



***Final Environmental Impact
Statement
and Final Section 4(f) Evaluation***

for the

I-94 Jackson Freeway Modernization Project
M-60 to Sargent Road
Jackson County, Michigan

November 2006



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**I-94 Jackson Freeway Modernization Project
M-60 to Sargent Road, Jackson County, Michigan**

**Final Environmental Impact Statement
and Final Section 4(f) Evaluation**

Submitted Pursuant to 42 U.S.C. 4332 (2) (c) and 49 U.S.C. 303

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U.S. Department of Transportation
Federal Highway Administration
and
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12/18/06
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Abstract: The proposed plan will modernize a nine-mile segment of I-94 from M-60 to Sargent Road through the Jackson urban area. The project will improve and modernize deteriorating road segments and bridges, improve travel efficiency and roadway capacity, and improve motorist safety by improving roadway geometrics. The No Build, Transportation System Management, Mass Transit, and roadway alternatives were considered and dismissed.

The Draft Environmental Impact Statement (DEIS) was published in March 2002. A reevaluation of the DEIS was approved by the Federal Highway Administration (FHWA) on July 10, 2006. A formal public hearing was held on April 18th, 2002, and written public comments were solicited through May 11th, 2002. This Abbreviated Final EIS (FEIS) incorporates changes required as a result of responses to these comments, and the resolution of local issues in the consensus process completed in February 2005. Additionally, it describes the Preferred Alternative and its impacts. This alternative would cost approximately \$409 million (in year 2005 dollars). Notable impacts resulting from the Preferred Alternative will include: construction impacts, relocating a total of 22 properties (9 residential home owners, 3 residential tenant units, 8 business, and 2 county buildings), 111 acres of right-of-way acquisition, noise impacts at about 220 residences, and 32.1 acres of wetland impacts. The majority of these impacts would be reduced by proposed mitigation measures, but certain unavoidable impacts will remain.

Comments on this Final Environmental Impact Statement should be submitted to Ms. Margaret Barondess at the above address no later than 30 days after the publication of the notice of availability in the Federal register.

PREFACE

The National Environmental Policy Act (NEPA) of 1969 requires that the social, economic, and natural environmental impacts of any proposed action of the federal government be analyzed for decision-making and public information purposes. There are three classes of action. Class I Actions, which are those that may significantly affect the environment, requiring the preparation of an Environmental Impact Statement (EIS). Class II Actions (categorical exclusions) (CE) are those that do not individually or cumulatively have a significant effect on the environment, and do not require the preparation of an EIS or an Environmental Assessment (EA). Class III Actions are those for which the significance of impacts is not clearly established. Class III Actions require the preparation of an EA to determine the significance of impacts and the appropriate environmental document to be prepared – either an EIS or a Finding of No Significant Impact (FONSI).

This document is an abbreviated Final Environmental Impact Statement (FEIS) for the proposed action, which will modernize a nine-mile segment of Interstate 94 (I-94) from Michigan State Route 60 (M-60) to Sargent Road through the Jackson urban area. The Draft Environmental Impact Statement (DEIS) is still a valid document and should be used in conjunction with this abbreviated FEIS. The project area encompasses approximately nine miles of existing highway, eight interchanges, numerous local frontage roads adjacent to I-94, and 18 distinct bridge structures at 14 locations. It presents the Preferred Alternative along with the proposed mitigation measures and addresses the comments received during the public comment period. Following the comment period on the FEIS, a Record of Decision (ROD) will allow the project to proceed. The ROD will explain the reasons for selecting the Preferred Alternative, summarize any mitigation measures that will be incorporated into the project, and document any Section 4(f) approval. After the ROD is issued, the design, right-of-way (ROW) acquisition, and construction phase of the project may then proceed at the discretion of MDOT and based on the availability of funding.

This document also contains a Final Section 4(f) Evaluation for the proposed reconstruction of I-94. Section 4(f) of the Department of Transportation Act requires that an evaluation be prepared when the proposed plan requires use of property from a significant historic site or public park. The proposed action would require use of property from a site that meets the criteria for listing on the National Register of Historic Places.

This document was prepared by the Project Planning Division of the Michigan Department of Transportation (MDOT), in cooperation with FHWA and other members of the study team. The study team includes representatives from the following divisions within MDOT: Design, Project Planning, Real Estate, Construction and Technology and Traffic and Safety. MDOT University Region and Jackson Transportation Service Center staff also participated in the project development process. Information contained in the FEIS was also furnished by other federal and state agencies, local units of government, public interest groups and individual citizens.

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List of Abbreviations

<u>Abbreviation</u>	<u>Term</u>
BMP	best management practice
CBC	Consensus Building Committee
CEQ	Council of Environmental Quality
CWA	Clean Water Act
DEIS	Draft Environmental Impact Statement
EPA	Environmental Protection Agency
FEIS	Final Environmental Impact Statement
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
ISA	Initial Site Assessment
I-94 BL	I-94 Business Loop
LOS	level of service
MDEQ	Michigan Department of Environmental Quality
MDOT	Michigan Department of Transportation
MDCH	Michigan Department of Community Health
MOA	Memorandum of Agreement
M-50	Michigan State Route 50
M-60	Michigan State Route 60
M-106	Michigan State Route 106
NAAQS	National Ambient Air Quality Standards
NFIP	National Flood Insurance Program
NPDES	National Pollutant Discharge Elimination System
NREPA	Natural Resources and Environmental Protection Act
NRHP	National Register of Historic Places
PEM	palustrine emergent
PFO	palustrine forested
POW	palustrine open water
PSS	palustrine scrub-shrub
ROW	right-of-way
ROD	Record of Decision
RTP	Regional Transportation Plan
SEE	Social, Economic, and Environmental
SHPO	State Historic Preservation Officer
SPUI	Single Point Urban Interchange
TIP	Transportation Improvement Plan
TSM	Transportation System Management
USFWS	United States Fish and Wildlife Service
UST	Underground Storage Tank

SECTION 1 - INTRODUCTION

1.1 BACKGROUND

The I-94 Jackson Freeway Modernization Project is a study being conducted by the Michigan Department of Transportation (MDOT) for a nine-mile segment of I-94 through Jackson County in the central portion of southern Michigan. The project area includes I-94 from just west of the Michigan State Route 60 (M-60) interchange to just east of the Sargent Road interchange. The project area encompasses approximately nine miles of existing highway, eight interchanges, local frontage roads adjacent to I-94, and 18 distinct bridge structures at 14 locations. Along this segment, I-94 currently has two continuous through lanes in each direction. The main purposes of the project are to: (1) improve the deteriorating condition of existing bridges and road segments consistent with an overall corridor improvement plan, (2) improve travel efficiency and roadway capacity in the I-94 corridor by replacing existing road segments, interchanges, and bridges with modern facilities designed to accommodate projected year 2025 traffic volumes, and (3) improve motorist safety.

The DEIS for this project was distributed for public and agency review and comments during March, April and May 2002. The DEIS described the need for the project, the improvement alternatives considered, and the impacts of the three Practical Alternatives. A public hearing was also held on April 18, 2002 to receive comments from the public.

1.2 FINAL EIS CONTENTS

As provided under the Council of Environmental Quality (CEQ) regulation (40 CFR 1503.4(c)), an abbreviated format was selected for this Final Environmental Impact Statement (FEIS) because only minor changes are needed to the information presented in the DEIS. These changes consist of factual corrections and/or an explanation of why the comments received on the DEIS do not warrant further response. As further provided under the CEQ regulations, the Abbreviated FEIS includes six main sections (excluding the introduction):

- **Section 2 - Preferred Alternative:** This section describes the Preferred Alternative and explains the reasons for its selection.
- **Section 3 - Changes to the DEIS:** This section corrects inaccuracies in the DEIS and provides additional information where needed to address comments received from the public and local, state, and federal agencies.
- **Section 4 - Mitigation Commitments:** This section lists the mitigation commitments for the Preferred Alternative.
- **Section 5 - Wetland Finding:** This section contains the wetland finding for the project.
- **Section 6 - DEIS Comments and Responses:** This section includes all relevant comments received from the public and agencies as well as responses.
- **Section 7 - Final Section 4(f) Statement:** This section provides the final Section 4(f) statement.

Rather than repeating information from the DEIS, this FEIS only provides supplemental information. Therefore, it is intended that readers will use both documents simultaneously. **Except for the changes and new information identified in this FEIS, all information in the DEIS remains accurate and unchanged as a result of comments received.**

Based on information contained in the DEIS and this FEIS, the Federal Highway Administration (FHWA) will issue the Record of Decision (ROD) no sooner than 30 days after its approval of the FEIS. The ROD will explain the reasons for selecting the Preferred Alternative, summarize any mitigation measures that will be incorporated into the project, and document any Section 4(f) approval. After the ROD is issued, the design, right-of-way (ROW) acquisition, and construction phases of the project may then proceed at the discretion of MDOT and based on the availability of funding. Because of the scale and varying degrees of need within the corridor, the design and construction will be done in phases. The following portions of the Preferred Alternative have been designated as Phase I of the I-94 Jackson Freeway Modernization Project: the Sargent Road interchange reconstruction, including the closure of the I-94 BL, and the replacement of the Hawkins Road and Dettman Road bridges. Due to funding availability, the interchange work at the Sargent Road interchange will also be phased. Later phases of the Preferred Alternative are identified in Section 2.3.13 of this document.

1.3 RE-EVALUATION

Since the DEIS for the I-94 Jackson Freeway Modernization Project was approved more than three years ago, MDOT (under Federal regulations) must re-evaluate the DEIS and determine if a supplement to the DEIS, or a new DEIS is needed. A re-evaluation checklist was prepared and submitted to FHWA for their concurrence. The re-evaluation checklist indicated what changes have taken place since the DEIS were approved, and concluded that no substantive changes have taken place that would require a supplement to the DEIS or a new DEIS. In addition, no additional significant impacts were identified. FHWA concurred in July 2006 on the determination that the preparation and circulation of this Final EIS is appropriate. Refer to Appendix A for the re-evaluation checklist.

SECTION 2 - PREFERRED ALTERNATIVE

2.1 SELECTION OF PREFERRED ALTERNATIVE

2.1.1 Background

During the course of the I-94 Jackson Freeway Modernization project, a formal process (which is described in Section 3.2 of the DEIS) was used to develop and evaluate road improvement alternatives. This process included the development of three Practical Alternatives which are described in Section 3.4 of the DEIS. The Practical Alternatives included a range of costs, identified impacts, and operational benefits. Although each of the Practical Alternatives included improvements throughout the entire project area, they were designed so that the best elements of each could ultimately be combined into the Preferred Alternative. The Preferred Alternative includes all road improvements along the nine-mile corridor of I-94.

2.1.2 Selection Process

The Preferred Alternative was chosen by MDOT after studying a wide variety of information. The selection process included consideration of input from the public and government agencies and a review of the benefits, identified impacts, and costs for each Practical Alternative.

2.1.2.1 Public and Agency Input

The opinions of government agencies and members of the public regarding the Preferred Alternative were solicited through several methods including:

- **Steering Committee/Technical Advisory Committee Meetings.** This committee consisted of representatives from local and regional governments, the Jackson Chamber of Commerce, business interests, environmental groups, the Jackson County Airport, the Region 2 Planning Commission, and Jackson Transit Authority. MDOT met with this committee eight times during the study process to review project issues, review the alternatives under consideration, and receive input. At the March 14, 2002 meeting of the committee, members expressed to MDOT their opinions about the Practical Alternatives.
- **Public Information Meetings.** Three Public Information Meetings were held at various stages of the project. The first meeting was held at the outset of the study in January 2001, to inform the public of the scope of the study and solicit their input on the need for improvements. The second meeting was held in April 2001, to present and solicit comments on the Illustrative Alternatives. The third meeting was held in September 2001, to present and solicit comments on the Practical Alternatives.
- **Public Hearing on April 18, 2002.** This open forum public hearing provided a variety of information about the project to attendees, and members of the project team were on hand to answer questions. Attendees had the opportunity to provide comments via comment forms and/or a court reporter.
- **Comments on the DEIS.** The DEIS was available for public review and comment from March 15, 2002 to May 11, 2002, at several locations in the Jackson area. Additionally, copies were mailed to relevant government agencies for review. Reviewers provided comments regarding the Practical Alternatives and their impacts via mail, email, court reporter, and comment forms.
- **Consensus Building Committee Meetings.** A Consensus Building Committee (CBC) was formed to identify other solutions for the I-94 and US-127 West interchange. Additional details on this committee are found in Section 2.2 of this document. The CBC included members from the City of Jackson, Blackman Township, Jackson County Board of Commissioners, Jackson County Road Commission, Region 2 Planning Commission, The Enterprise Group, MDOT and FHWA. The

committee met a total of eleven times from 2003 to 2005 and developed an additional solution, supported by all parties, for the I-94 and US-127 West interchange. This solution was the creation of a fourth practical alternative that could be compared against other practical alternatives.

- **Public Information Meeting on I-94 and US-127 West Interchange.** A Public Information Meeting was held on March 2, 2005, at the Blackman Township Hall. The purpose of the meeting was to explain the status of the project, discuss the results of the CBC process and show Alternative D-1 to the public. The meeting was held in an open house format and two presentations were made. Approximately seventy-five (75) participants attended the meeting. Additional details on this meeting are found in Section 2.2 of this document.
- **Other Coordination.** Input was solicited and received from the public and government agencies throughout the duration of the process and is described in Chapter 6 of the DEIS. This ongoing coordination included public information meetings, small group meetings, Steering Committee/Technical Advisory Committee meetings, agency scoping meetings, a project web site, and one-on-one conversations. Input about the Practical Alternatives was received through all of these techniques.

2.1.2.2 Evaluation Criteria

In addition to this input, MDOT also considered a variety of evaluation criteria for each Practical Alternative. The main categories evaluated included:

- Improvements to traffic operations (on I-94 mainline, ramps, and local roads)
- Improvements to deteriorating bridges and road segments
- Improvements to motorist safety
- Social, economic, and environmental (SEE) impacts (e.g., ROW requirements, relocations, wetland impacts, noise impacts, cultural resource impacts, etc.)
- Complexity of construction while maintaining traffic
- Pedestrian circulation
- Comments from local municipalities
- Local access conditions
- Cost

2.1.2.3 Details of the Public Involvement Process

MDOT and their consultants discussed the general advantages and disadvantages of the Practical Alternatives at meetings on March 4, April 30, and June 18, 2002. After considering the evaluation criteria and input received from the public and government agencies, the Preferred Alternative was formally selected by MDOT in June 2002. A modification to the Preferred Alternative interchange configuration at the I-94 and US-127 West interchange was made in January of 2005. This modification to the Preferred Alternative is described in Section 2.2. The selection process involved weighing each alternative's benefits against its costs and negative impacts and comparing these factors to those of other alternatives being considered at the same location. At each interchange, the Practical Alternative that offered the best balance between meeting the purpose of and need for the project (described in Chapter 2 of the DEIS) and minimizing costs and negative impacts was selected for inclusion as part of the Preferred Alternative.

2.1.3 Selection Results

The following sections identify the Practical Alternatives selected at each of the interchanges in the project area. These sections also describe the specific reasons supporting selection as the Preferred Alternatives at each interchange. When combined to form the Preferred Alternative, the result is a comprehensive package of improvements for the entire project area. The Preferred Alternative includes improvements to interchanges, the I-94 mainline, local roads that cross I-94, local roads adjacent to I-94

(frontage roads), bridges, stormwater systems, and stream/drain crossings. Table 2-1 provides a summary of the Practical Alternatives that were selected at each interchange location. Additional details about other components of the Preferred Alternative are included later in this section of the FEIS. Drawings showing the Practical Alternatives are shown in the DEIS (Figures 3-8, 3-9, and 3-10), and the Preferred Alternative is shown in Figures 1 and 2 of this FEIS. All figures are located in the tabbed figures section of this document.

Table 2-1. Practical Alternative Components that Comprise the Preferred Alternative.

Interchange Location	Practical Alternative Selected	Interchange Type
M-60	Practical Alternative I	Trumpet
Airport Road	Practical Alternative II	Single Point
US-127 West	Mod.Practical Alternative I (Alt. D-1)	Full Cloverleaf*
M-106 (Cooper Street)	Practical Alternative I	Partial Cloverleaf
Elm Road	Practical Alternative III	Partial Cloverleaf
US-127 East	Practical Alternative III	“Y” Configuration
Sargent Road	Practical Alternative II	Partial Cloverleaf

* Modified as discussed in Section 2.2

2.1.3.1 No Build Alternative

At all of the interchanges in the project area, the No Build Alternative would not meet the purpose of and need for the project. Specifically, it would not address projected traffic growth along the existing road system, improve motorist safety, or improve the design of roads and bridges to meet modern engineering standards. Because the No Build Alternative fails to meet the purpose of the project, it is not considered a feasible solution.

2.1.3.2 M-60

At this location, all three Practical Alternatives had the same interchange design (trumpet interchange), which slightly adjusts the existing interchange to accommodate six through lanes (three lanes in each direction) on I-94. Therefore, Practical Alternatives I, II, and III were all the same resulting in one Practical Alternative for this location. There was only one alternative for this location because the M-60 interchange does not require substantial upgrades as traffic operations and bridge conditions are acceptable. This design meets the purpose of and need for the project at a reasonable cost and without notable negative impacts. Therefore, this design will be carried forward as part of the Preferred Alternative. Drawings showing the Practical Alternatives are included in the DEIS (Figures 3-8, 3-9, and 3-10), and the Preferred Alternative is shown in Figures 1 and 2 of this FEIS. It has been determined that this improvement would not be needed until after 2015.

2.1.3.3 Airport Road

At the Airport Road interchange, two designs were considered - Practical Alternatives I (a “compressed diamond” configuration) and II [a “single point urban interchange” (SPUI) configuration]. The costs, negative impacts, and ROW requirements of these two Practical Alternatives (as described in the DEIS) were very similar. However, Practical Alternative I would have traffic operation problems because of the close proximity of the four traffic signals along Airport Road (at the two freeway ramps and the frontage roads on both sides of the interchange). Even when coordinated, these signals would cause traffic backups. Therefore, it would not meet the purpose of and need for the project. Practical Alternative II does not have this problem because of the increased distance between the one signal required for this interchange and the two frontage roads. As a result, Practical Alternative II does a better job of minimizing traffic backups and congestion. For this reason, Practical Alternative II has been selected as part of the Preferred Alternative at this location. Drawings showing the Practical Alternatives are included in the DEIS (Figures 3-8, 3-9, and 3-10), and the Preferred Alternative is shown in Figures 1 and 2 of this FEIS.

2.1.3.4 US-127 West

During the course of the study, three Practical Alternatives were evaluated at the US-127 West interchange. Practical Alternative I is similar in general configuration to the existing partial cloverleaf interchange configuration, but notably improves traffic operations and brings the interchange up to current design standards. This alternative separates local traffic from freeway traffic at three of the four freeway-to-freeway connections. Practical Alternative II was a trumpet interchange configuration that separates local traffic from freeway traffic at all four of the freeway-to-freeway connections. Practical Alternative III was a “Y” configuration that provided a high speed freeway-to-freeway connection and also separated local traffic from freeway traffic at all four freeway-to-freeway connections.

Although all evaluation criteria were considered in the selection of the Preferred Alternative at this location, a number of “key evaluation criteria” played a more important role in this decision. Table 2-2 shows the key evaluation criteria that were used to select the Preferred Alternative at US-127 West. As shown by the information in this table, there is no meaningful difference in the traffic operations provided by the three alternatives. At the same time, the SEE impacts of Practical Alternatives II and III are more extensive than Practical Alternative I. These include wetland, ROW, and relocation impacts. Additionally, Practical Alternative I would cost \$77 million less than Practical Alternative III and \$110 million less than Practical Alternative II. Initially, Practical Alternative I was selected as the Preferred Alternative because it provided the same traffic operational benefits as the other alternatives at a much lower cost and with less negative impacts. This alternative was later modified as Alternative D-1 (see Section 2.2 for details about Alternative D-1).

Table 2-2. Comparison of Practical Alternative Key Evaluation Criteria at US-127 West Interchange.

Category	Evaluation Criteria	Pract. Alt. I	Pract. Alt. II	Pract. Alt III	Alt. D-1
Cost	Total Estimated Cost (2005 dollars)	\$55 million	\$165 million	\$132 million	\$68 million
	Traffic Operations				
	Vehicle Miles Traveled during P.M. Peak Hour	34,414	35,943	37,376	N/A*
	Vehicle Hours Traveled during P.M. Peak Hour	766	783	816	N/A*
	Average Travel Speed during P.M. Peak Hour	44.9	45.9	46.8	N/A*
	Percent of Freeway Ramps at Acceptable LOS (D or Better) during P.M. Peak Hour	100%	100%	100%	100%
	Percent of Signalized Intersections at Acceptable LOS (D or Better) during P.M. Peak Hour	100%	100%	100%	100%
	I-94 Mainline LOS during P.M. Peak Hour (Eastbound/Westbound)	C/C	C/C	B/C	C/C
Maintaining Traffic during Construction	Complexity of Construction	High	High	Low	Low
SEE Impacts	ROW Acquisition Required	1.8 acres	15.6 acres	34.8 acres	2+ acres
	Number of Residential Relocations	0	9	5	0
	Number of Commercial Relocations	2	7	3	2
	Wetland Impacts	0.2 acres	0.6 acres	0.4 acres	0.8+ acres
	Noise Impacts	Moderate	Moderate	Major	Moderate

*This analysis was not done for Alternative D-1, but would be very similar to Practical Alternative I.

+ Slightly more than shown

Throughout the I-94 Jackson Freeway Modernization study, a Project Steering Committee and a Technical Advisory Committee provided input that was instrumental in developing an understanding of the need for improvements along the nine mile segment of I-94. The first event to provide information about this project was media coverage during November of 2000. Further input was garnered from a series of three public meetings held at Baker College in Jackson on January 9, April 24, and September 20, 2001, where attendance ranged from 100 to 200 persons at each meeting. Notification of the meetings was disseminated through more than 6,700 individual mailings as well as through notices in local newspapers, on radio, and through television stations. An April 17, 2002, meeting was held to solicit public comment on the recommendations developed by the Project Steering Committee and the Technical Advisory Committee. Three alternatives for the I-94 and US-127 interchange were presented, and public support centered around Practical Alternative I. Additional information on the modified Practical Alternative I (Alternative D-1) and the process used to develop it can be found in Section 2.2.

2.1.3.5 M-106 (Cooper Street)

Two Practical Alternatives were evaluated at this location. Practical Alternative I includes a partial cloverleaf configuration that is similar to the existing interchange, while Practical Alternative II is also a partial cloverleaf, but has an additional entrance loop in the southwest quadrant. Both of these alternatives have similar traffic operations (i.e., they meet the purpose of and need for the project equally well) and are similar for most SEE impacts. However, Practical Alternative I costs less than Practical Alternative II and would require less ROW acquisition (20 vs. 27 acres). Also, Practical Alternative II would impact about 0.2 acres more wetlands than Practical Alternative I (1.1 vs. 1.3 acres - Table 2-8). Based on this situation, Practical Alternative I was selected for inclusion in the Preferred Alternative at this location. Drawings showing the Practical Alternatives are included in the DEIS (Figures 3-8, 3-9, and 3-10), and the Preferred Alternative is shown in Figures 1 and 2 of this FEIS.

2.1.3.6 Elm Road

Three Practical Alternatives were evaluated at the Elm Road interchange. Practical Alternative I consists of a compressed diamond configuration, Practical Alternative II is a diamond interchange, and Practical Alternative III is a partial cloverleaf design. All three interchanges would have similar costs and SEE impacts. The only notable difference in SEE impacts would be wetland impacts. Practical Alternatives I and II would not result in wetland impacts while Practical Alternative III would impact 0.3 acre. However, traffic operations would be better for Practical Alternative III than for the other two alternatives, and as a result, it would meet the purpose of and need for the project better than the others. Better traffic operations would be achieved because Elm Road traffic desiring to enter westbound on I-94 would have free-flow on ramps. After considering this information, Practical Alternative III was selected by MDOT for inclusion in the Preferred Alternative. Drawings showing the Practical Alternatives are included in the DEIS (Figures 3-8, 3-9, and 3-10), and the Preferred Alternative is shown in Figures 1 and 2 of this FEIS.

2.1.3.7 US-127 East

Three Practical Alternatives were evaluated at this location. Practical Alternative I is a trumpet configuration similar to the existing configuration, Practical Alternative II is a flyover design (providing high speed directional ramps for three of the four freeway-to-freeway movements), and Practical Alternative III is a “Y” configuration (providing high speed directional ramps for all four of the freeway-to-freeway movements). All three of these alternatives provide similar traffic operations and meet the purpose of and need for the project equally well. Additionally, their costs and most SEE impacts are similar; however, Practical Alternative III has considerably less wetland impacts than the other two alternatives. While Practical Alternative III would impact about 13 acres of wetlands, Practical Alternative II would affect 18 acres, and Practical Alternative I would impact 20 acres. Based on this situation, MDOT selected Practical Alternative III as the Preferred Alternative at US-127 East. In addition, Practical Alternative III may provide additional opportunities for wetland mitigation at this

location. Drawings showing the Practical Alternatives are included in the DEIS (Figures 3-8, 3-9, and 3-10), and the Preferred Alternative is shown in Figures 1 and 2 of this FEIS.

2.1.3.8 Sargent Road

At this interchange, three Practical Alternatives were considered. Practical Alternative I is a diamond configuration [with the existing I-94 Business loop (I-94 BL) ramps eliminated and I-94 BL routed along Sargent and Ann Arbor Roads], Practical Alternative II is a partial cloverleaf interchange (with the existing I-94 BL ramps eliminated and I-94 BL routed along Sargent and Ann Arbor Roads), and Practical Alternative III is also a partial cloverleaf design (with the existing I-94 BL ramps left open). These three alternatives have similar traffic operations (i.e., they meet the purpose of and need for the project equally well) and costs. However, Practical Alternative I would require the relocation of three more businesses (a truck stop, a restaurant, and a restaurant/brewery) than would Practical Alternatives II and III. Additionally, Practical Alternative III would require maintaining two separate interchanges for Sargent Road and I-94 BL. The other main factor that was considered at this location is the fact that Practical Alternatives II and III would impact about 11 acres of regulated wetlands, while Practical Alternative I would only affect about six acres. After considering this situation, Practical Alternative II was selected as the Preferred Alternative. Even though it would cause about five more acres of wetland impacts than Practical Alternative I, Practical Alternative II was selected because it would prevent the relocation of three businesses. Also, Practical Alternative II was selected over Practical Alternative III because it would be easier to construct and would combine the I-94 BL and Sargent Road interchanges into one interchange. Drawings showing the Practical Alternatives are included in the DEIS (Figures 3-8, 3-9, and 3-10), and the Preferred Alternative is shown in Figures 1 and 2 of this FEIS.

Similar to the situation at the US-127 West interchange, unexpected delays in the project schedule have resulted in the further decline in the condition of the I-94 BL bridge near the Sargent Road interchange. The University Region will continue to monitor this bridge and will do what is necessary to maintain its integrity. The extent of repairs has not been determined at this time; however, they will not affect the ultimate build out of the Preferred Alternative in the future.

2.2 DEVELOPMENT OF ALTERNATIVE D-1

2.2.1 Consensus Building Process

During the DEIS public comment period some project stakeholders including representatives from the business community, regional planning agencies, local governments, and citizens expressed their opposition to Practical Alternative I being selected as the Preferred Alternative. This opposition was based on two main concerns. First, there was the perception that because Practical Alternative I has a configuration that is similar to the current interchange, it would have similar traffic operational problems. Second, the opposition was based on the perception that local and freeway traffic must be completely separated in order to provide adequate traffic operations. Resolutions stating an opposition to Practical Alternative I were passed by the following entities: the City of Jackson, Jackson County Board of Commissioners, Blackman Township, Jackson County Road Commission, Region 2 Planning Commission, and the Enterprise Group (a non-profit economic development organization in Jackson, Michigan). The Federal Highway Administration (FHWA) then requested that MDOT and the local jurisdictions come to consensus on the Preferred Alternative at the I-94 and US-127 West interchange.

With support from MDOT and the FHWA, a Consensus Building Committee (CBC) was formed from the core membership of the Project Steering Committee and the Technical Advisory Committee. Representatives were included from the City of Jackson, Jackson County Board of Commissioners, Blackman Township, Jackson County Road Commission, Region 2 Planning Commission, the Enterprise Group, MDOT, and FHWA. Neutral facilitators were chosen to conduct the meetings and gather

information from others who were interested in or who would be affected by the interchange. The main purpose of the CBC was to develop and reach consensus on an additional alternative for the I-94 and US-127 West interchange that could be officially added to the study and considered along with the three original alternatives. The CBC met between November 2003 and January 2005. Additional information on the CBC process is found in *I-94 & US-127/M-50 Interchange Consensus Building Committee* (Manis & Michaud 2005). This document is available upon request.

The CBC established a set of criteria on which to screen or evaluate alternative designs for the interchange. These included:

- Improving safety
- Separating local traffic from freeway traffic
- Reducing the number of signals along US-127
- Minimizing displacements
- Enhancing economic development

Along with these considerations, were the purpose and need for the project:

- Improving the deteriorating condition of the existing bridges and road segments
- Improving travel efficiency and roadway capacity by replacing suboptimal road segments, interchanges, and bridges with modern facilities designed to accommodate projected year 2025 traffic volumes
- Improving motorist safety

Between December 2003 and March 2004, members of the CBC developed and reviewed numerous interchange design alternatives. Of the numerous interchange designs considered, four were selected for further refinement as conceptual designs. These alternatives were further refined until one (Alternative D-1) was eventually selected to be carried forward as the modified alternative. This modified alternative (Alternative D-1) was agreed to by the CBC to be carried forward as the fourth alternative to be compared with Practical Alternatives I, II, and III. Descriptions of the alternatives considered are found in the *I-94 & US 127/M-50 Interchange Consensus Building Committee* report (Manis & Michaud 2005). This report was distributed to all CBC members.

2.2.2 Selection of Alternative D-1

Out of the alternatives considered, Alternative D-1 was selected by the CBC for inclusion in the Preferred Alternative. As shown in Figure 3, Alternative D-1 modifies Practical Alternative I by adding loop ramps in the northwest quadrant and in the southeast quadrant of the interchange to complete a full cloverleaf design. In addition, two signalized intersections would be replaced by I-94 exit ramp lanes that merge with US-127/M-50. Northbound US-127/M-50 would become three lanes to accommodate entering and exiting crossover traffic from the loop ramps connecting to I-94. Southbound US-127/M-50 would continue as three lanes to accommodate merging and exiting traffic from the loop ramps connecting to I-94. The Shirley Road curve alignment would be shifted more to the northeast, the northwest US-127 to westbound I-94 entrance ramp alignment would be shifted more to the northwest, and the I-94 westbound exit ramp alignment would be shifted farther to the south, to accommodate the increased size of the interchange.

I-94 would continue to have three through lanes in each direction, east and west. A separate fourth lane would be added from each direction, on approach to the interchange. The fourth lane would then split into two lanes, one as an exit ramp to connect with northbound US-127/M-50, and one as an exit ramp to connect with southbound US-127/M-50. The total estimated cost for Alternative D-1 (in year 2005 dollars) is \$52 million. This estimated cost encompasses all costs associated with the project including ROW acquisition, design, construction, utility relocation, and mitigation. This cost is different than the

one shown in Table 2-2 and Table 2-3 because the limits of Alternative D-1 are different than those of Practical Alternatives I, II, and III, and Alternative D-1 does not include the majority of the I-94 mainline improvements.

A comparative analysis of Alternative D-1 and Practical Alternative I was conducted. The results of the analysis showed that Alternative D-1 offered three important improvements over Practical Alternative I:

- 1) There would be an improved ability to maintain traffic during the construction of the interchange.
- 2) There would be a reduced number of controlled intersections (and reduced number of conflict points).
- 3) There would be an improved average travel speed through the interchange.

Table 2-3 shows a comparison Practical Alternative I and Alternative D-1 at the I-94 and US-127 West interchange only.

Table 2-3. Comparison of Practical Alternatives I, II, and III and Alternative D-1 at US-127 West Interchange.

Evaluation Criteria	Practical Alternative I	Practical Alternative II	Practical Alternative III	Alternative D-1
Estimated Cost (2005 dollars)*	\$55 million	\$165 million	\$132 million	\$68 million
Interchange Configuration	Partial Cloverleaf	Trumpet	Y	Full Cloverleaf
Approximate ROW (acres)	2 acres	16 acres	35 acres	2+ acres
Probable Residential Displacements	0	9	5	0
Probable Commercial Displacements	2	7	3	2
Approximate wetland Impacts (acres)	0.8 acres	0.6 acres	0.4 acres	0.8+ acres
Potential Cultural Resource Impacts (sites)	1	1	1	1
Potential Hazardous Materials Impacts (sites)	1	0	1	1
Existing Ramp Terminal LOS	B-C	B-C	B-C	B-C
Future Ramp Terminal LOS	A-D	A-D	A-D	A-D
Complexity of Construction	High	High	Low	Low
Signing	Minor Change	Simple	Simple	Simple
Average Speed of Travel Through Interchange	20 mph	25 mph	50 mph	30-40 mph
Local Access Improvement	Minor	Moderate	Major	Minor
Number of Intersections on Local Road	3	3	3	2

* This cost estimate only includes improvements at the interchange and does not take into account all improvements associated with the alternatives.

+ Slightly more than shown

A comparison of Alternative D-1 and Practical Alternative I was performed to identify potential environmental impacts. This assessment included a review of displacements, ROW, wetland impacts, cultural resource impacts, noise and air quality concerns. Minor amounts of additional ROW, wetland impacts and noise levels are anticipated. The noise impacts for Alternative D-1 are based on a qualitative assessment from the professional experience of the project team and the quantitative evaluation of

Practical Alternative I in the noise technical report (CH2M Hill 2002). The noise analysis will be reevaluated and updated during the design phase of the project. Other than these areas, no new environmental impacts have been identified as a result of Alternative D-1. MDOT has selected Alternative D-1 as part of the Preferred Alternative at this location.

The CBC agreed to hold a public information meeting to explain the results of the CBC process and to show Alternative D-1 to the public. The Public Information Meeting was held on March 2, 2005, at the Blackman Township Hall. The meeting was held in an open house format, and two presentations were made. Approximately seventy-five (75) members of the public attended the meeting. Comments received from the public at this meeting were in favor of the modified interchange alternative.

Due to the need to establish the CBC and the process time needed to identify an additional practical alternative, the bridge at the I-94 and US-127 West interchange has experienced further decline. To address this need, some repairs to the bridge took place in 2005, and additional repairs, including deck replacement, substructure repairs, and painting were completed in 2006. The repairs to the bridge will not affect the ultimate build out of the Preferred Alternative in the future. The interchange's priority will not be affected by normal maintenance, as MDOT is obligated to preserve the integrity of the existing system.

2.3 COMPONENTS OF THE PREFERRED ALTERNATIVE

2.3.1 General Characteristics

The Preferred Alternative includes improvements throughout the entire project area (Figures 1 and 2). With the exception of the elements listed below (Section 2.2.2), the improvements included in the Preferred Alternative are identical to those described for the Practical Alternatives in Section 3.4 of the DEIS. Table 2-1 of the FEIS identifies which Practical Alternative will be included in the Preferred Alternative at each interchange in the project area.

2.3.2 Specific Information

Most of the specific information describing the Practical Alternatives in Section 3.4 of the DEIS would also apply to the Preferred Alternative. The only exceptions to this situation are described below. These changes are reflected in Figures 1 and 2 of this FEIS.

2.3.2.1 I-94 Mainline

As noted in the DEIS, the proposed I-94 cross section includes three through lanes in each direction. Additionally, auxiliary weave lanes will be included as part of the Preferred Alternative where weave distances between ramp gores would be inadequate. A fourth auxiliary weave lane would be required in both directions between US-127 West and M-106 (Cooper Street) and between M-106 (Cooper Street) and Elm Road. Mainline capacity improvements are not needed now and will be considered when future traffic warrants such improvements.

2.3.2.2 Local Roads

After performing more detailed engineering studies for the Preferred Alternative, it has been determined that several local roads would need to be improved beyond the areas shown in the DEIS for the Practical Alternatives. Specifically, Blackman Road, Airport Road, Shirley Road, M-106 (Cooper Street), Elm Road, Dettman Road, Hawkins Road, and Blake Road would need to be improved beyond the limits shown for the Practical Alternatives in the DEIS. These increases were identified as a result of the more detailed engineering work that was performed for the Preferred Alternative. MDOT will only perform construction on local roads if required the interstate improvements. Otherwise, local agencies will bear the cost of these improvements. All of these improvements to local roads are shown in Figures 1 and 2 of this FEIS.

2.3.2.3 Stormwater System

The stormwater system has been developed to a greater level of detail than described in the DEIS. Specifically, a conceptual stormwater flow plan has been developed and is shown in Figure 4. This figure shows general flow directions, outfall locations, detention basin locations, and ditch locations for the Preferred Alternative. The location of these improvements will be looked at greater detail during the design phase of the project. Further details about the stormwater system are included under the Surface Water heading in Section 4.5 of this FEIS.

2.3.2.4 Retaining Walls

The location of some retaining walls would be slightly different than shown in the DEIS for the Practical Alternatives. All retaining walls are shown on Figure 2 of this FEIS. At most locations, these changes would be minor and would not notably change the design of the alternatives. However, at the Elm Road interchange, a retaining wall would not be constructed along the off-ramp in the southwest quadrant to the north of Barrett Lane. This would result in the construction limits for the Preferred Alternative extending about 100 feet farther to the south than the limits shown in the DEIS for Practical Alternative III (Figure 2). This would be similar to what is shown for Practical Alternative II in the DEIS. Also, due to the modified alternative at the US-127 West interchange, new retaining walls are proposed in this location. The locations of retaining walls will be reexamined during the design phase.

2.3.2.5 Cost

The total cost for the Preferred Alternative would be about \$409 million (in year 2005 dollars). This encompasses costs associated with the project including ROW acquisition, design, construction, utility relocation, and mitigation.

2.3.2.6 ROW Acquisition and Relocations

ROW acquisition for the Preferred Alternative would be similar to what is shown in the DEIS for the Practical Alternatives. The only notable exceptions to this would be at the Airport Road, US-127 West, and Elm Road interchanges where some additional ROW acquisition would be needed beyond what was shown in the DEIS. As a result of combining the Practical Alternatives from different interchanges to create one Preferred Alternative for this document, some refinement of the alternatives was done resulting in the need for minor amounts of additional ROW. A total of about 111 acres of ROW acquisition would be required for the Preferred Alternative. Figure 2 of this FEIS shows the areas where ROW acquisition would be necessary for the Preferred Alternative.

This alternative would result in the relocation of 21 properties: 12 residences (preliminary research indicates that three appear to be rental units), eight businesses, and one county facility (an animal shelter). Additionally, ROW acquisition would impact existing parking or storage areas at six businesses (Table 2-4 of this FEIS). More detailed information including the exact number of parking spaces lost and any space available for replacement will be determined during the design phase. As a result of these 21 relocations, up to eleven landlords could be affected. The Conceptual Stage Relocation Plan for the Preferred Alternative (Appendix B of this document) includes additional information related to the relocations. In the case of the county facility, the county will have the option to choose either just compensation based upon an appraisal of fair market value or functionally replacing the county facility with other facilities, as noted in the Conceptual State Relocation Plan.

Table 2-4. Impacts to Parking and Storage Areas Caused by the Preferred Alternative. *

Property	Location	Comments
Industrial Facility	3515 Wayland Drive	Loss of about ten percent of parking and storage (south side of parcel).
Hotel	2000 Holiday Inn Drive	Loss of about five percent of parking (along US-127).
Restaurant	3500 O'Neil	Loss of about ten percent of storage area (north side of parcel).
Senior Center	1948 Cooper Street	Loss of about 30 percent of parking (along M-106).
Truck Stop	6100 Ann Arbor Road	Loss of about five percent of parking (SE part of parcel).
Industrial Facility	3325 Trailer Park Drive	Loss of about 20 percent of parking and storage (south side of parcel).

* Impacts from the Preferred Alternative are shown on Figure 2.

2.3.3 Traffic Operations

Traffic signals would be located at the intersections shown in Table 2-5, while all other intersections would be controlled by stop signs. Table 2-5 shows the projected year 2025 peak hour LOS for the Preferred Alternative at signalized intersections. Figure 2 of this FEIS shows the approximate number of lanes that would be required (based on traffic projections) on ramps and local roads at each intersection.

Table 2-5. Projected (Year 2025) Peak Hour Level of Service for Signalized Intersections.

Intersection	Preferred Alternative*
Airport Rd./westbound ramps	C/C
Airport Rd./eastbound ramps	C/C
Airport Rd./O'Neil Rd.	A/D
M-50/Boardman Rd.	B/D
M-106 (Cooper St.)/westbound ramps	B/C
M-106 (Cooper St.)/eastbound ramps	B/C
Elm Rd./westbound ramps	B/B
Elm Rd./eastbound ramps	B/B
Sargent Rd./westbound ramps	B/B
Sargent Rd./eastbound ramps	B/B

* AM peak hour LOS / PM peak hour LOS

Traffic operations for the Preferred Alternative would be very similar to the operations described in Section 3.5 of the DEIS for the relevant components of the Practical Alternatives. As demonstrated in Table 2-6 of this FEIS, all of the mainline segments would experience a peak hour LOS of D or better in the year 2025 and most segments would be at LOS B or C compared to the existing LOS E and F (See Table 2-5 of the DEIS). Additionally, all ramps would operate at LOS D or better during the year 2025. These levels of service indicate that even during peak traffic conditions the Preferred Alternative would adequately accommodate projected traffic volumes.

Table 2-6. Projected (Year 2025) Peak Hour Traffic Volumes and LOS - Preferred Alternative.

I-94 Segment	A.M. Peak Hour			P.M. Peak Hour		
	Traffic Volume*	Eastbound LOS	Westbound LOS	Traffic Volume*	Eastbound LOS	Westbound LOS
West of M-60	3,100 / 2,500	D	C	2,300 / 2,900	C	D
M-60 to Airport Road	4,000 / 3,000	C	C	2,900 / 3,800	B	D
Airport Road to US-127 West	4,000 / 3,100	C	C	3,000 / 3,900	C	C
US-127 West to M-106 (Cooper Street)	5,000 / 3,800	C	B	3,900 / 4,900	C	C
M-106 (Cooper Street) to Elm Road	4,600 / 3,700	C	B	3,800 / 4,700	B	C
Elm Road to US-127 East	4,700 / 4,000	D	C	3,800 / 4,700	C	D
US-127 East to Sargent Road	4,000 / 2,900	C	B	2,600 / 3,800	B	C
East of Sargent Road	4,100 / 3,000	C	C	2,700 / 4,100	B	C

* Eastbound Traffic / Westbound Traffic

2.3.3.1 Existing and Future Twenty Year Traffic Projections

Generally, average daily traffic (ADT) volumes along the I-94 corridor through Jackson County have increased slightly between the years 2000 and 2005 with the highest increase located between the US-127 West and US-127 East interchanges. Table 2-7 shows 2000 and 2005 ADT for the I-94 corridor.

Table 2-7. Comparing 2000 ADT to 2005 ADT for the I-94 Mainline.

I-94 Segment	2000 ADT	2005 ADT	% Change
West of M-60	35,800	34,718	-0.61
M-60 to Airport Road	48,600	48,300	-0.12
Airport Road to US-127 West	50,200	51,300	0.43
US-127 West to M-106 (Cooper St)	64,600	69,000	1.33
M-106 (Cooper St) to Elm Road	61,200	66,000	1.52
Elm Road to US-127 East	61,600	67,800	1.94
US-127 East to Sargent Road	54,500	52,000	-0.93
East of Sargent Road	52,000	50,000	-0.78

As shown above, peak hour traffic conditions have remained relatively constant over the five year period. Therefore, it was concluded that no adjustments are necessary to either the base (2000) or future year (2025) projections shown in the DEIS or this FEIS.

2.3.4 Water Resources

2.3.4.1 Surface Water

Section 4 of this document provides information regarding additional surface water mitigation measures for the Preferred Alternative.

2.3.4.2 Floodplains

The Preferred Alternative will result in minor impacts to the (Grand River) floodplain totaling approximately 3.96 acres. However, the Preferred Alternative will not result in major impacts considered a “significant” floodplain encroachment. Based on this information and pursuant to Executive Order 11988 and 23 CFR 650, Subpart A, the Preferred Alternative will not require a floodplains finding. For those locations where more than 300 cubic yards of fill are placed within the floodplain, an equal amount of earth (i.e., compensating cut) will be removed from the floodplain in the same general vicinity.

A preliminary bridge hydraulics analysis of the I-94 bridge over the Grand River and Norfolk Southern Railroad was conducted (CH2M Hill 2005). The analysis looked at the Grand River as it relates to the replacement bridge proposed. The HEC-RAS computer model was used to model hydrologic conditions in the river. The model analyzed the existing bridge compared to the proposed bridge. The results of the model showed no change between the existing bridge and the bridge proposed under the Preferred Alternative and projected that no harmful interference will occur.

2.3.5 Wetlands

2.3.5.1 Avoidance and Minimization of Impacts

The Preferred Alternative includes all practicable measures to minimize harm to wetlands. Throughout the entire study process, wetland impacts have been avoided and minimized, and several items illustrate this fact. First, an extensive investigation of alternatives was conducted as part of the project, and wetland impacts were considered during this investigation. Chapter 3 of the DEIS identifies the alternatives considered and explains why many of these were eliminated from further consideration. In all cases, alternatives with lower wetland impacts were only eliminated if they: (a) did not meet the purpose of and need for the project, (b) had other severe negative impacts (e.g., relocations, hazardous materials, etc.), or (c) had an unreasonable cost. This process assured that alternatives having wetland impacts were advanced only when other options were not practicable.

After considering numerous Illustrative Alternatives in the DEIS (Chapter 3), three Practical Alternatives were evaluated in detail in the DEIS. MDEQ, the EPA, and the U.S. Fish and Wildlife Service (USFWS) all concurred that these three alternatives should be studied in detail (see letters from these agencies in Appendix A of the DEIS). All three of the Practical Alternatives evaluated in the DEIS were designed to avoid wetlands where this goal could be accomplished at a reasonable cost. The wetland impacts of the three Practical Alternatives at each interchange location are presented in Table 2-8.

Wetland impacts were minimized by selecting Practical Alternatives with the lowest wetland impacts for inclusion in the Preferred Alternative. Specifically, at the M-60, US-127 West, M-106 (Cooper Street), and US-127 East interchanges, the Practical Alternative with the lowest wetland impacts was selected (Table 2-8). At the other three interchange locations (Airport Road, Elm Road, and Sargent Road), minimizing wetland impacts by selecting the Practical Alternative with the lowest impacts was not practicable. At Airport Road and Elm Road, the other Practical Alternatives under consideration did not meet the purpose of and need for the project as well as the selected alternative. At the Sargent Road interchange, Practical Alternative II was selected over Practical Alternative I (which had the lowest wetland impacts) because Practical Alternative I would impact three more businesses and require their relocation. The selection of the Preferred Alternative at each interchange location is described in greater detail in Section 2.1 of this FEIS.

Table 2-8. Wetland Impacts of the Practical Alternatives by Interchange Location.

Interchange Location	Practical Alternative I	Practical Alternative II	Practical Alternative III
M-60	4.7 acres	4.7 acres	4.7 acres
Airport Road	0.5 acres	0.7 acres	0.7 acres
US-127 West	0.8 acres*	0.6 acres	0.4 acres
M-106 (Cooper Street)	1.1 acres	1.3 acres	1.3 acres
Elm Road	0.0 acres	0.0 acres	0.3 acres
US-127 East	19.7 acres	18.1 acres	13.5 acres
Sargent Road	5.5 acres	11.0 acres	11.2 acres
Totals	32.1 acres	36.4 acres	32.1 acres

Note: Shaded cells indicate Practical Alternatives selected for inclusion in the Preferred Alternative.*Wetland impacts at the US-127 West interchange are higher than those previously listed for Practical Alternative 1 because Alternative D-1 was chosen at this location.

In addition to impacts to overall wetlands, impacts to moderate and high quality wetlands were also minimized with avoidance being emphasized where practicable. Table 2-9 presents the impacts of the three Practical Alternatives upon moderate and high quality wetlands. As with overall wetland impacts described in the preceding paragraph, the Practical Alternatives with the least impacts to moderate and high quality wetlands were selected at all interchange locations other than Airport Road and Sargent Road. The reasons for selecting alternatives with greater impacts to moderate and high quality wetlands at these two locations are the same as described in the preceding paragraph.

Table 2-9. Practical Alternative Impacts to High and Moderate Quality Wetlands.

Interchange Location	Practical Alternative I		Practical Alternative II		Practical Alternative III	
	Mod.	High	Mod.	High	Mod.	High
M-60	2.3 acres	0.6 acres	Same design as Alt. I		Same design as Alt. I	
Airport Road	0.5 acres	0.0 acres	0.7 acres	0.0 acres	Same design as Alt. II	
US-127 West	0.0 acres	0.0 acres	0.2 acres	0.0 acres	0.0 acres	0.0 acres
M-106 (Cooper Street)	1.1 acres	0.0 acres	1.4 acres	0.0 acres	Same design as Alt. II	
Elm Road	0.0 acres	0.0 acres	0.0 acres	0.0 acres	0.0 acres	0.0 acres
US-127 East	8.5 acres	1.5 acres	6.3 acres	1.9 acres	1.6 acres	1.9 acres
Sargent Road	3.0 acres	2.4 acres	8.5 acres	2.6 acres	8.4 acres	2.8 acres
Totals	15.4 acres	4.5 acres	19.4 acres	5.1 acres	14.4 acres	5.3 acres

Note: Shaded cells indicate Practical Alternatives selected for inclusion in the Preferred Alternative.

Based on the information in Tables 2-8 and 2-9, wetland impact acreages for the Preferred Alternative are presented in Table 2-10. This table includes total wetland impacts, impacts to moderate quality wetlands, and impacts to high quality wetlands.

Table 2-10. Wetland Impacts for the Preferred Alternative.

Interchange Location	Total Wetland Impacts	Impacts to Moderate Quality Wetlands	Impacts to High Quality Wetlands
M-60	4.7 acres	2.3 acres	0.6 acres
Airport Road	0.7 acres	0.7 acres	0.0 acres
US-127 West	0.8 acres	0.0 acres	0.0 acres
M-106 (Cooper Street)	1.1 acres	1.1 acres	0.0 acres
Elm Road	0.3 acres	0.0 acres	0.0 acres
US-127 East	13.5 acres	1.6 acres	1.9 acres
Sargent Road	11.0 acres	8.5 acres	2.6 acres
Total	32.1 acres	14.2 acres	5.1 acres

Wetland impacts may be further minimized by using design features such as steep side slopes on fill embankments, minor alignment shifts, and considering the use of retaining walls at key locations. These detailed design features will be considered during the design phase of the project. Section 4 of this FEIS identifies wetland mitigation commitments for the Preferred Alternative. Lastly, as noted in Section 4.8 of this document, wetland mitigation credits are being purchased from a MDEQ approved wetland mitigation bank as mitigation for the wetland functions that are lost as a result of unavoidable impacts caused by the Preferred Alternative.

2.3.5.2 Wetland Mitigation Site Impacts

MDOT is in the process of purchasing wetland mitigation credits from the Parma wetland bank site which is described in Chapter 5 of the DEIS. This privately owned site is located within the Grand River watershed and is approximately 200 acres. Development of this property for use as a mitigation site for the I-94 Jackson project would result in minimal impacts. Specifically, about 60 acres of farmland would be removed from production. This site was also reviewed for other potential impacts. No other impacts were identified. Therefore, this site was classified and cleared as a Categorical Exclusion in 2006.

2.3.5.3 Mitigation

Section 4 of this document provides information regarding additional wetland mitigation measures for the Preferred Alternative.

2.3.6 Noise

Minor amounts of noise impacts are anticipated as a result of the Preferred Alternative. It should be noted that the modification of Practical Alternative I to Alternative D-1 increased these impacts, but the number of potential new impacts is low. The increased noise impacts as a result of the inclusion of Alternative D-1 are based on a qualitative assessment from the professional experience of the project team and the quantitative evaluation of Practical Alternative I in the noise technical report (CH2M Hill 2002). The increase in noise can be attributed to the addition of loop ramps in the northwest and southeast quadrants of the interchange and their proximity to noise receivers. The noise analysis will be reevaluated and updated during the design phase of the project. Additional information on noise mitigation can be found in Section 4.4.

2.3.7 Community & Neighborhood Impacts

At the Elm Road interchange, Practical Alternative III was selected for inclusion in the Preferred Alternative. In the DEIS, this alternative included a retaining wall along the southern side of the off-ramp in the southwest quadrant of the interchange (DEIS Figure 3-10, sheet 5). However, based on the opinions of residents in this area and more detailed design efforts, this retaining wall will not be included as part of the Preferred Alternative. As a result, the Preferred Alternative would have impacts to the small neighborhood located along Barrett Lane to the south of this freeway off-ramp. Six residences and one

commercial business located along the north side of Barrett Lane would require relocation as a result of this change. With approximately 12 homes in this neighborhood, about half of the residences in the neighborhood would be removed. As a result, this neighborhood would be negatively affected.

2.3.8 Environmental Justice

Because the Preferred Alternative would result in ROW acquisition, relocations, noise impacts, and neighborhood impacts in census tract 59 (a tract with low-income populations that are higher than the average for Jackson County), environmental justice was investigated in detail. Tract 59 has approximately 21 percent of households below the poverty level (i.e., “low-income”), which is above the Jackson County average of 11 percent. Extensive data was collected, and coordination was conducted with local and state agencies, and the Region 2 Planning Commission (the Metropolitan Planning Organization for the Jackson area). None of the collected evidence indicated that there were disproportionate impacts to “low-income” populations. Additionally, many of the impacted residents attended the public meetings, and concerns were not raised by these residents regarding impacts to low-income households. Although about six of the 12 residences along Barrett Lane will be relocated as a result of the Preferred Alternative, the decision to relocate these residences rather than save them using a retaining wall was partially based on the opinions expressed by these residents at public meetings. After conducting a thorough investigation of all available data sources and a proactive public involvement effort, no disproportionately high and adverse impacts were identified to low-income populations.

As noted in the DEIS, extra efforts were made to notify minority and low-income populations that could be affected by the project about public information meetings. Prior to these meetings, notices were posted at numerous locations both within and outside the project area. These included eight churches (including two predominantly minority churches and two churches in low-income census tracts), a convenience store, a shopping area, a publicly subsidized housing complex, and the Family Independence Agency office in downtown Jackson. All of the public information meetings were held at Baker College, a location served by the local bus service in Jackson.

During the course of the study investigations were conducted to determine the percentage of minority-owned businesses within the project area. Information from the U.S. Census Bureau revealed that in 1997, approximately 4.3% of the businesses in the Jackson Metropolitan Area were minority owned. In comparison, approximately 7.6% of the businesses in the state of Michigan were minority-owned. This FEIS identifies that eight (8) businesses will require relocation as a result of the Preferred Alternative. Assuming that approximately 4.3% of the businesses impacted by the Preferred Alternative are minority owned, the number of minority-owned businesses impacted is less than one (1). Therefore this study concludes that no disproportionately high and adverse impacts were identified to minority-owned businesses.

2.3.9 Cultural Resources

Once the Preferred Alternative was identified, archaeological investigations were conducted. This included a search of background literature and field surveys (Phase I investigations). During field surveys, four archaeological sites were identified. However, these sites either had poor integrity or had little evidence of buried artifacts. The State Historic Preservation Officer (SHPO) has reviewed the results of the Phase I investigation and agrees that none of the identified sites are eligible for the NRHP. Correspondence from SHPO documenting this determination is included in Appendix C. As a result of SHPO concurrence, Phase II investigations are not required. Based on these survey results, the Preferred Alternative would not affect any NRHP-eligible archaeological sites.

Since publication of the DEIS, SHPO has also provided concurrence regarding the project’s effects on above ground sites. A letter documenting this concurrence is located in Appendix C.

Since the release of the DEIS in 2002, the site containing the Best Hotel has been cleared and the structures removed by private development. The site is located at 1725 West Avenue in the southeast quadrant of the I-94 and US-127 West interchange. The structure was noted as being eligible for the NRHP in Section 4.15 of the DEIS.

2.3.10 Underground Mines

Because all of the Practical Alternatives are similar at the locations where underground mines are located, any additional construction costs due to special engineering techniques would be similar for all alternatives at a specific location. This issue will be investigated early in the design phase of the project.

2.3.11 Recent Developments

Since the release of the DEIS in 2002, there have been new developments at certain sites along I-94 and its interchanges that may be potentially affected by implementation of the Preferred Alternative. Coordination was conducted with local jurisdictions including the City of Jackson, Blackman Township, and Leoni Township. A visual inspection of the corridor was also conducted in May 2005 to identify these sites. The following discussion addresses the potential impacts of the Preferred Alternative on those more recent developments.

2.3.11.1 US-127 West

The Preferred Alternative for this interchange includes a 30-40 foot re-alignment shift of Shirley Road to the northeast. There will be a need for approximately 30-40 feet more ROW than currently exists along this segment of Shirley Road. A recently built Hampton Inn has driveway access to Shirley Road, north of the Super 8 Motel driveway. However, the Hampton Inn building is a considerable distance from Shirley Road, and the effects of a somewhat shorter driveway caused by the construction of the Preferred Alternative would be negligible.

The site containing the Best Hotel, located at 1725 West Avenue, was recently cleared and the structures removed by private development. The site is located in the southeast quadrant of the I-94 and US-127 West interchange. The structure was noted as being eligible for the NRHP in Section 4.15 of the DEIS.

2.3.11.2 Cooper Street

The Jackson Building Materials Company was recently constructed on Rosehill Road just northeast of the interchange. Since the Preferred Alternative for this interchange does not involve any re-alignment of Rosehill Road, implementation of the Preferred Alternative is not expected to impact this site.

2.3.11.3 Elm Road

A Ford automobile dealership was recently constructed along the south side of Seymour Road, approximately one-half mile east of the Elm Road interchange. The implementation of the Preferred Alternative will cause a re-alignment of Seymour Road to meet Elm Road at a point farther to the north. However, the alignment of Seymour Road will remain the same along that segment on which the automobile dealerships exist. Therefore, the implementation of the Preferred Alternative will not impact this site. It should be noted that the Carpool Lot located along Seymour Road near the northeast quadrant of the I-94 and Elm Road interchange has been closed. The new location, which is currently open, is along Rosehill Road near the northwest quadrant of the I-94 and Elm Road Interchange. The new location was designed to meet the interchange layout, as well as the Preferred Alternative layout and is accessed from Rosehill Road along the south side of the new Carpool Lot. The access to the new Carpool Lot can be changed to coincide with the relocated Rosehill Road included in the Preferred Alternative.

2.3.11.4 Sargent Road

The Roberts Arena hockey facility is a recent development located along the south side of Ann Arbor Road, and less than one-half mile west of the Sargent Road interchange. The alignment of this segment

of Ann Arbor Road will remain the same as currently exists during the implementation of the Preferred Alternative, and this site will therefore not be impacted.

The SJF America business is a recent development located at the northwest quadrant of the Sargent Road interchange. The current design of the Preferred Alternative shows there will potentially be a loss of parking near the roadway, south of the building. However, these impacts would be minor and it is likely that the parking area could be accommodated or mitigated during the design phase of the project.

Plans have been submitted by the Jackson County Road Commission for improvements to Sargent Road. The plans include widening Sargent Road to three lanes north of I-94 (beyond the westbound I-94 exit ramp) to the Dawn Foods Warehouse (the Old Jacobson's facility) entrance. This is a distance of approximately 300 feet with an additional 100 foot taper beyond the warehouse entrance. The work is anticipated to be completed in 2007.

2.3.12 Impact Summary for the Preferred Alternative

With the exception of the changes noted in Section 3 of this document, the impacts of the Preferred Alternative would be the same as those described for the appropriate alternatives (i.e., the alternative selected at each interchange location as indicated in Table 2-1 and in Chapter 5 of the DEIS). Table 2-11 of this FEIS summarizes the impacts of the Preferred Alternative.

Table 2-11. Summary of Impacts for the Preferred Alternative.

Resource Issue	Impacts
Land Use	
Degree of induced development	Low
Farmland	
Acres of prime farmlands converted to ROW	2.8 acres
Acres of active farmlands impacted	10-15 acres
Relocations and ROW Impacts	
Number of residential displacements	12
Number of commercial, industrial, and institutional displacements	9
Number of properties with parking impacts	6
Acres of ROW acquisition	111 acres
Community and Neighborhood Impacts	
Impacts to neighborhoods	Moderate
Impacts to existing traffic patterns, access, and circulation	Low
Negative impacts to perceived quality of life	Low
Economic Conditions	
Negative impacts to businesses	Low
Environmental Justice	
Disproportionately high and adverse impacts to minority and low-income populations	None
Pedestrians & Bicyclists	
Change in access and circulation	None
Air Quality	
Violations of the National Ambient Air Quality Standards (NAAQS)	None
Noise	
Number of receivers that would suffer noise impacts	223
Surface Water	
Negative impacts to water quality	Low
Negative impacts to rivers and drains	Low
Groundwater	
Negative impacts to groundwater quality	Low
Floodplains	
Acres of floodplain impacted	3.9 acres
Wetlands	
Acres of wetlands impacted	32.1 acres
Wetland impacts due to stormwater runoff	Low
Wetland impacts due to sedimentation	Low
Wetland impacts due to changes in hydrology	Low
Threatened & Endangered Species	
Acres of Indiana bat habitat impacted	1.9 acres
Vegetation & Wildlife	
Impacts to existing vegetation communities	Low
Increase in wildlife auto crashes	Low
Aquatic Ecology	
Impacts to aquatic ecology of the Grand River and drains	Low
Cultural Resources	
Number of impacted sites eligible for the National Register of Historic Places (NRHP)	1
Hazardous Materials	
Number of known contaminated sites where ROW acquisition is needed	4
Impacts to remediation efforts at Mechanical Products, Inc. site	None
Visual Conditions	
Negative impacts to visual conditions	Low

2.3.13 Project Funding

MDOT has developed a long range planning estimate of funds that will be available for road improvements over the next 30 years for the planning area. This estimate incorporates funding for all projects including capacity improvements/new roads (CI/NR) and rehabilitation and reconstruction (R&R) projects. The total estimated funds available for all transportation improvements in the entire multi-county planning area over the next 30 years are approximately \$635,744,467 with \$467,797,959 planned for road preservation, \$51,788,037 allocated to improve road capacity and create new roads, and \$116,158,471 set aside for multimodal improvements.

With a projected cost of \$409 million (in year 2005 dollars) for the Preferred Alternative, sufficient funding is not available for construction of the entire Preferred Alternative. Instead, MDOT will construct portions of the Preferred Alternative based on traffic volume needs, congestion and funding availability over the next 20 years. MDOT currently has \$15.4 million for improvements identified as part of the Preferred Alternative. One million dollars will come from a remaining earmark in TEA-21, and an additional \$14.4 million will come from SAFE TEA-LU funds. The Preferred Alternative has been divided into three separate phases as follows:

- **Phase I:** Sargent Road interchange reconstruction, including the closure of the I-94 BL, and the replacement of the Hawkins Road and Dettman Road bridges;
- **Phase II:** US-127/M-50/West Avenue interchange reconstruction, Elm Road interchange reconstruction, final phases of the Sargent Road interchange reconstruction, replacement of the Lansing Road bridge, and replacement and widening of the I-94 bridge over the Grand River
- **Phase III:** US-127 south interchange reconstruction, Cooper Street interchange reconstruction, widen I-94 between the two legs of US-127, Airport Road interchange reconstruction, widen I-94 from US-127 south to Sargent Road, M-60 interchange reconstruction, widen I-94 from US-127/M-50/West Avenue to M-60

The approximate time frame of each phase and the preliminary cost is shown in Table 2-12. These priorities were determined at the time of this study and are based upon the availability of funding. MDOT will periodically reevaluate the priorities and monitor the condition, capacity and safety needs along the corridor based upon the purpose and need for the I-94 Modernization Study.

Due to funding availability, the design, ROW acquisition, and interchange work at the Sargent Road interchange will be phased. The first phase will be to reconstruct the Sargent Road bridge and realign the eastbound ramps on the south side of the interchange as defined in the study. The westbound ramps will be phased in later years when funding becomes available. Phase I of the project will be added to the Regional Transportation Plan (RTP) in September of 2006. Because of deteriorating conditions on the Sargent Road, Dettman Road, and Hawkins Road bridges, FHWA will allow MDOT to go forward with the design phase of Phase I of the Preferred Alternative. Correspondence regarding MDOT's request and FHWA approval of the classification for the two bridges over I-94 at Dettman Road and Hawkins Road as a categorical exclusion can be found in Appendix C.

Table 2-12. Project Phasing

Phase	Estimated Start and Completion Date	Cost
Phase I	Years 0-5	\$15 million
Phase II	Years 5-25	\$148 million
Phase III	Years 25-40	\$246 million

Notes: Cost estimates are in year 2005 dollars and include design, ROW acquisition, and construction. All bridge and interchange reconstructions will provide for, but will not include, the widening of I-94. The reconstructed interchanges will be tied into the existing two lanes of I-94.

SECTION 3 - CHANGES TO DEIS

This section identifies corrections and additions to the information contained in the DEIS. These corrections and additions are based on input received during the public comment period and minor design changes to the Practical Alternatives once they were incorporated in the Preferred Alternative. **With the exception of the corrections and additions noted in this section, all information in the DEIS remains accurate and unchanged as a result of public comments received.**

3.1 DEIS ERRATA

This subsection identifies specific corrections to the DEIS. These corrections apply to the Practical Alternatives as documented in the DEIS. Because the Preferred Alternative (described in Section 2 of this FEIS) includes only one Practical Alternative at each interchange location, the changes described in this subsection may not apply to the Preferred Alternative (i.e., the changes described for a particular location may be for a Practical Alternative that was not selected at that location). Section 2 of this document specifies which Practical Alternative was selected at each interchange. Changes to the specific sections of the DEIS text are noted in italics.

3.1.1 Cooperating Agencies

The Signature Page shall be corrected by removing the U.S. Department of Interior, Fish and Wildlife Service from the listing of Cooperating Agencies. There is only one Cooperating Agency for this project and that is the U.S. Department of Interior, Office of Surface Mining.

The second bullet under Section 6.3 Agency Coordination should be replaced with the following new bullet:

- *Identification of the U.S. Office of Surface Mining Reclamation and Enforcement as a formal “cooperating agency”*

3.1.2 Major Unresolved Issue

Under Section 1.6 on page 1-4 of the DEIS, the existing paragraph should be replaced with the following paragraph:

One major unresolved issue exists for this project. The construction of this project is not currently included on the most recent Regional Transportation Plan (RTP) and Transportation Improvement Plan (TIP) for the Jackson metropolitan area. Any proposed construction projects must be formally added to these plans through the amendment process before the Federal Highway Administration (FHWA) will sign a Record of Decision (ROD) for a project. MDOT does not currently have the funding identified to construct the entire project. Therefore, the design and construction will be done in phases as funding becomes available. Funding is currently available to construct some portions of the improvements covered in the FEIS. The current funding will be used towards those improvements identified as Phase I of the project, the reconstruction of the Sargent Road interchange, and the replacement of the Hawkins Road and Dettman Road bridges. Additional phases are identified in the FEIS. It is MDOT's intention to forward this project, with one ROD for the entire Preferred Alternative, to FHWA for approval. Phase I of the project will be added to the RTP in September of 2006.

3.1.3 Other Federal Actions Requested

Under Sections 1.7 (page 1-6) and 5.19 (page 5-34) of the DEIS, the first bullet should be replaced with the following new bullet:

- Part 303, *Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451 as amended (NREPA) Permit*: Because the alternatives will result in wetland impacts, this permit is required by NREPA (in lieu of a Clean Water Act Section 404 Permit as Michigan has assumed jurisdiction over inland [not contiguous with the Great Lakes or connecting waters] wetlands from the Federal Government). This permit will be obtained from the Michigan Department of Environmental Quality's (MDEQ) Land and Water Management Division. The U.S. Army Corps of Engineers and the U.S. Environmental Protection Agency (EPA) may be involved in reviewing this permit application.

Under Sections 1.7 (page 1-6) and 5.19 (page 5-34) of the DEIS, the third bullet should be replaced with the following new bullet:

- *Floodplain Regulatory Authority found in Part 31, Water Resource Protection, of the NREPA*: Because floodplains will be impacted, this permit is required under NREPA. This permit will be obtained from MDEQ's Land and Water Management Division. The U.S. Army Corps of Engineers and EPA may be involved in reviewing this permit application.

3.1.4 Water Resources

3.1.4.1 Surface Water

Under Section 4.10.1 on page 4-7 of the DEIS, the first paragraph should be replaced with the following new paragraph:

The entire project area is located within the upper Grand River watershed, with several county drains, lakes, *streams*, detention basins, and the Grand River within or close to the project area (Figure 4-5). Many of these water bodies are adjacent to or are connected to wetlands. With the exception of detention basins, these water bodies are regulated by the Federal Clean Water Act (CWA) and NREPA. Additionally, *impacts to* county drains and detention basins are regulated by the Jackson County Drain Commission, *and in most cases require a permit from MDEQ*.

Under Section 4.10.1 on page 4-8 of the DEIS, the second sentence in the second paragraph should be replaced with the following new sentence:

These include the Sandstone Blackman Drain, an unnamed drain, the Hurd Marvin Drain, the Pool Drain, the Thompson Lake Drain, the Ruel Drain, *and the Gregory Drain* (Figure 4-5).

Under Section 4.10.1 on page 4-9 of the DEIS, these two new paragraphs should be inserted after the first paragraph:

The Gregory Drain originates in a wetland on the east side of US-127 East. The drain flows from east to west through a four-foot diameter concrete box culvert under US-127. The drain is approximately three feet wide and less than one foot deep within the project area. The bottom substrate consists of a sand/muck mix.

The Brill Lake Inlet is a stream located at the east end of the project area. This stream originates south of the project area and flows north under eastbound I-94 through a four-foot diameter concrete box culvert into the median. The inlet continues north in an open ditch through the median and then goes under westbound I-94 through another four-foot diameter concrete box culvert. The stream then continues north and discharges into Brill Lake. The inlet is three to six feet wide and less than one foot deep within the project area. The bottom substrate is composed

mainly of sand within the project area, although as it approaches Brill Lake, the substrate composition changes to primarily muck and other organic components.

Figure 4-5 from the DEIS incorrectly omitted the Gregory Drain and does not label the Brill Lake Inlet. This figure has been corrected and is included as Figure 5 in this document.

Under Section 5.10.1.2 on page 5-19 of the DEIS, the existing first paragraph should be replaced with the following paragraph:

This alternative would directly impact drains at six existing crossings *and one existing stream crossing* where culvert lengths would be increased (this would be accomplished by replacing existing culverts with new, longer culverts). All of these *water bodies* are regulated as waters of the State of Michigan. At the western end of the project area, this alternative would require an increase in the total culvert length at the unnamed drain that flows through the M-60 interchange. At both locations where this drain crosses under the interchange, existing total culvert lengths would need to be increased by about 50 to 100 feet. Under this alternative, modifications would be required to the Hurd Marvin Drain. Where this drain flows under I-94 and the US-127 West interchange, existing culvert lengths would be increased by about 50 feet. The Thompson Lake Drain would require the existing culvert length to be increased by about 50 feet. Additionally, the Ruel Drain would require an increase in culvert length of 50 to 100 feet. *Lastly, this alternative would require the replacement of the existing I-94 culvert at the Brill Lake Inlet with a culvert that is about 50 feet longer than the existing culvert.* The locations of these drains *and stream* are shown in Figure 4-5 of the DEIS. Increasing these culvert lengths would result in impacts to aquatic habitat. These would result from vegetation removal, changes in channel substrate, and enclosing the drain. Aquatic habitat would be essentially removed from the areas where a drain *or stream* is within a culvert. Increasing the length of existing culverts would also probably result in changes to stream channel stability. Stability changes could include channel down-cutting, changes in channel depth and width, and changes in channel substrate (the size/type of particles making up the stream bottom). These impacts may in turn slightly alter the quality of the existing aquatic habitat of these streams.

Under Section 5.10.1.3 on page 5-20 of the DEIS, the existing paragraph should be replaced with the following paragraph:

The impacts resulting from Practical Alternative II are the same as those discussed under Practical Alternative I, with *four* exceptions. First, at the US-127 West interchange, the Hurd Marvin Drain would need to be relocated for about 500 feet in the northwestern quadrant of the interchange (Figure 3-9, sheet 4). *This relocation would not result in a net loss of length in the Hurd Marvin Drain.* Second, at the same interchange, Shirley Road would be realigned, requiring a new culvert of approximately 100 feet over the Hurd Marvin Drain (Figure 3-9, sheet 4). *Third*, north of the US-127 West interchange, the existing Pool drain culvert would require lengthening by approximately 50 feet on both sides of the roadway. *Last, Practical Alternative II would require lengthening of the existing culvert over the Gregory Drain by about 50 feet on both sides of US-127.* As with Practical Alternative I, these impacts would result in the loss of aquatic habitat and some stream channel instability.

Under Section 5.10.1.4 on page 5-20 of the DEIS, the existing paragraph should be replaced with the following paragraph:

The impacts resulting from Practical Alternative III are the same as those discussed under Practical Alternative I except at the US-127 West *and US-127 East interchanges.* *At the US-127*

West interchange, Practical Alternative III crosses the Hurd Marvin Drain, and either four additional culverts of about 100 feet each or one continuous culvert of about 1,000 feet would be required. *This would not result in a net loss of length in the Hurd Marvin Drain.* However, there is the potential for a net loss of open channel and aquatic habitat. This alternative would not require increasing the length of the existing Hurd Marvin Drain culvert on the east side of the interchange. Additionally, at this same interchange, the existing Pool Drain culvert would need to be lengthened by approximately 50 feet on the west side of US-127. As with Practical Alternative I, these impacts would result in the loss of aquatic habitat and some stream channel instability. However, these impacts would be more substantial than either Practical Alternative I or II. *Practical Alternative III would also require lengthening of the existing culvert over the Gregory Drain by about 50 feet on both sides of US-127.*

Under Section 5.22.5 of the DEIS, BMPs should not include straw bales. The second sentence in the second paragraph should be replaced with the following.

BMPs to be used may include silt fences, coffer dams, check dams, matting, temporary and permanent revegetation, organic fertilizer, and sediment basins.

3.1.4.2 Groundwater

Under Section 5.22.6 on page 5-43 of the DEIS, the last sentence of the second paragraph should be replaced with the following.

Beyond these items, the contractor will need to meet all other *Michigan Department of Community Health (MDCH)*, local health department, and MDEQ requirements designed to protect groundwater quality.

3.1.4.3 Floodplains

Under Section 4.10.3 on pages 4-9 and 4-10 of the DEIS, the first paragraph should be replaced with the following new paragraph:

National Flood Insurance Program (NFIP) maps prepared by the Federal Emergency Management Agency (FEMA) indicate that 100-year *mapped* floodplains exist only along the Grand River within the project area (Figure 4-5). In the vicinity of I-94, this floodplain is approximately 900 feet wide with the current bridge structure (fill embankment approaches and bridge piers) constricting the floodplain immediately under I-94. This existing floodplain encroachment is a “transverse” encroachment, meaning that the road crosses the floodplain at a right angle and does not run parallel to the floodplain. Within and near the project area, there is very little development within the Grand River floodplain except for the I-94 bridge. *Although not mapped, floodplains also exist along the other drains and streams in the project area. Preliminary investigations indicate that only one stream crossing (the Brill Lake Inlet) has an upstream drainage area of two square miles or greater, making it subject to regulations under Part 31 of NREPA.*

Under Section 5.10.3 on page 5-23 of the DEIS, the first paragraph should be replaced with the following new paragraph:

Within the project area, the only *mapped* 100-year floodplain is located along the Grand River (Figure 4-5). Practical Alternative I would impact approximately 3.5 acres of the 100-year NFIP floodplain along the Grand River, while Practical Alternatives II and III would impact about 4.0 acres. At the floodplain crossing, fill would be placed within the floodplain. *The replacement bridge will be designed to locate piers and fill placement that will not cause a rise in the flood*

elevation. There may be about 3.5-4.0 acres of additional fill in the floodplain at the bridge approaches to accommodate the additional highway width. A preliminary bridge hydraulics analysis of the I-94 bridge over the Grand River and Norfolk Southern Railroad was conducted (CH2M Hill 2005). The analysis looked at the Grand River as it relates to the replacement bridge proposed. The HEC-RAS computer model was used to model hydrologic conditions in the river. The model analyzed the existing bridge compared to the proposed bridge. The results of the model showed no change between the existing bridge and the bridge proposed under the Preferred Alternative and projected that no harmful interference will occur. This floodplain encroachment would be considered a “transverse” encroachment, meaning that the road would cross the affected floodplain at a right angle and would not run parallel to the affected river. The existing floodplain constriction would not be worsened by the build alternatives since all floodplain impacts would occur on the north and south sides of the existing bridge approaches (i.e., where I-94 crosses the floodplain, the existing floodplain width would not be changed - Due to the relatively high costs of lengthening the bridge structure and because there are no existing flooding problems at this location, a longer bridge is not practical). Given this situation, no additional harmful interference to flood water conveyance would be created by the build alternatives. In addition to these impacts, the build alternatives would result in impacts to floodplains along the minor drains and streams that would be crossed. These impacts would not cause harmful interference to flood water conveyance. Additionally, the new crossing at the Brill Lake Inlet is also regulated by MDEQ under Part 31 of NREPA.

3.1.5 Threatened & Endangered Species

Under Section 5.12.3 on page 5-28 and Section 5.22.9 on page 5-45 of the DEIS, the existing first paragraph should be replaced with the following new paragraph:

Impacts to *potential* Indiana bat habitat (shown in Figure 4-1 of the DEIS) will be mitigated by not cutting any trees within possible habitat during the time period when this species could be present in Michigan. Specifically, trees in *potential* Indiana bat habitat will not be cut between April 1 and October 1 to protect maternal roosting colonies.

3.1.6 Hazardous Materials

Under Section 5.16.5 on page 5-32 and Section 5.22.11 on page 5-45 of the DEIS, the second to the last bullet should be replaced with the following new bullet:

- *During the design phase*, the MDEQ Storage Tank Division will be consulted regarding underground storage tank (UST) and leaking UST properties adjacent to construction areas to assure that new exposure pathways are not created.

3.1.7 Air Quality

Under Section 5.8 on page 5-11, Table 5-2 should be replaced with the following new table. The 1-hour and 8-hour CO standards have been included at the end of the table.

Table 3-1. Predicted Worst Case Carbon Monoxide Concentrations for the Year 2025.

Intersection (peak hour)	No Build Alternative		Practical Alternative I		Practical Alternative II		Practical Alternative III	
	1-hour Level*	8-hour Level*	1-hour Level*	8-hour Level*	1-hour Level*	8-hour Level*	1-hour Level*	8-hour Level*
EB off ramp/Airport Road (p.m.)	10.70	6.64	9.20	5.59	10.90	6.78	10.90	6.78
O'Neil Road/Airport Road (p.m.)	10.20	6.29	9.60	5.87	NA	NA	NA	NA
WB off ramp/M-50 (a.m.)	11.20	6.99	NA	NA	NA	NA	NA	NA
WB off ramp/M-50 (p.m.)	11.10	6.92	10.90	6.78	12.90	8.18	13.00	8.25
EB off ramp/M-50 (p.m.)	10.60	6.57	NA	NA	NA	NA	NA	NA
Boardman Road/M-50 (a.m.)	10.50	6.50	NA	NA	NA	NA	NA	NA
Boardman Road/M-50 (p.m.)	12.10	7.62	13.80	8.81	12.20	7.69	12.90	8.18
Springport Road/M-50 (a.m.)	NA	NA	NA	NA	13.10	8.32	13.10	8.32
Springport Road/M-50 (p.m.)	NA	NA	NA	NA	14.00	8.95	14.00	8.95

* All levels are presented in parts per million (ppm).

NA = Not applicable - CO hot spot modeling was not performed for these intersections because they are projected to be at level of service C or better.

** The 1-hour standard for CO is 35 ppm. The 8-hour standard for CO is 9 ppm.

SECTION 4 - SUMMARY OF MITIGATION MEASURES

This section lists the mitigation commitments for the Preferred Alternative. A Project Mitigation Summary Green Sheet is included at the end of this section.

The goal of mitigation measures is to preserve, to the greatest extent possible, existing neighborhoods, land use, and resources, while improving transportation. Although some adverse impacts are unavoidable, the Michigan Department of Transportation (MDOT), through the route location, design, environmental clearance, and construction processes, takes precautions to protect as many social and environmental systems as possible. Construction activities which include the mitigation measures included below are those contained in the 2003 MDOT Standard Specifications for Construction.

The following paragraphs discuss the mitigation concepts that are being considered at this time. Without the benefit of detailed design plans and data, tentative mitigation ideas are proposed as a means to avoid or reduce adverse impacts on identified resources. Further agency coordination will continue through the design stage. Design plans will be reviewed by MDOT personnel prior to contract letting in order to incorporate any additional social, economic, or environmental protection items. Construction sites will be reviewed to ensure that the mitigation measures proposed are carried out, and to determine if additional protection is required.

More mitigation measures may be developed if additional impacts are identified. Specific mitigation measures will be included on the design plans and permit applications.

4.1 RELOCATIONS AND ROW IMPACTS

1. **Compliance with State and Federal laws** – Acquisition and relocation assistance and advisory services will be provided by the Michigan Department of Transportation (MDOT) in accordance and compliance with Act 31, Michigan P.A. 1970; Act 227, Michigan P.A. 1972; the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended; and Act 87, Michigan P.A. 1980, as amended. The MDOT will inform individuals, businesses and non-profit organizations of the impact, if any, of the project on their property. Every effort will be made through relocation assistance to lessen the impact when it occurs.
2. **Residential** – The MDOT is required by statute to determine the availability of comparable, decent, safe and sanitary housing for eligible displaced individuals. The MDOT has specific programs to implement the statutory and constitutional requirements of property acquisition and relocation of eligible displacees. Appropriate measures will be taken to ensure that all eligible displaced individuals are advised of the rights, benefits, and courses of action available to them.
3. **Business, Farms or Non Profit Organizations** – The MDOT is required by statute to offer relocation assistance to displaced businesses, farms and non profit organizations. The MDOT has specific programs that will implement the statutory and constitutional requirements of property acquisition and relocation of eligible displacees. Appropriate measures will be taken to ensure that all eligible displaced businesses, farms or non profit organizations are advised of the rights, benefits, and courses of action available to them. Displaced businesses and organizations will be encouraged to relocate within the same community.
4. **Purchasing Property** – The MDOT will pay just compensation for fee purchase or easement use of property required for transportation purposes. "Just compensation" as defined by the courts is

the payment of "fair market value" for the property rights acquired plus allowable damages to any remaining property. "Fair market value" is defined as the highest price estimated, in terms of money, the property would bring if offered for sale on the open market by a willing seller, with a reasonable time allowed to find a purchaser, buying with the knowledge of all the uses to which it is adapted and for which it is capable of being used.

5. **Relocation Information** – A booklet entitled "Your Rights and Benefits" detailing the relocation assistance program can be obtained from the Michigan Department of Transportation, Real Estate Support Area, P.O. Box 30050, Lansing, Michigan, 48909 or phone (517) 373-2200.
6. **Property Acquisition Information** – A booklet entitled "Public Roads & Private Property" detailing the purchase of private property can be obtained from the Michigan Department of Transportation, Real Estate Support Area, P.O. Box 30050, Lansing, Michigan, 48909 or phone (517) 373-2200.
7. **Conceptual Stage Relocation Plan** – The Conceptual Stage Relocation Plan for this project is attached in Appendix B. A review of local real estate listings and coordination with local officials indicated that comparable replacement property is available within the study area communities for the residences, businesses, and county facility (an animal shelter) that would be relocated.

4.2 COMMUNITY AND NEIGHBORHOOD IMPACTS

Disruption of traffic and detours during construction will be minimized to the extent possible for the Preferred Alternative. During construction, reasonable access will be maintained to all residences and neighborhoods. Additionally, alternate routes will be clearly marked for use by emergency vehicles. Preliminary investigations and coordination with surrounding school districts showed no significant issues regarding school busing. Once specific construction and design plans are in place, additional coordination will be conducted with surrounding school districts to confirm that construction along Sargent Road will not affect school busing.

4.3 AIR QUALITY

All construction contractors that work on this project will be required to comply with relevant federal, state, and local laws governing the control of air pollution. Contractors will also be responsible for adequate dust control measures to protect public health and welfare. All bituminous plants, Portland cement concrete proportioning plants, and crushers must meet the requirements of Part 55 of NREPA. Portable bituminous or concrete plants will also be required to obtain permits from the Air Quality Division of MDEQ. Dust collectors will be provided on all bituminous and concrete proportioning plants. Dry, fine aggregate material removed by the dust collector will be returned to the dryer discharge.

4.4 NOISE AND VIBRATION

Noise walls will likely be constructed at two locations. At the first location, a 10 to 12-foot high noise wall will likely be constructed in the southeast quadrant of the US-127 West interchange. At the second location, a 12-foot high noise barrier will likely be constructed near the residential area west of Sargent Road on Trailer Park Drive. The opinions of impacted residents will be considered before reaching a final decision regarding these walls. All noise walls will be evaluated in greater detail during the design phase of the project. If any relevant conditions (e.g., design details, traffic projections, cost estimates) have substantially changed at that time, noise walls may not be provided. A final decision regarding the

installation of noise walls will not be made until the completion of the design phase and all related public involvement. A copy of the *Traffic Noise Analysis for the I-94 Jackson Freeway Modernization Project* (CH2M Hill 2002) is available upon request. This analysis will be updated using the most current MDOT noise guidelines during the design phase. Noise wall locations are shown in Figure 2.

Construction noise will be minimized by the use of mufflers on construction equipment. Air compressors will meet Federal noise level standards and will, if possible, be located away or shielded from residences and other sensitive noise receivers.

Where pavement must be fractured or structures must be removed, care will be taken to prevent vibration damage to adjacent structures. In areas where construction-related vibration is anticipated, basement surveys will be conducted before construction begins to document any damage caused by highway construction.

4.5 SURFACE WATER

Highway runoff from the Preferred Alternative will outlet into roadside ditches which will provide filtering through vegetation before the runoff is discharged into adjacent rivers, drains, streams, lakes, or wetlands. Filtering highway runoff through vegetated ditches has been proven an effective method of treating highway runoff by removing sediments and some of the associated pollutants such as oils, greases, and heavy metals. The median drainage will be picked up in an enclosed system, which will outlet into detention basins or a vegetated ditch system.

Additional highway runoff detention/retention areas will be incorporated into the M-60, US-127 West, Elm Road, US-127 East, and Sargent Road interchanges during the design phase of the project. The detention/retention basins will outlet into vegetated ditches where possible, for additional treatment of highway runoff. Basins will be sized to handle the first-flush flow as defined by the MDOT Drainage Manual and will be designed such that no harmful interference will occur from a 10-year storm event for an enclosed storm system, and a 25-year storm event for an open channel system for size, checked against a 100-year storm event. A combination of detention basins and vegetated ditches will be designed to handle highway runoff at the Grand River and at the fens located south of Brill Lake at the eastern end of the project area. As requested during coordination with the Jackson County Drain Commissioner, no additional I-94 drainage will be added to the Thompson Lake Drain, which is at capacity. MDOT will perform routine maintenance on detention basins to assure that trapped sediments are regularly removed.

To protect surface water quality, Best Management Practices (BMPs) will be implemented to minimize soil erosion during construction. BMPs to be used may include silt fences, coffer dams, check dams, matting, temporary and permanent revegetation, organic fertilizer, and sediment basins. If impacts occur from sedimentation during construction, corrective action will be taken immediately. During construction, all disturbed areas will be revegetated as early as possible to meet the standard requirements of the MDEQ and MDOT.

In addition to these BMPs, a soil erosion control plan will be developed that identifies the specific locations and types of erosion control measures to be implemented. This plan will be developed as part of the design phase of this project. MDOT is an Authorized Public Agency that has an approved soil erosion and sedimentation control plan on file with the MDEQ. The soil erosion control plan developed during the design phase will be consistent with this MDEQ-approved plan. A Notice of Coverage will be submitted to the MDEQ to satisfy National Pollutant Discharge Elimination System (NPDES) coverage requirements and a NPDES Phase 2 permit will be required.

Routine inspections of the construction site will be performed at least once per week and within 24 hours of a precipitation event that causes runoff. All inspections will be performed and documented by a Certified Storm Water Operator for Construction Sites.

During the design phase of the project, MDOT will investigate the possibility of having open channels for drains and streams in medians and also between freeway ramps and the I-94 mainline.

4.6 GROUNDWATER

The Preferred Alternative will include special construction techniques for the bridge over the Grand River and the Norfolk Southern railroad tracks. In order to prevent contaminated groundwater in the shallow aquifer from being drawn to the south toward I-94, sheet piling and/or concrete slurry walls will be placed underground and will totally surround each individual location where subsurface work is required. This will allow each location where subsurface work is required at the bridge over the Grand River and the Norfolk Southern railroad tracks to be de-watered without continual pumping. Additionally, at each location where subsurface work is required for bridge footings or piers, special drilling and construction techniques will be used to prevent groundwater from the shallow aquifer from entering the deep aquifer. Special drilling techniques (such as double casings) will also be used when borings are drilled as part of geotechnical (subsurface soil) investigations. Details regarding exactly where and to what extent these mitigation measures are required will be determined based on additional studies during the design and ROW acquisition phases of the project. Contaminated water removed during construction will be collected and disposed of in accordance with all relevant federal, state, and local regulations. Prior to undertaking these activities, MDOT will coordinate with representatives from the property owner and provide them the ability to comment.

In order to protect groundwater quality, all disturbed sewer lines will be addressed in accordance with standard construction specifications that will be imposed upon the construction contractor. At businesses and residences that would be relocated, sewer lines will either be capped where the service line meets the main line or filled with concrete grout at the basement level, and water will be turned off at the street. If abandoned water wells and septic systems are encountered during construction, they will be addressed in accordance with standard construction specifications. At the structures that will be removed, the contractor will be required to fill in the foundation to ground level within 48 hours of demolition. Beyond these items, the contractor will need to meet all other Michigan Department of Community Health (MDCH), local health department, and MDEQ requirements designed to protect groundwater quality.

4.7 FLOODPLAINS

A preliminary bridge hydraulics analysis of the I-94 bridge over the Grand River and Norfolk Southern Railroad was conducted (CH2M Hill 2005). The analysis looked at the Grand River as it relates to the replacement bridge proposed. The HEC-RAS computer model was used to model hydrologic conditions in the river. The model analyzed the existing bridge compared to the proposed bridge. The results of the model showed no change between the existing bridge and the bridge proposed under the Preferred Alternative. The model showed no increase in backwater elevation at the 100 year storm event and projected that no harmful interference will occur.

Based on this study, it was concluded that the Preferred Alternative will not result in a significant floodplain encroachment and no mitigation is required. MDOT will also comply with Parts 31 and 301 of NREPA, 1994 PA 451 and the related administrative rules. A more detailed hydraulic analysis will be conducted during the design phase of the project

4.8 CONCEPTUAL WETLAND MITIGATION PLAN

In order to compensate for the approximately 32.1 acres of impacts to regulated wetlands caused by the Preferred Alternative, wetland mitigation credits will be purchased for the project. The anticipated impacts will require approximately 48.4 acres of wetland mitigation. This acreage reflects the standard MDEQ mitigation ratio of 1.5:1 for impacts to palustrine emergent (PEM), palustrine scrub-shrub (PSS), and palustrine open water (POW) wetlands and a 2:1 ratio for impacts to palustrine forested (PFO) wetlands. The wetland mitigation credits purchased from the approved wetland mitigation bank will replace the wetland functions and values lost as a result of the Preferred Alternative.

At this time, MDOT is in the process of purchasing mitigation credits from an approved wetland mitigation bank located near Parma (about six miles to the west of the project area) (Figure 6). This privately-owned parcel is used for agriculture, was formerly a wetland before being drained, is within the Grand River watershed, is about 200 acres in size, contains hydric soils, and has a convenient water source present. This site is also farther than five miles from the Jackson County Airport (Federal Aviation Administration regulations restrict wetland creation within this distance). Based on coordination during the course of the project, MDEQ has agreed that this site can be used for wetland mitigation (see 9/5/01 Resource Agency Meeting minutes in Appendix A of the DEIS for documentation). Because the owners of this site have developed a conceptual mitigation plan (including conceptual design drawings) MDEQ has agreed that a conceptual design drawing of the site is not required for this FEIS. A Categorical Exclusion was approved for this site in 2006.

It has been assumed that all the wetland mitigation for the project will occur at this preferred location, but a final decision will not be made until each individual project reaches the design and construction stage. If the preferred site is ultimately used for all wetland mitigation, the details concerning its use will be determined during the design and ROW acquisition phases of the projects when permit applications are prepared for submission to MDEQ. If this site becomes unavailable or additional wetland mitigation is necessary, potential backup sites have been identified in the DEIS.

4.9 THREATENED AND ENDANGERED SPECIES

The Indiana bat is the only threatened or endangered species that will be potentially impacted by the Preferred Alternative. Potential impacts to all threatened and endangered species that could be present in the project area were assessed in the DEIS. Impacts to potential Indiana bat habitat (shown in Figure 4-1 of the DEIS) will be mitigated by not cutting any trees within possible habitat during the time period when this species could be present in Michigan. The U.S. Department of the Interior, Office of Environmental Policy and Compliance has, through correspondence, recommended that potential roosting habitat not be disturbed from April 1 to October 1 to protect maternal roosting colonies. Therefore, trees in potential Indiana bat habitat will not be cut between April 1 and October 1.

4.10 CULTURAL RESOURCES

The historic importance of the site at 1644 Cooper Street will be documented by MDOT prior to its demolition. Additionally, a Memorandum of Agreement (MOA) has been developed among MDOT, FHWA, and SHPO regarding mitigation requirements at the site. This MOA is included in Appendix D of this document.

4.11 CONTAMINATED SITES

During the design phase of the project, specific mitigation strategies will be developed for each known or potentially contaminated site affected by the Preferred Alternative. The strategies will include the following measures:

- All known and potentially contaminated sites will be reviewed and/or further investigation and testing may be needed prior to design plans being completed. Based on the initial review, if it is determined that further investigation is needed, testing and site assessment will be done so that design plans will reflect any remediation or special construction needed to complete the project.
- All known and potentially contaminated sites will be managed in accordance with applicable State and Federal laws. Where appropriate, site-specific investigations will be completed to evaluate potential contamination and to determine if mitigation is necessary. If site-specific corrective action plans are needed, these plans may include the following mitigation strategies: (1) documenting properties using design and construction documents, (2) educating workers to identify potential contamination sources, (3) using appropriate personal protective equipment during construction, and/or (4) remediation (clean-up) of contaminated soil or groundwater.
- MDOT will evaluate and test sites that will affect the construction, design, cost, and worker safety issues. “Due Care” Plans may need to be developed for some contaminated sites. MDOT does not do corrective action or remediation of sites, but rather develops plans to avoid exacerbation and provide for worker safety and public protection from any contamination that may be exposed during construction.
- Preliminary site investigations (PSIs) that are conducted by consultants will identify contamination and provide direction for any mitigation of contamination during construction.
- MDOT will notify and coordinate with Mechanical Products, Inc. concerning proposed mitigation measures and work plans in the vicinity of the M-106 (Cooper Street) interchange.

4.12 VISUAL CONDITIONS

Visual impacts will be reduced by revegetating all cut slopes, fill embankments, and other disturbed soils at the earliest date possible. In addition, the Preferred Alternative will also include architectural treatments and details on bridges, retaining walls, and other infrastructure. These treatments will be based on a consistent theme throughout the project area. MDOT will work with the community to determine architectural treatments and details on infrastructure within the project area.

4.13 UNDERGROUND MINES

If abandoned underground mines are encountered as a result of geotechnical investigations, special construction techniques will be applied as needed to prevent road failures due to subsidence (sink-holes) or other sub-surface instability. Both the MDEQ Geologic Survey Division and the U.S. Department of Interior’s Office of Surface Mining Reclamation and Enforcement will be consulted to assist with geotechnical investigations and the development of any special construction techniques that are required.

4.14 SURPLUS MATERIAL

Surplus or unsuitable material generated by excavation or removal of buildings will be disposed of in accordance with the following provisions:

- When such material is to be disposed of outside the ROW, the contractor shall be responsible for obtaining written permission from the owner of the property onto which the material will be placed. In addition, no such material will be disposed of within wetland areas, watercourses, or designated floodplains (regardless of ownership) without prior approval and permits from all relevant resource agencies and the FHWA.
- All MDEQ regulations governing disposal of solid waste will be followed by the contractor.

November 2006

**I-94 Jackson Freeway Modernization Project
Final Environmental Impact Statement
FHWA-MI-EIS-02-01-F
Green Sheet: Project Mitigation Summary**

<i>Impact Category</i>	<i>Mitigation Measures</i>
I. Social and Economic Environment	
a. Noise	Noise walls are proposed at two locations. A 10 to 12-foot high noise wall is proposed in the southeast quadrant of the US-127 West interchange. A 12-foot high noise barrier will likely be constructed near the residential area west of Sargent Road on Trailer Park Drive.
b. Parking Impacts	Compensation will be provided to businesses that will lose parking as a result of the Preferred Alternative. Parking lot impacts are not anticipated to prohibit businesses operations.
c. Relocations	Acquisition and relocation assistance and advisory services will be provided by MDOT in accordance and compliance with Act 31, Michigan P.A. 1970; Act 227, Michigan P.A. 1972; the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended; and Act 87, Michigan P.A. 1980, as amended. MDOT will inform individuals, businesses and non-profit organizations of the impact, if any, of the project on their property. Every effort will be made through relocation assistance to lessen the impact when it occurs.
II. Natural Environment	
a. Wetlands	Wetland mitigation credits will be purchased from an approved wetland mitigation site to compensate for approximately 32.1 acres of impacts to regulated wetlands caused by the Preferred Alternative. This mitigation will total approximately 48.4 acres of mitigation wetlands. The location of the site is described in Section 4.8 of the FEIS. An Act 451, Part 303 permit will be obtained from MDEQ for this compensatory wetland mitigation.
b. Threatened & Endangered Species	Trees in potential Indiana bat habitat areas will not be cut between April 1 and October 1 to protect maternal roosting colonies.
c. Surface Water	The MDEQ and MDNR will be consulted concerning aquatic ecology and construction activities in the channel of the Grand River.
	Hydraulic studies have been performed and will be checked during the design phase of the project. At that time, specific details such as culvert length and sizes will be evaluated, and coordination with MDEQ will occur.
	During the design phase of the project, MDOT will investigate the possibility of having open channels for drains and streams in medians and between freeway ramps and the I-94 mainline. Preliminary investigations indicate that this may be possible inside the ramps at the M-60 interchange, the US-127 West interchange, and at the Brill Lake Inlet.
	All MDOT outfalls will be labeled in accordance with the MDOT statewide storm water permit.
d. Groundwater	Special construction techniques will be used for the bridge over the Grand River and the Norfolk Southern railroad tracks. Sheet piling and/or concrete slurry walls will be used to protect groundwater from known contamination.
e. Floodplains	Hydraulic studies have been performed and will be checked during the design phase of the project to ensure that the project will not cause harmful interference with flood elevations, either upstream or downstream, from the project area. For those locations where more than 300 cubic yards of fill are placed within the floodplain, an equal amount of earth (i.e.,

<i>Impact Category</i>	<i>Mitigation Measures</i>
	compensating cut) will be removed from the floodplain in the same general vicinity.
III. Cultural Environment	
a. 1644 Cooper Street	Prior to demolition or construction activity, MDOT will record the residence to create a permanent record of its existence. The record shall be submitted to the SHPO for review and approval before construction.
IV. Hazardous / Contaminated Materials	
a. Hazardous Sites	MDOT will notify and coordinate with Mechanical Products, Inc. concerning proposed mitigation measures and work plans in the vicinity of the M-106 (Cooper Street) interchange.
V. Construction	
a. Vibration	Basement surveys will be offered in areas where vibration effects could occur. These areas will be identified during the design phase, where pavement and bridge removal will occur, or where piling and/or steel sheeting is planned. Vibration impacts are not anticipated at this time.
b. Underground mines	If abandoned underground mines are encountered as a result of geotechnical investigations, special construction techniques will be applied as needed to prevent road failures due to subsidence (sink-holes) or other sub-surface instability. Both the MDEQ Geologic Survey Division and the U.S. Department of Interior's Office of Surface Mining Reclamation and Enforcement will be consulted to assist with geotechnical investigations and the development of any special construction techniques that are required.

SECTION 5 - “ONLY PRACTICABLE ALTERNATIVE FINDING” WETLAND FINDING

**DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
E.O. 11990 – WETLAND FINDING
FHWA-MI-EIS-02-01-F**

This statement sets forth the basis for a finding that there is no practical alternative to construction in wetlands for the proposed modernization of approximately 9 miles of I-94 through the Jackson urban area in Jackson County, Michigan. All practical measures to minimize harm to the wetlands have been taken. This finding is made in accordance with Executive Order 11990 (23 CFR 771.125(a)(1)), on the Protection of Wetlands, dated May 24, 1977.

5.1 DESCRIPTION OF PROJECT

The I-94 Jackson Freeway Modernization Project is a study being conducted by MDOT on a nine-mile segment of I-94 through Jackson County in the central portion of southern Michigan. The project area includes I-94 from just west of the M-60 interchange to just east of the Sargent Road interchange. The project area encompasses approximately nine miles of existing highway, eight interchanges, numerous local frontage roads adjacent to I-94, and 18 distinct bridge structures at 14 locations. The Preferred Alternative includes improvements throughout the entire project area. As noted in the DEIS, the proposed I-94 cross section includes three through lanes in each direction. Additionally, auxiliary weave lanes will be included as part of the Preferred Alternative where weave distances between ramp gores would be inadequate. A 4th auxiliary weave lane would be required in both directions between US-127 West and M-106 (Cooper Street) and between M-106 (Cooper Street) and Elm Road. The Preferred Alternative includes upgraded interchanges at all project area interchanges as well as improvements to local roads that are adjacent to and cross I-94. Typical cross sections for the Preferred Alternative are shown in Figure 3-7 of the DEIS, and the Preferred Alternative is shown in Figures 1 and 2 of the FEIS.

5.2 DESCRIPTION OF WETLANDS AFFECTED

Affected wetlands are described in Section 5.11 and Appendix C of the Draft EIS. Impacts to wetlands resulting from the Preferred Alternative are described and analyzed in Section 2.3.5 of the FEIS, while mitigation is discussed in Section 4.8 of the FEIS which also describes proposed wetland mitigation concepts and the mitigation site. Overall wetland impacts for the Practical Alternatives are compared in Table 2-8 of the FEIS, and a detailed summary of impacts to moderate and high quality impacts is provided in Table 2-9. The wetland impacts resulting from the construction of the Preferred Alternative are also summarized in Table 2-10 of the FEIS. Approximately 32.1 acres of wetlands will be unavoidably impacted by the proposed project. This total includes about 13.2 acres of palustrine emergent (PEM), 2.9 acres of palustrine scrub-shrub (PSS) wetlands, 12.6 acres of palustrine emergent/palustrine scrub-shrub (PEM/PSS) wetlands, and 2.9 acres of palustrine open water (POW) wetlands (which are mitigated at a ratio of 1.5:1), as well as 0.5 acres of palustrine forested (PFO) wetlands (which are mitigated at a ratio of 2:1). These figures may be modified after final design is completed and will be described in detail during the permit application process.

5.3 PRACTICABLE ALTERNATIVES TO THE PROPOSED ACTION

An extensive investigation of alternatives was conducted as part of this project. Chapter 3 of the DEIS identifies these alternatives and explains why many of these were eliminated from further consideration. Furthermore, during the course of the project, MDEQ concurred that the three Practical Alternatives were

the correct alternatives to study in detail (a letter from MDEQ indicating this is included in Appendix A of the DEIS). The three Practical Alternatives were evaluated in detail in the DEIS, and Section 2 of the FEIS provides an explanation regarding the selection of the Preferred Alternative. The explanations in Chapter 3 of the DEIS and Section 2 of this FEIS document the fact that other transportation improvement alternatives that were eliminated are not practicable. These eliminated alternatives do not meet the purpose of and need for the project, have unacceptable negative impacts, and/or are prohibitively expensive. For these reasons, all other alternatives were eliminated from consideration, and there is no practicable alternative to the Preferred Alternative.

5.4 MEASURES TO MINIMIZE HARM

All three of the Practical Alternatives were designed to avoid wetlands where this goal could be accomplished at a reasonable cost. Wetland impacts were minimized at interchanges, where practicable, by selecting the Practical Alternative with the lowest wetland impacts for inclusion in the Preferred Alternative. Specifically, at the M-60, US-127 West, M-106 (Cooper Street), and US-127 East interchanges, the Practical Alternative with the lowest wetland impacts was selected. At three interchange locations (Airport Road, Elm Road, and Sargent Road), minimizing wetland impacts by selecting the Practical Alternative with the lowest impacts was not practicable. At Airport Road and Elm Road, the other Practical Alternatives under consideration did not meet the purpose of and need for the project as well as the selected alternative. At the Sargent Road interchange, the Practical Alternative with the least wetland impacts was not practicable because it would impact three more businesses than the alternative selected. Beyond these factors, wetland impacts have been minimized for the Preferred Alternative by using design features such as steep side slopes. Additionally, Section 4 of this FEIS identifies wetland mitigation commitments for the Preferred Alternative. These measures will be considered and incorporated during the design phase of the project. It is the goal to replace the wetland functions that are lost as a result of the Preferred Alternative. This mitigation wetland will be located within the Grand River watershed, will be constructed prior to wetland impacts, will include all the mitigation at one location, and will include mitigation ratios of 1.5:1 for impacts to PEM, PSS, and POW wetlands and a 2:1 ratio for impacts to PFO wetlands. A total of 48.4 acres of wetland mitigation will be created.

5.5 COORDINATION AND PUBLIC INVOLVEMENT

This project has been coordinated with representatives of the Environmental Protection Agency (EPA), U.S. Fish and Wildlife Service (USFWS), Michigan Department of Environmental Quality (MDEQ), and other agencies as listed in Section 6 of the DEIS. A formal public hearing was held on April 18, 2002. Evidence of this coordination is contained in the appendices of the DEIS along with Section 6 of the FEIS. The concerns raised by these agencies and the public in general have been adequately considered in the selection of the Preferred Alternative.

5.6 CONCLUSION

Based upon the above considerations, it is determined that there is no practicable alternative to the proposed construction in wetlands and that the proposed action includes all practicable measures to minimize harm to wetlands which may result from such use.

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SECTION 6 - COMMENTS AND RESPONSES

This section identifies applicable comments received during the official comment period and provides responses indicating how each comment was addressed. “Relevant” comments are those that apply to information contained in the DEIS (e.g., comments regarding the alternatives, impacts of the Practical Alternatives, findings/conclusions reached, and selection of a Preferred Alternative). The section is separated into two different categories. The first group includes comments received from stakeholder groups and government agencies, while the second is comments received from individual members of the general public. Where reasonable, similar comments have been combined and/or summarized to minimize repetition and facilitate efficient review.

6.1 COMMENTS FROM STAKEHOLDER GROUPS AND GOVERNMENT AGENCIES

This section includes comment letters from stakeholder groups and government agencies. Within the margins of each letter, individual comments have been identified by number. Following each letter, responses are provided for each numbered comment.

Comment Letter #1: United States Department of Commerce, Office of the Under Secretary for Oceans and Atmosphere



UNITED STATES DEPARTMENT OF COMMERCE
Office of the Under Secretary for
Oceans and Atmosphere
Washington, D.C. 20230

April 16, 2002

Mr. Ronald S. Kinney
Environmental Section
Project Planning Division
Murray D. Van Wagoner (Transportation) Building
425 West Ottawa Street
Lansing, Michigan 48909

Dear Mr. Kinney:

Enclosed are comments on the Draft Environmental Impact Statement for I-94 Jackson Freeway Modernization Project M-60 to Sargent Road, Jackson County, Michigan. We hope our comments will assist you. Thank you for giving the opportunity to review this document.

Sincerely,

for 
for Scott B. Gudes
Deputy Under Secretary
for Oceans and Atmosphere

Enclosure



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MEMORANDUM FOR: Margaret McCalla
Acting Director, Office of Policy and Strategic Planning

FROM: Charles W. Challstrom
Director, National Geodetic Survey

SUBJECT: DEIS-0204-01 I-94 Jackson Freeway Modernization Project M-60
to Sargent Road, Jackson County, Michigan

The subject statement has been reviewed within the areas of the National Ocean Service (NOS) responsibility and expertise and in terms of the impact of the proposed actions on NOS activities and projects.

All available geodetic control information about horizontal and vertical geodetic control monuments in the subject area is contained on the National Geodetic Survey's home page at the following Internet World Wide Web address: <http://www.ngs.noaa.gov>. After entering the this home page, please access the topic "Products and Services" and then access the menu item "Data Sheet." This menu item will allow you to directly access geodetic control monument information from the National Geodetic Survey data base for the subject area project. This information should be reviewed for identifying the location and designation of any geodetic control monuments that may be affected by the proposed project.

Comment 1-1

If there are any planned activities which will disturb or destroy these monuments, NOS requires not less than 90 days' notification in advance of such activities in order to plan for their relocation. NOS recommends that funding for this project includes the cost of any relocation(s) required.

For further information about geodetic control monuments, please contact Rick Yorczyk; SSMC3 8636, NOAA, N/NGS; 1315 East West Highway; Silver Spring, Maryland 20910; telephone: 301-713-3230 x142; fax: 301-713-4175, Email: Rick.Yorczyk@noaa.gov.

NOS also has a Geodetic State Advisor in Michigan who is available to answer any questions you may have. Please contact Ronald L. Ramsey, at NOAA/NGS State Transportation Building, Design Survey Division P.O. Box 30050 Lansing, MI 48909; telephone: 517-377-1510; fax: 517-394-8684
email: ramsevr@mdot.state.mi.us.

Response to Comment 1-1

As requested, MDOT will coordinate with the National Geodetic Survey during the design phase of the project to assure the Preferred Alternative complies with all the requirements related to geodetic control monuments.

Comment Letter #2: United States Environmental Protection Agency, Region 5



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

MAY 06 2002

REPLY TO THE ATTENTION OF

B-19J

Mr. Ronald Hatcher
Area Engineer
Federal Highway Administration
315 West Allegan Street, Room 207
Lansing, Michigan 48933

Re: Comments on the Draft Environmental Impact Statement (DEIS) for the I-94 Jackson Freeway Modernization Project, Jackson County, Michigan, EIS No. 020100

Dear Mr. Hatcher:

In accordance with the U.S. Environmental Protection Agency's (U.S. EPA's) responsibilities under both the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, we have reviewed the Draft Environmental Impact Statement (DEIS) for the I-94 Jackson Freeway Modernization Project, Jackson County, Michigan. The project limits are from Michigan State Route (M-60) to Sargent Road/Business I-94.

The project is intended to modernize a nine-mile segment of I-94 through the Jackson urban area that has deteriorating road segments and bridges. In addition to addressing these roadway and bridge problems, the project is intended to improve travel efficiency by increasing roadway capacity and improving roadway geometrics so that it can safely accommodate 2025 traffic volumes. U.S. EPA provided a letter to the Federal Highway Administration (FHWA) on November 26, 2001, concurring with the purpose and need for the project.

U.S. EPA has participated in resource agency meetings hosted by Michigan Department of Transportation (MDOT) when the illustrative and practical alternatives were discussed. The existing corridor has two through lanes in each direction and various configurations are used for the eight interchange locations. A representative range of reasonable Illustrative Alternatives was advanced as Practical Alternatives. Each Practical Alternative includes additional capacity on the I-94 mainline to three continuous through lanes in each direction and the reconstruction of bridges crossing the mainline. The distinguishing feature between the three Practical Alternatives is the interchange configurations. The DEIS packaged the range of interchange configurations into three separate alternatives based on right-of-way requirements. On January 22, 2002, U.S. EPA provided a letter to FHWA concurring with the range of alternatives that were brought forward for analysis in the DEIS.

Based upon our review of this project and its DEIS, we conclude that there doesn't appear to be a great difference between the build alternatives proposed. Both from a traffic performance

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perspective and a wetlands perspective, it appears that the three alternatives evaluated in the DEIS are about the same. Practical Alternative I directly impacts 28 wetland sites, totaling 32 acres; 11 of which are classified as low quality, 11 as moderate quality, and 6 as high quality. Practical Alternative II would directly impact 32 wetland sites, totaling 36.5 acres; 11 of which are classified as low quality, 14 as moderate quality, and 7 as high quality. Practical Alternative III would directly impact 31 sites, totaling 32.5 acres; 12 of which are classified as low quality, 12 as moderate quality, and 7 as high quality.

The DEIS provided functional assessment data for wetlands in the project area and impacts for each Practical Alternative. Because detailed engineering has not yet been performed for the Practical Alternatives, the DEIS presented a "worst case" approach for wetland impact assessment. It was assumed that most wetlands within the existing and future right-of-way would be impacted. As the DEIS has stated, this approach overestimates wetland impacts. Based on the information presented in the DEIS, it appears that Alternative I would be the environmentally preferred alternative, followed by Alternative III and Alternative II. This is because of the overall amount of direct wetland impacts (31.5, 32.5, and 36.5 acres respectively) and also due to the relative ranking of the number of high/moderate/low wetlands impacted by each alternative. Although the numbers of wetlands impacted by each alternative is instructive, we believe that the better indicator would be the number of acres of high or moderate quality wetlands impacted by each alternative. We recommend that the Final Environmental Impact Statement (FEIS) include information about the acreage of high and moderate quality wetlands impacted by each alternative.

Comment 2-1

The DEIS discusses the importance of wetlands to Jackson County. Many of the wetlands that remain in the project area are high quality systems with significant water quality and wildlife functions. The functions of floodflow alteration/attenuation, sediment/toxicant retention, and nutrient removal are especially important to human health and the environment and should be protected as much as possible. Thus, we encourage FWHA and MDOT to avoid and minimize impacts to wetlands as a whole, but especially focus on the high and moderate quality wetlands in the project area. In particular, we note the following opportunities to preserve and protect high quality/moderate quality wetlands along the following key interchanges: M-60 (Wetlands 3, 4, 5, and 8), US-127/West (Wetland 56, which has Fen characteristics), US-127/East (Wetlands 31, 33, 46 and Wetlands 40, 41, and 42), and Sargent Road/Business I-94 (Wetland 37 and wetlands near Sherman Lake (Wetlands 26 and 27)). We would support the selection of a preferred alternative that has the least impact to these high quality wetlands.

Comment 2-2

The wetlands discussion in the DEIS mentions that some of the wetlands in the project area have been impacted by highway runoff as well as agricultural runoff. Many of these wetlands may have functioned at a higher level before the introduction of highway runoff. We encourage FHWA and MDOT to look creatively at mitigating highway runoff in the corridor. In particular, we would like the FHWA and MDOT to evaluate the potential for improving the functions of corridor wetlands with well designed stormwater treatment systems. We will look for more information on this topic in the forthcoming FEIS.

Comment 2-3

We have identified concerns in the areas of overall impacts to wetlands, impacts to high and moderate quality wetlands and stormwater. Based on these environmental concerns and the information that we requested for the FEIS, we have assigned a rating of "EC-2" (environmental concerns, insufficient information). Please refer to the enclosed Summary of Rating Definitions Sheet. This rating will be published in the Federal Register.

If you have any questions or comments, please feel free to contact Sherry Kamke, of my staff, at (312) 353-5794.

Sincerely yours,

for Sherry A. Kamke
Kenneth A. Westlake, Chief
Environmental Planning and Evaluation Branch

cc: ✓ Ron Kinney, MDOT
Craig Czarnecki, USFWS
Henry Rosenfield, USACE
Jerry Fulcher, MDEQ

SUMMARY OF RATING DEFINITIONS AND FOLLOWUP ACTIONS*

ENVIRONMENTAL IMPACT OF THE ACTION

LO—Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC—Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO—Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU—Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1—Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2—Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3—Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment.

Response to Comment 2-1

This information is included in Section 2.3.5 of the FEIS.

Response to Comment 2-2

Impacts to moderate and high quality wetlands have been minimized. This process is described in Section 2.3.5 of the FEIS. Additionally, Section 4.8 identifies mitigation commitments that may further reduce impacts to moderate and high quality wetlands in the project area.

Response to Comment 2-3

Additional information regarding the stormwater system and how it will be designed to reduce impacts to water quality and wetlands are presented in Section 4.5 of the FEIS. Additionally, Figure 4 shows the conceptual stormwater system for the Preferred Alternative. These measures should limit negative impacts to water quality and wetlands as well as improve the functions of wetlands that are already impacted by road runoff.

Comment Letter #3: United States Department of the Interior



United States Department of the Interior

OFFICE OF THE SECRETARY
Washington, D.C. 20240



ER-02/253

MAY 13 2002

Mr. James J. Steele
Division Administrator
Federal Highway Administration
Federal Building, Room 207
315 West Allegan Street
Lansing, Michigan 48933-1528

RECEIVED
JUN 03 2002

Dear Mr. Steele:

The Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement (DEIS) and Section 4(f) Evaluation for the I-94 Jackson Freeway Modernization Project, M-60 to Sargent Road, Jackson County, Michigan. The Department offers the following comments for your consideration.

SECTION 4(f) EVALUATION COMMENTS

Three design alternatives are proposed, which may impact a Section 4(f) property located at 1644 Cooper Street. The State Historic Preservation Office has determined that all three practical alternatives would adversely affect the historic property, a property eligible for the National Register of Historic Places (8.4.2). Measures to minimize harm include the complete documentation of the structure to create a record of the historic characteristics of the site.

We concur that there is no feasible and prudent alternative to the proposed project, if project objectives are to be met. We also concur with the proposed measures to minimize harm to the historic property located at 1644 Cooper Street, as detailed in the draft Memorandum of Agreement (MOA) included with the draft evaluation. Please remember to include the Advisory Council for Historic Preservation in your review of this action. A fully signed copy of the MOA should be included in the final Section 4(f) Evaluation.

The Department has no objection to Section 4(f) approval of this project by the Department of Transportation.

ENVIRONMENTAL IMPACT STATEMENT COMMENTS

General Comments

The document adequately discloses most potential impacts to fish and wildlife resources. The draft EIS also presents a rationale for the elimination of certain alternatives and provides a satisfactory comparative analysis of the no-build alternative and the three build alternatives (referred to as practical alternatives).

Specific Comments

Wetlands

Section 5.11, page 5-23: In table 5-6, the draft EIS provides a comparison of wetland impacts that would be caused by the three build alternatives. Wetland losses that may result from Alternatives I, II, and III are 31.5, 36.5 and 32.5 acres, respectively. We note, however, the wetland impacts of a recommended build alternative may differ from the acreage listed. As discussed in sections 3.2.3 and 3.2.4 of the draft EIS (page 3-3), the primary variances between the three practical alternatives are different interchange configurations. A recommended build alternative would likely be a combination of elements from all three practical alternatives. Although the wetland impacts may vary from those identified for the three practical alternatives, impacts should not exceed 36.5 acres. The final EIS should include recalculated values for wetland impacts for the recommended alternative.

Comment 3-1

Section 5.11.5, Conceptual Wetland Mitigation Plan, pages 5-27 to 5-28, and section 5.22.8, pages 5-44 to 5-45: The draft EIS addresses wetland mitigation through compensation. We recommend that the final EIS include a discussion of avoidance and minimization efforts, as well as compensatory mitigation.

Comment 3-2

The draft EIS proposes compensatory mitigation at acceptable replacement ratios for each wetland type, identifies a preferred mitigation site, and discusses the mitigation site selection process, including a criterion where the site should be within the project watershed. We recommend the wetland mitigation plan also include the following:

- a commitment to create replacement wetland habitat before highway construction begins;
- a commitment to monitor the success of created replacement wetland habitat following its construction for a minimum period of 5 years, including a specific timetable for monitoring that includes the time of year and frequency of sampling;
- identification of performance criteria for measuring the success of wetland habitat creation;
- a commitment to correct or improve the biological productivity of created wetland habitat based on the results of monitoring;
- a plan to control the establishment of invasive and/or non-native plant species;
- site plans that include a 100-foot-wide perimeter buffer zone adjacent to the wetland mitigation area(s);
- submittal of annual monitoring reports; and
- establishing protection and management plans to remain in force in perpetuity for the wetland mitigation area(s).

Comment 3-3

Threatened and Endangered Species

Section 5.12, page 5-28: The draft EIS indicates potential habitat for the Indiana bat (*Myotis sodalis*) and Mitchell's satyr butterfly (*Neonympha mitchelli mitchelli*), both federally listed as endangered, occurs within the project area. In addition, habitat for the Federal candidate species, eastern massasauga rattlesnake (*Sistrurus catenatus*), also occurs in the project area. Surveys for Mitchell's satyr butterfly did not find this species to be present in the project area. The draft EIS states impacts to massasauga habitat would be minimal.

An Indiana bat habitat survey determined two sites within the project area are of low quality for Indiana bats and one site is of high quality. Practical alternative I would impact 1.5 acres of high-quality Indiana bat habitat, and practical alternative II would impact 0.5 acres of high-quality habitat. Practical alternative III would not impact any Indiana bat habitat.

Comment 3-4

Section 5.12.3, Mitigation measures, page 5-28, and section 5.22.9, threatened and endangered species, page 5-45: The draft EIS states, in order to protect maternal roosting colonies, trees within identified Indiana bat habitat would not be cut between May 1 and September 30. Previous studies of Indiana bats have found that they sometimes return to southern Michigan in late April; therefore, cutting trees just prior to May 1, would not guarantee avoidance of direct take of Indiana bats. In order to avoid the time period when bats would be expected to occupy or use the forested areas on site, we recommend restricting tree clearing activities from April 1 to October 1. We recommend that the final EIS include these dates.

If new information about the project becomes available indicating other listed or proposed species or should other species occurring in the project area become federally listed or proposed, the Federal Highway Administration (FHWA) would be required to reevaluate its responsibilities under the Endangered Species Act. Because data on threatened and endangered species are updated continually, we recommend that the FHWA, or its designee, request annually from the U.S. Fish and Wildlife Service (FWS) an updated list of federally endangered, threatened, or proposed species.

FISH AND WILDLIFE COORDINATION ACT COMMENTS

The Department's comments do not preclude separate evaluation and comments by the FWS, pursuant to the Fish and Wildlife Coordination Act, regarding any permits required from the Michigan Department of Environmental Quality for work in wetlands and other waterbodies. In the review of these permit applications, the FWS may concur (with or without stipulations) or object to permit issuance, depending upon whether specific project-related actions may impact public trust fish and wildlife resources. The FWS advises that it would not oppose issuance of required permits, provided that the project design and other avoidance measures described in the EIS are incorporated into the final project plans; and that the final plans also include adequate measures (including those described above) to offset unavoidable wetland impacts. Please continue to coordinate with the FWS during the refinement of the wetland mitigation plans.

SUMMARY COMMENTS

The Department has a continuing interest in working with the FHWA and the Michigan Department of Transportation in order to ensure that impacts to resources of concern to the Department are adequately addressed. For matters related to fish and wildlife resources, please continue to coordinate with the Field Supervisor, U.S. Fish and Wildlife Service, 2651 Coolidge Road, Suite 101, East Lansing, Michigan 48823-6316, telephone (517) 351-2555. For matters related to Section 4(f) resources, please coordinate with the Regional Environmental Coordinator, National Park Service, Midwest Regional Office, 1709 Jackson Street, Omaha, Nebraska 68102, telephone: (402) 221-3493.

We appreciate the opportunity to provide these comments.

Sincerely,



Willie R. Taylor
Director, Office of Environmental
Policy and Compliance

cc: Mr. Ronald Kinney
Environmental Section Manager
Michigan Department of Transportation
425 West Ottawa Street
Lansing, Michigan 48909

Response to Comment 3-1

Section 2.3.5 of this FEIS presents information regarding the wetland impacts of the Preferred Alternative.

Response to Comment 3-2

This information is included in Section 2.3.5 of this FEIS.

Response to Comment 3-3

Most of these mitigation measures will be included as suggested as part of the Preferred Alternative. Section 4.8 of this FEIS identifies the additional wetland mitigation measures from this list that will be included.

Response to Comment 3-4

This FEIS has been revised to include expanded dates for tree cutting restrictions within the project area. These dates shall be April 1 to October 1. This commitment is included in Sections 3.1.5 and 4.9 of this FEIS.

Comment Letter #4: United States Department of Health & Human Services



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control
and Prevention (CDC)
Atlanta GA 30341-3724

April 17, 2002

Ron Kinney
Environmental Section Manager
Michigan Department of Transportation
425 W. Ottawa Street
Jackson, MI 48909

Dear Mr. Kinney:

We have completed our review of the Draft Environmental Impact Statement (DEIS) for Jackson Freeway Modernization Project M-60 to Sargent Road, Jackson County, Michigan. We are responding on behalf of the U.S. Public Health Service, Department of Health and Human Services (DHHS).

Thank you for the opportunity to review and comment on this EIS. Although we believe this EIS adequately addresses most topics we raised in our advance notification response letter of December 1, 2000, we still have concerns about potentially contaminated sites which we believe need further clarification in the Final EIS.

The DEIS indicates that, "due to the variety of contamination sources and lack of detailed information, specific mitigation strategies will eventually need to be developed for each known or potentially contaminated site". The DEIS indicates that further investigations of these contaminated sites will occur prior to finalizing any ROW purchases and that the sites will be managed in accordance with all state and federal laws. We believe the FEIS should include detailed information on these contaminated sites. Specifically, the FEIS should address each contaminated site; the nature and extent of the contamination; planned mitigation measures; steps that will be followed to protect workers and the public; the preparation of site safety plans, sampling and testing strategies, and plans for final site cleanup certification. If contaminated material will be removed as part of the mitigation measures, information needs to be provided concerning the methods and routes of transport, plans to protect the public during transport, and the final hazardous material disposal site location.

Comment 4-1

We would appreciate receiving a copy of the FEIS when it becomes available, as well as, any future environmental impact statements which may indicate potential public health impacts and are developed under the National Environmental Policy Act (NEPA).

Sincerely,

A handwritten signature in cursive script that reads "Paul Joe".

Paul Joe, DO, MPH
Medical Officer
National Center for Environmental Health (F16)

Response to Comment 4-1

MDOT understands the importance of this issue and agrees that it must be addressed as part of the project development process. However, the level of investigation requested is not normally conducted until the design and ROW acquisition phases of a project because many of the specific site details concerning potential ROW acquisitions are unknown until the final design has been confirmed. This approach ensures that effort and funds are not expended for property that will not be acquired. Additionally, an Initial Site Assessment (ISA) (DLZ 2002) was performed on all properties within the project area. The ISA identified hazardous materials concerns within the project area and provided details for many sites. The results of the ISA are summarized in Chapter 4 of the DEIS. The mitigation measures outlined in Chapter 5 of the DEIS and Section 4 of this FEIS will adequately address all of the concerns expressed in this comment, but it will not occur until later phases of project development than requested.

Comment Letter #5: State of Michigan, Department of Environmental Quality



JOHN ENGLER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
LANSING



RUSSELL J. HARDING
DIRECTOR

June 5, 2002

Mr. Ronald S. Kinney, Manager
Environmental Section
Project Planning Division
Michigan Department of Transportation
P.O. Box 30050
Lansing, Michigan 48909

Dear Mr. Kinney:

SUBJECT: I-94 Jackson Freeway Modernization Project
Draft Environmental Impact Statement, File Number 01-38-5001

The Michigan Department of Environmental Quality (MDEQ), Land and Water Management Division (LWMD), has completed review of the Draft Environmental Impact Statement (DEIS) for the I-94 Jackson Freeway Modernization Project from M-60 to Sargent Road in Jackson County, Michigan.

The DEIS lists the following goals of the project:

- a) Improve the deteriorating condition of existing bridges and road segments.
- b) Improve travel efficiency and roadway capacity to accommodate projected year 2025 traffic volumes.
- c) Improve motorist safety.

The DEIS evaluated the following four alternatives to meet the project goals:

- a) No-build, which includes replacement of all mainline ramps, bridges, interchanges and local road segments in their current configuration.
- b) Three practical build alternatives described as Practical Alternatives I, II, and III.

We have the following comments regarding the DEIS:

Comment 5-1

- a) Section 1.7 and Section 5.19, Part 303 should be referred to as Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). Similarly, Part 31 should be referred to as the Floodplain Regulatory Authority found in Part 31, Water Resources Protection, of the NREPA.
- b) Section 3.2.4, the LWMD supports the concept of selecting a recommended alternative that is a combination of the three practical alternatives. This would allow the selection of individual components of each alternative to minimize environmental impacts. For example while Practical Alternative III shows the second highest wetland impacts, the proposed interchange at US 127 East and I-94 has less wetland impact than the other two alternatives. Similarly, Alternative 1 involves less stream enclosure than Alternative III at the proposed US 127 west crossing of the Hurd-Marvin Drain.

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www.michigan.gov • (517) 373-1170

Comment 5-2

c) Section 3.4.1, the DEIS indicates that slopes of 1 on 4 would be used where necessary to lessen ROW and environmental impacts while slopes as steep as 1 on 2 would be used in fill areas that exceed 20 feet. It is requested that in environmental areas, slopes of 1on 2 or 1on 3 also be used to minimize impacts. Similarly section 3.4.1.3 indicates that retaining walls would be used to minimize right-of-way impacts. In sensitive environmental areas the use of retaining walls should also be investigated.

Comment 5-3

d) Figures 3-8, 3-9 and 3-10 indicate that the proposed I-94 improvements will cross the inlet to Brill Lake while figure 4-5 indicates the project area ending west of the Brill Lake inlet. If construction is proposed at the Brill Lake inlet then it should be properly protected. The DEIS also identifies wetlands with fen characteristics near Brill Lake. These areas should be properly protected from additional road runoff.

Comment 5-4

e) Section 4.10.1, indicates that county drains and detention basins are regulated by the Jackson County Drain Commission. It should also be noted that work within a county drain will also require a permit from the MDEQ in most circumstances.

Comment 5-5

f) Section 4.10.3 and 5.10.3 imply that a 100-year regulated floodplain only exists along the Grand River within the project area. While this is the only mapped floodplain, any stream or drain has a floodplain. Any filling, grading or construction within a floodplain on a stream or drain with a drainage area of 2 square miles or more is regulated under Part 31 even if the floodplain has not been mapped.

Comment 5-6

g) Section 4.13.2, indicates that good wildlife habitat exists in the areas around the M-60 interchange, near US-127 north of Springport, along the Grand River and along I-94 near Brill Lake. Where new or replacement bridges or culverts are proposed in these areas, extra spans should be incorporated to accommodate wildlife passage along these corridors.

Comment 5-7

h) Section 4.16.1, lists 14 known sites of contamination within the project area. The MDEQ's Storage Tank Division has identified 4 additional Leaking Underground Storage Tank (LUST) sites that may impact this project. These are listed below:

- 1) Rod Mills and Son
2830 Shirley Drive, Facility ID# 0-0018743, Facility status: Open
- 2) Biocenter
2161 Lansing Avenue, Facility ID# 5-0001058, Facility status: Open
- 3) Jackson County Maintenance Garage
2200 Blackstone, Facility ID# 0-0003104, Facility status: Open
- 4) Sears
1250 Jackson Crossing, Facility ID# 0-0016800, Facility status: Closed

Comment 5-8

i) Section 5.22.11, indicates that the Environmental Response Division will be consulted regarding UST and LUST sites in the project area. The Storage Tank Division of the MDEQ should be consulted on all issues relating to UST and LUST sites. The Environmental Response Division handles only heating oil tank releases.

Comment 5-9

j) Under the groundwater protection measures in Sections 5.10.2 and 5.22.6 it is recommended that the MDOT contact and coordinate with Mechanical Products for any construction activity in that area. Mechanical Products is undergoing cleanup plans that could be impacted by the proposed project.

j) The MDEQ's Air Quality Division concurs that Jackson County is currently designated as being in attainment with the National Ambient Air Quality Standards for all criteria pollutants. As a result, there are no transportation conformity or general conformity requirements for any project located within the county.

Comment 5-10

k) Section 5.10.1, indicates that several culverts will be lengthened during the proposed project. In some cases it may be necessary to increase the structure size to offset the expected increase in the upstream energy grade line caused by the longer culvert. In addition, mitigation measures including stream enhancements should be considered to offset impacts caused by long culverts. Mitigation measure should be coordinated with the LWMD and the Fisheries Division of the Michigan Department of Natural Resources.

Comment 5-11

l) Section 5.11.2 indicates that construction may result in relatively minor amounts of sediment being discharged into wetlands. Where off-site sedimentation occurs it should be cleaned up immediately upon coordination with the LWMD.

Comment 5-12

m) Within the median sections, the MDOT should investigate the feasibility of having an open channel for any of the proposed stream enclosures.

Comment 5-13

n) Once a final alternative is selected, efforts made to avoid and minimize wetland impacts should be properly documented in the planning and design phase. Once a final alternative is selected in the FEIS, efforts should be made to secure one of the mitigation sites identified in the DEIS. Mitigation shall give consideration to the replacement of the predominant wetland benefits lost within the impacted wetland areas. A mitigation plan, including the control of invasive species during the monitoring period, should be developed and approved by the MDEQ as part of the permit application process. Final mitigation plans will need to include a monitoring plan, performance criteria, and details as to how the created wetland will be protected in perpetuity with a conservation easement.

Comment 5-14

o) The MDEQ requires that mitigation activities be complete before initiating other permitted activities, unless a concurrent schedule is agreed upon between the department and the applicant, and an adequate financial assurance mechanism is provided by the applicant.

Comment 5-15

If you have any questions, please feel free to contact me.

Sincerely,



Gerald W. Fulcher, Jr., P.E., Chief
Transportation and Flood Hazard Management Unit
Land and Water Management Division
517-335-3172

- cc: Mr. James Kirschensteiner, U.S. Federal Highway Administration
- Ms. Sherry Kamke, U.S. Environmental Protection Agency
- Mr. Craig Czarnecki, U.S. Fish and Wildlife Service
- Mr. Gary R. Mannesto, U.S. Army Corps of Engineers
- Mr. Robert Rusch, MDEQ
- Mr. R. Dowe Parsons, MDEQ
- Mr. Lee Carter, MDEQ
- Ms. Sarah Wolf, MDEQ
- Mr. Rick Schramm, MDEQ
- Ms. Peg Bostwick, MDEQ
- Mr. Alex Sanchez, MDEQ

Response to Comment 5-1

These changes are reflected in Section 3 of this FEIS.

Response to Comment 5-2

As described in Section 4.8 of this FEIS, MDOT will investigate the feasibility of these measures during the design phase of the project.

Response to Comment 5-3

The Preferred Alternative includes improvements that will cross the Brill Lake Inlet, but only on the eastbound lanes (Figure 2 of this FEIS). At this location, only minor improvements will be required, and these will be accomplished within the existing ROW. Section 3.1.4 of this FEIS includes a description of this stream, potential impacts, and mitigation measures that will be used to protect it. Additionally, design measures will be implemented to avoid impacts to the fens located near Brill Lake. This mitigation measure is included in Section 4.8 of this FEIS. Finally, the stormwater mitigation measures described in Section 4.5 of this FEIS will reduce the potential for water quality impacts at this location.

Response to Comment 5-4

This change is reflected in Section 3.1.4 of this FEIS.

Response to Comment 5-5

These DEIS sections have been corrected to indicate that the Grand River is not the only regulated floodplain within the project area. The corrected language is found in Section 3.1.4 of this FEIS. Permits will be obtained during the design phase for work performed within any regulated 100-year floodplain.

Response to Comment 5-6

MDOT has considered the potential of increasing culvert sizes or adding additional spans to the bridges. At the M-60 interchange and in the vicinity of Brill Lake, enlarged culverts are not proposed for the following reasons: 1) there is no identified impact to important wildlife movement corridors caused by the Preferred Alternative, so the mitigation does not remedy any project impacts, 2) it is not clear that wildlife will use the culverts, 3) impacts to high value wildlife habitat are minimal and only occur immediately adjacent to the existing highway, 4) the increased cost of these culverts is not justified given their uncertain benefits, and 5) impacts to wildlife habitat are not regulated under any statutes or other regulations. Because the Preferred Alternative does not include improvements near the wildlife habitat at Springport Road, no culvert or bridge upgrades will be constructed at this location. Along the Grand River, no additional spans are necessary because the Preferred Alternative (as shown in Figure 2 of this FEIS) will provide sufficient space for wildlife passage between the river and the railroad tracks. This issue can be revisited if conditions or policies change at the time of permit application. In Section 2 of the Threatened and Endangered Species Report and Section 4.12 of the DEIS, methods and criteria used for determining good habitat are explained.

Response to Comment 5-7

Site number 1, at 2830 Shirley Drive, is located outside of the project area and would not be affected by construction. Site number 2, at 2161 Lansing Avenue, is also located outside of the project area. Site number 3, 2200 Blackstone Avenue, is already included in the DEIS as Site #13 on DEIS Figure 4-5. Site 4, located at the Paka Plaza, is already included in the DEIS as Site #12 on DEIS Figure 4-5. All of these sites were identified in the Initial Site Assessment technical report prepared for the project and/or the DEIS and were considered during selection of the Preferred Alternative.

Response to Comment 5-8

This change is reflected in Sections 3.1.4 and 4.11 of this FEIS.

Response to Comment 5-9

MDOT will notify and coordinate with Mechanical Products, Inc. concerning proposed mitigation measures and work plans in the vicinity of the M-106 (Cooper Street) interchange.

Response to Comment 5-10

As noted in the DEIS, detailed hydraulic studies will be performed during the design phase of the project. At that time, specific details such as culvert length and sizes will be evaluated, and coordination with MDEQ and MDNR will occur.

Because only low quality habitat occurs in the existing drains in the project area and because impacts will be relatively minor, mitigation measures including stream enhancements will not be included as part of the Preferred Alternative. Additional information regarding the habitat quality of existing drains in the project area can be found in the DEIS.

Response to Comment 5-11

If off-site sedimentation occurs, it will be cleaned up in coordination with MDEQ's Land and Water Management Division.

Response to Comment 5-12

During the design phase of the project, MDOT will investigate the possibility of having open channels for drains and streams in medians and also between freeway ramps and the I-94 mainline. This mitigation commitment is identified in Section 4.5 of this FEIS. Preliminary investigations indicate that this may be possible inside the ramps at the M-60 interchange, the US-127 West interchange, and at the Brill Lake Inlet.

Response to Comment 5-13

A detailed discussion of avoidance and minimization of wetland impacts for the Preferred Alternative is provided in Section 2.3.5 of this FEIS.

Response to Comment 5-14

MDOT is currently negotiating with the owner of the preferred wetland mitigation site regarding purchase of the necessary mitigation acreage. Although a need of about 50 acres is anticipated, MDOT will attempt to purchase at least 60 acres so that extra acreage is available should it be needed. If this negotiation is unsuccessful, MDOT will negotiate with the owners of one of the backup sites that have been identified.

Section 4.8 of this FEIS includes the suggested mitigation commitments for the wetland mitigation plan.

Response to Comment 5-15

This requirement is included in the mitigation commitments in Section 4.8 of this FEIS.

Comment Letter #6: Region 2 Planning Commission

**RESOLUTION OF THE REGION 2 PLANNING COMMISSION
EXECUTIVE COMMITTEE**

WHEREAS, the Michigan Department of Transportation has been undertaking the I-94 Freeway Modernization Study from M-60 to Sargent Road in Jackson County , and

WHEREAS, the Michigan Department of Transportation has published the Draft Environmental Impact Statement (DEIS) evaluating the interchanges along this 9-mile segment of the I-94 corridor, and

WHEREAS, one of the stated goals in the proposed plan is to "improve travel efficiency and capacity in the I-94 corridor by replacing existing road segments, interchanges, and bridges with modern facilities designed to accommodate projected year 2025 traffic volumes," and to "improve motorist safety," and

WHEREAS, the Michigan Department of Transportation and their consultant have developed three alternatives for the reconstruction of the I-94/US-127 North interchange, and

WHEREAS, Alternative 1 provides very minimal improvements to conditions already existing.

Comment 6-1

NOW THEREFORE BE IT RESOLVED, that the Executive Committee of the Region 2 Planning Commission objects to the consideration of Alternative 1, and

Comment 6-2

BE IT FURTHER RESOLVED, that the Executive Committee of the Region 2 Planning Commission requests that the Michigan Department of Transportation consider other alternatives at the I-94/US-127 North interchange to achieve the stated goals of the study.

ADOPTED this day, April 11, 2002, at an Executive Committee meeting of the Region 2 Planning Commission held at Somerset Township Hall, Hillsdale County, Michigan.

Attest:



Bernard J. Carey, Chair
Region 2 Planning Commission



Charles C. Reisdorf, Executive Director
Region 2 Planning Commission

Response to Comment 6-1

Since the drafting of the Region 2 Planning Commission resolution, the Consensus Building Committee (CBC) has addressed the opposition to Practical Alternative I. A description of the process used to reach consensus on the interchange design can be found in Section 2.2 of this document and in the I-94 & US-127/M-50 Interchange Consensus Building Committee report (Manis & Michaud 2005).

Since consensus has been reached to incorporate Alternative D-1 as the Preferred Alternative at the I-94/US-127 West interchange, previously received comments against Practical Alternative I, and resolutions of opposition, no longer apply to the Preferred Alternative. A revised resolution from Region 2 Planning Commission is shown as Comment Letter #18.

Response to Comment 6-2

The CBC has elected to incorporate Alternative D-1 as the Preferred Alternative at the US-127 West interchange (see Response to Comment 6-1, above).

Comment Letter #7: Region 2 Planning Commission



Region 2 Planning Commission

Jackson County Tower Building
120 West Michigan Avenue
Jackson, Michigan 49201

Fax: 517-788-4635

517-788-4426

Email: Region2@dmcj.net

April 24, 2002

Mr. Jose Lopez
Bureau of Transportation Planning
Michigan Department of Transportation
P.O. Box 30050
Lansing, MI 48909

Handwritten signature: J. Lopez

Re: Public Comments on the I-94 Freeway Modernization Study

Dear Mr. Lopez:

On April 18, 2002, the Michigan Department of Transportation conducted a public hearing requesting input on the proposed reconstruction of I-94 in the Jackson urbanized area. As part of the final design plans, the staff of the Region 2 Planning Commission is requesting that provisions for non-motorized transportation be considered when reviewing the various interchange design alternatives.

Comment 7-1

The Jackson Regional Trailway Design Committee, comprised of representatives from Jackson County and the city of Jackson, is in the process of developing a regional non-motorized trail system. We are requesting that provisions be incorporated into the design plans for the US-127/Springport Road interchange (east/west access) and the I-94/Airport Road interchange (north/south) to accommodate pedestrian and bicycle traffic. Possible options could include the construction of a pedestrian bridge or including a 10-foot wide pedestrian/bicycle path on the bridge overpasses.

Thank you for the opportunity to express our concerns and comments on the I-94 Freeway Modernization Study.

Sincerely,
Handwritten signature: Steven Duke

Steven Duke
Principal Planner

Serving Hillsdale, Jackson and Lenape Counties

Response to Comment 7-1

The Preferred Alternative does not include any construction activities at the Springport Road interchange (Figure 2 of this FEIS). Therefore, it will not be possible to consider upgraded pedestrian/bicycle facilities at this location as part of the Preferred Alternative. At the Airport Road interchange, MDOT will fund replacement of the existing sidewalk as part of the Preferred Alternative. This decision is based on MDOT's policy regarding replacement of local government infrastructure as part of construction projects on state trunklines. Specifically, MDOT policy allows replacement of existing pedestrian/bicycle facilities that are impacted by a proposed project with in-kind facilities, while all upgrades or improvements beyond the existing condition must be funded by the local government jurisdiction within which the facility would be located. However, if the relevant local government agency intends to pay for new or upgraded facilities, MDOT will accommodate these plans in the design of the Preferred Alternative. MDOT will coordinate with local governments during the design phase concerning non-motorized facilities and context sensitive solutions.

Comment Letter #8: Jackson County Board Of Commissioners

**JACKSON COUNTY
BOARD OF COMMISSIONERS**

James E. Rice
Chair

Clifford Herl
Vice-Chair

Jackson County Tower Building
120 W. Michigan Avenue
Jackson, Michigan 49201
Phone (517) 788-4336
FAX (517) 780-4755

Commissioners
Gary D. Adams
Floyd J. Baum
Kenneth Beardslee
Todd N. Brittain
John R. Day
Betty Jo DeForest
David K. Elwell
Robert J. Lacinski
Gail Mahoney-Sherrrod
Robert L. McNitt
Walter Pascal
Judy M. Reynolds
James E. Shotwell, Jr.

**RESOLUTION
JACKSON I-94 FREEWAY MODERNIZATION PROJECT**

WHEREAS, the Michigan Department of Transportation has developed an I-94 Jackson Freeway Modernization Project plan; and

WHEREAS, the Michigan Department of Transportation has published and distributed a Draft Environmental Impact Statement, dated March 2002; and

WHEREAS, the Michigan Department of Transportation has stressed the importance for public input; and

WHEREAS, the interchanges of I-94 and US-127 North are the busiest along the targeted corridor; and

WHEREAS, the current design, structure, layout and flow of the interchanges of I-94 and US-127 North are currently deficient; and

WHEREAS, the interchanges of I-94 and US-127 North are the main artery into and out of the City of Jackson; and

WHEREAS, the Jackson County Board of Commissioners is interested in the long-term implications of the highway infrastructure related to this interchange as well as the motoring public; and

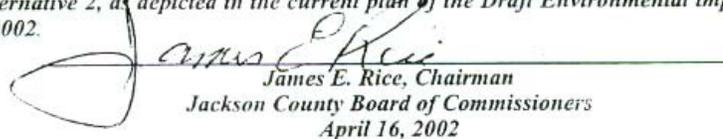
Comment 8-1

WHEREAS, alternatives 1 and 3 are inadequate in fully addressing the current and future traffic flow and other safety factors for this interchange; and

Comment 8-2

WHEREAS, alternative 2, as depicted in the current plan as of April 4, 2002, appears to best address the concerns of this body;

NOW, THEREFORE, BE IT RESOLVED, that the Jackson County Board of Commissioners hereby supports alternative 2, as depicted in the current plan of the Draft Environmental Impact Statement as of April 4, 2002.


James E. Rice, Chairman
Jackson County Board of Commissioners
April 16, 2002

I-94

Response to Comment 8-1

Since the drafting of the Jackson County Board of Commissioners resolution, the Consensus Building Committee (CBC) has addressed the opposition to Practical Alternative I. A description of the process used to reach consensus on the interchange design can be found in Section 2.2 of this document and in the I-94 & US-127/M-50 Interchange Consensus Building Committee report (Manis & Michaud 2005).

Since consensus has been reached to incorporate Alternative D-1 as the Preferred Alternative at the I-94/US-127 interchange, previously received comments against Practical Alternative I, and resolutions of opposition, no longer apply to the Preferred Alternative. A revised resolution from the Jackson County Board of Commissioners is shown as Comment Letter #19.

Response to Comment 8-2

The CBC has elected to incorporate Alternative D-1 as the Preferred Alternative at the US-127 West interchange (see Response to Comment 8-1, above).

Comment Letter #9: Jackson County Road Commission

COMMISSIONERS:

KARL A. SCHMIDT
Chairperson
ELWIN M. JOHNSON
Vice Chairperson
ROBERT M. ZENZ
Member



JOSEPH M. MICHALSKY, P.E.
County Highway Engineer
KENNETH R. STRAUB
County Highway Superintendent
LAURE A. FIERO
Clerk/Director of Administration

The Jackson County Road Commission has been following closely the I-94 corridor study which includes widening & interchange redesign. After reviewing the study of the project we are in agreement with the study except the speculation we have heard about not changing the interchange of I94 and north bound 127.

Comment 9-1

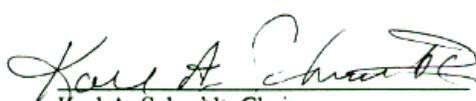
Alternative 1 provides very little improvements to conditions already existing.

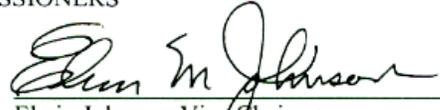
The Jackson County Road Commission objects to the consideration of Alternative 1.

Comment 9-2

The Jackson County Road Commission requests that the Michigan Department of Transportation consider other alternatives at the I94/US127 North interchange to achieve stated goals of the study.

BOARD OF JACKSON COUNTY ROAD
COMMISSIONERS


Karl A. Schmidt, Chairman


Elwin Johnson, Vice Chairman


Robert M. Zenz, Member

Your Local Road Professionals
2400 Elm Road, P.O. Box 1125 • Jackson, Michigan 49204-1125
Telephone: (517) 788-4230 or 1 (800) 718-3537 • Fax: (517) 788-4237
<http://www.jcrc-roads.org>

Response to Comment 9-1

Since the drafting of the Jackson County Road Commission resolution, the Consensus Building Committee (CBC) has addressed the opposition to Practical Alternative I. A description of the process used to reach consensus on the interchange design can be found in Section 2.2 of this document and in the I-94 & US-127/M-50 Interchange Consensus Building Committee report (Manis & Michaud 2005).

Since consensus has been reached to incorporate Alternative D-1 as the Preferred Alternative at the I-94/US-127 interchange, previously received comments against Practical Alternative I, and resolutions of opposition, no longer apply to the Preferred Alternative. A revised resolution from the Jackson County Road Commission is shown as Comment Letter #20.

Response to Comment 9-2

The CBC has elected to incorporate Alternative D-1 as the Preferred Alternative at the US-127 West interchange (see Response to Comment 9-1, above).

Comment Letter #10: Blackman Charter Township

RESOLUTION

08-2002-0401

BLACKMAN CHARTER TOWNSHIP RESOLUTION TO RECOMMEND THAT MDOT IMPLEMENT PRACTICAL ALTERNATIVE #2 (FIGURE 3-9) IN THE I-94 JACKSON FREEWAY MODERNIZATION PROJECT, M-60 TO SARGENT ROAD

- WHEREAS:** The Michigan Department of Transportation (MDOT) is studying a I-94 Jackson Freeway Modernization Project, and
- WHEREAS:** The name of this proposal is Draft Environmental Impact Statement and Draft Section 4 (f) Evaluation, dated March 2002, and
- WHEREAS:** One of the stated goals in the proposed plan is to 'improve travel efficiency and roadway capacity in the I-94 corridor by replacing existing road segments, interchanges, and bridges with modern facilities designed to accommodate projected year 2025 traffic volumes, and
- WHEREAS:** Another stated goal is to 'improve motorist safety', and
- WHEREAS:** The other options proposed do not address these issues as adequately or as completely as Alternative #2 for the I-94 and US 127 interchange, and
- WHEREAS:** There is a public comment period.

Comment 10-1

THEREFORE, BLACKMAN CHARTER TOWNSHIP HEREBY RESOLVES TO PUBLICLY STATE THEIR PREFERENCE IN THIS UNDERTAKING

Comment 10-2

- RESOLVED,** Blackman Charter Township prefers Alternative #2 (Figure 3-9) as the best plan to meet the needs of the residents of Blackman Charter Township and Jackson County.
- RESOLVED,** Blackman Charter Township considers the other options to be vastly inferior to Alternative #2 (Figure 3-9).
- RESOLVED,** Blackman Charter Township recommends to MDOT that Alternative #2 (Figure 3-9) be chosen and implemented as the best solution to the stated goals of their study.

At a regular meeting of the Blackman Charter Township Board of Trustees, county of Jackson, State of Michigan held in the Township Hall of said Township on April 1, 2002

PRESENT: Supervisor Bowman, Clerk Snell, Treasurer Brockie and Trustees Barrett, Laskovich, Smith and Thomas

ABSENT: None

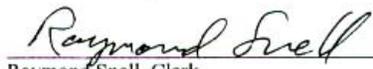
The foregoing resolution offered by Board Member Mike Thomas, Trustee.
Support offered by Board Member Joe Smith.

Upon roll call vote the following voted "AYE": Supervisor Bowman, Clerk Snell, Treasurer Brockie, Trustees Barrett, Laskovich, Smith and Thomas.

"NAY": None

The Supervisor Declared the Resolution Adopted.


Kevin Bowman, Supervisor


Raymond Snell, Clerk

Resolution #8-2002-0401

Response to Comment 10-1

Since the drafting of the Blackman Charter Township resolution, the Consensus Building Committee (CBC) has addressed the opposition to Practical Alternative I. A description of the process used to reach consensus on the interchange design can be found in Section 2.2 of this document and in the I-94 & US-127/M-50 Interchange Consensus Building Committee report (Manis & Michaud 2005).

Since consensus has been reached to incorporate Alternative D-1 as the Preferred Alternative at the I-94/US-127 interchange, previously received comments against Practical Alternative I, and resolutions of opposition, no longer apply to the Preferred Alternative. A revised resolution from Blackman Charter Township is shown as Comment Letter #21.

Response to Comment 10-2

The CBC has elected to incorporate Alternative D-1 as the Preferred Alternative at the US-127 West interchange (see Response to Comment 10-1, above).

Comment Letter #11: Blackman Charter Township



BLACKMAN CHARTER TOWNSHIP

1990 W. Parnall Road • Jackson, Michigan 49201-8612 • Phone (517) 788-4345 • Fax (517) 788-4689

Mr. Jose Lopez
Bureau of Transportation Planning
Michigan Department of Transportation
P.O. Box 30050
Lansing, MI 48909

RE: Non Motorized Multi-Path Network
Pedestrian/Bicycle Trail System

Dear Mr. Lopez:

A variety of communities are currently participating in a regional multi-path study of the Jackson Area. Some of the communities involved are Concord Twp., Blackman Charter Twp., Henrietta Twp., Rives Twp., Spring Arbor Twp., Summit Twp., Waterloo Twp., Jackson County and the City of Jackson. US-127 and I-94 have been identified as major constraints to making a safe east-west connection and north-south connection on the west side for pedestrians and bicyclists.

We understand that the Michigan Department of Transportation (MDOT) is currently studying the reconstruction of US-127/I-94. Your recent public forum held on April 18, 2002, illustrated different proposals for the renovation project. We strongly encourage a safe east-west and north-south pedestrian/bicycle crossing be incorporated into any proposed renovation project.

Comment 11-1

Therefore, on behalf of Blackman Charter Township, we ask that you provide safe pedestrian/bicycle connections across US-127 via a bridge or underpass. We believe that Springport Road is the most likely candidate for the east-west crossing and Airport Road the north-south, however that does not preclude other possibilities anywhere south of Parnall Rd. and along the I-94 Expressway. The crossings will be a long-term benefit to residents and neighborhoods.

Thank you for your consideration of our request.

Sincerely,

Jack Koch
Zoning Administrator

Response to Comment 11-1

MDOT has a well-established policy regarding replacement/upgrade of local government infrastructure as part of construction projects on state trunklines. This policy allows replacement of existing pedestrian/bicycle facilities that are impacted by a proposed project with in-kind facilities, while all upgrades or improvements beyond the existing condition must be funded by the local government jurisdiction within which the facility would be located. If the relevant local government agency pays for new or upgraded facilities, MDOT will accommodate these plans in the design of the Preferred Alternative. Because there are no existing crossings of US-127 or I-94 at any location other than Airport Road, the Preferred Alternative will not include any new pedestrian/bicycle facilities unless local government jurisdictions fund the improvements. To date, there has been no indication that local governments intend to do this. Based on this situation, at the Airport Road interchange, MDOT will fund replacement of the existing sidewalk as part of the Preferred Alternative.

Comment Letter #12: Spring Arbor Township

TOWNSHIP OF SPRING ARBOR

107 Teft Road, P.O. Box 250
Spring Arbor, MI 49283
(517) 750-2800 FAX (517) 750-2802



May 9, 2002

Mr. Jose Lopez
Bureau of Transportation Planning
Michigan Department of Transportation
P. O. Box 30050
Lansing, MI 48909

Re: Non Motorized Multi Path Network; Pedestrian/Bicycle Trail System

Dear Mr. Lopez:

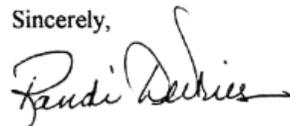
A variety of communities are currently participating in a regional multi path study of Jackson area. Some of the communities involved are Concord Twp., Blackman Twp., Henrietta Twp., Rives Twp., Spring Arbor Twp., Summit Twp., Waterloo Twp., Jackson County and the City of Jackson. US-127 and I-94 have been identified as major constraints to making a safe east-west connection and north-south connection on the west side for pedestrians and bicyclists.

We understand that the Michigan Department of Transportation (MDOT) is currently studying the reconstruction of US-127/I-94. Your recent public forum held on April 18, 2002 illustrated different proposals for the renovation project. We strongly encourage a safe east-west and north-south pedestrian/bicycle crossing be incorporated into any proposed renovation project.

Therefore, on behalf of Spring Arbor Township, we ask that you provide safe pedestrian/bicycle connections across US-127 via a bridge or underpass. We believe that Springport Road is the most likely candidate for the crossing east-west and Airport Road north-south, however that does not preclude other possibilities anywhere south of Parnall Road and along the I-94 expressway. The crossings will be a long-term benefit to residents and neighborhoods.

Thank you for your consideration of our request.

Sincerely,



Mrs. Randi DeVries
Township Clerk

Comment 12-1

Response to Comment 12-1

MDOT has a well-established policy regarding replacement/upgrade of local government infrastructure as part of construction projects on state trunklines. This policy allows replacement of existing pedestrian/bicycle facilities that are impacted by a proposed project with in-kind facilities, while all upgrades or improvements beyond the existing condition must be funded by the local government jurisdiction within which the facility would be located. If the relevant local government agency pays for new or upgraded facilities, MDOT will accommodate these plans in the design of the Preferred Alternative. Because there are no existing crossings of US-127 or I-94 at any location other than Airport Road, the Preferred Alternative will not include any new pedestrian/bicycle facilities unless local government jurisdictions fund the improvements. To date, there has been no indication that local governments intend to do this. Based on this situation, at the Airport Road interchange, MDOT will fund replacement of the existing sidewalk as part of the Preferred Alternative.

Comment Letter #13: Henrietta Township Recreation Committee

April 29, 2002

RE: Non Motorized Multi Path Network
Pedestrian/Bicycle Trail System

Dear Mr. Lopez,

A variety of communities are currently participating in a regional multi path study of the Jackson area. Some of the communities involved are Concord Twp., Blackman Twp., Henrietta Twp., Rives Twp., Spring Arbor Twp., Summit Twp., Waterloo Twp., Jackson County and the City of Jackson. US-127 and I-94 have been identified as major constraints to making a safe east-west connection and north-south connection on the west side for pedestrians and bicyclists.

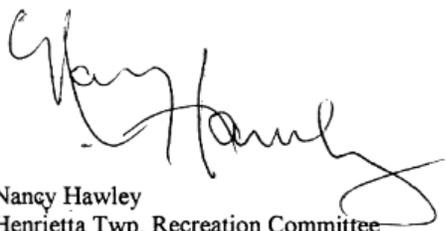
We understand that the Michigan Department of Transportation (MDOT) is currently studying the reconstruction of US-127 / I-94. Your recent public forum held on April 18, 2002 illustrated different proposals for the renovation project. We strongly encourage a safe east -west and north-south pedestrian / bicycle crossing be incorporated into any proposed renovation project.

Comment 13-1

Therefore, on behalf of The Henrietta Twp. Recreation Committee, we ask that you provide safe pedestrian / bicycle connections across US-127 via a bridge or underpass. We believe that Springport Road is the most likely candidate for the crossing east -west and Airport Road north -south, however that does not preclude other possibilities anywhere south of Parnell Road and along the I-94 Expressway. The crossings will be a long-term benefit to residents and neighborhoods.

Thank you for your consideration of our request.

Sincerely,



Nancy Hawley
Henrietta Twp. Recreation Committee
8751 Kennedy Rd.
Munith, Mi. 49259

Response to Comment 13-1

MDOT has a well-established policy regarding replacement/upgrade of local government infrastructure as part of construction projects on state trunklines. This policy allows replacement of existing pedestrian/bicycle facilities that are impacted by a proposed project with in-kind facilities, while all upgrades or improvements beyond the existing condition must be funded by the local government jurisdiction within which the facility would be located. If the relevant local government agency pays for new or upgraded facilities, MDOT will accommodate these plans in the design of the Preferred Alternative. MDOT will coordinate with local governments during the design phase concerning non-motorized facilities and context sensitive solutions. Because there are no existing crossings of US-127 or I-94 at any location other than Airport Road, the Preferred Alternative will not include any new pedestrian/bicycle facilities unless local government jurisdictions fund the improvements. To date, there has been no indication that local governments intend to do this. Based on this situation, at the Airport Road interchange, MDOT will fund replacement of the existing sidewalk as part of the Preferred Alternative.

Comment Letter #14: Summit Township

**SUMMIT TOWNSHIP
2121 FERGUSON ROAD
JACKSON MI 49203
(517) 788-4113**

May 9, 2002

Mr. Jose Lopez
Bureau of Transportation Planning
Michigan Department of Transportation
P.O. Box 30050
Lansing, MI 48909

RE: Non Motorized Multi-Path Network
Pedestrian/Bicycle Trail System

Dear Mr. Lopez:

A variety of communities are currently participating in a regional multi-path study of the Jackson Area. Some of the communities involved are Concord Twp., Blackman Charter Twp., Henrietta Twp., Rives Twp., Spring Arbor Twp., Summit Twp., Waterloo Twp., Jackson County and the City of Jackson. US-127 and I-94 have been identified as major constraints to making a safe east-west connection and north-south connection on the west side for pedestrians and bicyclists.

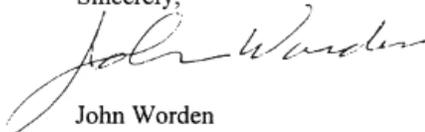
We understand that the Michigan Department of Transportation (MDOT) is currently studying the reconstruction of US-127 / I-94. Your recent public forum held on April 18, 2002, illustrated different proposals for the renovation project. We strongly encourage a safe east-west and north-south pedestrian/bicycle crossing be incorporated into any proposed renovation project.

Comment 14-1

Therefore, on behalf of Summit Township, we ask that you provide safe pedestrian/ bicycle connections across US-127 via a bridge or underpass. We believe that Springport Road is the most likely candidate for the east-west crossing and Airport Road the north-south, however that does preclude other possibilities anywhere south of Parnall Rd. and along the I-94 Expressway. The crossings will be a long-term benefit to residents and neighborhoods.

Thank you for your consideration of our request.

Sincerely,



John Worden
Zoning Administrator

Response to Comment 14-1

MDOT has a well-established policy regarding replacement/upgrade of local government infrastructure as part of construction projects on state trunklines. This policy allows replacement of existing pedestrian/bicycle facilities that are impacted by a proposed project with in-kind facilities, while all upgrades or improvements beyond the existing condition must be funded by the local government jurisdiction within which the facility would be located. If the relevant local government agency pays for new or upgraded facilities, MDOT will accommodate these plans in the design of the Preferred Alternative. MDOT will coordinate with local governments during the design phase concerning non-motorized facilities and context sensitive solutions. Because there are no existing crossings of US-127 or I-94 at any location other than Airport Road, the Preferred Alternative will not include any new pedestrian/bicycle facilities unless local government jurisdictions fund the improvements. To date, there has been no indication that local governments intend to do this. Based on this situation, at the Airport Road interchange, MDOT will fund replacement of the existing sidewalk as part of the Preferred Alternative.

Comment Letter #15: City of Jackson

RESOLUTION

WHEREAS, the Michigan Department of Transportation has been studying the I-94 Freeway Modernization from M-60 to Sargent Road in Jackson County since Fall of 2000; and

WHEREAS, the Michigan Department of Transportation has issued a draft Environmental Impact Statement and draft Section 4(f) Evaluation dated March 2002; and

WHEREAS, included in the draft Environmental Impact Statement is an evaluation of the interchanges in this area of I-94; and

WHEREAS, the interchange of I-94 and US-127 North/West Avenue is one of the study intersections for which the consultant has developed three alternatives; and

WHEREAS, their consultant is recommending Alternative 1 to Michigan Department of Transportation which provides very little improvement from the existing conditions; and

WHEREAS, the Michigan Department of Transportation has a public comment period from March 15 through May 11, 2002.

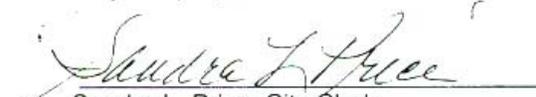
NOW THEREFORE BE IT RESOLVED, that the City of Jackson objects to Alternative 1; and

BE IT FURTHER RESOLVED, that the City recommends that the Michigan Department of Transportation consider Alternative Number 2.

State of Michigan)
County of Jackson)ss
City of Jackson)

I, Sandra L. Price, City Clerk in and for the City of Jackson, County and State aforesaid, do hereby certify that the foregoing is a true and complete copy of a resolution adopted by the Jackson City Council on the 16th day of April, 2002.

IN WITNESS WHEREOF, I have hereto affixed my signature and the Seal of the City of Jackson, Michigan, on this 17th day of April, 2002.


Sandra L. Price, City Clerk

Comment 15-1

Response to Comment 15-1

Since the drafting of the City of Jackson resolution, the Consensus Building Committee has addressed the opposition to Practical Alternative I. A description of the process used to reach consensus on the interchange design can be found in Section 2.2 of this document and in the I-94 & US-127/M-50 Interchange Consensus Building Committee report (Manis & Michaud 2005).

Since consensus has been reached to incorporate Alternative D-1 as the Preferred Alternative at the I-94/US-127 interchange, previously received comments against Practical Alternative I, and resolutions of opposition, no longer apply to the Preferred Alternative. A revised resolution from the City of Jackson is shown as Comment Letter #22.

Comment Letter #16: Mechanical Products, Inc.



Mechanical Products 1824 River Street Jackson, MI 49202

April 15, 2001

Ronald S. Kinney
Environmental Section
Project Planning Division
Michigan Department Of Transportation
425 West Ottawa Street
P.O. Box 30050
Lansing, Michigan 48909

Re: Draft Environmental Impact Statement ("EIS") for Proposed I-94 Jackson Freeway Modernization Project in Jackson County

We have received and reviewed the referenced Draft EIS, which you forwarded to us by your letter dated March 8, 2002. As you know Mechanical Products ("MP") is working with the Michigan Department of Environmental Quality to address contamination found in soils and groundwater located on our property and adjacent properties. MP has previously met with representatives of the Michigan Department Of Transportation ("MDOT") to discuss the planned alterations to the I-94 Freeway. MP has expressed concerns regarding the potential effects of the Freeway work on these environmental conditions. MP submits the following comments on the Draft EIS:

Comment 16-1

1. The location of the I-94 Freeway in the vicinity of the MP facility, i.e. west of Cooper Street and north of I-94, for each of the identified practical alternatives does not appear to be any closer to the Mechanical Products property than the existing Freeway. This is an important and favorable aspect of these alternatives, because this will reduce the disruption caused by the Freeway work to MP's management of the soil and groundwater contamination conditions. Please advise us if we are incorrect in our understanding of the location of the practical alternatives.

Comment 16-2

2. The Draft EIS contains statements indicating that the MDOT recognizes the potential problems growing out of the installation of new or modified freeway supporting structures in areas proximate to the MP facility and the areas of affected groundwater located to the west of the MP facility. The Draft EIS states at Section 5.10.2.3 that

phone: 517.253.1234 fax: 517.253.1234 www.mechprod.com



3. mitigation measures such as sheet piling and/or concrete slurry walls will be used, and, further, that special drilling and construction techniques will be used as appropriate where bridge footings or piers are constructed. According to the Draft EIS these measures will be used to avoid the problem of contaminated groundwater being drawn toward the construction activities as a result of dewatering measures associated with these activities. While these mitigation measures appear to be appropriate, MP recommends that MDOT and its contractors provide the specific work plans and system design information to MP prior to its finalization so that MP and its consultants can review this information to evaluate the adequacy of the mitigation measures.

MP appreciates the opportunity to comment on the Draft EIS.

Very truly yours,
Mechanical Products

Perry Mulhollen

cc: David Tripp
William Farrell

Response to Comment 16-1

The assessment about the location of the existing and proposed I-94 is correct. The Preferred Alternative will not move I-94 any closer to the existing Mechanical Products, Inc. site.

Response to Comment 16-2

As requested, specific information about proposed mitigation measures, work plans, and system design information will be provided to Mechanical Products, Inc. for review prior to implementation. MDOT will also work with Mechanical Products, Inc. to address any concerns they may have. A mitigation commitment for this is included in Section 4.11 of this FEIS.

Comment Letter #17: The Enterprise Group of Jackson, Inc.



4/17/04

Mr. Jose A. Lopez
Public Hearings Officer
Bureau of Transportation Planning
Michigan Department of Transportation
Murray D. Van Wagoner Building
P.O. Box 30050
Lansing, MI 48909

Dear Mr. Lopez:

At our April 15th Enterprise Group Board Meeting, a resolution was passed in support of Alternative II on the I-94 & U.S. 127-north overpass. The Enterprise Group of Jackson, Inc. is a countywide organization made up of the Greater Jackson Area Chamber of Commerce, The Jackson Area Manufacturer's Association, Convention and Visitor's Bureau, Small Business Development Center, Technical Assistance Center and other affiliated organizations. Our Board is made up of local governmental officials, area businesses, including manufacturers, commercial businesses, hospitality businesses, and representatives from higher education and labor. Our organization clearly represents a broad constituency in Jackson County.

Comment 17-1

At our board meeting, we reviewed the three alternatives for this particular interchange and there was unison in the opinion that what is necessary at I-94 and U.S. 127 North is for local traffic to be separated from Interstate traffic. The primary concerns for the community are safety, as well as streamlining the flow of traffic at this interchange. It was the view of this 24-member board that alternative II was far superior to alternative I, while preserving valuable commercial land that was consumed under alternative III.

For these reasons, we urge MDOT to take this local input and move forward with plans to implement alternative II at this vital interchange for Jackson. If you have any questions for me about our organization, or our position on this issue, please contact me at (517) 788-4455.

Sincerely,

A handwritten signature in black ink, appearing to read "S. Czarnecki", written over a horizontal line.

Steve Czarnecki
President & CEO

414 N. Jackson • Jackson, Michigan 49201 • Phone: 517-788-4455 • Fax: 517-782-0061

Response to Comment 17-1

Since the drafting of the Enterprise Group resolution, the Consensus Building Committee has addressed the opposition to Practical Alternative I. A description of the process used to reach consensus on the interchange design can be found in Section 2.2 of this document and in the I-94 & US-127/M-50 Interchange Consensus Building Committee report (Manis & Michaud 2005).

Since consensus has been reached to incorporate Alternative D-1 as the Preferred Alternative at the I-94/US-127 interchange, previously received comments against Practical Alternative I and resolutions of opposition no longer apply to the Preferred Alternative. A revised resolution from the Enterprise Group is shown as Comment Letter #23.

Comment Letter #18: Region 2 Planning Commission

RESOLUTION OF THE REGION 2 PLANNING COMMISSION

WHEREAS, the Michigan Department of Transportation has been undertaking the I-94 Freeway Modernization Study from M-60 to Sargent Road in Jackson County, and

WHEREAS, the Michigan Department of Transportation has published the Draft Environmental Impact Statement (DEIS) evaluating the interchanges along this 9-mile segment of the I-94 corridor, and

WHEREAS, one of the stated goals in the study is to "improve travel efficiency and capacity in the I-94 corridor by replacing existing road segments, interchanges, and bridges with modern facilities designed to accommodate projected year 2025 traffic volumes," and to "improve motorist safety," and

WHEREAS, a local Consensus Building Committee was appointed representing elected and appointed bodies, and the Metropolitan Planning Organization, as well as federal and state highway representatives; and

WHEREAS, the purpose of the Consensus Building Committee was to reach agreement on a preferred alternative design for the I-94/US-127 North interchange; and

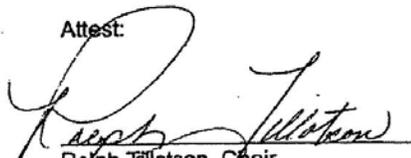
WHEREAS, the Consensus Building Committee reached unanimous agreement on August 26, 2004 by selecting Alternative D1, a full-cloverleaf design;

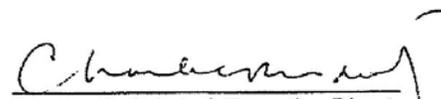
NOW, THEREFORE BE IT RESOLVED, that the Region 2 Planning Commission, as the state-designated Metropolitan Planning Organization for the Jackson urbanized area, hereby supports the selection of Alternative D1 as the preferred alternative for the I-94/US-127 North interchange; and

BE IT FURTHER RESOLVED, that the Region 2 Planning Commission requests that the Michigan Department of Transportation implement Alternative D1 as the preferred solution to address the stated goals of the I-94 Freeway Modernization Study and to address the concerns and needs of the local community.

ADOPTED this day, November 18, 2004, at a meeting of the Region 2 Planning Commission held at Lenawee County Library, Adrian, Michigan.

Attest:


Ralph Tillotson, Chair
Region 2 Planning Commission


Charles C. Reisdorf, Executive Director
Region 2 Planning Commission

c:\region2\documents\stall\rest\mb\regional\2\pci-94D1\resolution

Comment 18-1

Comment 18-2

Response to Comment 18-1

Comment Acknowledged. This resolution replaces the previous resolution listed as Comment Letter #6.

Response to Comment 18-2

Comment Acknowledged.

Comment Letter #19: Jackson County Board of Commissioners

**JACKSON COUNTY
BOARD OF COMMISSIONERS**

Clifford E. Herl, Chairman



David K. Elwell, Vice-Chairman

Gary D. Adams
Rick I. Baxter
Phillip H. Berkemeier
Todd N. Brittain
John R. Day

Robert J. Lacinid
Gail Mahoney
James E. Shorwell, Jr.
James C. Videto
Gregory C. Wilson

**RESOLUTION (09-04.39) SUPPORTING ALTERNATIVE "D1"
FOR THE I-94/US 127 INTERCHANGE**

WHEREAS, the Michigan Department of Transportation has developed an I-94 Freeway Modernization Project plan; and

WHEREAS, a Consensus Building Committee has been appointed representing elected and appointed bodies in the affected area, as well as federal and state highway representatives; and

WHEREAS, the purpose of the Consensus Building Committee is to reach agreement on a preferred alternative for the I-94/US-127 North interchange; and

WHEREAS, the Consensus Building Committee reached unanimous agreement on August 26, 2004 by selecting Alternative "D1;" and

WHEREAS, the Jackson County Board of Commissioners is interested in the long-term implications of the highway infrastructure related to this interchange; and

WHEREAS, alternative "D1," as depicted in the current plan as of August 26, 2004 appears to best address the concerns of this body;

Comment 19-1

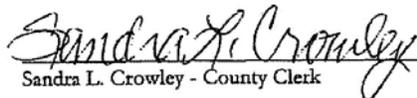
NOW, THEREFORE, BE IT RESOLVED, that the Jackson County Board of Commissioners hereby supports alternative "D1" as the preferred alternative, as depicted in the current form as of August 26, 2004.


Clifford F. Herl, Chairman
Jackson County Board of Commissioners
September 28, 2004

Jackson County Tower Bldg., 120 W. Michigan Avenue, Jackson, MI 49201
Phone: (517) 788-4335 FAX: (517) 780-4755

STATE OF MICHIGAN)
) ss.
COUNTY OF JACKSON)

I Sandra Crowley, the duly qualified and acting Clerk of the County of Jackson, Michigan, do hereby certify that the foregoing is a true and complete copy of a Resolution adopted by the County Board of Commissioners of the County of Jackson, State of Michigan at a regular meeting held on September 28, 2004 at which meeting a quorum was present and remained throughout and that an original thereof is on file in the records of the County. I further certify that said meeting was conducted and public notice of said meeting was given pursuant to and in full compliance with the Open Meetings Act, being Act No. 267, Public Acts of Michigan, 1976, and that the minutes of said meeting were kept and will be or have been made available as required by said Act.


Sandra L. Crowley - County Clerk

Dated: 9-30-04

Response to Comment 19-1

Comment Acknowledged. This resolution replaces the previous resolution listed as Comment Letter #8.

Comment Letter #20: Jackson County Road Commission

COMMISSIONERS:

ELWIN M. JOHNSON
Chairperson
ROBERT M. ZENZ
Vice Chairperson
KARL A. SCHMIDT
Member



JOSEPH M. MICHALSKY, P.E.
County Highway Engineer
KENNETH R. STRAUB
County Highway Superintendent
LAURE A. FIERO, MBA
Clerk/Director of Administration

**BOARD OF JACKSON COUNTY ROAD COMMISSIONERS
RESOLUTION 04-15**

**RESOLUTION SUPPORTING ALTERNATIVE "D1"
FOR THE I-94/US 127 INTERCHANGE**

WHEREAS, the Michigan Department of Transportation has developed an I-94 Freeway Modernization Project plan; and

WHEREAS, a Consensus Building Committee has been appointed representing elected and appointed bodies in the affected area, as well as federal and state highway representatives; and

WHEREAS, the purpose of the Consensus Building Committee is to reach an agreement on a preferred alternative for the I-94/US-127 North interchange; and

WHEREAS, the Consensus Building Committee reached unanimous agreement on August 26, 2004 by seeking Alternative "D1"; and

WHEREAS, the Jackson County Board of Road Commissioners is interested in the long-term implications of the highway infrastructure related to this interchange; and

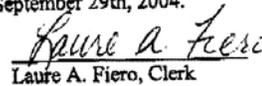
WHEREAS, alternative "D1," as depicted in the current plan as of August 26, 2004 appears to best address the concerns of the Road Commission;

NOW, THEREFORE, BE IT RESOLVED, that the Jackson County Board of Road Commissioners hereby supports Alternative "D1" as the preferred alternative, as depicted in the current form as of August 26, 2004.

Comment 20-1

I hereby certify the foregoing is a true and correct copy of a resolution unanimously adopted by the Board of Jackson County Road Commissioners at a regular meeting held September 29th, 2004.

Prepared by: L. A. Fiero
2400 N. Elm Road
P.O. Box 1125
Jackson, MI 49204


Laure A. Fiero, Clerk

Your Local Road Professionals
2400 Elm Road, P.O. Box 1125 • Jackson, Michigan 49204-1125
Telephone: (517) 788-4230 or 1 (800) 718-3537 • Fax: (517) 788-4237
<http://www.jcrrc-roads.org>

Response to Comment 20-1

Comment Acknowledged. This resolution replaces the previous resolution listed as Comment Letter #9.

Comment Letter #21: Blackman Charter Township

**RESOLUTION
27-2004-1004
BLACKMAN CHARTER TOWNSHIP**

**RESOLUTION TO RECOMMEND THAT MDOT IMPLEMENT PRACTICAL ALTERNATIVE #D1
IN THE I-94 JACKSON FREEWAY
MODERNIZATION PROJECT, M-60 TO SARGENT ROAD**

WHEREAS, the Michigan Department of Transportation (MDOT) is studying a I-94 Jackson Freeway Modernization Project, and

WHEREAS, the name of this proposal is Draft Environmental Impact Statement and Draft Section r(f) Evaluation, dated March 2002, and

WHEREAS, one of the stated goals in the proposed plan is to 'improve travel efficiency and roadway capacity' in the I-94 corridor by replacing existing road segments, interchanges, and bridges with modern facilities designed to accommodate projected year 2025 traffic volumes, and

WHEREAS, another stated goal is to 'improve motorist safety', and

WHEREAS, the other options proposed do not address these issues as adequately or as completely as Alternative #D1 for the I-94 and US 127 interchange, and

WHEREAS, the local Consensus Building Committee for this project met on August 26, 2004 and by unanimous vote recommends that Alternative #D1 be added to the impact matrix.

THEREFORE, BLACKMAN CHARTER TOWNSHIP HEREBY RESOLVES TO PUBLICLY STATE THEIR PREFERENCE IN THIS UNDERTAKING

RESOLVED, Blackman Charter Township prefers Alternative #D1 as the best plan to meet the needs of the residents of Blackman Charter Township and Jackson County.

RESOLVED, Blackman Charter Township considers the other options to be inferior to Alternative #D1.

RESOLVED, Blackman Charter Township recommends to MDOT that Alternative #D1 be chosen and implemented as the best solution to the stated goals of their study.

At a regular Board meeting of the Blackman Charter Township Board, located at 1990 W. Parnall Road, County of Jackson, Michigan, Monday, October 4, 2004 at 7:00 p.m., this Resolution was presented by Member Bowman.

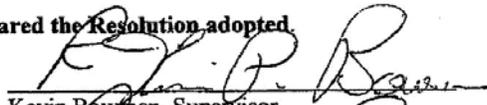
Support was offered by Member Snell

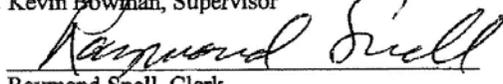
Upon Roll Call, the following voted "aye": Supervisor Bowman, Clerk Snell, Treasurer Brockie and Trustees Barrett, Laskovich, Smith and Thomas.

The following voted "nay: None

Absent: None

The Supervisor declared the Resolution adopted.


Kevin Bowman, Supervisor


Raymond Snell, Clerk

27-2004-1004

Comment 21-1

Response to Comment 21-1

Comment Acknowledged. This resolution replaces the previous resolution listed as Comment Letter #10.

Comment Letter #22: The City of Jackson

RESOLUTION

BY THE CITY OF JACKSON:

WHEREAS, the Michigan Department of Transportation has been studying the I-94 Freeway Modernization from M-60 to Sargent Road in Jackson County since the Fall of 2000; and

WHEREAS, three alternatives were developed for the interchange of I-94 and US-127 North/West Avenue in the Draft Environmental Impact Statement; and

WHEREAS, a Consensus Building Committee (CBC) was organized to include representatives from local governments to develop a fourth alternative; and

WHEREAS, in April 2004, Alternatives C1 and D1 were presented to the City Council and a resolution was approved in support of Alternative C1; and

WHEREAS, during the summer months, the CBC evaluated the benefits and the costs between Alternatives C1 and D1; and

WHEREAS, the speed, level of service and the reduction of traffic signals were comparable between the two alternatives, with C1 costing more; and

WHEREAS, in August 2004, the CBC voted unanimously to proceed with Alternative D1; and

WHEREAS, the CBC is seeking support from the local governments.

Comment 22-1

NOW, THEREFORE, BE IT RESOLVED, that the City of Jackson does support Alternative D1 as the fourth alternatives in the Environmental Impact Statement.

State of Michigan)
County of Jackson)ss
City of Jackson)

I, Lynn Fessel, City Clerk, in and for the City of Jackson, County and State aforesaid, do hereby certify that the foregoing is a true and complete copy of a resolution adopted by the Jackson City Council on the 23rd day of November, 2004.

IN WITNESS WHEREOF, I have hereto affixed my signature and the Seal of the City of Jackson, Michigan, on this 24th day of November, 2004.


Lynn Fessel, City Clerk

Response to Comment 22-1

Comment Acknowledged. This resolution replaces the previous resolution listed as Comment Letter #15.

Comment Letter #23: The Enterprise Group of Jackson, Inc.



**The Enterprise
Group**

of Jackson, Inc.

**RESOLUTION
THE ENTERPRISE GROUP OF JACKSON INC.**

**RESOLUTION TO RECOMMEND THAT MDOT IMPLEMENT PRACTICAL ALTERNATIVE #D1 IN
THE I-94 JACKSON FREEWAY
MODERNIZATION PROJECT, M-60 TO SARGENT ROAD**

At a regular meeting of The Enterprise Group of Jackson Board of Directors, One Jackson Square Jackson, Michigan on Monday, October 18, 2004 at 7:00 p.m., the following Resolution was presented:

WHEREAS, the Michigan Department of Transportation (MDOT) is studying a I-94 Jackson Freeway Modernization Project, and

WHEREAS, there is a local Consensus Building Committee looking at alternative interchange designs to be included in the Draft Environmental Impact Statement and Draft Section r(f) Evaluation, dated March 2002, and

WHEREAS, The Enterprise Group had representation on this Local Consensus Building Committee, and

WHEREAS, one of the stated goals in the proposed plan is to 'improve travel efficiency and roadway capacity' in the I-94 corridor by replacing existing road segments, interchanges, and bridges with modern facilities designed to accommodate projected year 2025 traffic volumes, and

WHEREAS, another stated goal is to 'improve motorist safety', and

WHEREAS, the other options proposed do not address these issues as adequately or as completely as Alternative #D1 for the I-94 and US 127 interchange, and

WHEREAS, the local Consensus Building Committee for this project met on August 26, 2004 and by unanimous vote recommends that Alternative #D1 be added to the impact matrix.

THEREFORE, THE ENTERPRISE GROUP OF JACKSON, INC. HEREBY RESOLVES TO PUBLICLY STATE THEIR PREFERENCE IN THIS UNDERTAKING

RESOLVED, The Enterprise Group of Jackson Board of Directors prefers Alternative #D1 as the best plan to meet the needs of the residents of Jackson County.

RESOLVED, The Enterprise Group of Jackson Board of Directors considers the other options to be inferior to, or considerably more expensive than Alternative #D1.

RESOLVED, The Enterprise Group of Jackson Board of Directors recommends to MDOT that Alternative #D1 be chosen and implemented as the best solution to the stated goals of their study.

Director Rochefort moved to approve resolution as presented.

Director Northrup supported the motion.

The motion passed unanimously.

The Chairman declared the Resolution adopted.

Recorded October 18, 2004 by:


R. Bonney, Meeting Recorder

Comment 23-1

One Jackson Square • Suite 1100 • Jackson, Michigan 49201 • Phone: 517-788-4455 • Fax: 517-782-0061

Response to Comment 23-1

Comment Acknowledged. This resolution replaces the previous correspondence listed as Comment Letter #17.

6.2 COMMENTS FROM THE GENERAL PUBLIC

Comment: The I-94 bridge at US-127 West is in danger of falling and needs to be replaced.

Response: Chapter 2 of the DEIS identified the I-94 bridge over US-127 and M-50 as being in need of replacement in the near future. To address this need, emergency repairs to the bridge began in the spring of 2005. These emergency repairs included structural repairs to the bridge. The emergency repairs to the bridge will not affect the ultimate build out of the Preferred Alternative in the future. The interchange's priority will not be affected by normal maintenance, as MDOT is obligated to preserve the integrity of the existing system. MDOT is aware of the current condition of all bridges in the project area and will continue to maintain them in a safe condition for the traveling public until they can be replaced through implementation of the Preferred Alternative.

Comment: The timing of bridge reconstruction is a concern.

Response: The following portions of the Preferred Alternative have been designated as Phase I of the Preferred Alternative as funding has been identified: the Sargent Road interchange reconstruction, including the closure of the I-94 BL, and the replacement of the Hawkins Road and Dettman Road bridges. Due to funding availability, the Sargent Road interchange work will be phased. The first phase will be to reconstruct the Sargent Road bridge and realign the eastbound ramps on the south side of the interchange as defined in the study. The westbound ramps will be phased in later years when funding becomes available. Because of deteriorating conditions on the Sargent Road, Hawkins Road, and Dettman Road bridges, FHWA will allow MDOT to go forward with the design phase of Phase I of the Preferred Alternative. Correspondence regarding this issue from FHWA and MDOT can be found in Appendix C. A best-case scenario would result in the completion of the Phase I construction within five years. MDOT has identified the Phasing plan for the Preferred Alternative. The Preferred Alternative has been divided into three separate phases as follows:

- **Phase I:** Sargent Road interchange reconstruction, including the closure of the I-94 BL, and the replacement of the Hawkins Road and Dettman Road bridges;
- **Phase II:** US-127/M-50/West Avenue interchange reconstruction, Elm Road interchange reconstruction, final phases of the Sargent Road interchange reconstruction, replacement of the Lansing Road bridge, and replacement and widening of the I-94 bridge over the Grand River
- **Phase III:** US-127 south interchange reconstruction, Cooper Street interchange reconstruction, widen I-94 between the two legs of US-127, Airport Road interchange reconstruction, widen I-94 from US-127 south to Sargent Road, M-60 interchange reconstruction, widen I-94 from US-127/M-50/West Avenue to M-60

The approximate time frame of each phase and the preliminary cost is shown in Table 2-12 in Section 2.3.13 of this FEIS. These priorities were determined at the time of this study and are based upon the availability of funding. MDOT will periodically reevaluate the priorities and monitor the condition, capacity and safety needs along the corridor based upon the purpose and need for the I-94 Modernization Study.

Comment: The project should promote a system solution where freight is moved from region to region by rail.

Response: Section 3.3.2 of the DEIS evaluated other transportation alternatives including Transportation System Management (TSM), mass transit, and off-alignment alternatives. These alternatives were evaluated and eliminated because they failed to meet the purpose of the project as outlined in Chapter 2 of the DEIS. The increased use of rail to move freight, will not address the project's goals such as improving the condition of existing bridges and road segments, improving travel efficiency and roadway capacity, and improving motorist safety.

Comment: I-94 needs more merging room heading westbound from the Airport Road interchange.

Response: The Preferred Alternative will improve this merge distance with the new distance meeting all current design standards. This location is shown on Figure 2.

Comment: A merge lane is needed on I-94 between US-127 West and US-127 East.

Response: The Preferred Alternative will improve merge distances at all interchange ramps in this segment of I-94. Additionally, an auxiliary weave lane will be included between on and off ramps from the US-127 West interchange to Elm Road. This lane will improve motorists' ability to merge. The new merge distances will meet all current design standards and are shown on Figure 2 of this FEIS.

Comment: The speed limit on I-94 should be raised to 70 mph through the Jackson area.

Response: As provided under Section 257.628 of the Michigan Vehicle Code, the speed limit on Michigan highways is jointly determined by MDOT and the Michigan State Police Department. Before making a decision, a variety of factors are considered including an engineering and traffic investigation report and safety. The decision about the speed limit on I-94 will not be made until the construction phase of the project.

Comment: Four travel lanes in each direction may not be needed on I-94.

Response: The Preferred Alternative includes three continuous through lanes on I-94. A fourth auxiliary lane would be included where necessary to accommodate weaving traffic caused by interchange ramps that are in close proximity to each other. As shown on Figure 2, the 4th auxiliary lane will only be needed between US-127 West and Elm Road.

Comment: Reroute US-127 beginning about five miles north of the US-127 West interchange, swing it to the east, turn it south, and connect to I-94 at the US-127 East interchange. This would allow selection of the No Build Alternative for I-94.

Response: Off-alignment alternatives were evaluated and eliminated as described in Section 3.3.2.3 of the DEIS. These alternatives were discarded because they failed to meet the purpose of the project as outlined in Chapter 2 of the DEIS. In addition, the benefits of an off-alignment solution were vastly outweighed by their negative impacts and cost. The No Build Alternative was eliminated from consideration because it would not meet the project's purpose and need. This is explained in greater detail in Section 2 of this FEIS.

Comment: **Practical Alternative I is the best solution at the US-127 West interchange because it:**

- **Solves the problem of replacing and enlarging the deteriorated bridge structures and accommodating additional lanes on I-94**
- **Saves taxpayers \$100 million**
- **Will not hurt businesses on west side of US-127**
- **Is the easiest and least confusing way for travelers to get to local businesses**
- **Requires the least amount of new ROW**

Response: Initially, Practical Alternative I was selected for the Preferred Alternative at this interchange. However, this alternative was modified as Alternative D-1. The reasons for selecting and making modifications to this alternative are discussed in Section 2 of this FEIS.

Comment: **Local and interstate freeway traffic should be separated, and Practical Alternative I does not provide this separation.**

Response: Initially, Practical Alternative I was selected as the Preferred Alternative at this interchange. However, this alternative was modified as Alternative D-1. The reasons for selecting and making modifications to this alternative are discussed in Section 2 of this FEIS. The modified Alternative D-1 separates all freeway to freeway movements from local traffic.

Comment: **Practical Alternative II should be selected at the US-127 West interchange because:**

- **It separates local traffic from freeway traffic**
- **Requires less ROW than Practical Alternative III**

Response: Initially, Practical Alternative I was selected for the Preferred Alternative at this interchange. However, this alternative was modified as Alternative D-1. The reasons for selecting and making modifications to this alternative are discussed in Section 2 of this FEIS.

Comment: **Practical Alternative II at the US-127 West interchange will greatly affect the residences along Shirley Drive by rerouting traffic through this neighborhood.**

Response: As noted in Chapter 5 of the DEIS (Section 5.4.2), all of the Build Alternatives will impact the perceived quality of life of some of the residents in the project area. Residences along Springport Road and Shirley Drive would notice an increase in traffic as a result of Practical Alternative II. However, this alternative was not selected as the Preferred Alternative at this interchange.

Comment: **Practical Alternative III should be selected at the US-127 West interchange because:**

- **It separates local traffic from freeway traffic**
- **Provides a freeway to freeway connection with no traffic lights**

Response: Initially, Practical Alternative I was selected for the Preferred Alternative at this interchange. However, this alternative was modified as Alternative D-1. The reasons for selecting and making modifications to this alternative are discussed in Section 2 of this FEIS.

Comment: **Keep the existing southbound ramps from US-127 to Springport Road (both eastbound and westbound).**

Response: The Preferred Alternative retains the existing US-127 exit ramps onto Springport Road. This is shown on Figure 2.

Comment: **Provide pedestrian sidewalks between Springport Road and Boardman Road.**

Response: MDOT policy states that existing pedestrian/bicycle facilities that are impacted by a proposed project will be replaced with in-kind facilities, while all upgrades or improvements beyond the existing condition must be funded by the local government jurisdiction within which the facility would be located. Currently, no sidewalks exist at this location. However, if local agencies propose new non-motorized facilities within the project area and are willing to pay for these new facilities, MDOT will accommodate these plans in the design of the Preferred Alternative.

Comment: **Near the US-127 West interchange, a bicycle/pedestrian way is needed to cross from the north side to the south side of I-94 and from the east side to the west side of US-127. A tunnel or guarded crossover could and should be provided.**

Response: The response to the preceding comment also applies to this comment. See above.

Comment: **Current and future noise levels along I-94 are a concern.**

Response: Section 5.9 of the DEIS evaluates potential noise impacts throughout the project area, and additional details regarding the noise analysis are provided in the *Noise Technical Report for the I-94 Jackson Freeway Modernization Project* (CH2M Hill 2002) which was available for public inspection at all DEIS public review locations. These documents indicate where noise levels will increase, identify locations where noise walls were evaluated, and specify locations where noise walls will likely be constructed.

Comment: **Current and future air pollution levels are a concern along I-94.**

Response: Section 5.8 of the DEIS addresses air quality issues related to the Practical Alternatives. Additional information regarding air quality is found in the *Air Quality Technical Report for the I-94 Jackson Freeway Modernization Project, Jackson Michigan* (CH2M Hill 2002) which was available for public inspection at all DEIS public review locations. These documents indicate that the project will not result in violations of any applicable air quality standards, which protect human health.

Comment: **The neighborhood along Barrett Lane will be severely impacted by the project.**

Response: The neighborhood located along Barrett Lane in the southwest quadrant of the Elm Road interchange will be substantially impacted by the Preferred Alternative. Impacts to this neighborhood were not fully addressed in the DEIS. Further information about these impacts is provided in Section 2 of this FEIS. This section indicates that about six of the

twelve residences in this neighborhood would be relocated as a result of the Preferred Alternative.

Comment: **Compensation for ROW acquisition is a concern.**

Response: ROW requirements for the Preferred Alternative are shown in Figure 2 of this FEIS. All property owners will be compensated at fair market value for ROW that is purchased as part of the project. This compensation, as well as relocation assistance, will be provided by MDOT in accordance with all relevant Federal and State regulations. These commitments are described in Section 4 of the FEIS. ROW acquisition will not occur until after the design phase of the project is near completion, and the exact timing of the design phase is not yet known (it depends on funding).

Comment: **The location and visual appearance of noise barriers and retaining walls is a concern.**

Response: The likely locations of noise walls are identified in Section 5.9 of the DEIS, and retaining walls are shown in Figures 3-8, 3-9, and 3-10 of the DEIS as well as Figure 2 of this FEIS. These locations are determined by design constraints (retaining walls) and applicable regulations (noise walls). As noted in Section 4 of this FEIS, the Preferred Alternative will also include architectural treatments and details on bridges, retaining walls, and other infrastructure. These treatments will be based on a consistent theme throughout the project area. This will minimize negative visual impacts.

Comment: **Do not change the Sargent Road interchange - it is safe and convenient in its current condition. Changing the access will cause traffic jams and long waits at the intersections.**

Response: Practical Alternative II was chosen for inclusion in the Preferred Alternative at this location. The reasons for selecting this alternative are described in Section 2 of the FEIS. Although the interchange currently operates at an acceptable level of service without congestion, congestion is expected to increase by the year 2025 (see Section 2.5.3.2 of the DEIS). Practical Alternative II was thoroughly analyzed to determine how traffic would operate if it were to be constructed. Table 3-2 of the DEIS shows that the interchange intersections will operate at an acceptable LOS well into the future and will not result in traffic jams. Unexpected delays in the project schedule have allowed the further decline in the condition of the I-94 BL bridge near the Sargent Road interchange. To address this need, an emergency project at the interchange is anticipated to begin in the spring of 2007. The extent of these emergency repairs has not been determined at this time. The emergency repairs to the bridge will not affect the ultimate build out of the Preferred Alternative in the future.

Comment: **Practical Alternative II should be selected at the Sargent Road interchange because:**

- **It retains the existing businesses along Ann Arbor Road; and**
- **It combines the two interchanges into one.**

Response: Practical Alternative II was selected as the Preferred Alternative for this interchange. The reasons for selecting this alternative are discussed in Section 2 of this FEIS.

Comment: **The 145 Truck Stop is an important stop for truckers and the community. Negative impacts to this business are a concern.**

Response: Practical Alternative II was selected for inclusion in the Preferred Alternative at this location. This alternative will retain all existing businesses located along Ann Arbor Road including the 145 Truck Stop. However, there may be minor parking impacts to the truck stop (Figure 2 of this FEIS). The Preferred Alternative is not expected to affect the use of the 145 Truck Stop by semis.

Comment: **To address the heavy traffic condition on Airport Road between Jackson and the northern suburbs, the following alternative should be considered. Reduce the traffic signals on Airport Road to two with one each at Airport/O’Niel/Boardman and Airport/Wayland. This can be accomplished by exiting eastbound I-94 traffic onto O’Niel Road west of Sam’s Store with traffic coming to the traffic light at Airport Road. Westbound traffic would exit onto a new east-west service road south of Meijer and would proceed to the traffic light at Wayland/Airport Road.**

Response: A variation of this alternative was considered as an “Illustrative Alternative” at this location. This alternative is described in Section 3.3 and is shown on Figure 3-2 of the DEIS. As noted in Section 3.3 of the DEIS, this alternative was eliminated from further consideration because it would not adequately address projected traffic operational problems. As described in Section 2 of this FEIS, Practical Alternative II was selected for inclusion in the Preferred Alternative at this interchange. The Preferred Alternative includes three traffic signals along Airport Road near the interchange. This interchange will adequately handle the high traffic volumes projected along Airport Road. Table 3-2 of the DEIS contains forecast LOS information for the Practical Alternative II intersections.

CH2M Hill has no interest, financial or otherwise, in the preparation of the Final EIS for the I-94 Jackson Freeway Modernization Project, other than compensation for the services performed and the general enhancement of CH2M Hill's professional reputation. The team of professionals that CH2M Hill assembled to conduct field studies and analyses was based solely on their qualifications. To the best of CH2M Hill's knowledge, no person or firm contributing to the preparation of this document has any interest in the findings or outcome of the process.

(Vice President, CH2M Hill Michigan, Inc.)
CH2M Hill

Date

SECTION 7 - FINAL SECTION 4(f) EVALUATION

7.1 BACKGROUND

Section 4(f) of the Department of Transportation Act of 1966, as amended (49 U.S.C. 303), provides protection to publicly owned parks and recreation areas, wildlife or waterfowl refuges, and to all significant historic sites regardless of ownership. Section 4(f) requires that impacts to these sites resulting from a proposed project must be avoided if there is a feasible and prudent alternative action. If avoidance is not feasible and prudent, then all possible planning to minimize harm to these sites must be included in the project.

FHWA has adopted regulations (23 CFR 771.135) that provide guidance for implementing Section 4(f). For historic properties, Section 4(f) applies to historic properties eligible for listing on the NRHP, unless FHWA determines otherwise. NRHP sites are also protected by Section 106 of the National Historic Preservation Act. This act requires that Federal agencies consult with the SHPO and the Advisory Council on Historic Preservation regarding the effects of proposed projects on historic properties. This Section 4(f) analysis also incorporates the results of the Section 106 consultation process.

7.2 PROPOSED ACTION AND NEED

The Proposed Action for this project is to modernize I-94, including the mainline, interchanges and adjacent local roads. The main purposes of the project are to: (1) improve the deteriorating condition of existing bridges and road segments consistent with an overall corridor improvement plan, (2) improve travel efficiency and roadway capacity in the I-94 corridor by replacing existing road segments, interchanges, and bridges with modern facilities designed to accommodate projected year 2025 traffic volumes, and (3) improve motorist safety. Based on these purposes, the Proposed Action includes the construction of roadway and bridge improvements along the existing alignment to address these issues. A more detailed description of the need for the project is provided in Chapter 2 of the DEIS.

Details regarding the Proposed Action are provided in Section 2 of this document, which describes the Preferred Alternative. This alternative includes construction of three continuous travel lanes in each direction of I-94 with a fourth auxiliary lane in some locations (Figure 2). The I-94 mainline would include travel lanes that are 12 feet wide, 12-foot shoulders, and a 35-foot median (DEIS Figure 3-7). The vertical elevation (profile) of the I-94 mainline would remain similar to the present condition in some areas but would need to be changed in others to meet modern engineering standards for interstate freeways. All of the existing bridges in the project area would be replaced as part of the Preferred Alternative, and it includes a variety of different interchange configurations. Many of the local roads in the project area would also need to be re-aligned as a result of the improvements to I-94 (Figures 1 and 2).

7.3 SECTION 4(f) PROPERTIES

There are no publicly owned parks, waterfowl refuges, or wildlife refuges within the project area that qualify for protection under Section 4(f). However, there is one historic property that is potentially eligible for the NRHP where Section 4(f) use would occur.

The house at 1644 Cooper Street was originally occupied and built by Edward Tremelling in the late 1800s. The connection between Edward Tremelling and the Porter Mine operation is important to the site's significance. Tremelling was one of three brothers residing along M-106 (Cooper Street) who were

employed as miners by the Porter Coal Company, a major 19th century coal mining company in the Jackson area, in the early 1870s. Prior to establishing his coal mining operation on the east side of M-106 (Cooper Street) in 1870, Benjamin Porter utilized his property as a brick production yard, reportedly producing some two to three million bricks annually over the previous 20 years. The Porter brickyard [on the east side of M-106 (Cooper Street)] provided convenient materials for construction of the residence at 1644 Cooper Street (on the west side of the street).

The one-story brick cottage style home's design is consistent with industrial worker housing documented in other urban areas of the state for the late nineteenth century. The exterior of the dwelling has been subjected to relatively minor modifications, including two telescoped wood frame rear additions and window treatments. However, it retains its overall original integrity. The significance of the 1644 Cooper Street dwelling renders it eligible for inclusion on the NRHP under Criterion A (events/trends significant to Jackson's industrial and city development) and Criterion C (significant for its design/method of construction as a unique example of a type of construction associated with urban working class housing and home ownership).

The parcel of property on which this residence is situated is approximately 0.9 acres in size and includes two residences (1640 and 1644 Cooper Street) and several outbuildings. However, the residence at 1640 Cooper Street and the other outbuildings on this parcel were constructed at a later date than the residence at 1644 Cooper Street and are not historically significant. Access to the site is provided from a driveway that connects to M-106 (Cooper Street).

The location of this site is shown in Figures 8-1 and 8-2 of the DEIS, and a photo is included in Figure 8-3 of the DEIS. A more detailed description of this site can be found in the *Reconnaissance Level Survey of Above-Ground Resources, I-94 Jackson Area Freeway Modernization Project* (CCRG 2001).

The site containing the Best Hotel, located at 1725 West Avenue, was recently cleared and the structures removed by private development. The site is located in the southeast quadrant of the I-94 and US-127 West interchange. The structure was noted as being eligible for the NRHP in Section 4.15 of the DEIS.

7.4 IMPACTS ON SECTION 4(f) PROPERTIES

7.4.1 No Build Alternative

The No Build Alternative would not require any use of the Section 4(f) property at 1644 Cooper Street.

7.4.2 Preferred Alternative (Practical Alternative I at the Cooper Street Interchange)

At the Cooper Street interchange, Practical Alternative I is the Preferred Alternative (Table 2-1 and Figure 2 show the Preferred Alternative at each interchange). Constructing the Preferred Alternative would require the purchase of the entire property at 1644 Cooper Street for use as road ROW and the destruction of the historic building located at this site due to the fill embankments for the freeway ramp and Cooper Street (DEIS Figure 8-1). In addition, the driveway connection from the site onto Cooper Street could not be maintained because of the grade difference between the site and Cooper Street. As the embankments take up the majority of the property, the historic structure cannot be moved to a different part of the site. The SHPO has determined that the Preferred Alternative would adversely affect this potentially NRHP-eligible site. Correspondence from SHPO documenting this determination is included in Appendix C.

7.4.3 Practical Alternative II and Practical Alternative III at the Cooper Street Interchange

Constructing Practical Alternative II or Practical Alternative III at the Cooper Street interchange would require the purchase of the entire property at 1644 Cooper Street for use as road ROW and the destruction of the historic building located at this site (DEIS Figure 8-2). The details related to this impact would be the same as described for the Preferred Alternative. The SHPO has determined that Practical Alternatives II and III would adversely affect this potentially NRHP-eligible site. Correspondence from SHPO documenting this determination is included in Appendix C.

7.5 AVOIDANCE ALTERNATIVES

There are no feasible and prudent alternatives to the use of the Section 4(f) property at 1644 Cooper Street because there are unique problems or unusual factors involved in the use of alternatives that avoid this property. In addition, the cost, social, economic, and environmental impacts, and community disruption resulting from such alternatives reach extraordinary magnitude.

7.5.1 Location Alternatives

During the NEPA study process, an exhaustive alternatives evaluation process was conducted. Numerous factors were considered during this process including: impacts to Section 4(f) sites, other environmental and social impacts, cost, engineering feasibility, and the ability to meet transportation needs. As described in Chapter 3 of the DEIS and Section 2 of this FEIS, many alternatives were eliminated after considering these factors.

All of the location alternatives that were considered to avoid the property at 1644 Cooper Street were eliminated because they are not feasible and prudent. Specifically, each of these alternatives would create unique problems as described below. A summary of the location alternatives considered and the problems associated with each is presented in Table 7-1.

As shown in this table, the TSM alternative, the mass transit alternative, and Illustrative Alternatives 3 and 3a do not meet the project's transportation needs as described in Section 3.3 of the DEIS. In addition, Illustrative Alternatives 3 and 3a would require several (approximately 10-20) relocations.

Relative to the Preferred Alternative, the off-alignment alternative would result in increased costs (at least \$500,000,000 more than Preferred Alternative), large numbers of relocations (at least 150 homes or businesses), and high wetland impacts (at least 100 acres).

Shifting the I-94 mainline and M-106 (Cooper Street) interchange to the north would cause high negative impacts. Such a shift would require ROW acquisition at a high-risk contaminated site, Mechanical Products, Inc (See Chapter 4 of the DEIS for additional information about this site). This business would also be very expensive to purchase and relocate because it is one of only two companies in the world that produces certain kinds of electronic circuitry for the aerospace industry. Shifting to the north would result in at least seven residential relocations and require a new bridge alignment over the Grand River to the west of Cooper Street. Additionally, shifting to the north would increase costs by several million dollars.

Finally, shifting the entire M-106 (Cooper Street) interchange to the east to avoid this property (1644 Cooper Street) would result in large numbers of relocations (apx. 10 to 20 relocations) and would move this interchange too close to the Elm Road interchange. This would cause poor traffic operations on I-94 and violate interchange spacing guidance, likely requiring a design exception.

Table 7-1. Evaluation of Location Alternatives to Avoid Historic Site at 1644 Cooper Street.

Location Alternative	High Cost	High Negative Impacts	Does Not Meet Transportation Needs	Comments
Off-Alignment	X	X		<ul style="list-style-type: none"> • High cost (at least \$500,000,000) • High relocations (at least 150) • High wetland impacts (at least 100 acres)
Shift I-94 and Interchange to North	X	X		<ul style="list-style-type: none"> • ROW acquisition at Mechanical Products Inc (high risk contaminated site and highly specialized business that would be costly to purchase) • At least 7 residential relocations and new bridge over Grand River • Several million dollars more than Preferred Alternative
Shift M-106 (Cooper Street) Interchange to East		X	X	<ul style="list-style-type: none"> • High number of relocations (approx. 10-20). • M-106 (Cooper Street) interchange distance to Elm Road interchange would violate FHWA spacing standards and would need design exception.
TSM			X	<ul style="list-style-type: none"> • Would not modernize freeway • Would not accommodate traffic volumes
Mass Transit			X	<ul style="list-style-type: none"> • Would not modernize freeway • Would not accommodate traffic volumes
Illustrative Alts 3/3a		X	X	<ul style="list-style-type: none"> • Several relocations (approx. 10-20) • Would not accommodate projected traffic volumes.

As noted in Section 2 of this FEIS, Practical Alternative I was selected as the Preferred Alternative at the M-106 (Cooper Street) interchange where the Section 4(f) property is located. As described in Chapter 8 of the DEIS, both Practical Alternatives II and III would also result in use of the property at 1644 Cooper Street. Therefore, selecting either of these as the Preferred Alternative would not avoid this property.

As a result of this evaluation process, the Michigan Department of Transportation (MDOT) has determined that only the Preferred Alternative would adequately meet the project's transportation needs at a reasonable cost while minimizing negative impacts.

7.5.2 Design Alternatives

A variety of design alternatives that would avoid impacts to this property were considered including: building retaining walls, creating steeper slopes on fill embankments, using a reduced typical section, and slightly shifting the road alignment. It was determined that these options were not feasible and prudent because they would create unique problems. Retaining walls and steeper slopes would preclude a driveway access from the site onto M-106 (Cooper Street). A reduced typical section (narrower lanes or reducing the number of lanes) would result in worsened traffic operations, would be contrary to the purpose of and need for the project, and would not meet applicable design standards. Lastly, shifting the alignment of M-106 (Cooper Street) to the east away from the site would result in additional ROW impacts on the opposite side of M-106 (Cooper Street). This would cause between two and four additional relocations along the east side of M-106 (Cooper Street). For these reasons, design alternatives have not been included as part of the Preferred Alternative.

7.6 MEASURES TO MINIMIZE HARM

The Preferred Alternative includes all possible planning to minimize harm to the Section 4(f) property at 1644 Cooper Street. As described in Section 7.5 above, numerous location and design alternatives were considered, but none of these are feasible and prudent. In addition to these alternatives, other measures to minimize harm were considered. Because this site is eligible for the NRHP, documentation will be completed after the property is acquired for ROW, but before the structure is removed. This documentation will create a record of the historic characteristics of the site. A MOA has also been prepared and signed by the FHWA, MDOT, and the SHPO pursuant to 36 CFR 800.6 (b)(1). This MOA is included in Appendix D of this document. Beyond these actions, there are no other reasonable actions that could be considered to minimize harm to this site. As a result, the Preferred Alternative is the feasible and prudent alternative that causes the least harm to the site at 1644 Cooper Street.

7.7 COORDINATION

7.7.1 General Information

Throughout the NEPA process, there has been extensive coordination with the government agencies that have jurisdiction related to Section 4(f) properties. This coordination has included:

- Early coordination letters
- Scoping information packages/letters
- Phone calls
- Group and individual meetings

Agencies and entities that were contacted as potentially interested parties included:

- SHPO
- U.S. Department of Interior
- National Park Service
- Michigan Department of Natural Resources
- City of Jackson
- Jackson County
- Blackman Township
- Leoni Township
- Jackson County Historic Society
- Native American Tribes
- FHWA

Coordination with these agencies is generally described in Chapter 6 of the DEIS. Also, local government agencies were represented on the Project Steering Committee and Technical Advisory Committee which evaluated alternatives, design options, and mitigation measures. Beyond these items, coordination with SHPO was ongoing throughout the project. Correspondence from these agencies (including SHPO) is included in Appendix A of the DEIS.

7.7.2 Coordination with U.S. Department of Interior

Formal coordination with the U.S. Department of Interior regarding the project's Section 4(f) impacts was conducted. In addition to an early coordination letter and phone conversations, the Department of Interior reviewed the DEIS for the project and provided a formal comment letter. This letter is included in this FEIS and is labeled as Comment Letter #3. In this letter, the Department of Interior states the following main points:

- The Department of Interior concurs that there is no feasible and prudent alternative to the alternatives presented in the DEIS.
- The Department of Interior concurs with the measures to minimize harm identified in the Draft MOA in Appendix E of the DEIS.
- A fully signed copy of the MOA should be included in the FEIS.
- The Department of Interior has no objection to Section 4(f) approval of the project.

7.7.3 Section 4(f) Comments

Beyond the Department of Interior comments listed above, no other Section 4(f) comments were received as part of the public comment process for the project. None of the Department of Interior comments raise questions or suggest other actions, which require a response or explanation.

7.8 CONCLUSION

Based upon the above considerations, there is no feasible and prudent alternative to the use of land from the property at 1644 Cooper Street, and the Preferred Alternative includes all possible planning to minimize harm to this property resulting from such use.

REFERENCES

CH2M Hill. 2002b. *Noise Technical Report for the I-94 Jackson Freeway Modernization Project, Jackson, Michigan*. Lansing, MI.

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