

Summary

What is the US 14 Final EIS?

An Environmental Impact Statement (EIS) is a document used to describe the anticipated effects of major public projects. It discloses anticipated effects to the public and interested parties, and helps decision makers make sound decisions. An EIS is written to comply with the National Environmental Policy Act (NEPA), a federal statute that directs federal agencies to use a systematic interdisciplinary approach when federal actions have a potential impact on the environment. Rules concerning implementation of NEPA are issued by the U.S. Council on Environmental Quality, and may be found at 40 CFR 1500. At the state level, an EIS must also comply with the Minnesota Environmental Policy Act (MEPA), which contains the legal basis for these studies (Minnesota Statutes, Chapter 116D).

In December 2007, the Federal Highway Administration (FHWA) and the Minnesota Department of Transportation (MnDOT) completed and published the Draft EIS (or DEIS) for the US Highway 14 corridor from New Ulm to North Mankato, Minnesota. The DEIS compared project alternatives to help readers understand the potential environmental effects. However,

the DEIS did not recommend one single course of action, or a “Preferred Alternative.” Following the circulation of the DEIS, a number of public meetings were held, and both the general public as well as interest groups and public agencies submitted comments on the proposed action. Following these activities MnDOT and FHWA identified which alternative analyzed in the DEIS should be selected for construction, i.e. the “Preferred Alternative.” The present document, the Final Environmental Impact Statement (FEIS) identifies this alternative, discloses the anticipated effects, and describes the basis for its selection.

The US 14 DEIS compared project alternatives but did not recommend a Preferred Alternative. The FEIS identifies the Preferred Alternative – the vision for the highway at full build out – and discloses the impacts associated with it. This FEIS summary provides an overview of the information presented in the FEIS. It is more concise, discussing in detail only the most important issues.

This FEIS Summary provides an overview of the information presented in the FEIS. In addition to the details presented in the FEIS itself, more information is found on the Project Website: www.dot.state.mn.us/d7/projects/14newulmtonmankato. The EIS included discussion of all required environmental topics; however, some topics emerged as more important to understanding the tradeoffs between the alternatives than others. These topics (including transportation, land use, communities, water/natural resources, visual resources, and cultural resources) received a higher level of attention in the EIS than other environmental topics.



Where is the project?

The project is located about 70 miles south-southwest of the Minneapolis-St. Paul, Minnesota metropolitan area between the cities of New Ulm and North Mankato in Brown and Nicollet Counties. The cities of Courtland and Nicollet are along the 22.5 mile route.

What is proposed?

The project involves upgrading the existing 2-lane highway to a 4-lane divided expressway. This may include interchanges or other improved intersection designs at major state highway and county road intersections as well as at-grade intersections at other public roads. The proposed upgraded highway will follow the existing route except for proposed bypasses of Courtland and Nicollet. The design will follow applicable standards for new construction of a rural expressway in flat to rolling topography with a 70 mph design speed.

Why is the project needed?

Improvements to US 14 will address a variety of traffic operational problems that were documented in the *14 West Interregional Corridor Management Plan* (June 2003). These include variations in design through the corridor, safety problems, limited capacity to convey traffic, and highway design deficiencies. Improving the highway will also enhance the corridor's interregional trade function and respond to governmental and public support for improvements to US 14. These issues are discussed below and in depth in Section 1 of the FEIS.

System Continuity

- The EIS study area (between New Ulm and North Mankato) is the only part of the designated US 14 interregional corridor (from New Ulm to Rochester) not already upgraded or approved for upgrading to a four lane highway.
- Within the project area highway design characteristics are inconsistent, ranging from a main street design with numerous accesses in Courtland to standard, rural two-lane design with spot intersection improvements such as turn lanes and acceleration lanes.

Safety Deficiencies and Needs

- Crash rates at the most heavily used intersections exceed statewide averages. The US 14/MN 15/CR 21 intersection is the biggest concern with a history of fatalities and severe injury crashes. The intersections with CR 37, MN 99, and MN 111/CR23 are also crash problem areas.
- Lack of passing zones which results in drivers taking risks to pass in the limited space allowed. These lead to more crashes, including head-on and sideswipe crashes which accounted for 22% of crashes between 2007 and 2009.

Capacity Deficiencies and Needs

- A forecasted increase in traffic congestion for the entire corridor resulting from high traffic volumes, a high percentage of trucks, and the lack of passing opportunities.
- Parts of US 14 now operate below 55 mph, which is MnDOT's Interregional Corridor average speed performance target. This is partially due to speed limits of 35 mph in Courtland and 45 mph in Nicollet. Without improvements, most of the corridor is expected to operate below 55 mph by 2025.



- Increasing traffic, including through-town truck traffic, will have a continuing and increasing adverse impact on the growing communities of Courtland and Nicollet.
- Multiple intersections are at high risk for requiring traffic signals, which would further reduce average speed.

Highway and Bridge Design Deficiencies and Needs

- Limited sight distance at CR 21 and CR 37 gives entering vehicles warning of approaching vehicles;
- Skewed intersections at numerous intersections increase the risk of entering vehicles' drivers failing to see oncoming traffic;
- Lack of left turn lanes at numerous intersections requires turning vehicles to wait in the through lane, increasing risk of crashes and limiting mainline speeds;
- A large number of accesses per mile which statistically correlates with higher crash rates and reduces average speeds and may be partially responsible for the greater than average crash rates on this corridor;
- The Minnesota River Bridge is two lanes. The bridge is rated as structurally deficient and functionally obsolete and will be more than 50 years old by the time highway improvements are made. Since the highway on both ends of the bridge will be four lanes, not expanding the bridge would create a bottleneck effect as traffic transitions from four lanes on both bridge ends.

What alternatives were considered in the EIS?

The project needs shaped the development of viable improvement alternatives. Many alternatives were considered in the *14 West Interregional Corridor Scoping Document* (March 2003). These were reduced to the most promising in the *14 West Interregional Corridor Scoping Decision Document* (May 2003) and the *Amended Scoping Decision Document* (October 2005). Those that remained were studied in depth in the EIS. This section provides an overview of the alternatives that are described in detail in Section 2 of the FEIS.

The “No Build” Alternative provided the baseline.

The No Build Alternative served as a baseline for comparison to the Build Alternatives. Improvements under this alternative are limited to normal pavement maintenance, spot traffic operational improvements, and minor safety improvements. The No Build Alternative retains the existing roadway's current physical characteristics, curvature, and typical section (i.e., pavement and shoulder width). Routine maintenance is the only planned construction, which typically includes pavement resurfacing or patching and minimal safety enhancements.

The “Build” Alternatives differed by highway location.

The Build Alternatives evaluated in the EIS consisted of corridor locations, or alignments, that were refined through an extensive study process (see Section 2 of the FEIS and the Project Website for more information). All Build Alternatives were designed as 4-lane divided highways. Two-lane alternatives were eliminated from consideration during the scoping process because a two lane highway would not fully address existing and future safety and

traffic operation problems. Also, the two-lane configuration would not have provided for system continuity, as discussed above.

Exhibit F-S-1 (at the end of this Summary) shows the US 14 study area, including the alternative corridor locations which were evaluated in detail. For reader clarity, the overall project has been divided into West and East Study Sections with CR 12 on the west side of Courtland as the border between them. Brief descriptions of the Build Alternatives in each Study Section follow below. All of the alternatives included the following features:

- Four intersections requiring special designs – specifically, where US 14 meets: MN Highway 15 near New Ulm, CR 37 near New Ulm, CR 24 in Courtland, and MN 111/CR 23 in Nicollet. Interchanges were considered for analyzing impacts as they provide the ultimate long term solution to safely manage increasing traffic at the major crossroads. If interchanges are not yet indicated at the time of construction other at-grade intersection designs will be considered, including standard stops on the minor roads, roundabouts, or restricted crossing U-turns.
- All alternatives included bypasses of Courtland (one route) and Nicollet (four alternative routes). At these locations, bypasses are needed to maintain or improve mobility and safety while avoiding substantial adverse community impacts.
- Consolidated access points at intersections and driveways – specifically, there would be fewer public road access points and limited private access.

Alternatives from New Ulm to Courtland (West Study Section)

All alternatives in the West Study Section included expansion of the US 14 Minnesota River Bridge from two to four lanes. Prior studies, including an origin destination survey completed for the US 14 Comprehensive Management Plan, found no need to change the river crossing location.

In the EIS the West Study Section included one alternative that used existing US 14 (W1), one on the bluff top (W2), and one that was a combination (W3).

Alternative W1 has been selected as the Preferred Alternative

Beyond the bridge, three alternative alignments were considered for US 14:

- **Preferred Alternative W1. Existing US 14/Minnesota River Alignment** – Alternative W1 has been selected as the Preferred Alternative in the West Study Section. The Preferred Alternative W1 follows existing US 14 from the Minnesota River to a point west of Courtland, where it leaves the existing highway to bypass Courtland to the north. This alternative maximizes use of existing US 14. The design and operation is constrained by its location between the bluff and the Minnesota River and by existing development adjacent to the highway.
- **Alternative W2. Top-of-Bluff Alignment** – Alternative W2 would have departed existing US 14 at the MN 15 intersection and climbed to the top of a prominent bluff approximately 150 feet above the existing highway elevation. The Alternative W2 corridor then followed an entirely new alignment along the top of the bluff to a point west of Courtland, where it



bypassed Courtland to the north. Alternative W2 included a steep grade where it would climb the bluff, as well as a substantial bluff cut.

- **Alternative W3. River/Bluff Combination Alignment** – Alternative W3 was a combination of Alternatives W1 and W2. It was developed to utilize the existing highway between the US 14 Minnesota River Bridge and CR 37 then climb the bluff and follow the route for Alternative W2.

Alternatives from Courtland to Nicollet (East Study Section)

All alternatives in the East Study Section included a north Bypass of Courtland. Access to Courtland is proposed to be at an interchange at an extension of CR 24 up the slope north of the city. While other bypass corridors were studied in this area, this route provided the best overall choice, due to its location near the community and the ability to reduce environmental impacts farther north, especially wetlands and farmland.

All eastern Build Alternatives included expansion of existing US 14 from approximately 478th Street (southeast of Nicollet) to CR 6 at the eastern end of the study area.

The East Study Section included three alternatives (E1, E2, and E3) that bypassed Nicollet just south of the existing developed area, each with two access location options: at CR 23 or connecting to a re-routed MN 99 on the east side of Nicollet. Alternative E4 connected with CR 23 about one mile south of existing US 14.

Alternative E1 with a access at CR 23 has been selected as the Preferred Alternative

Between the Courtland bypass and the common alignment east of Nicollet, four alternatives were considered in the EIS for the bypass of Nicollet:

- **Preferred Alternative E1. Nicollet Near South Bypass Alignment** – Alternative E1 has been selected as the Preferred Alternative. It makes the most use of existing US 14 from Courtland to Nicollet, thereby minimizing farmland impacts. Alternative E1 then bypasses Nicollet to the south. The Preferred Alternative includes providing access to Nicollet at CR 23 and accounts for the impacts of a possible interchange.
- **Alternative E2. Nicollet South Bypass – South of Swan Lake WMA Alignment** – Alternative E2 was proposed to avoid the Swan Lake WMA to the south. It also avoided a number of residential properties along existing US 14. In Nicollet it was similar to Alternative E1 with two access location options.
- **Alternative E3. Nicollet South Bypass – Section Line Alignment** – Alternative E3 was proposed to further avoid residential properties and property severances by following a section line. It also helped to avoid impacts to the Swan Lake WMA. In Nicollet, it was similar to Alternatives E1 and E2 with two access location options.
- **Alternative E4. Nicollet Far South Bypass** – Alternative E4 was proposed to bypass Nicollet much farther to the south, connecting to CR 23 about one mile south of existing US 14. West

of Nicollet it was the same as Alternative E3. Alternative E4 included only one proposed access location at CR 23.

Is there a Preferred Alternative?

Yes. Following a thorough analysis of transportation benefits, consideration of potential environmental impacts, and input from the public and agencies, FHWA and MnDOT have identified a Preferred Alternative for the project. The Preferred Alternative consists of Alternative W1 in the west project segment and Alternative E1 in the east project segment. The Preferred Alternative is the best overall choice meeting identified project needs while providing the best overall balance of reducing environmental impacts.

Why is the Preferred Alternative preferred?

By remaining on the existing alignment in the West Study Section, the Preferred Alternative avoids major bluff cuts in environmentally sensitive areas and saves money by crossing Heyman's Creek at a location that will not require long bridges. It also greatly reduces impacts to farmlands. While it has more floodplain and wetland impacts, upgrading on the existing route (which would remain in place for access and as a collector road even if a different alternative was selected) allows for improved water quality through treating the runoff. It also most effectively connects traffic generators along the corridor.

In the East Study Section the Preferred Alternative provides the best balance between farmland and wetland impacts while responding to the interests of the City of Nicollet to have access close to existing development. It also reduces long term maintenance by utilizing the existing route as much as possible instead of introducing another highway parallel to the existing east-west roads.

What are the anticipated project impacts?

One of the primary purposes of an EIS is to document the social, economic and environmental impacts of a proposed action. Section 3 of the DEIS identifies the potential impacts for all the alternatives. Much of that information is reproduced in Section 3 of the FEIS, but more detail is provided on the impacts of the Preferred Alternative. Table F-S-1 (Summary – Pages 10-12) and the discussion below summarize the FEIS information.

Impacts to Transportation, Land Use, and Communities

The first broad impact category in the FEIS Summary discusses how US 14 relates to people, both those who drive on the highway and those who live nearby. The No Build Alternative would continue the trend of increasing transportation problems, such as congestion and crashes, and the resulting economic consequences. Properties and development adjacent to existing US 14 would also be affected by increasing traffic, especially in Courtland and Nicollet.

West Study Section

In this section of the project, the alternatives differed primarily in relation to the Minnesota River valley. The Preferred Alternative (western Alternative W1) made more use of the existing highway and reduced impacts to agricultural land uses. The Preferred Alternative west of CR 37 is constrained by the Minnesota River and bluff. This section of the Preferred Alternative will include a narrow median with a median barrier. The goal will be to have as narrow a



median as possible, consistent with safety and sound engineering practice, to minimize environmental impacts.

While the top-of-bluff alignment (Alternative W2 and parts of Alternative W3) would have reduced residential relocations and access issues, especially at Minnesota Valley Lutheran High School and residential areas, it would have required steeper grades for US 14 traffic, necessitated construction of long bridges over Heyman's Creek, and affected much more farm land.

East Study Section

In the east segment, the Preferred Alternative (as well would Alternatives E2 and E3) will provide convenient interchange access near existing development in Nicollet. Being located on existing US 14, the Preferred Alternative provides less opportunity to limit direct highway access from local residences and businesses. Alternatives E2, E3, and E4 would have reduced access issues and impacts to existing buildings.

The Preferred Alternative will cause less impact to agricultural land and operations than any of the other alternatives. It impacts the fewest agricultural parcels, results in the fewest severances (tied with Alternative E2) and has the least acquisition of agricultural land. The Preferred Alternative results in the least amount of prime farmland and total acres being acquired.

Alternative E4, being about one mile south of existing US 14 in Nicollet, was much less convenient to the local community and other state highways.

Impacts to Water Features and Natural Resources

This impact category considers the Minnesota River valley, wetlands, and other natural resources. The No Build Alternative would have avoided most impacts to these resources, but would have resulted in reduced mobility and other adverse social and economic impacts as discussed above.

West Study Section

Natural resources associated with the Minnesota River Valley include floodplains, wetlands, and wooded bluff slopes that are subject to erosion when disturbed. The Preferred Alternative, by using the existing highway, reduces overall environmental impacts (especially to the wooded bluffs) compared to a road on new alignment, but it does result in more floodplain and wetland impacts compared to Alternative W2 that cuts up through the bluff.

East Study Section

The Swan Lake Wildlife Management Area (WMA) is a natural resource area located just west of Nicollet along existing US 14. US 14 currently goes through part of the WMA. The Preferred Alternative will expand the existing US 14 cross section within the WMA, affecting approximately six acres. By being located further to the south, other Alternatives had less direct impact to the -WMA.

The Preferred Alternative will impact approximately three more acres of wetlands than Alternative E4, but will have fewer wetland impacts than the other alternatives considered. Conversely, Alternative E4 would have the most county ditch crossings.



Impacts to Visual Quality and Historic Properties

West Study Section

Other key issues among the Build Alternatives on the west end of the project included visual impacts and impacts to historic resources. Visual impacts would have been most pronounced with Alternative W2 and W3 as a substantial bluff cut and woodland clearing would have been required where US 14 would climb the bluff and transition into an interchange area. This would have involved a cut of 65 feet, fill of 30 feet, and a bluff top cut width of 533 feet where MN 15 climbs the bluff and a cut of 50 feet, fill of 20 feet, and a bluff top cut width of 442 feet at CR 37. The Preferred Alternative minimizes visual impacts by avoiding the bluff cuts.

Sites and buildings covered by Section 106 of the National Historic Preservation Act are commonly found in Minnesota. The Preferred Alternative will have an adverse effect on five such sites. The effects of the other western alternatives would be similar.

East Study Section

In the East Study Section, the Preferred Alternative will impact two historic properties. One of these would be avoided by Alternatives E3 and E4.

How will the project be managed to minimize or compensate for adverse effects?

Section 3 of the FEIS, *Affected Environment, Environmental Consequences, and Mitigation Measures*, contains discussions of how impacts will be mitigated. Mitigation refers to instances where adverse impacts can be reduced through avoidance of a resource, minimizing the impact to a resource, the replacement of a resource, enhancement of similar resources, or through compensation or special programs. Examples of mitigation measures include but are not limited to:

- Compensation for acquisition of property and for residential or business relocations. Under both Federal and State law and rule, compensation must include the fair market value of any property acquired, reasonable allowances for moving expense, and a variety of other features.
- Mitigation for wetland impacts. Typically, more wetland acreage must be either restored or created than would be lost due to project impacts. The presence of the Swan Lake WMA along the US 14 corridor provides an opportunity to integrate a portion of the wetland mitigation with the mission of the WMA.
- Water runoff retention and treatment to reduce potential impacts on river flows or water quality.
- Documentation of historic properties adversely affected by the project.
- Special design measures, such as roadside plantings, to reduce adverse visual impacts or to enhance the environment of any potentially affected communities, including areas outside the incorporated areas of Courtland and Nicollet.



What regulations apply to this project?

The planning, agency coordination, public involvement, and impact evaluations for this project are being conducted in accordance with the both the National and Minnesota Environmental Policy Acts (NEPA and MEPA), the Clean Water Act, the Clean Air Act, state and federal Executive Orders regarding wetland and floodplain protection and environmental justice, the Fish and Wildlife Coordination Act, the Endangered Species Act, the National Historic Preservation Act, and other federal and state laws, policies, and procedures for environmental impact analyses and preparation of environmental documents. A complete list of the agencies consulted in developing the DEIS and FEIS for the project is provided in Section 4.2.6 *Comments and Coordination*. A list of permits and approvals that will be obtained prior to construction is provided in Section 3.19, *Permits and Related Approvals*.

What's next?

The Preferred Alternative described in this FEIS will likely be constructed as a series of projects with logical end points over the course of many years. Some features of the Preferred Alternative, such as interchanges, may not be built with the initial construction, but are viewed as the ultimate, long term build out. Cost effective interim measures or enhanced designs that have less impact may be substituted for elements of the Preferred Alternative in order to maximize the benefits of the project relative to its costs.

The US 14 Minnesota River Bridge at New Ulm is proposed to be replaced in 2018 with funding provided by the Minnesota Legislature in 2008. The replacement structure will be a four-lane bridge.

No other projects along the corridor currently have funding identified in any specific timeframe.

Knowledge of the proposed location for the Preferred Alternative can serve as a basis for local governments to steer development away from future right of way. Also, with a completed FEIS the project could be accelerated should funding become available.



Table F-S-1 Environmental Impact Summary

Impact Categories	No-Build Alt.	Build Alternatives - West			Build Alternatives - East				Preferred Alt. Total	Remarks
		Pref. Alt. W1	Alt. W2	Alt. W3	Pref. Alt. E1	Alt. E2	Alt. E3	Alt. E4		
Project Length										
US 14 Length (mi.)	22.6	6.7	7.0	6.9	15.6	15.4	15.4	15.1	22.3	
Relocations, Agricultural Parcel Severances, and Land Acquisition –[Note: Bracketed numbers show impacts for optional MN 99 realignment that has been rejected. Although it was also an option for E1 it is not part of the Preferred Alternative and the impacts are therefore not listed].										
Residential Relocations (no.)	0	9	5	6	4	4 [5]	4 [5]	4	13	Relocations include residences that fall within preliminary right of way limits, those within 85' of the right of way, and those where access may be an issue
Business/Other Relocations (no.)	0	3	3	3	2	0	0	0	5	Same as for residences.
Agricultural Parcel Impacts (no.)	0	12	24	18	27	30 [36]	39[46]	50	39	These estimates do not include parcels already affected by existing US 14. Parcels currently being farmed, but located within municipal boundaries were not included.
Agricultural Severances (no. of parcels split)	0	1	12	15	17	17[22]	24[18]	25	18	
Agricultural Land Acquisition (acres)	0	145	300	260	435	480 [515]	550 [590]	565	580	
Residential Land Acquisition (acres)	0	25	35	25	60	60 [55]	50 [45]	40	85	
Commercial and Quarry Acquisition (acres)	0	16	16	14	2	0 [0]	0 [0]	0	18	

Table F-S-1 Environmental Impact Summary

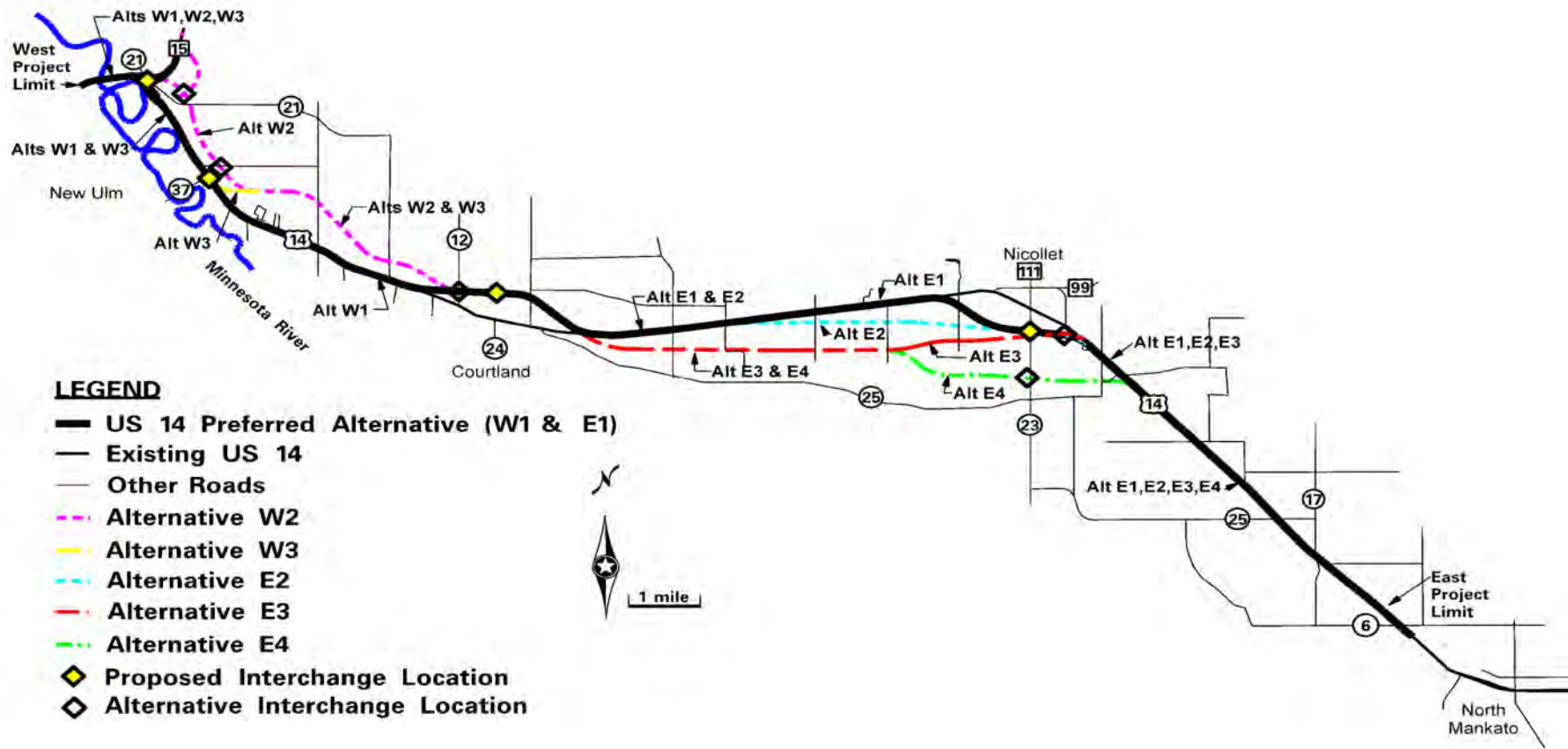
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		Pref. Alt. W1	Alt. W2	Alt. W3	Pref. Alt. E1	Alt. E2	Alt. E3	Alt. E4		
Minn. Valley LHS Acquisition (acres)	0	13	0	0	0	0	0	0	13	
Total Land Acquisition (acres)	0	199	351	299	497	540 [570]	600 [635]	605	696	
Natural Resources										
Agricultural Wetlands (acres)	0	0.1	0.0	0.0	1.8	5.8 [5.8]	16.2 [13.6]	4.1	1.9	Farmed wetlands determined by aerial photo slide review
Non-Agricultural Wetlands (acres)	0	13.6	4.4	12.2	6.4	7.6 [7.6]	0.5 [0.5]	0.5	20.0	Other, non-farmed wetlands
Total Wetlands (acres)	0	13.7	4.4	12.2	8.2	13.4 [13.4]	16.7 [14.1]	4.6	21.9	Assumes impact to all acres within preliminary right of way. Actual impacts may be less
Prime Farmland (acres)	0	80	195	125	280	300 [280]	360 [350]	415	360	Prime farmland is the highest quality land for farming purposes
Stream Crossings (no. of impacts)	0	6	6	4	3	3	2	2	9	Includes Minnesota River for alternatives W1, W2, and W3 and connections to local roads
County Ditch Crossings (no. of impacts)	0	0	0	0	3	3	3	5	3	County Ditch crossings are mutually exclusive from Stream Modifications.
100-YR Floodplain Impacts (acres)	0	44	25	45	0	0	0	0	44	MN River based on 2009 Brown County Flood Map

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		Pref. Alt. W1	Alt. W2	Alt. W3	Pref. Alt. E1	Alt. E2	Alt. E3	Alt. E4		
Federal & State Threatened & Endangered Species (no. of impacts)	0	0	0	0	0	0	0	0	0	Coordination will be undertaken with the DNR to determine if additional reviews for bald eagles and endangered mussels should occur prior to construction
Publicly Owned Lands										
MnDNR Swan Lake Wildlife Management Area Lands (acres)	0	0	0	0	6.2	0	3	0	6.2	The WMA is publicly owned but is not an eligible Section 4(f) resource
Section 4(f) and Section 106 Resources										
Section 4(f) Uses	0	1	0	0	1	1	0	0	2	Heim Farmstead and WSP RR
Section 106 Adverse Effects	0	5	5	4	2	2	1	1	7	Altman Site, New Ulm Spring, Kohn Barn, Heim Farmstead, Kohn Barn, WSP RR, Johnson Barn

West Study Section

East Study Section



LEGEND

- US 14 Preferred Alternative (W1 & E1)
- Existing US 14
- Other Roads
- Alternative W2
- Alternative W3
- Alternative E2
- Alternative E3
- Alternative E4
- ◆** Proposed Interchange Location
- ◇** Alternative Interchange Location



US 14 Final EIS
New Ulm to North Mankato

Exhibit F-S-1
Project Area and Alternatives

