Alternative (Full Interchange at Hawley Road)	2016 Final EIS Preferred Alternative (At-grade alternative [half interchange at Hawley Road] and On-alignment alternative)
Potential Contaminated Sites (sites recommended for additional field testing)	0	67 ^g	67 ^g	51	39

^a The cost estimate is in 2021 dollars, and the ultimate cost will be higher due to inflation. WisDOT and FHWA will conduct a Cost and Schedule Risk Assessment prior to the Supplemental Final EIS/ROD, which will estimate year-of-expenditure dollars.

^b The No-build alternative would have continual repair and maintenance costs, but a value is difficult to determine. As the facility continues to deteriorate, the level of effort and associated costs would increase.

^c In addition to right-of-way acquisition, easements (not included as part of the right-of-way total in this table) may be required.

^d The WisDOT Southeast Region Service building on 60th Street/Hawley Road would be relocated as a result of the Washington Street extension.

^e The project would have both negative and positive effects on minority and/or low-income populations, but the effects would not be disproportionately high and adverse as defined by Executive Order 12898, United States Department of Transportation Order 5610.2C, and FHWA Order 6640.23A or other applicable laws.

^f There are an additional 7 noise receptors impacted as a result of Washington Street extension. This number is not included in the total.

^g This includes 16 sites recommended for field testing due to the Washington Street extension.

^h The cost of the 2016 Final EIS preferred alternative was \$850 million in 2014 dollars. This cost was updated to 2021 dollars to provide a better comparison with the current alternatives. The increased cost equates to approximately a 5 percent construction inflation index increase per year over the 7 years (2014 to 2021).



Economic Impact

The project would cost between \$1.20 billion and \$1.28 billion (2021 dollars) depending on the alternative selected. **The preferred alternative (8-lane alternative with a diverging diamond interchange at the Stadium Interchange) would cost approximately \$1.20 billion (2021 dollars).** The cost estimate is in 2021 dollars, and the ultimate cost will be higher due to inflation. WisDOT and FHWA will conduct a Cost and Schedule Risk Assessment prior to the Supplemental Final EIS/ROD, which will estimate year-of-expenditure dollars.

Public Involvement

WisDOT and FHWA implemented an extensive public involvement program during the Supplemental Draft EIS preparation (Section 5). WisDOT held nearly 200 meetings with local governments, elected officials, community groups, businesses, state and federal agencies, and advisory committees since June 2020. Public involvement meetings were held in March and December 2021 and June 2022.

During the public involvement meetings, there was support for and opposition to different aspects of the project. The following were areas of controversy: adding a lane to I-94, potential freeway access changes, impacts to historic resources, visual impacts and traffic noise in neighborhoods adjacent to the freeway, and lack of transit alternatives.

WisDOT and FHWA will hold a public hearing following the availability of the Supplemental Draft EIS.

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-2**.

Table S-2. Other Approvals Needed

Federal Law or Presidential Executive Order	Action	Issuing Agency	Notes	Timing
Clean Water Act	Section 401 Water Quality Certification	Wisconsin Department of Natural Resources		Prior to construction
	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.	
Executive Order 12898 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



Table S-2. Other Approvals Needed

Federal Law or Presidential Executive Order	Action	Issuing Agency	Notes	Timing
Section 106 and Section 110(f) 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, National Park Service, Advisory Council on Historic Preservation, U.S. Department of Veterans Affairs) with an interest in the effects of the undertaking on historic properties.	Final EIS/Record of Decision
Section 4(f) of the US Department of Transportation Act	Approval	FHWA	For parks and historic resources that will be affected, FHWA 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
Clean Air Act National Ambient Air Quality Standards	Coordination	U.S. Environmental Protection Agency	No permit of 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 Supplemental EIS

The Supplemental EIS incorporates the most up-to-date data, updated environmental regulations, changes to the alternatives, and public and agency input since the 2016 Final EIS. Changes between the 2016 Final EIS and Supplemental EIS are described as follows.

Section 1—Purpose and Need for the Project

- Updated traffic volumes with 2019 data
- Updated the traffic forecasts with a design year of 2050

- Updated the crash analysis using crash data from 2015 to 2019
- Updated demographic information (population, jobs, and business) using most recently available Census data
- Updated the focus and discussion of the Southeastern Wisconsin Regional Planning Commission's (SEWRPC's) 2035 plan using the most recent regional land use and transportation plan, *VISION 2050: A Regional Land Use and Transportation Plan for Southeastern Wisconsin—SEWRPC Planning Report No. 55*

Section 2—Alternatives Considered

- Analyzed 6-lane alternatives in addition to a revised 8-lane alternative from the 2016 Final EIS
- Analyzed a diverging diamond interchange at the Stadium Interchange in addition to the hybrid interchange analyzed in the 2016 Final EIS
- Analyzed the alternatives using updated design year 2050 traffic and safety projections
- Analyzed the alternatives in the context of SEWRPC's most recent regional land use and transportation plan, *VISION 2050: A Regional Land Use and Transportation Plan for Southeastern Wisconsin—SEWRPC Planning Report No. 55*
- Incorporated public and agency input on the alternatives since the 2016 Final EIS

Section 3—Existing Conditions, Environmental Impacts, and Measures to Mitigate Adverse Impacts

This section was updated from the 2016 Final EIS based on the most up-to-date data for each resource, design refinements to the 8-lane alternative, adding the 6-lane alternatives, adding the diverging diamond interchange at the Stadium Interchange in addition to the hybrid interchange, and public and agency input. Notable changes to the impacts are as follows:

- In the Direct Land Use Changes section (Section 3.2.2.2), updated the acres of land that would be acquired under the 8- and 6-lane alternatives from 64 to 75 acres in the 2016 Final EIS to 42 to 49 acres.
- Revised the Highway Traffic and Operational Characteristics section (Section 3.3.2.3) to account for 2050 design year traffic projections, 2015 to 2019 crash data, and updated predictive safety analysis.
- In the Residential Development Impacts section (Section 3.5.2), revised the number of residential displacements from eight to one for the 8- and 6-lane alternatives.
- In the Commercial and Industrial Development Impacts section (Section 3.6.2), revised the number of commercial displacements from 11 to 6 for the 8- and 6-lane alternatives.
- In the Wetland Impacts section (Section 3.15.2), updated the acres of wetlands impacted by the 8- and 6-lane alternatives, which is less than the impacts in the 2016 Final EIS.
- In the Threatened and Endangered Species Impacts section (Section 3.18.2), revised the impacts to state-listed species. Some state-listed species identified in the 2016 Final EIS are no longer present in the project corridor, per coordination with WDNR. Although impacts to state-listed species may occur, they will be evaluated in accordance with WDNR once field surveys are conducted.

- Updated the Noise section (Section 3.19) to document the new traffic noise study conducted for the Supplemental EIS. The study evaluated the traffic noise impacts of the 8-lane and 6-lane alternatives, along with the hybrid interchange and diverging diamond interchange at the Stadium Interchange. The number and location of feasible and reasonable noise barriers is the same as in the 2016 Final EIS.
- Updated the Historic Property Impacts section (Section 3.24.2) to describe potential impacts to the West St. Paul Avenue Industrial Historic District and 16th Street Viaduct. The project's area of potential effect (APE) was reviewed in summer 2020 to determine if there were any structures or areas potentially eligible for the National Register that were not identified as part of the Section 106 consultation for the 2016 Final EIS. Based on refined project design and inclusion of the West St. Paul Avenue Industrial Historic District and 16th Street Viaduct the APE was updated. For buildings or districts within the APE that had not previously been evaluated, WisDOT prepared Determinations of Eligibility to assess their eligibility for the National Register of Historic Places (National Register).
- In the Construction Costs section (Section 3.27.1), updated the construction cost for the 8-lane alternative in 2021 dollars and added the construction costs for the 6-lane alternatives.

Section 4—Updated Section 4(f) Evaluation

Identified two new Section 4(f) properties since the 2016 Final EIS (West St. Paul Avenue Historic District and 16th Street Viaduct). Re-evaluated the changes to the 8-lane alternative and evaluated the 6-lane alternatives and Stadium Interchange options.

Section 5—Public Involvement and Agency Coordination since 2016 Final EIS

Described new public involvement and agency coordination that has occurred since the 2016 Final EIS.

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Acronyms and Abbreviations

AADT	annual average daily traffic
AASHTO	American Association of State Highway and Transportation Officials
ACS	American Community Survey
ADA	Americans with Disabilities Act
ADID	Advanced Identification of Wetland Disposal Areas
AOC	Area of Concern
APE	Area of Potential Effects
ATC	American Transmission Company
BAC	Business Advisory Committee
BMP	best management practice
BRT	bus rapid transit
CAC	Community Advisory Committee
CFR	<i>Code of Federal Regulations</i>
CLOMR	Conditional Letter of Map Revision
CO	carbon monoxide
CO ₂	carbon dioxide
Coordination Plan	<i>Coordination Plan for Agency and Public Involvement</i>
Corps of Engineers	U.S. Army Corps of Engineers
CSD	community-sensitive design
dB	decibel
dBA	decibel A-weighted
DBE	disadvantaged business enterprise
DHV	design hour volume
EIS	Environmental Impact Statement
ERP	emergency repair program
FCTS	Fiscally Constrained Transportation System
FDM	<i>Facilities Development Manual</i>
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FS	field site
FTA	Federal Transit Administration

GHG	greenhouse gas
HCS 2016	2016 Highway Capacity Software
HHS	U.S. Department of Health and Human Services
HOV	high-occupancy vehicle
I-41	Interstate 41
I-43	Interstate 43
I-94	Interstate 94
I-794	Interstate 794
I-894	Interstate 894
ICE	indirect and cumulative effects
IHSDM	Interactive Highway Safety Design Model
KOP	key observation point
LOC	Local Officials Committee
LOMR	Letter of Map Revision
LPA	locally preferred alternative
LUST	leaking underground storage tank
MATC	Milwaukee Area Technical College
MCTS	Milwaukee County Transit System
MICAH	Milwaukee Inner-City Congregations Allied for Hope
MIS	major investment study
MMSD	Milwaukee Metropolitan Sewerage District
mph	miles per hour
MPS	Milwaukee Public Schools
MSAT	mobile source air toxics
NAAQS	National Ambient Air Quality Standards
National Register	National Register of Historic Places
NBI	National Bridge Inventory
NCHRP	National Cooperative Highway Research Program
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides



O3	ozone
PA	Programmatic Agreement
Pb	lead
PCB	polychlorinated biphenyl
PIM	public involvement meeting
PM10	particulate matter with aerodynamic diameter equal to or less than 10 micrometers
PM2.5	particulate matter with aerodynamic diameter equal to or less than 2.5 micrometers
POAQC	Project of Air Quality Concern
POM	polycyclic organic matter
ppb	parts per billion
ppm	parts per million
ROD	Record of Decision
RPBB	rusty patched bumble bee
RTA	regional transit authority
SEWRPC	Southeastern Wisconsin Regional Planning Commission
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO2	sulfur dioxide
SOHI	South of Highland
Stadium District	Southeast Wisconsin Professional Baseball Park District
TAC	Technical Advisory Committee
TCGP	Transportation Construction General Permit
TDM	transportation demand management
TIF	tax increment financing
TIN	Target Investment Neighborhood
TIP	Transportation Improvement Program
TMDL	total maximum daily load
TMP	transportation management plan
TNM	Traffic Noise Model
TRB	Transportation Research Board
TSM	transportation systems management
TTAC	Transit Technical Advisory Committee



Uniform Act	Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended
USC	United States Code
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
US 41	U.S. Highway 41
US 45	U.S. Highway 45
UWM	University of Wisconsin–Milwaukee
VA	United States Department of Veterans Affairs
VMT	vehicle miles traveled
vpd	vehicles per day
WDNR	Wisconsin Department of Natural Resources
WIS	Wisconsin State Highway
WisDOT	Wisconsin Department of Transportation

