



PLANNING AND ENVIRONMENTAL LINKAGES TO NEPA TRANSITION REPORT



CA0602

Interstate 530 – Highway 67

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1.0 INTRODUCTION

In order to be seamlessly incorporated into the National Environmental Policy Act (NEPA) process, all corridor and subarea studies utilizing the Planning and Environmental Linkages (PEL) study approach should follow Federal Highway Administration (FHWA) guidance and planning regulations, and include extensive public involvement and agency coordination. The regulations for a PEL study are formalized in the *Statewide Transportation Planning; Metropolitan Transportation Planning; Final Rule*¹, which details how results or decisions of transportation planning studies may be used as part of the overall project development process consistent with NEPA. Appendix A to Part 450—*Linking the Transportation Planning and NEPA Processes* describes how information, analysis and products from transportation planning can be incorporated into and relied upon in NEPA documents under existing laws². Some of the key criteria that a Federal agency must consider in deciding whether to adopt planning-level analyses or decisions in the NEPA process include:³

- Involvement of interested state, local, tribal and Federal agencies;
- Public review;
- Reasonable opportunity to comment during the development of the corridor or subarea planning study;
- Documentation of relevant decisions in a form that is identifiable and available for review during the NEPA scoping process and can be appended to or referenced in the NEPA document; and
- The review by FHWA and the Federal Transit Administration (FTA), as appropriate.

In an effort to link planning studies to environmental processes that are compliant with NEPA, FHWA developed *Guidance on Using Corridor and Subarea Planning to Inform NEPA*, April 5, 2011. This guidance encourages the integration of initial highway and transit planning efforts into a NEPA process to minimize duplication of effort, number of review cycles and project costs. Likewise, and consistent with 23 CFR 450, the FHWA PEL Questionnaire acts a summary of the planning process, designed to ensure planning information and decisions are properly documented for utilization during the NEPA phase of project development.

2.0 I-30 PEL OVERVIEW

The Arkansas State Highway and Transportation Department (AHTD) conducted the I-30 Planning and Environmental Linkages (PEL) Study to develop conceptual transportation alternatives that would address transportation system mobility, safety and roadway and bridge deficiencies along I-30/I-40 within the PEL study area⁴ that can advance to the schematic and environmental phase (NEPA) of project development. Several technical reports provide an overview of the I-30 PEL, including guidance on the PEL process (*I-30 PEL Process Framework and Methodology – Appendix I*); details about the extensive public and agency outreach (*Public and Agency Coordination Documentation - Appendix C*); and background and supporting documentation of the

¹ 23 CFR 450

² FHWA. 2008. *Planning and Environmental Linkages Implementation Resource Guide*.

³ AASHTO. 2008. *Using the Transportation Planning Process to Support the NEPA Process*.

⁴ Study area defined and shown *I-30 PEL Purpose and Need Report (Appendix A)*.

problems and potential solutions for the I-30/I-40 facility (*I-30 PEL Purpose and Need Report - Appendix A*).

The I-30 PEL Study provided a tool for engaging the public and agencies in developing improvements within the study area and created a link between past, current and future transportation decisions, thus potentially minimizing any duplication of effort and time lost between studies. The I-30 PEL Study is expected to shorten the time needed to implement a project by allowing planning-level decisions to be carried into future, more detailed environmental studies.

3.0 ISSUES AND ANALYSES NOT INCLUDED IN THE I-30 PEL STUDY

3.1 Air Quality

The proposed I-30 PEL study area is located in Pulaski County, an area in attainment for all national ambient air quality standards (NAAQS); therefore, the transportation conformity rules do not apply and no additional air quality analysis was required at the time of the PEL Study. Central Arkansas is at risk for classification of non-attainment for the NAAQS for both ozone and particulate matter. Should there be a change in status, it is recommended that air quality be assessed during NEPA.

3.2 Indirect and Cumulative Impacts

Schematic design and project details of the PEL Recommendation were not developed enough at the time of the PEL Study to adequately assess impacts caused by the action later in time or farther removed in distance (indirect impacts)⁵ or impacts resulting from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions (cumulative impacts)⁶. The PEL Recommendation would be further studied and refined in the next phase of project development, NEPA, such that indirect and cumulative impacts could be evaluated.

4.0 ISSUES TO BE STUDIED AND ANALYSES TO BE PERFORMED IN GREATER DETAIL DURING NEPA

The I-30 PEL Recommendation designates a conceptual alignment for widening and reconstruction; however this recommendation would likely require design refinements and other potential modifications as a more detailed schematic design and analysis is completed during the NEPA phase of project development. Accordingly, the I-30 PEL Study did identify several issues/analyses that require a more detailed evaluation and mitigation as applicable under NEPA, as presented below:

4.1 Design Refinements

The following additional design modifications would be evaluated during the NEPA phase of project development:

- **Intersection modifications to the PEL Recommendation:**
 - **2nd Street and Cumberland Street Intersection:** Although the proposed

⁵ 40 CFR 1508.8

⁶ 40 CFR 1508.7

design for the 2nd Street and Cumberland Street intersection operates at an acceptable Level of Service (LOS) C during the AM/PM peak periods, this intersection remains a safety concern for the reasons listed below and accordingly, would be re-evaluated in NEPA for an improved design.

- Heavy pedestrian activity; area has one of the highest vehicle/pedestrian accident rates in the metropolitan area.
 - River Rail Street Car shares a lane with westbound 2nd Street through the intersection, affecting traffic flow.
 - The short merging distance from I-30 southbound through the Cantrell interchange onto 2nd Street results in the sudden reduction of motorist speeds into an area with signals, pedestrians and street car in a shared lane.
- **Cantrell Road and Cumberland Street Intersection:** Due to a narrow turning radius, buses are unable to turn left onto southbound Cumberland Street from westbound Cantrell Road. Design refinements would be evaluated during NEPA with the goal of enlarging this turning radius, thereby providing buses inbound access to Rock Region Metro's River City Travel Center from I-30.
- **C/D Lane Modifications to the PEL Recommendation:**
 - The 10-lane C/D Reasonable Alternative eliminated 70 more crashes per year than the 10 Main Lane Alternative, but created weaving issues between I-40 and the C/D entrance ramp (southbound direction). The shortened C/D lanes of the PEL Recommendation (10-lane Downtown C/D) eliminated this weaving issue, but resulted in 38 fewer eliminated crashes per year compared to the 10-lane C/D Reasonable Alternative. The optimal location to terminate the northern end of the C/D lanes that both reduces the greatest number of crashes possible and eliminates the weaving issue would be evaluated during NEPA.
 - Shifting the lane organization for the PEL Recommendation (10-total lanes) from 3 Main Lanes and 2 C/D lanes in each direction to 2 Main Lanes and 3 C/D lanes in each direction and along the same general alignment, for a total of 10 lanes, would be evaluated during NEPA.
- **Bridges:**
 - **I-30 Bridge Construction:** During the PEL analysis, the new I-30 Bridge over the Arkansas River was expected to be constructed as close as possible to the centerline of the existing bridge, requiring phased construction. Due to the high cost and constructability issues associated with phased construction, the bridge would be re-evaluated for construction to the east or west of the existing bridge centerline.
 - **E-W Connectivity:** Bridge designs for the NEPA preferred alternative would be widened/lengthened, when practicable, thereby opening up east-west connectivity and giving more open space for bicycle/pedestrian access.

- **Bicycle/Pedestrian Access:** Bicycle/pedestrian access would continue to be coordinated with stakeholders and planners as part of the second Visioning Workshop scheduled to occur during the NEPA process. Ramp configurations, intersection and interchange designs for the NEPA preferred alternative would include considerations for bicycles/pedestrians, when practicable.

4.2 Future Adjacent Studies

The following capacity improvements outside the PEL study limits were determined necessary to accurately evaluate the PEL study area:

- I-630 from Louisiana Street west beyond the study limits; and
- I-30 southwest of the south terminal to 65th Street beyond the study limits.

These additional improvements were deemed necessary to avoid backups from congestion outside the PEL study limits impacting the traffic and safety inside the PEL study limits. AHTD has acknowledged both outside areas warrant additional study and plans exist to study and improve, as determined necessary, these outside areas. During NEPA, coordination with AHTD would occur to document the status of these plans and their relationship with the NEPA preferred alternative.

4.3 Additional Modeling

4.3.1 Mobility

Multiple Vissim model runs would be performed during the NEPA phase. Vissim model runs, during the 2041 design year AM/PM peak periods, are anticipated as follows:

- A modified PEL Recommendation with potential design refinements, such as alternative interchange configurations, identified in the NEPA phase.
- A modified PEL Recommendation with a lane organization of 2 Main Lanes and 3 C/D lanes in each direction for a total of 10-lanes, as discussed in **Section 4.1**.
- Interstate Justification Request (IJR) model runs:
 - Increased traffic demand (10%) for the NEPA preferred alternative;
 - NEPA preferred alternative without the outside improvements discussed in **Section 4.2**; and
 - A high level analysis of the approximate year the outside improvements (**Section 4.2**) would likely be needed due to increased congestion.

4.3.2 Safety

A Highway Safety Manual (HSM) detailed analysis of the No Action and NEPA preferred alternative would be performed. The analysis would provide a more detailed understanding of the safety measures of effectiveness for the IJR.

4.4 Environmental Resources/Issues to be Studied in More Detail

4.4.1 Field Work and Impact Analyses

At the PEL-level of analysis, environmental impacts were evaluated based on information generally collected through easily attainable database searches, imagery analyses, and desktop geographic information system (GIS) evaluations. The resulting

resource inventory of the study area is presented in the *I-30 PEL Constraints Report (Appendix B)*. Comprehensive field work and detailed impact analyses using an increasingly developed, NEPA-level schematic for the preferred alternative would be completed, including but not limited to, the following:

- Community Impacts (displacements, EJ, public facilities, other transportation modes such as the River Rail Streetcar, etc.);
- Waters of the U.S., including Wetlands (Preliminary Jurisdictional Determination);
- Threatened and Endangered Species;
- Vegetation/Habitat;
- Hazardous Materials;
- Existing Noise Measurements and Noise Analysis; and
- Cultural Resources⁷.

4.4.2 Section 4(f) Applicability

The type and magnitude of “use” (adverse impact to or occupancy of) a Section 4(f) resource would be determined during the NEPA phase. The NEPA-level study would build upon the PEL evaluation of three parks potentially impacted (North Shore Riverwalk Park, Julius Breckling Riverfront Park, and William J. Clinton Presidential Center and Park) and one historic site potentially impacted (NRHP-eligible historic Locust Street Bridge). Should additional parks, historic structures or archeological resources be impacted by the NEPA preferred alternative, Section 4(f) applicability determinations for those resources would be required. Additionally, airspace agreements previously executed between the cities and FHWA at the I-30 Arkansas River Bridge will be closely examined during NEPA for potential effects to parks.

4.4.3 Permitting

The need for the following permits would be evaluated during NEPA for the preferred alternative:

- **U.S. Army Corps of Engineers (USACE):** Section 10 of the Rivers and Harbors Act (33 USC 403), Section 404 of the Clean Water Act (CWA) (33 USC 1344) and Section 14 of the Rivers and Harbors Act (33 USC 408);
- **U.S. Coast Guard (USCG):** USCG bridge permit; and
- **Arkansas Department of Environmental Quality (ADEQ)⁸:** Section 401 of the CWA (33 USC 1344), Section 402 of the CWA (33 USC 1342) - National Pollutant Discharge Elimination System (NPDES) permit and a Short Term Activity Activation (STAA) permit.

4.4.4 Mitigation and Commitments

During NEPA, mitigation strategies to avoid or minimize any adverse impacts would be determined for the preferred alternative and carried forward to inform the design-build process. A draft Environmental Permits Issues and Commitment (EPIC) sheet, as described in the Connecting Arkansas Program (CAP) Environmental Manual, would be

⁷ Environmental analysis of cultural resources to occur in accordance with the *I-30 PEL Cultural Resources Methodology Memorandum (Appendix G)*.

⁸ ADEQ Water Division performs stat certifications under Section 401 of the CWA on behalf of the U.S. Environmental Protection Agency (EPA).

completed for incorporation into plans, or in this instance into the Design-Build Request for Proposal, to ensure that implementation occurs through proper execution of the plans, specifications and estimates (PS&E) contract. Provisions will be included in the PS&E that require the contractor to make every reasonable effort to minimize construction impacts, including noise through abatement measures such as work-hour controls and proper maintenance of muffler systems.

4.5 Identification of Cooperating and Participating Agencies

Coordination would occur with AHTD and FHWA on the identification of cooperating and participating agencies. Cooperating agency means any Federal, state, tribal or local agency, other than a lead agency, that has jurisdiction by law or special expertise with respect to any environmental impact involved in a proposed project. Cooperating agencies may adopt the environmental document of a lead agency when, after an independent review of the document, the cooperating agency concludes that its comments and suggestions have been satisfied⁹.

At this stage of project development, it is anticipated that the USACE and USCG would be invited to be cooperating agencies due to their legal jurisdiction and special expertise; the USACE because the proposed project would require Section 10, Section 404 and Section 408 permits and the USCG because the project would require a bridge permit. Invitation letters would be sent by the lead agency to all potential cooperating agencies outlining involvement requirements and a request for acceptance. It is anticipated that both the USACE and USCG would adopt the FHWA/AHTD NEPA document as their environmental document, issuing a joint Finding of No Significant Impact (FONSI) should that be the NEPA determination. All coordination, environmental documentation, review and decisionmaking with the USCG would occur in accordance with the Memorandum of Agreement (MOA) and Memorandum of Understanding (MOU) between the USCG and FHWA¹⁰ and the Application for Coast Guard Bridge Permits guidance¹¹. Additionally, the FHWA/AHTD NEPA document must comply with the USCG environmental document checklist before issuance of a joint NEPA decision.

Participating agencies are Federal or non-Federal agencies that may have an interest in the project, but involvement does not imply support for a proposed project, nor do they have jurisdiction over or special expertise with respect to evaluation of the project¹². A Technical Work Group (TWG) was established to facilitate Federal, state, and local agency coordination during the PEL Study. More than 35 agencies were invited as TWG members, and their participation set the foundation for future agency coordination in NEPA. It is likely that participating agencies would include some TWG members, but all TWG members may not be participating agencies.

⁹ 40 CFR 1508.5

¹⁰ MOA and MOU between USCG and FHWA to *Coordinate and Improve Bridge Planning and Permitting (December 2014)*

¹¹ Application for Coast Guard Bridge Permits (September 2009)

¹² Safe, Accountable, Flexible, Efficient Transportation Equity Act (SAFETEA-LU) Section 6002

4.6 Funding/Project Phasing

It is unlikely that the entire set of solutions recommended in the PEL will be funded as one project. A key activity within the NEPA process is to further evaluate the PEL Recommendation, identify segments of independent utility and develop an implementation schedule for those improvements based on priorities tied to purpose and need and project goals. As the design schematics of the NEPA preferred alternative are advanced, and cost estimates become more refined, the NEPA project team will identify the set of “most likely improvements”, which will form the basis for the first construction phase. To maximize the amount of construction delivered, the project will be delivered using the Fixed Price – Best Design methodology as outlined in the *AHTD Design-Build Guidelines and Procedures*. AHTD will establish the baseline project scope and the not-to-exceed baseline project budget, consistent with the most likely set of improvements identified in NEPA. Operational modeling of the preferred alternative during the NEPA phase would provide relevant information needed in the determination of the priority of improvements for inclusion into the Fixed Price – Best Design project. Logical termini and sections of independent utility would be coordinated and approved by the lead agencies; and based on this modeling and coordination, a project phasing plan of the NEPA preferred alternative would be prepared and included in the NEPA documentation.

4.7 Project Management Plan (PMP) and Financial Plan (FP)

A PMP, a FP, and Annual Updates (AU) to the FP are required for all projects estimated at \$500M or more that will receive Federal financial assistance¹³. The PMP establishes the framework for the management of a major project and the methodology for organizing, directing and coordinating the resources required for the project. The goal of the PMP is to document mechanisms for control of scope, budget, schedule and quality. The FP ensures that the necessary financial resources are identified, available and managed throughout the life of the project. An annual FP is a comprehensive document that reflects the project’s scope, schedule, cost estimate and funding structure to provide reasonable assurance that there will be sufficient funding available to implement and complete the entire project, or a fundable phase of the project, as planned. A PMP and FP would be prepared for the proposed project during the NEPA phase of project development.

5.0 ISSUES AND ANALYSES TO BE CONTINUED THROUGH NEPA

5.1 Visioning Workshop #2

During the NEPA phase, a second Visioning Workshop that examines potential context sensitive solutions (CSS) and design concepts in greater detail would be held with stakeholders. Based on stakeholder feedback and available funding, CSS/aesthetic guidelines would be developed following this Visioning Workshop and included in the design-build-to-a-budget request for proposals, pending AHTD approval. The Visioning Workshop would include, among many topics, potential bicycle/pedestrian trails identified in the third TWG meeting by the Arkansas Department of Parks and

¹³ 23 USC 106(h)

Tourism¹⁴. The Study Team would work with city planners and stakeholders to ensure that city goals for future development are given due consideration and incorporated, when practicable.

5.2 Public, Agency and Stakeholder Coordination

TWG, Stakeholder Advisory Group (SAG), Project Partner and community meetings similar to those held throughout the PEL process would continue throughout NEPA. Likewise, the NEPA process would include one public meeting presenting and gathering input on the proposed preferred alternative and one public hearing presenting the findings of the environmental analysis. The public meeting and hearing would be held in compliance with the AHTD Public Involvement Handbook and the CAP Environmental Manual.

5.3 Every Day Counts (EDC)

As an FHWA EDC-1 initiative, the PEL process was utilized for the proposed project to shorten project delivery. Results of the PEL Study would be used to inform the NEPA phase, resulting in less duplication of effort and in more informed project-level decisions. Likewise, the FHWA EDC-2 initiative of Implementing Quality Environmental Documents (IQED) was applied in the PEL by developing a specified purpose and need that supports the alternatives screening process, and preparing technical reports and public presentations that utilized effective visualization and communication of data to the public. Products and presentations developed during the NEPA phase would continue to implement EDC best practices.

6.0 INCORPORATING PEL ANALYSES INTO THE NEPA PROCESS

This section documents the processes and issues identified during the PEL Study that are integral to defining the parameters and facilitating the transition from PEL to NEPA.

6.1 Document Classification

Determining the type of environmental documentation required is central to the progression of the PEL findings into NEPA. The following sections present information necessary for that determination.

Project Planning: The *I-30 PEL Framework and Methodology (Appendix H)* was developed to foster proactive working relationships among the FHWA, AHTD, Metroplan and local governments. Improvements to the I-30/I-40 facility received voter approval as part of the CAP¹⁵. Additionally, the I-30 PEL Study builds upon previous studies identifying the need for improvements in the study area. The planning history associated with the facility and study area, as well as a discussion of the congruent relationship between the proposed project and local government/agency plans, is presented in the *I-30 PEL Purpose and Need Report (Appendix A)*.

¹⁴ Details related to the suggested bicycle/pedestrian trails are presented in the *TWG Comment Documentation* for TWG #3 (**Appendix C-3**).

¹⁵ The CAP is a large highway construction program by AHTD established and funded through a 2012 voter-approved constitutional amendment for a 10-year, half-cent sales tax to improve the state's intermodal transportation system.

Potential Environmental Issues: The inventory and preliminary evaluation of the potentially affected social, economic and natural environment resulting from the PEL Recommendation provides the baseline information to be used in NEPA. As documented in the *I-30 PEL Environmental Impacts Report (Appendix E)*, potential impacts to all resources were generally minimal. These environmental resources would be re-examined during NEPA following additional engineering design refinements, field work and continued public and agency outreach.

Public and Agency Involvement: The I-30 PEL Study included a robust outreach plan, comprised of agency, Project Partner, stakeholder, community, and public meetings, as well as various outreach strategies promoting involvement from a broad spectrum of the public. Details about the extensive and transparent outreach efforts are included in the *Public and Agency Coordination Documentation (Appendix C)*.

Conclusion: An Environmental Assessment (EA) is prepared for actions in which the significance of the environmental impact cannot be clearly established and would be appropriate where the majority of available data shows there is no significant impact or where the significance of impact of only a few aspects of the proposed action cannot be clearly established or is unknown. Based on the extensive information gathered, analyzed, and documented during the PEL Study and in the resulting PEL Report, AHTD believes that the preparation of an EA is appropriate for the proposed I-30 project. AHTD's recommendation to prepare an EA is consistent with 23 CFR 771.119 which allows preparation of an EA "...for each action that is not a categorical exclusion and does not clearly require the preparation of an environmental impact statement (EIS) or where it is believed that an EA would assist in determining the need for an EIS" and "If, at any point in the EA process, it is determined that the action is likely to have a significant impact on the environment, the preparation of an EIS would be required." The format of the EA would be determined by FHWA.

6.2 Moving Forward into NEPA

Results and conclusions of the technical reports produced for the I-30 PEL Study would be directly incorporated into the EA, as appropriate. The I-30 PEL Study would be referenced in the EA, attached as an appendix, and would be part of the project record/history of the decision-making process. NEPA would build upon the I-30 PEL Study findings including purpose and need, alternatives screening and identification, public and agency coordination, environmental constraints and affected environment.¹⁶

7.0 SUMMARY OF I-30 PEL RECOMMENDATION

The 10-lane Downtown C/D Alternative was identified as the PEL Recommendation to be carried forward to NEPA.

¹⁶ As presented in the following I-30 PEL technical reports: *Purpose and Need Report (Appendix A)*; *Alternatives Screening Methodology (Appendix D-1)*; *Universe of Alternatives (Appendix D-2)*; *Levels 1, 2, and 3 Screening Methodology and Results Memorandums (Appendices D-3 through D-5)*; *Public and Agency Documentation (Appendix C)*; *Constraints Report (Appendix B)* and *Environmental Impacts Report (Appendix E)*.

Features of the PEL Recommendation, shown in **Figure 1**, include:

- 3 main lanes and 2 C/D lanes in each direction; outside the C/D lanes, facility is 5 main lanes in each direction;
- C/D lanes extending from about Broadway St. to the Cantrell Road interchange;
- Other alternatives incorporated into the PEL Recommendation (**Figure 1**); and
- Meets the purpose and need and study goals as outlined in the *I-30 PEL Purpose and Need Report (Appendix A)*.

8.0 FHWA I-30 PEL RECOGNITION

It is anticipated that the FHWA would provide a written letter, acknowledging the completion of the I-30 PEL Study in accordance with the FHWA PEL guidance and planning regulations, concurrence with the identified I-30 PEL Recommendation, and concurrence that the planning products completed as part of the I-30 PEL Study shall be used to inform NEPA.

Figure 1. PEL Recommendation

