PROJECT ID 1440-13/15-00 FHWA-WI-EIS-04-03-LS SF
WISCONSIN STATE HIGHWAY 23
FOND DU LAC to PLYMOUTH
FOND DU LAC AND SHEBOYGAN COUNTIES, WISCONSIN

LIMITED SCOPE SUPPLEMENTAL FINAL ENVIRONMENTAL IMPACT STATEMENT,
RECORD OF DECISION
And Section 4(f) Evaluation Combined
Submitted Pursuant to 42 U.S.C. 4332(2)(c), 49 U.S.C. 303, and
Public Law 112-141, 126 Stat. 405, Section 1319(b)
By the
U.S. Department of Transportation
Federal Highway Administration
and
Wisconsin Department of Transportation

COOPERATING AGENCY
U.S. Army Corps of Engineers (pursuant to 33 CFR 230)

APPROVALS

[redacted]

3/17/14
Date For Federal Highway Administration

[redacted]

3/17/14
Date For Wisconsin Department of Transportation

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ABSTRACT

Wisconsin Highway 23 is part of the National Highway System (NHS) and is a rural principal arterial that connects Fond du Lac and Sheboygan in east central Wisconsin. Both west and east ends of the project are located in the growing urban areas of Fond du Lac and Plymouth. Nearly 20 miles in length, this highway corridor serves high traffic volumes near the urban areas and lower traffic volumes in rural areas. This combined Limited Scope Final Environmental Impact Statement and Record of Decision (LS SFEIS/ROD) evaluates the No- Build Alternative, several Build Alternatives, and a series of corridor preservation alternatives for future transportation improvements, and selects an alternative. The Preferred Build Alternative is the Selected Alternative and reconstructs WIS 23 to a 4-lane divided highway on the existing alignment and creates interchanges, connector roads, and a trail. Corridor preservation alternatives evaluate areas needed for future interchanges, overpasses, and connector roads as well as the US 151/WIS 23 interchange.

FHWA and WisDOT have prepared this Limited Scope Supplemental Final Environmental Impact Statement (LS SFEIS) in accordance with Title 23, Part 771.130 (f) of the Code of Federal Regulations (23 CFR 771.130). This LS SFEIS is used to address issues of limited scope associated with the overall project.

This Record Of Decision has been prepared in accordance with 23 CFR 771.127, 40 CFR 1505.2 and Public Law 112-141, 126 Stat. 405, Section 1319(b)

NATIONAL ENVIRONMENTAL POLICY ACT STATEMENT

The National Environmental Policy Act (NEPA), 42 USC 4321-4347, became effective January 1, 1970. This law requires that all federal agencies have prepared for every recommendation or report on proposals for legislation and other major federal actions significantly affecting the quality of the human environment a detailed Environmental Impact Statement (EIS). The Federal Highway Administration (FHWA) is therefore required to prepare an EIS on proposals that are funded under its authority if the proposal is determined to be a major action significantly affecting the quality of the human environment.

EISs are required for many transportation projects as outlined in NEPA. This Limited Scope Supplemental Environmental Impact Statement (LS SEIS) follows the same procedure as an original EIS, except that scoping is not required [40 CFR 1502.9(c), 23 CFR 771.130]. The processing of the LS SEIS is carried out in two stages. Limited Scope Supplement Draft EISs (LS SDEIS) are first written and forwarded 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 LS SDEIS must be made available to the public at least 15 days before the public hearing and no later than the first public hearing notice or notice of opportunity for a hearing. A minimum 45-day comment period is provided from the date the LS SDEIS notice of availability is published in the Federal Register. WisDOT must receive agency and public comments on or before the date listed on the front cover of the LS SDEIS unless a time extension is granted by the FHWA and the Wisconsin Department of Transportation (WisDOT). After the comment period for the LS SDEIS has elapsed, preparation of the Limited Scope Supplemental Final EIS (LS SFEIS) can begin. It includes:

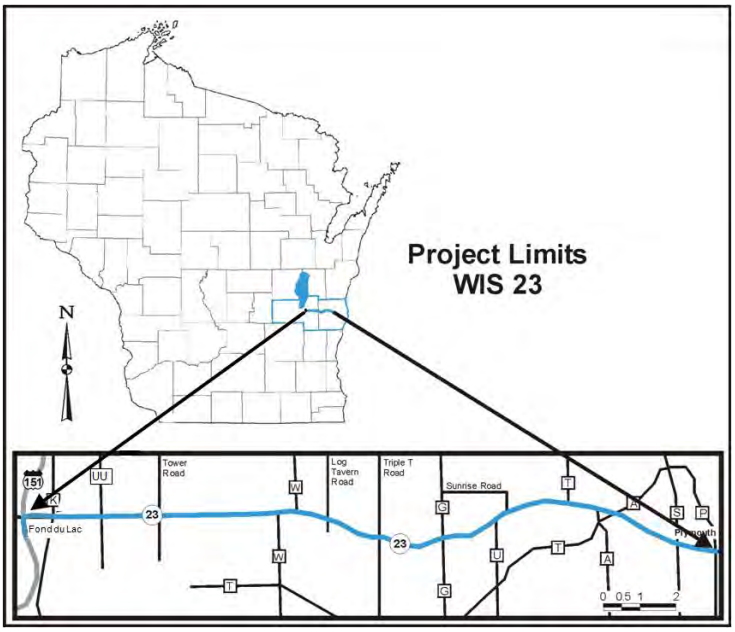
1. Basic content of the Limited Scope Supplemental Draft Environmental Impact Statement, as amended, due to internal agency comments, editing, additional alternatives being considered, and changes due to the time lag between the Draft, Supplemental Draft, and Supplemental Final EIS.
2. Summary of public hearing comments.
3. Summary of written comments received on the Limited Scope Supplemental Draft Environmental Impact Statement.
4. Evaluation and response to substantive comments.

A Record of Decision (ROD) is the administrative action that approves the selected alternative. Public Law 112-141, 126 Stat. 405, Section 1319(b) states that to the maximum extent practicable, the lead agency shall expeditiously develop a single document that consists of a FEIS and a ROD. This environmental document is a combined LS SFEIS/ROD.

The name, address, and telephone number of the individual from whom additional information can be obtained is listed on the cover of this document.

GENERAL REVIEWER INFORMATION

This LS SFEIS/ROD has been combined with the original 2010 FEIS for ease of review. Original 2010 FEIS text is shown in black. Items that are considered revisions that target specifically identified issues in the January 19, 2012 Notice of Intent to prepare an LS EIS are shown in blue text. This document has also been updated to reflect changes to data, policies, or conditions since the 2010 FEIS was published. These updates are shown in maroon text. Text that has changed between the LS SDEIS and this LS FEIS/ROD is highlighted in yellow or is designated by lines in the margin. In addition, for ease of review, a summary of changes between the 2010 FEIS and this LS SFEIS/ROD is provided at the beginning of each section.



Project Location
Project 1440-13/15-00
WIS 23

ES.0
EXECUTIVE SUMMARY

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Maroon text signifies updates addressing changed conditions or analysis, clarifications, or additional information.
Items that are considered revisions that target specifically identified issues in the January 19, 2012 Notice of Intent to prepare an LS EIS are shown in blue text.
Yellow highlight signifies updates from the LS SDEIS to this combined LS SFEIS and ROD (LS SFEIS/ROD).
For tables and figures, the title of the table or figure has been shown in maroon or blue to indicate whether it has been updated or revised since the 2010 FEIS.

ES.0 DOCUMENT BASIS AND DESCRIPTION

A Draft Environmental Impact Statement (DEIS) was published for WIS 23 from Fond du Lac to Plymouth in November 2004. Figure ES-1 shows the approximately 19.1-mile corridor limits. The DEIS evaluated alternatives that addressed system, capacity, and safety needs on this corridor. Because of modifications and augmentations in the project alternatives, a reevaluation determined that a Supplemental Draft EIS (SDEIS) was needed. The reevaluation was formally signed with the release of the SDEIS in December 2009. The release of the SDEIS was followed by a Final EIS (FEIS) released in June 2010. The Federal Highway Administration (FHWA) issued a Record of Decision (ROD) on September 27, 2010. The ROD approved the 4-Lane Build On-Alignment Alternative for WIS 23 from Fond du Lac to Plymouth, the construction of several interchanges, the extension of a multiuse trail, and the corridor preservation for two interchanges and several grade separations.

In June of 2011, 1000 Friends of Wisconsin, Inc. filed a complaint against the United States Department of Transportation (US DOT), the FHWA, and the Wisconsin Department of Transportation (WisDOT) for approving the WIS 23 Corridor Expansion Project.

Additional legal proceedings were stayed until July of 2014. The LS SDEIS and LS SFEIS/ROD were prepared in accordance with Title 23, Part 771.130 (f) of the Code of Federal Regulations (23 CFR 771.130). The applicable text states:

> *§ 771.130 Supplemental environmental impact statements.*
>
> *(f) In some cases, a supplemental EIS may be required to address issues of limited scope, such as the extent of proposed mitigation or the evaluation of location or design variations for a limited portion of the overall project. Where this is the case, the preparation of a supplemental EIS shall not necessarily:*
>
> *(1) Prevent the granting of new approvals;*
>
> *(2) Require the withdrawal of previous approvals; or*
>
> *(3) Require the suspension of project activities; for any activity not directly affected by the supplement. If the changes in question are of such magnitude to require a reassessment of the entire action, or more than a limited portion of the overall action, the Administration shall suspend any activities which would have an adverse environmental impact or limit the choice of reasonable alternatives, until the supplemental EIS is completed.*

The LS SDEIS and this LS SFEIS/ROD were prepared in accordance with Title 23, Part 771.125 of the Code of Federal Regulations (23 CFR 771.125) and Public Law 112-141, 126 Stat., Section 1319(b) .

The LS SDEIS and this LS SFEIS/ROD are used to address issues of limited scope associated with the overall project. These issues are as follows:

- Updating and clarifying portions of the original Purpose and Need.
- Enhancing and clarifying the discussion of alternatives that do not include capacity expansion.
- Clarifying the discussion of impacts to Section 4(f) properties and reconsidering determinations on three of those resources.
- Revising, updating, and clarifying the ICE analysis.
- Seeking additional public involvement and offering a hybrid style public hearing.

This LS SFEIS/ROD lists and responds to comments received during the comment period of the LS SDEIS. Both the LS SDEIS and this LS SFEIS/ROD were combined with the original 2010 FEIS for ease of review. Original 2010 FEIS text is shown in black. Items that are considered revisions that target specifically identified issues in the January 19, 2012, Notice of Intent to prepare the LS EIS are shown in

blue text. This document has also been updated to reflect changes to data, policies, or conditions since the 2010 FEIS was published. These updates are shown in maroon text. In addition, for ease of review, a summary of changes since the 2010 FEIS is provided at the beginning of each section. Textual differences between the LS SDEIS and this LS SFEIS/ROD are highlighted in yellow.

ES.1 LOCATION AND DESCRIPTION OF EXISTING FACILITY

The study corridor is Wisconsin Highway (WIS) 23 in east central Wisconsin (see Figure ES-1). The project is located in Fond du Lac and Sheboygan counties between the cities of Fond du Lac and Plymouth. The majority of existing WIS 23 is a rural 2-lane highway. Portions of the highway, on either end of the project, are located in growing urban areas. The EIS study limits begin at the US 151/WIS 23 interchange, on the east side of the city of Fond du Lac and extend approximately 19.5 miles east to County P on the northwest side of the city of Plymouth. The study includes the connection between the US 151 Fond du Lac bypass and the WIS 23 corridor. The 4-lane US 151 Fond du Lac Bypass was completed in 2007. The portion of WIS 23 from County P to WIS 67 in Plymouth was expanded to 4 lanes in 2004 and 2005. WIS 23 from WIS 67 to I-43 in Sheboygan was previously expanded to 4 lanes. This leaves the Fond du Lac to Plymouth section as the last remaining 2-lane section between Fond du Lac and I-43 in Sheboygan. This LS SFEIS/ROD focuses on the portion of WIS 23 between Fond du Lac and Plymouth.

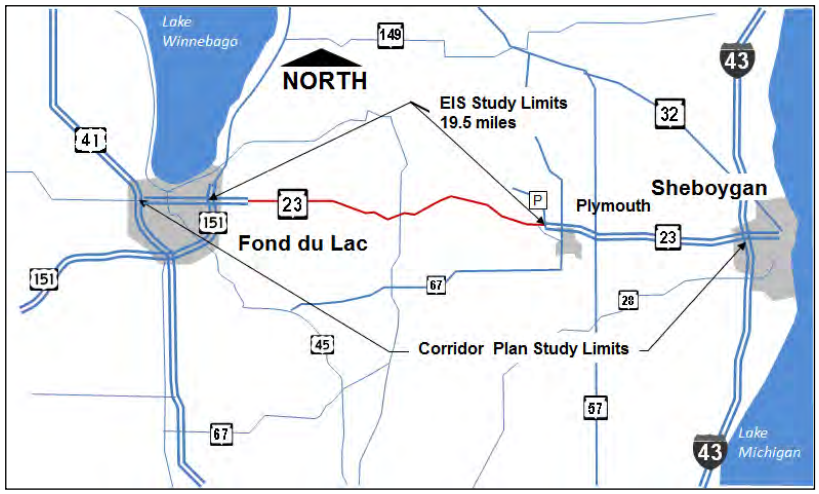

Figure ES-1 Project Location

ES.2 DESCRIPTION OF ALTERNATIVE STRUCTURE

The WIS 23 project development process is depicted in Figure ES-2. There are seven phases:

- The alternative screening phase.
- The alternatives presented in the 2004 DEIS.
- The alternatives presented in the 2009 SDEIS.
- The alternatives presented in the 2010 FEIS.
- The Selected Alternatives presented in the 2010 ROD.
- The alternatives presented in the 2013 LS SDEIS.
- The alternatives and Selected/Preferred Alternative presented in this 2014 LS SFEIS/ROD.

The alternatives presented in this LS SFEIS/ROD are the same as those presented in the 2010 FEIS and ROD.

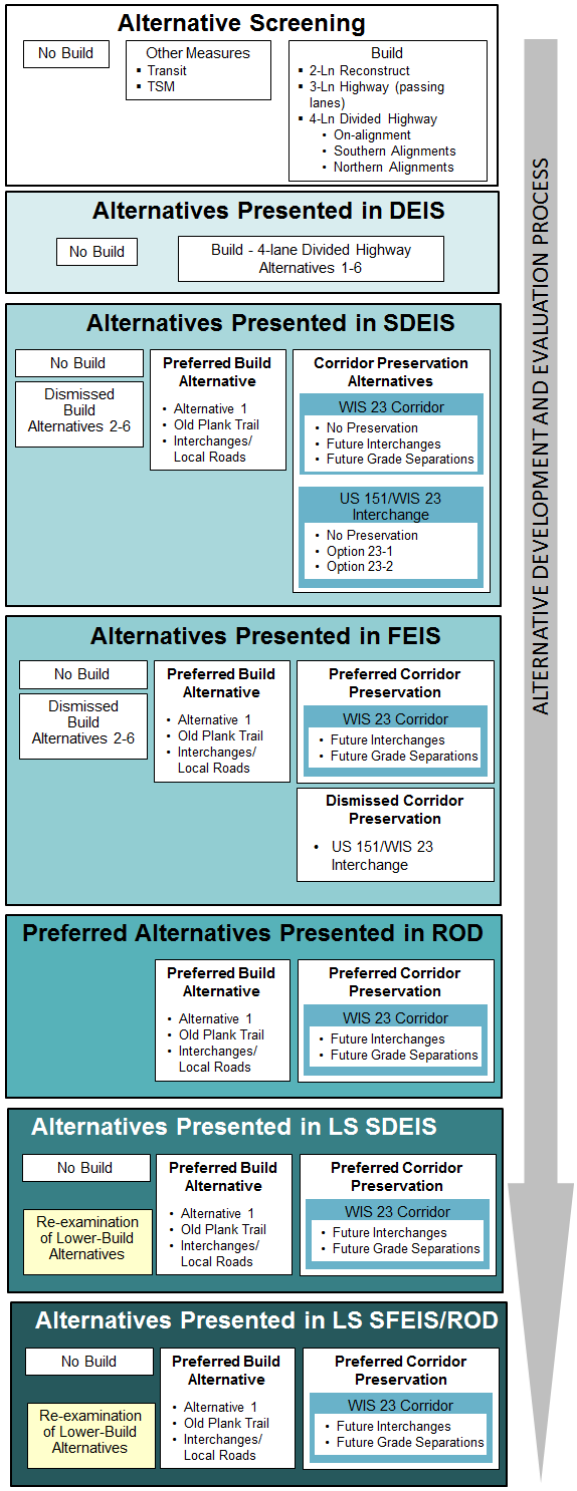

Figure ES-2 Alternative Evaluation Phases

ES.3 PROJECT PURPOSE AND NEED

A. General

The Purpose and Need describes the reasons why the project is being considered. The Purpose and Need for the WIS 23 corridor remains the same as stated in the 2010 FEIS. Section 1.5 has been added that describes the Purpose and Need screening criteria that was used to evaluate alternatives to determine if they satisfied the Purpose and Need. This information was necessary due to the revised traffic forecasts. Since the forecasts were lower than those presented in the 2010 FEIS, an updated analysis of the alternatives was completed to ensure the validity of the range of alternatives that were analyzed in detail in the 2010 FEIS. Reasons that prompted the reexamination include the following:

- Since the release of the 2010 FEIS, a new travel demand model has been completed based on implementation of WisDOT's updated traffic forecasting methodology. Many state highways have experienced lower traffic volume trends. These two factors warranted the preparation of new 2035 forecasts for the WIS 23 corridor. The revised 2035 forecasts presented in this document are lower than those presented in the 2010 FEIS. More detailed explanation of these revisions can be found in Section 2.0 Alternatives and Appendix A.
- The traffic operational analysis, which analyzes how much congestion roadways experience, has been updated using the procedures from the 2010 Highway Capacity Manual (Transportation Research Board, 5th Edition, 2010) and updated traffic forecasts.
- The crash data was updated with the most recent five years of available data (2008 to 2012). WisDOT changed its method of reporting average state crash rates since the publication of the 2010 FEIS. The new methodology increased the number of roadway classifications used to report statewide crash rates. The new methodology also only provides five-year rolling averages rather than the yearly averages that were previously reported.

B. Summary

The purpose of the WIS 23 project is to provide additional highway capacity [i.e., to provide appropriate and effective Level of Services (LOS[1])] to service existing and projected traffic volumes and improve operational efficiency and safety for local and through traffic while avoiding or minimizing environmental effects. It also seeks to preserve the corridor and right of way for future transportation needs such as grade separations and interchanges. This preservation will help coordinate local governmental land use plans with transportation improvement plans. These plans include nonmotorized transportation accommodations.

The improved facility will meet today's physical and operational standards for a Connections 2030 Connector Route. Through-traffic, commuters, and truck traffic will be able to maintain steady flow through the project area when WIS 23 is updated to A3 expressway standards. The project will enhance safety and efficiency while avoiding or minimizing socioeconomic and environmental impacts to the extent possible. The following items discuss the needs of the project.

1. System Linkage and Route Importance–WIS 23 is a Connector route in the Corridors 2030 State Highway Plan. It is a rural principal arterial between the city of Fond du Lac and the city of Sheboygan and a major east-west connecting highway between these and other population centers of east central Wisconsin. It provides a major link between I-43 and US 41. WIS 23 is a state-designated long truck route. As a Connector route, it should be upgraded to current standards for roadway capacity and alignment.

2. Transportation Demand and Regional Economic Development–WIS 23 provides a connection to numerous economic sectors with the east Wisconsin region. It helps connect east central Wisconsin to the Fox Valley, Green Bay, Milwaukee, and Madison, Wisconsin, and Chicago, Illinois, economic centers. The current roadway does not adequately meet the regional transportation needs of these economic sectors and decreases the region's competitiveness.

3. Legislative and Planning History–As a Connector in the State Highway Plan, WIS 23 warrants high levels of mobility and safety. Because of this, in the 1999 biennial budget, the legislature enumerated WIS 23 as a major project. Authorization for expanding highway capacity along the portion of WIS 23 from WIS 67 to US 41 in Sheboygan and Fond du Lac counties is found in Wisconsin Statutes 84.013(3)(ra).

4. Existing and Future Traffic Volumes and Resulting Operation–Many portions of WIS 23 exceed the threshold that warrants a 4-lane facility. By 2035, most of the corridor will exceed these thresholds. The lack of adequate capacity will create operation service levels that are below desirable standards for a Connector route.

5. Existing Highway Geometric Characteristics–The traffic volumes on much of WIS 23 are at a level where a 4-lane cross section is considered according to current WisDOT design standards. Additionally, much of the route is marked for no passing. Even when passing zones are available, opposing traffic volumes reduce passing opportunities and result in a lower LOS. The connection between the US 151 Fond du Lac bypass and WIS 23 is a junction of two Connector routes in the State Highway Plan. To be consistent with the State Highway Plan, this junction should be served with a partial "system" interchange that provides free-flowing ramps from and to these two highways.

6. Access–The high number of access points is directly related to both highway safety and mobility. WIS 23 has greater numbers of driveway and side-road access than what is recommended for a Connector route. Local traffic and farm machinery enter and exit the highway from approximately 235 county and local roads, private driveways, and field access points.

7. Safety–While the overall WIS 23 crash rate is below the statewide average for a 2-lane rural state trunk highway, some sections experience higher than average crash rates. On high priority corridors such as WIS 23, it is desirable to reduce all risk factors that contribute to crashes, particularly at intersections.

[1] Level of Service is a measure of traffic congestion and ranges from A (good) to F (poor).

8. Nonmotorized Travel Accommodations–Currently there are no good east-west routes or accommodations on WIS 23 for nonmotorized travel between Fond du Lac's Prairie Trail and Sheboygan County's Old Plank Road Trail. Additionally, WIS 23 provides one of the few crossings of the Sheboygan River and other topographic features, yet there is a 16-mile gap on WIS 23 where pedestrian and bicycle facilities are not provided.

ES.4 ALTERNATIVES

A. General

The Alternatives Section describes the alternative development and evaluation process. The Preferred Alternative in this LS SFEIS/ROD is the same as stated in the 2013 LS SDEIS. It is also the same as that stated in the 2010 FEIS with some minor design modifications at intersections as a result of the normal final design process. It is also the Selected Alternative. Portions of the Alternatives Section presented in the 2010 FEIS have been updated as follows:

- Section 2.2, which describes the Preferred Alternative, has been updated to reflect what was incorporated in the 2010 ROD.
- As design progressed after the ROD, some design modifications were made as part of the normal project development process. The majority of these design modifications were in response to public input and include the following:
  - There is an additional proposed roadway connection between Hilltop Road and Whispering Springs Road.
  - The access road in the southeast quadrant of the County UU interchange has been shortened.
  - One access road has been removed and another shortened in the southwest quadrant of the County UU interchange.
  - County K north of WIS 23 has been shifted to the west to accommodate plans of St. Mary's Springs Academy.
  - Access treatments have been determined for all intersections through the corridor.

Additionally, updated traffic counts were taken in 2012 and WisDOT updated its traffic forecasting methodology. Since the forecasts were lower than those presented in the 2010 FEIS, an updated screening analysis of alternatives, including those previously dismissed from detailed review, was completed. The updated screening analysis has been included as Section 2.6. The screening analysis included a reexamination of each alternative, including a new "Hybrid Alternative," against the Purpose and Need criteria. Detailed information on that screening criteria is provided in Section 1.5.

B. Alternative Development

In the early stages of the project, WisDOT worked with the Public Advisory Committee (PAC) to develop broad improvement concepts. These included the No-Build Alternative, Other Measures, and the Build Concepts. These concepts resulted in the alternatives described as follows:

1. No-Build Alternative–The No-Build Alternative would not expand WIS 23 to provide additional roadway capacity. The No-Build Alternative does not make any improvements to the corridor except for routine roadway maintenance. It is presented in the EIS to comply with Council on Environmental Quality (CEQ) regulations and to serve as a baseline for comparison.

2. Nonhighway Alternatives–Transit and Alternate mode alternatives would use transit and other modes such as bike facilities to provide mobility and reduce traffic on WIS 23 to acceptable levels These alternatives cannot independently satisfy the project Purpose and Need because they do not reduce volumes enough to improve service levels. Components of this alternative, however, are brought forward in other alternatives. This alternative also included Transportation System Management (TSM). TSM seeks to relieve congestion and enhance capacity through low cost improvements such as signal improvements or the removal of bottlenecks. TSM would not solve the capacity and operational problems throughout the existing route. It would not remove enough

WIS 23 traffic from peak hours to improve WIS 23 operation to the Corridors 2030 operational objective of LOS C. Therefore, this alternative was not considered for further analysis.

3. Reconstructing the Existing 2-Lane Highway–This alternative would reconstruct the existing roadway in rural areas and construct turn lanes at intersections. This alternative is not compatible with the long-term, areawide transportation goals of a high mobility facility and does not satisfy the project capacity and safety needs. Therefore, this alternative was not carried forward.

4. 2-Lane Roadway with Passing Lanes–In 2006, WisDOT examined the passing lane alternative as an interim solution before full reconstruction to a 4-lane facility. The conclusions of the 2-Lane Roadway with Passing Lane studies, which were included in the 2009 SDEIS and 2010 FEIS, were that the passing lane alternative did not fulfill the Purpose and Need of the project and was not carried forward for detailed study as a long-term solution.

   Note, in 2012, WisDOT reexamined the 2-Lane Roadway with Passing Lanes alternative, as well as a Hybrid Expansion/Passing Lane alternative to see if alternatives that did not include capacity expansion could satisfy the project Purpose and Need. A summary of the analysis is discussed in Section 2.6. The analysis found that alternatives that did not involve capacity expansion were not able to fully satisfy the project Purpose and Need. The Preferred Alternative described in the 2010 ROD continued to best satisfy the project Purpose and Need. A detailed review of the analysis is included in Appendix B of this LS SFEIS/ROD.

5. Northern 4-lane Roadway Alternatives–This alternative looked at corridors that were north of the existing WIS 23 alignment and involved capacity expansion. They were eliminated from detailed study because the initial environmental review showed the impacts to be much greater than other viable options.

C. Alternatives Presented in the 2004 DEIS, 2009 SDEIS, 2010 FEIS, and 2013 LS SDEIS

Corridor alternatives were developed using local input, information compiled on composite constraint maps of the area, engineering feasibility, and design standards. Considerations included property lines, homes, businesses, farms, buildings, wetlands, historic sites, archaeological sites, cemeteries, potentially contaminated sites, quarries, and drainage features. The alternatives retained for detailed study were selected based on the ability to fulfill the Purpose and Need while minimizing impacts. The basic roadway alternatives presented in the 2004 DEIS, 2009 SDEIS, 2010 FEIS, and 2013 LS SDEIS included the following:

1. No-Build Alternative–No improvements to the existing WIS 23 roadway beyond routine maintenance.
2. Alternative 1–This would construct a 4-lane WIS 23 divided highway section on the existing alignment from US 151 to County P in Plymouth. A jug-handle would be incorporated at the County K intersection in Fond du Lac, and diamond interchanges would be installed at County UU and County G in Fond du Lac County.
3. Alternative 2–This would construct a 4-lane highway expansion along the existing WIS 23 alignment with a 4-mile relocation between Log Tavern Road and Sunrise Road (see Figure ES-3 and Figure 2.4-3). As with Alternative 1, a jug-handle would be incorporated at the County K intersection, and a diamond interchange would be installed at County UU in Fond du Lac County.
4. Alternatives 3-6–With these alternatives, a 4-lane WIS 23 divided highway would be constructed, and the majority of the highway west of County U would be off the existing alignment. The differences among Alternatives 3, 4, 5 and 6 are primarily alignment variations in the connection points. In the 2009 SDEIS, the 2010 FEIS, the 2013 LS SDEIS, and this LS SFEIS/ROD, Alternative 3 represents Alternatives 4, 5, and 6 that follow Alternative 3's basic alignment. As with Alternative 1, a jug-handle would be incorporated at the County K intersection, and a diamond interchange would be installed at County UU in Fond du Lac County (see Figure ES-3 and Figures 2.4-5 to -8).

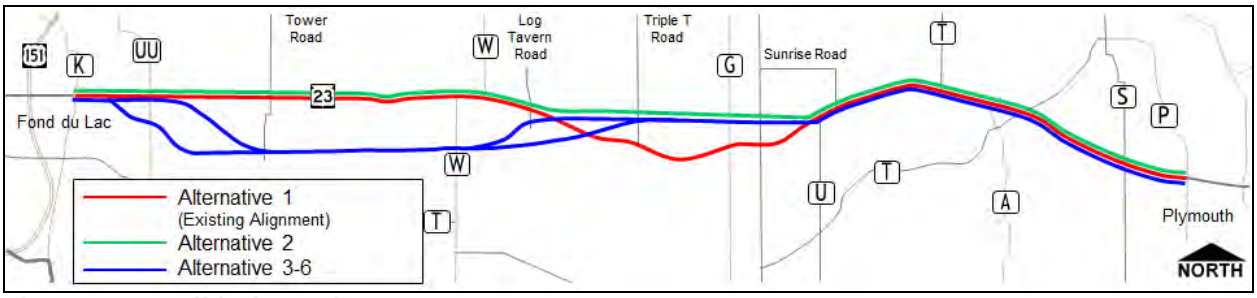

Figure ES-3 Build Alternatives

ES.5 RECORD OF DECISION

A. General

The ROD incorporated in this document is consistent with and supersedes the ROD issued on September 27, 2010. This LS SFEIS/ROD is in accordance with Section 1319 of Moving Ahead for Progress in the 21st Century highway bill. Section 1319(b) directs the lead agency, to the maximum extent practicable, to expeditiously develop a single document that consists of a Final Environmental Impact Statement (FEIS) and ROD, unless certain conditions exist. These conditions include substantial changes to the proposed action or significant new circumstances or information relevant to environmental concerns that bear on the proposed action.

The ROD incorporated in this document is also prepared in accordance with 23 CFR 771.127 and 40 CFR 1505.2. A signature on this LS SFEIS/ROD represents approval of the selected build alternative and corridor preservation action. The ROD documents FHWA's and WisDOT's decision for the selected alternative that addresses the Purpose and Need of this project on WIS 23 from Fond du Lac to Plymouth.

B. Decision - Build Alternative

All alternatives presented in the 2004 DEIS remained under consideration until the 4-lane expansion was selected as the Preferred Build Alternative after the public hearing in January 2005. Selection of the 4-lane Preferred Build Alternative was made only after evaluation of all comments received as a result of the public hearing and following review of the DEIS by the public and agencies. Based on public and agency comments, additional elements were incorporated into the Preferred Alternative that required the release of a 2009 SDEIS. These elements included interchanges, the extension of a multiuse trail, and corridor preservation options. The following paragraphs describe the Preferred Alternative presented in the 2009 SDEIS, 2010 FEIS, 2013 LS SDEIS, which is the Selected Build Alternative in this LS SFEIS/ROD because it best meets the project Purpose and Need while incurring the least amount of impacts.

1. Four-Lane Expansion (Alternative 1)–The Selected Build Alternative constructs a 4-lane divided highway on the existing alignment for the full length of the project. From US 151 to County UU, WIS 23 will essentially have a suburban cross section. This includes four 12-foot lanes, 6-foot inside shoulders with an 18-foot median with mountable curb, and 10-foot outside shoulders that drain to the side slopes. From County UU east to County P in Sheboygan County, WIS 23 will have a typical expressway cross section. This includes four 12-foot lanes, a 60-foot median, 6-foot inside shoulders, and 10-foot outside shoulders. Generally, the existing roadbed will carry the eastbound lanes, and the westbound lanes will be constructed north of the existing roadway. Figure 2.7-1 illustrates these cross sections.

   The Ice Age Trail and the State Equestrian Trail run concurrently near WIS 23 and cross WIS 23 at the Kettle Moraine Forest. The WIS 23 Selected Build Alternative provides an underpass with a clear width of 20 feet and a minimum vertical clearance of 12 feet for the combined trails.

2. Old Plank Trail–The existing Old Plank Trail currently connects the city of Sheboygan with the town of Greenbush on the east portion of the study corridor. The US 151 bypass of the city of Fond du Lac constructed the Prairie Multiuse Trail along the bypass roadway that connects the Wild Goose State Trail south of the city and the WIS 149 trail in Peebles. The Selected Build Alternative will

construct an extension of the Old Plank Trail from the town of Greenbush to the Prairie Trail in Fond du Lac. The trail will generally be located on the south side of the 4-lane expansion.[2]

3. Local Roads and Interchanges–The Selected Build Alternative also constructs a series of local roads and interchanges to improve highway mobility and safety. These improvements include a jug-handle grade-separated interchange at County K and diamond interchanges at County UU and County G. Several side roads will also have their direct access to WIS 23 removed but are provided alternate access via frontage roads and other local connections. Figures ES-4, ES-5, ES-6, and ES-7 show the County K Jug-Handle, the County UU and County G interchanges, and the roundabout at Wisconsin American Parkway, respectively. Figures ES-8 and ES-9 show local road modifications in Fond du Lac and Plymouth respectively. Section 2 of this LS SFEIS/ROD describes these access modifications in greater detail.

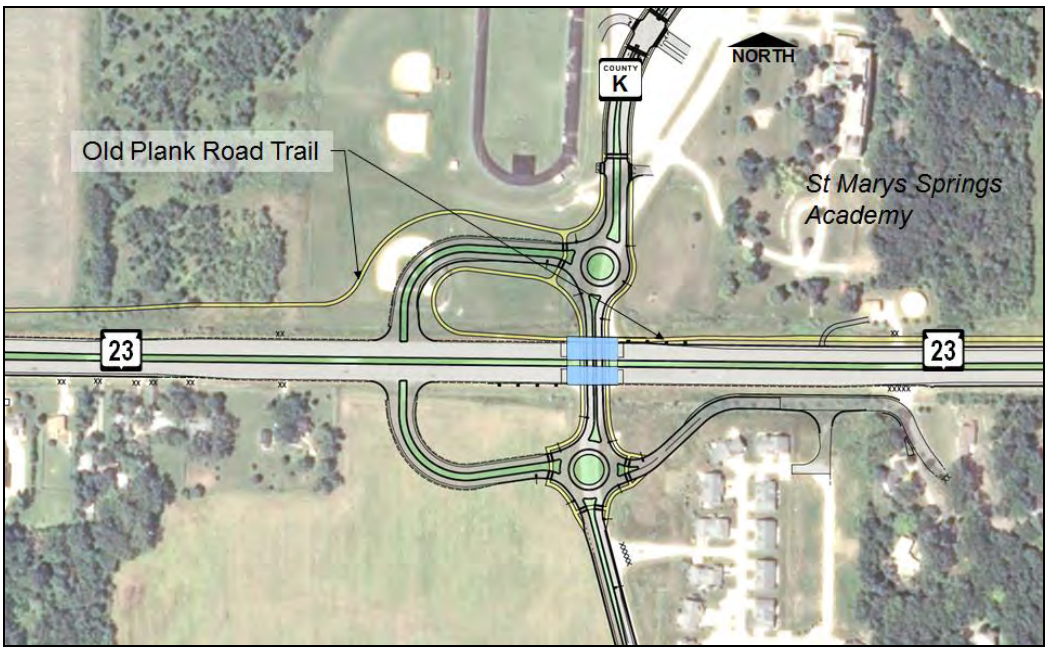

Figure ES-4 County K Jug-handle

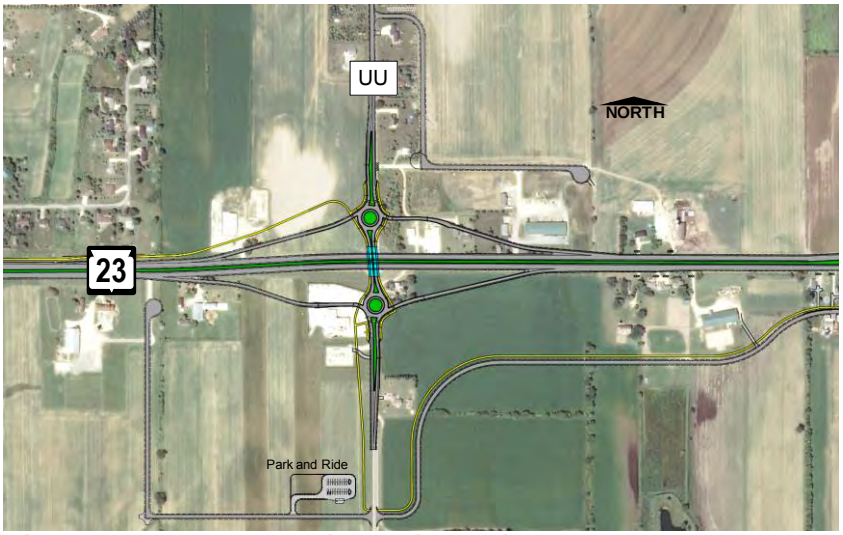

Figure ES-5 County UU Diamond Interchange

[2] Note, numerous alternatives were evaluated for the location of the Old Plank Road Trail extension. See Section 2.5 of this LS SFEIS/ROD.

Figure ES-6 County G Diamond Interchange

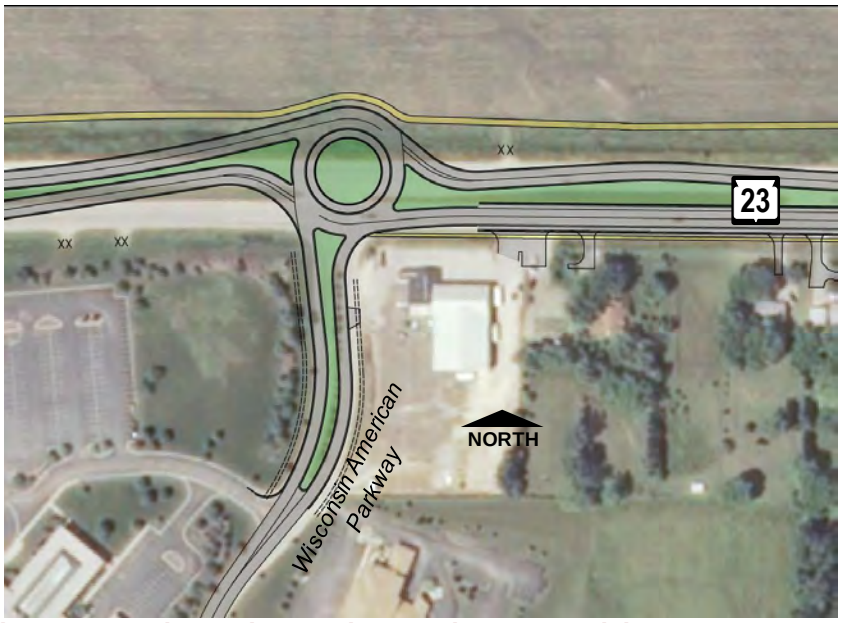

Figure ES-7 Wisconsin American Parkway Roundabout

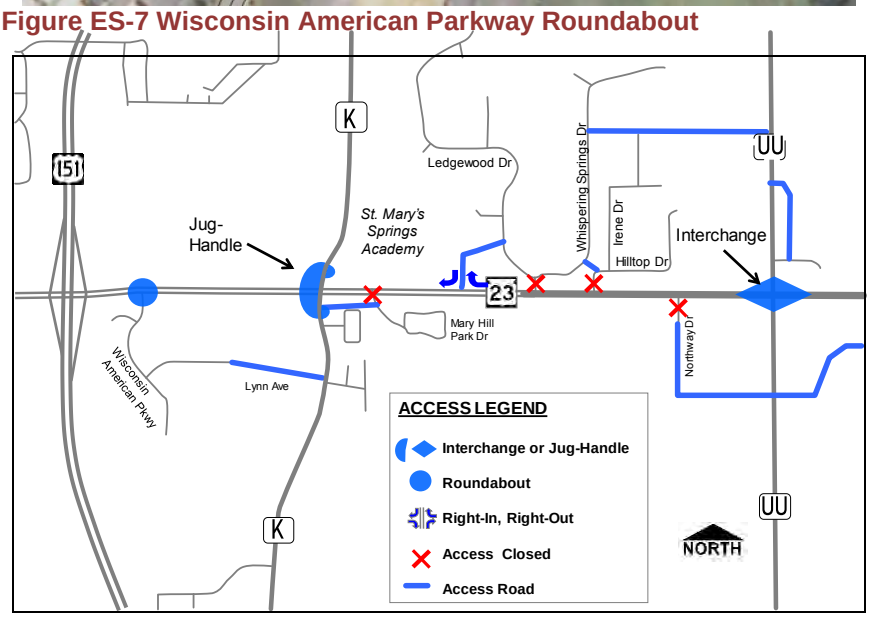

Figure ES-8 Local Road Changes in Fond du Lac

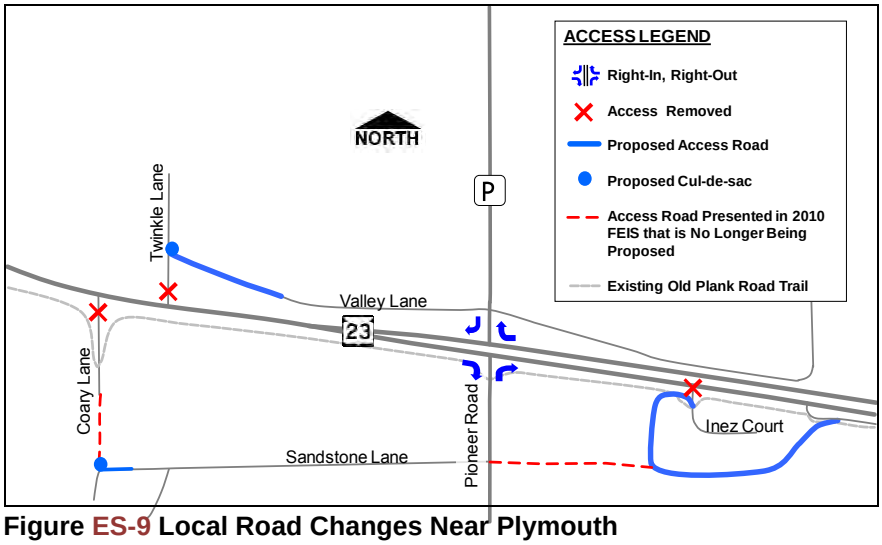

Figure ES-9 Local Road Changes Near Plymouth

J-turns are being proposed at several high-volume intersections east of County UU. This intersection design only allows right-in/right-out/left-in movements and removes the most hazardous movements from the intersection. To turn left from a side road, a driver must first turn right and then make a U-turn several hundred feet from the intersection. This intersection access treatment is shown in Figure ES-10. J-turns are proposed at Tower Road North, 7 Hills Road, County W, County T, County U, County A, and County S. Numerous intersections will be converted to allow right-in, right-out movements only.

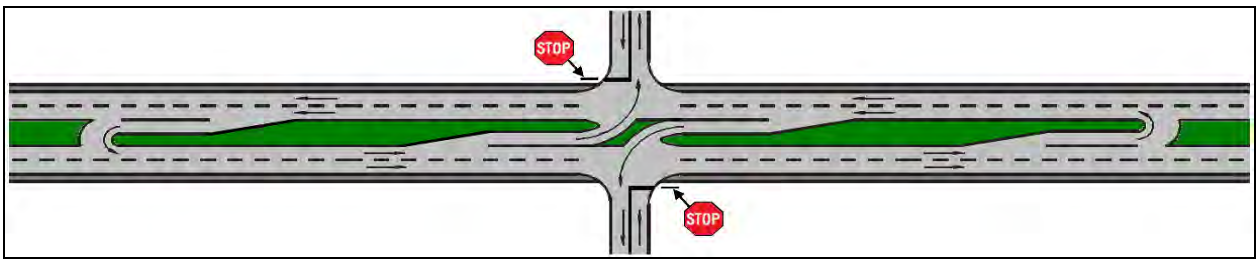

Figure ES-10 J-turn Design

C. Decision - Corridor Preservation Measures

Corridor preservation measures have been selected so that improvements can be more easily implemented when operational and safety needs dictate. These improvements focus on either removing access from WIS 23 or improving the access type at intersections. Access modifications include access closure, Right-In/Right-Out (RIRO), dedicated left turns, and J-turns. The following paragraphs describe the Preferred Corridor Preservation Measures presented in the 2010 FEIS which are now the Selected Corridor Preservation Measures in this LS SFEIS/ROD because they best meet the access needs of the corridor.

1. WIS 23 Corridor

The Selected WIS 23 Corridor Preservation Alternative implements corridor preservation at key intersections and local road connections. These WIS 23 corridor preservation measures will preserve right of way needed to remove access from WIS 23 or improve the access type. The actual construction of these access modifications will occur when operational and safety needs dictate. From Wisconsin American Parkway east to County P, the land needed to construct two diamond interchanges, four grade separations, and several cul-de-sacs will be preserved. The areas for corridor preservation and the associated future improvement include:

- Grade separation (overpass) at Tower Road
- Cul-de-sacs at Poplar Road
- Grade separation (overpass) at 7 Hills Road
- Cul-de-sac at County W south and Hinn Road
- Rerouting of County W south to County W north roughly along Poplar Road and Loehr Road

- Diamond interchange at County W north intersection.
- Grade separation (overpass) at Scenic View Drive
- Cul-de-sac at Plank Road
- Grade separation at Sugarbush Road
- Diamond interchange at County A

The footprints for these interchanges and grade separations can be seen in Figures 2.7-13 to 2.7-25.

2. US 151/WIS 23 System Interchange

Another corridor preservation measure was studied for different system interchange types for the connection between US 151 and WIS 23. This is a junction between two Connector routes in the Corridors 2030 State Highway Plan. In the 2009 SDEIS, three corridor preservation options were evaluated at this interchange. Selection of the Selected US 151/WIS 23 corridor preservation option was made after evaluation of all comments received as a result of the February 2010 public hearing and following review of the 2009 SDEIS by the public and agencies. The three US 151/WIS 23 System Interchange corridor preservation alternatives that were considered include the following:

- No Corridor Preservation–This alternative does not preserve any right of way for anticipated future system interchange improvements at this connection. Land adjacent to the existing diamond interchange will be unencumbered by official mapping.

- Option 23-1–This alternative would build freeflowing ramps between WIS 23 and US 151. The ramps would be located in the southeast quadrant and impact the Wisconsin American Business Park substantially.

- Option 23-2–This alternative would build free-flowing ramps between WIS 23 and US 151. The ramps would be located on top of the existing diamond interchange and would occupy portions of the northeast and southwest quadrants. It would impact the Taycheedah Creek wetland mitigation bank.

As presented in the 2010 FEIS, No Corridor Preservation remains the Selected Corridor Preservation Alternative for the US 151/WIS 23 connection in this LS SFEIS/ROD. Reasons for this selection include the following:

- Operations modeling indicates the current diamond interchange with conventional improvements can operate at satisfactory LOS until the year 2045.
- The effects of mapping on properties within the footprint are substantial and greatly affect existing businesses in the Wisconsin American Business Park.
- There are limited monies available for right of way purchases associated with corridor preservation measures of this magnitude. Because anticipated improvements are far into the future and there are many current statewide needs, it is unlikely that additional monies could be allocated toward right of way purchases associated with this corridor preservation.

ES.6 ENVIRONMENTAL IMPACTS

Environmental impacts were identified for each corridor alternative. The impact analysis included a review of the following: economic and community/residential impacts; air and noise effects; farmland impacts; residential and business relocations; upland habitat impacts; wetlands, streams, lakes, and floodplains impacted; erosion control and potential stormwater impacts; endangered species impacted; potential impacts to archaeological and historical sites that may be eligible for the National Register of Historic Places (NRHP); locations of possibly contaminated sites; public and private access points; estimated right of way required; public input; and project costs.

A detailed discussion of environmental consequences is provided in Section 4.0. There have been several updates from that provided in the 2010 FEIS. These include the following:

- Prior to the release of the 2010 ROD, some right of way was purchased through WisDOT's hardship acquisition and early acquisition programs.[3] Since the release of the 2010 FEIS and 2010 ROD, WisDOT has been purchasing right of way and relocating businesses and households. In the rural portion of the WIS 23 corridor (east of Taft Road) right of way has been acquired from 57 parcels, 12 residences have been relocated, and 1 business has been relocated. In the urban section of the WIS 23 corridor (west of Taft Road), 9 residences have been relocated and 1 business has been relocated. Other than the 9 residences and 1 business, no other right of way has been purchased in the urban section because the right of way plat has not yet been completed. The acquisition that has occurred to date will not, and has not, influenced decisions related to the selection of the Preferred Alternative.
- A wetland delineation was performed in 2011. Alternative impacts to wetlands use the updated wetland delineation. Additionally, more information is known about potential mitigation opportunities.
- There have been updates to Threatened and Endangered Resources through additional coordination with the WDNR. Additionally, information regarding rare species has been compiled in one location with a new factor sheet.[4]
- The status of several resources pertaining to Section 4(f) has changed. These changes include the following:
  - The Northern Unit of the Kettle Moraine State Forest was not considered a Section 4(f) property in the 2010 FEIS. It is now being considered a Section 4(f) property. Information is provided in Section 5 of this LS SFEIS/ROD. The discussion is combined with the Ice Age Trail and State Equestrian Trail, also Section 4(f) properties.
  - St Mary's Springs Academy was considered a Section 4(f) property in the 2010 FEIS because the Preferred Alternative impacts the property, a historic resource eligible for the National Register of Historic Places (NRHP). Because of property owner modifications and structure removals on the property, the historic boundary was reduced. Because of this revision to the historic boundary, the WIS 23 Selected Alternative will no longer adversely affect the property. The Selected Alternative no longer has any use of the Section 4(f) property.
  - The Sippel archaeological site was considered a Section 4(f) impact in the 2010 FEIS. Also, a programmatic Section 4(f) evaluation was incorrectly used for the Sippel site since it was incorporated in an EIS, (http://www.environment.fhwa.dot.gov/4f/4fmhist.asp). The Sippel site is no longer considered to have a Section 4(f) impact. 23 CFR 774.13(b) states that disturbance of an archaeological site is excepted from requiring Section 4(f) approval when the resource has minimal value for preservation in place and the State Historic Preservation Officer (SHPO) does not object to this finding.
  - The Old Wade House Park remains a Section 4(f) property and is discussed in Section 5 of this LS SFEIS/ROD.
- The Indirect and Cumulative Effects analysis has been updated based on additional coordination with local land use experts. It reflects the most recent updates in land use planning and current economic trends.
- A public hearing with a hybrid format will be held after the release, and during the availability for comment, of this LS SFEIS/ROD.

[3] On prolonged studies, property owners may be eligible for hardship acquisition. Affected property owners may make a formal request to WisDOT to purchase their property as a "hardship." The owner must show that the marketability of the property has been adversely affected by the proposed plan and that a prolonged delay in the acquisition will cause them undue economic hardship. Once WisDOT receives such a request, WisDOT considers the request and follows the procedures for Early and Advanced Acquisitions in accordance with the WisDOT Real Estate Program Manual (WisDOT, August 2012), https://trust.dot.state.wi.us/extntgtwy/dtid_real_estate/repm/repm.htm, and 23 CFR Section 710 Subpart E.

[4] Factor Sheets are a more condensed method for documenting the results of the NEPA process. They are generally used by WisDOT and FHWA in Environmental Assessments and Environmental Reports. The sheets were used in this EIS as part of a WisDOT pilot effort to streamline the environmental documentation process. Since the FEIS used the Factor Sheet format, it has been retained in the LS SDEIS and this LS SFEIS/ROD, except for Section 5, which was significantly revised.

The Environmental Cost Matrix, Table ES-1 at the end of this summary, presents the impacts listed in the 2009 SDEIS and 2010 FEIS and shows the impacts for each added component (e.g., the trail, the grade-separated crossings, and the interchanges). Since the publication of the 2010 FEIS, the impacts have been updated as part of the normal design refinement process. Table ES-2 compares the impacts presented in the 2010 FEIS with the updated impacts obtained from the current design refinements. Many of these refinements involved access and right of way modifications that occurred during right of way negotiations and are described in Section 2.7 in this LS SFEIS/ROD.

ES.7 LEAD AND COOPERATING AGENCY

FHWA is the federal lead agency for this EIS under the National Environmental Policy Act of 1970. WisDOT is the state lead agency and is preparing the EIS in consultation with FHWA. With the reevaluation contained in the 2009 SDEIS, it was determined that 23 US 139 (formerly referred to as SAFETEA-LU 6002) did not need to be followed. Reasons provided in the 2009 reevaluation include the following:

1. *The Notice of Intent for development of the original EIS was published in the Federal Register on November 24, 2003, prior to the enactment of SAFETEA-LU.*
2. *An SDEIS as described in 23 CFR 771.130 was prepared that did not involve the reassessment of the entire action or project. The SDEIS instead evaluated additional project components as described in the reevaluation document.*

The United States Army Corps of Engineers (USACE) is a Cooperating Agency for the EIS as described in 33 CFR 230. In accordance with USACE regulations under Section 404 of the Clean Water Act, the USACE remains impartial until an independent public interest review has been completed.

ES.8 ENVIRONMENTAL JUSTICE

This document is in compliance with USDOT and FHWA policies to determine whether a proposed project will have induced socioeconomic impacts or any other adverse impacts on minority or low-income populations, and it meets the requirements of Executive Order on Environmental Justice 12898–"Federal Actions to Address Environmental Justice in Minority and Low-Income Populations." Minority or low-income individuals may be dispersed throughout the study area, though no known minority or low-income populations will be disproportionately impacted by the alternatives selected for detailed study.

ES.9 OTHER ACTIVITIES REQUIRED

Relocation Assistance Plans have been prepared for displaced residents and businesses under Wis. Stats. 32.25.

Stream and wetland impacts associated with the Selected Alternative are subject to individual Section 404 permits required by USACE. WisDOT is currently coordinating with USACE regarding impacts and mitigation possibilities (see Section 6).

A water quality certification, Section 401 permit, is required by the Wisconsin Department of Natural Resources.

The proposed highway improvement project will be planned and implemented in accordance with the standards of erosion control and stormwater management established in Trans 401.

Cultural resource impacts require coordination with the SHPO and the Advisory Council on Historic Preservation (ACHP) and completion of requirements of the National Historic Preservation Act of 1966. Coordination and consultation with interested Native American tribes have been conducted throughout the course of this project.

An Agricultural Impact Statement (AIS) was prepared by the Wisconsin Department of Agriculture, Trade and Consumer Protection (DATCP) as required under Wis. Stats. 32.035 before negotiating with property owners regarding real estate acquisition from farming operations. The Executive Summary of the AIS was provided as Appendix K in the 2010 FEIS. An addendum to the AIS was prepared in 2010 and is available upon request.

Mitigation commitments for affected Section 4(f) and Section 6(f) properties are included in this document in Section 5. A summary of project commitments is provided in Section 6.

ES.10 REGULATORY COMPLIANCE

The planning, agency coordination, public involvement, and impact evaluation for the project have been conducted in accordance with the NEPA, the Clean Water Act, Executive Orders regarding wetland and floodplain protection, the Fish and Wildlife Coordination Act, the Migratory Bird Treaty Act, the Executive Order on Environmental Justice 12898, the National Historic Preservation Act of 1966, and other state and federal laws, executive orders, policies, and procedures for environmental impact analyses and preparation of environmental documents.

ES.11 PUBLIC COMMENTS AND AGENCY COORDINATION

Since the release of the 2009 SDEIS, WisDOT made a design refinement to the Preferred Alternative that was incorporated in the 2010 ROD for the project. This involved selecting the interchange access option at County G. Since that time, most design refinements have been made in determining access treatments for side roads and modifying some access road configurations. These refinements have been made in coordination with local officials as well as in discussion with individual property owners during the right of way negotiation process. Local access and access road modifications are discussed in Section 2.7 of this LS SFEIS/ROD.

As mentioned previously, in June 2011, 1000 Friends of Wisconsin, Inc. filed a complaint against the US DOT, the FHWA, and WisDOT for approving the WIS 23 Corridor Expansion Project. In response to portions of the complaint, FHWA and WisDOT have prepared the 2013 LS SDEIS and this LS SFEIS/ROD in accordance with Title 23, Part 771.130 (f) of the Code of Federal Regulations (23 CFR 771.130), Title 23, Part 771.125 of the Code of Federal Regulations (23 CFR 771.125), and Public Law 112-141, 126 Stat., Section 1319(b).

In April 2013, a public informational meeting was held to obtain input on the most current WIS 23 design and to provide an additional opportunity for the public to comment on Section 4(f) impacts. Some written comments questioned the need for WIS 23 expansion. Additionally, the village of Glenbeulah requested that a full interchange be constructed at County A with the initial expansion project instead of J-turns. The Selected Corridor Preservation Alternative for WIS 23 includes preserving land for an interchange at County A. This interchange could be constructed if safety and operational needs are not addressed by the proposed J-turn. If implemented, a separate environmental document will be prepared for a County A interchange.

In August 2013, a public hearing was held to receive comments on the LS SDEIS as well as the Preferred Alternative. Numerous comments were received and are summarized in Section 7.6 of this LS SFEIS/ROD. Some commenters were disappointed in project delays. Other commenters challenged the need to expand WIS 23 to 4 lanes citing traffic volumes are not growing or are growing at slower rates. Table 7.6-4 lists responses to substantive comments.

ES.12 PROJECT BENEFITS

The proposed project will provide the following benefits:

1. Provide a safe and dependable highway connection to and from regional communities while reducing conflicts between local and through traffic.

2. Improve the highway facility to meet current design standards for this Connector route in Wisconsin.

3. Complete the system link of US 41 to I-43 between the cities of Fond du Lac and Sheboygan. WIS 23 is a Corridors 2030 designated, multilane, east-west connector highway between the Green Bay and Milwaukee areas.

4. Improve safety at intersections and farm crossings.

5. Increase the mobility by adding capacity and minimizing public and private access.

6. Preserve the corridor for future transportation use by coordinating local governmental land use plans. This will alleviate development pressures on WIS 23 and intersecting roads, preserving the corridor for future transportation use.

7. Maintain a rural highway-type facility while addressing the increased traffic needs of the expanding urban area.

Table ES-1 Selected Alternative Environmental Cost Matrix

Updated 2013 Impact Values and Categories	UNIT	NO BUILD[3]	Build Alternatives: Selected Build Alternative: Alt 1 4-In Expansion Totals[1]	Selected Build Alternative: Connection Roads and Interchanges Totals	Selected Build Alternative: Old Plank Trail[5] Totals	Build Alternatives Total	Corridor Preservation Measures: WIS 23 Corridor Connection Rds, Grade Separation, and Interchanges: No WIS 23 Preservation Totals	WIS 23 Corridor Connection Rds, Grade Separation, and Interchanges: Selected WIS 23 Preservation Totals	US 151 / WIS 23 System Interchange: Selected No US 151/WIS 23 Preservation Totals	US 151 / WIS 23 System Interchange: US 151/WIS 23 23-1 Preservation Totals	US 151 / WIS 23 System Interchange: US 151/WIS 23 23-2 Preservation Totals	Selected Corridor Preservation Measures
Road Length	Miles	19.07	19.07	N/A	N/A	19.07	N/A	N/A	N/A	N/A	N/A	N/A
FOUR-LANE EXPANSION AND ACCESS PRESERVATION COST												
Design	Millions $	6.7	9			9.0	N/A	N/A	N/A	N/A	N/A	N/A
Real Estate [5]	Millions $		26.5			26.5	N/A	N/A	N/A	N/A	N/A	N/A
Utility	Millions $		5.4			5.4	N/A	N/A	N/A	N/A	N/A	N/A
Construction	Millions $		87.3			87.3						
SUBTOTAL	Millions $	**6.7**	**128.2**			**128.2**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**
FUTURE ACCESS PRESERVATION COST (Construction and Real Estate)												
System interchange Roadway Construction	Millions $	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	47.2	70.9	N/A
System interchange Real Estate	Millions $	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	3.1	0.9	N/A
CTH W Interchange with Connections	Millions $	N/A	N/A	N/A	N/A	N/A	N/A	9.8	N/A	N/A	N/A	9.8
CTH A Interchange with Connections	Millions $	N/A	N/A	N/A	N/A	N/A	N/A	8.6	N/A	N/A	N/A	8.6
Grade Separation Overpass (Sugarbush, Tower, Seven Hills, Hillview, Scenic View, County P)	Millions $	N/A	N/A	N/A	N/A	N/A	N/A	19.6	N/A	N/A	N/A	19.6
SUBTOTAL	Millions $	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**38.0**	**N/A**	**50.3**	**71.8**	**38.0**
TOTAL COSTS[2]	Millions $	**6.7**	**128.2**			**128.2**	**N/A**	**38.0**	**N/A**	**50.3**	**71.8**	**38.0**
EIS IMPACTS												
Existing R/W Used	Acres	0	429	25	32	486	0	20	0	36	55	20
Total Land Converted to Highway R/W	Acres	0	215	119	90	424	0	68	0	62	52	68
Cropland Converted to Highway R/W	Acres	0	92	81	52	225	0	39	0	4	28	39
Residential Relocations	Number	0	21 [6]	12	0	33	0	3	0	5	0	3
Business Relocations (Not Including Farms)	Number	0	3	5 Bldgs 7 Bus	0	8 Bldgs 10 Bus	0	2	0	3 Bldgs 5 Bus	0	2
Farm Relocations (One or more farm buildings)	Number	0	17	2	0	19	0	4	0	0	0	4
Farms Severed	Number	0	0	5[4]	0	5	0	2	0	1	1	2
Wetlands filled	Acres	0	37.1	0.8	10.2	48.1	0	1.7	0	12.1	7.6	1.7
Upland/Woodland Habitat Affected	Acres	0	38.4	2.2	7.3	47.9	0	8.5	0	5.9	0.1	8.5
Excess Right of Way Purchased	Acres	0	158.2			158	0	N/A	0	N/A	N/A	N/A
Floodplain Encroachment	yes/no	NO	YES	YES	YES	YES	NO	YES	NO	YES	YES	YES
Threatened and Endangered Species	yes/no	NO	YES	YES	NO	YES	NO	YES	NO	YES	YES	YES
Impacted Noise Receptors (2035)	Each	44	47			47	ND	ND	9	2	2	9
Potentially Contaminated Sites (Phase II)	Each	0	27 (5)			27 (4)	0	2	0	0	0	0
Historical Resources In Corridor (Number Adversely Effected)	Number	0	19(0)	2(0)	N/A	19(0)	0	0	0	2 (0)	2 (0)	0
Archaeological Resources	Number Phase II (III)	0	4(1)	0	0	4(1)	0	0	0	2 (0)	1 (0)	0

[1] Includes crossing for Ice Age Trail.
[2] All Costs are in Year of Expenditure dollars, 2015 for Preferred Build Alternative, 2030 for Improvements Associated with Corridor Preservation
[4] Three of the farms severed by the connection roads and interchanges are also severed by the trail that runs along the proposed roadway.
[5] Approximately 35% of right of way allocated to Old Plank Road Trail would be needed if WIS 23 were expanded without trail. See discussion Section 4.1
[6] Residential relocations for 4-Lane expansion also includes the relocation due to the relocation of the utility poles.

Selected Alternative Environmental Cost Matrix

		CURRENT Values		2010 FEIS Values (No Longer Current)	
Updated 2013 Values and Impact Categories	**UNIT**	**Build Alternatives Total**	**Selected Corridor Preservation Measures**	**Build Alternatives Total**	**Preferred Corridor Preservation Measures**
Road Length	Miles	19.07	N/A	19.07	N/A
FOUR-LANE EXPANSION AND ACCESS PRESERVATION COST					
Design	Millions $	9.0	N/A	9.0	N/A
Real Estate [2]	Millions $	26.5	N/A	26.5	N/A
Utility	Millions $	5.4	N/A	5.4	N/A
Construction	Millions $	87.3		98.8	
SUBTOTAL	Millions $	**128.2**	**N/A**	139.7	N/A
FUTURE ACCESS PRESERVATION COST (Construction and Real Estate)					
System interchange Roadway Construction	Millions $	N/A	N/A	N/A	N/A
System interchange Real Estate	Millions $	N/A	N/A	N/A	N/A
CTH W Interchange with Connections	Millions $	N/A	9.8	N/A	9.8
CTH A Interchange with Connections	Millions $	N/A	8.6	N/A	8.6
Grade Separation Overpass (Sugarbush, Tower, Seven Hills, Hillview, Scenic View, County P)	Millions $	N/A	19.6	N/A	19.6
SUBTOTAL	Millions $	**N/A**	**38.0**	N/A	38.0
TOTAL COSTS[1]	Millions $	**128.2**	**38.0**	139.7	38.0
EIS IMPACTS					
Existing R/W Used in Alternative	Acres	**486**	**20**	494	31
Total Land Converted to New Highway R/W	Acres	**424**	**68**	423	72
Cropland Converted to Highway R/W	Acres	**225**	**39**	245	41
Residential Relocations	Number	**33**	**3**	24	4
Business Relocations (Not Including Farms)	Number	**8 Bldgs 10 Bus**	**2**	5	2
Farm Relocations (One or more farm buildings)	Number	**19**	**4**	16	1
Farms Severed	Number	**5**	**2**	7	2
Wetlands filled	Acres	**48.1**	**1.7**	43	2
Upland/Woodland Habitat Affected	Acres	**47.9**	**8.5**	72	11
Excess R/W Puchased (due to relocations)	Acres	**158**	**N/A**	N/A	N/A
Floodplain Encroachment	yes/no	**YES**	**YES**	YES	YES
Threatened and Endangered Species	yes/no	**YES**	**YES**	YES	YES
Impacted Noise Receptors (2035)	Each	**47**	**9**	ND	ND
Potentially Contaminated Sites (Ph II)	Each	**27 (4)**	**0**	ND	ND
Historical Resources Nearby (Number Adversely Effected)	Number	**19(0)**	**0**	19(0)	N/A
Archaeological Resources	Number Phase II (III)	**4(1)**	**0**	5(1)	0

N/A = Not Applicable, ND = Not Determined, R/W = right of way

[1] All Costs are in Year of Expenditure dollars, 2015 for Preferred Build Alternative, 2030 for Improvements Associated with Corridor Preservation

[2] Approximately 35% of right of way allocated to Old Plank Road Trail would be needed if WIS 23 were expanded without trail. See discussion Section 4.1

Table ES-2 Selected Alternative Environmental Cost Matrix

Some of the impacts presented in Table ES-2 show that impacts vary from those presented in the 2010 FEIS. This is because as design has progressed there is a greater understanding of the actual right of way needs. In most cases, the direct right of way impacts have been reduced. The number of relocations has increased, primarily because of property owners requesting relocation because of access changes.

ES.13 LIST OF ABBREVIATIONS

106 (Section 106)	Section 106 of the National Historic Preservation Act, requires Federal agencies to take into account the effects of their undertakings on historic properties
4(f) (Section 4(f))	Section 4(f) of the Department of Transportation Act dealing with impacts on historic places, parks, and wildlife refuges.
AADT	Annual Average Daily Traffic
ADT	Average Daily Traffic
AIS	Agricultural Impact Statement
DATCP	Wisconsin Department of Agriculture, Trade, and Consumer Protection
decibel (dB)	a unit of measurement for sound level
DEIS	Draft Environmental Impact Statement
DHV	Design hourly volume
DOE	Determination of Eligibility, for the National Register of Historic Places
EIS	Environmental Impact Statement
Endangered Species	species identified by either the state or the federal government as likely to be in danger of becoming extinct through a significant portion of or all of its range
FDM	Facilities Development Manual
FEIS	Final Environmental Impact Statement
FHWA	Federal Highway Administration
GIS	Geographic Information System
HazMat	Hazardous Materials
IAT	Ice Age Trail
ICE	Indirect and Cumulative Effects
LOS	Level of Service, refers to the overall quality of traffic flow at an intersection or mainline section.
LS SDEIS	Limited Scope Supplemental Draft Environmental Impact Statement
LS SFEIS	Limited Scope Supplemental Final Environmental Impact Statement
LUST	Leaking Underground Storage Tank
mi	mile
MOA	Memorandum of Agreement
NAC	Noise Abatement Criteria
NEPA	National Environmental Policy Act
NEWRPC	Northeast Wisconsin Regional Planning Commission
NHS	National Highway System
NRHP	National Register of Historic Places
PAC	Public Advisory Committee
RIRO	Right-in/Right-out

R/W	Right-of-Way
ROD	Record of Decision
SDEIS	Supplemental Draft Environmental Impact Statement
SHPO	State Historic Preservation Officer
Threatened Species	species identified by either the state of federal government as likely to be in danger of becoming endangered in the foreseeable future
TPC	Transportation Projects Committee
TWLTL	Two-Way Left-Turn Lane
UST	Underground Storage Tank
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
WIS 23	Wisconsin State Highway 23
USACE	United States Army Corps of Engineers
WisDOT	Wisconsin Department of Transportation

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