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EXECUTIVE SUMMARY

The *US 31 Plymouth to South Bend, Preliminary Alternatives Analysis and Screening Report* documents the Indiana Department of Transportation (INDOT) and the Federal Highway Administration (FHWA) assessment of preliminary alternatives and identifies alternative corridor recommendations for further engineering and environmental analysis.

INDOT, in cooperation with FHWA, is preparing an Environmental Impact Statement (EIS) to evaluate the US 31 Improvement from Plymouth to South Bend in Marshall and St. Joseph counties, Indiana. The US 31 improvement corridor is about 20 miles long, running from the southern terminus at US 30 near Plymouth to the northern terminus at US 20 near South Bend.

The involvement of the public as well as local elected and appointed officials in projects such as this is essential. Early in the project development, a Community Advisory Committee (CAC) was formed for this project. The CAC established a method of communication that facilitated the distribution of information from the US 31 Management Team, consisting of representatives of INDOT, FHWA, Michiana Area Council of Governments (MACOG, the South Bend Metropolitan Planning Organization (MPO)), to the public. The CAC also provided a central location from which the US 31 Management Team could gather public input. The CAC consists of approximately 25 members, representing a diverse cross section of the public, elected officials, and appointed officials, and has been a valuable source of information and direction to the US 31 Management Team.

To provide the public with access to the most current project information available and to provide additional opportunities for public input, the US 31 Management Team has established a website for this project, www.us31study.org. This website provides information related to:

- What's new with the project;
- Project Information – project schedule, listing of project meetings and copies of various project related documents that are public information;
- Public Involvement with electronic forms available for comments and subscription to a project mailing list;
- Alternative information (maps);
- Link to other websites including INDOT, FHWA, and other US 31 projects.

A major component of public involvement for this project has been, and will continue to be in the form of public information meetings. The first Public Information meeting for the US 31 Corridor Study was held at the Lakeville High School on March 21, 2002. This Public Information meeting was an Initial Scoping Meeting at which an overview of the US 31 Corridor Study process was presented. The public was asked to provide oral and written comments on issues and concerns associated with the improvement of US 31. Earlier the same day in a separate meeting, the same presentation concerning the Initial Project Scoping was also made to the CAC.

A second Public Information meeting for the US 31 Corridor Study was held at the Lakeville High School on April 10, 2003. Another CAC meeting again preceded this meeting on the same day. At these meetings, the draft *Purpose and Need Statement and Preliminary Alternatives* for the US 31 Corridor Study was presented. Nine (9) preliminary US 31 improvement alternatives,



designated as Alternatives A thru I were presented and comment was requested from the public and the CAC on the project needs and purposes. These nine (9) preliminary alternatives were based on alternatives discussed in the 1997 US 31 Major Investment Study (MIS). The MIS was conducted in response to legislation by the Indiana General Assembly, and examined transportation improvement options in the US 31 corridor from Plymouth to South Bend.

On May 15, 2003, an Interagency Review meeting was held with various federal and state environmental resource agencies to review the draft *Purpose and Need Statement and Preliminary Alternatives* for the US 31 Corridor Study. A project tour was conducted for all agency representatives. This project tour provided the various agency representatives with an opportunity to see the general corridors of the nine (9) preliminary alternatives. In addition to supplemental information on environmental issues and concerns related to the preliminary alternatives, this Interagency Review Meeting and project tour generated two (2) additional preliminary alternatives (Alternatives J and K). It also resulted in a slight shift of Alternative H to follow a segment of an existing high transmission powerline corridor.

On June 6, 2003, the first consulting party meeting was held at the Old Lakeville School as part of the Section 106 historic and archaeological process. At this meeting, the Area of Potential Effect (APE) for the preliminary alternatives was presented. The consulting parties were asked to help identify historic resources and districts that may be eligible for the National Register.

Following the identification of the eleven (11) preliminary alternatives (Alternatives A–K) (Figures E.1, E.2), environmental data, engineering data and historic and archeological resource data were collected and evaluated. The eleven (11) preliminary alternatives were each narrowed to 2,000-foot wide corridors to allow for future adjustments of alignments, and a 300 to 500-foot wide working alignment was used for the impact analysis. The eleven (11) alternatives to be evaluated in the study include five (5) western alternatives (Alternatives A–E); four (4) eastern alternatives (Alternatives G–I, K); and two (2) central alternatives (Alternatives F and J) that utilize large portions of the existing US 31 alignment.

Alternatives B–F each consist of two (2) Options, and are referred to as B1, B2, C1, C2, etc. The Options are each approximately 3.4 miles in length and differ in terms of their associated environmental impacts. Option 1 uses the existing US 31 alignment for 1.7 miles before leaving the existing US 31 alignment just south of Lakeville, while Option 2 follows the abandoned railroad corridor east of US 31, then crosses to the west of the existing alignment south of Lakeville. There was an initial screening of the eleven (11) preliminary alternatives to compare Options 1 and 2 for Alternatives B–F. Given the higher residential, farm, and business relocations, impacts to potential historic sites, and higher overall cost, Option 1 was not recommended to be advanced for further study. **Therefore, Alternatives B1, C1, D1, E1 and F1 were eliminated from further consideration. Alternatives B2, C2, D2, E2 and F2 were advanced to Phase 1 and Phase 2 screening, along with Alternatives A, G, H, I, J and K.** For further discussion related to the screening of Option 1 and Option 2, see Section 4.14.

The eleven (11) preliminary build alternatives and the No Build (No Action or Do Nothing) Alternative were evaluated based on the criteria contained in the *Draft Purpose and Need Statement* and potential environmental impacts. All of the preliminary alternatives developed for the US 31 Plymouth to South Bend project were evaluated to determine if they would be carried forward for evaluation in the Draft Environmental Impact Statement (DEIS). A two-phase process was used to screen each alternative. Phase 1 screened alternatives with respect to



purpose and need, while Phase 2 screened alternatives with respect to potential social and environmental impacts. **If an alternative clearly did not satisfy the purpose and need, it was not advanced to Phase 2 of the screening process.**

The results of the analysis conducted in the alternatives screening process and the associated recommendations are the result of considerable coordination with INDOT, FHWA, MACOG, various state and federal resource agencies, the CAC and members of the general public. These coordination efforts have been ongoing since the project's inception and will continue through the life of the project.

Based on the items discussed above, this screening report documents the analysis used by the US 31 Management Team to determine that **Alternative C, Alternative E, Alternative F, and Alternative G** be carried forward for further analysis. In addition to the consideration of these four (4) alternatives, the No Build (No Action or Do Nothing) Alternative will continue to be an option considered throughout the life of this project. Figure E.1 shows the alternatives recommended for further analysis in the DEIS.

Alternative C, a western corridor that begins at the existing US 31/30 interchange, follows the existing US 31 corridor in the southern quarter of the project, departs US 31 near West 4A Road, runs east of La Paz, and parallels US 31 to the east near an abandoned railroad corridor. It crosses over existing US 31 south of Lakeville, runs west of Lakeville near an abandoned railroad corridor, and terminates at US 20 west of the existing US 31 and US 20 interchange. It is 19.5 miles in length.

Alternative E, a western corridor that begins at the existing US 31/30 interchange, follows the existing US 31 corridor in the southern quarter of the project, departs US 31 near West 4A Road, runs east of La Paz, and parallels US 31 to the east near an abandoned railroad corridor. It crosses over US 31 south of Lakeville, runs west of Lakeville near an abandoned railroad corridor, returns to existing US 31 south of Kern Road, and terminates at the existing US 20 and US 31 interchange. It is 20.6 miles in length.

Alternative F, a central corridor that begins at the existing US 31/30 interchange, follows the existing US 31 corridor in the southern quarter of the project, departs US 31 near West 4A Road, runs east of La Paz, and parallels US 31 to the east near an abandoned railroad corridor. It crosses over US 31 south of Lakeville, runs west of Lakeville near an abandoned railroad corridor, returns to existing US 31 near New Road, and terminates at the existing US 20 and US 31 interchange. It is 20.4 miles in length.

Alternative G, an eastern corridor, begins at the existing US 31/30 interchange, follows the existing US 31 corridor in the southern quarter of the project, departs US 31 near West 4A Road, runs east of La Paz, and parallels US 31 to the east near an abandoned railroad corridor. It runs east of Lakeville, returns to US 31 just south of Kern Road and ends at the existing US 20 and US 31 interchange. It is 21.2 miles in length.



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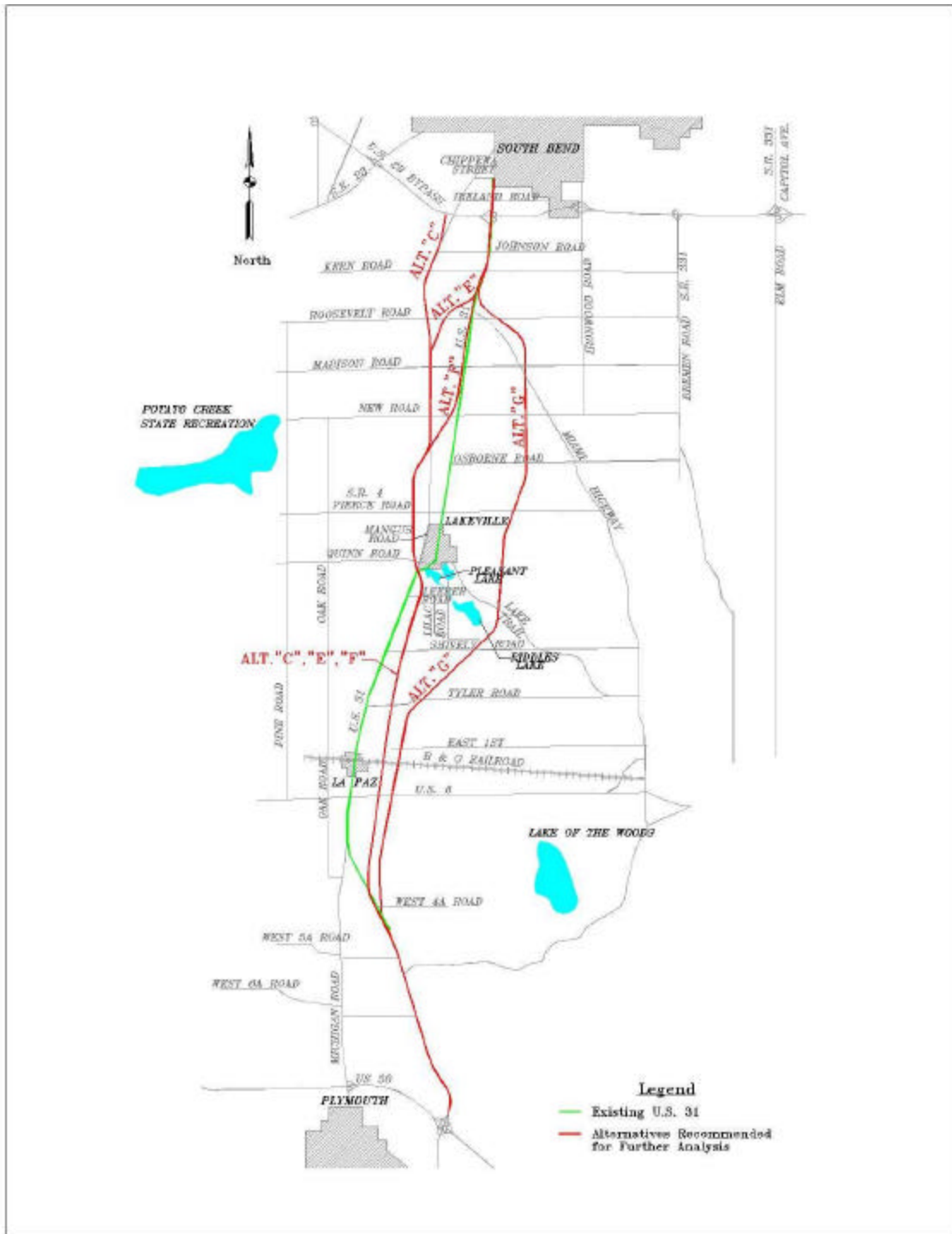


Figure E.1: US 31 Plymouth to South Bend Freeway Alternatives Recommended for Further Analysis in the DEIS (Alternatives C, E, F, and G)



In addition to the eleven (11) preliminary alternatives (Alternatives A-K), other potential solutions to the transportation needs in the US 31 Corridor were considered. These potential solutions included:

- No-Build Alternative – represented by the existing roadway network plus programmed major roadway improvements in the South Bend Metropolitan Area. This alternative is the baseline for comparing “build” alternatives; its inclusion as an alternative is required by the National Environmental Policy Act (NEPA).
- Travel Demand Management (TDM) Alternatives – actions to spread the peak-hours of travel or to encourage the shift to alternative modes of travel to the single-occupancy vehicle (i.e. flexible workdays and road pricing (toll collection)).
- Transportation System Management (TSM) Alternatives – low-cost capital investments to reduce congestion, improve traffic flow, and measures to optimize performance of the existing transportation infrastructure (i.e. intersection improvements, signal coordination and timing, lane control (reversible lanes) and high-occupancy vehicle (HOV) lanes).
- Intelligent Transportation System (ITS) Applications – technology-based programs to actively manage the roadway system (i.e. providing travel information on roadway conditions to daily commuters via message boards, etc.).
- Mass Transit Alternatives – rail or bus service along the US 31 Corridor.
- Rural Arterial (Non-Freeway) Alternative – geometric design options for upgrading existing US 31 and options involving upgrading portions of US 31 on existing and new alignments.

The screening process concluded that freeway alternatives A, B, D, H, I, J and K not be recommended for further study. These alternatives were eliminated due to the fact that they contained problems related to either meeting the Purpose and Need of the project, difficulties related to engineering measures or potential environmental impacts. The reasons for eliminating other alternatives are outlined below:

The following potential solutions to the transportation needs in the US 31 Corridor did not meet the Purpose and Need for this project:

- **Travel Demand Management (TDM) Alternatives**
- **Transportation System Management (TSM) Alternatives**
- **Intelligent Transportation System (ITS) Applications**
- **Mass Transit Alternative**
- **Rural Arterial (Non-Freeway) Alternatives**
- **Freeway Alternatives:**
 - **Alternative A – a western alternative.**
 - **Alternative B – a western alternative.**
 - **Alternative H – an eastern alternative.**
 - **Alternative I – an eastern alternative.**
 - **Alternative K – an eastern alternative.**



The following alternatives did meet the Purpose and Need for this project, but were not recommended for further study because of their social and environmental impacts:

- **Alternative D**

Alternative D did fulfill the goals of the *Draft Purpose and Need*. Alternative D crosses through the large Whispering Hills subdivision resulting in a high number of residential relocations and neighborhood impacts. This subdivision would be virtually eliminated by this alternative. Alternative D connects to existing US 31 approximately 1/3 of a mile south of the existing US 20 interchange. The close proximity of this connection to the existing interchange creates insufficient distance to accommodate the proper weaving movements for the traffic flow. Due to the insufficient geometrics and the relocations and neighborhood impacts, this alternative was eliminated from further consideration.

- **Alternative J**

Alternative J used the largest percentage of the existing US 31 right-of-way. This alternative was one of the best performers in regards to the Purpose and Need measures. Generally, the more an alternative utilized portions of existing US 31, the better it performed. Alternative J also generally had the lowest impacts to the natural environment, as less new right-of-way would be required. However, this alternative also had the highest residential relocations among the alternatives and the highest cost. Alternative J would require 235 residence and 86 business relocations. In addition, it would significantly impact two closely situated Local Historical Landmarks along existing US 31, the Ullery/Farneman House, an Italianate-style house (c. 1860), and the Southlawn Cemetery (including the small caretaker's building). Alternative J is adjacent to both the Newton Park in Lakeville and the LaVille Jr.-Sr. High School. Shifting Alternative J to the west to avoid the park and school would make it essentially the same as Alternatives B, C, D, E and F of which Alternatives C, E, and F have been carried forward for further analysis. Alternative J, although a high performer in regard to Purpose and Need, was eliminated due to the high relocations, significant impacts to Local Historic Landmarks, impacts to Newton Park and the LaVille Jr.-Sr, High School and high cost.

In conclusion, this screening report documents the analysis used by the US 31 Management Team to determine that **Alternative C (a western alternative)**, **Alternative E (a western alternative)**, **Alternative F (a central alternative)**, and **Alternative G (an eastern alternative)** be carried forward for further analysis. In addition to the consideration of these four (4) alternatives, the No Build (No Action or Do Nothing) Alternative will continue to be an option considered throughout the life of this project. Figure E.1 shows the alternatives recommended for further analysis in the DEIS and Figure E.2 shows the freeway alternatives eliminated from further consideration.



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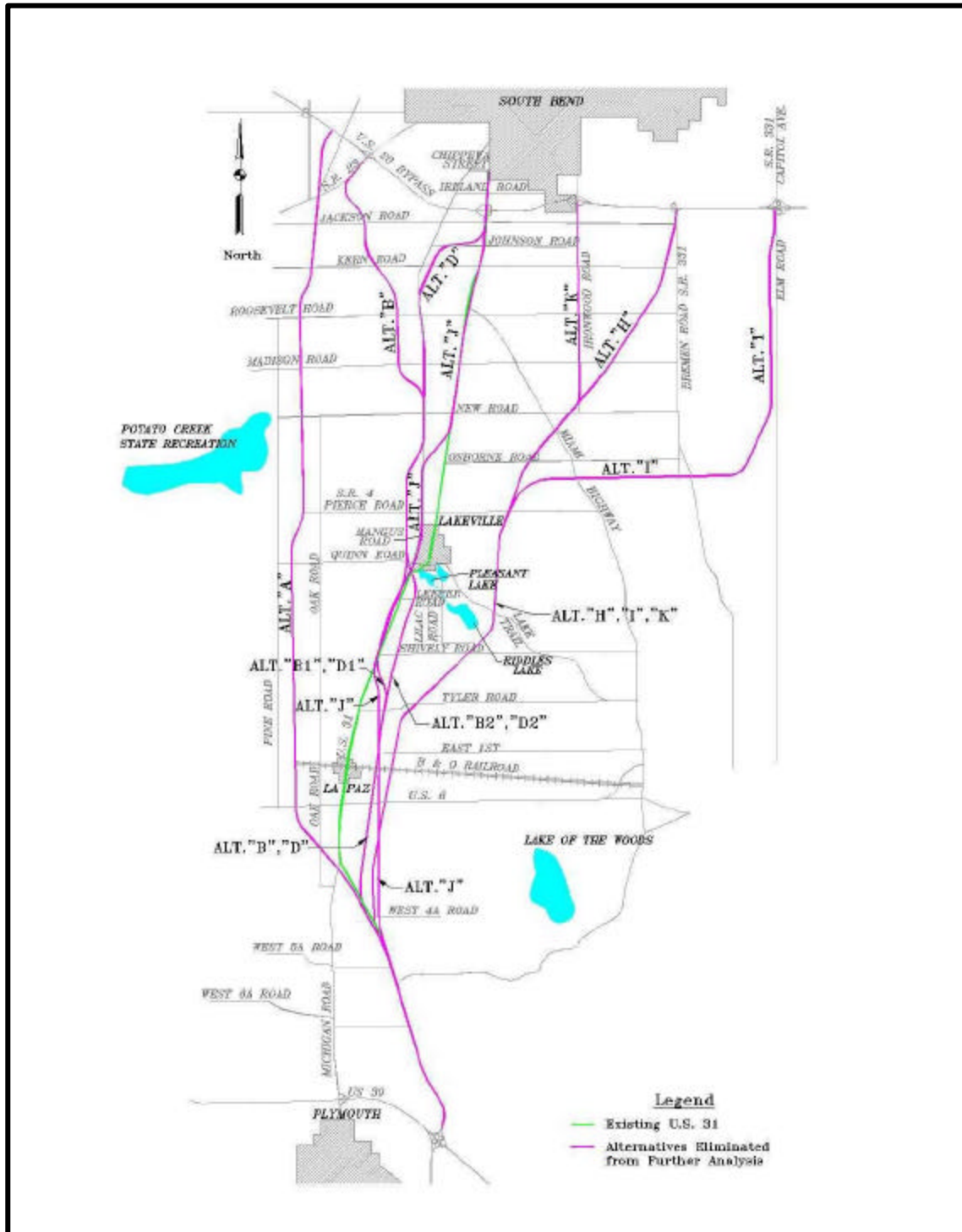


Figure E.2: US 31 Plymouth to South Bend Freeway Alternatives Eliminated From Further Consideration (Alternatives A, B, D, H, I, J, K)



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