

TIER 1 RECORD OF DECISION

I-69 Evansville to Indianapolis, Indiana



March 24, 2004

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1.0 BACKGROUND

The proposed action in the Tier 1 Environmental Impact Statement (EIS) for the I-69 Evansville to Indianapolis project involves the completion of an Interstate highway linking the City of Evansville, Indiana with the City of Indianapolis, Indiana. The proposed action is part of a larger, national effort to connect the three North American trading partners of Canada, the United States, and Mexico with an Interstate highway.

1.1 National I-69 Corridor

In 1991, the Congress passed the Intermodal Surface Transportation Efficiency Act (ISTEA), which designated “Corridor 18” from Indianapolis, Indiana to Memphis, Tennessee via Evansville, Indiana as a high-priority corridor. This corridor was extended to the north and the south in the National Highway System Designation Act of 1995. It was further modified in 1998 by the Transportation Equity Act for the 21st Century (TEA-21), which extended the corridor to provide a continuous link from the Canadian border at Port Huron, Michigan to the Mexican border in the Lower Rio Grande Valley. In addition, TEA-21 designated Corridor 18 as “Interstate Route I-69”.

The Federal Highway Administration (FHWA) has established a process for conducting National Environmental Policy Act (NEPA) reviews and related environmental studies for projects in the I-69 corridor. This process was described in a notice published in the Federal Register on December 8, 2000, *Announcement of I-69 Status* (65 Fed. Reg. 77064). As stated in that notice, the I-69 corridor has been divided into 32 Sections of Independent Utility (SIUs). Each SIU is considered to be an independent project for purposes of NEPA review. The Evansville-to-Indianapolis section of I-69 is SIU #3 of the National I-69 project.

The *Announcement of I-69 Status* stated that the NEPA document for each SIU will consider “state and local needs . . . as well as the national legislative and administrative objectives for the movement of goods across the country.” The announcement also stated that FHWA intended to “partner with the state departments of transportation to facilitate the examination of alternatives and impacts within the proposed corridor, and to ensure consistency in addressing the national transportation objectives relative to transcontinental trade put forth by Congress.”

1.2 Evansville-to-Indianapolis Section of I-69

Proposals to complete an Interstate highway from Evansville to Indianapolis have been considered, in various forms, since the earliest stages of planning of the Interstate System. There also have been various other proposals to provide a major highway to connect Evansville to other points in Indiana. The most recent of these efforts, prior to the current study, was a proposal to connect Evansville to Bloomington. A Draft Environmental Impact Statement (DEIS) for the Evansville-to-Bloomington project was released in March 1996, but the process was never completed. For a full description of the previous studies, see FEIS, Vol. I, Section 1.1, *Previous Studies*.

The current study began with the issuance of a Notice of Intent (NOI) in the Federal Register on January 5, 2000. The NOI announced that a Tier 1 EIS would be prepared for “the proposed extension of I-69 from Indianapolis to Evansville in Southwest Indiana (Corridor 18).” (65 Fed. Reg. 551). The NOI specified the termini as I-64 north of Evansville and I-465 in Indianapolis. It stated that “[t]he Tier 1 document will involve extensive environmental studies, as well as transportation studies, economic impact studies, and cost analysis. This document will provide the basis for FHWA to grant approval for a specific corridor.” The NOI also announced that the March 1996 DEIS for an Evansville-to-Bloomington highway was officially withdrawn.

1.3 Tiered Approach

As stated in the NOI, a tiered process is being used to conduct the environmental reviews required under NEPA and other laws for the Evansville-to-Indianapolis section of I-69.

The CEQ and FHWA regulations allow NEPA studies for large, complex projects to be carried out in a two-staged, “tiered” process. In the first tier, the “big picture” issues are addressed, while taking into account the full range of impacts. In Tier 2, the focus shifts to issues associated with a more refined determination of impacts, and the avoidance and mitigation of adverse impacts. The difference in focus is one of degree.

For this project, the “big picture” issues the Tier 1 EIS was intended to resolve are: (1) whether or not to complete I-69 in Southwestern Indiana, and if so, (2) the selection of a corridor for I-69 between Evansville and Indianapolis. Recognizing the significance of these decisions, FHWA and INDOT have consulted extensively with environmental resource agencies about the level of detail needed in the Tier 1 process in order to provide a basis for informed decision-making at this stage. This consultation began in early 1999, before a decision had been made to proceed with a tiered study. It continued throughout the entire Tier 1 process.

Based on consultation with the environmental agencies, FHWA and INDOT developed a tiered approach appropriate for this project. The guiding principle in determining the appropriate level of detail in Tier 1 was to develop sufficient information to provide a basis for informed decision-making on the issues to be decided in Tier 1. Table 1 below summarizes the overall methodology for Tier 1 and Tier 2 studies. Table 2 compares the level of detail in the Tier 1 and Tier 2 analyses for categories of environmental resources.

For an overview of the tiered approach used in this process, see FEIS, Vol. I, Section S.3.1, *Tiering*. For an explanation of the approach to alternatives analysis in this tiered process, see FEIS, Vol. I, Section 3.1.1 *Tiering*. For an explanation of the approach to environmental impact analysis in this tiered process, see FEIS, Vol. I, Section 5.1.1, *Tiered Approach*.

Table 1 Overall Methodology for Tier 1 and Tier 2		
	Tier 1 Activities	Tier 2 Activities
Public Outreach	Obtain input across wide geographic area (26 counties). Address entire Indianapolis-to-Evansville corridor.	Focus on those impacted in and near single corridor. Separate outreach activities for each section. Use Community Advisory Committee(s) in each section. Closer coordination with MPOs and local units of government.
Resource Agency Coordination	Coordination at key decision points. Based upon GIS-level impacts, some of which are field-verified.	Continue coordination. Use more detailed impact data based upon specific alignment (footprint). Data will be field-verified.
Purpose and Need	Consider national, state, and regional needs. Based on comprehensive needs analysis of 26-county Study Area.	Refine needs and project goals identified in Tier 1, as appropriate. Focus on local needs specific to individual sections.
Alternatives Development	Consider broad range of corridors over large geographic area.	Generally will consist of a single alignment together with route variations or design options in specific areas within the selected corridor.
Cost Development	Costs given in 2000 dollars. Costs based upon typical sections and terrain types.	Costs given in current dollars. Costs based upon specific design of highway, frontage roads, bridges, interchanges, and mitigation.
Mitigation	Agency coordination for mitigation commenced after Preferred Alternative was recommended by INDOT. Impacts based upon GIS analysis. In some cases, impacts are field-verified.	Agency coordination for mitigation ongoing from commencement of study. Mitigation based on more detailed impact information. Impacts are field-verified.
NEPA Decision	Select Corridor (approximately 2000 feet wide).	Select actual location of I-69 including interchange locations, grade separations, and other design and mitigation features.

Table 2 Environmental Analysis for Tier 1 and Tier 2		
Environmental Resource	Tier 1 Activities	Tier 2 Activities
Wetlands	Identify wetlands using National Wetlands Inventory maps.	Delineate wetlands through field survey following Corps procedures.
Historic/Archaeology	Conduct research using Interim Reports with limited survey and Records check with GIS analysis, and site visits.	Make final determinations of eligibility and boundaries through additional field work and research. Resolve any adverse effects.
Threatened & Endangered Species	Identify species in Study Area for all alternatives; prepare Biological Assessment (BA) and obtain Biological Opinion (BO) for Preferred Alternative.	Conduct additional field studies pursuant to Tier 1 BO. If applicable, prepare additional BAs and obtain BOs for Tier 2 sections.
Farmland	Identify farmland, including prime farmland.	Map and delineate farmland, including prime farmland; complete NRCS forms.
Land Use	Use GIS layers to identify land uses. Field verify land use shown on aerials. Review local land use plans for consistency.	Use GIS layers to identify land uses. Field verify land use shown on aerials. Review local land use plans for consistency. Consult with local officials responsible for land use planning.
Water Quality and Floodplains	Use GIS layers to identify water bodies, floodplains, and water quality.	Conduct field surveys to evaluate biodiversity and water quality, as appropriate.
Air Quality	Conduct comparative analysis of alternative air quality impacts; demonstrate conformity with applicable air quality plans.	Conduct microscale (“hot spot”) analysis; update conformity analysis and/or findings, if needed.

Environmental Resource	Tier 1 Activities	Tier 2 Activities
Economic Impacts	Identify impacts within regions using REMI model.	Assess impacts on local basis and consult with local officials.
Social Impacts	Use aerials and field survey to estimate relocations; identify other social impacts.	Conduct community impact assessments; refine relocation impacts.
Cumulative Impacts	Determine existing land use trends and forecast future trends for key resources; identify other major projects.	Consult with local officials and determine localized development trends.
Noise	Estimate noise impact contour lines; identify potential noise mitigation areas.	Use noise model to identify noise-impacted receivers; identify likely noise barrier locations.
Visual	Evaluate view of and from the roadway; identify key scenic areas.	Refine assessment of visual impacts by field surveys; develop context-sensitive designs.
Karst	Identify areas with high density of sensitive karst features, using best available mapping.	Conduct field surveys to locate karst features; conduct dye tracings and other actions required under INDOT Karst MOA.
Construction	Describe potential construction impacts.	Analyze site-specific impacts

2.0 DECISION

The Selected Alternative is Alternative 3C, as illustrated in Figure 1. The alternative is divided into six Tier 2 sections, as illustrated in Figure 1. A Tier 2 Environmental Impact Statement (EIS) will be prepared for each Tier 2 section. This Record of Decision is based on the FEIS and in the event of any differences in wording, the Record of Decision takes precedence over the FEIS.

2.1 BUILD DECISION AND CORRIDOR SELECTION

This Record of Decision approves the selection of the alternative that was identified in the FEIS as “Preferred Alternative 3C.” This alternative is a corridor, generally 2000 feet in width, within which specific alignments will be developed in Tier 2 studies. The rationale for selection of Alternative 3C is summarized below in Section 3.5 of this Record of Decision.

2.1.1 Selection of Build Alternative. This Record of Decision approves the selection of a “Build” alternative for an Interstate highway, I-69, between Evansville and Indianapolis.

2.1.2 Location of Corridor. The location of the selected Alternative 3C corridor is depicted in the FEIS, Vol. III, *Environmental Atlas*. The selected Alternative 3C corridor connects the following points in Indiana: Evansville, Oakland City, Washington, Crane Naval Surface Warfare Center, Bloomington, Martinsville, and Indianapolis. The southern terminus is at the I-164/I-64 interchange just north of Evansville. The northern terminus is west of the I-465/SR 37 interchange in Indianapolis.

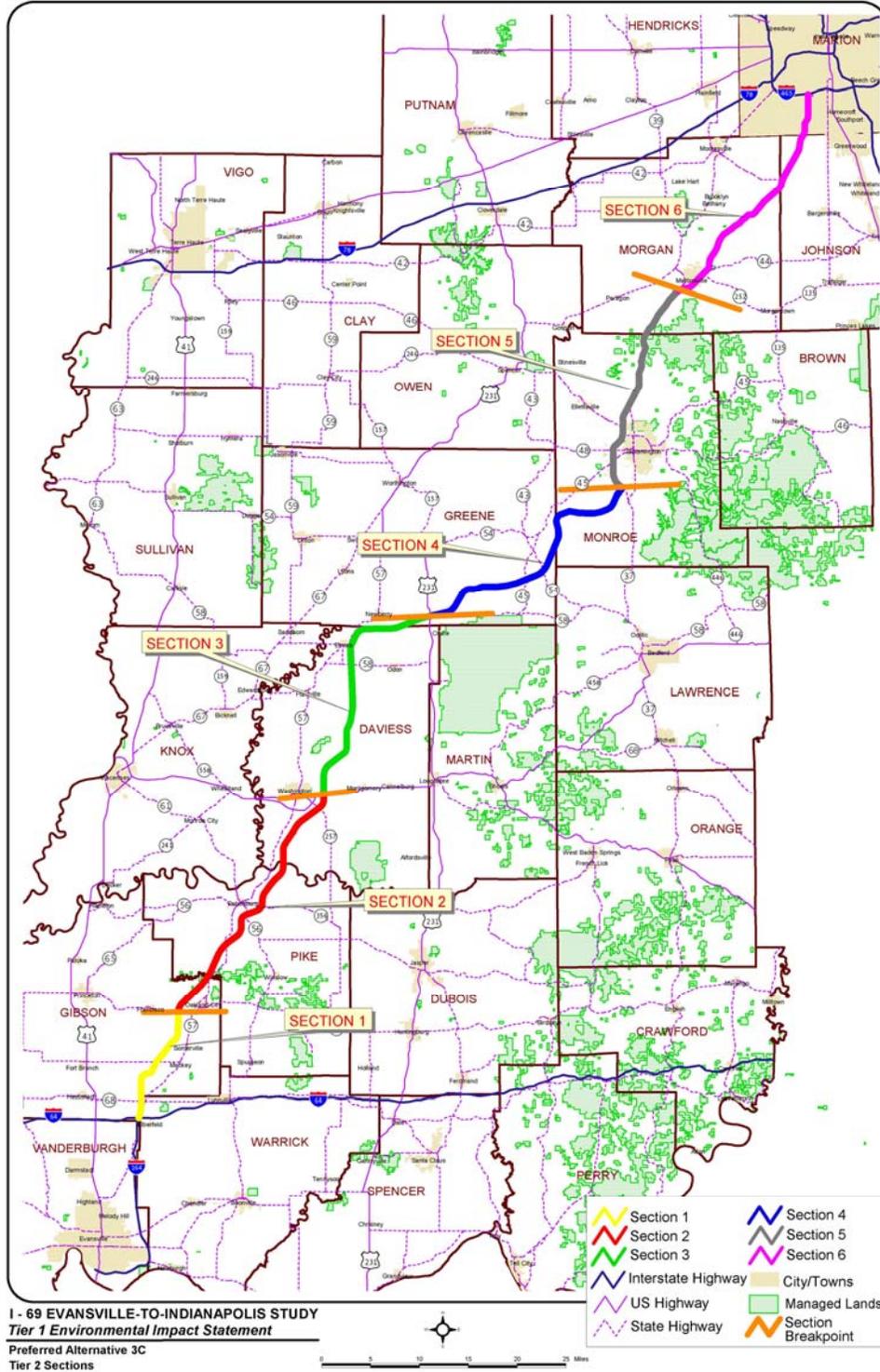


Figure 1 – Selected Alternative Showing Tier 2 Sections

2.1.3 Variations in Corridor Width. The selected Alternative 3C corridor is generally 2000 feet in width. This corridor is narrower than 2000 feet in some locations, in order to ensure minimization of impacts on certain sensitive resources in Tier 2. The corridor is wider than 2000 feet in other locations, in order to maximize opportunities for the development of avoidance alternatives. Specifically, as depicted in the FEIS, Vol. III, *Environmental Atlas*, the selected Alternative 3C corridor is (1) narrower as it crosses Pigeon Creek; (2) narrower as it crosses the Patoka River; (3) wider in the Washington area, in the vicinity of a potential Amish historic district; (4) narrower as it crosses First Creek; (5) narrower on the east side and wider on the west side in the vicinity of the Virginia Iron Works archaeological site; (6) narrower at a sinking stream basin and sinkhole areas in karst terrain west of the connection with SR 37 near Bloomington; (7) narrower as it crosses and parallels Indian Creek; and (8) narrower as it parallels and runs close to the White River north of Martinsville.

2.1.4 Working Alignment. The environmental impact calculations in the FEIS were based on working alignments, as described in the FEIS, Vol. I, Section 5.1.2, *Key Concepts – Study Bands, Corridors, and Working Alignments*. The working alignments were used in the Tier 1 study solely for the purpose of estimating potential impacts, benefits, and costs. Decisions regarding the specific alignment for the project will be made in Tier 2 and will be further refined during the design phase following Tier 2.

2.1.5 Typical Cross-Section. The environmental impact calculations in the FEIS were based on the typical cross-sections contained in the FEIS, Vol. II, Appendix E, *Typical Sections for Working Alignments*. The typical cross-sections used in the Tier 1 study were used solely for the purpose of estimating potential impacts, benefits, and costs. Decisions regarding the cross-section for the project (including auxiliary elements such as access roads) will be made in Tier 2. Consideration will be given during Tier 2 to designs involving independent alignment of the northbound and southbound travel lanes due to issues of topography and resource avoidance. Decisions regarding cross-sections will be refined during the design phase following Tier 2.

2.1.6 Interchange Locations and Grade Separations (Overpasses/Underpasses). The FEIS identifies potential interchange locations, as well as potential grade separations (overpasses and underpasses) for each alternative. These potential interchange locations and potential grade separations for Alternative 3C are shown in the FEIS, Vol. III, *Environmental Atlas*. This information is shown for all of the alternatives in the DEIS, Vol. III, *Environmental Atlas*. These features have been identified in Tier 1 solely for the purpose of estimating potential impacts, benefits, and costs. Decisions regarding the number and location of interchanges and grade separations will be made in Tier 2, and are not being made in this Record of Decision. Decisions made in Tier 2 regarding interchanges and grade separations will be further refined during final design.

2.1.7 Rest Areas. The FEIS evaluated the alternatives based on the assumption that any build alternative would include four rest areas (two northbound and two southbound). Specific locations for the rest areas were not identified. This assumption has been made in Tier 1 solely for the purpose of estimating potential impacts, benefits, and costs. Decisions regarding the

number and location of rest areas will be made in Tier 2, and are not being made in this Record of Decision. Decisions made in Tier 2 regarding rest areas will be further refined during final design.

2.1.8 Property Acquisition. This Record of Decision approves the use of federal funds for property acquisition for the project to the extent that such acquisitions meet the conditions for a hardship or protective acquisition, as defined in applicable FHWA regulations. Federally funded hardship or protective acquisitions implemented pursuant to this Record of Decision will require prior FHWA approval and appropriate documentation. This Record of Decision also approves federally funded acquisition of property for mitigation purposes, as described in Section 2.2. This Record of Decision does not affect INDOT's authority to proceed with state-funded acquisitions, which may be credited toward the State's share of project costs pursuant to FHWA regulations.

2.1.9 Variation Selections. In the FEIS, five alternatives which used the SR 37 corridor to reach I-465 had two variations near Indianapolis. One variation continued on the existing SR 37 alignment to very near I-465. The other variation left the SR 37 alignment in Morgan County to use a corridor along Mann Road. This Record of Decision approves the selection of the SR 37 variation; the Mann Road variation is eliminated. For more information, see FEIS, Vol. I, Section 6.3.4, *Elimination of Mann Road Variation*. The SR 37 variation will be utilized. Likewise, the FEIS included several alternatives with multiple route variations in the vicinity of Washington, the FEIS considered four variations – two to the west of Washington (WW1 and WW2) and two to the east of Washington (WE1 and WE2). This Record of Decision approves the selection of variation WE2, for the reasons given in FEIS, Vol. 1, Section 6.3.3, *Selection of a Variation Around Washington*. However, as stated in Section 6.3.3 of the FEIS, Tier 2 studies will allow for consideration of variation WE1, should significant issues with the routing of WE2 come to light.

2.2 MITIGATION

This Record of Decision approves and directs the implementation of the mitigation measures listed in the FEIS, Chapter 7, *Mitigation and Commitments*. FHWA will support efforts, in cooperation with INDOT and applicable resource agencies, to ensure the timely implementation of these measures. Where appropriate, mitigation measures approved in this Tier 1 Record of Decision may be carried out concurrently with Tier 2 studies. Mitigation measures implemented pursuant to this Record of Decision (including land acquisition) shall be eligible for federal funding, subject to prior approval by FHWA. See Section 5.0 for further discussion of mitigation.

Some of the mitigation measures involve a commitment to a specific design feature (e.g., bridging the Patoka floodplain) or mitigation activity (e.g., mitigating for forest lands at a 3:1 ratio). Others measures involve a commitment to conduct further analysis in Tier 2 (e.g., consider preparing "historic preservation plans" during Tier 2). For activities directly related to the quantity of impacts, Tier 2 may result in different quantities of mitigation than those identified in Tier 1. Final mitigation quantities will be based on impacts identified in Tier 2.

2.3 TIER 2 NEPA STUDIES

2.3.1 Type of NEPA Document. An environmental impact statement (EIS) will be prepared for each Tier 2 section.

2.3.2 Termini for Tier 2 Sections. The project considered in a Tier 2 study is referred to as a “Tier 2 section.” The termini for the Tier 2 sections shall be the termini described in the FEIS, Vol. I, Section 6.5.1, *Description of Tier 2 Sections*. These termini are approved in this Record of Decision for the reasons stated in the FEIS, Vol. I, Section 6.5.2, *Rationale for Tier 2 Termini*.

2.3.3 Scope of Environmental Analysis. Each Tier 2 NEPA document will “look beyond” the termini of the Tier 2 section for which that document is being prepared, in order to determine whether there are any sensitive environmental resources just beyond the termini that would affect the location of the adjoining section(s). This approach is intended to provide additional assurance that decisions made in one section do not prematurely preclude consideration of alternatives for adjoining sections.

2.3.4 Range of Alternatives. The range of alternatives considered in detail in a Tier 2 NEPA document will differ from the range of alternatives in a typical NEPA document. It is expected that the alternatives screening process in Tier 2 will result in the identification of a single alignment together with multiple route variations or design options in specific areas within the selected corridor. Key Tier 2 issues for each section will include interchange location and design; access to abutting properties; and location of grade separations with intersecting roads. The range of alternatives appropriate for each Tier 2 document will be determined for each Tier 2 section in consultation with resource agencies. The Tier 2 NEPA studies will include consideration of a No Build alternative as a baseline for analysis, in accordance with applicable regulations.

2.3.5 Potential to Consider Alternatives Outside Selected Corridor. In general, the range of alternatives considered in a Tier 2 study will be confined to the selected Alternative 3C corridor. However, the flexibility will exist to consider alternatives outside the selected corridor to avoid significant impacts within the selected corridor. The issue of whether to consider alternatives outside the selected corridor will be determined in consultation with resource agencies in Tier 2. Any alternatives outside the selected corridor will connect all of the points listed in Section 2.1.2 above (Evansville, Oakland City, Washington, Crane Naval Surface Warfare Center, Bloomington, Martinsville, and Indianapolis), as well as connecting the project termini (I-64/I-164 interchange just north of Evansville and I-465 in Indianapolis).

3.0 ALTERNATIVES CONSIDERED

This section briefly describes the purpose and need for the proposed action, the alternatives evaluation procedures, the alternatives considered, and the balancing of values which formed the basis for the decision to select Alternative 3C. The analysis presents the social, economic, and

environmental effects, as well as performance and cost measures which were important factors in the decision-making process.

3.1 PURPOSE AND NEED

The purpose of this proposed action is identified in the FEIS, Vol. I, Section 2.1, *Statement of Purpose and Need*, and Section 2.5.1, *Project Goals and Performance Measures*. The statement of purpose and need is multi-dimensional and reflects the full range of goals that are intended to be served by this large-scale project. It was developed through an open, collaborative process and took into account federal legislation, statewide plans and policies, and a comprehensive needs assessment. For a discussion of the factors considered in developing the purpose and need, refer to the FEIS, Vol. I, Section 2.2, *Policy Framework*, Section 2.3, *Needs Assessment*, and Section 2.4, *Public and Agency Input*.

The Purpose and Need identified nine goals, which were grouped into three broad categories – transportation in Southwest Indiana, economic development in Southwest Indiana, and completion of National I-69. Of those nine specific goals, three were identified as core goals – i.e., the primary objectives of the project. The core goals were determined based on consideration of multiple factors, including federal legislation, INDOT plans and policies, a comprehensive needs assessment, and public input. In order to be selected, an alternative had to achieve a substantial improvement over the existing condition with respect to each of the core goals.

The nine project goals are listed below. The goals that are highlighted in *italics* were identified in the FEIS as core goals of the project.

Strengthen the Transportation Network in Southwest Indiana

- *Improve the transportation linkage between Evansville and Indianapolis*
- *Improve personal accessibility for Southwest Indiana residents*
- Reduce existing and forecasted traffic congestion on the highway network in Southwest Indiana
- Reduce traffic safety problems

Support Economic Development in Southwest Indiana

- Increase accessibility for Southwest Indiana businesses to labor, suppliers, and consumer markets
- Support sustainable, long-term economic growth (diversity of employer types)
- Support economic development that benefits a wide spectrum of Southwest Indiana residents (distribution of economic benefits)

Complete the Portion of the National I-69 Project Between Evansville and Indianapolis

- *Facilitate interstate and international movements of freight through the I-69 corridor, in a manner consistent with the national I-69 policies*
- Connect I-69 to major intermodal facilities in Southwest Indiana

3.2 KEY CONCEPTS USED IN ALTERNATIVES ANALYSIS

In order to provide a set of tools for analyzing the environmental impacts of the alternatives carried forward for detailed study, each alternative was defined as a set of three overlapping bands: a “Study Band,” a “Corridor,” and a “Working Alignment.” These terms have the following meanings:

Study Band. This is a two-mile wide band within which environmental data-gathering efforts were focused.

Corridor. For purposes of this study, a corridor is generally 2,000 feet wide, but its width is narrower in some places and broader in others. This Record of Decision approves a corridor, rather than a specific alignment, for Alternative 3C.

Alignment. A working alignment is a potential location for a highway right-of-way within the 2,000-foot wide corridor. The Tier 1 EIS is not intended to result in the selection of a specific alignment. However, working alignments have been developed within each corridor in order to provide a sound basis for estimating the environmental impacts of each alternative.

For further discussion of these concepts, see FEIS, Vol. I, Section 5.1.2, *Key Concepts – Study Bands, Corridors, and Working Alignments*, including Figure 5.1-1, *Illustration of Study Band Corridor and Working Alignment*. The study bands, corridors, and working alignments for all of the alternatives are depicted in the DEIS, Vol. III, *Environmental Atlas*. The study band, corridor, and working alignment for the selected Alternative 3C – including modifications adopted following the DEIS – are shown in the FEIS, Vol. III, *Environmental Atlas*.

3.3 ALTERNATIVES CONSIDERED IN DETAIL

Alternatives were developed and analyzed through a three-level process during Tier 1, as explained in the FEIS, Vol. I, Section 3.1, *Process Overview*. As a result of this process, twelve "build" alternatives were carried forward for detailed study. These included Alternatives 1, 2A, 2B, 2C, 3A, 3B, 3C, 4A, 4B, 4C, 5A, and 5B. These alternatives are shown in Figure 2.

These twelve alternatives, along with the No Build Alternative, were analyzed for social, economic, and environmental effects as well as performance and cost measures. For the performance and cost analysis of these alternatives, see FEIS, Vol. I, Section 3.4, *Level 3: Performance and Cost Analysis of the Alternatives*. For a detailed analysis of the environmental

impacts of these alternatives, see FEIS, Vol. I, Chapter 5, *Environmental Consequences*. For a comparison of these alternatives, including the advantages and disadvantages of each, see Table 3 below and FEIS, Vol. I, Section 6.1, *Comparison of Alternatives Studied in DEIS*.

3.3.1 NO BUILD ALTERNATIVE

The No Build Alternative consisted of the “existing” highway network, plus projects which are considered “committed.” “Committed” projects are those which are regarded as reasonably certain to be built or for which INDOT has a firm, long term commitment to build. The No Build Alternative is described in the FEIS, Vol. I, Section 3.3.2.5, *No Build Alternative*.

The No Build Alternative would cause the least damage to the biological and physical environment. However, the No Build Alternative does nothing to achieve any of the goals of I-69. The No Build Alternative requires only the capital outlay for construction for the committed projects and will cause an increase in operation and maintenance costs. Over time, however, there are significant regional problems (the very poor connection between Indianapolis and Evansville, and the inferior personal accessibility) which remain unaddressed under the No Build Alternative. In addition, the major national and international trade corridor of I-69 would have a significant gap, which would leave Indiana at an increased competitive business disadvantage.

Under the No Build Alternative, the I-69 Evansville to Indianapolis project would not proceed. It is assumed that FHWA and INDOT would proceed with the committed projects. Each of these projects would receive individual environmental review.

This Record of Decision selects a Build Alternative. In accordance with applicable regulations, the Tier 2 NEPA Studies will include consideration of a No Build alternative as a baseline for analysis.

3.3.2 ALTERNATIVE 1

Alternative 1 consisted of approximately 154 – 156 driving miles from I-64/US 41 to I-465. However, it is important to note that the length of construction was only about 87 – 89 miles, since adding travel lanes to I-70 between Terre Haute and Indianapolis is a committed project. This alternative began at the US 41/I-64 interchange, and made use of the US 41 corridor, northward to the State Road (SR) 641 Terre Haute bypass (currently under construction). Variations were developed through and around Fort Branch, Vincennes, and Farmersburg. This alternative then used the SR 641 bypass to I-70, and I-70 from SR 641 to I-465.

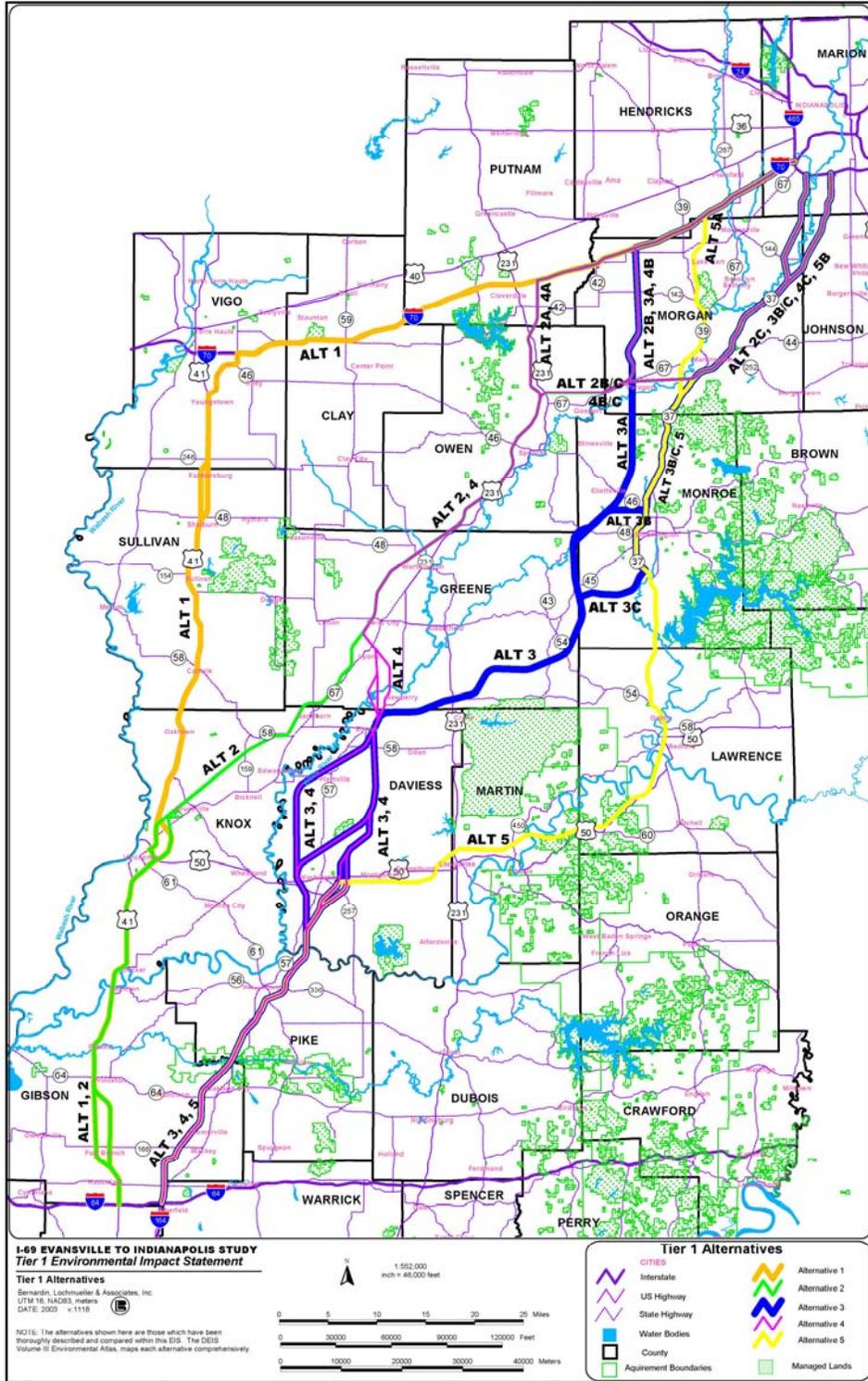


Figure 2 – Alternatives Considered in Tier 1

Table 3 Summary of Key Performance Measures and Environmental Impacts¹

Criteria	Alternative 1	Alternative 2			Alternative 3			Alternative 4			Alternative 5	
		A	B	C	A	B	C	A	B	C	A	B
Total Length (miles)	154 - 156	147 - 148	145 - 146	146 - 147	142	141	142	143	142	142	149	147
Total Impact Length (miles) ²	87 - 89	-	-	146 - 147	123	141	142	112	123	142	138-141	147
Total New Right-of-Way Impacted (acres)	1850 - 2370	4920 - 5130	5480 - 5690	5750 - 5960	6400	6140	5860	5590	6150	6420	6290	5830
Estimated Cost (billions of dollars; to the nearest 10 million in year 2000 dollars) ³	0.81 - 1.04	1.09-1.29	1.17-1.37	1.55-1.78	1.29-1.36	1.73-1.83	1.73-1.83	0.97-1.03	1.05-1.11	1.43-1.53	1.62-1.80	1.81-1.93
Mitigation Costs (billions) ⁴	.04	.06	.06	.07	.08	.08	.08	.06	.06	.07	.08	.08
Rest Area Costs (billions)	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03	.03
Potential Bridges Over Water (new or existing) ⁵	19	36	44	44	54	55	59	47	55	60	52	53
Potential Interchanges	24 - 27	24 - 26	25 - 27	31 - 33	18	23	29	18	19	26	35	36
Potential Grade Separations for Roads/Railroads	37 - 42	59 - 61	36 - 65	64 - 67	57	57	67	57	61	69	56	60
Purpose & Need Performance⁶												
Indy-Evv Connection - Freeflow Travel Time Savings (min.)	11	16	18	19	24	25	22	19	21	21	15	16
Indy-Evv Connection - Typical Travel Time Savings (min.)	12	18	20	21	30	30	27	25	27	27	20	21
Accessibility - Increase in # of People Within 1 Hr of Indy	0	8000	8000	37000	25000	29000	60000	0	8000	37000	60000	60000
Accessibility - Increase in # of People Within 2 Hrs of Indy	18000	32000	33000	43000	61000	46000	42000	32000	32000	42000	24000	24000
Accessibility - Increase in # of People Within 3 Hrs of Indy	58000	84000	100000	84000	232000	166000	166000	112000	112000	112000	150000	150000
Accessibility - Cumulative # of People With New 1 Hr Access to Major Education Inst.	122000	119000	177000	453000	284000	400000	446000	11000	69000	345000	440000	456000
Accessibility - Increase in # of People Within 1/2 Hr to Major Urban Area	9000	4000	4000	13000	5000	12000	37000	0	0	9000	28000	37000
National I-69 - Daily Truck-Hours Saved	2000	2400	2500	4100	3800	4900	4500	3200	3000	4600	3500	4300
Environmental Consequences												
Potential Relocations ⁷												
<i>Homes</i>	264 - 335	179 - 240	194 - 251	299 - 360	216	366 - 416	390	141 - 154	156 - 165	261 - 274	405	441
<i>Businesses</i>	70 - 131	29 - 63	32 - 66	81 - 115	17	68	76	8	11	60	53	97
Farmland (acres)	1410 - 1940	3780 - 4040	4250 - 4510	4550 - 4810	4770	4650	4470	4690	5160	5460	4420	4120
Prime Farmland (acres)	1010 - 1420	2740 - 3000	3170 - 3430	3490 - 3740	3090	2970	2900	3370	3800	4120	2870	2670
Forest (acres)	115 - 170	900 - 915	995 - 1010	850 - 865	1565	1290	1150	870	965	820	1515	1280
Estimated Core Forest Habitat (acres) ⁸	0	117	130	85	499	437	387	130	144	98	695	557
Wetlands (acres) ⁸	22 - 40	60 - 75	65 - 85	80 - 100	105	80	75	75	90	105	105	80
Estimated Wetland Mitigation (acres)	118 - 170	190 - 230	205 - 260	230 - 295	305	235	220	215	255	295	305	235
Historic Sites/Districts ⁹	73 - 76	69 - 72	64 - 67	95 - 98	53	84	94	35	30	61	84	100
Archaeological Sites ⁹	27	50	52	72	40	58	60	63	65	85	36	51
Public Parks, Refuges, Recreation Areas - Non-historic Section 4(f)	0	0	0	0	1	0	0	0	0	0	3	3
Potential Hazardous Material Sites ¹⁰	17 - 30	10 - 19	10 - 19	22 - 31	0	16	16	0	0	15	4	18
Total Streams Crossed	65 - 72	99 - 110	110 - 122	118 - 137	132	144	127	121	127	140	112	118
<i>Perennial Streams</i>	16 - 17	27 - 29	34 - 37	38 - 43	39	49	44	39	42	51	39	43
<i>Intermittent Streams</i>	49 - 55	72 - 81	76 - 85	80 - 94	93	95	83	82	85	89	73	75
Floodplains Crossed (acres)	370 - 470	1010 - 1100	1070 - 1160	1550 - 1640	880	810	830	980	1050	1520	1190	960
Karst Features ¹¹	0	65	140	110	60	15 ¹²	50	65	140	110	675	675
Indirect Impacts												
<i>Farmland (acres)</i>	420-490	525-595	580-650	735 - 900	595-665	720 - 870	710 - 900	510-575	530-595	715 - 820	615 - 750	690 - 840
<i>Forest (acres)</i>	70-140	125-185	190-205	215-285	245-300	310-380	325-400	145-200	150-205	220-290	350-440	340-455
<i>Wetlands (acres)</i>	0-25	5-30	5-25	5-35	10-20	10-25	10-30	5-30	5-30	5-30	20-45	15-45

1 Does not include committed projects such as SR 641 (Terre Haute Bypass) and improvements to I-70; includes impacts within the Working Alignment Right-of-Way unless otherwise noted.
2 "Impact length" is the length of the alternative for which impacts were calculated. It excludes use of existing or committed freeways (I-70 or SR 641). Thus, for Alternatives 1, 2A, 2B, 3A, 4A, 4B and 5A, impact length is less than total length.
3 Includes construction, engineering, and right-of-way costs. See Appendix HH of the FEIS for details. Assumptions regarding committed projects have a significant impact on these costs. See Table 3-34a of the FEIS. Under different assumptions regarding committed projects, costs of Alternatives 1, 2A, 2B, 3A, 4A, and 4B would increase, and costs of alternatives 2C, 3B, 3C, 4C, 5A and 5B would decrease. Mitigation and rest area costs are shown separately in this table.
4 Mitigation costs were developed after DEIS was published, in consultation with resource agencies. See Appendix HH of the FEIS for details.
5 It was assumed that where existing 4-lane facilities (US 41 or SR 37) are upgraded, that existing bridge structures can be used for I-69. This total includes both new and existing bridges.
6 This section of the table summarizes only those performance measures that relate to core project goals.
7 Structures only.
8 These resources (core forest and wetlands) are habitat for many threatened or endangered species.
9 Identifies potentially impacted sites and districts listed on, determined eligible, or potentially eligible for the National Register of Historic Places located within the Area of Potential Effect (APE).
10 Includes Underground Storage Tanks (USTs), Leaking Underground Storage Tanks (LUSTs), Resource Conservation and Recovery Act (RCRA) sites, and Brownfield sites only.
11 Includes sinkhole areas over 80 acres in size, as well as sinking stream basins.
12 Karst features impacted by Alternative 3B include high-quality, sensitive natural areas in Garrison Chapel Valley. In its comment letter on the DEIS, the U.S. Department of the Interior found such impacts to be "environmentally unacceptable." (p. 6)

SOURCE: *Bernardin, Lochmueller & Associates, Inc.*

Indicates DEIS Preferred Alternative

Indicates Single Preferred Alternative identified in FEIS

3.3.3 ALTERNATIVE 2

Alternative 2 began at the US 41/I-64 interchange, and made use of the US 41 corridor, northward to SR 67. Variations were considered through or around Fort Branch and Vincennes. Alternative 2 then followed the SR 67 corridor northeast. As this alternative approached Indianapolis, three options of Alternative 2 would have brought this alignment to I-465. Detailed descriptions of the options from the SR 67 corridor to Indianapolis follow.

Alternative 2A. Alternative 2A consisted of approximately 147 – 148 driving miles from I-64/US 41 to I-465. Alternative 2A continued on the SR 67 corridor to US 231, where it followed US 231 northward to I-70. This alternative then followed I-70 to I-465.

Alternative 2B. Alternative 2B consisted of approximately 145 – 146 driving miles from I-64/US 41 to I-465. Alternative 2B continued on the SR 67 corridor to Morgan County, and went directly north to I-70. It continued via I-70 to Indianapolis.

Alternative 2C. Alternative 2C consisted of approximately 146 – 147 driving miles from I-64/US 41 to I-465. Alternative 2C continued on the SR 67 corridor to Morgan County and used SR 37 to I-465 in Indianapolis.

3.3.4 ALTERNATIVE 3

Alternative 3 begins at the I-64/I-164/SR 57 interchange, and follows the SR 57 corridor northeast to Newberry in Greene County. Variations were considered to bypass Washington. Alternative 3 then proceeds east to the Monroe/Greene County line. As this alternative approaches Indianapolis, three options of Alternative 3 bring it to I-465. Detailed descriptions of the options from the Monroe/Greene County line to Indianapolis follow.

Alternative 3A. Alternative 3A consisted of approximately 142 driving miles from I-64/I-164/SR 57 to I-465. Alternative 3A continued due north through western Monroe and western Morgan Counties to I-70. It continued via I-70 to Indianapolis.

Alternative 3B. Alternative 3B consisted of approximately 141 driving miles from I-64/I-164/SR 57 to I-465. Alternative 3B continued north into northern Monroe County. It turned east to join SR 37 north of Bloomington. It then continued in the SR 37 corridor to I-465 in Indianapolis.

Alternative 3C. Alternative 3C consists of approximately 142 driving miles from I-64/I-164/SR 57 to I-465. Alternative 3C continues due east to SR 37 just south of Bloomington. It continues in the SR 37 corridor to I-465 in Indianapolis.

3.3.5 ALTERNATIVE 4

Alternative 4 began at the I-64/I-164/SR 57 interchange, and followed the SR 57 corridor northeast to SR 67. Variations were considered to bypass Washington. Alternative 4 then used the SR 67 corridor northeast to eastern Owen County. As this alternative approached Indianapolis, three options of Alternative 4 brought it to I-465. Detailed descriptions of the options from eastern Owen County to Indianapolis follow.

Alternative 4A. Alternative 4A consisted of approximately 143 driving miles from I-64/I-164/SR 57 to I-465. Alternative 4A followed the SR 67 corridor to US 231, and used the US 231 corridor to I-70. It continued via I-70 to Indianapolis.

Alternative 4B. Alternative 4B consisted of approximately 142 driving miles from I-64/I-164/SR 57 to I-465. Alternative 4B continued on the SR 67 corridor to Morgan County, and went directly north to I-70. It continued via I-70 to Indianapolis.

Alternative 4C. Alternative 4C consisted of approximately 142 driving miles from I-64/I-164/SR 57 to I-465. Alternative 4C continued on the SR 67 corridor to Morgan County and used SR 37 to I-465 in Indianapolis.

3.3.6 ALTERNATIVE 5

Alternative 5 began at the I-64/I-164/SR 57 interchange, and followed the SR 57 corridor northeast to US 50 near Washington. Variations were considered to bypass Washington. Alternative 5 then traveled along the US 50 corridor in an easterly direction to SR 37, where it followed the SR 37 corridor northward. As this alternative approached Indianapolis, two options of Alternative 5 brought it to I-465. Detailed descriptions of the options from SR 37 to Indianapolis follow.

Alternative 5A. Alternative 5A consisted of approximately 149 driving miles from I-64/I-164/SR 57 to I-465. Alternative 5A followed SR 37 to SR 39. It then used the SR 39 corridor to I-70. It continued via I-70 to Indianapolis.

Alternative 5B. Alternative 5B consisted of approximately 147 driving miles from I-64/I-164/SR 57 to I-465. Alternative 5B continued on the SR 37 corridor to I-465 in Indianapolis.

3.4 POST-DEIS EVALUATION OF ALTERNATIVES

In response to comments received on the DEIS, FHWA and INDOT conducted additional analysis of the alternatives and engaged in additional consultation with federal and state regulatory agencies. These additional activities were described in the FEIS, Vol. II, Section 6.3, *Major Post-DEIS Activities*, and are summarized below.

3.4.1 Reconsideration of Alternative 1

During the comment period on the DEIS, the USEPA requested that one of the non-preferred alternatives, Alternative 1, be reconsidered. Others also expressed an interest in further consideration of Alternative 1. In response to those comments, FHWA and INDOT reconsidered Alternative 1. This additional analysis included a review of its performance on core goals. Additional data were developed regarding the core goal of personal accessibility – in particular, data measuring improvements in travel time among major population and employment centers in Southwest Indiana, as well as a review of the data regarding access to education in Southwest Indiana. For further details, see the FEIS, Vol. I, Section 6.3.1, *Post-DEIS Reconsideration of Alternative 1*. Based on this reconsideration, USEPA stated in its FEIS comment letter that “Alternative 3C performs better than Alternative 1 in fulfilling the project’s core goals, notably the goal of improving personal accessibility for southwestern Indiana.” For details, see the FEIS, Vol. I, Section 6.3.2, *Post-DEIS Consideration of Hybrid Alternatives*, and FEIS, Vol. II, Appendix CC, *Analysis of Hybrid Alternatives*. Based on this reconsideration, as well as the data presented in the EIS, FHWA and INDOT concluded that Alternative 1 is not reasonable, prudent, or practicable.

3.4.2 Evaluation of Hybrid Alternatives

During the comment period on the DEIS, the USEPA requested that FHWA and INDOT develop and consider possible combinations of alternatives that were studied in the DEIS – i.e., “hybrid” alternatives. Two particular hybrid alternatives were developed: a hybrid of 2C and 3C, and a hybrid of 4B and 5A. This additional analysis indicated that, while each hybrid had certain advantages, neither warranted additional study. Therefore, the selection of a Preferred Alternative focused on the routes studied in detail in the DEIS.

The USEPA in its review letter of the FEIS, dated February 11, 2004, stated that “We appreciate that two hybrids were developed and fairly evaluated in detail using the same parameters as were applied to the other twelve alternatives; neither hybrid performed sufficiently well to be considered a ‘preferred alternative’.”

3.4.3 Variation Selection and Alignment Shifts

Before a single preferred alternative was selected, all alternatives were reevaluated to determine whether alignment shifts could minimize impacts on key resources. Three such shifts were identified and made, as described in FEIS, Vol. I, Section 6.3.5, *Post-DEIS Alignment Shifts*. In order to minimize environmental impacts, some variations were eliminated. These are discussed in the FEIS, Vol. I, Section 6.3.3, *Selection of Variation Around Washington*, and Section 6.3.4, *Elimination of Mann Road Variation*. See Section 2.1.9 of this Record of Decision for further information.

Further information about these variation selections and alignment shifts also is given in the FEIS, Vol. II, Appendix II, *Documentation on Variation Selection and Alignment Shifts*. These variation selections and alignment shifts were made on nine of the 12 DEIS alternatives (2C, 3A, 3B, 3C, 4A, 4B, 4C, 5A, and 5B).

3.4.4 Consideration of Section 404 Permitting Requirements

In its comments on the DEIS, the USEPA emphasized the importance of selecting a preferred alternative in accordance with the wetlands permitting requirements under Section 404 of the Clean Water Act. In particular, the USEPA mentioned the need to ensure consistency with the Section 404(b)(1) Guidelines (40 C.F.R. Part 230), which have been interpreted to require (in the context of Section 404 permit decisions) selection of the “least environmentally damaging practicable alternative” or “LEDPA.” In response to this comment, FHWA and INDOT considered all of the alternatives in terms of both their practicability and their relative impact on wetlands.

In addition, FHWA and INDOT convened a meeting in April 2003 with the agencies involved in Section 404 permitting to discuss both the overall procedures for Section 404 permitting in the tiered process as well as the documentation needed to support selection of a preferred alternative in the Tier 1 process in order to ensure consistency with the intent of the Section 404 permitting requirements. Attendees at this meeting included the USACE, which is the agency responsible for issuing Section 404 permits; the USEPA, which has a commenting role in the permit process as well as the power to veto permits issued by the USACE; the USFWS, which has a commenting role in the permitting process, with regard to fish and wildlife issues; and the Indiana Department of Environmental Management, which is responsible for certifying compliance with Indiana State water quality standards, as a precondition for issuance of a Section 404 permit.

Following that interagency meeting, the USACE requested that FHWA and INDOT include a Section 404(b)(1) consistency analysis in the FEIS. The purpose of this analysis was to document that the preferred alternative was consistent with alternative selection criteria in the Section 404(b)(1) Guidelines. FHWA and INDOT agreed to prepare this analysis, which is summarized in the FEIS, Vol. I, Section 6.3.6, *Wetland Avoidance and Minimization Efforts*, and is provided in full in the FEIS, Vol. II, Appendix DD, *Section 404(b)(1) Consistency Analysis*.

3.4.5 Circulation of Preferred Alternative and Mitigation Package (PAMP)

After completing the activities described in Sections 3.4.1 through 3.4.4 above, the FHWA and INDOT prepared a Preferred Alternative and Mitigation Package (PAMP). This package was circulated to all of the regulatory agencies involved in the study, and also was posted for public review on the project web site. In that package, FHWA and INDOT stated their intention to identify Alternative 3C as the preferred alternative in the FEIS. The document explained the rationale for the selection of Alternative 3C and solicited the agencies’ input on that selection, prior to the formal identification of a preferred alternative in the FEIS.

On August 28, 2003, FHWA and INDOT met with the regulatory agencies to discuss the information presented in the PAMP and to receive the agencies' comments and suggestions. The agencies also were given the opportunity to submit written comments following the meeting. Comment letters regarding the PAMP were received from the USACE, USEPA, and the Indiana Department of Natural Resources; these letters are included in the FEIS, Vol. II, Appendix Y, *Agency Correspondence*. No other agencies responded. None of the comment letters on the PAMP objected to the selection of Alternative 3C as the preferred alternative. Following the comment period on the PAMP, the FHWA and INDOT proceeded with the completion of the FEIS, which formally documented the selection of Alternative 3C as the preferred alternative.

3.5 SELECTION OF ALTERNATIVE 3C

From among the DEIS Preferred Alternatives, Alternative 3C was selected as the single Preferred Alternative in the FEIS. The selection process is explained in the FEIS, Vol. I, Section 6.4, *Selection of a Single Preferred Alternative*, and is summarized below.

3.5.1 Reasons for Eliminating Non-Preferred Alternatives

The non-preferred alternatives all had one or more significant shortcomings. Three of these alternatives (3A, 5A, and 5B) had major unavoidable impacts to sensitive environmental resources, which could be avoided by other alternatives that offered acceptable transportation benefits. The other four alternatives in this group (1, 2A, 2B, 4A) all performed poorly relative to the other alternatives in terms of their ability to meet core goals of the project. This group of alternatives included Alternative 1, which was the lowest-impact alternative in most categories, but also was the lowest-performing alternative, and in particular did little to achieve the core goal of improving accessibility in the region. These alternatives were eliminated because they do not sufficiently address the project goals (particularly core goals) or because they have significant impacts on sensitive resources that are avoided by other acceptable alternatives.

3.5.2 Reasons for Eliminating Hybrid Alternatives

The hybrid alternatives each had some positive attributes, but each also had significant shortcomings. The hybrid of Alternatives 2C and 3C performed well in improving personal accessibility, but performed almost as poorly as Alternative 1 on the core goal of improving Evansville-to-Indianapolis travel times. In addition, this hybrid alternative cost in excess of \$2 billion, more than any other alternative. The hybrid of Alternatives 4B and 5A offered no significant advantages over Alternative 4B, and thus did not merit further consideration.

3.5.3 Reasons for Eliminating Alternative 3B

Alternative 3B performed well in meeting all three core goals of the project. In addition, unlike Alternative 3C, it would have remained outside the city of Bloomington, while still providing a high level of access to that city. However, in order to remain outside Bloomington, this

alternative required new construction in close proximity to the Garrison Chapel Valley area, which includes several important hibernacula (caves/mines used for hibernation) for the endangered Indiana bat. By contrast, Alternative 3C remains on existing SR 37 to the east of the Garrison Chapel Valley, and thus has far lower potential for impacts to the bat hibernacula in that area. Because Alternative 3C has comparable performance in meeting core goals of the project, with less impact to the Garrison Chapel Valley, Alternative 3B was eliminated.

3.5.4 Selection of Alternative 3C from Among Remaining DEIS Preferred Alternatives

As explained in Section 6.4 of the FEIS, the five DEIS Preferred Alternatives were all acceptable in terms of their ability to satisfy the project's objectives. However, Alternative 3B was eliminated for the reasons explained above. Therefore, the selection of the single alternative from among the four remaining DEIS preferred alternatives (2C, 3C, 4B, and 4C) was based heavily on environmental factors, including minimizing wetlands impacts in accordance with the Section 404(b)(1) Guidelines. Alternative 3C provides the best balance of performance, environmental impact, and cost from among the four remaining DEIS Preferred Alternatives (2C, 3C, 4B, and 4C). Key factors considered in reaching this decision include the following:

- (1) Alternative 3C minimizes impacts to wetlands. Alternative 3C has the lowest impacts on wetlands of any of the other remaining DEIS Preferred Alternatives, and therefore is consistent with the intent of the Section 404(b)(1) Guidelines. (See USACE letters dated September 25, 2003 and February 13, 2004 in the project file; see also FEIS, Vol. II, Appendix DD, *Section 404(b)(1) Consistency Analysis*.) The wetlands impacts of the other remaining DEIS Preferred Alternatives are either slightly higher (Alternatives 2C and 3B) or substantially higher (Alternatives 4B and 4C) when compared to Alternative 3C. Furthermore, Alternative 3C has the lowest number of floodplain acres crossed among the four remaining DEIS Preferred Alternatives.
- (2) Alternative 3C performs well on all core goals. Alternative 3C performs relatively well on all three core goals, as well as the other goals stated in the Purpose and Need statement. Among the other remaining DEIS Preferred Alternatives, there are some that perform well on one of the core goals, but poorly on others. For example, Alternative 2C performs relatively well in improving accessibility, but relatively poorly in improving Evansville-to-Indianapolis travel times. Conversely, Alternative 4B performs relatively well in improving Evansville-to-Indianapolis travel times, but relatively poorly in improving accessibility. Alternative 4C is closer to Alternative 3C in its ability to achieve all core goals, but still falls short of Alternative 3C in its performance (and has substantially greater impacts on wetlands, as discussed above).
- (3) Alternative 3C focuses development in existing SR 37 corridor. Approximately 35 percent of Alternative 3C is located on SR 37, an existing multi-lane highway. Using this existing route has unavoidable social impacts, including displacement of homes and businesses as well as impacts such as noise and loss of access, as would be true of any alternative that makes extensive use of existing highways. However, by using this existing route, Alternative 3C minimizes impacts on undeveloped areas and helps to focus future growth in an existing

developed corridor. By contrast, alternatives such as 4B – or other hypothetical routes that serve Bloomington but connect to I-70 east of Indianapolis – would tend to attract development away from existing corridors and toward the periphery of the developed areas. As a result, those alternatives would tend to have greater impacts on farmland, both due to the right-of-way needed for the project itself and due to the potential for induced development (“sprawl”) resulting from the project. (See FEIS, Vol. I, Figure 6.2, *Population Density*.) Two of the remaining DEIS Preferred Alternatives (2C and 4C) also follow SR 37, but for a shorter distance; these other alternatives also are inferior to Alternative 3C in other aspects, in particular lower performance (in the case of 2C) and higher wetlands impacts (in the case of 4C).

(4) Alternative 3C minimizes impacts to farmlands. Alternative 3C has the lowest farmland impacts from among these other remaining DEIS Preferred Alternatives. Mitigation for farmland will focus on practices that assist in avoiding and/or minimizing farmland conversion. Where reasonable, existing property lines will be followed to minimize the splitting of large farmland tracts. The NRCS will be contacted during Tier 2 to determine the feasibility of participating in the Farm and Ranch Lands Protection Program. Funding will be made available to local communities through the I-69 Community Planning Program and may be used to develop farmland protection strategies.

(5) While Alternative 3C has greater impacts to karst and forest, these impacts will be mitigated. Alternative 3C has greater impacts than the other remaining DEIS Preferred Alternatives on forest and unglaciated karst topography. This project incorporates extensive commitments that will mitigate these impacts. For example, the commitment to protect/replace 3 acres of forest for every acre impacted by the project will help to consolidate public ownership of large blocks of contiguous forest within the boundaries of the Hoosier National Forest, the Patoka National Wildlife Refuge, and in state forests. The protection of forest habitat will assist in mitigating the project’s impacts to the Indiana bat. In its Biological Opinion, the USFWS noted that “With successful implementation of the Tier 1 Forest and Wetlands Mitigation and Enhancement Plan and all of the other proposed mitigation efforts and conservation measures, we anticipate that long-term habitat conditions for Indiana bat maternity colonies, individuals and hibernating populations within the action areas may be better than existing conditions.” In addition, the project will be implemented in accordance with the October 13, 1993 Karst Memorandum of Understanding, which provides proven environmentally sensitive guidelines for the construction of transportation projects in karst areas. Experience with construction in other high-density karst areas in Indiana indicates that compliance with the Karst MOU results in effective minimization of karst impacts. See FEIS, Vol. II, Appendix U, *Karst MOU*. Karst impacts also will be mitigated through the I-69 Community Planning Program, which will provide funding and technical assistance for land use planning. Information contained in the 1994 karst study prepared for the 1996 DEIS for the Southwest Indiana Highway project will be used in Tier 2 studies, to the extent applicable to alternatives under consideration. Tier 2 studies will also include detailed and thorough analysis of indirect impacts for each Tier 2 section.

(6) Alternative 3C remains within a reserved transportation corridor in the Patoka area. Alternative 3C, like Alternatives 4C and 4B, crosses through the acquisition area of the Patoka

National Wildlife Refuge. By contrast, Alternative 2C avoids this area by remaining on US 41. However, the proposed I-69 crossing through the Patoka area is located within a transportation corridor that was reserved for I-69 by the USFWS in their FEIS for the creation of the Patoka River National Wildlife Refuge. In addition, by remaining within the reserved corridor, impacts on wetlands have been minimized; Alternative 3C is expected to impact approximately three to five acres of wetlands in this area. In addition, the floodplain in this area will be bridged, preserving connectivity to the entire riverine ecosystem and minimizing impacts to wetlands in the area. See FEIS, Vol. I, Section 5.23.4, *Natural Environmentally Sensitive Areas*, for more detail.

(7) *Alternative 3C is consistent with established statewide transportation planning goals in Indiana.* Independent of this study, the INDOT Long Range Plan provides for improvements in the Evansville-to-Bloomington corridor, which is designated as a Statewide Mobility Corridor because it directly connects two major population centers. It is also designated as a Commerce Corridor, pursuant to State legislation that directed INDOT to establish a statewide network of highway corridors to facilitate trade and economic competitiveness. See Indiana Code § 8-23-1-14.5. These corridors are designed to link counties determined to be “economic centers” in Indiana. Alternative 3C is consistent with these statewide transportation objectives; the other remaining DEIS Preferred alternatives provide no direct link between Evansville and Bloomington.¹

3.5.5 Environmentally Preferable Alternative

As summarized above and in greater detail in the FEIS, Vol. I, Section 6.4, *Selection of a Single Preferred Alternative*, Alternative 3C is the alternative that sufficiently addresses the purpose and need for action while balancing important environmental, community and economic values. While some of the other alternatives have lower impacts on certain environmental resources, those alternatives either do not sufficiently address the project’s core goals or have greater impacts on other sensitive resources. Thus, Alternative 3C is the environmentally preferable alternative among the alternatives that adequately achieve the project’s objectives. This finding is made in accordance with 40 C.F.R. § 1505.2(b).

In weighing all these factors, FHWA and INDOT determined that Alternative 3C best satisfies the project purposes while having an acceptable level of impacts.

4.0 SECTION 4(f)

The proposed action has the potential to require the use of resources protected under Section 4(f) of the Department of Transportation Act, 49 U.S.C. 303(c). A Section 4(f) evaluation

¹ The purpose and need for this project does not specifically require completion of a highway from Evansville to Bloomington. However, if the alternative selected for I-69 does not connect Evansville to Bloomington, the need would still exist (as identified in INDOT’s Statewide Plan) to connect those two cities with a Statewide Mobility Corridor. The cost and environmental impacts for such a highway, which would be a multi-lane road with at least partial access control, would be over and above the cost and impacts of I-69.

appropriate for a Tier 1 study has been included in the FEIS, Vol. I, Chapter 8, *Section 4(f)*. This Record of Decision includes a preliminary Section 4(f) determination for the project as recommended in FHWA regulations for tiered studies.

4.1 Methodology for Section 4(f) Compliance in Tiered Process

The Section 4(f) evaluation for this tiered study process has been carried out in accordance with FHWA's Section 4(f) regulations, 23 C.F.R. 771.135(o). See FEIS, Vol. I, Chapter 8, *Section 4(f) Evaluation* for further discussion.

In accordance with these regulations, the Section 4(f) evaluation in the FEIS was intended to: (1) evaluate the potential impacts of the alternatives on Section 4(f) resources as those impacts relate to the decision to be made at Tier 1 and (2) ensure that opportunities to minimize harm to Section 4(f) resources in Tier 2 are not precluded by decisions made at Tier 1.

4.2 Additional Section 4(f) Analyses Completed in Response to Comments on FEIS

The FEIS included a Section 4(f) evaluation, which described the potential impacts of the alternatives on Section 4(f)-protected parks, recreation areas, refuges, and historic sites. See FEIS, Vol. I, Chapter 8, *Section 4(f)*. Following publication of the FEIS, public commenters identified three additional properties that the commenters believed should have been considered in the Section 4(f) evaluation. These were the Wabash and Erie Canal, the Wapehani Mountain Bike Park, and a recreational trail owned by the Monon Rail Preservation Corporation. To ensure completeness, additional documentation has been prepared to address each of these properties. This additional documentation is included in Appendix C of this Record of Decision. In summary, FHWA has reached the following conclusions regarding these three properties:

4.2.1 Wabash and Erie Canal

The Wabash and Erie Canal is a former canal that originally extended, in part, from Evansville to Indianapolis in Southwest Indiana. The canal as a whole is not considered to be eligible for the National Register; however, individual elements may be eligible based on above-ground features (e.g., locks) or below-ground archaeological resources. Alternative 3C crosses the route of this former canal at three locations, which are shown in Appendix C-1. Based on field observation, there are no extant above-ground structures at any of these locations. Earthworks from the canal are visible, but earthworks alone generally are not sufficient to establish eligibility as a historic (above-ground) resource. Below-ground resources may be present. Accordingly, FHWA has concluded that the canal sections that are crossed by Alternative 3C are not eligible as historic (above-ground) resources, but may be eligible for their archaeological (below-ground) significance. During Tier 2, further analysis will be conducted of the potential archaeological resources associated with the canal at the three points where the canal's route intersects with Alternative 3C. If any archaeological resources are identified, they will be analyzed and addressed in accordance with FHWA's Section 4(f) regulations for archaeological properties.

Under those regulations, direct impacts on archaeological sites generally can be addressed through data recovery efforts; in some cases, where archaeological resources are found to be valuable for preservation in place, alignment shifts must be considered. For further discussion of this resource, refer to Appendix C-1 of this Record of Decision.

4.2.2 Wapehani Mountain Bike Park

The Wapehani Mountain Bike Park is a 43-acre publicly owned park located in southwestern Bloomington, adjacent to the right-of-way for SR 37. This park is a Section 4(f) resource, because it is a publicly owned park. As currently planned, Alternative 3C would remain within the existing right-of-way on the east side of S.R. 37 in this area and therefore would not directly use land from this park. In addition, the proximity of Alternative 3C would not substantially impair the protected features, activities, or attributes of the park. The park was established in 1990, at a time when SR 37 was already a major multi-lane highway. Therefore, the proximity impacts associated with a highway (noise and visual) were accepted at the time the park was established. For further discussion of this resource, refer to Appendix C-2 of this Record of Decision.

4.2.3 Monon Rail Preservation Corporation Corridor

The Monon Rail Preservation Corporation has acquired a portion of an existing railroad corridor in the Bloomington area west of SR 37. None of the corridor is protected by Section 4(f), because it is all privately owned, and privately owned parks and recreation areas are not subject to Section 4(f) requirements. In addition, the portion owned by the Monon Rail Preservation Corporation is still in occasional use as a railroad and therefore would not be a recreational resource even if publicly owned. For further discussion of this corridor, see Appendix C-3 of this Record of Decision.

In sum, the additional properties mentioned by the commenters on the FEIS have been evaluated and appropriate documentation has been prepared and is included as appendices to this Record of Decision. The evaluation of these resources has not revealed any additional use of Section 4(f)-protected land. Rather, this evaluation has helped to confirm the basic findings presented in the DEIS and FEIS regarding the project's potential involvement with Section 4(f) resources. For a summary of those findings, see Sections 4.3 and 4.4 below.

4.3 Summary of Section 4(f) Evaluation for Parks, Recreation Areas, and Refuges

As part of the Tier 1 environmental process, FHWA and INDOT undertook a comprehensive effort to identify all Section 4(f) protected parks, recreation areas, and/or wildlife or waterfowl refuges that are located within or near any of the alternatives considered in the DEIS. The results of this effort are documented in the FEIS, Vol. I, Section 8.2, *Section 4(f) Resources – Parks, Recreation Areas, and Wildlife or Waterfowl Refuges*.

In comments on the FEIS, one additional Section 4(f)-protected park resource – the Wapehani Mountain Bike Park – was identified in the Bloomington area. As stated above, the selected Alternative 3(C) will not use this Section 4(f) resource. The basis for this finding is provided in Appendix C-2 of this Record of Decision.

The corridor for Alternative 3C entirely avoids all of the identified Section 4(f) protected park, recreation areas, and wildlife or waterfowl refuge lands. The basis for this finding is summarized in the FEIS, Table 8-1, *Summary of Section 4(f) Analysis for Parks, Recreation Areas, and Refuges*. There are no unresolved issues concerning the existence or location of Section 4(f) protected parks, recreation areas, or wildlife or waterfowl refuges in the vicinity of any of the corridors.

Based on existing information, it is highly likely that an alignment can be developed during Tier 2 within the corridor for Alternative 3C in a location that continues to avoid all Section 4(f) protected parks, recreation areas, and wildlife or waterfowl refuges.

4.4 Summary of Section 4(f) Evaluation for Historic and Archaeological Resources

Through Section 106 consultation, which occurred as part of the Tier 1 process, historic and archaeological sites were identified within the two-mile-wide study bands for all of the alternatives. The listed and potentially eligible historic and archaeological properties within the corridors for the alternatives were listed in the FEIS, Vol. I, Section 8.3, *Section 4(f) Resources - Historic and Archaeological Resources* and are further described in Section 5.13, *Historic and Archaeology Impacts*.

During Tier 1, the Section 106 consultation process involved a preliminary evaluation of the eligibility of historic and archaeological sites for the National Register of Historic Places. It also involved a GIS-based analysis to assess the likelihood of finding new archaeological resources within the study bands for each of the alternatives.

This process was carried out in accordance with the Section 106 regulations, which specifically allow for the phasing of efforts to identify and evaluate historic and archaeological sites “where alternatives under consideration involve corridors or large land areas.” In this phased process, eligibility evaluations during Tier 1 involved determinations of “potential eligibility.” Final determinations of eligibility and effects to historic and archeological properties will be made in Tier 2 studies. See FEIS, Vol. I, Section 5.13, *Historic and Archaeological Impacts* for details.

4.4.1 Historic and Archaeological Properties – In General

Based on existing information, the following conclusions were reached in the FEIS and are now re-affirmed in the Record of Decision with regard to the alternatives considered in this study:

- None of the alternatives considered in this study would directly or constructively use any National Register listed historic or archaeological site.
- There are potentially eligible historic and archaeological sites within the two-mile-wide study bands and within the 2000-foot corridors for each of the alternatives. In addition, each of the alternatives passes through areas considered to have high potential for archaeological sites. Thus, all of the alternatives have the potential to result in the direct and/or constructive use of potentially eligible historic and archaeological sites.
- All of the alternatives fall within the same range of potential impacts to Section 4(f) protected historic resources. See FEIS, Table 8-2, *Listed and Potentially Eligible Individual Historic Properties Within Corridor* (showing a similar number of potentially eligible historic resources within the corridor for each of the 12 alternatives) and FEIS, Table 8-2a, *Detailed Information on Listed and Potentially Eligible Individual Historic Properties Within Corridor*. Thus, the alternatives are approximately equal in terms of their potential for harm to Section 4(f) protected historic sites.
- The alternatives are approximately equal in terms of the overall magnitude of their potential for harm to Section 4(f) protected archaeological resources. See FEIS, Table 8-3, *Previously Recorded Archaeological Sites in the Study Corridors*, and Table 8-4, *Potential for Archaeological Sites*.

4.4.2 Historic and Archaeological Properties – Route Variations in Washington Area

Based on existing information, the following conclusions were reached in the FEIS and are re-affirmed in this Record of Decision with regard to route variations considered in the vicinity of the city of Washington (for Alternatives 3A, 3B, 3C, 4A, 4B, and 4C, which are on the same location in this area):

- The route for WE2 in the vicinity of Washington skirts the edge of an area of Amish settlement that may be eligible for the National Register as a historic district.
- While the potential for this Amish area to be found eligible appears to be low, the State Historic Preservation Officer (SHPO) has requested that this area be further investigated as a potential historic district in Tier 2. Therefore, Tier 1 decision-making has been based on the cautious assumption that any route located to the east of Washington, including WE2, may require a Section 4(f) approval.
- In light of the potential use of Section 4(f) land by the eastern routes around Washington, the western routes around Washington (WW1 and WW2) were evaluated to determine whether they are prudent. The routes located to the west of Washington (WW1 and WW2) are not prudent, because of their greater impacts on wetlands, floodplains, and other sensitive natural areas. See FEIS, Vol. I, Section 6.3.3, *Selection of Variation Around Washington*, for impacts of these variations.

- The selected alternative, in the vicinity of Washington, is an eastern route, WE2. However, as stated in Section 6.3.3 of the FEIS, Tier 2 studies will allow for consideration of variation WE1, should significant issues with the routing of WE2 come to light. Therefore, the location of the project in the vicinity of Washington may be selected from among the two eastern route variations (WE1 and WE2), or possibly other future variations, provided that they are located to the east of Washington, and thus, outside the sensitive natural areas that lie to the west of Washington.

4.5 Conclusions of Tier 1 Section 4(f) Evaluation

- All of the corridors considered as alternatives in the FEIS have the potential to result in the use of Section 4(f) resources. All alternatives were developed with the intent to avoid Section 4(f) resources, where possible, and minimize impacts.
- Based on existing information, all of the corridors appear to be substantially equal in terms of their overall potential for harm to Section 4(f) resources. In these circumstances, Section 4(f) does not limit the choice of alternatives. Thus, the selection of Alternative 3C is consistent with the requirements of Section 4(f).
- In addition, Alternatives 1, 2A, 2B, and 4A and the No Build Alternative are not prudent alternatives for purposes of Section 4(f), primarily because of their low performance in meeting the transportation goals of the project, particularly the core goal of increasing accessibility within Southwest Indiana. See FEIS, Vol. I, Section 6.2.2, *Alternatives Non-Preferred in DEIS for Performance Reasons*, Section 6.3.1, *Post-DEIS Reconsideration of Alternative 1*, and Section 6.4.1, *Elimination of Alternatives Identified as "Non-Preferred" in the DEIS*, for further discussion of the reasons for eliminating these alternatives from consideration. Therefore, even if these alternatives caused less harm to Section 4(f) resources, they still would have been rejected, because Section 4(f) does not require the selection of imprudent alternatives.
- Opportunities to avoid and minimize harm to Section 4(f) resources in Tier 2 have been preserved for Alternative 3C. In particular, in the vicinity of Washington, the opportunity has been preserved to make alignment shifts east of Washington to avoid a potential Amish historic district. Alignments to the west of Washington have been eliminated as not prudent based on much higher natural resource impacts. For a discussion of the reasons for eliminating alternatives located to the west of Washington, refer to FEIS, Vol. I, Section 8.3.1, *Historic Resources*, p. 8-34. Likewise, the corridor was moved to the west and widened to provide greater opportunity to avoid the Virginia Iron Works. For further discussion, see FEIS, Vol. I, Section 8.3.2, *Archaeological Resources*, p. 8-48.
- In sum, the selection of Alternative 3C is consistent with Section 4(f). Further actions to fulfill the requirements of Section 4(f) compliance will be required in Tier 2, as

additional design details become available. For further details regarding Section 4(f) compliance in Tier 2, refer to Section 4.6 of this Record of Decision.

4.6 Section 4(f) Compliance in Tier 2

During Tier 1, the FHWA and INDOT have conducted an extensive evaluation of Section 4(f)-protected parks, recreation areas, refuges, and historic and archaeological sites. At this tier, the analysis has focused primarily on the *potential* impacts of the alternatives on Section 4(f)-protected lands. This approach is consistent with the FHWA tiering regulations. See 23 C.F.R. § 771.135(o).

During Tier 2, the FHWA and INDOT will continue to follow the procedures established in FHWA regulations for Section 4(f) compliance in a tiered process. For each Tier 2 study, FHWA and INDOT will conduct more in-depth studies to the actual impacts of Alternative 3C on Section 4(f)-protected resources.

If the Tier 2 studies determine that an alignment within Alternative 3C would use a Section 4(f)-protected property, FHWA and INDOT will develop and consider avoidance alternatives, as appropriate. The analysis of avoidance alternatives will initially consider alignment shifts within the selected corridor. If avoidance alternatives within the selected corridor are not available, the analysis of potential avoidance alternatives will be expanded as appropriate, in accordance with Section 2.3.5 of this Record of Decision.

In summary, extensive efforts have been made during Tier 1 to avoid the use of all Section 4(f)-protected resources. Nonetheless, the possibility still exists that uses of Section 4(f)-protected properties may be identified in Tier 2. If such uses are identified, these properties will be avoided or uses minimized as required by Section 4(f).

5.0 MEASURES TO MINIMIZE HARM

Throughout the NEPA process, efforts have been made to avoid human and natural resources. In particular, avoidance and the opportunity to minimize impacts were used in the decision-making process to identify a preferred alternative. After Alternative 3C was identified as the preferred alternative, further efforts were undertaken to develop comprehensive mitigation measures.

Many of the mitigation proposals in Tier 1 are conceptual and should be viewed as the starting point for identifying the total mitigation for constructing I-69 between Evansville and Indianapolis. During the Tier 2 NEPA studies, these mitigation measures and others will be developed from more detailed information and interactions with the public and resource agencies.

FHWA and INDOT are committing to mitigation identified in FEIS, Vol. I, Chapter 7, *Mitigation and Commitments* based on current information. Mitigation measures specified in Tier 1 will be reviewed and may be modified in Tier 2 in consultation with environmental

resource agencies, based on more detailed environmental impact data developed in the Tier 2 studies. Specific mitigation measures and other commitments will be included in Tier 2 NEPA documents. See Section 2.2 of this Record of Decision for more information.

Chapter 7 of the FEIS includes a discussion of the mitigation measures that FHWA and INDOT are committing to implement. INDOT and FHWA have contacted state and federal environmental agencies, organizations, and the public to provide input on both creative and traditional approaches for replacement of environmental functions and values that may be lost as a result of this project. Based on this consultation, FHWA and INDOT have developed a number of major mitigation initiatives, including several initiatives that go beyond the requirements of the law. They are:

5.1 Context Sensitive Design (CSD)/Community Advisory Committees (CAC)

Context sensitive design (CSD) is a collaborative, interdisciplinary approach that involves all stakeholders to develop a transportation facility that fits its physical setting and preserves scenic, aesthetic, historic, and environmental resources, while maintaining safety and mobility. CSD is an approach that considers the total context within which a transportation improvement project will exist.

In order to ultimately design and construct an Interstate that is truly sensitive to the environment through which it would be traversing, FHWA and INDOT will seek the continued assistance from the communities near the corridor through Tier 2 design and construction phases of the project. Therefore, one or more Community Advisory Committees (CACs) will be established in each Tier 2 NEPA study section. Early in Tier 2, INDOT and FHWA will work with the local officials, MPOs, and others to identify specific representatives from neighborhood groups, emergency response personnel, schools, local advocacy groups, etc., to be members of each CAC.

5.2 Indiana Bat Hibernacula

The Indiana bat (*Myotis sodalis*) is an endangered species bat occurring throughout much of the eastern United States. They hibernate in a few caves and abandoned mines, which are known as hibernacula. Nearly 85% of the known population winters in only seven hibernacula in Missouri, Indiana, and Kentucky, and approximately one-half of the population uses only two of these hibernacula (Brady, et. al., 1983). Many other hibernacula exists that are utilized by lesser numbers of Indiana bat.

INDOT and FHWA will attempt to purchase and protect one or more hibernacula for the Indiana bat from willing sellers. Initial efforts to purchase hibernacula are underway. Upon purchase, the property would be transferred to an appropriate governmental conservation and management agency for protection in perpetuity via conservation easements. The purpose of purchasing

winter hibernacula for the Indiana bat is to promote conservation and preservation of this endangered species. See the *Biological Opinion* in the FEIS, Vol. II, Appendix LL.

5.3 Wetland Mitigation

Wetlands are an important natural resource because they support rich biological communities and floodplain protection. The construction of this Interstate will impact wetlands of varying types. The majority of impacted wetlands are expected to be forested wetlands. To mitigate for these wetland losses, INDOT and FHWA propose to follow the mitigation ratios listed in their *Wetlands MOU* (signed January 28, 1991). See the FEIS, Vol. II Appendix T.

Wetland mitigation sites are preferred in areas connected to existing wetlands and forests that currently provide habitat for both federal and state listed threatened and endangered species. It is INDOT's intention to restore wetlands in areas that have the greatest opportunity to develop habitat for threatened and endangered species. Such mitigation sites will be designed, constructed, and monitored in accordance with the applicable permit conditions. Once a site has become established, the site may be transferred to an appropriate governmental agency in accordance with applicable permit conditions.

5.4 Forest Mitigation

Forests are a large and important resource in Indiana. Indiana's forests make significant environmental and economic contributions, including timber, employment, outdoor recreation, protection of soil and water resources, and habitat for many plant and animal species, including threatened and endangered species. The *Tier 1 Forest and Wetland Mitigation and Enhancement Plan*, which is included in the FEIS as Appendix NN, provides a list of potential mitigation sites for upland and bottomland forests. The list includes sites in the Hoosier National Forest.

FHWA and INDOT will voluntarily mitigate impacts to upland forests at a 3:1 ratio within Southwest Indiana. This mitigation will be accomplished either by purchase of existing tracts or by planting trees. Preference will be given to areas contiguous to large forested tracts that have recorded federal and state listed threatened and endangered species. Coordination with resource agencies will assure that these forest mitigation sites are strategically situated in biologically attractive ecosystems. All forest mitigation lands will be protected in perpetuity via conservation easements or other appropriate measures and may be transferred to appropriate governmental agencies.

Some or all of the forest land that serves as mitigation for the project's overall impacts to forests may also serve as mitigation under the U.S. Fish and Wildlife Service's Biological Opinion for this project. As part of the Section 7 consultation process for each Tier 2 section, FHWA and INDOT will consult with the USFWS to determine the amount and location of the forest land that is to be protected or created as mitigation for each Tier 2 section's impacts to the Indiana bat.

5.5 I-69 Community Planning Program

In its comments on the FEIS, the USEPA stated that “[w]e commend FHWA/INDOT for their proactive and innovative environmental protection measure of offering technical and financial assistance for community land use planning.” The I-69 Community Planning Program will provide resources to local communities (cities, towns, and counties) for land-use planning purposes to help them better manage development that may occur upon completion of I-69. The objectives of the program are identified in the FEIS, Vol. I, Chapter 7, *Mitigation*, pp. 7-5 and 7-6. These objectives include “develop protective strategies for environmentally sensitive areas.” The local communities could use these grants to prepare transportation land use plans, zoning and subdivision ordinances, and special highway corridor “overlay zones” for development. The total cost of this program is estimated at \$2 million. Local communities eligible for grants are: Bedford, Bloomfield, Bloomington, Ellettsville, Evansville, Greenwood, Indianapolis, Linton, Loogootee, Martinsville, Mooresville, Oakland City, Petersburg, Princeton, Spencer, Vincennes and Washington. Counties eligible for grants are: Daviess, Dubois, Gibson, Greene, Johnson, Knox, Lawrence, Martin, Monroe, Morgan, Owen, Pike, Vanderburgh and Warrick.

FHWA and INDOT will establish specific terms and conditions during Tier 2 regarding the activities for which the planning grants can be used, in order to ensure that the planning funds are used in an environmentally sensitive manner. These terms and conditions will be established in writing and will be developed in consultation with federal and state resource agencies. These terms and conditions will be approved by FHWA prior to the release of federal funds for this planning program. This program will be implemented as soon as possible after the terms and conditions are established, in accordance with the USEPA’s request in its comment letter on the FEIS for this project.

5.6 Geographic Information System (GIS)

A GIS is an interactive network of maps (i.e., layers) that depict various environmental, social, and economic resources. This GIS for Southwest Indiana is comprised of approximately 170 different layers of aquatic, terrestrial, mineral, social, and economic information for the 26 counties. With the publication of the I-69 DEIS, the Indiana Geological Survey (IGS) made this information available to all agencies and the public on their website (<http://igs.indiana.edu/arcims/southwest/download.html>). Building on the Southwest Indiana GIS, INDOT and FHWA are developing a statewide GIS that will consist of layers for similar resources for each county throughout the State of Indiana. This effort is nearly complete, with the information being made available on the IGS website referenced above.

5.7 Update County Historic Surveys

The Indiana Department of Natural Resources, Division of Historic Preservation, which serves as the State Historic Preservation Officer (SHPO) for Indiana, manages the Indiana Historic Sites and Structures Inventory. Many of the publications upon which the SHPO relies to assemble its Inventory are older and require updating or require publication costs associated with the printing

of additional documents. INDOT and FHWA will provide financial and technical assistance to the SHPO to support the completion of field surveys and publishing of County Interim Reports for the Inventory, as specified in the Section 106 Memorandum of Agreement (MOA) for this project. For a copy of the MOA, see the FEIS, Vol. II, Appendix P, *Section 106 Documents*.

5.8 Biological Surveys on Wildlife and Plants

Pursuant to the Biological Opinion, INDOT will cooperate with the USFWS, IDNR, and other agencies and organizations to complete the following: (1) biological surveys for rare and endangered species; (2) surveys of known Indiana bat hibernacula (i.e., caves); (3) funding of research for discovery of new hibernacula; (4) funding of research on autumn and spring habitat for the Indiana bat; (5) funding for captive-rearing research on mussels; and (6) funding for the writing and printing of informative pamphlets on bats, bald eagles, and mussels in Indiana. For additional information, see the USFWS *Biological Opinion* for Alternative 3C in FEIS, Vol. II, Appendix LL.

5.9 Patoka River National Wildlife Refuge

At the time the refuge was created (1994), a transportation corridor was reserved for I-69. The reserved corridor crosses the Patoka River Bottoms wetlands complex at its narrowest width, thus minimizing the potential for impacts to wetlands and forests. Land within the reserved corridor is not considered to be part of the refuge for purposes of Section 4(f). In addition to remaining within this reserved corridor, FHWA and INDOT will seek to acquire one or more parcels of land within the Refuge's acquisition boundary from willing sellers and transfer ownership of that land to the USFWS. INDOT is currently coordinating with the USFWS to identify high-priority parcels for possible acquisition. Priority will be given to parcels contiguous with USFWS-owned lands.

5.10 Bridging of Floodplains

Floodplains are a vital part of a river or stream ecosystem. They are important because they act as flood buffers, water filters, and nurseries, and are major centers of biological life in the river or stream ecosystem. They are important for maintenance of water quality as they provide fresh water to wetlands and backwaters, dilute salts and nutrients, and improve the overall health of the habitat of many species of birds, fish, and plants. They are important biologically as they represent areas where many species reproduce and are important for breeding and regeneration cycles.

The Patoka River and Flat Creek will be completely bridged in this project. See FEIS, Vol. I, Section 5.19, *Wetlands Analysis* for a discussion of this issue. The bridging of a floodplain would minimize habitat impacts and maintain wildlife corridors. Similarly, it would minimize any floodplain encroachments, reduce significantly the loss of wetlands, forests and farmland, and minimize impacts to threatened and endangered species. The decision of whether to bridge additional floodplains will be made in Tier 2.

5.11 Hoosier National Forest

The Hoosier National Forest (HNF) is located in several counties throughout south-central Indiana. This forest is highly fragmented, with pockets of publicly owned and privately owned land within its boundaries. To offset the effects of fragmentation, the HNF Lands Program maintains a dynamic list of properties within the HNF boundary available for purchase.

As mitigation for the forest impacts of this project, INDOT proposes to acquire privately owned lands from willing sellers within the HNF and transfer those lands to the HNF, thus supporting the HNF's efforts to strengthen core forest habitat. Tracts would be reforested, if applicable. This restoration would create nesting opportunities for many neo-tropical migratory birds by increasing the amount of core forest habitat. In addition, some of the properties within the HNF boundaries could be purchased to protect caves (some being hibernacula) and karst resources. Properties are for the most part wooded and contain Indiana bat summer habitat, too.

5.12 Distance Learning

Using information and technology developed in this and other studies, INDOT and FHWA have been involved and will continue to promote distance learning opportunities for students in Southwest Indiana. These opportunities will continue interactive learning utilizing a video conference concept. Various elementary schools and high schools in Southwest Indiana have participated in this educational program for the past three years. INDOT and FHWA consider this program invaluable to students and the public today in learning about Indiana and its resources.

6.0 REGULATORY REQUIREMENTS

Coordination with all appropriate federal and state agencies has occurred throughout the Tier 1 process. The major regulatory requirements applicable to this proposed action include consultation regarding historic and archaeological resources under Section 106 of the National Historic Preservation Act; conformity findings under Section 176(c) of the Clean Air Act; permitting under Section 404 of the Clean Water Act; consultation regarding threatened and endangered species under Section 7 of the Endangered Species Act; and the use of a resource protected under Section 4(f) of the Department of Transportation Act of 1966.

After the FEIS was published, a number of activities have occurred. These activities have included the completion of the Section 106 process for the Tier 1 EIS and the approvals of the air quality conformity analysis for the Indianapolis and Evansville Metropolitan Planning Organizations. These actions, together with an overview of anticipated Tier 2 activities, are summarized below.

6.1 Section 106 Process

The FEIS includes in Appendix P an executed Memorandum of Agreement (MOA) which identifies the mitigation measures and other actions that will be further examined during the Section 106 consultation in Tier 2. On January 30, 2004, the FHWA submitted to the Advisory Council on Historic Preservation all requirements as stated in 36 C.F.R. 800.11(f). This included (1) the revisions to the Section 800.11(e) documentation, (2) efforts to avoid or minimize the undertaking's adverse effects, (3) a summary of the views of the consulting parties and the public regarding the MOA, and (4) a copy of the executed MOA. The FHWA also sent a letter to all consulting parties that included the executed MOA and invited them to sign the MOA as a concurring party. Consulting parties were requested to return signature pages by February 25, 2004. Thus far, a total of eight (8) consulting parties had submitted signed signature pages. The eight consulting parties who signed the MOA are: Donald Bowling the Mayor for the City of Loogootee; Norman Voyles, a Morgan County Commissioner; Don Williams, the President of the Warrick County Commissioners; Robert F. Schmidt, the President of the Canal Society of Indiana; Jeff Lake, of Downtown Evansville; Harry Thompson, of Newburgh Historic Preservation; Dennis Au, of Original Evansville Historic Preservation, and the Morgan County Historian. The Section 106 process for the Tier 1 EIS is now completed.

Additional Section 106 consultation will be conducted for each Tier 2 section concurrently with the environmental impact statement (EIS) for that section. Section 106 consultation during Tier 2 will be carried out in accordance with the Section 106 regulations, as described in the Section 106 MOA executed during Tier 1.

6.2 Air Quality Conformity Finding

Within the Tier 1 EIS Study Area, Marion and Vanderburgh counties are currently the only areas subject to the air quality conformity requirements under Section 176 (c) of the Clean Air Act (CAA). In order to comply with conformity requirements, the metropolitan planning organizations (MPOs) in both of these counties conducted an analysis to ensure that their long-range transportation plans conform to the emissions budgets for motor vehicles in the State Implementation Plan. The air quality modeling was completed and both MPOs updated their long-range transportation plans to include Alternative 3C for I-69, prior to release of the FEIS. See FEIS, Vol. I, Section 5.9, *Air Quality*. Since the publication of the FEIS, the USEPA and the Indiana Department of Environmental Management (IDEM) have reviewed the air quality analysis and the plan update for both MPOs. The agencies concluded that the analysis demonstrates conformity to the emissions budgets for both MPOs. With the concurrence of those agencies, FHWA and Federal Transit Authority (FTA) made their conformity finding for the Evansville plan update on January 29, 2004 and made their conformity finding for the Indianapolis plan update on January 6, 2004. For copies of these conformity findings, see Appendix D of this Record of Decision.

Air quality conformity analyses and findings will be updated, as appropriate, during the Tier 2 NEPA studies for individual Tier 2 sections. For further discussion of the conformity activities

that will be carried out during Tier 2, please refer to FEIS, Vol. I, Section 5.9.3, *Tier 2 EIS Air Quality Analyses*.

6.3 Section 404

At the request of the U.S. Army Corps of Engineers (USACE), the FEIS included an analysis documenting the consistency of selecting Alternative 3C with their permitting requirements, which are known as the Section 404(b)(1) Guidelines. See FEIS, Vol. II, Appendix DD, *Section 404 (b)(1) Consistency Analysis*. In a letter dated September 25, 2003, the USACE informed FHWA that the tiered approach and the alternatives analysis conducted for the project is consistent with the intent of the Section 404 (b)(1) Guidelines. In a letter dated February 13, 2004, the USACE reviewed the FEIS and reaffirmed that it considered the tiered approach and the alternatives analysis in the FEIS to be consistent with the intent of the Section 404 (b)(1) Guidelines. The USACE also stated that a final USACE determination as to compliance cannot be made until final information is developed and provided. The USACE requested that the Record of Decision include a clarification that the USACE has not formally made or concurred in a determination of consistency with the Section 404 (b)(1) Guidelines. This clarification is included in Appendix E to this Record of Decision.

During Tier 2, FHWA and INDOT will continue to coordinate closely with the USACE and other applicable agencies regarding Section 404 permitting. This coordination effort will be conducted for each Tier 2 section. Permit applications for each section will be filed when a sufficient level of design detail and environmental data is available. Section 404 permits for each Tier 2 section will be obtained prior to construction for that section.

6.4 Section 7

In July 2003, the FHWA and INDOT submitted a Biological Assessment (BA) to the U.S. Fish and Wildlife Service (USFWS) that examined the impacts of the Alternative 3C on three species – the Indiana bat, the bald eagle, and the eastern fanshell mussel. Based on the BA, the USFWS concurred that the project is not likely to adversely affect the mussel. Subsequently, on December 3, 2004, the USFWS issued a Biological Opinion stating that Alternative 3C is not likely to jeopardize the continued existence of the Indiana bat or the bald eagle. The Biological Opinion is included in Appendix LL of the FEIS. The Biological Opinion concludes the Section 7 consultation process for Tier 1 and specifies the procedures to be followed for Section 7 consultation in Tier 2.

During Tier 2, informal or formal Section 7 consultation will be conducted for each Tier 2 section, concurrently with the NEPA process for that section. The basic process for Section 7 consultation was described as follows in the Service's Biological Opinion (dated December 3, 2003):

The Service will implement an appended programmatic approach for I-69, which is a two-stage consultation process. The first stage involves the Service

developing a programmatic biological opinion for I-69 that analyzes potential effects from a landscape-level to an individual animal level that may result from fully implementing the proposed design criteria developed for the entire I-69 project from Evansville to Indianapolis, Indiana. This stage is being completed near the end of Tier 1. The second stage involves the FHWA developing appropriate project section-specific documentation (e.g., Tier 2 biological assessments for each project section) that addresses the specific impacts associated with each section of I-69. Upon completion of the Service's project section-specific review and analysis, the associated documentation is physically "appended" to the programmatic biological opinion. The programmatic biological opinion, together with the appended documentation for each project section, encompasses the complete consultation document for each Tier 2 Project Section of I-69.

In accordance with this procedure, more detailed studies will be conducted to determine the potential impacts of the project (including the potential for a take) in each individual Tier 2 section. If applicable, a Biological Assessment will be prepared for a Tier 2 section. Based on the Biological Assessment for a Tier 2 section, FHWA and INDOT may seek a finding of "not likely to adversely affect" for that section or may request additional formal consultation. If the Service concurs in a finding of not likely to adversely affect, Section 7 consultation for that section would be concluded. If the Tier 2 section is advanced to formal consultation, the process will conclude with a Biological Opinion for that section. Terms and conditions established in the Tier 1 Biological Opinion may be modified by the USFWS based on additional documentation developed during Section 7 consultation in Tier 2.

6.5 Section 4(f)

For a discussion of Section 4(f), including actions completed since the FEIS and actions to be completed during Tier 2, please refer to Section 4.0 of this Record of Decision and the FEIS, Vol. I, Chapter 8, *Section 4(f)*.

7.0 COMMENTS ON FEIS

The Tier 1 FEIS was released on December 18, 2003. Although no comment period is required on a FEIS under FHWA regulations, the FHWA and INDOT established a 47-day period for comments to be submitted on the FEIS. This period ended on February 2, 2004. Comments postmarked by the last day of this period were considered to be timely. In addition, comments received following the end of the comment period, but prior to issuance of the Record of Decision, also were considered. The comments received on the FEIS are summarized in Section 7.2 below and in Appendix A. General responses to substantive issues raised in the comments are provided in Appendix B. More specific, point-by-point responses to comments are included in the project file, along with copies of all comments received on the FEIS.

7.1 Summary of Comments on FEIS

7.1.1 Federal Agency Comments. Comments on the FEIS were received from the USACE, USEPA, and Natural Resources Conservation Service (NRCS). Generally, these agencies expressed satisfaction with the tiered process and the information presented in the FEIS, while also identifying additional actions that will need to be taken as part of the Tier 2 environmental studies. The USFWS informed FHWA in writing that it was satisfied with the document and that USDOJ would not be providing written comments.

7.1.2 State Agency Comments. Comments on the FEIS were received from the Indiana Department of Natural Resources (IDNR) Executive Office, and from the IDNR Division of Historic Preservation and Archaeology (DHPA), which serves as the Indiana State Historic Preservation Officer (SHPO). Both comment letters expressed general satisfaction with the Tier 1 study, while identifying additional actions that will be needed during Tier 2 studies.

7.1.3 Local Governments, Agencies, and Officials. Comments on the FEIS were received from numerous local governments, agencies, and officials. These comments expressed a wide range of perspectives. Some expressed strong support for Alternative 3C and urged that it be completed as soon as possible. These commenters included, among others, local officials from Bedford and Evansville. Others expressed strong opposition to this alternative and urged selection of Alternative 1 or the No Build alternative. These commenters included, among others, local officials from Bloomington and Perry Township (in Indianapolis).

7.1.4 Businesses, Business Groups, and Economic Development Organizations. Comments on the FEIS were received from numerous businesses, business groups, and economic development organizations. In general, these entities and groups expressed support for Alternative 3C and urged that it be constructed as quickly as possible, but there were a few businesses and business groups that expressed opposition to this alternative. Commenters included numerous businesses based in and around Evansville, as well as businesses from Bloomington, Indianapolis, and other locations in Southwest Indiana. Comments also were received from Chambers of Commerce in Evansville and Bloomington, as well as other business and economic development groups.

7.1.5 Environmental, Historic Preservation, and Citizens Groups. Comments on the FEIS were received from numerous environmental, historic preservation, and citizens groups. In general, these organizations expressed opposition to Alternative 3C and urged the adoption of Alternative 1 or the No Build. These organizations included, among others, Citizens for Appropriate Rural Roads, COUNT US!, the Environmental Law and Policy Center, the Historic Landmarks Foundation of Indiana, the Hoosier Environmental Council, and the Marion County Association of Neighborhood Associations.

7.1.6 Other Institutions. Comments were received from two other institutions – the Ivy Tech State College – Evansville Campus, and the University of Evansville. Both comments were brief but generally supportive of the FEIS and Alternative 3C.

7.1.7 Individual Comments. Approximately 500 separate public comments were received on the FEIS. Some of those comments were lengthy and detailed. There were large numbers of comments submitted by supporters of Alternative 3C, as well as large numbers of comments submitted by those who opposed that alternative. Most of the comments from individuals were relatively brief and primarily expressed a position for or against the project and/or a particular alternative. Some included specific and detailed comments on various aspects of the study. For a summary of these comments, see Appendix A of this Record of Decision. All comments received on the FEIS are included, with responses to substantive comments, in the project file.

7.2 Responses to Comments on FEIS

During the preparation of this Record of Decision, the comments on the FEIS were grouped into categories by subject, and comments on each topic were then considered and addressed. The results of this review are presented in Appendix B to this Record of Decision, which contains general responses to the comments received on the FEIS. The responses in Appendix B are supported by additional documentation in FHWA's project file, which includes specific, point-by-point responses to the FEIS comments.

8.0 RECORD OF DECISION

For the foregoing reasons and based upon its performance in meeting the project goals, and consideration of all the social, economic, and environmental evaluations contained in the FEIS with the input received from other agencies, organizations, and the public, the FHWA approves Alternative 3C as the Selected Action for this project.

Record of Decision Approval:

March 24, 2004
Date

Robert F. Tally, Jr.
Robert F. Tally, Jr.
Division Administrator
Federal Highway Administration
Indiana Division