APPENDIX B – FHWA PEL QUESTIONNAIRE

This questionnaire is intended to act as a summary of the planning process and ease the transition from planning to a National Environmental Policy Act (NEPA) analysis. Often, there is no overlap in personnel between the planning and NEPA phases of a project, so consequently much (or all) of the history of decisions made in the planning phase is lost. Different planning processes take projects through analysis at different levels of detail. NEPA project teams may not be aware of relevant planning information and may re-do work that has already been done. This questionnaire is consistent with the 23 CFR 450 (Planning regulations) and other FHWA policy on the Planning and Environment Linkages (PEL) process.

1. **Background:**

   a. **Who is the sponsor of the PEL study? (state DOT, local agency, other)**

      Indiana Department of Transportation (IDOT), in cooperation with the Illinois Department of Transportation (IDOT) and the Federal Highway Administration (FHWA).

   b. **What is the name of the PEL study document and other identifying project information (e.g., sub-account or STIP numbers, long-range plan, or transportation improvement program years)?**

      The *I-80/94 Borman Expressway Planning and Environment Linkages (PEL) Study Report* documents the PEL study process. During the study, the following additional documents have been prepared and are attached to the PEL Study Report:

      - Initial High-Level Assessment of Potential TSMO Strategies
      - Red Flag Investigation
      - EDR Area/Corridor Report
      - Preliminary Purpose and Need/Logical Termini
      - Alternatives Assessment Report

      The I-80/94 Borman Expressway PEL Study is in the NIRPC 2022-2026 Transportation Improvement Program (TIP) (ID # 1901643). However, the study is currently not included in the Chicago Metropolitan Agency for Planning's (CMAP) 2019-2024 TIP and will need to be added to the TIP prior to the completion of the NEPA phase.

   c. **Who was included on the study team (Name and title of agency representatives, consultants, etc.)?**

      <u>INDOT LaPorte District</u>

      Amber Thomas, Project Manager
      Sarah Ford, Technical Services Director
      Jessica Miller, Capital Program Management Director
      Adam Parkhouse, Communications Director

      <u>INDOT Central Office</u>

      Dan McCoy, Director of Traffic Engineering
      Jim Sturdevant, Director of Traffic Management Division
      Ed Cox, ITS Engineering Director
      Jim Poturalski, Director of Engineering and Research
      Laura Hilden, Director of Environmental Services
      Roy Nunnally, Director of Long Range Planning, Modeling & Traffic Counting
      Jay Mitchell, Transportation Planning Supervisor

      <u>IDOT Central Office</u>

      Kyle Armstrong, Engineer of Traffic Operations
      Terry Heffron, ITS Unit Manager
      John Sherrill, Bureau of Design and Environment

IDOT District 1

Lisa Heaven-Baum, Traffic Programs Engineer
Carlos Munoz, Traffic Control Supervisor

FHWA Indiana

Karstin Carmany-George, Planning & Environmental Specialist
Karen Stippich, Traffic Operations Engineer
Abell Gelaye, Transportation Engineer

FHWA Illinois

Chris Byars, Transportation Engineer
Dean Mentjes, Transportation Operations Engineer
Matt Fuller, Environmental Engineer

Parsons

Junell O'Donnell, Project Manager
Dan Prevost, PEL/Public Involvement Lead
Craig Moore, Transportation Planning Lead
Ken Curry, Traffic Analysis Modeling Lead
Joseph Brahm, TSMO Lead
John LaBlonde, Civil Lead

The study team organized a Community Advisory Committee and a Resource Agency Committee to provide input throughout the project. Details on those committees and their engagement is provided in Section 5 and Appendices J and K.

d. Provide a description of the existing transportation facility within the corridor, including project limits, modes, functional classification, number of lanes, shoulder width, access control and type of surrounding environment (urban vs. rural, residential vs. commercial, etc.)

The existing transportation facility for the PEL study includes I-80/94 from I-65 in Indiana on the east (i.e., eastern logical termini) to IL 394 in Illinois on the west (i.e., western logical termini). Interstate 80/94 is predominantly an eight-lane facility with four continuous general-purpose lanes in each direction. For the purposes of this PEL study, the study area extends past the logical termini to the next interchange in each direction. In addition, at the intermediate interchanges, it generally extends to the next intersection or interchange to the north and south along the intersecting roadway. This facility includes 10 interchanges comprised of two system interchanges and eight service interchanges. The western portion of the study corridor supports dense residential and commercial development while the eastern portion supports a mix of less dense residential development, undeveloped land, and large tracts of wetlands. For more information, see Section 1.1 of this PEL Study Report.

e. Provide a brief chronology of the planning activities (PEL study) including the year(s) the studies were completed.

- Initial High-Level Assessment of Potential TSMO Strategies (2021)
- Red Flag Investigation (2021)
- EDR Area/Corridor Report (2021)
- Preliminary Purpose and Need/Logical Termini (2021)
- Alternatives Assessment Report (2021)
- PEL Study Report (2022)

f. Are there recent, current, or near future planning studies or projects in the vicinity? What is the relationship of this project to those studies/projects?

The NIRPC and CMAP Transportation Improvement Programs (TIP) identify projects proposed in the region over the next six years. The TIP documents include all state and federally funded projects of all

types and sizes. Based on a review of these documents and coordination with INDOT and IDOT, two projects have been identified that have the potential to affect travel patterns in the I-80/94 corridor:

- The Northern Indiana Commuter Transportation District (NICTD) West Lake Corridor is an 8-mile, $850 million extension of the existing South Shore Line commuter rail, which will improve access to central and southern Lake County. Early construction activities have begun and the line is expected to be operational in 2025.
- The NICTD Double Track NWI project will provide a second track for 16.9 miles of the existing South Shore Line and make other improvements on the line. Similar to above, early construction activities have begun and the line is expected to be operational in 2025.

The study team has met with NICTD to share information about the 80/94 FlexRoad study and the two rail projects and identify opportunities to integrate transit information into the TSMO strategies being evaluated. This coordination will continue as the 80/94 FlexRoad study progresses into the NEPA phase.

2. **Methodology used:**

   a. **What was the scope of the PEL study and the reason for completing it?**

   The scope of the PEL study was to identify existing conditions within the study area, establish the project's purpose and need, and evaluate and screen a range of reasonable alternatives, resulting in the recommendation of alternatives to be carried forward for further evaluation in the NEPA phase. Due to corridor and cost constraints, the PEL study primarily focused on TSMO alternatives. The goal of the PEL study was to conduct the appropriate transportation planning studies (i.e., planning products) so that they would comply with NEPA requirements. As such, when the NEPA process is initiated, these planning products can be incorporated via reference without the need for rework; thereby, providing a seamless transition between PEL and NEPA.

   b. **Did you use NEPA-like language? Why or why not?**

   Yes. NEPA-like language was used to ensure that all the planning products would comply with NEPA so that they could be incorporated into the NEPA process via reference without the need for rework.

   c. **What were the actual terms used and how did you define them? (Provide examples or list)**

   The PEL study used the same terms that are used in NEPA such as logical termini, independent utility, purpose and need, range of reasonable alternatives, and No-Build Alternative.

   d. **How do you see these terms being used in NEPA documents?**

   The PEL study used the same terms that would be used in any NEPA document. As a result, the planning products from the PEL study, which will include NEPA terms, can be incorporated via reference into the NEPA documents.

   e. **What were the key steps and coordination points in the PEL decision-making process? Who were the decision-makers and who else participated in those key steps? For example, for the corridor vision, the decision was made by state DOT and the local agency, with buy-in from FHWA, the USACE, and USFWS and other resource/regulatory agencies.**

   The key steps in the decision-making process included the following.

   - Defining the study area and logical termini
   - Identifying existing conditions
   - Determining the project's purpose and need
   - Developing, evaluating, and screening TSMO and other improvement strategies
   - Identifying a range of reasonable alternatives to be carried forward for further evaluation in NEPA that consist of different packages of improvement strategies.

   The primary decision-makers and members of the study team included INDOT's La Porte District and Central Offices, IDOT's District 1 and Central Offices, and FHWA's Indiana and Illinois Division Offices. Coordination meetings with the study team were held throughout the duration of the PEL study. As

part of the PEL study, a Community Advisory Committee (CAC) and Resource Agency Committee (RAC) were formed and meetings were held with these committees at the study's key steps. In addition, two sets of public information meetings were held at key steps. See Section 5 of this PEL Study Report for more information regarding agency coordination and public involvement.

f. How should the PEL information be presented in NEPA?

The following planning products from the PEL study may be incorporated into NEPA via reference.

- Initial High-Level Assessment of Potential TSMO Strategies
- Preliminary Purpose and Need/Logical Termini report
- Alternatives Assessment Report
- I-80/94 Borman Expressway PEL Study Report
- INDOT Red Flag Investigation
- IDOT Environmental Survey Request information
- EDR Report
- Noise Analysis Memo
- Resource Agency Committee information
- Community Advisory Committee information
- Public Information Meeting information

3. Agency coordination:

a. Provide a synopsis of coordination with Federal, tribal, state and local environmental, regulatory and resource agencies. Describe their level of participation and how you coordinated with them.

A Resource Agency Committee (RAC) was formed consisting of local, state, and federal agencies. Three RAC meetings were held at key steps in the PEL study. Tribal coordination was not conducted for this PEL study. See Section 5.1 of this PEL Study Report for more information regarding agency coordination. Below is the list of RAC members that were invited to the RAC meetings.

- U.S. Environmental Protection Agency
- Chicago Metropolitan Agency for Planning (CMAP)
- Illinois Department of Natural Resources
- Illinois Department of Transportation, Region 1
- Illinois Historic Preservation Agency
- Illinois Environmental Protection Agency
- U.S. Army Corps of Engineers, Chicago District
- U.S. Department of Housing & Urban Development, Chicago Regional Office
- City of Gary, Parks & Recreation Board
- City of Hammond, Parks & Recreation Board
- Indiana Department of Environmental Management
- Indiana Department of Natural Resources, Division of Fish and Wildlife
- Indiana Geological & Water Survey
- Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology
- Lake County Surveyor
- Natural Resources Conservation Service
- Northwestern Indiana Regional Planning Commission (NIRPC)
- U.S. Fish and Wildlife Service, Northern Indiana Suboffice
- National Park Service, Midwest Regional Office
- Little Calumet River Basin Development Commission

The following is a list of the RAC members that attended each meeting.

RAC Meeting #1

- Indiana Department of Environmental Management
- Indiana Department of Natural Resources, Division of Historic Preservation and Archaeology
- Illinois Department of Natural Resources
- Illinois Historic Preservation Agency

- Chicago Metropolitan Agency for Planning
- Northwestern Indiana Regional Planning Commission
- National Park Service

RAC Meeting #2
- Indiana Department of Natural Resources, Division of Fish and Wildlife
- Illinois Department of Natural Resources
- Illinois Historic Preservation Agency
- Northwestern Indiana Regional Planning Commission
- City of Hammond
- U.S. Environmental Protection Agency

RAC Meeting #3
- Indiana Department of Environmental Management
- Illinois Department of Natural Resources
- Illinois Historic Preservation Agency
- Chicago Metropolitan Agency for Planning
- U.S. Department of Housing & Urban Development
- U.S. Fish and Wildlife Service

b. What transportation agencies (e.g., for adjacent jurisdictions) did you coordinate with or were involved during the PEL study?

- Northwestern Indiana Regional Planning Commission (NIRPC)
- Chicago Metropolitan Agency for Planning (CMAP)
- Indiana Toll Road
- Illinois Tollway

c. What steps will need to be taken with each agency during NEPA scoping?

Official early agency coordination and scoping, including tribal coordination, will be needed to initiate the NEPA process and to help define the level of NEPA documentation and studies. The RAC meetings and coordination conducted during the PEL study will continue into the NEPA phase. Cooperating and participating agencies were not identified and invited during the PEL study so that coordination will need to occur at the beginning of NEPA.

4. Public coordination:

a. Provide a synopsis of your coordination efforts with the public and stakeholders.

A Community Advisory Committee (CAC) was formed consisting of local and regional stakeholders. Three CAC meetings were held at key steps in the PEL study. In addition, two sets of public information meetings, including both in-person and virtual options, were also held key steps. Finally, a website was created (www.indianaflexroad.com) that included study information and provided the public the opportunity to submit comments and respond to survey questions. See Section 5.2 of this PEL Study Report for more information regarding public involvement.

Below is the list of CAC members that were invited to the CAC meetings.

- Northwestern Indiana Regional Planning Commission (NIRPC)
- Chicago Metropolitan Agency for Planning (CMAP)
- City of Gary, Public Works
- City of Hammond, Public Works
- Gary Schools
- City of Hammond Schools
- NAACP Gary Branch
- NAACP Chicago Southside Branch
- Urban League of Northwest Indiana
- Chicago Urban League

- Hammond Hispanic Community Committee
- Casa Central
- Latinos Progresando
- Indiana Department of Homeland Security
- Indiana State Police
- Lake County Highway Department
- Cook County Transportation and Highways
- City of Gary
- City of Gary Common Council
- City of Hammond
- City of Hammond Common Council
- Town of Highland
- Town of Munster

The following is list of the CAC members that attended each meeting.

CAC Meeting #1
- City of Gary
- Town of Highland
- NIRPC
- Indiana Department of Homeland Security

CAC Meeting #2
- City of Gary
- City of Hammond
- CMAP
- Cook County Transportation and Highways
- Hammond Hispanic Community Committee
- NAACP
- NAACP Chicago Southside Branch

CAC Meeting #3
- NIRPC
- Hammond Schools Transportation

During the public comment period for the first three public information meetings (two in-person and one virtual), the study's website had over 3,500 visits, of which were 1,004 unique visitors. Users left 62 comments on the study map and submitted nine surveys electronically. Over 30 people attended the three public information meetings, provided the study team with over 40 comments, and completed two surveys.

For the second set of public information meetings (one in-person and one virtual), a total of 32 people attended these meetings (20 in-person and 12 virtual). A total of 18 comments were submitted (16 in-person and 2 online). Also, five people responded to the survey questions.

5. **Purpose and Need for the PEL study:**

   a. **What was the scope of the PEL study and the reason for completing it?**

   The scope of the PEL study was to identify existing conditions within the study area, establish the project's purpose and need, and evaluate and screen a range of reasonable alternatives, resulting in the recommendation of alternatives to be carried forward for further evaluation in the NEPA phase. Due to corridor and cost constraints, the PEL study primarily focused on TSMO alternatives. The goal of the PEL study was to conduct the appropriate transportation planning studies (i.e., planning products) so that they would comply with NEPA requirements. As such, when the NEPA process is initiated, these planning products can be incorporated via reference without the need for rework; thereby, providing a seamless transition between PEL and NEPA.

b. Provide the purpose and need statement, or the corridor vision and transportation goals and objectives to realize that vision.

The following information is also provided in Section 2 of this PEL Study Report.

Project Needs

The need for this project is based on recurring corridor congestion and elevated crash rates on I-80/94 between IL 394 in Cook County, Illinois and I-65 in Lake County, Indiana. Motorists within this corridor experience recurring congestion during weekday peak commuting periods and on Sunday afternoons/evenings, especially during the summer. The congestion results in poor travel time reliability and low speeds during peak hours. NIRPC has identified this roadway as the most congested interstate highway corridor in northwest Indiana.

Two primary needs have been identified for the I-80/94 Borman Expressway project:

- Recurring traffic congestion – bottleneck locations that result in travel time delays, low travel speeds, and unacceptable levels of service, and
- Safety – segments of high crash rates in the corridor.

Project Purpose

Based on the project's needs, the purpose of this study is to identify corridor improvements that, based on the design year of 2040, will:

- Increase the operational efficiency of the corridor by reducing travel times and increasing travel time reliability, and
- Improve safety in the corridor by reducing crashes.

As a principle, alternatives should focus on cost-effectively addressing the study needs within the existing infrastructure based on anticipated funding and right-of-way constraints.

For more detailed information regarding the project's purpose and need, see the *Preliminary Purpose and Need/Logical Termini* report in Appendix C of this PEL Study Report.

c. What steps will need to be taken during the NEPA process to make this a project-level purpose and need statement?

None, because it is a project-level purpose and need statement. However, the project's purpose and need is preliminary and may be refined during the NEPA process.

6. Range of alternatives: Planning teams need to be cautious during the alternative screen process; alternative screening should focus on purpose and need/corridor vision, fatal flaw analysis, and possibly mode selection. This may help minimize problems during discussions with resource agencies. Alternatives that have fatal flaws or do not meet the purpose and need/corridor vision will not be considered reasonable alternatives, even if they reduce impacts to a particular resource. Detail the range of alternatives considered, screening criteria, and screening process, including:

a. What types of alternatives were looked at? (Provide a one or two sentence summary and reference document.)

Due to corridor and cost constraints, the PEL study focused on TSMO strategies and low-cost/high-value geometric changes that supported the TSMO strategies. TSMO strategies were grouped based on primary function (traffic operations, safety, *etc.*) and, in some cases, were evaluated both individually and in combination with other strategies. Each of the alternatives identified for further analysis during the NEPA phase includes a combination of multiple strategies. The No-Build Alternative was also evaluated as part of this PEL study. For more information regarding the study alternatives, see Section 4 of this PEL Study Report and the *Alternatives Assessment Report* in Appendix G.

b. How did you select the screening criteria and screening process?

The screening criteria were based primarily on the following performance measures that were developed to determine if the alternatives would satisfy the project's purpose and need. Not all of

these criteria need to be met in order for a strategy/alternative to satisfy the project's purpose and need.

- Travel time through the I-80/94 corridor is reduced with no minimum level of reduction required.
- Travel time reliability through the I-80/94 corridor is increased with no minimum level of increase required. Reliability is measured based on the 95th percentile travel time, average travel speed, and planning time index.
- Freeway speed through the I-80/94 corridor is increased with no minimum level of increase required.
- Safety is improved based on a qualitative assessment that crashes will be reduced within the I-80/94 corridor with no minimum level of reduction required.

These criteria focus on traffic and safety performance. In addition, the alternatives were evaluated based on costs and benefit-cost ratios and, to a much lesser extent, environmental impacts. Because the TSMO alternatives would be limited primarily to the existing corridor and right-of-way, environmental impacts would be minimal and were not a factor in the screening process. For more information regarding the alternatives screening process, see Section 4 of this PEL Study Report and the *Alternatives Assessment Report* in Appendix G.

c. For alternative(s) that were screened out, briefly summarize the reasons for eliminating the alternative(s). (During the initial screenings, this generally will focus on fatal flaws.)

The following alternatives (referred to as strategies) were considered and dismissed in the *Initial High-Level Assessment of Potential TSMO Strategies* report. See Section 4.1 and Appendix H of this PEL Study Report for the descriptions of these strategies and the reasons why they were dismissed.

- Integrated Corridor Management (ICM)
  This strategy would utilize alternate routing on adjacent arterials. For this strategy to be effective, ideally there should be consistent alternate routes available for the rerouting of traffic for both eastbound and westbound I-80/94. Eastbound traffic should use an alternate route on the south side of I-80 and westbound on the north side of I-80. However, there is no consistent stretch of roadway with adequate capacity on the north side of I-80 and rerouting both eastbound and westbound freeway traffic onto Ridge Road south of I-80 would likely cause severe congestion and would not be accepted by the municipalities in the area. As a result, this strategy was dismissed because it would not feasible or practicable.
- Transit Management
  Because of the lack of a major destination at either end of the corridor, a strategy of developing transit from one end of the corridor to the other with the purpose of encouraging a major mode shift translating to fewer cars and congestion in the corridor is not feasible or practicable and would not meet the purpose and need for this project
- Freight Management
  There are no major freight facilities in the vicinity of the study corridor. As a result, Freight Management would not be an applicable strategy and was dismissed from further consideration.
- Tolling
  In 2018, Indiana developed a Statewide Interstate Tolling Strategic Plan. At the conclusion of the study, it was determined that additional tolling options would not be pursued at that time. While tolling may be reviewed again as a long-term strategy, it was dismissed from further consideration for this short-term study.
- Connected and autonomous Vehicles (CAV)
  This strategy was dismissed from further consideration because it would likely not be implemented within the timeframe of this study (i.e., 2040) to a level that would meet the project's purpose and need.
- Transit Signal Priority
  This strategy is not applicable because there are no signalized intersections on I-80/94. Also, there are no continuous, parallel bus routes adjacent to the corridor to which this strategy would be applicable. Therefore, this strategy was dismissed from further consideration

In addition, it was determined at the beginning of the study that alternatives involving additional through lanes or new alignments would not be considered due to corridor and cost constraints.

d. Which alternatives should be brought forward into NEPA and why?

The following alternatives were recommended to be carried forward for further analysis in the NEPA phase.

Alternative 1 – Base Package

- Dynamic Shoulder Lanes
- Event Management
- Broadway Interchange and I-65 Interchange Modifications
- Signing Enhancements

Alternative 2 – Base Package + Ramp Metering

- Dynamic Shoulder Lanes
- Event Management
- Broadway Interchange and I-65 Interchange Modifications
- Signing Enhancements
- Ramp Metering

Alternative 3 – Base Package + Mainline Safety

- Dynamic Shoulder Lanes
- Event Management
- Broadway Interchange and I-65 Interchange Modifications
- Signing Enhancements
- Variable Speed Limits
- Dynamic Lane Control
- Queue Warning

Alternative 4 – Base Package + Mainline Safety + Ramp Metering

- Dynamic Shoulder Lanes
- Event Management
- Broadway Interchange and I-65 Interchange Modifications
- Signing Enhancements
- Variable Speed Limits
- Dynamic Lane Control
- Queue Warning
- Ramp Metering

In addition, in accordance with NEPA guidelines, the No-Build Alternative will also be carried forward into the NEPA phase to serve as a baseline comparison to these alternatives even though it does not meet the project's purpose and need.

These alternatives were developed based on the anticipated traffic and safety benefits, potential environmental impacts, and estimated costs. The alternatives seek to capitalize on the complementary nature of the improvement strategies and provide a representative range of reasonable alternatives for detailed analysis during the NEPA phase. For more information, see Section 4 of this PEL Study Report and the *Alternatives Assessment Report* in Appendix G.

e. Did the public, stakeholders, and agencies have an opportunity to comment during this process?

The public and agencies had the opportunity to comment throughout the study process through a series of CAC, RAC, and public involvement meetings. They could also submit comments on the study website. For more information on agency coordination and public involvement, see Section 5 of this PEL Study Report.

f. **Were there unresolved issues with the public, stakeholders, and/or agencies?**

There were no substantive unresolved issues raised during the PEL study process.

7. **Planning assumptions and analytical methods:**

a. **What is the forecast year used in the PEL study?**

2040

b. **What method was used for forecasting traffic volumes?**

Design year traffic volumes were obtained from the Northwest Indiana Regional Planning Commission's (NIRPC) travel demand model.

c. **Are the planning assumptions and the corridor vision/purpose and need statement consistent with each other and with the long-range transportation plan? Are the assumptions still valid?**

Yes, the planning assumptions, corridor vision/purpose and need statement and the long-range transportation plan are all consistent with each other. The assumptions are still valid.

d. **What were the future year policy and/or data assumptions used in the transportation planning process related to land use, economic development, transportation costs, and network expansion?**

The assumptions related to land use, economic development, transportation costs, and network expansion come from the NIRPC regional comprehensive plan. Both NIRPC and INDOT assume that there will be no major capacity improvements to the I-80/94 corridor in the next 20 to 30 years because they are likely beyond the states' available funding and would likely result in significant right-of-way and environmental impacts.

8. **Environmental resources (wetlands, cultural, etc.) reviewed. For each resource or group of resources reviewed, provide the following:**

a. **In the PEL study, at what level of detail was the resource reviewed and what was the method of review?**

The environmental review and evaluation were based on existing secondary sources data collected from various GIS databases. This resulted in the preparation of a *Red Flag Investigation* (see Appendix D) and an *EDR Report* (see Appendix F). In addition, secondary source environmental information was received from IDOT via the Environmental Request Survey (see Appendix E). For a summary of the environmental resources located in the vicinity of the study area, see Section 3 of this PEL Study Report.

b. **Is this resource present in the area and what is the existing environmental condition for this resource?**

The following is a summary of the environmental resources in the study corridor. See Section 3 of this PEL Study Report for more detailed information,

The western portion of the study corridor supports dense residential and commercial development while the eastern portion supports a mix of less dense residential development, undeveloped land that includes forested, scrub-shrub, and herbaceous habitat, and large tracts of wetlands. The Little Calumet River meanders along most of the study corridor and crosses I-80/94 twice. Most of the floodplains within the study corridor are associated with the Little Calumet River. There are numerous local public parks, recreational facilities, and managed lands along the entire study corridor. In addition, the I-80/94 interchange with I-294 and IL 394 is surrounded by the Wampum Lake INAI site and Nature Preserve. A preliminary review of the Indiana Natural Heritage Database indicated the presence of endangered, threatened, and rare (ETR) species within the 0.5 mile search radius of the study corridor. A review of the US Fish and Wildlife Service (USFWS) database did not indicate the presence of endangered bat species in or within 0.5 mile of the study of the study corridor.

Based on a review of IndianaMap, there are no historic sites or districts adjacent to or near the study corridor in Indiana that are listed on the National Register of Historic Places (NRHP). For the Illinois portion of the study corridor, there are no known historic architectural resources within the study

corridor. However, given the density and age (>50 years) of the development along the corridor, it is possible that potential historic sites may be present. As for archaeological resources in Illinois, there are 12 previously recorded archaeological sites located within or adjacent to the ESR study limits.

Given the density of residential and commercial development, there are numerous public facilities and services located along the study corridor. There are also numerous hazardous material sites.

With regard to EJ populations, 34 of the 40 census tracts within 1 mile of the study corridor meet the thresholds to be an EJ population. Given the generally elevated percentages of low-income and/or minority individuals in the census tracts that did not meet the thresholds to be an EJ population, the study team has determined that the entire study area (all 40 census tracts) should be considered as having EJ populations.

Because dense residential development (i.e., noise sensitive receptors) represents the predominant land use along the western half of the I-80/94 study corridor (i.e., west of the SR 912 interchange), noise barriers are located along most of this section of the corridor. The eastern half of the corridor (i.e., east of the SR 912 interchange) supports a mix of less dense residential development, undeveloped land, and large tracts of wetlands. As a result, most of this section of the corridor does not include noise barriers.

In Indiana, the portion of the study corridor in Lake County is in nonattainment for ozone (O3). Similarly, in Illinois, the portion of the study corridor in Cook County is in nonattainment for ozone (O3). For all the other transportation-related pollutants, the study corridor is in attainment.

c. **What are the issues that need to be considered during NEPA, including potential resource impacts and potential mitigation requirements (if known)?**

A noise analysis will be required to identify the potential need for new noise barriers or modifications to existing noise barriers. A more detailed analysis will be needed to determine potential impacts to EJ populations from ramp metering. Finally, field surveys will be needed to determine the presence of jurisdictional wetlands and streams in areas of potential disturbance, specifically along the I-65 southbound ramp. It is anticipated that modifications to this ramp may result in wetland impacts. In general, however, it is anticipated that the environmental impacts will be negligible because most of the improvements would be associated with the construction of gantries and ramp meters within the existing right-of-way. The proposed modifications to the Broadway interchange would also occur within the existing right-of-way and are expected to result in minimal impacts.

d. **How will the planning data provided need to be supplemented during NEPA?**

All applicable resources that may be present and impacted by the project will require more detailed field surveys and/or analysis during the NEPA phase.

9. **List environmental resources you are aware of that were not reviewed in the PEL study and why. Indicate whether or not they will need to be reviewed in NEPA and explain why.**

All applicable environmental resources were reviewed at a cursory level based on secondary source data and, as needed, will require more detailed field surveys and/or analysis during the NEPA phase. These resources are discussed in Section 3 of this PEL Study Report and in the following supporting documents that are located in the appendix.

- INDOT Red Flag Investigation and List of ETR Species in Lake County (Appendix D)
- IDOT Environmental Survey Request (Appendix E)
- EDR Report (Appendix F)
- Noise Analysis Memo (Appendix I)

10. **Were cumulative impacts considered in the PEL study? If yes, provide the information or reference where the analysis can be found.**

No. The construction activities associated with the proposed alternatives are expected to be limited to the existing highway right-of-way. As a result, it is anticipated that any direct impacts would be minimal. In addition, because the proposed alternatives would not include new access and interchanges, indirect

impacts are not anticipated; therefore, cumulative impacts were not considered during the PEL study. However, the potential for cumulative impacts will be evaluated in further detail in the NEPA phase.

11. **Describe any mitigation strategies discussed at the planning level that should be analyzed during NEPA.**

    No mitigation strategies were identified during the PEL study but will be developed, as needed, during the NEPA phase.

12. **What needs to be done during NEPA to make information from the PEL study available to the agencies and the public? Are there PEL study products which can be used or provided to agencies or the public during the NEPA scoping process?**

    All applicable PEL study information and reports (e.g., *Preliminary Purpose and Need/Logical Termini*, *Alternatives Assessment Report*, etc.) have already been made available for public and agency review via public and agency meetings and the study website. This same approach can be used to make these PEL study products available during the NEPA scoping process.

13. **Are there any other issues a future project team should be aware of?**

    No.