



U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
Arkansas Division
700 West Capitol Avenue, Room 3130
Little Rock, AR 72201-3298



April 19, 2000

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AUG 24 2000
DISTRICT 7
MODOT JOPLIN, MO

IN REPLY REFER TO:
Record of Decision
FHWA-AR-EIS-98-01-F
DPR-0051(1)
State Job 009969
U.S. Highway 71
Bella Vista, Arkansas to
Pineville, MO
Benton County, Arkansas
McDonald County, Missouri
HDA-AR

Mr. Dan Flowers, Director
Arkansas State Highway and
Transportation Department
Little Rock, Arkansas

Dear *Dan* Mr. Flowers:

In accordance with prescribed procedures, the 30 day period since the Final Environmental Impact Statement (FEIS) Notice appeared in the Federal Register has ended. The FEIS Notice was published in the Federal Register on January 7, 2000. All comments received on the subject FEIS were addressed in the Record of Decision (ROD). Therefore, I have signed the ROD which provides approval of project location and major design features. The ROD also documents compliance with the FHWA-NEPA environmental process. The project may now proceed to final design, property acquisition, and project construction as described in 23 CFR 771.113.

*C: Ch. Engr.
Asst. Ch. Engr. - Planning
Env.
P&R
Job A File*

Sincerely yours,

Kenneth A. Perret
Division Administrator

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APR 21 2000

Programs & Contracts
AHTD

Enclosure

cc:
Mr. Gene Cleckley, SRC Atlanta
Mr. Alan Masuda, Missouri Division
Mr. Henry Hungerbeeler, Missouri DOT
Mr. Fred Skaer, HEPE-1

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APR 20 2000

DIRECTOR'S OFFICE
ARKANSAS STATE HIGHWAY AND
TRANSPORTATION DEPARTMENT

RECORD OF DECISION

FEDERAL HIGHWAY ADMINISTRATION – Arkansas Division

US 71 – Bella Vista to Pineville Benton County Arkansas and McDonald County Missouri

FHWA-AR-EIS-98-01-F
State Project: 009969
Federal Project: DPR-0051(1)

A. Decision

The Arkansas Highway and Transportation Department (AHTD), Missouri Department of Transportation (MoDOT) and the Federal Highway Administration (FHWA) are proposing to improve US 71 from south of Bella Vista, Arkansas to near Pineville, Missouri. Exhibit 1 shows the location and extent of the US 71 improvements.

Based on environmental and engineering studies, agency coordination and public input, a new freeway facility on new location, that will be located west of existing US 71 was identified as the Selected Alternative in the Final Environmental Impact Statement (FEIS), along with the interim improvements on existing US 71. The Selected Alternative on new location is referred to as the Far West Alternative. The length of the ultimate improvements within the US 71 Study Area measure approximately 30.5 km (19.0 mi.) from Route H in Missouri to the existing US 71/US 71 Business Interchange in Arkansas. Associated with the ultimate improvements, the interim improvements measure approximately 15.3 km (9.5 mi.)

The US 71 ultimate freeway improvements will consist of two traffic lanes in each direction separated by an 18.3-meter (60-foot) depressed median. Full-width, 3.6-meter (12-foot) paved shoulders will be provided on each side of the traveled way. The roadway line and grade will be efficiently adapted to the topography of the area to provide a facility that will be safe, efficient, and aesthetically pleasing. The US 71 interim improvements in Missouri and any permits or mitigation associated with these improvements are supported by the evaluation previously completed for the 1992 MoDOT EIS and Record of Decision.

The US 71 freeway improvements for this study will be consistent with the extent and character of the planned US 71 MoDOT improvements that were defined in a Final EIS completed in 1992 which considered US 71 improvements north of the state line (MoDOT Job Number J7P0427-FHWA-EIS-90-02-F).

The basic purpose of the project is to provide a safe, efficient, environmentally sound and economical transportation facility that responds to the identified needs. The specific needs being addressed by the proposed action are summarized as follows:

- Multi-State Interstate System - Provide a freeway as part of the multi-state, high-priority transportation corridor extending from Shreveport, Louisiana to Kansas City, Missouri, as established in the Intermodal Surface Transportation Efficiency Act (ISTEA).

- Traffic Safety - Reduce the number and severity of traffic-related crashes occurring along US 71 between Bella Vista and Pineville.
- Roadway Design Features - Upgrade current roadway design features in the US 71 Corridor including roadway alignments and roadway cross-sections.
- Movement of People and Goods - Provide for the efficient transport of people and goods through the region by reducing the total hours of travel through the Study Area.
- Local Access – Provide improved local access to the US 71 facility utilizing interchanges and frontage roads wherever needed while providing efficient through service for non-local trips and truck traffic.
- Roadway Capacity – Increase roadway system capacity in accordance with the projected travel demands to improve the general operating conditions of US 71.
- Recreational Activity Access - Facilitate the usage by motorists of nearby regional recreational facilities through improved accessibility.

The Far West Alternative is generally defined as a four-lane freeway relocation improvement of US 71 around the western side of the built-up area of Bella Vista Village with a southern terminus at the US 71/US 71 Business Interchange and a northern terminus at the planned MoDOT freeway improvements southwest of Pineville at Route H. Table 1 presents a general summary of costs of the Selected Alternative. Ultimate construction represents a newly constructed freeway section on new alignment. Interim construction generally consists of upgrading the existing US 71 roadway by providing a four-lane facility with varying degrees of access control during the interim period or until the ultimate improvement is completed. These interim improvements will extend from the connection with the planned four-lane freeway improvement by MoDOT at Route H, southwest of Pineville, to a connection with the existing US 71 roadway at the state line. In Arkansas the interim improvements consist mainly of signal improvements along with minor intersection upgrades to improve safety and operational features.

**Table 1
Summary of Costs
“Far West” Preferred Alternative
(US 71 Improvements)**

	“Ultimate” Length km (mi.)	“Ultimate” Construction and R.O.W. Cost (\$ - M)	“Interim” Construction and R.O.W. Cost (\$ - M)	Existing US 71 Widening Cost (\$ - M)	Operations and Maintenance Cost (\$ - M) ¹	Total Capital Cost (\$ - M)
Missouri	8.2 (5.1)	43.6	47.4	0.0	0.9	91.9
Arkansas	22.0(13.7)	83.9	1.0	3.6	3.5	92.0
Total Project	30.2 (18.7)	127.5	48.4	3.6	4.4	183.9

¹Additional costs for O&M based on 1997-2020 project life and 7% discount rate.
Based on 1996 Unit Costs

The Far West Alternative will meet the project purpose and need more efficiently than the “No-Build” Alternative. In addition to improving traffic safety within the US 71 corridor, the implementation of these improvements will eliminate current roadway deficiencies, relieve traffic congestion, and provide for the efficient movement of people and goods. Therefore, economic development opportunities would be provided for the various communities to build upon and grow. With the freeway improvements, better continuity for the regional highway system would be provided, resulting also in improved access to recreational facilities located near the Study Area.

Additional advantages offered by the Far West Alternative, when compared to other alignment alternatives, are:

- Least adverse construction impacts on traffic during construction,
- Provides measurably better long-term capacity,
- Provides superior travel efficiencies, resulting in reduced crashes,
- Least impact on identified wetlands,
- Least impact on sites of historic or archeological significance,
- Least adverse impacts to high-risk or moderate-risk hazardous waste sites, and
- Most compatible with existing and future community land use plans.

Compared to the other alignment alternatives, the Far West Alternative will meet the project purpose and need most efficiently. Each of the alternatives will equally provide a multi-state Interstate facility, upgrade the US 71 design features, improve the efficiency of the system for the movement of people and goods, and facilitate access to nearby regional recreational activities. However, the Far West Alternative has distinguished itself from the other alternatives because of its superior effectiveness in improving traffic safety and its overall roadway capacity.

B. Summary of Future Actions

As a result of the environmental evaluation of the Far West Alternative, a number of identified actions were found to be necessary during the design development and construction phases of the project. The following is a list of these actions:

- Continue coordination with the Bentonville/Bella Vista Trailblazers Association, Inc. during design development and construction to coordinate the planning of a pedestrian/ bicycle trail that will connect the two communities of Bentonville and Bella Vista with the US 71 improvements.
- Coordinate the design development and construction activities with the US Fish & Wildlife Service.
- Continue coordination of mitigation measures for impacts to the surrounding environment which address environmental and social impacts including:
 - Continued consideration of reducing noise levels associated with the “New Home” Church and the Highlands Golf Course as part of the design development phase of the project.
 - Continued refinement to the highway final alignment within the evaluated corridor to avoid impacts. During design development,

alignment refinements will be investigated so that impacts to existing water resources in the vicinity of McKisic Creek will be minimized. In an attempt to minimize the proximal impacts to residences located within the Highlands, alignment refinements will be investigated during the design development phase of the project. Refinements to the final alignment will be investigated during design development to avoid impacts to Wetland B-3a.

- Continue investigation of residential displacements during design development.
- Continue coordination of the Section 404 Permits for compliance with the provisions of the Clean Water Act. Coordination with the US Army Corps of Engineers (USACE) as part of design development activities will entail fulfillment of the requirements of the permits.
- Continue coordination with Missouri Department of Natural Resources (MDNR) and Arkansas Department of Environmental Quality to ensure that a proper construction water pollution control program is implemented during the design development and construction phases of the project.
 - Make sure "State of the Art" Erosion Protection Plans are followed with proper inspection and maintenance.
 - Identify and monitor any wells that will be impacted by the alignment.
 - Ensure that "Best Management Practices" are being used by contractors during design and construction.
- Continue coordination with Missouri Department of Natural Resources (MDNR), in Missouri, to ensure that a proper construction water pollution control program is implemented during the design development and construction phases of the project. This includes ensuring that Stream Channel Modification Guidelines are followed when modifying channels or relocating streams.
- Develop a "Construction Management Plan" for the improvements through the Bella Vista Community, as part of detailed design.
- Continue coordination with Missouri Speleological Survey (MSS) or Arkansas Association of Cave Studies (AACS) to document any new caves discovered during final design or construction.

C. Alternatives Considered

In compliance with federal regulations requiring the consideration of all reasonable alternatives, a full set of improvement alternatives was considered for US 71. The alternatives were defined in accordance with the needs of the Study Area and traffic considerations.

1. OVERVIEW OF IMPROVEMENT CONCEPTS

The following types of improvement concepts were considered:

- **“No-Build” Concept** - This concept consists of maintaining the existing roadway system plus any committed street and highway improvements within the Study Area. Committed improvements include Transportation System Management (TSM) measures applied to the existing US 71 roadway. This concept provides a basis of comparison for the determination of the benefits and adverse impacts of the other improvement alternatives.
- **Non-Freeway Improvement to Existing Roadway Concept** - This concept will involve retrofitting the existing US 71 roadway to the fullest extent reasonable to meet future travel demands and safety needs. This concept will not provide a freeway improvement. These retrofits will entail a combination of roadway widening, improved access control and TSM improvements. Because this concept will not provide a freeway improvement, it would not comply with the high-priority corridor Interstate standard. Consequently, this concept was not considered further.
- **“Freeway-Build” Concept** - This concept will involve the construction of a freeway facility either on new location or along the existing US 71 alignment. Based on current land use and the built-up environment of the Bella Vista area, several preliminary corridors have been identified – Far West, Near West, Existing and East. Exhibit S-2 in the FEIS, shows the locations of the Study Corridors.
- **Other Concepts** - Public transportation alternatives, such as bus systems and rail transit, were considered as multi-modal options to the roadway alternatives. Due to the lack of land use and population densities and due to the highly dispersed trip origin/destination distributions of the Study Area, public transportation alternatives were not considered a reasonable alternative to the proposed action.

2. PRELIMINARY “FREEWAY-BUILD” STUDY CORRIDORS

For the US 71 project, four preliminary 1,600 meter-wide (one mile-wide) Study Corridors were identified – Far West Corridor, Near West Corridor, Existing Corridor and East Corridor. The locations of these corridors were defined to minimize the potential adverse impacts to the built environment, to minimize the length of the freeway improvements, and to provide the most direct connections to the existing US 71 bypass east of Bentonville and the planned MoDOT improvements to the north. For further details of the previously planned MoDOT improvements north of Route H, please refer to the FEIS, Appendix L, Record of Decision.

For the purpose of identifying the corridors that are reasonable and meet the stated purpose and need for the proposed action, a preliminary assessment, evaluation, and screening were conducted. The goals of this screening were to eliminate from further consideration those corridors with any “fatal flaws” or those that wouldn’t comply with the stated purpose and need of the project. Based on a total-project assessment of the Study Corridors’ potential impacts on the social, environmental and engineering/traffic issues of the Study Area, it was determined that the East Corridor would not accomplish the goals of the project, primarily relating to traffic. Consequently, freeway improvements within the East Corridor were not considered further. No “fatal flaws” were identified in the other Study Corridors.

3. SUMMARY OF REASONABLE ALTERNATIVES

Based on the stated purpose and need for the proposed action, alternative alignments within the Far West, Near West, and Existing Corridors were identified and evaluated. Based on the assessment of the potential social, economic and environmental consequences of the competing alternative alignments, in combination with input provided by the community involvement process, a Selected Alternative for the US 71 improvements was identified. As part of this evaluation process, a wide range of alternative actions (potential alternatives) was initially considered in order to provide the basis for determining the reasonable alternatives. Exhibit 2 illustrates the wide range of alternatives within each corridor for the US 71 Corridor Study. In accordance with the preliminary screening of the “Freeway-Build” Study Corridors, the following group of reasonable alternatives was defined within each remaining preliminary corridor, and then evaluated:

- “No-Build” Alternative
- “Freeway-Build” Alternative
 - Freeway Alternatives Within the **Far West Corridor**
 - Freeway Alternatives Within the **Near West Corridor**
 - Freeway Alternatives Within the **Existing Corridor**

Due to the need to provide short-term improvements to the existing US 71 roadway for safety considerations, AHTD and MoDOT agreed that both interim and ultimate improvements should be defined for each corridor. The interim improvements consists of short-term investments to address the safety and capacity concerns of US 71 until the ultimate freeway improvements can be constructed throughout the entire Study Area. For the Near West and Existing Alternatives, the interim improvements represent a staging of the ultimate freeway improvements such that little or no additional construction would be necessary. Table 2 summarizes the extent of the interim improvements and provides a description of the improvements for each of the “Freeway-Build” Alternatives. Exhibit 3 represents the best alternative within each of the “Freeway-Build” Alternative Corridors.

**Table 2
Summary Descriptions of Interim and Ultimate Improvements
“Freeway-Build” Alternatives**

Far West Alternative
<ul style="list-style-type: none"> • Ultimate Freeway Improvements – Construct a four-lane freeway on new location extending from a connection with the planned MoDOT improvements at Route H located southwest of Pineville to the existing US 71/US 71B Interchange south of Bella Vista on an alignment around the western edge of Bella Vista. • Short-Term (Interim) Improvements – Construct a combination of four-lane expressway and five-lane urban arterial improvements from a connection with the planned MoDOT improvements at Route H to a connection with existing US 71 at the state line on an alignment concurrent with the existing US 71 roadway. Roadway approach and signal improvements would be provided at several existing intersections in Arkansas and Missouri, as warranted. The combination four-lane expressway and five-lane urban arterial improvements along the existing US 71 Corridor would be additional to the ultimate improvements.
Near West Alternative
<ul style="list-style-type: none"> • Ultimate Freeway Improvements - Construct a four-lane freeway extending from a connection with the planned MoDOT improvements at Route H located southwest of Pineville to the existing US 71/US 71B Interchange south of Bella Vista on an alignment along existing US 71 in Missouri and through the west-central area of Bella Vista in Arkansas. Roadway approach and signal improvements would be provided at several existing intersections in Arkansas and Missouri.

- **Short-Term (Interim) Improvements** - Construct the four-lane ultimate freeway improvements in Missouri from Route H to a point just north of the state line at which the ultimate freeway improvements diverge from the existing US 71 Corridor, and construct a four-lane improvement from this point to a connection with the existing US 71 roadway at the state line. Roadway approach and signal improvements would be provided at several existing intersections in Arkansas and Missouri, as warranted. The four-lane improvements from the divergence point (3.6 km north of the state line) to the state line would be additional to the ultimate improvements.

Existing Alternative

- **Ultimate Freeway Improvements** - Construct a four-lane freeway extending from a connection with the planned MoDOT improvements at Route H located southwest of Pineville to the existing US 71/US 71B Interchange south of Bella Vista on an alignment along the existing US 71 Corridor.
- **Short-Term (Interim) Improvements** - Construct the four-lane ultimate freeway improvements in Missouri from Route H to a connection with the existing US 71 roadway at the state line. Roadway approach and signal improvements would be provided at several existing intersections in Arkansas and Missouri, as warranted. No additional construction would be required.

For each of the "Freeway-Build" Alternatives, the interim improvements are consistent with the Selected Alternative from the MoDOT Final EIS (MoDOT Job Number J7P0427-FHWA-EIS-90-02-F). As such, commitments for the continued study and mitigation of adverse impacts from the interim improvements in Missouri will be fulfilled in compliance with and under the auspices of the documented MoDOT Final EIS and ROD. However, though the adverse impacts of the interim improvements are adjudicated by the previous MoDOT EIS, the total, cumulative impacts of the combined interim and ultimate improvements have been evaluated in this EIS.

Table 3 presents a summary of the Environmental and Social-Economic impacts that were quantified for the comparison of the Selected Alternative (i.e., Far West Alternative) versus the other reasonable "Freeway-Build" Alternatives. The data shown in the table reflect the total impacts of the alternatives including the ultimate improvements and the short-term improvements necessary for the interim construction.

**Table 3
Summary of Social, Economic and Environmental Factors
Selected Alternative: Far West Alternative**

EVALUATION FACTOR	UNITS	FAR WEST	NEAR WEST	EXISTING
ENVIRONMENTAL				
Parkland	Type / Number	0 / 0	0 / 0	0 / 0
Waters of the U.S.				
Special Aquatic Sites:	Number / Hectares	0 / 0.00	1 / 0.01	1 / 0.01
Regulated Ponds:	Number / Hectares	0 / 0.00	2 / 0.17	2 / 0.17
Streams (Culverted):	Number / Hectares	4 / 0.34	5 / 0.37	5 / 0.33
Streams (Bridged):	Number / Hectares	8 / 0.95	5 / 0.83	8 / 0.98

EVALUATION FACTOR	UNITS	FAR WEST	NEAR WEST	EXISTING
Floodplain (100 Year)	Hectares	15.7	11.7	15.5
Floodplain Crossings	Meters	2,465	1,220	1220
Threatened and Endangered Species	Number	0	0	0
Natural Community Impacts				
Dry Limestone-Dolomite Forest	Hectares	11.0	30.7	19.7
Dry Mesic Limestone-Dolomite Forest	Hectares	200.2	142.9	36.7
Dry Mesic Bottomland Forest	Hectares	0.6	0.0	0.0
Woodlot	Hectares	26.1	0.0	0.0
Unimproved Pasture	Hectares	167.7	124.9	78.1
Habitat Fragmentation	Number ⁽²⁾	1	1	0
Prime Farmlands	Hectares	21.36	14.4	9.74
Statewide Important Farmland	Hectares	55.65	31.44	17.63
Visual and Aesthetic Considerations	Rating ⁽¹⁾	3	3	4
Air Quality	Rating ⁽¹⁾	4	4	4
Cultural Resources				
Predictive Archeological Sites (Impact Probability)	Rating ⁽¹⁾	3	3	4
Previously Recorded Archeological Sites	Number	8	8	13
Historic Sites	Number	0	0	0
Architectural Sites	Number	5	4	1
Hazardous Waste Sites				
High Risk	Number	0	0	1
Moderate Risk	Number	0	2	3
Low Risk	Number	2	2	1
Natural Features and Caves	Number	1	3	2
SOCIAL AND ECONOMIC				
Impacts to Existing Structures (Relocations)				
Residential				
House	Number	15	26	12
Mobile Home	Number	4	7	3
Business				
General	Number	2	8	15
Poultry	Number	0	0	0
Public Use	Number	0	1	3
Noise Impacts (2020)				
NAC Receptors	Number	11	44	122
Additional "Substantial" Increase Receptors	Number	58	77	15
Total NAC Receptors Along Existing US 71	Number	146	110	319
Compatibility w/ Current Land Use/Master Plan	Rating	4	1	3
Adverse Construction Impacts to Businesses	Rating	5	5	1
Economic Considerations				
Highway User Cost Savings	Dollars (Million)	113.6	92	143.5
O&M Costs	Dollars (Million)	4.2	4.9	2.4
Environmental Justice	Rating ⁽¹⁾	4	4	4

Notes:

(1) Rating Scale

5 - Excellent (High), 4 - Good (Medium/High), 3 - Fair (Medium), 2 - Marginally Poor (Low/Medium), 1 - Poor (Low)

(2) Number of 202 Hectare Forest Blocks (500 Acre Forest Blocks)

4. SELECTED ALTERNATIVE

The identification of the Selected Alternative is based on three primary considerations -- the effectiveness of the alternatives in accomplishing the goals of the proposed action (i.e. Purpose and Need), the comparison of the alternatives' overall impacts and benefits, and input from the public and review agencies, including the public hearing. Based on these three considerations, **the Far West Alternative is the Selected Alternative** for the US 71 improvements between Bella Vista, Arkansas and Pineville, Missouri (see Exhibit 4).

The process of evaluating the improvement alternatives involves a balancing of the benefit/impact tradeoffs with regard to the engineering, traffic, environmental and social considerations, with the concerns and interests of the commenting public and review agencies. Particular issues and concerns may be important to some, but may in fact conflict with the concerns of others. It is therefore the overall total-project comparison of the "Freeway-Build" Alternatives which helps guide the selection of the best alternative.

Each of the alternatives has varying degrees of adverse impacts and benefits, and for a number of the impact issues, none of the alternatives differentiate themselves (see Table 3). Considering solely the potential impacts to the natural environment, as shown in Table 3, the Existing Alternative could be considered the environmentally preferred alternative since it would be the least environmentally damaging alternative for some issues. But from an overall perspective, the Far West Alternative presents the best alignment based on the overall comparison of the benefits and adverse impacts. As shown in Table 4, there are several issues which support the Far West Alternative as the Selected Alternative. From engineering, traffic and social/economic perspectives, the Far West Alternative would best meet the needs of the Study Area while minimizing long-term construction costs and overall adverse impacts. Furthermore, the Far West Alternative is most consistent with the community's values as expressed and articulated though the study's public involvement program. Further detail of these issues is provided in the FEIS in the Summary, Section E, Selected Alternative.

**TABLE 4
REASONABLE "FREEWAY-BUILD" ALTERNATIVES
OVERALL IMPACT COMPARISON SUMMARY**

Major Categories (Evaluation Factors)	Far West	Near West	Existing	Distinguishing Factors or Issues
• Engineering	+	+	-	<ul style="list-style-type: none"> ✓ Long-range Costs ✓ Maintenance of Traffic
• Traffic	++		-	<ul style="list-style-type: none"> ✓ Safety (Traffic Mix) ✓ Long-term Corridor Capacity ✓ Incident Management ✓ Crash Reduction
• Environmental	-		+	<ul style="list-style-type: none"> ✓ MoDOT EIS/ROD ✓ Secondary Impacts ✓ Waters of the U.S.
• Social/Economic	++	--	-	<ul style="list-style-type: none"> ✓ Adverse Impacts to Businesses During Construction ✓ Impacts to Existing Structures (Relocations) ✓ Noise Impacts ✓ Compatibility with Current Land Use/Master Plan

Rating Scale: ++ Benefits >> Adverse Impacts
 + Benefits > Adverse Impacts
 = Benefits = Adverse Impacts
 - Benefits < Adverse Impacts
 -- Benefits << Adverse Impacts

D. Section 4(f)

After extensive studies and coordination with Missouri Department of Natural Resources (MDNR) and the Arkansas State Historic Preservation Officer (SHPO) of the possible impacts to both public lands and architectural and cultural resources potentially eligible for the National Register of Historic Places, it was found that no Section 4(f) sites or properties will be impacted by construction of the US 71 improvement.

E. Measures to Minimize Harm

All practical measures to minimize harm have been incorporated into the identification of the Selected Alternative. All such minimization measures that were considered in determination of the Selected Alternative will be incorporated into all appropriate construction specifications and contracts.

Land Use Impacts

Nearly one-tenth of Bella Vista Village is unplatted and lies generally west of the Far West Corridor. The Selected Alternative for the US 71 improvements will be very compatible with Bella Vista's general development plan. Considering the general development plan of Bella Vista, constructing this alternative provides the opportunity to open the western portion of the Bella Vista development. Opening up the western portion of the Bella Vista for new platting before the existing areas mature more fully, and assuming current levels of development, would have the net effect of spreading public and private investments over a much greater area. This would have the potential to generate a higher level of development in the area as a whole.

Farmland Impacts

Throughout the alignment selection process, a major consideration was the minimization of farmstead severance. Alignments were located adjacent to property lines as much as possible and diagonal crossings of cultivated fields were avoided. Frontage roads will be constructed as needed to maintain access to private property. Due to the access control criteria property owners that desire to cross the new facility will incur some adverse travel distance. By location of the Selected Alternative adjacent to established transportation corridors, impacts to prime farmland has been minimized.

Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations* was the result of a recognition that some Federal Actions were having a disproportional adverse effect on certain designated population segments. The implementation of Executive Order 12898 was accomplished through the development of demographic baseline conditions within the affected environment and through the consideration of social impacts. The baseline demographic analysis is discussed in the FEIS, Chapter III, Section A. This analysis showed that minority populations, as well as low-income individuals and families, are virtually absent from the Study Area. As a result, impacts to minority populations, and low income individuals and families was minimized by alignment adjustments and modifications. The adverse impact of the El Toro Restaurant was unavoidable due to its close proximity to the US 71/ US 71B Interchange improvements.

Relocation Impacts

Property that is required for the construction of US 71 improvements will be subject to the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended (42 U.S. C. 4601). This program provides that no person will have to move from their dwelling until they are provided comparable replacement housing that is within their financial means. Similar to the relocation procedures for residences, AHTD and MoDOT will utilize all possible sources of funding or other sources that may be available to businesses. Details of the program which covers process, benefits, and rights are discussed in the FEIS in Chapter IV, Environmental Consequences, Section E, Relocation Impacts.

Air Quality Impacts

During construction of any of the "Freeway-Build" Alternatives, all materials resulting from the clearing, grubbing, demolition or other operations will be removed from the project, burned or otherwise disposed of by the contractor. Any batch plant operations, clearing and grubbing functions, or debris burning will be performed in accordance with MoDOT and AHTD regulations and procedures. Detailed air quality studies were limited to a regional pollutant burden analysis as the present year as well as the design year average daily traffic volumes were well below the minimum thresholds. Regional emissions of HC, CO and NOx can be expected to be reduced for any "Freeway-Build" alternative, when compared to the "No-Build" condition.

Noise Impacts

The number of NAC noise receptors near the Far West Alternative is estimated to be 11 for the Selected Alternative (i.e., Far West Alternative). The number of noise receptors that would hear a "substantial" increase is estimated to be 58 (refer FEIS, Table IV-15). As before, these receptors include both existing and known planned receptors.

The Far West Alternative will reduce the volume of traffic on existing US 71, therefore a beneficiary reduction in the number of NAC noise receptors near the existing US 71 alignment would occur. It is estimated that there would be 149 fewer receptors than with the 2020 "No-Build" Alternative, (refer FEIS, Table IV-16).

Water Quality, Geology and Cave Impacts

MoDOT, in coordination with MDNR, and AHTD have developed a construction water pollution control program to protect the adjacent environment from sedimentation and construction pollutants discharged from construction activities. These procedures and specifications are utilized during preliminary design, final design and construction. Both, MoDOT and AHTD are committed to assuring that "Best Management Practices" or BMP's are implemented.

For the "Freeway-Build" Alternatives, the roadway alignments have been defined to avoid, to the fullest extent possible, any known caves. The Selected Alternative (i.e., Far West Alternative) avoids all known caves within the Study Area. However, during mass excavations in the St. Joe Formation for the construction of the improvements, it is likely that other caves of unknown magnitude could be discovered. If during final design or construction additional caves are located, coordination with Missouri Speleological Survey (MSS) or Arkansas Association of Cave Studies (AACS) will be provided and will utilize a process of evaluation, minimization of impacts, and mitigation as necessary.

Wetlands and "Waters of the US"

The Selected Alternative for the US 71 improvements will impact one jurisdictional wetland area (Site B-3a from the Summary Report, as also shown on Plate FW4 of the FEIS, in Appendix C). It is an "emergent" wetland area covering 0.04 hectares (0.10 acres). There would be no regulated ponds impacted by the Selected Alternative. Five (5) regulated streams would be bridged, and 17 regulated streams would be culverted resulting in total impacts of 1940.8-meters (6,367-foot) of channel including 0.44 hectares (1.08 acres) of Waters of the U.S. within the Ordinary High Water Mark (OHWM).

MoDOT and AHTD are committed to the study of the avoidance of potential impacts to wetlands or other Waters of the U.S. during the design phase of this project. Each resource will be individually examined and the construction limits of the roadway improvements will be reevaluated to see if the wetlands resource can reasonably be avoided. When impacts are unavoidable, they will be minimized and the impacted wetlands resource will be mitigated and enhanced to the extent practical to achieve a "no net loss" of wetland surface area.

The US Army Corps of Engineers has authorized the construction of the Far West Alternative pursuant to the requirements of the Department of the Army Nationwide Permit No. 14 (Nationwide Permit No. 13862) for McDonald County and Department of the Army General Permit GB (General Permit No. 13862) for Benton County. Copies of these permits are included in FEIS, Appendix E. Subsequent design development and construction activities for the Far West Alternative ultimate improvements will need to be performed in accordance with these permits.

For the interim improvements in Missouri (i.e. improvements along the existing US 71 Corridor in Missouri), the Section 404 permit prepared in association with the 1992 Final EIS (FHWA-EIS-90-02-F) by MoDOT will govern the compliance of Section 404.

Water Body Modifications and Wildlife Impacts

The location of the Selected Alternative (i.e., Far West Alternative) will fragment one 200 hectare (500 acre) block, and seventeen 16 hectare (40 acre) blocks of upland forest. Also, the Far West alternative would impact 2.45 hectares (6.0 acres) of riparian forest.

The Selected Alternative would cross 12 streams impacting 1.43 hectares (3.43 acres) and would impact 19 ponds totaling 2.32 hectares (5.77 acres).

Minimizing habitat fragmentation is one of the considerations of the alternative evaluation process. Other potential remedies include tree replacement programs, bridging streams rather than installing culverts, and installing artificial wildlife corridors where such corridors can be shown to be effective for reducing mortality in existing wildlife populations. Commitments have been made as part of the Section 404 Permits regarding the clear spanning with bridges or the construction of drainage culverts for stream crossings. Specific commitments for tree replacement and the installation of wildlife corridors are not included with the project beyond the standard provisions or procedures of MoDOT and AHTD regarding these particular issues.

Floodplain Impacts

In defining the roadway alignments for the "Freeway-Build" Alternatives, all practical care was taken to minimize impacts to floodplains. Generally, the roadway grade of the "Freeway-Build" Alternatives will be set above the predicted 100-year flood levels and opportunities to

incorporate remedial measures into the facility would be possible. Bridge and roadway design will be consistent with local, state and federal water resources and floodplain management programs. Though construction will be required in some unavoidable floodplain areas, impacts to base flood elevations will be in compliance with National Flood Insurance Program (NFIP) regulations.

Impacts to Terrestrial Communities

Although alignment alternatives within each Study Corridor attempted to avoid all of the endangered, threatened, and rare species sites, the interim improvements of the Far West Alternative, (EX/NWB1), in McDonald County directly impact Site #71 (Henson Cave) of the Missouri Natural Features Inventory. Prior to the investigation completed in 1996, the issue of impacts to Henson Cave was addressed by MoDOT's EIS for US 71 (I-44 to State Line). Coordination with the U.S. Department of Interior (USDOI) was completed as part of this earlier EIS, including issues relating to caves, water quality, and threatened and endangered species impacts. USDOI offered no comments regarding Henson Cave in its review of the earlier EIS. The Record of Decision for the US-71 improvements (I-44 to State Line) was executed on September 14, 1992, and authorized MoDOT to proceed with design development. It was determined that there were no impacts to Henson Cave, thus measures to minimize harm were not required.

Henson Cave is listed as an endangered animal site providing habitat for the Gray Bat (*Myotis grisescens*). The Gray Bat is federally listed as endangered, and listed in Missouri as undetermined. However, a 1996 investigation by Project Team ecologists found that no bats were present in Henson Cave, mainly due to previous human intrusion. In a memorandum dated August 5, 1996 (see FEIS, Appendix J), the Project Team's Biological Specialist stated that "The cave should continue to be considered an abandoned gray bat cave and will undoubtedly remain unsuitable as maternity habitat for the gray bat, given the high level of human disturbance.

Historic and Archeological Preservation

In accordance with AHTD procedures and the MoDOT Protocol for Cultural Resources "Investigations Associated with Environmental Assessment or Environmental Impact Statements", those cultural resources affected by any of the US 71 improvement alternatives have been identified. These resources have been considered based on the various investigations – archaeological, architectural, historical bridges, and historical sites.

- ***Results of Determination of Effect*** – Potential impacts to several of these sites were eliminated due to the selection of the best alternative alignment within each Study Corridor, and then by the selection of the Far West Alternative as the Selected Alternative. Consequently, the Selected Alternative (i.e., Far West Alternative) will not directly impact any NRHP-eligible architectural structures. Furthermore, it was determined by the Arkansas SHPO after the issuance of the Draft EIS that none of the potentially NRHP-eligible structures in the vicinity of the Far West Alternative will be adversely affected by the project. No additional work is required regarding architectural resources in Missouri or Arkansas for the Far West Alternative. Documentation to this effect is included in the FEIS, Appendix I.

The Selected Alternative will not impact any known archeological sites in Arkansas. Similarly in Missouri, the ultimate improvements for the Far West Alternative will also

not impact any known archeological sites. However, the interim improvements impact seven known sites along the existing US 71 roadway. The mitigation of these impacts will be governed by the MOA executed as part of the US 71 EIS (I-44 to state line) completed by MoDOT.

The AR-SHPO concurred that the Selected Alternative will have no adverse effect on resource BE2177 (New Home Church) listed in the NRHP or the structures determined eligible for listing in the NRHP (review letter dated 1 December 1998, see FEIS, Appendix I). Though mitigation measures are not required for the New Home Church, pursuant to the findings of the AR-SHPO, AHTD is committed to the continued consideration of design refinements to the Far West Alternative during the design phase to minimize the effects of the US 71 improvements on the church site.

- **Results of the Phase II Investigations** - Phase I field investigations of archeological, bridge and historic sites along the Far West Alternative, in accordance with AR-SHPO and MoDOT protocol, have been completed and reports submitted for review by the AR-SHPO and MO-SHPO. Each review concurred that, with the exception of a Phase II assessment program for the prehistoric site recorded as 3BE634, no further archeological, bridge or historic site investigations are necessary or required (AR-SHPO review letter dated January 14, 1999 and MO-SHPO letter dated December 11, 1998, see FEIS, Appendix I). Following the selection of the Far West Alternative as the Selected Alternative, a Phase II assessment was conducted at 3BE634 and the AR-SHPO has determined that no further work is necessary at this site (FEIS, Appendix I). Investigations of archeological, bridge and historic sites along the interim improvements for the Far West Alternative will be governed by the MOA executed in association with the previous MoDOT EIS for US 71.

Documentation of architectural resources in accordance with AR-SHPO and MoDOT protocol have been completed and reports submitted for review by the AR-SHPO and MO-SHPO. No architectural resources will be affected in Missouri by the Far West Alternative and the MO-SHPO concurred (review letter dated 11 December 1998, see FEIS, Appendix I) that no further investigations are necessary or required.

Hazardous Waste Sites

Phase II assessments will be performed by MoDOT and AHTD during the design phase of the project and prior to construction in the US 71 Corridor.

Two sites of low potential risk are located in the vicinity of the Selected Alternative. Further site delineation is recommended during final design with avoidance as the desired location solution. The two sites of low potential risk are a residence, and Jones Golf Cars. Avoidance of these known sites will be provided to the extent possible. These impacts will be remedied prior to or as part of construction of the roadway improvements. If an unknown site is encountered during construction, measures will be taken as necessary to eliminate or minimize any adverse environmental consequences.

Construction Impacts

For the portion of the US 71 improvements located in Missouri, MoDOT construction standards will be utilized. MoDOT has developed a series of Standard Specifications for Highway Construction. These specifications include, but are not limited to, air, noise and water pollution

control measures to minimize impacts to the surrounding areas during construction. Pollution control measures, both temporary and permanent, would be enacted under the project construction specifications.

In Arkansas, to the extent available, AHTD pollution control standards and specifications will be utilized for the construction of the "Freeway-Build" Alternatives. As necessary, project-specific details would be developed to augment the available standards. These measures will be implemented to minimize adverse impacts to adjacent areas including noise, air, and water quality.

Public Lands

The Selected Alternative (i.e., Far West Alternative) for the US 71 improvements will not impact any public lands since there are no public lands located within the Far West Corridor.

F. Monitoring Program

The proposed project will be subject to review by MoDOT, AHTD and other State, Federal and local agencies. Some permits will need to be obtained from all levels of government. Numerous measures to minimize harm were considered during identification of the Selected Alternative. Detailed discussions of actions required to minimize harm are located in the FEIS, Summary, and this ROD, Section B, Summary of Future Actions. Also, within this ROD, Section E, Measures to Minimize Harm, there are brief discussions which focus on individual issues and mitigation measures associated with the selection of the Far West Alternative. Those measures will be implemented and monitored by FHWA, MoDOT, and AHTD.

G. Comments on the FEIS

The 30-day public comment period for the FEIS began January 7, 2000, with a published notification in the Federal Register. Additionally, copies of the FEIS were sent to various parties of interest, as listed in Chapter VI of the FEIS.

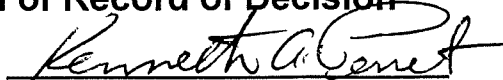
Comments received on the FEIS during the comment period ending February 4, 2000 were reviewed and reflected in this Record of Decision. The comments received had no impact on the identification of the Selected Alternative (i.e., Far West Alternative).

H. Summary

The identification of the Selected Alternative (i.e., Far West Alternative), as documented in the FEIS, is made following thorough consideration of all social, economic and environmental factors and after an extensive program of agency coordination and public involvement. The US 71 Improvements and the environmental consequences associated with its construction are accurately presented in the FEIS.

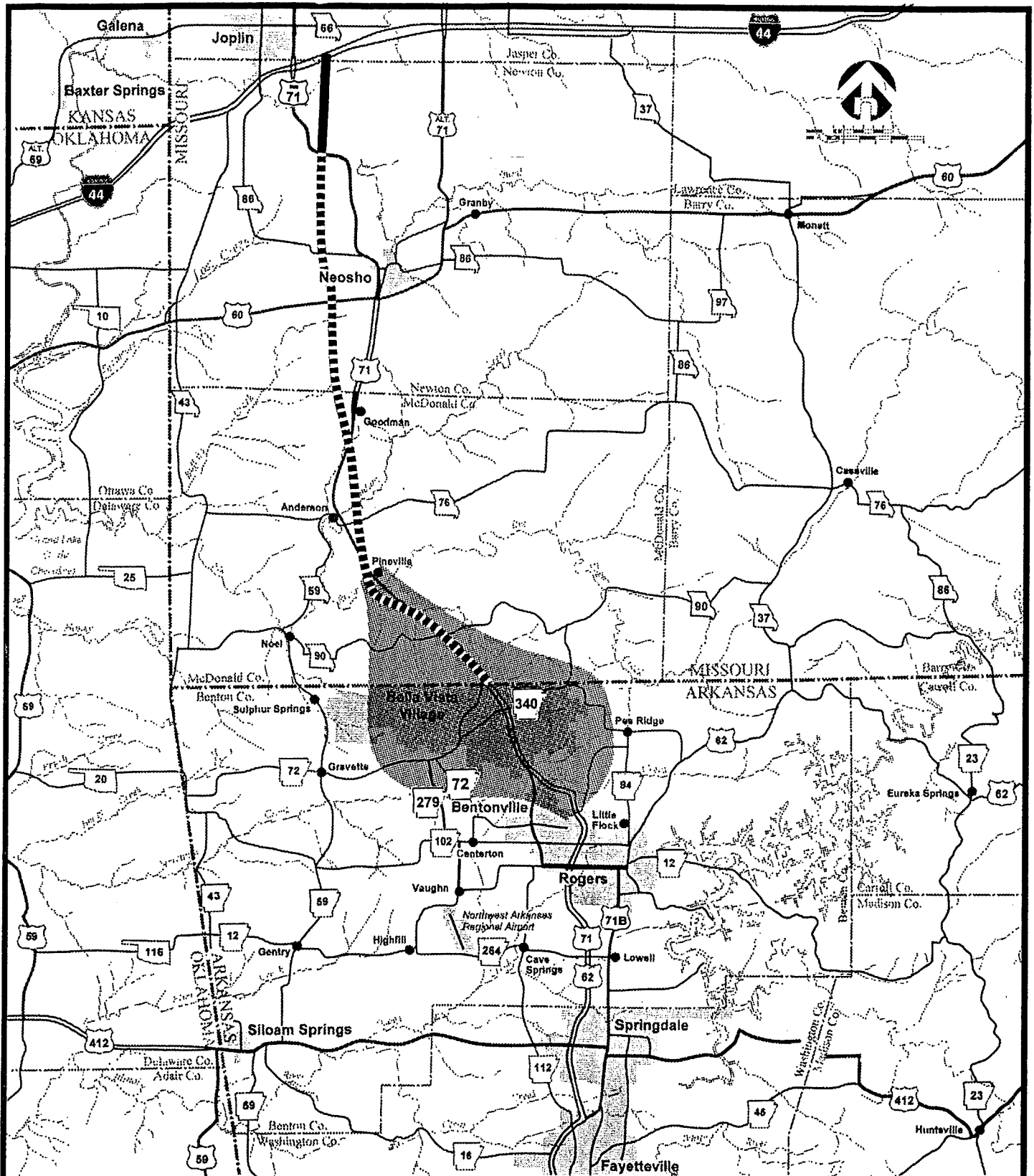
I. Approval of Record of Decision

Approving Official:


Federal Highway Administration

Date:

4/19/2000



LEGEND



Study Area

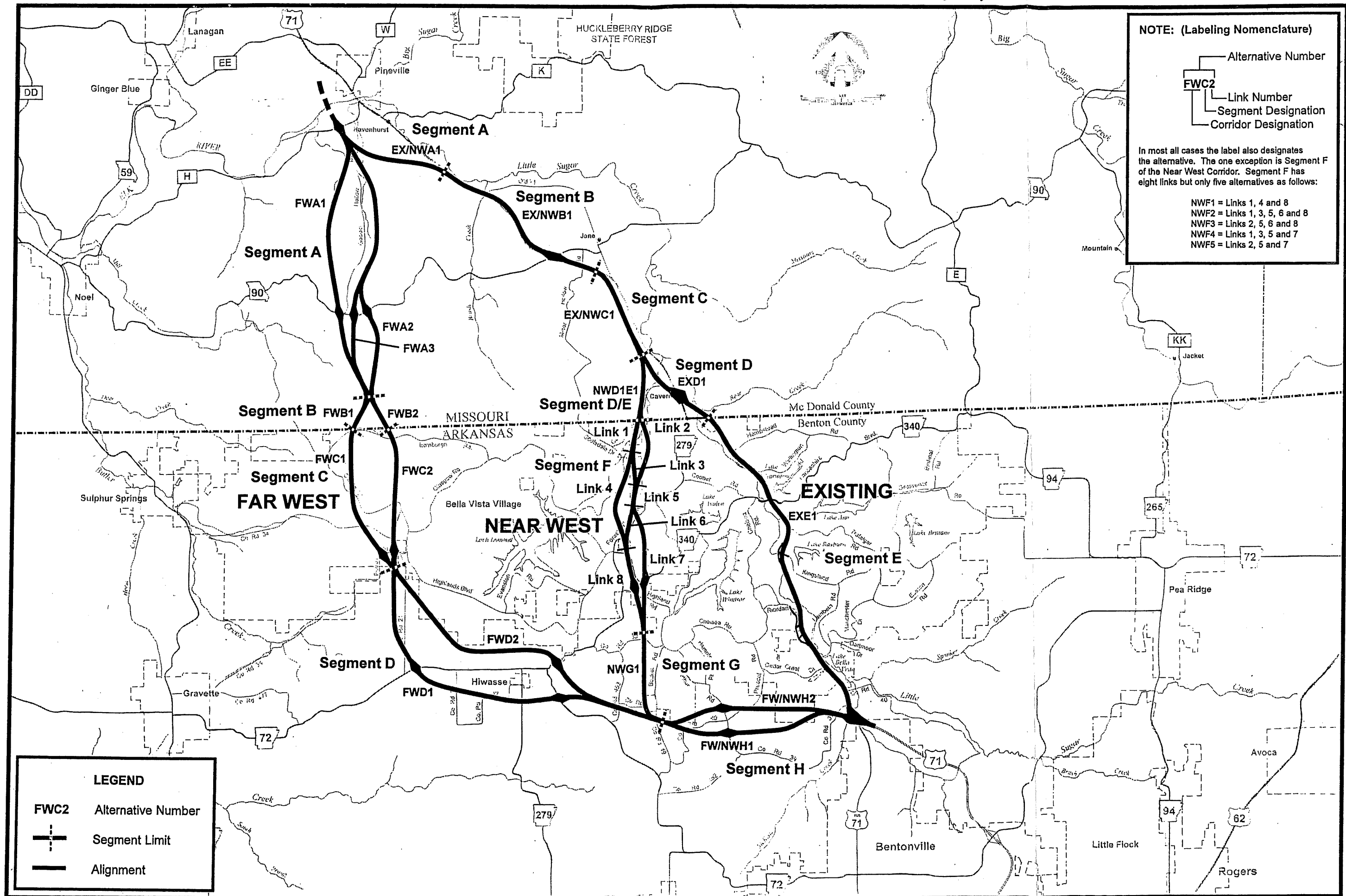


MoDOT Completed Freeway Improvements



MoDOT Proposed Freeway Improvements

Exhibit 1 Study Area Map



NOTE: (Labeling Nomenclature)

Alternative Number
 FWC2
 Link Number
 Segment Designation
 Corridor Designation

In most all cases the label also designates the alternative. The one exception is Segment F of the Near West Corridor. Segment F has eight links but only five alternatives as follows:

NWF1 = Links 1, 4 and 8
 NWF2 = Links 1, 3, 5, 6 and 8
 NWF3 = Links 2, 5, 6 and 8
 NWF4 = Links 1, 3, 5 and 7
 NWF5 = Links 2, 5 and 7

LEGEND

FWC2 Alternative Number
 + Segment Limit
 — Alignment

Exhibit 2 Reasonable Alternatives

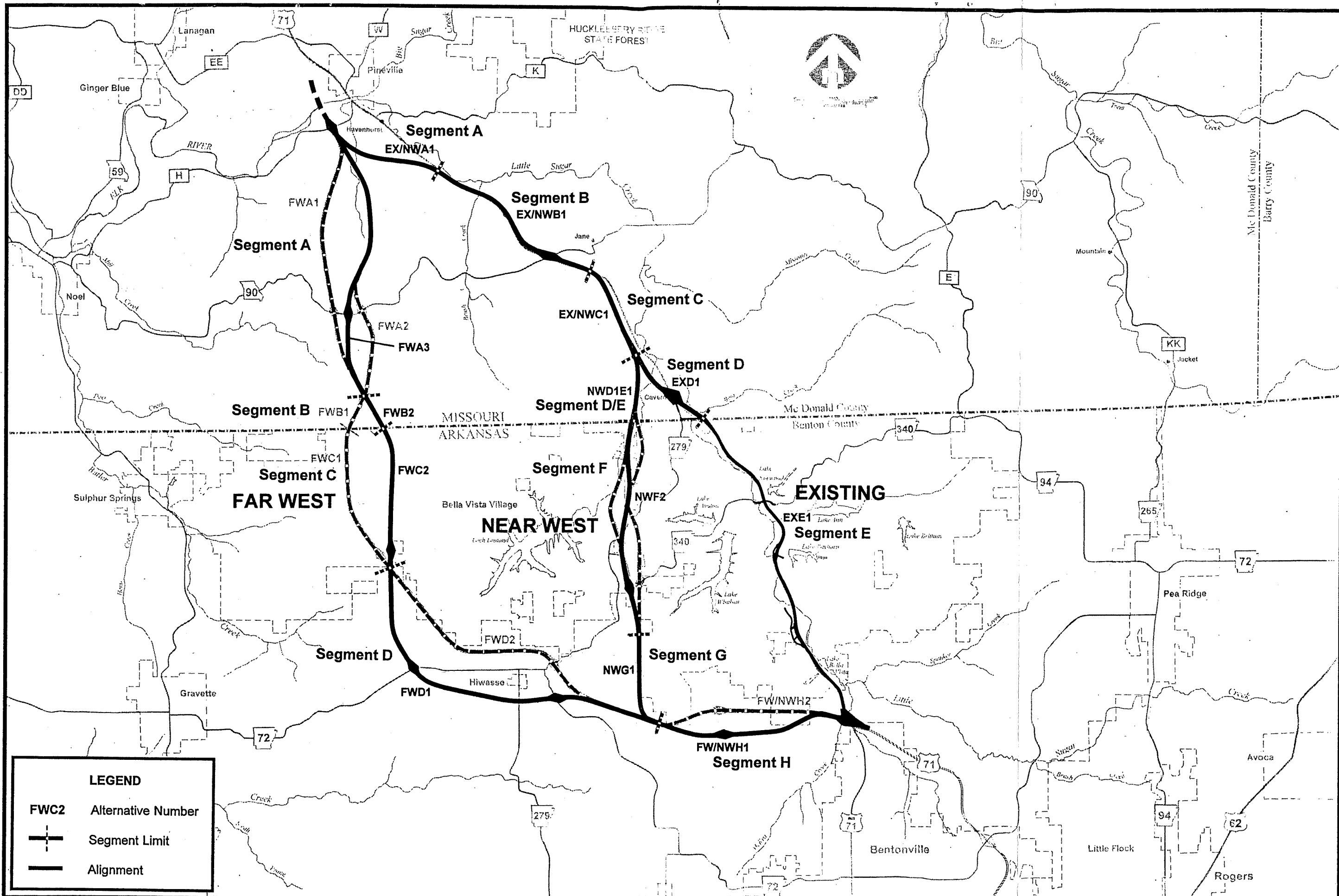


Exhibit 3 Best Alternatives
Within Each Study Corridor

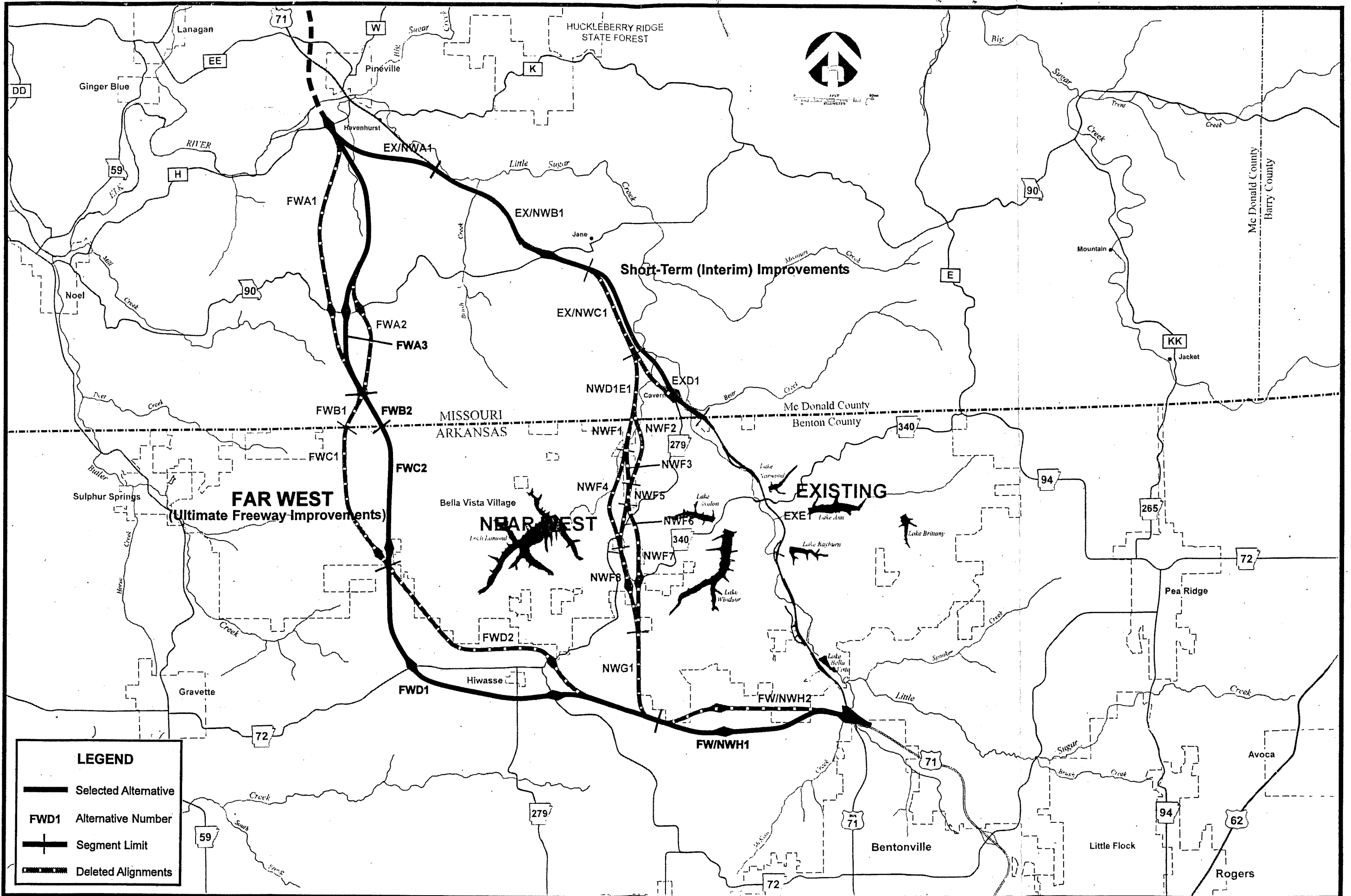


Exhibit 4 Selected Alternative