



**Response to Final Environmental
Impact Statement/Section 4(f)
Evaluation Comments**

Attachment E

**Response to
Final Environmental Impact Statement/Section 4(f) Evaluation Comments
September 2003**

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United States Coast Guard

Comment – Navigation impacts are adequately addressed in FEIS. Further notification of the availability of the navigation model requested.

FHWA Response – FHWA will continue consultation with the Coast Guard during final design on the development of bridge designs for both Ohio River crossings included in the Selected Alternative. Both bridges include commitments for designs that will be sensitive to the landscape. A conceptual design will be developed for the downtown bridge, in advance of other work on the crossing, sufficient to develop the computer model at the Center for Maritime Education of the Seamen’s Institute located in Paducah, Kentucky. FHWA will work with the Coast Guard to identify the timing of the modeling so information about pier locations for navigation requirements can be used in selecting a final design for this crossing.

United States Environmental Protection Agency – Region 4

Air Quality

Comment 1 – The ROD must document that the Selected Alternative is included in the conforming Long Range Transportation Plan (LRTP).

FHWA Response –The Selected Alternative was amended into KIPDA’s 2025 Regional Mobility Plan (RMP) and FY 2004-06 Transportation Improvement Program (TIP) on June 26, 2003. KIPDA also amended the FY 2004-06 TIP programmed amounts for the Louisville Bridges preliminary engineering and right-of-way (PE and ROW) on August 28, 2003. USEPA issued the adequacy finding in the August 7, 2003 Federal Register and the updated SIP budgets for Indiana and Kentucky became effective August 22, 2003. FHWA and FTA reviewed the conformity analysis for the KIPDA 2025 RMP Amendment and FY 2004-06 TIP (as amended), together with the comments from USEPA and the State air agencies, and issued the conformity finding on August 28, 2003 (see Attachment F). FHWA and FTA also approved the KYTC request to amend the KIPDA FY 2004-06 TIP (as amended) into the fiscally constrained KYTC FY 2003-08 STIP on August 28, 2003 (see Attachment F). These actions support one another in that they demonstrate that the KIPDA FY 2004-06 TIP (as amended) is both fiscally constrained and conforming in the context of the KYTC FY 2003-08 STIP (as amended). Having completed the KIPDA amendment process, and demonstrated fiscal constraint and conformity, FHWA can now proceed with approval of the Record of Decision.

Comment 2 – Areas of nonattainment for the 8-hour ozone standard will be designated in April of 2004 and the planning process initiated for this requirement may require tighter controls and more emission reductions.

FHWA Response – Implementation of the 8-hour ozone standard is a future action that will be addressed in the local planning process. Although it appears that the Louisville

metropolitan area (LMA) may be designated as a nonattainment area for ozone under the 8-hour standard, that designation has not formally occurred, and any changes to air quality implementation plans to address such nonattainment, if necessary, will be identified in the future. Consequently, any transportation-related air quality requirements applicable to the Project as a result of a future nonattainment designation cannot be identified or addressed at this time. Such requirements will be addressed, if necessary, at the time they are identified and adopted by the appropriate regulatory authorities. However, in the meantime, it should be noted that no CO hot spot exceedances were projected for the Selected Alternative in the air quality analysis performed for the Project. The increased network efficiency and reduced vehicle miles of travel (VMT) projected for the Selected Alternative over the No-Build alternative will help lower emissions, thus improving the ability of the region to meet its air quality goals.

Comment 3 – Monitoring data for regional area should have been included in the FEIS.

FHWA Response – The Louisville – Southern Indiana Ohio River Bridges Project is part of the metropolitan area’s long-range transportation plan. The plan included provision for two new bridges across the Ohio River and reconstruction of the Kennedy Interchange when work began on the EIS for this Project in 1998. Options for improving cross-river mobility within the region were identified and evaluated to determine impacts on the human and natural environment, including impacts to the air quality of this region. Planning for the air quality analysis included consideration of locally available data from KIPDA and the Jefferson County Air Pollution Control District about air quality within the region, to identify the work necessary to evaluate the impact of project alternatives. The work resulting from that planning was included in the Draft Environmental Impact Statement (DEIS) and updated in the FEIS in response to comments received on the DEIS. Information on air quality within the region also was addressed in the Indirect and Cumulative Effects Analysis Technical Report, which was prepared to provide data and analysis for the EIS. This report detailed coordination with local agencies and others interested in the air quality of this region and also included information from the regional monitoring sites. The technical report was referenced in the DEIS and FEIS and was made available for review by the public at the local Project office.

Air quality monitoring data is collected and reported by the respective State air quality agencies. The States recently utilized this data in preparing recommendations to USEPA regarding designations under the new 8-hour ozone standard. IDEM has published the Indiana data on its website at <http://www.in.gov/idem/air/8hourstandard/index.html>. Comparable Kentucky monitoring data is available from the Jefferson County Air Pollution Control District (JCAPCD) and the Kentucky Division for Air Quality (DAQ).

Traffic Noise

Comment 4 – Generic goal to reduce noise by 5 to 10 dBA not sufficient – should reduce noise to the FHWA Noise Ambient Criteria (NAC) levels (67 or 72 dBA) and reduce any noise increase from the project to a maximum of 10 dBA or 15 dBA.

Response – The mitigation criteria used (5-10 dBA) are outlined in the INDOT and KYTC Noise Policies for determining effective and reasonable noise attenuation. INDOT and KYTC define *substantial noise reduction* to mean at least a 5-decibel reduction at a benefited receptor, with a desire to achieve a 10-decibel or more reduction if it can be determined to be reasonable. These two Noise Policies have been reviewed and approved by FHWA for use on projects where federal funds are to be used. FHWA guidance and subsequent policy defines effective mitigation in terms of absolute decibels reduced as described above. There are neither guidelines nor policies that relate mitigation effectiveness to NAC values or increases over existing levels. In practice it is difficult from an engineering perspective to achieve a significant reduction in noise levels greater than 10 dBA and the dramatic increases in barrier area to obtain such a reduction would likely make the barrier unreasonable from a cost standpoint.

Comment 5 – Noise policy documents referenced in the FEIS should have been provided as an appendix.

Response – The INDOT and KYTC Noise Policies, which have been reviewed and approved by FHWA, were followed in preparing the highway traffic noise impact analysis, the conclusions of which were summarized in the FEIS. The impact and mitigation criteria from each state’s respective Noise Policy were incorporated and summarized in the FEIS. The complete Noise Policy documents for the two respective states have been available for public review throughout the EIS process at the FHWA Offices in Frankfort, Kentucky and Indianapolis, Indiana, at the central offices of the Indiana Department of Transportation (INDOT) and the Kentucky Transportation Cabinet (KYTC), and at the local Project office located in the LMA. Inclusion of lengthy policy documents, such as each referenced Noise policy, as appendices to the FEIS would result in an excessively lengthy document longer than the four, thick volumes that already comprise the FEIS. FHWA believes that the FEIS contains a sufficient summary of information concerning these policies and the noise analyses performed for the Project, and the various technical reports and relevant agency policy documents are readily available at the local project office and other locations for review by anyone seeking additional, detailed information on the noise and other analyses summarized in the FEIS.

Comment 6 – Noise mitigation should not be limited to barriers, but include other methods to cumulatively reduce impacts.

Response – Additional noise abatement measures, including traffic management measures, alteration of horizontal and vertical alignments, buffer zone acquisition and insulation of public buildings were investigated and discussed in Chapter 5 of the FEIS. The executed Section 106 Memorandum of Agreement (MOA) for the Selected Alternative describes potential additional measures for noise sensitive design and enhanced noise abatement measures for historic properties, including the possible use of “quiet pavement technology” and bridge joint designs that would reduce traffic generated noise. These abatement measures are outlined in Chapter 8 of the FEIS and incorporated into the ROD for the Selected Alternative. The implementation of any such mitigation

measures will depend on the evaluation of their effectiveness carried out pursuant to the commitments contained in the FEIS and the ROD, and will be further evaluated in the final design phase.

Comment 7 – The ROD should provide firm commitments for actual locations of barrier construction and a schedule for that construction.

Response – The FEIS contains preliminary barrier analyses and commitments for locations where barrier mitigation is likely. Pages 5-280 through 5-293 of the FEIS contain a summary of the analysis of impacted receptors to determine if noise abatement through the construction of noise barriers would be reasonable and feasible. The locations where noise barriers were determined to be likely are noted in the FEIS on page 8-4. Two additional receptors were also noted for additional review during the final design phase of the Project. Exact locations of barrier construction cannot be determined until more detailed design information is available. The preliminary barrier analysis performed for the FEIS was used to assess the feasibility and reasonableness for barrier mitigation at locations that were identified as impacted in the DEIS. The final barrier details, including location and barrier design parameters, will be determined as a part of the final design process. Where determined reasonable and feasible, the design for noise barriers will be included in plans for the related roadway/bridge section of the Selected Alternative, and construction of the noise barriers will occur at the same time as construction of the other roadway and bridge elements in that area. Consideration would be given to the construction of barrier walls in advance of other work where right-of-way is available and advance construction is found to be cost effective.

Comment 8 – The ROD should clarify any additional measures to be employed to reduce noise impacts and the specific sites to be affected.

Response – As noted in the response to Comment 7, locations where noise barriers appear feasible and reasonable were identified in the FEIS. A final decision concerning reasonable and feasible barrier locations will be made during final design, when information about structural requirements and cost can better be determined. A final decision will also be made during final design about pavements and bridge joints to minimize tire-generated noise applicable to all elements of the Project, when information about soil strength, bridge layouts and structure types is available. The information necessary to specify a cost effective noise mitigation plan for locations within the Project therefore would not be available until more detailed work is completed during final design.

Comment 9 – The FEIS should have clarified the 10-minute intervals used for the ambient noise measurements.

Response – The FHWA promulgated Highway Traffic Noise Guidance includes ranges for many measurement and analysis parameters, from which each state was to construct a written Highway Traffic Noise Policy that defines the noise analysis policy for that state. The KYTC policy manual defines a 10-minute measurement as an appropriate period for

the measurement of existing levels. This value was then used throughout the Project to ensure consistency within the noise analyses on both sides of the Ohio River. As detailed on Page 4-163 in the noise technical baseline report, the 10-minute measurement of existing noise consists of monitoring the ambient noise utilizing an integrating sound level meter that updates ten times per second, averaging the measured noise. As this is an integrated average of thousands of sound pressure level samples, relating the ambient level data beyond the ten-minute time frame does not significantly alter the measured value. Any major intrusive events (dogs barking, jet flyover, heavy truck stopped in vicinity, etc.) that were considered non-representative of ambient conditions warranted an additional ten-minute noise measurement. FHWA guidance requires that the computer noise modeling utilize worst-case traffic volumes, thus generating worst-case noise levels for the alternative. The guidance advocates that this worst-case modeling be compared to worst-case ambient noise levels. Any level measured in ambient conditions will be either the worst-case level or some lower level. Any decrease in the measured ambient level from worst case would err in favor of the residents by yielding a larger difference between existing and predicted build noise levels.

Comment 10 – Truck percentages used in the noise modeling should have been included in the FEIS.

Response – Specific modeling parameters and details, including the truck percentages, vary for different alignments and different segments, based on road type and location. The specific truck percentage for each segment, along with other model inputs and technical data, can be found in the *Highway Traffic Noise Impact Analysis* Technical Baseline Report and the accompanying appendices, which were available for review at the local Project office as part of the FEIS documentation. Again, including such detailed supporting information in the FEIS itself, or in one of its appendices, would have further magnified its already considerable size. FHWA believes that the information presented in the FEIS adequately summarizes the data used in the noise modeling analyses, and the detailed supporting information is referenced on Pages 5-53 and 5-54 in Section 5.1.7.3 of the FEIS and is available for inspection at the local project office.

Comment 11 – The ROD should discuss adaptive management actions to correct the ineffectiveness of any constructed barriers.

Response – Decisions about noise abatement measures, including noise barrier walls, will be finalized during the final design phase of the Project. For the Selected Alternative, FHWA has agreed to measure the effectiveness of noise barrier walls after the Project is completed. To expand that provision by making an advance commitment to specific future corrective actions without knowledge of specific future circumstances is unreasonable and speculative.

Wetland Mitigation

Comment 12 – The USEPA is concerned about the incremental cumulative loss of wetlands in the project area.

FHWA Response – Potential impacts to wetlands have been identified and evaluated since the preliminary screening of alternatives for this Project. Federal and state policies supported the inclusion of wetlands in the Indirect and Cumulative Effects Analysis Report (ICEA) and in Section 5.10.5 of the FEIS. As a result of the alternatives development and screening process, most of the alternatives evaluated in the DEIS would have had relatively minimal impacts on wetland resources. The Selected Alternative will impact only 4.11 acres of wetlands. Further efforts will be undertaken during the final design process to reduce the potential wetland impact acreage. These measures will be undertaken in compliance with, and documented through, the Clean Water Act Section 404 permitting process administered by the United States Army Corps of Engineers (USACE). One of the goals of that process is to minimize cumulative impacts to wetlands as a result of implementation of the Project. FHWA will work closely with the USACE, Louisville District to minimize the impacts of the Project.

Comment 13 – A conceptual wetland mitigation plan should have been identified in the FEIS.

FHWA Response – The USACE, Louisville District has been consulted throughout the EIS development process concerning potential wetland impacts by the Project, beginning with the Federal Stakeholders Executive Briefing of October 6, 1998. As detailed in Section 7.2 of the FEIS, this coordination continued throughout the early coordination, agency scoping meeting and indirect and cumulative effects agency coordination meeting and preparation of the both the DEIS and FEIS. Consultation included a meeting on August 29, 2002 to review potential wetlands within the project area.

FHWA believes that based on consultation with the USACE, Louisville District and the development already underway within the Project corridor, production of a conceptual wetland mitigation plan would be of limited benefit at this time. This concern was addressed in detail in Chapter 7 of the FEIS, in Responses to DEIS Comments L.2 and L.15. Since the construction of the Project may not occur for some time, wetland areas may be naturally created or destroyed in the interim. Design modifications may become apparent during the design phase that could potentially avoid wetland impacts. Consequently, the course of time may naturally increase, decrease, eliminate or create wetlands, which undercut the cost and effort to develop a detailed conceptual mitigation plan at this time. Detailed delineations, which will indicate the exact wetland impacts, will be undertaken during the design phase. In general, wetlands directly impacted by the Project will be mitigated at an appropriate ratio. At that time, a more refined approach to the development of the detailed mitigation plan will be initiated, as detailed in Sections 4.1.9 and 5 of the ROD. Available parcels exist along Lentzier Creek, in Indiana, which could be acquired to accommodate the required wetland mitigation acreages. Priority will be given to the acquisition of these parcels prior to construction. The detailed

mitigation plan will be developed through the Section 404 permitting process, in which USEPA has a defined, formal role. No impacts to wetlands can occur without the Section 404 permit, which will be obtained prior to the initiation of construction. Thus, USEPA will have a formal opportunity to review and comment on the detailed mitigation plan before the Section 404 Permit is issued.

Comment 14 – The USEPA recommends consultation with federal and state resource agencies on wetland mitigation plans/sites concurrent with right-of-way acquisition.

FHWA Response – The FHWA concurs with USEPA on the need for consultation with federal and state resource agencies concurrent with the right-of-way acquisition, in the development of detailed wetland mitigation plans and in the identification of possible mitigation sites prior to the initiation of any construction activities. Available parcels exist along Lentzier Creek, in Indiana, which could be acquired to accommodate the required wetland mitigation acreages. Priority will be given to the acquisition of these parcels prior to construction. FHWA will also work to initiate this consultation as early as possible during design to maximize opportunities to minimize or mitigate wetland impacts.

Surface Water Quality and Stream Impacts

Comment 15 – Water quality mitigation measures and all streams to be impacted by bridge structures should be identified in the ROD.

FHWA Response – Water quality mitigation measures committed to in the FEIS have been reaffirmed in Section 4 of the ROD and expanded to identify the streams that will be bridged. The Project includes two crossings of the Ohio River and crossings of Harrods Creek, Lentzier Creek, two major tributaries of Lentzier Creek, and Beargrass Creek and bridge structures will be designed and constructed for these crossings.

Groundwater and Wellhead Protection

Comment 16 – The ROD should include a discussion of mitigation measures for bridge pier construction in the wellhead protection areas of both Indiana and Kentucky.

FHWA Response – The Selected Alternative involves construction within one wellhead protection area (Louisville Water Company Wellhead Protection Area in Kentucky). Mitigation measures for bridge pier construction were addressed in Section 5.8.5 and Chapter 8 of the FEIS and those measures have been reaffirmed and supplemented in Section 4.1.8 of the ROD.

Comment 17 – Coordination with Indiana Department of Environmental Management (IDEM) should be undertaken during the design of the bridge drainage system.

FHWA Response – The design and grade of the eastern bridge component of the Selected Alternative will provide for drainage to be contained within the bridge structure and to flow from Indiana across the Ohio River to Kentucky. The Kentucky state boundary is the 1899 low-water mark on the Indiana side of the Ohio River; thus, Kentucky has jurisdiction over any activities south of that boundary. The conceptual plan for containing runoff from the bridge deck and releasing it at the lower end of the bridge, which falls in Kentucky, would therefore not involve the release of any runoff associated with the new Ohio River Bridge within Indiana. IDEM can be notified of any meetings scheduled with Kentucky state agencies on this issue; however at this time, we see no reason for any formal coordination.

Comment 18 – The ROD should contain the details of the hazardous spill containment plan.

FHWA Response – The details for responding to a spill or release of hazardous materials on the Project during construction and operation have been included in Section 4 of the ROD.

Forest Impacts

Comment 19 – The ROD should commit to incorporating wildlife passageways in those identified areas where upland forest will be fragmented.

FHWA Response – USEPA noted in this comment that the major portion of the upland forest impacts fall within the Indiana portion of the Selected Alternative, along Alternative A-15. These upland forest impacts generally fall into three areas: the area between the Utica – Sellersburg Road and Salem Road, the area between Salem Road and the Utica – Charlestown Road and the area along the rock quarry above the Ohio River floodplain. Two of the three areas currently have planned private development that is already underway. A commitment to consider wildlife passageways in the development of final design plans is included in Section 4.1.7 of the ROD.

The area between the Utica – Sellersburg Road and Salem Road and the area along the rock quarry are currently being developed and much of the wooded areas are being removed. Wildlife corridors will be altered as a result of these activities. The area between the Utica – Sellersburg Road and Salem Road has at least three distinct passageways that wildlife could use and the Selected Alternative would bridge two of the three. But all of this area is planned for residential subdivision development and much of the forested area has been or is being removed. These bridge crossings however would continue to provide a corridor for wildlife passage through the area.

No bridge is included within the area along the rock quarry; however a large culvert is located within the drainage channel flowing from the Indiana Army Ammunition Plant (INAAP) property toward Utica and into the Ohio River. This culvert could provide a passageway for wildlife within the area.

The third area between Salem Road and the Utica – Charlestown Road is located between the two areas described above. A tributary of Lentzier Creek flows along the side of the Utica – Charlestown Road. The forested area on either side of the Selected Alternative would continue to be connected through the use of a bridge that would span both the Utica – Charlestown Road and the tributary of Lentzier Creek. During the design phase, the final selection of a bridge span or culvert size will include consideration for wildlife passage.

Floodplain Impacts

Comment 20 – The ROD should identify mitigation measures to minimize impacts to flora and fauna of floodplains; wildlife habitat and movements through floodplains should be of high priority.

FHWA Response – In addition to the provisions for wildlife passageways identified in the response to Comment 19, above, a number of mitigation measures were included in Chapter 8 of the FEIS and Section 4 of the ROD to avoid or minimize impacts to existing vegetation by the Selected Alternative.

Comment 21 – The ROD should commit to bridging all streams and associated floodplains.

FHWA Response – Floodplains will be crossed on-structure and impacts will be minimized during the final design and permitting process, as discussed in the Response to DEIS Comment L.14. Bridges are included for the major stream crossings for the Selected Alternative – the Ohio River, Harrods Creek, and three tributaries of Lentzier Creek. The remaining stream crossings generally fall into the category of headwater streams and will include the construction of culverts to handle drainage from the watershed. Impacts to streams will be minimized to the maximum extent practicable, and all necessary permits will be obtained, in accordance with applicable regulations and guidelines under Section 404 of the Clean Water Act and other applicable regulatory authorities.

Agricultural Resources

Comment 22 – The ROD should include a discussion of mitigation measures for agricultural impacts.

FHWA Response – Mitigation measures for the loss of agricultural properties are described in Section 5.2.3 of the FEIS. As with all mitigation measures, the agricultural mitigation commitments in the FEIS have been confirmed in the ROD. These measures are limited since the impact to farmland within the Kentucky portion of the Selected Alternative is small (approximately 5 acres) and there is little farmland left within the area. The bulk of the impact to agricultural property falls within the Indiana portion of the Selected Alternative and a large area between the Utica – Sellersburg Road and Salem Road is currently being converted from open or forested lands to residential subdivision

development. The Smart Growth Conference and funding (\$300,000) for improvements to the Clark County, Indiana land use planning process provided for in the mitigation included for the Selected Alternative should help promote better management of existing resources, including remaining agricultural resources.

Social Impacts and Environmental Justice

Comment 23 – The ROD should clarify the apparent inconsistency in the assessment of impacts to Environmental Justice communities that exists in the analyses presented in the Final Environmental Impact Statement and in the Technical Baseline Report.

FHWA Response – The Socio-Economic Baseline Report, which contains a section on Environmental Justice, was prepared prior to publication of the DEIS and was used in preparing the DEIS. In response to a number of comments received on the DEIS and the information in the Socio-Economic Baseline Report, additional analyses were performed to clarify the likely impacts of the Project on low-income and minority areas within the Project study area. As a result of this refined analysis, the assessment of the likely impacts to low-income and minority areas was revised, and these revised conclusions were included in the FEIS. While the revised conclusions were included in the FEIS, the original Environmental Justice section of the Socio-Economic Baseline Report itself was not altered. Rather, concurrently with preparation of the FEIS, which includes the revised Environmental Justice analysis, an Environmental Justice addendum was prepared, documenting the basis for the revised analysis and conclusions included in the FEIS. This addendum, along with the original Environmental Justice section of the Socio-Economic Baseline Report and a related early draft of the Environmental Justice analysis that was made available for public review, have been assembled into a comprehensive technical report summarizing the Environmental Justice analysis for this Project. That comprehensive Environmental Justice report, which is available for review at the local Project office, clearly demonstrates the basis for the Environmental Justice analysis contained in the FEIS.

Comment 24 – The ROD should include a discussion of mitigation measures for social and economic impacts.

FHWA Response – The three major elements of the Selected Alternative were selected based on consideration of impacts to the human and natural environment, including impacts to the social and economic fabric of the neighborhoods, communities and region. The alternatives, from which these major elements were selected, were developed to minimize impacts to these resources. As a result of extensive early planning to avoid and minimize impacts, and as demonstrated in the FEIS, the Selected Alternative has a relatively small impact on the social and economic conditions within this region.

A number of measures were identified in the FEIS to address the forecast small shift in future population and employment growth, primarily from eastern Jefferson County and Oldham County in Kentucky to southeastern Clark County and northern Floyd County in

Indiana. Funding and support for a Smart Growth Conference within the region was included through the Section 106 MOA. This conference will provide information that local communities can use to better plan for and accommodate any changes in population and employment growth as a result of the Project. The FEIS also identified funding in the amount of \$300,000 to assist Clark County, Indiana to improve its land use planning process. The small decrease in future population and employment growth in far eastern Jefferson and Oldham Counties in Kentucky is not expected to have a significant effect on the socio-economic conditions in those areas, and actually may help to alleviate some of the strong growth pressure that those areas are currently experiencing. Consequently, no specific mitigation measures are provided to address this issue in Kentucky.

The safety and efficiency improvements to the cross-river mobility of this region will provide a direct benefit to those using the current transportation system. A fourth element of the Selected Alternative is an enhancement to the existing bus system (TARC) within the region. This enhancement, coupled with the improvements to the existing transportation system provided by the three major elements of the Selected Alternative, will afford the low income and minority segments of the communities with increased access to the transportation system and greater access to employment opportunities.

United States Department of the Army – Louisville District Corps of Engineers

Comment 1 – Section 10 of the Rivers and Harbors Act also regulates activities associated with navigable waters of the US.

FHWA Response –Section 5.15 of the FEIS states that a permit under Section 10 of the Rivers and Harbors Act would be required for any bridge construction across the Ohio River, as the Ohio River is considered a navigable waterway.

Comment 2 – Clarification of the definition of prior converted wetlands should be in the FEIS

FHWA Response – The impacted wetlands identified in Section 5.10.2 of the FEIS do not include prior converted wetlands. The wetlands to be impacted by the Selected Alternative include approximately 4.11 acres of jurisdictional wetlands, 3.74 acres of which are riverine wetlands.

Comment 3 – An assessment of the functions and values associated with impacted water bodies is used to determine mitigation as opposed to specific mitigation ratios.

FHWA Response –Section 5.10.6 of the FEIS explains that typical mitigation ratios are subject to change based on wetland functions and values, and will be determined in coordination with the IDEM, the Kentucky Natural Resources Environmental Protection Cabinet, Division of Water (KNREPC) and the USACE, Louisville District during the development of the Section 404 Permit and Section 401 Water Quality Certification.

Functions and values of impacted water bodies were also discussed in Chapter 7 of the FEIS, in Response to DEIS Comment L.17.

United States Department of the Interior

Comment 1 – The FHWA should be aware that additional Section 7 consultation on this project may be necessary at the time of construction because of (1) the 4-year time lag between completion of the original Biological Assessment on this project and the initiation of construction and/or (2) the likelihood that new information on federally-listed species or critical habitat may become available which could affect implementation of the project.

FHWA Response – The FHWA commits to initiating additional Section 7 coordination and consultation that may be required as a result of the passage of time or the listing of species/modification of critical habitat. The United States Fish and Wildlife Service (USFWS) will be consulted, pursuant to applicable regulations.

Comment 2 – The FHWA should incorporate habitat restoration and enhancement measures that would benefit Indiana bats and gray bats in conjunction with any stream and wetland mitigation that will be required for this project.

FHWA Response – Specific measures were developed in the FEIS to mitigate adverse impacts of construction, which are detailed in Chapter 8. During the development of the design, habitat restoration and enhancement at a 1:1 replacement ratio for upland forest areas will be incorporated into project plans and permitting, and coordinated for concurrence with the appropriate state and federal regulatory agencies.

Comment 3 – The FHWA should consider the effects to migratory songbirds and other migratory species in conjunction with the migratory waterfowl. A suggestion to shorten the period of forest clearing to November-February was made to better account for the yearly variations in migration patterns and weather.

FHWA Response – Section 5.7.3.1 of the FEIS states, “The proposed project shall not entail the taking, killing or possession of any migratory birds.” This conclusion includes migratory songbirds and other migratory bird species, in addition to migratory waterfowl. A review of the coordination with the USFWS, IDNR and KNREPC did not reveal any special concerns related to migratory songbirds. Therefore, FHWA believes that the provisions cited for migratory waterfowl would apply to migratory songbirds as well. The Biological Assessment for the Project explained that tree removal in construction zones would occur between October 15 and March 31 to avoid adverse impacts. The USFWS reviewed and concurred in the conclusions of the Biological Assessment on September 18, 2002, December 19, 2002 and March 13, 2003. Based on the USFWS concurrence with the Biological Assessment, FHWA believes that the October 15 to March 31 tree removal limitation is sufficient to protect against the taking of migratory birds and that the concerns expressed in this comment have been sufficiently addressed. Should new information regarding impacts to the protected species be brought to our attention we can reconsider these limitation dates.

Comment 4 – The FEIS would be improved by adding information about the functions and values that will be impacted by the project, in addition to simple metrics like linear distances and area. FHWA should provide appropriate mitigation for impacts in an integrated manner to maximize benefits to those fish and wildlife and their habitats that will be displaced as a result of this Project (referring to fluvial impacts, i.e. floodplains, riparian forests, streams and wetlands).

FHWA Response –The assessment of wetland functions and values in the development of mitigation measures was detailed in the response to the USACE, Louisville District Comment 3, above. Mitigation measures have been developed to minimize expected impacts of Project construction, as detailed in Chapter 8 of the FEIS.

Comment 5 – Due to increasing urbanization within the Project area, we would prefer that all of the mitigation be placed within the Project vicinity only if the mitigation area(s) buffer other existing protected lands. Otherwise, we believe that the mitigation area(s) should be located outside of the LMA in order to adequately replace the fish, wildlife, and habitats that are lost.

FHWA Response – Design of the mitigation will be an integral part of the design of the road and bridge infrastructure, and must be finalized prior to the issuance of any construction permits. The specific locations of mitigation areas cannot be determined at this time. Ideally, the mitigation would be constructed in the vicinity of the infrastructure, if available land were present. If mitigation placement is required outside of the LMA, appropriate coordination with applicable regulatory agencies will be undertaken as part of the design/permit process.

Indiana Department of Environmental Management

Comment – The department, upon review of the FEIS, had no additional comments to offer. The Offices of Land and Water will address their specific environmental review requirements during the permitting process.

FHWA Response – This response is acknowledged by the FHWA and included in the project administrative record. Coordination with the department will be undertaken as required during the final design and permitting processes.

Kentucky Division of Water

Comment – The FEIS generally addresses the Division of Water’s concerns; however, further comments on groundwater were offered – potential impact to B. E. Payne Water Treatment Plant by the location and design of A-15 abutment and piers, and bridge deck runoff possibly containing contaminants. Groundwater Protection Plans (GPP) are required before construction and must be in place during all phases of construction.

FHWA Response – FHWA notes that in its comment on groundwater issues, the Kentucky Division of Water acknowledged the agreement of the Kentucky Transportation Cabinet to include appropriate measures with the Project in response to

each of the four points contained in the Division of Water's comment letter. For point 1 (bridge abutment and design), the B. E. Payne Water Treatment Plant infrastructure and sources will be taken into consideration in locating and designing the bridge abutment. For point 2 (bridge pier locations and design), the method of construction of bridge piers and location of those piers would be modified to avoid impacts and bridge piers will not be constructed in the settlement lagoons. For point 3 (storm water discharge from bridge), runoff will be collected and managed to avoid discharges into the Ohio River and adjacent shore. For point 4 (groundwater protection plans), KYTC acknowledges the need for development and implementation of these plans throughout the construction phase. FHWA concurs with the Kentucky Transportation Cabinet in the commitments responding to each of these four points. In fact, the first three points are addressed in measures included in the FEIS in Chapter 8 for construction through the Louisville Water Company Wellhead Protection Area. The commitment on point 4 to work with the Division of Water Groundwater Branch in developing and implementing appropriate GPPs throughout the construction phase is consistent with current KYTC operating procedures and Kentucky Division of Water requirements; however, an additional commitment should be included as part of the Project, and FHWA has done so by adding this provision in Section 4 of the ROD.

Louisville Metro Government

Comment 1 – The Louisville Metro Government will begin a plan to recapture and integrate 30 acres within the existing Kennedy Interchange for future use.

FHWA Response – The “Kennedy Interchange East Louisville Downtown Area Planning” enhancement (\$450,000) will identify the reclamation requirements and future land use for re-use of the existing Kennedy Interchange right-of-way (approximately 40-45 acres). Fifteen acres will serve as mitigation for impacts to parks (Section 4(f) resources) from C-1; the use of the 30-acre balance will be identified by the study.

Comment 2 – Hazardous routing designations should be posted to avoid the downtown core.

FHWA Response – The designation of hazardous materials routes was addressed in Responses to Comments B.18, B.24, N.15 and N.16 in Chapter 7 of the FEIS. There are no current plans to designate hazardous materials routes in the LMA, nor is such a designation part of the purpose and need for the Project. Any future designation would occur pursuant to applicable federal, state and local guidelines.

Comment 3 – All components of the Project should move forward as soon as possible.

FHWA Response – FHWA and the States are committed to moving ahead as soon as possible. The Financing Options Document and Responses to DEIS Comments B.9 and B.10 discuss the staging of construction of the project. Current plans provide for constructing both bridges at the same time with the I-265 Bridge open in 2014 and the new I-65 Bridge in 2020.

Comment 4 – Construction management and maintenance of traffic plans should be developed in cooperation with the city.

FHWA Response – A preliminary traffic maintenance plan has been developed as part of the Financing Options Plan. During the design phase, details will be refined. Coordination concerning the maintenance of traffic plan will include the Louisville-Jefferson County Metro Government, as requested.

Comment 5 – Plans should be drafted to provide for emergency, ambulance and fire response. Construction of the tunnel would create additional concerns for evacuation and communications.

FHWA Response – The eastern portion of the Selected Alternative, Alternative A-15, will provide for a one-lane gated access road from Transylvania Avenue to I-265 specifically for emergency access to the tunnel should an incident occur. The emergency access road is illustrated in Figure 5.5-2 of the FEIS. Establishment of evacuation procedures and a communications network will be coordinated with the local fire department during the design of the Selected Alternative.

City of Jeffersonville

Comment – The FEIS should be modified to not preclude the possible renovation and conversion of the Big Four Bridge into a pedestrian and bicyclist facility. Such a facility might obviate the need for a pedestrian and bicycle facility on the new I-65 Bridge, which has the potential to increase adverse impacts on Jeffersonville. Additional coordination was recommended to determine the location(s) of these facilities.

FHWA Response – The Waterfront Development Corporation in Louisville has included in its plan of Phase II of the Waterfront Park the conversion of the Big Four Railroad Bridge into a pedestrian walkway. FHWA is open to a value engineering proposal to shift the bicycle/pedestrian facility from C-1 to the Big Four Bridge, if a third party were able to demonstrate definitively that the near-term and long-term costs would be reduced. Such a change would require that the NEPA, Section 4(f) and Section 106 evaluations be revisited to address the value-engineering proposal.

City of Green Spring

Comment 1 – The ROD should contain a commitment to provide noise barriers for the City of Green Spring.

FHWA Response – The analysis in the FEIS indicated that a potential noise barrier is feasible and reasonable along a segment of Alternative A-15, currently KY 841, adjacent to the City of Green Spring. The construction of the noise barrier will be evaluated for constructability during the design phase of the Project, as detailed in the Response to USEPA's Comment 7, above.

Comment 2 – The ROD should provide detailed mitigation measures for protection of the groundwater well system and wellhead protection area.

FHWA Response – Groundwater and wellhead protection was detailed in Section 5.8.2 of the FEIS and in Chapter 7 of the FEIS, in Response to DEIS Comment J.1. Protection of these resources is also detailed in the ROD in Section 4.

Comment 3 – The ROD should commit to BMP’s to avoid and minimize harmful impacts.

FHWA Response – The ROD commits to using BMP’s during the construction of the Project to minimize impacts. Such BMP’s are outlined in Chapter 8 of the FEIS and are confirmed in the ROD.

Comment 4 – Construction of an eastern bridge as the first phase of construction would prolong impacts to the urban neighborhoods within the limits of the downtown alternative.

FHWA Response – Construction impacts were discussed in Section 5.14 of the FEIS and in Response to DEIS Comment P.16. All major elements of the Selected Alternative, including both the downtown and eastern bridges, would be commenced simultaneously. The eastern bridge is not proposed to be constructed as the “first phase” of the Project, although it is expected to be completed before the downtown bridge as a result of the complexity of the downtown project—including connection to the complex Kennedy Interchange Reconstruction.

Comment 5 – The eastern bridge does not warrant funding prioritization over other local, regional and state funding needs.

FHWA Response – Information regarding project costs can be found in the FEIS Summary Section S.2.3. The associated Financing Options Document further details project costs, project phasing, historical revenue trends and projected future revenues, and a reasonable financing strategy. The Financing Options Document reflects the intent of the States to commit funds from their available resources to support construction of the proposed project over the estimated 2007-2020 construction period. The historical trend information, the projected future revenues available to the States, and the strategy articulated to finance the project serve as a reasonable demonstration that the States are positioning themselves to give priority to funding the proposed project, at the same time as they continue to give priority to maintenance of their existing system.

Comment 6 – Project support data does not reflect the degree of controversy generated against the need for an eastern bridge.

FHWA Response – Information is presented in the FEIS in Chapter 7 and Appendix F regarding use of public input in the generation and analysis of alternatives. Although there may be individuals who are opposed to the implementation of an eastern alternative, there has been significant demonstrated support for it. As detailed in Chapter 2 of the

FEIS, an eastern alternative (as part of the Selected Alternative) satisfies the purpose and need for the project.

Comment 7 – Construction of the downtown bridge should proceed first, based on funding projections and demonstrated need.

FHWA Response – The Financing Options Document and Responses to DEIS Comments B.9 and B.10 discuss the staging of construction of the project. Those plans provide for constructing both bridges at the same time with the I-265 Bridge open in 2014 and the new I-65 Bridge in 2020. Although construction will commence at the same time, the eastern (I-265) bridge is expected to open approximately six years earlier because of the complexities of building the downtown elements of the Project, including the complex Kennedy Interchange reconstruction.

Comment 8 – The ROD should commit to the construction of a “half diamond” interchange at KY 841 and U.S. 42; said interchange is not to be reconstructed for 50 years from the date it is opened to traffic.

FHWA Response – Construction of the partial interchange at KY 841 and U.S. 42 is an element of the Selected Alternative as detailed in Section 3.7 of the FEIS and confirmed in the ROD. A commitment to a 50-year time frame to avoid reconstruction of this interchange from the date it is opened to traffic is not reasonable. FHWA typically does not enter into this type of arrangement. After it is opened to traffic, future usage would dictate reconstruction of the interchange, if required.

Louisville Water Company

Comment– The ROD should commit to continuing coordination with the Louisville Water Company during the design, construction and operation of the Preferred Alternative, A-15 and the Ohio River Bridge. This will insure that their concerns over pier placement, accidental spills, and roadway drainage are addressed.

FHWA Response – ROD Section 4.1.8, includes a commitment to coordinate with the Louisville Water Company regarding the four specific items included in their comment letter. During the development of the DEIS and FEIS, coordination was continuous with Louisville Water Company and the Indiana-American Water Company. During the design, construction and operation of Alternative A-15 coordination will continue as detailed in Chapter 7 of the FEIS, in Response to DEIS Comment J.2.

Transit Authority of River City (TARC)

Comment – The future utilization of either the Clark Memorial or Kennedy Bridge is key to the future extension of the Transportation Tomorrow South Central Corridor Light Rail project into southern Indiana. The acknowledgement in the FEIS that any conceptual designs for the Preferred Alternative thus far do not preclude such options is encouraging.

FHWA Response – Section 3.7 of the FEIS provides details of the components of the Selected Alternative including the use of these bridges for enhanced bus service. This project results in a 2025 LOS B on the Clark Memorial Bridge, thereby preserving the future potential for expanding light rail into Indiana across the Clark Memorial Bridge.

River Fields, Inc.

Comment 1 – Defer the ROD until a supplemental EIS is issued that addresses the significant problems with the study process and supporting analyses.

FHWA Response – As demonstrated in the DEIS and FEIS, and in the detailed responses to comments provided in the FEIS and the ROD, FHWA, in cooperation with INDOT and KYTC and their Project consultant, and in consultation with United States EPA, other federal, state, and local agencies, and the public, has engaged in a thorough and comprehensive review of the likely environmental effects of this Project. Concerns about the EIS process and analyses have been acknowledged and addressed in the extensive responses to comments. Based on a review of all of the information in the record, FHWA has executed a Record of Decision (ROD) for this Project confirming the Selected Alternative as the feasible and prudent alternative that best meets the Project's purpose and need while minimizing environmental impacts to the extent practicable. FHWA does not agree that a supplemental EIS is needed or that the ROD should be postponed.

Comment 2 – This Project has always been and continues to be two separate projects – a downtown project that solves current traffic safety and congestion problems and an eastern bridge that supports desires for future land development in only a portion of the region.

FWHA Response – As detailed in the FEIS Response to DEIS Comment A.3, the purpose of this Project is to provide a long-term solution to the need for improved cross-river mobility between Clark County, Indiana and Jefferson County, Kentucky. Through years of careful study and extensive public and agency input, FHWA, INDOT, and KYTC have identified several specific needs related to improving cross-river mobility in the LMA, which are described in detail in the Statement of Purpose and Need, Chapter 2 of the FEIS. Those needs include: inefficient cross-river mobility for areas experiencing existing and planned growth, traffic congestion on the Kennedy Bridge and within the Kennedy Interchange, traffic safety problems within the Kennedy Interchange and Kennedy Bridge and its approach roadways, inadequate cross-river transportation system linkage and freeway rerouting opportunities in the eastern portion of the LMA, and locally adopted transportation plans that call for two new bridges across the Ohio River and reconstruction of the Kennedy Interchange. Based on the extensive analysis of alternatives documented in the FEIS, and in particular in Chapter 3 (Alternatives), FHWA has concluded that the Selected Alternative, including a new downtown bridge, an eastern bridge, and a reconstruction of the Kennedy Interchange, is the feasible and prudent solution to the region's long-term cross-river mobility needs. Any single-bridge

alternative (either downtown or in the east) would not adequately address those needs. As explained in greater detail in Sections 2.2.3 and 2.2.4 of the FEIS, evaluation of alternatives that would address only a portion of those interrelated cross-river mobility needs (such as downtown congestion and safety issues), as suggested by this comment, would not be reasonable and would be inconsistent with the National Environmental Policy Act (NEPA) regulations to evaluate related actions within the same geographic area in one EIS, so as to avoid the problems of “segmentation.”

Comment 3 – Concerned about cost of building the project, revenue required for the project, impacts on the current program and sequencing contained in the Financing Options Plan.

FWHA Response – FHWA initiated a cost estimate review to verify the expected cost of this Project and to provide the best possible estimate of cost. The future revenue streams for the INDOT and KYTC were then evaluated to determine the ability of the two states to fund the project over the period of time required to complete work, currently estimated at approximately 17 years. As acknowledged in the Financing Options Document prepared as part of the EIS process, the cost estimate included in that document was based on one possible scenario for completing construction of the Project and assisted FHWA in developing a reasonably reliable, updated cost estimate. Based on this information, FHWA believes Indiana and Kentucky can fund this project over the time required to complete the Project. Before any construction commences, FHWA and the states will complete the required Mega Project Financing Plan, which will identify and confirm the financial resources needed to complete this Project, and will consult closely in developing a sequencing plan for construction of the Selected Alternative to ensure that realistic financial assumptions are being made. Construction will not commence without completion of the required Financial Plan demonstrating the constructability of this Project over the Project time period.

Comment 4 – Announcement of a preferred alternative by Indiana and Kentucky governors was made in July 2002, prior to completion of the FEIS.

FWHA Response – There is no legal prohibition on the states or FHWA announcing their preferred alternative prior to publication of the FEIS. (In fact, the agencies could have, but did not, identify a Preferred Alternative in the DEIS.) In this case, the governors of Indiana and Kentucky announced their preferred solution prior to FHWA’s selection of a Preferred Alternative, which was announced in the FEIS in April 2003. FHWA did not endorse the “Preferred Alternative” announced by the two states in July 2002. While FHWA understood the decision of the two governors to announce their preferred solution to their constituents at that time, FHWA was committed to completing the Section 106 historic properties review process and various other environmental inquiries, including reviewing and responding to all comments received on the DEIS, before announcing its Preferred Alternative. Thus, FHWA chose to wait to select and announce a Preferred Alternative in the FEIS. During this time, additional consultation with other federal agencies on the impact of the Project to human and natural resources was conducted to provide sufficient information to allow FHWA to announce a Preferred Alternative. While the States’ July 2002 statement of their Preferred Alternative was a

relevant factor in FHWA's consideration, that announcement did not foreclose FHWA's independent decision-making process. The basis for FHWA's selection of a Preferred Alternative is set forth in detail in the FEIS.

Comment 5 – Toll analysis was issued late in the process and demonstrated 78% to 99.5% of the purported future users of an eastern bridge do not value their time savings from the bridge enough to pay a one-way toll of \$1 - \$2. Additional comment in Section 1-1 of the River Fields, Inc. letter was offered concerning the different values used in the preliminary toll analysis and the user benefit analysis included in the FEIS.

FHWA Response – A preliminary toll analysis was undertaken in the early work on this Project to assess the “feasibility” of this option as a source of funding for the Project. The preliminary analysis demonstrated that a radical drop in usage could be expected if a toll of \$1 or more was applied to a new eastern bridge because a number of “free” river crossing options would continue through the Sherman Minton, Clark Memorial and Kennedy Bridges. Moreover, FHWA and the states determined that it would not be practical to toll these otherwise “free” pre-existing crossings. The preliminary toll analysis was based on an assumed \$0.10 per minute value of time (\$6.00 per hour). The preliminary toll analysis was included in the Financing Options Plan to acknowledge the early consideration for this option and to identify the basis for it not being carried forward as a funding option for the Project. This analysis was a purely preliminary, “rough” calculation to determine the basic feasibility of the tolling option. A more refined toll analysis would have included a detailed assessment of the value of time to be used in establishing the toll that would maximize use and revenue. However, the results of the preliminary analysis demonstrated that imposing tolls would not be a reasonable option, and no additional, detailed analysis was performed (nor would any have been done even if an \$18 per hour value of time had been used in the preliminary analysis).

The toll and user benefits analyses were completed at different times in the EIS process and for different reasons. The preliminary toll analysis was performed early in the Project, to evaluate the “feasibility” of tolls as an option for funding all or some portion of the Project. The user benefit analysis was performed later in the process to provide the public with an additional measure of the benefits from an improved highway system. This was only one of several measures of effectiveness used to evaluate the alternatives presented in the EIS, and in itself was not the determinative factor in identifying the Selected Alternative. In fact, the Selected Alternative proved to be the most desirable alternative across most, if not all, of the measures used to evaluate Project alternatives, including reductions in vehicles miles and hours of travel (VMT and VHT, respectively) and vehicle hours of delay (VHD), improvements in levels of service and reduction of congestion downtown, provision of additional cross-river linkage and rerouting opportunities, and satisfaction of locally-adopted transportation plans.

The \$18 per hour value of time is the value used by FHWA in the Highway Economic Resources System (HERS) model for the Highway Needs Report to Congress every two years. INDOT has adopted this value and uses it routinely for other user benefit analyses for projects statewide.

Comment 6 – The eastern bridge will move almost 11,000 jobs from one portion of the region to another.

FHWA Response – This comment was previously addressed in Responses to DEIS Comments D.4 and D.7, which are included in Chapter 7 of the FEIS. The DEIS and FEIS acknowledged a small shift in future population and employment growth from far eastern Jefferson and Oldham Counties in Kentucky, to Clark and Floyd Counties in Indiana. This shift would not affect the urban core or western and southern areas of Jefferson County. No existing jobs would be lost; rather, a small shift in future growth rates would occur, with all of the affected areas continuing to see healthy growth through 2025. Moreover, the areas that would see slightly higher growth rates are somewhat closer to the urban core than those areas that would see slightly lower growth rates.

Comment 7 – Inclusion of National Security as a need.

FHWA Response – Numerous comments were received on the DEIS, including one from the United States Department of Defense noting that improvements to the Interstate System for capacity or system redundancy purposes would benefit the United States Department of Defense’s military deployments. In particular, the United States Department of Defense noted that a new eastern Interstate highway bridge over the Ohio River in the LMA would be beneficial in the event of deployment from Fort Carson, Colorado and Fort Riley, Kansas to Port of Hampton Roads, Virginia. In revising the Statement of Purpose and Need in the FEIS based on comments received on the DEIS, FHWA added a reference to this information within the larger context of the discussion of the need for improved cross-river linkage and additional freeway rerouting opportunities in the LMA. This information was not emphasized as a primary motivation for the Selected Alternative, but rather as an additional example of the already identified need for improved cross-river linkage and a reduction in the region’s dependence on the limited number of river crossing options in the downtown area. Contrary to the commenter’s suggestion, this information was not included in an effort to obtain additional, defense-related funding for the Project.

Comment 8 – The eastern bridge could cause tremendous harm, including potential impacts to the regional drinking water supply. The conflict between the eastern bridge and the regional drinking water aquifer cannot be solved by threading the bridge around the wells.

FHWA Response – Alternatives developed for the Project were evaluated to assess impacts to human and natural resources, including water quality and water resources, such as the Louisville Water Company Wellhead Protection Area near Prospect. This wellhead protection area is approximately bounded by the Indiana bank of the Ohio River, Harrods Creek, U.S. 42 and the Jefferson/Oldham County line. The A-15 portion of the Selected Alternative passes through this area and will include the construction of bridges and highway embankments. The Louisville Water Company was consulted on multiple occasions during the development of alternatives, during the evaluation of impacts that could be expected from alternatives, after identification of the Preferred

Alternative in the FEIS, and during the circulation period for the FEIS. In addition, the Kentucky Division of Water was consulted about the construction of the eastern portion of the Selected Alternative through the wellhead protection area. These consultations were designed to obtain the responsible agencies' input and to identify any necessary measures to ensure the protection of the regional drinking water aquifer. The conceptual plan for handling bridge deck drainage and disposition of runoff from the roadway was identified and addressed in the latter meetings, after identification of the Preferred Alternative. Construction through the wellhead protection area without impacting the aquifer is feasible, provided adequate measures are included to protect the groundwater resources. The conceptual drainage plan and other measures included in the FEIS for construction through the wellhead protection area provide a sound basis for proceeding with the next phase (design phase) of the Project. Both the Louisville Water Company and the Kentucky Division of Water have concurred in this conclusion, and have not objected to the construction of the Selected Alternative in this area. Both agencies have requested continued consultation and coordination going forward to ensure that their concerns about wellhead protection are sufficiently addressed during the design of the Project. FHWA has included a commitment to continue coordination with the Louisville Water Company on their plans to construct a hard-rock collection tunnel and collection wells along the Ohio River between Harrods Creek and the B. E. Payne Water Treatment Plant to minimize or avoid conflicts in the placement of the tunnel, wells and bridge piers, and to ensure that adequate measures are included in the Selected Alternative to avoid any adverse impacts to the drinking water supply.

Comment 9 – Neither the DEIS or FEIS cite any data to support the need for an eastern bridge to address “inefficient” mobility between eastern portions of the Louisville/Jefferson County Metro Government area and southeastern Clark County.

FHWA Response – Chapter 3 of the FEIS summarizes several measures of improvement in cross-river mobility associated with each of the alternatives evaluated in the EIS. Those measures demonstrate that construction of an eastern bridge will improve the efficiency of cross-river travel, by helping to reduce VMT, VHT, and VHD. Section 3.6.5 and Table 3.6-5 of the FEIS illustrates the need for completion of the eastern portion of the circumferential highway traffic system. In addition, the FEIS clearly demonstrates the inefficiency experienced in cross-river travel between eastern Jefferson County and southeastern Clark County as the result of the need for all cross-river travelers to travel to downtown Louisville to cross the Ohio River, thereby adding miles and additional time to their travel. As cross-river travel demand grows over the next 20 years, those inefficiencies can reasonably be expected to increase.

Comment 10 – Traffic projections are based on erroneous and non-standard professional practices.

FHWA Response – Comments identifying alleged erroneous and non-standard professional practices in the local travel demand modeling process were acknowledged and addressed in detail in Responses to DEIS Comments C.2 and C.3 in the FEIS. These

comments have not identified any additional substantive issues that were not previously addressed in the FEIS.

Comment 11 – User benefits are outweighed by the Project cost.

FHWA Response – User benefit calculations were included in the FEIS simply as one measure to assist readers in understanding the savings in travel time (VHT), distance (VMT) and delay (VHD) projected for the Selected Alternative. These benefits were calculated for a 20-year period after completion of the Project. This provides a very conservative measure of the value of having the improvements completed, since no credit is given to the use of completed elements of the Project until the whole project is completed. The \$18 per hour value of time was derived from data provided by the INDOT and used by that transportation agency to calculate the benefits to users for transportation improvements. The methodology provided in the December 2000 “Highway Economic Requirements System – HERS” publication was used to calculate user benefits. This is the FHWA model used to prepare the congressionally mandated Highway Needs Report every two years. The calculations demonstrate the substantial benefit of having the Selected Alternative completed and available for travel within the regional highway system. However, this is not the only measure of benefits associated with construction of the Selected Alternative, nor is it necessary for projected “user cost savings” to outweigh the Project construction cost to justify construction of a highway project. As noted above in the Response to River Fields, Inc. Comment 5, the analysis documented in Chapter 3 of the FEIS demonstrates that the Selected Alternative will provide numerous benefits to the LMA that justify the expenditure of the anticipated Project cost. Thus, even if the \$18 per hour value of time were reduced, the overall benefits of the Selected Alternative would justify its construction.

Comment 12 – Most of what the DEIS and FEIS claim as future (not current), projected congestion reduction benefits from building the eastern bridge have nothing to do with building the bridge.

FHWA Response – This comment was acknowledged and addressed in detail in Response to DEIS Comment C.2 in the FEIS. These comments have not raised any additional substantive issues that were not previously addressed in the FEIS.

Comment 13 – The purpose and need statement in the FEIS places much more emphasis than the DEIS on the two bridge resolution of cross-river mobility needs as being the result of a “federally sanctioned” Metropolitan Planning Organization Process.

FHWA Response –The federally sanctioned transportation planning process, conducted through the Metropolitan Planning Organization (in this case, KIPDA) is the legitimate and proper starting point for evaluating the environmental effects of potential transportation improvements. The Purpose and Need Statement, Chapter 2, of the FEIS highlighted the development of the “two bridges” proposal through that planning process. However, as part of the ongoing NEPA process, FHWA has independently evaluated the need for improvements in cross-river mobility, and has confirmed that the Selected

Alternative best meets that need with the least environmental harm among the reasonable alternatives. The Purpose and Need Statement appropriately noted the transportation planning history as one of the factors demonstrating the need for improved cross-river mobility. Based on the conclusions of the NEPA process, KIPDA has amended the 2025 RMP to incorporate the Selected Alternative, which is similar but not identical to the “two bridges” proposal previously included in the long-range transportation plan.

Comment 14 – Inclusion of the eastern bridge in the Bi-State Regional Transportation Plan of 1969 was based on a major premise of constructing a new regional airport in Clark County and the plan included numerous projects, which have never been built.

FHWA Response – The reference to the 1969 Regional Transportation Plan was provided as part of the general Project background in the Project History section of the DEIS and FEIS. While providing part of the historical context for the Project, the inclusion of an eastern bridge in the 1969 plan was not a determinative factor in the evaluation of alternatives in this process. The factors that led to the identification and evaluation of alternatives are described in detail in the Statement of Purpose and Need, Chapter 2 of the FEIS. Those needs are based on current socio-economic and travel conditions within the LMA, rather than decades-old assumptions about future infrastructure projects. Thus, the assumptions underlying the 1969 Regional Transportation Plan are essentially irrelevant to this Project decision.

Comment 15 – Direct taking of Belleview Historic District by the A-15 alignment has not been acknowledged.

FHWA Response – The boundary of this historic property was researched during the review of this Project under Section 106 of the National Historic Preservation Act. The historic boundary of the Belleview property, as described in the National Register nomination for the property, was included in the mapping used to develop, refine and select alternatives that were evaluated in the EIS. That boundary was included in the historic properties identification material provided to the Kentucky State Historic Preservation Officer (KY SHPO) and Section 106 consulting parties. No land within the boundary of the historic property is to be acquired as a part of this project. The KY SHPO concurred in that identification material and has executed the Section 106 MOA indicating that FHWA has successfully taken into account the effect of the Project on historic properties. In response to recent letters from Mr. James Thompson, owner of the Belleview property, FHWA undertook a review of the information collected on this property during the Section 106 process and reconfirmed that the boundary included on Project mapping accurately represents the historic boundary of Belleview as recognized on the National Register of Historic Places (NRHP). The “north field” as Mr. Thompson refers to the additional property he acquired after purchase of the Henry Bell farm, is not part of the historic Belleview property that was listed on the NRHP. Moreover, FHWA has determined, and the KYSHPO has concurred, that the so-called “north field” is not eligible for inclusion on the NRHP in association with the Belleview property. FHWA issued a letter dated August 13, 2003 to the Advisory Council on Historic Preservation (ACHP) and KYSHPO reaffirming the FHWA eligibility finding for Belleview and the

Kentucky SHPO concurred that the “north field” was not part of Belleview (refer to Attachment C). Mr. Thompson has been notified in writing of this determination by FHWA.

Comment 16 – Section 4(f) – incomplete and incorrect constructive use analysis

FHWA Response – The “Technical Report on Proximity Impacts to Section 4(f) Properties” was prepared by the FHWA to provide the evaluation of proximity impacts to nearby section 4(f) properties in order to determine if a “constructive use” would occur. A substantial amount of work was performed in the NEPA, Section 106, and Section 4(f) evaluation processes to evaluate historic properties and potential impacts to those properties. Consultation with the ACHP, INSHPO and KYSHPO and over 40 consulting parties resulted in the evaluation of a large number of properties. Documentation on FHWA’s eligibility determinations and findings of effects were compiled and provided to consulting parties for review and comment. The information in those documents was used in evaluating potential proximity impacts of the Selected Alternative and determining if a constructive use would occur.

The Drumanard Estate Historic District, Belleview, Rosewell, Merriwether House, Allison-Barrickman property, Determan and Schildknecht houses were included in that technical report and analysis. After consideration of comments from consulting parties and other interested parties on the findings of effect for these properties, the FHWA continues to believe that the proximity impacts described in the technical report accurately represent the likely impact of the Selected Alternative on those properties, and that there would be no substantial impact to the historic integrity of the properties or to the historic characteristics or attributes that make them eligible for the NRHP. Consequently, no constructive use would occur.

The Selected Alternative has a direct impact on the three historic properties – Butchertown Historic District, Old Jeffersonville Historic District, and Phoenix Hill Historic District – addressed as historic urban neighborhoods in the comment letter. The adverse effect of the Selected Alternative on these historic properties is acknowledged in the Section 106 documentation and the Section 4(f) use of the properties is acknowledged in the FEIS/Section 4(f) Evaluation.

The Drumanard Estate Historic District is an individually listed historic property and, as noted on Page 36 of the technical report, also a contributing property to the Country Estates of River Road Historic District. The Drumanard Estate Historic District is the contributing property of the Country Estates of River Road Historic District in closest proximity to the Project. The evaluation and determination that no constructive use would occur for the Drumanard Estate Historic District would therefore also apply to the Country Estates of River Road Historic District. The next contributing property in closest proximity to the Selected Alternative (Alternative A-15) is the Edward Strater House, which is adjacent to the Drumanard Estate Historic District but farther south. The relationship of the Edward Strater House to the Drumanard Estate Historic District and the Country Estates of River Road Historic District is acknowledged in the Section 106

Determination of Eligibility document on pages 149, 161, and 162 and in the Section 106 Assessment of Effects document on page 58D. The effect of the Selected Alternative on the Edward Strater House therefore has been included in the evaluation of proximity impacts on the Country Estates of River Road Historic District. Based on that evaluation, FHWA has concluded that no constructive use would occur.

The last property identified in the comment letter was the Utica Lime Kilns. The Selected Alternative was acknowledged to have a likely adverse effect on three of the four lime kilns due to blasting. Lime kiln 48004 is the lime kiln in closest proximity to the Selected Alternative (Alternative A-15), being just over 50 feet from the nearest blasting location. Lime kilns 48002/48003 are more than 550 feet from any blasting that would be included in the Project. Measures were included in the Section 106 MOA on pages 17 and 18 to avoid damage to these three lime kilns from the construction of the Selected Alternative. As a result of the re-evaluation of proximity impacts on this property (contained in an addendum to the Technical Report on Proximity Impacts to Section 4(f) Properties), no vibration damage is projected to occur to the lime kilns from construction activities or from traffic on the completed project. The combination of visual, noise and vibration impacts would not substantially impair the historic integrity of the lime kilns or the historic characteristics, which make them eligible for the NRHP. Therefore, proximity impacts would not cause a “constructive use” of the lime kilns (See attachment C).

Comment 17 – In addition to the constructive uses of the Allison-Barrickman property, the historic boundaries of this property continue to be erroneously shown on project maps.

FHWA Response – The comment about possible constructive use of the Allison-Barrickman property is addressed in the response to Comment 16, above. Concerning the historic boundary of the Allison-Barrickman property, FHWA acknowledges there was an error in the historic boundary as it was presented on Project maps. This error has been corrected. This error in the boundary does not change the assessment of effects of the Project on the Allison-Barrickman property, because it involves an area that is on the opposite side of the historic property from the areas in closest proximity to the Project elements (See Attachment C).

Comment 18 – Section 106 Process was flawed because development of the Section 106 MOA focused on C-1/A-15 before FHWA announced the Preferred Alternative.

FHWA Response – FHWA consulted with the Advisory Council on Historic Preservation, Indiana SHPO, Kentucky SHPO, INDOT, KYTC, and other interested parties in delineating the area of potential effects, identifying historic properties and assessing the impact of Project alternatives on historic properties. Upon completion of this work, it was necessary to identify an alternative for use in selecting appropriate mitigation measures and to prepare the MOA. Since this was in advance of publication of the FEIS, FHWA advised Section 106 Consulting Parties that based on the information collected at that time, the two-bridge combination using Alternative C-1, Alternative A-15 and the Kennedy Interchange Relocation to the South appeared to be the most likely

solution and would be used in preparing the MOA. FHWA further advised the Section 106 Consulting Parties that in the event a different alternative was selected as the Preferred Alternative, FHWA would further consult in preparing a new MOA for that alternative. The Section 106 MOA ultimately was signed by the ACHP and the two state SHPOs, signifying their satisfaction with the Section 106 consultation process.

Comment 19 – Section 4(f) – Failure to acknowledge that the Downtown Project is FHWA’s Section 4(f) Avoidance Alternative.

FHWA Response – All of the single bridge alternatives evaluated in the DEIS, including the downtown bridge alternatives, would have required the taking of land from historic properties and/or park and recreation resources; therefore none were Section 4(f) avoidance alternatives. Further in evaluating the single bridge alternatives, none were found to provide the needed improvement in cross-river mobility within the region, thus resulting in the need for selection of a two-bridge solution. The bridge combination of Alternative C-1 and Alternative A-15 with the Reconstruction of the Kennedy Interchange to the South was determined to be both the environmentally preferable alternative and the feasible and prudent alternative that best minimizes harm to Section 4(f) resources.

Comment 20 – Inadequate historic property mitigation – for direct, indirect and cumulative impacts.

FHWA Response – FHWA, in cooperation with INDOT and KYTC and their Project consultant, and in consultation with federal, state, and local agencies, and the public, has engaged in a thorough and comprehensive review of the likely environmental effects of this Project and provided mitigation for those effects to the extent practicable, including mitigation for impacts to historic properties. Mitigation measures and steps for development of the appropriate details for inclusion in construction plans are identified and summarized in Chapter 8 of the FEIS and Section 4 of the ROD. These measures were selected based on the reasonableness and feasibility of mitigating Project impacts and not on an arbitrary amount of money or percentage of the cost of other items of work.

From the very early environmental work on the Project, FHWA has included consideration for avoiding and minimizing impacts to historic properties as well as other environmental resources within the Project Area. The identification of alternatives and selection of those to be considered in more detail through the environmental impact statement was based on these guiding principles. FHWA has continued the refinement of alternatives to assist in identifying the environmentally preferable alternative. It is difficult to assign a quantitative value to all of the measures included to mitigate impacts. For example, context sensitive solutions or context sensitive design are project development philosophies used by INDOT and KYTC that integrate environmental concerns into the development and construction of projects. The details of mitigation measures to be included in construction plans will therefore be developed through a continuing, comprehensive consideration of actions to further minimize, avoid or mitigate project impacts. The mitigation provided in the FEIS and ROD will therefore be

developed to provide for an effective response to the effect of this Project on historic properties and other elements of the human and natural environment.

The evaluation of impacts also included indirect and cumulative impacts and a number of measures were included in the Project for those impacts. A Smart Growth Conference was included to provide information for local governments in the region to use in responding to changes that can reasonably be foreseen as a result of implementation of the Project. In addition, INDOT included a \$300,000 grant as a project enhancement to assist Clark County, Indiana in improving its land use planning process and to more effectively manage development within the area where the greatest change is likely to occur. The KYTC included a number of measures to assist the local community in integrating elements of the Project into the community such as the \$450,000 planning/design funds for the East Louisville Downtown Area Planning, \$150,000 planning funds for the Downtown/West Louisville Access Planning, \$1.5 million training funds for a Minority Historic Rehabilitation Craftsman Training Program, and \$10 million for funding of the restoration and adaptive reuse of the Trolley Barn where the Kentucky Center for African-American Heritage can be relocated to serve as a focal point for cultural, social, and educational programs. FHWA through the consultation on this Project and in cooperation with the INDOT and KYTC has prepared a comprehensive plan for mitigating Project impacts in a way that will further integrate the Project into the community.

Comment 21 – Failure of FHWA to exercise independent and objective decision making and oversight.

FHWA Response – The FHWA has fulfilled its responsibility to objectively oversee development of the Project and NEPA process through a cooperative Bi-State Management Team, including the INDOT and KYTC, who selected the Project consultant to assist in the preparation of the documentation required by NEPA. FHWA participated in the development of the Project, overseeing the process as work was being undertaken. This active participation through the Bi-State Management Team has also provided FHWA with the information necessary to identify the Selected Alternative that provides the environmentally preferable alternative and provides the region with the necessary improvement in cross-river mobility to address the region’s needs both today and in the future.

As noted in the response to River Fields, Inc. Comment 4, above, while FHWA understood the decision by the Indiana and Kentucky governors in July 2002 to announce their preferred solution, FHWA did not make a project decision at that time, choosing to complete work on the Section 106 consultation and continue consultation with other federal agencies before announcing a decision.

Community Transportation Solutions, Inc. (CTS) was selected by the two states as the Project consultant. Project Managers assigned to the Project from both states, who participated actively in the Bi-State Management Team and consulted regularly with FHWA, provided oversight of CTS’s work. In addition, through the Bi-State

Management Team and FHWA's independent oversight, extensive guidance, review and direction were given to CTS during the preparation of technical studies, associated processes, such as early coordination with federal, state and local agencies on Project alternatives, and preparation of the DEIS and FEIS for the Project. All decisions with respect to the Project generally and NEPA compliance specifically have been the ultimate responsibility of the FHWA, and have been made by the FHWA after consulting with INDOT and KYTC, with the assistance of CTS.

Comment 22 – Procurement process for the General Engineering Consultant

FHWA Response – FHWA was aware of the decision by the INDOT and KYTC to advertise and interview for the services of a General Engineering Consultant prior to the completion of the environmental phase of the Project. Planning for the continued development of this Project is in accordance with federal and state requirements, and commitments provided for in the ROD are appropriate and in the public interest. The contract for these services, however, should not be approved until FHWA issues its decision through approval of the ROD.

Comment 23 – Failure of the study consultant to disclose in the FEIS its financial interest in the outcome of the Project.

FHWA Response – The DEIS and FEIS were prepared by CTS under the guidance and direction of INDOT and KYTC. As state agencies with statewide jurisdiction for transportation decision-making and implementation within their respective states, INDOT and KYTC were authorized to prepare the NEPA documentation for this Project. FHWA, as the federal agency responsible for NEPA compliance, furnished guidance and participated actively in the preparation of the DEIS and FEIS, and independently evaluated both the DEIS and FEIS prior to their approval and adoption. FHWA is fully responsible for the scope and contents of the FEIS. The services of CTS were procured by the two states to assist in the preparation of various technical reports, as well as the DEIS and FEIS themselves. INDOT and KYTC have consistently supervised and reviewed the work of CTS to ensure its objectivity prior to its submission to FHWA, and FHWA performed an independent evaluation prior to approving and adopting the DEIS and the FEIS.

There is no federal requirement for the consultant to acknowledge in the FEIS an interest in any future work on the Project. Moreover, CTS had no financial interest in the outcome of the Project to disclose in the FEIS. Prior to the adoption and publication of the FEIS, which identified FHWA's Preferred Alternative, CTS had no promise or guarantee of future work on the Project. At most, CTS had a general expectation that it might be eligible to perform some of the subsequent engineering or design work for the next phase of the Project, subject to normal contract bidding procedures. Throughout that time, FHWA, INDOT, and KYTC carefully supervised and directed CTS's work to ensure its objectivity. The final decision, documented in the Record of Decision, is that of FHWA alone, based on its careful and independent evaluation, in consultation with INDOT and KYTC.

In responding to the INDOT Professional Services Bulletin (PSB-2003-14), issued on April 4, 2003 for the procurement of a General Engineering Consultant (GEC), CTS acknowledged its role in the environmental (NEPA) phase of the Project. CTS's role in assisting the Bi-State Management Team in preparing the EIS was acknowledged in the cover letter accompanying its submission, within the body of the material required by INDOT, and in the oral presentation on July 8, 2003 before the INDOT/KYTC selection committee.

Comment 24 – Failure to address indirect and cumulative environmental justice impacts from the Eastern Bridge and the pending Title VI complaint.

FHWA Response – The FHWA takes seriously its obligations under Title VI of the Civil Rights Act of 1964. FHWA strives to ensure that its activities meet both the letter and the spirit of that legislation and that its partners in managing and developing the transportation system for Indiana and Kentucky are also fulfilling their obligations. Comments offered in response to the DEIS about environmental justice were therefore carefully reviewed. In responding to those comments in the FEIS in Chapter 7 (Section E), FHWA re-evaluated the information prepared for the Project to ensure that low-income and minority populations within the community would not disproportionately bear the burden of exposure to human health or environmental hazards. This re-evaluation also took into account the Title VI Complaint filed by two members of the Kentucky General Assembly in February 2002. Material compiled in response to the complaint as well as the results of FHWA's re-evaluation were used in preparing the FEIS. The FEIS also serves as FHWA's response to the Title VI Complaint. FHWA believes the impacts of the Project on low-income and minority populations are accurately described in the FEIS and have been fully considered in its decision about the Selected Alternative.

As noted above, responses to comments on Environmental Justice were included in Section E in Chapter 7 of the FEIS. Specific reference to the Title VI Complaint and responses addressing portions of the material were provided in the Responses to DEIS Comments E.6, E.7, E.18, E.19, and E.44.

The report identified as “Beyond Merger – A Competitive Vision for the Regional City of Louisville” prepared by the Brookings Institution Center on Urban and Metropolitan Policy was released for distribution within Louisville and Jefferson County in mid 2002. There is little reference to the Louisville – Southern Indiana Ohio River Bridges Project in this report, nor was there any extensive contact or coordination with the FHWA. We understand that one of the primary reasons for preparation of the report was to prepare Louisville and Jefferson County for their merger of city and county governments. The report served to identify broad issue areas and provide information for bringing about that change in government. Throughout the development of this Project, FHWA and the Bi-State Management Team have consulted with the City of Louisville and Jefferson County governments and would expect to continue that process with the new Metro Government as design plan development work continues. In fact, a number of project enhancements

are included in the measures prepared for any unavoidable Project impacts. Many of the broad issue areas identified in the report would be addressed by these measures.

The Brookings report was not developed for use in preparing the environmental impact statement for the Louisville – Southern Indiana Ohio River Bridges Project. However, certain issues identified in the report as important for the new government to address, such as the indirect and cumulative impact of changes in land use within the region, were also important in evaluating project alternatives and in selecting the most environmentally preferable alternative for the Project. Indeed, the level of detail and depth of analysis provided in the DEIS and FEIS concerning these issues, and specifically within the context of the regional transportation system and the specific effects of this Project, far exceed the general, relatively generic and academic observations contained in the Brookings report. Thus, the concerns raised in the Brookings report have been fully and carefully evaluated through the much more detailed and specific EIS process. It will be important for FHWA and the Bi-State Management Team to maintain the contact with local government noted above in developing the details for construction of the Project.

Comment 25 – The Technical Report on Proximity Impacts to Section 4(f) Properties failed to identify increases in noise levels for the Drumanard Estates Historic District, Country Estates of River Road Historic District, Belleview Historic District, Rosewell, Merriwether House, Allison-Barrickman, Determan House, and Schildknecht House and overlooked constructive use of these properties because of noise.

FHWA Response – River Fields, Inc. apparently overlooked Table 1 in the Technical Report on Proximity Impacts to Section 4(f) Properties (Technical Report), which provides a summary of information on proximity impacts for each of the properties listed above. The table includes information on noise impacts for the alignment nearest the historic property, including:

1. Projected noise,
2. Existing noise,
3. Increase in noise over existing,
4. No-build noise, and
5. Increase in noise over no-build.

FHWA carefully outlined the evaluation of proximity impacts in Page 1 through 4 of the Technical Report. Increases in noise levels were fully considered for each of these properties to determine whether or not the proximity impacts (increase in noise in this instance) would constitute a constructive use of the property and FHWA determined that there would be no constructive use of any of these properties.

The following table was prepared to provide a comparison of information included in the Technical Report on Proximity Impacts to Section 4(f) Resources for the nearest alignment to the historic property, Alignment A-15, and River Fields, Inc.'s comment letter on the FEIS:

TABLE COMPARING NOISE USED IN TECHNICAL REPORT ON PROXIMITY
IMAPCTS, NOISE FOR ALTERNATIVE A15, NOISE CITED IN RIVER FIELDS
COMMENT LETTER ON FEIS

<u>Historic Property</u>	<u>Nearest Alignment</u>	<u>Noise Impact</u>			<u>Noise – A15</u>			<u>RFI</u>	<u>Noise Receptor</u>
		<u>P</u>	<u>E</u>	<u>D</u>	<u>P</u>	<u>E</u>	<u>D</u>		
Drumanard	A13/A15	54	48	6	54	48	6	6	H7
Belleview	A13	64	49	15	65	49	16	16	H9
Rosewell	A16	67	45	22	68	45	23	23	H11
Merriwether	A15	62	47	15	62	47	15	16	H8
Allison-Barrickman	A9	65	51	14	60	51	9	13	H5
Determan	A15	71	43	28	71	43	28	28	H12
Schildknecht	A16	68	46	22	63	46	17	17	H13

P – Projected Noise; E – Existing Noise; D – Difference

Comment 26 – The Federal Highway Administration (FHWA) itself abandoned VHD as a meaningful way to measure travel improvements three years ago.

FHWA Response – River Fields, Inc. has taken FHWA guidance on congestion measures completely out of context. The reference to a change in the use of VHD (vehicle hours of delay) as a performance measure was contained in the FY 2000 Performance Plan. FHWA noted in that plan that a change from the use of VHD was necessary to provide a more effective metric for a system-wide measure of congestion. In changing from the use of VHD as a measure in the Performance Plan, however, FHWA did not abandon the use of VHD as a performance measure on individual projects. FHWA has no policy or guidance prohibiting the use of VHD as a performance measure. That decision is left up to the local transportation planning organization to determine what’s most appropriate for the project. VHD, along with a number of other performance measures for congestion, was determined to be appropriate for use on the Louisville – Southern Indiana Ohio River Bridges Project.

Comment 27 – The Financial Plan required for mega projects (per Section 1305(b) of TEA-21, and in accordance with FHWA Guidance – Financial Plans, May 2000) must be completed and accepted to demonstrate KIPDA compliance with federal transportation planning requirements.

FHWA Response - The FHWA Guidance – Financial Plans, May 2000, states “in all cases the Initial Financial Plan must be accepted by FHWA before authorization of Federal-aid funding for project construction.” The FHWA Guidance encourages States to develop the Financial Plan earlier where possible, but it is not required until just prior to Federal-aid authorization of construction. Final design and right-of-way acquisition may proceed prior to FHWA acceptance of the initial Financial Plan.

Comment 28 – The KIPDA 2025 RMP Amendment and the new FY 2004-06 TIP should list estimated project costs in year-of-expenditure dollars, rather than current year dollars.

FHWA Response – The fiscal constraint regulations (23CFR450.216(a)(5), 450.32(b)(11), and 450.324(e)) do not require that costs be reported in year-of-expenditure dollars. All Metropolitan Planning Organization (MPO) 20-year Transportation Plans and 3-year TIP estimates of project costs and available revenues are in current year dollars, not year-of-expenditure dollars. FHWA included both estimates in the FEIS for NEPA disclosure purposes. The intent was to make it clear how the time value of money would impact the final overall project cost using one possible schedule for design, right of way acquisition and construction of the project. However, given that MPO Plan and TIP estimates of project costs and revenues are in current year dollars, it is appropriate that KIPDA program \$1.936 billion for the Louisville-Southern Indiana Ohio River Bridges Project (\$1.312 billion for KYTC and \$0.623 billion for INDOT).

Comment 29 – The \$99 million in High Priority Project (HPP) funds programmed in the KIPDA FY 2004-06 TIP are not fiscally constrained against the HPP funds shown in the KYTC FY 2003-08 STIP Fiscal Balance Sheet.

FHWA Response – KIPDA amended the FY 2004-06 TIP on August 28, 2003 and reduced the programmed KYTC HPP funds to the historical earmarks that have come to the Louisville Bridges Project over the 6-year life of TEA-21 (\$34.3million/6-years = \$5.7 million/year). FHWA and FTA approved the amendment of the KIPDA FY 2004-06 TIP (as amended on August 28, 2003) into the KYTC FY 2003-08 STIP on August 28, 2003. The HPP funds for the Louisville Bridges Project that are in the TIP and STIP are consistent, and are fiscally constrained.

FHWA has also reviewed the list of HPP projects included in the KYTC STIP (as amended on August 28, 2003), and find that all the HPP funded projects (other than Louisville Bridges) are already supported in existing law, and have carry-over apportionments/obligational-authority to support them. The only project included in the STIP that is programmed based on estimated future HPP apportionments is the Louisville Bridges Project (\$5.7 million/year for FYs 2004-06). As such, FHWA finds that the statewide estimate of STIP HPP apportionments is reasonable.

Comment 30 – The KIPDA FY 2004-06 TIP and the KYTC FY 2003-08 STIP do not meet the fiscal constraint requirements in 23CFR450.216(a)(5) and 450.324(e).

FHWA Response - We have reviewed the KIPDA June 26, 2003 and KYTC July 8, 2003 responses to the River Fields June 10, 2004 letter to KIPDA, and we concur with the KIPDA/KYTC responses. We have reviewed the KYTC FY 2003-08 STIP Amendment planned obligations, against the estimated apportionments, and find that the STIP is fiscally constrained, by year. We have also reviewed the August 28, 2003 KIPDA FY 2004-06 TIP Amendment Fiscal Balance Sheet planned obligations against the estimated apportionments, and find that the TIP is fiscally constrained, by year. Given the above, FHWA and FTA approved the KYTC request to amend the KIPDA FY 2004-06 TIP (as amended on August 28, 2003) into the KYTC FY 2003-08 STIP on August 28, 2003 [See Attachment F].

Comment 31 – The KYTC STIP is not fiscally constrained since the KYTC Six-Year Highway Plan is not fiscally constrained.

FHWA Response – The KYTC STIP is a federally approved document, and the associated Federal-aid projects/program must be fiscally constrained. The KYTC Six-Year Highway Plan is approved by the Kentucky General Assembly, and there is no requirement that State funded projects or the State funded program be fiscally constrained. The KYTC STIP clearly distinguishes between Federal-aid projects and State funded projects. Per the STIP fiscal constraint requirements (23CFR450.216(a)(5)), it is only required that the Federally funded projects be fiscally constrained against estimated Federal-aid apportionments. This requirement only applies to the first three years (FY 2003-2005) of the FY 2003-2008 Kentucky STIP and projects in the remaining years are for information only.

The Kentucky General Assembly approved the FY 2003-08 Six-Year Highway Plan, assuming the Governor's six cent per gallon increase in state motor fuel taxes would materialize. Unfortunately, the six-cent gas tax was not adopted by the General Assembly. As such, the list of State funded projects exceeds currently available State revenues. KYTC has assured FHWA that priority will be given to operating and maintaining the existing system, matching the Federal-aid program, and funding State funded capacity adding projects in non-attainment or maintenance areas so conformity is not adversely impacted.

In conclusion, KYTC has addressed the TIP/STIP fiscal constraint requirement for Federal-aid projects, and as such, we have approved the KYTC request to amend the KIPDA FY 2004-06 TIP (as amended on August 28, 2003) into the KYTC FY 2003-08 STIP on August 28, 2003.

Comment 32 – The KIPDA 2025 RMP Amendment is not fiscally constrained, because the KYTC FY 1999-2018 Statewide Transportation Plan (Dec. 1999) has not been updated, and it reflects the Louisville Bridges Project as an illustrative project.

FHWA Response – The statewide transportation plan regulations (23CFR450.214) do not require that the statewide transportation plan be updated on any given frequency, or in advance of an MPO transportation plan update. In fact, there is no requirement that the statewide transportation plan be fiscally constrained or project specific. In fact, it is acceptable for a State to adopt a policy plan.

Federal regulations require that the KIPDA 2025 RMP “Include a financial plan that demonstrates the consistency of proposed transportation investments with the already available and projected sources of revenue. The financial plan shall compare the estimated revenues from existing and proposed funding sources that can reasonably be expected to be available for transportation uses, and the estimated costs of constructing, maintaining and operating the total (existing plus planned) transportation system over the period of the plan. The estimated revenue by existing revenue source (local, State, and Federal and private) available for transportation projects shall be determined and any shortfalls identified. Proposed new revenues and/or revenue sources to cover shortfalls shall be identified, including strategies for ensuring their availability for proposed investments. Existing and proposed revenues shall cover all forecasted capital, operating, and maintenance costs. All cost and revenue projections shall be based on the data reflecting the existing situation and historical trends. For non-attainment and maintenance areas, the financial plan shall address the specific financial strategies required to ensure the implementation of projects and programs to reach air quality compliance” (23CFR450.322(b)(11)).

KIPDA “flat-lined” current revenues out for the life of the plan. This estimate did not assume any growth in transportation funds provided to KIPDA, and thus is very conservative. Given the conservative nature of this estimate, and the fact that it is a 20-plus year estimate, FHWA considers it reasonable that KIPDA has programmed \$2.5 billion in projects against the conservative \$2.4 billion estimate of available revenues. The difference is well within the “level of accuracy” of a 20-year fiscal estimate.

The States have expressed their intent to fund the Louisville Bridges Project over the 2004-2020 design and construction period with State and Federal funds in excess of KIPDA’s “flat-line” estimate. FHWA has reviewed the KYTC April 22, 2003 letter to KIPDA and the associated “Financial Plan for construction of Two Ohio River Bridges and the Reconstruction of the I65-I71-I64 Interchange,” and find that it is fully consistent with the likely financing strategy included in the FEIS Financing Options Plan technical report. FHWA has determined that the projected total revenues available to the States (based on actual revenues received over the 12-year period of ISTEA and TEA-21) are adequate to support their expressed intent to fund the Louisville Bridges Project.

The April 22, 2003 letter to KIPDA highlights that other financing options such as bonding will be considered in developing the Financial Plan, which must be accepted by FHWA prior to FHWA authorization of construction. FHWA has determined that the 2025 RMP Amendment financial plan, together with the April 22 commitment to KIPDA by KYTC and INDOT, satisfy the requirements included in 23CFR450.322(b)(11).

Comment 33 – FHWA cannot approve the ROD until the Louisville Area Ozone Maintenance SIP is updated using Mobile 6.

FHWA Response – R-4 and R-5 EPA published their respective adequacy findings for the updated Louisville Area Ozone Maintenance State Implementation Plan (SIP) budgets using Mobile 6 in the August 7, 2003 Federal Register ... these budgets became effective August 22, 2003. KIPDA adopted the 2025 RMP Amendment and the FY 2004-06 TIP on June 26, 2003, and the KIPDA FY 2004-06 TIP was amended on August 28, 2003. The respective air agencies have reviewed the associated conformity analysis and forwarded comment letters to FHWA indicating that the analysis meets the requirements of the conformity regulations. KYTC forwarded a letter dated August 14, 2003 listing regionally significant State funded projects, and committed to give them funding priority “so that air quality designations and conformity are not adversely impacted.” The first analysis year for the KIPDA conformity analysis is 2012, and so FHWA believes it is reasonable to expect that the FY 2004-06 TIP/STIP regionally significant projects will be given funding priority and find that the conformity analysis is reasonable. By letter dated August 14, 2003, KYTC affirmed that the reduction in estimated HPP to \$5.7 million/year in KIPDA’s FY 2004-06 TIP “will not affect the estimated completion date for the Louisville Bridges Project.” Based on these letters of support, and our finding that the RMP/TIP/STIP are fiscally constrained, FHWA and FTA issued the RMP/TIP conformity finding on August 28, 2003 [See Attachment F].

Comment 34 – KYTC has not demonstrated that they will adequately operate and maintain the existing highway and transit system.

FHWA Response - By letter dated August 11, 2003, KYTC noted that they plan to expend the following amounts for operating and maintaining the State highway system over FYs 2004-06: \$399.4, \$407.5, and \$415.3 million respectively. These amounts provide for a 2% annual growth in revenues that are specifically set aside for maintenance and operation of their system. These funds are budgeted in such a way that they cannot be used for State funded capital improvement projects. Regarding transit, KYTC noted that the funding amounts included in the TIP and STIP for transit capital and operating/maintenance continue at historical levels. These funding levels for Section 5307, 5310, and 5311 transit funds have been summarized on the STIP and TIP Fiscal Balance Sheets. FHWA finds that the funding levels for operating and maintaining the existing system are consistent with historical averages, and we find that KYTC has made commitments to operate and maintain the existing system at an acceptable level.

Historic Landmarks Foundation of Indiana

Comment 1 – The entire Smith Farm should be included when discussing the preservation of this resource.

FHWA Response – As detailed in the executed Section 106 MOA, INDOT has agreed to accept by donation and preserve that portion of the Smith Farm that was determined eligible for the NRHP as a rural historic farmstead. The executed MOA further states that the INDOT (if the property is donated) will develop a Historic Preservation Plan (HPP) for treatment and rehabilitation of the residence and grounds reuse of the property for public use and maintenance by a local or regional preservation organization of local government acceptable to INDOT and the IN SHPO. It is not reasonable or appropriate to utilize historic preservation mitigation measures to preserve properties or portions of properties that are not eligible for listing on the NRHP.

Comment 2 – The exterior rehabilitation of the Smith house should be expanded to include accessory farm structures that contribute to the NRHP-eligibility of the site as a rural farmstead.

FHWA Response – The executed MOA states that the INDOT (if the property is donated) will develop a Historic Preservation Plan (HPP) for treatment and rehabilitation of the residence and grounds reuse of the property for public use and maintenance by a local or regional preservation organization of local government acceptable to INDOT and the IN SHPO. Mitigation measures will be focused on aspects of the farm that contribute to its National Register-eligible historic character. It is not reasonable or appropriate to utilize historic preservation mitigation measures to preserve properties or portions of properties that are not eligible for listing, or listed, on the NRHP.

Comment 3 – The DEIS and MOA made no mention of the 17-foot wide pedestrian and bicycle path on the upstream side of the bridge. The incorporation of the pedestrian and bicycle path would encroach further into the Old Jeffersonville Historic District. The use of the Big Four Bridge as a pedestrian and bicycle path is recommended instead of the expansion of Alignment C-1.

FHWA Response – The executed Section 106 MOA description of the undertaking includes the 17-foot pedestrian and bicycle paths on both new bridges. Use of the Big Four Bridge could be considered as a value-engineering proposal if it would result in a less expensive option (both near-term and long-term). The NEPA, Section 4(f) and Section 106 evaluations would need to be revisited to consider such a value-engineering proposal.

Comment 4 – FHWA has failed to meet its Section 4(f) obligations in that the agency has not provided a justification for why relocation of the Central Passage House is not feasible and prudent.

FHWA Response – In accordance with Section 4(f) requirements, properties protected by Section 4(f) must be avoided unless there is no “feasible and prudent” alternative that would avoid the protected property. The Central Passage House is an element of the Swartz Farm Rural Historic District. As noted in the Section 4(f) Chapter, there is no “feasible and prudent” alternative that would avoid the Swartz Farm Rural Historic District, due to its proximity to the S.R. 265/S.R. 62 Interchange. Relocating the Central Passage House was considered as one of the “measures to minimize harm” to the Swartz Farm Rural Historic District, but it was determined that the integrity of the Central Passage House and its relationship to the District could not be adequately maintained by relocating the house. The MOA resulting from the Section 106 process contains a commitment to prepare archival documentation for the Central Passage House as a measure for minimizing impacts to the Swartz Farm Rural Historic District. The minimization measures contained in the MOA were developed in conjunction with numerous historic agencies, groups, associations, and other interested consulting parties, and received concurrence from the IN SHPO and the Advisory Council on Historic Preservation (ACHP).

Comment 5 – Connecting a federal highway with the INAAP property would be questionable use of federal funds until the contamination of that property is resolved.

FHWA Response – I-265, the Federal highway in question, would not connect with the INAAP property. However, Salem Road would be extended, as part of the Salem Road Interchange, to Patrol Road within the INAAP property. Access to Patrol Road would be restricted until the completion of the decommissioning of the property currently being undertaken by the Department of the Army. This issue was also addressed in Response to Comment N.14 in Chapter 7 of the FEIS.

Comment 6 – The mitigation funding commitment levels for neighborhood, community and environmental impacts appear grossly inadequate at approximately 1% of the total project cost.

FHWA Response – FHWA, in cooperation with INDOT and KYTC and their Project consultant, and in consultation with federal, state, and local agencies, and the public, has engaged in a thorough and comprehensive review of the likely environmental effects of this Project and provided for mitigation of those effects to the extent practicable. Mitigation measures and steps for development of the appropriate details for inclusion in

construction plans are identified and summarized in Chapter 8 of the FEIS and Section 4 of the ROD. These measures were selected based on the reasonableness and feasibility of mitigating Project impacts and not on an arbitrary amount of money or percentage of the cost of other items of work.

From the very early environmental work on the Project, FHWA has included consideration for avoiding and minimizing impacts to the human and natural environment. The identification of alternatives and selection of those to be considered in more detail through the environmental impact statement were based on these guiding principles. FHWA has continued this refinement of alternatives, to assist in identifying the environmentally preferable alternative. It is difficult to assign a quantitative value to all of the measures included to mitigate impacts. For example, context sensitive solutions or context sensitive design are project development philosophies used by INDOT and KYTC that integrate environmental concerns into the development and construction of projects. The details of mitigation measures to be included in construction plans will, therefore, be developed through a continuing, comprehensive consideration of actions to further minimize, avoid or mitigate project impacts. The mitigation provided for in the FEIS and ROD can therefore be developed to provide for an effective response to the environmental effects of this Project on the human and natural environment.

Comment 7 – The downtown and eastern projects should be unlinked due to insufficiencies in the Purpose and Need.

FHWA Response – The purpose and need of the proposed action is to improve cross-river mobility between Jefferson County, Kentucky and Clark County, Indiana. As detailed in Section 2.2 of the FEIS and Response to DEIS Comment A.3, the interrelation of identified factors contributes to the need for two new bridges across the Ohio River.

Comment 8 – More funding is needed to address the issue of providing a long-term strategy to address cumulative and secondary impacts.

FHWA Response – As noted in the response to Comment 6, above, FHWA has engaged in a thorough and comprehensive review of the likely environmental effects of this Project, including indirect and cumulative effects. A commitment is included in the FEIS and ROD for a Smart Growth Conference that will provide information for local governments in the region to use in responding to changes that can reasonably be foreseen as a result of implementation of the Project. In addition, INDOT has included a \$300,000 grant as a project enhancement to assist Clark County, Indiana in improving their planning process and to more effectively manage development within the area where the greatest change is likely to occur.

Comment 9 – Need update of comprehensive plans and creation of more stringent zoning ordinances in Clark and Floyd counties before constructing an eastern bridge.

FHWA Response – As detailed in Chapter 8 of the FEIS, INDOT has committed to funding a \$300,000 grant for improvements to the Clark County, Indiana land use planning process, and sponsoring a Smart Growth Conference within three years of the ROD.

Colgate-Palmolive

Comment 1 – Additional investigations are needed to avoid impacts to the Colgate-Palmolive Company from the relocation of the wastewater treatment plant.

FHWA Response – The Project recognizes the Colgate-Palmolive Company as an integral component in the economic development of southern Indiana. Furthermore, the Project recognizes (in Response to DEIS Comment D.92) that the razing or relocation of the wastewater treatment plant servicing the Colgate-Palmolive factory may impair the company from its regular production. Therefore, various design concepts at the Tenth Street Interchange may be explored during the design phase of the Project to find a suitable location for the wastewater plant or otherwise avoid the taking of the plant.

Comment 2 – Comments and conclusions made in the January 29, 2002 response to the DEIS remain valid.

FHWA Response These comments were addressed in the Responses to DEIS Comments D.92 and F.49.

Butchertown Neighborhood Association, Inc.

Comment 1 – Utility lines should be buried through the Butchertown Historic District.

FHWA Response – A number of mitigation measures were included in the executed Section 106 MOA for the Butchertown Historic District; however, provision for burying of utility lines throughout the District was not one of those measures. This measure was considered during the Section 106 consultation process, but was determined not to be reasonable or necessary to mitigate the likely impacts of the Project on the Butchertown Historic District. The provision for development of a Historic Preservation Plan will provide the Butchertown Neighborhood Association with a useful tool for planning and implementing additional measures not included with the Project. In addition, Stipulation II.F of the MOA provides for consideration of additional measures that are found to be reasonable for inclusion in the Project.

Comment 2 – There is no mention in the MOA of historic easements for residential, commercial, and industrial owners in Butchertown. Vendome Copper and Tasman Industries will be required to create new orientation to (extended) Witherspoon Avenue. The Barnwasser Packing House and Producer Feeds are historic structures, which may be taken as part of the project, and were not discussed in the Section 106 review.

FHWA Response – A number of mitigation measures were included in the executed Section 106 MOA for the Butchertown Historic District; however, provision for an easement acquisition program was not one of those measures. This measure was considered during the Section 106 consultation process, but was determined not to be reasonable or necessary to mitigate the likely impacts of the Project on the Butchertown Historic District. The provision for development of a Historic Preservation Plan will provide the Butchertown Neighborhood Association with a useful tool for planning and implementing additional measures not included with the Project. In addition, Stipulation II.F of the MOA provides for consideration of additional measures that are found to be reasonable for inclusion in the Project.

Comment 3 – The Geiger Mill foundation under I-64 needs protection during construction.

FHWA Response – As noted on Page 184 of the Section 106 Final Determination of Eligibility document prepared for the Project, the ruins along I-64 initially thought to be the site of the old Geiger Mill appear to be a distillery that burned in this vicinity. The old Geiger Mill site is actually further east, in the corner of the intersection of Frankfort Avenue and Mellwood Avenue. Work on the project is not expected in this area; therefore, there was no likely impact on the mill site. FHWA has phased the final identification, evaluation, and determination of Project effect for archaeological resources (see Section 106 MOA, page 2). The steps required to complete work on archaeological resources are provided in Stipulation IV of the Section 106 MOA. Disposition of the ruins along I-64 and other sites within the project footprint will, therefore, be determined in accordance with these procedures.

Comment 4 – The study of the impact of the new ramps for I-64 at Mellwood/Story Avenues and I-71 at Ohio/Frankfort Avenues is incomplete. Two way traffic on Story and Mellwood Avenues is important to the Butchertown Historic District and the Clifton Historic District.

FHWA Response – FHWA, in cooperation with INDOT and KYTC and their Project consultant, and in consultation with federal, state, and local agencies, and the public, has engaged in a thorough and comprehensive evaluation of project alternatives and the likely environmental effects of those alternatives in identifying the Selected Alternative for the Project. The Project includes reconstruction of the I-64 ramps to and from the Mellwood Avenue/Story Avenue Interchange and a connector roadway between these two one-way streets, along the east side of I-64. The FHWA is aware of the interest in possibly converting these one-way streets to two-way operations through the limits of the Project, and has provided for a study during the development of final plans (see Section 106 MOA Stipulation III.K.11). This study along with information developed through the Historic Preservation Plan prepared for the Butchertown Historic District and the Kennedy Interchange – East Louisville Downtown Planning project enhancement will provide the information necessary to consider this change to the Project during the final design phase.

Comment 5 – Two archaeological sites have not been included: the Geiger Ferry Buildings and the site of a Union Fort during the Civil War.

FHWA Response – The Project’s archaeologists evaluated both of these resources and determined the Project would not impact either site as the sites lay outside of the proposed right-of-way.

Comment 6 – The historic route of Beargrass Creek is in the right-of-way of relocated Spaghetti Junction. Evidence of the creek location will be lost.

FHWA Response – The location of Beargrass Creek has been modified a number of times in the past through this area and most of its historic route has already been lost. The current location of Beargrass Creek falls east of the relocated Kennedy Interchange and is not anticipated to be significantly impacted by the Project. Work at the crossing of I-71 and I-64 over Beargrass Creek would be primarily tie-in work such as matching pavement width and possibly rehabilitating the structure to accommodate the widened approaches. The Project is not expected to alter the route of the creek.

Rose Hill Neighborhood Association

Comment 1 – The FEIS underestimates the construction impacts from C-1 on the Old Jeffersonville Historic District and provides inadequate relief.

FHWA Response – The response to a similar comment was provided in the Response to DEIS Comment R.10.

Comment 2 – We continue to recommend an underpass for Court Avenue to reduce the required height of the U.S. 31 approach lanes, reducing impacts to the Clark Memorial Bridge and the Ohio Falls Historic District. This option should be included in the comprehensive engineering study, which will be done for this part of the Project.

FHWA Response – FHWA recognizes the interest in including an underpass for Court Avenue under the US 31 connection between I-65 and the Clark Memorial Bridge and provided a response to such a suggestion on Page 41 of the “Response to Menu of Mitigation Opportunities” provided to Section 106 Consulting Parties under a cover letter dated January 20, 2003. This document was prepared to provide responses to suggested mitigation measures for project impacts to historic properties. The preliminary evaluation of this option found it not to be prudent or feasible; however the Section 106 MOA includes a stipulation (Stipulation III.D.1.) for INDOT and KYTC to make every reasonable effort to avoid displacement of the bridge pylons during the development of construction plans. A treatment plan would then be developed for unavoidable displacement of the bridge pylons or any other contributing element to the historic Clark Memorial Bridge.

Comment 3 – Alternative C-1 and the mitigation proposed for it in the MOA have resulted in the Old Jeffersonville Historic District and Rose Hill being seriously shortchanged relative to Louisville and eastern Jefferson County.

FHWA Response – FHWA, in cooperation with INDOT and KYTC and their Project consultant, and in consultation with federal, state, and local agencies, and the public, has engaged in a thorough and comprehensive review of the likely environmental effects of this Project and provided for mitigation of those effects to the extent practicable. The measures were selected irrespective of geographic location (Indiana or Kentucky, downtown or east end); however the unique characteristics of each resource and its relationship to the area were important considerations. For the Old Jeffersonville Historic District, mitigation measures were identified in the Section 106 MOA and incorporated into the ROD for the likely impacts of the Project on this historic resource. These measures are based on the relationship of the Project to the historic resource and the likely impact on the characteristics and qualities that make it eligible for listing on the NRHP.

Comment 4 – Supports building an additional bridge in eastern Clark and Jefferson Counties to connect the LMA outer beltway. Strongly urges that the advantages of any eastern bridge be maximized as much as possible in view of its predicted impacts.

FHWA Response – As detailed in Sections 2.2 and 3.6 of the FEIS and Responses to DEIS Comments A.4, A.6, A.8, A.9, A.24, A.25, A.26, A.27, A.30 and A.34, the need for an east end bridge across the Ohio River is justified.

Comment 5 – State-of-the-art noise and light mitigation, such as Full Cut Off (FCO) lights, soundproofed concrete edge barriers and “quiet pavement”, for the Kennedy Bridge as well as the C-1 Bridge should be implemented.

FHWA Response – Work on the existing John F. Kennedy Bridge (I-65) over the Ohio River through this project is limited, primarily to restoration of the deck to provide for one-way (southbound) traffic flow after completion of the new C-1 Bridge, which will provide six lanes for northbound traffic. A response to this comment was provided on Page 38 of the “Response to Menu of Mitigation Opportunities” provided to Section 106 Consulting Parties under cover letter dated January 20, 2003. FHWA consulted with the INDOT and KYTC and did not find it reasonable to retrofit the lighting, barrier walls, or other elements of the existing John F. Kennedy Bridge. Inclusion of these items would likely require major reconstruction of the superstructure in lieu of simply removing the existing barrier wall and restriping the deck to accommodate one-way traffic after completion of the new C-1 Bridge for northbound traffic.

St. Francis in the Fields Episcopal Church

Comment 1 – Alternatives A-13a, A-13b, A-15a and A-15b would have adverse noise on St. Francis in the Fields Church.

FHWA Response – As detailed in Section 5.3.1.2 of the FEIS, FHWA has determined that these alternatives would cause no adverse noise impact upon St. Francis in the Fields Church. Potential noise impacts upon this property were also discussed in Chapter 7 of

the FEIS, in Response to DEIS Comment H.17. Alternative A-13 (a and b) is not part of the Selected Alternative. Alternative A-15 (a and b) is predicted to increase the noise level by 3 dBA Leq over existing levels. Since the first audibly discernable change in noise levels is 3 dBA Leq, Alternative A-15 (a and b) will have no adverse effect on St. Francis or the surrounding landscape. The St. Francis vicarage is further from the Selected Alternative than the monitored sites and would have an even smaller increase in future noise levels.

Comment 2 – There has been no provision made for St. Francis to be afforded the same noise and vibration monitoring as will be given to other churches that are impacted by the project.

FHWA Response – Provisions were included in the Section 106 MOA to provide noise and vibration monitoring for St. Joseph’s Church, Franklin Street Baptist Church, Marcus Lindsay Methodist Church and Grace Immanuel United Church of Christ within the Butchertown Historic District and St. John’s Church and Refuge in Kentucky Church within the Phoenix Hill Historic District. These provisions were concurred upon by the KY SHPO and IN SHPO to mitigate for adverse noise and vibration impacts on the Butchertown Historic District and the Phoenix Hill Historic District resulting from the Project. As detailed in the Response to DEIS Comment H.17, the Selected Alternative is predicted to have no adverse noise effect on St. Francis. Likewise, vibration analyses, as detailed in Section 5.6.2 of the FEIS and Responses to DEIS Comment I.8, show no impacts to structures in the project area, including St. Francis.

Comment 3 – Alternatives A-13a and A-15a would have an adverse vibration effect on St. Francis in the Fields Church.

FHWA Response – As detailed in Section 5.3.1.2 of the FEIS, the Section 106 process has shown that these alternatives would cause no adverse vibration effect upon the church property. This analysis was concurred upon by the IN and KY SHPOs.

Comment 4 – Alternatives A-13a, A-13b, A-15a and A-15b would have an adverse blasting vibration effect on St. Francis in the Fields Church.

FHWA Response – The Selected Alternative would have no effect from construction vibration blasting on St. Francis in the Fields Church, as detailed in Section 5.3.1.2 of the FEIS.

Comment 5 – Alternative A-9 would have an adverse visual effect on St. Francis in the Fields Church.

FHWA Response – Alternative A-9 is not included in the Selected Alternative. Therefore, an adverse visual impact on St. Francis in the Fields Church will not occur from this alternative.

Comment 6 – Comments and conclusions made in the January 29, 2002 response to the DEIS remain valid.

FHWA Response – These comments were addressed in the Responses to DEIS Comments B.10, D.35, H.17, I.8 and M.9.

Comment 7 – The FEIS does not specifically address how any of the alternatives in the vicinity of St. Francis in the Fields Church will be constructed so as to avoid interfering with access to and from the church or interference through noise, vibration and other construction concerns with the church’s religious activities.

FHWA Response – The eastern element of the Selected Alternative, Alternative A-15, would not directly impact access to the church’s Wolf Pen Branch Road or U.S. 42 entrance/exit. Indirectly, traffic flow to and from Wolf Pen Branch Road will be altered. Development of a maintenance of traffic plan during the design phase of the Project should provide alternate routes to Wolf Pen Branch Road and U.S. 42. These concerns were also addressed in Section 5.3 of the FEIS and in the Responses to DEIS Comments D.35 and P.1.

Comment 8 – Alternative A-9 would have an adverse construction impact on St. Francis in the Fields Church.

FHWA Response – Alternative A-9 is not included in the Selected Alternative. Therefore, an adverse construction impact on St. Francis in the Fields Church will not occur from the Project.

Coalition for the Advancement of Regional Transportation (CART)

Comment – Comments and conclusions made in the January 29, 2002 response to the DEIS remain valid.

FHWA Response – These comments were addressed in the Responses to DEIS Comments A.1, A.2, A.5, A.28, A.32, A.35, B.1, B.2, B.3, B.4, B.6, B.7, B.11, B.14, B.17, B.30, B.59, B.61, B.62, B.63, B.116, B.125, B.143, C.5, C.11, C.22, C.28, C.30, D.15, D.19, D.81, D.83, D.84, E.7, E.18, E.44, G.19, J.4, J.14, J.41, J.42, J.43, J.44, J.45, J.46, M.2, M.3, P.16, Q.10, Q.15 and Q.21.

The Knob and Valley Audubon Society of Southern Indiana

Comment – The FEIS has made no attempt to address the inadequacies in this study that we pointed out in the DEIS.

FHWA Response – These comments were addressed in the Responses to DEIS Comments B.1, B.6, B.9, B.11, B.61, B.62, B.63, C.23, C.28, D.15, D.19, D.80, D.81, E.1, E.7 and E.8.

Southern Indiana Minority Enterprise Initiative

Comment 1 – Request funding is made available under Section 106 for mitigation for impacts to Taylor High School, despite the fact that this property was not mentioned in the executed MOA.

FHWA Response – This property, also known as the City School, was evaluated in the Section 106 process. FHWA determined that there would be no adverse effect on the property as a result of construction and operation of the Selected Alternative. Consequently, this property was not referenced in the Section 106 MOA, which addresses avoidance and mitigation for adverse effects to historic properties. Because the Selected Alternative will have no adverse effect on this property, mitigation funding under Section 106 would be inappropriate. These findings were reviewed and concurred in by the Indiana SHPO.

Comment 2 – Request for status on Indiana Historic Preservation Advisory Team

FHWA Response – Your request for participation on the Indiana Historic Preservation Advisory Team Preservation will be considered during the organizational meeting of the Indiana and Kentucky Historic Preservation Advisory Teams in accordance with Stipulation I.A.6 of the Section 106 MOA (see Attachment D).

Ohio River Bridges Coalition

Comment – Endorses the need for two bridges and that the project be approached as one project and not two fragmented projects.

FHWA Response – The Purpose and Need of the Project is detailed in Chapter 2 of the FEIS. That Chapter explains the need to evaluate all issues related to cross-river mobility in the LMA within the same alternatives evaluation and environmental review process. The result of that evaluation is the conclusion, documented in the FEIS and the ROD, that the Selected Alternative, including two new Ohio River bridges, is the feasible and prudent alternative that best meets the identified purpose and need. FWHA, INDOT, and KYTC are committed to advancing all elements of the Project together, as noted in the FEIS and ROD.

Nitta Yuma Association

Comment – Concern that Nitta Yuma and effects on the neighborhood were omitted from the DEIS and the FEIS. Lighting, noise, vibration, blasting and dust impacts will negatively affect the neighborhood.

FHWA Response – Nitta Yuma is located within the larger Country Estates of River Road Historic District, and potential adverse effects to Nitta Yuma were addressed within that context. Potential permanent impacts, such as noise and lighting, as well as

temporary impacts associated with construction activities (vibrations, blasting and fugitive dust) to Nitta Yuma have been addressed through mitigation provided in the Section 106 MOA.

Ohio River Foundation (formerly Ohio River Advocacy)

Comment 1 – The FEIS has made no attempt to address the inadequacies in this study that we pointed out in the DEIS.

FHWA Response – These comments were addressed in the Responses to DEIS Comments D.19, G.19, G.20, J.1, J.3, J.4, J.9, J.23, J.42, K.16, K.18, K.33, K.36, K.41, L.15 and Q.30.

Comment 2 – The FEIS fails to mention if any PCB-laden soils are present where bridge piers are to be constructed and what steps would be taken to avoid resuspension if they are present.

FHWA Response – The precise location of bridge piers will be determined during the next phase of work on the Project, taking into account a number of factors, including the navigation channel clearance requirement of the U.S. Coast Guard and structural requirements of the bridge type selected for the site. Very few piers would be placed within the Ohio River channel; therefore the amount of streambed area where construction activities might cause resuspension of streambed sediments would be limited to essentially the area required for construction of bridge footers. Cofferdams are typically used for these situations, to minimize the amount of streambed that would be impacted by construction of bridge pier footers. This method of construction has been identified as the preferred method for the Project (refer to Section 4.1.8 of the ROD.)

Sierra Club – Cumberland Chapter

Comment – The FEIS has made no attempt to address the inadequacies in this study that we pointed out in the DEIS.

FHWA Response – These comments were addressed in the Responses to DEIS Comments A.4, A.5, A.23, B.1, B.4, B.6, B.59, D.16, D.17, D.19, D.21, D.43, E.1, E.17, E.21, E.36, G.4, G.5, J.1, J.5 and L.1.

Kentucky Waterways Alliance

Comment 1 – The Project remains two separate projects separated by eight (8) River miles.

FHWA Response – The purpose and need of the proposed action is to improve cross-river mobility between Jefferson County, Kentucky and Clark County, Indiana. As detailed in Section 2.2 of the FEIS and Response to DEIS Comment A.3, the inter-

relation of identified factors contributes to the need for two new bridges across the Ohio River.

Comment 2 – There remains no traffic justification for the eastern project.

FHWA Response – As detailed in Sections 2.2 and 3.6 of the FEIS and Responses to DEIS Comments A.4, A.6, A.8, A.9, A.24, A.25, A.26, A.27, A.30 and A.34, the need for an eastern bridge across the Ohio River is justified.

Comment 3 – As previously pointed out, the “need” justification presented, that the project is included in one or more land use plans, is not sufficient for a proposed expenditure of almost \$1 billion and that presents significant harmful impacts to the watershed and waters of this portion of the region.

FHWA Response – As detailed in Chapter 2 of the FEIS, there are several interrelated needs affecting cross-river mobility between Jefferson County, Kentucky, and Clark County, Indiana. These are: inefficient cross-river mobility for existing and future population and employment growth on both sides of the Ohio River; peak period traffic congestion in the downtown area; traffic safety problems downtown; inadequate cross-river system linkage and freeway rerouting opportunities; and consistency of the transportation system with locally adopted transportation plans. The stated need for the project encompasses more than its inclusion in one or more land use plans. No resource or permitting agencies indicated in their DEIS comments that the characterization of the purpose and need of this project was inappropriate.

Comment 4 – The new “national defense” statement of need for the eastern bridge in the FEIS appears to be an afterthought.

FHWA Response – Numerous comments were received on the DEIS, including one from the Department of Defense noting that improvements to the Interstate System for capacity or system redundancy purposes would benefit the Department of Defense’s military deployments. In particular, the Department of Defense noted that a new eastern Interstate highway bridge over the Ohio River in the LMA would be beneficial in the event of deployment from Fort Carson, Colorado and Fort Riley, Kansas to Port of Hampton Roads, Virginia. In revising the Statement of Purpose and Need in the FEIS based on comments received on the DEIS, FHWA added a reference to this information within the larger context of the discussion of the need for improved cross-river linkage and additional freeway rerouting opportunities in the LMA. This information was not emphasized as a primary motivation for the Selected Alternative, but rather as an additional example of the already identified need for improved cross-river linkage and a reduction in the region’s dependence on the limited number of river crossing options in the downtown area. Contrary to the commenter’s suggestion, this information was not included in an effort to obtain additional, defense-related funding for the Project.

Comment 5 – The eastern bridge does not deserve funding prioritization with other demonstrated local, regional, and statewide needs.

FHWA Response – Information regarding project costs can be found in the FEIS Summary Section S.2.3. The associated Financing Options Document further details project costs, project phasing, historical revenue trends and projected future revenues, and a reasonable financing strategy. The Financing Options Document reflects the intent of the States to commit funds from their available resources to support construction of the proposed project over the estimated 2007-2020 construction period. The historical trend information, the projected future revenues available to the States, and the strategy articulated to finance the project serve as a reasonable demonstration that the States are positioning themselves to give priority to funding the proposed project, at the same time as they continue to give priority to maintenance of their existing system.

Comment 6 – The major funding and construction emphasis is on the eastern bridge with construction occurring between 2007 and 2014, while construction of the downtown project is stretched out from 2007 to 2020. As a result, the urban environment, including surface waters and the Beargrass Creek watershed, will suffer longer impacts during construction of the downtown project because of the clear emphasis on funding and construction of the eastern bridge first and faster.

FHWA Response – The Financing Options Document and Responses to DEIS Comments B.9 and B.10 discuss the staging of construction of the project; construction impacts and mitigation measures for watersheds are discussed in the FEIS Section 5.14 and Chapter 8 and in the Response to DEIS Comment P.16.

Comment 7 – Our comments remain valid regarding impacts by an eastern bridge to the aquifer that serves as a regional public drinking water source. The FEIS now says that the FHWA will simply build a big retention basin to collect all of the runoff and spills from over a mile segment of the bridge and Kentucky highway. The basin itself can pollute the aquifer. Where is the basin going to be located? How will liquids in it be managed? Who is going to pay for the basin, the liquids disposal and groundwater monitoring?

FHWA Response – Specific comments on this issue made in response to the DEIS are addressed in the Responses to DEIS Comments J.1, J.3, J.5, J.30 and J.48. The basin will not be located on any Section 4(f) property/resource.

Comment 8 – There is very little in the FEIS for environmental mitigation other than standard language regarding the use of best management practices for erosion control and sedimentation prevention. The FHWA should do the very most it can to avoid or lessen harmful impacts, including pre- and post-construction monitoring of water quality to assess whether proposed mitigation measures are effective.

FHWA Response – From the very early environmental work on the Project, FHWA has included consideration for avoiding and minimizing impacts to the human and natural environment. In cooperation with INDOT and KYTC and their Project consultant, and in consultation with federal, state, and local agencies, and the public, FHWA has used information about environmental resources to evaluate a wide range of alternatives and

select those with the least impact for further evaluation in the environmental impact statement. The early and on-going attention to avoiding impacts to environmental resources facilitated the identification of project impacts and selection of mitigation measures to minimize any unavoidable impacts.

The FEIS included measures such as best management practices, general or standard construction practices developed through years of use, specific measures selected for the unique characteristics of locations within the Project, and processes to guide the development of those measures for inclusion in construction plans. In addition, the INDOT and KYTC have included a number of enhancement measures that go beyond the normal requirement for mitigating Project impacts. As Project details are developed, attention will also continue to be given to further avoiding and/or minimizing impacts to environmental resources. This combination of general and specific mitigation measures, processes for development of details for integration into construction plans, Project enhancements, and continued evaluation of ways to further minimize Project impacts provides a well balanced plan to integrate this Project into the landscape through which it passes.

A number of permits will be required for the construction of the Project, including one for wetlands to be displaced by the Project and a number for construction within floodplains and along or across streams. Monitoring requirements for these permits in addition to the overall monitoring provisions included in Section 5 of the ROD will provide effective management and oversight of steps required to fully implement this Project.

Louisville Audubon Society

Comment 1 – Expresses concern about the fast tracking of such a mega project, especially when only 1% is budgeted for environmental mitigation.

FHWA Response – FHWA, in cooperation with INDOT and KYTC and their Project consultant, and in consultation with federal, state, and local agencies, and the public, has engaged in a thorough and comprehensive review of the likely environmental effects of this Project and provided for mitigation of those effects to the extent practicable. Mitigation measures and steps for development of the appropriate details for inclusion in construction plans are identified and summarized in Chapter 8 of the FEIS and Section 4 of the ROD. These measures were selected based on the reasonableness and feasibility of mitigating Project impacts and not on an arbitrary amount of money or percentage of the cost of other items of work.

From the very early environmental work on the Project, FHWA has included consideration for avoiding and minimizing impacts to the human and natural environment. The identification of alternatives and selection of those to be considered in more detail through the environmental impact statement was based on these guiding principles. FHWA has continued this refinement of alternatives to assist in identifying

the environmentally preferable alternative. It is difficult to assign a quantitative value to all of the measures included to mitigate impacts. For example, context sensitive solutions or context sensitive design are project development philosophies used by INDOT and KYTC that integrate environmental concerns into the development and construction of projects. The details of mitigation measures to be included in construction plans will therefore be developed through a continuing, comprehensive consideration of actions to further minimize, avoid or mitigate project impacts. The mitigation provided for in the FEIS and ROD can therefore be developed to provide for an effective response to the environmental effects of this Project on the human and natural environment.

“Fast tracking” or identification of this Project as a High Priority Project, has provided FHWA with greater access to information and resources within other federal agencies to assist in the identification of impacts and measures to avoid or minimize impacts to environmental resources. By including these agencies as the Project was being developed, FHWA has been able to more efficiently complete the steps required by NEPA and to identify the environmentally preferable alternative.

Comment 2 – Impacts to neighborhoods, wildlife habitats and water resources will be too high (i.e. how do we mitigate the loss of mature trees?).

FHWA Response – FHWA has evaluated Project impacts to neighborhoods, wildlife habitats, water resources and a number of other environmental resources. While there may be loss of some mature trees that cannot be replaced immediately, the carefully planned mitigation measures that include revegetation of areas where these trees would be removed and enhancing the vegetation in other areas will provide for a long-term response. These impacts and measures to minimize impacts are identified and summarized in Chapter 8 of the FEIS. As a result of these actions and in consideration of the information provided in the FEIS, supporting technical reports, and input received from federal, state, and local agencies and the public, FHWA believes that the Selected Alternative provides for the needed improvement to cross-river mobility for this region with recognition of impacts to the human and natural environment.

Comment 3 – We do not believe the FEIS justifies construction of an eastern bridge.

FHWA Response – As detailed in Sections 2.2 and 3.6 of the FEIS and Responses to DEIS Comments A.4, A.6, A.8, A.9, A.24, A.25, A.26, A.27, A.30 and A.34, the need for an eastern bridge across the Ohio River is justified.

Comment 4 – Traffic and safety studies still point to the redo of Spaghetti Junction and adding downtown bridge lanes, not to use up all our states highway money on the illogical east end one (bridge) that people even say they would not use if it were a toll bridge.

FHWA Response – The FEIS demonstrates in Section 3.6 the construction of a downtown bridge and reconstructing the Kennedy Interchange alone would result in unsatisfactory peak hour operating conditions. However, as illustrated in Table 3.6-2 of the FEIS, the combination of an eastern bridge with a downtown bridge would result in

an acceptable level of service. In addition, an eastern bridge would complete the eastern portion of the circumferential highway transportation system and will provide additional cross-river freeway rerouting opportunities in the LMA. An eastern bridge, in combination with a new downtown bridge and the Kennedy Interchange reconstruction, also will provide substantial improvements in the efficiency of the regional transportation system and ensure sufficient cross-river system capacity for the foreseeable future.

Comment 5 – The money should be used for the light rail system.

FHWA Response – The use of a light rail transit (LRT) lines across the Ohio River was evaluated in Section 3.3.4 of the FEIS and in Responses to DEIS Comments B.6, B.7 and B.61. The single- and three line LRT were eliminated from consideration due to their high cost (\$329 to \$948 million) and insufficient reductions in cross-river trips (0.2 percent and 0.3 percent of the projected 340,000 vehicles per day in the year 2025).

Comment 6 – The money would be better spent on repairs for the deteriorating existing infrastructure and preserve what habitat and green space we have left for our future generations.

FHWA Response – The No-Action Alternative was evaluated in Sections 3.2.1 and 3.3.1 of the FEIS. In addition, Table 3.6-2 in the FEIS illustrates that under the No-Action Alternative, the Kennedy Bridge, which as of the year 2000 was operating at 6% over its demand capacity, will be operating at over 40% of its demand capacity by the year 2025. Sections 3.2.2, 3.2.3, 3.3.2 and 3.3.3 of the FEIS evaluate various Transportation System Management (TSM) and Transportation Demand Management (TDM) alternatives that would enhance the existing infrastructure. However, none of the TSM or TDM alternatives were determined to satisfy the Purpose and Need of the Project.

Bridgepointe Homeowners Association

Comment 1 – Concern from Bridgepointe residents that the A-15 Alternative threatens the quality of life in their community, the value of their homes, and their personal safety. Please refer to letters sent on July 21, 2001 and August 31, 2002 with questions from Bridgepointe concerning the project.

FHWA Response – FHWA acknowledges the concern that the Bridgepointe Homeowners Association expresses about possible impacts to the quality of life in their community, value of their homes, and the personal safety of residents within the community. These concerns have been included in the evaluation of alternatives and impacts of those alternatives on the human and natural environment and the improvement to cross-river mobility within the region for the alternatives included in the environmental impact statement. The decision about what and where to build the Project provided in Section 1 of this ROD will eliminate much of the uncertainty for Bridgepointe and other neighborhoods along the Project and allow the development of details in the construction plans to minimize any unavoidable impacts to these areas. Mitigation measures included in the Project are addressed in Chapter 8 of the FEIS and Section 4 of the ROD. The

development of details to be included in right-of-way and construction plans will provide the means for avoidance and/or mitigation of unavoidable Project impacts. Communication of accurate information about the likely impacts of the Project on Bridgepointe and other communities along the Project was a primary reason for the inclusion of a Project web site and Project office. These resources were available to disseminate that information to homeowners, neighborhood associations, and other interested citizens throughout this Project.

Comment 2 – Request for a written analysis, supported by a reliable origin and destination traffic study, which demonstrates that spending up to \$500 million for an eastern bridge is warranted.

FHWA Response – This comment was addressed in the Responses to DEIS Comment C.5.

Comment 3 - Request for a concise written summary of any factually supported growth assumption and traffic studies, which clearly demonstrate the benefits of an eastern bridge costing the taxpayers more than \$500 million.

FHWA Response – As detailed in Sections 2.2 and 3.6 of the FEIS and Responses to DEIS Comments A.4, A.6, A.8, A.9, A.24, A.25, A.26, A.27, A.30 and A.34, the need for an east end bridge across the Ohio River is justified.

Comment 4 – Request a written response to the suggested mitigation actions for the described construction impacts.

FHWA Response – Mitigation of construction impacts anticipated by the Preferred Alternative, Alternative A-15, are described in Chapter 8 of the FEIS.

Comment 5 – Request for a certified letter detailing the response to the suggested mitigation actions for the described construction impacts and any information that disputes or disagrees with the need for the mitigation actions, and any valid traffic studies, which specifically justify building an eastern bridge.

FHWA Response – The responses to Comments 3 and 4, above, provide details of traffic studies and mitigation measures, respectively, undertaken and/or developed during the course of the project. In lieu of a certified letter, FHWA will ensure that the homeowners association is provided with a copy of the ROD for review.

James Thompson (4 Letters)

Comment 1 – Comments and conclusions made in the January 29, 2002 response to the DEIS remain valid.

FHWA Response – These comments were addressed in the Responses to DEIS Comments A.1, A.4, A.24, A.34, B.9, B.59, B.60, B.95, C.12, C.15, C.16, D.2, D.3, D.9, D.13, D.15, D.19, D.24, D.44, D.45, D.46, D.47, D.48, D.49, D.50, D.51, D.52, D.70, E.4, E.10, F.8, F.23, F.24, F.25, J.1, M.5, Q.15 and Q.16.

Comment 2 – A study should be completed of the proposed east end bridge provoking a significant relocation of existing downtown, south and west end Kentucky businesses to southern Indiana.

FHWA Response – The socioeconomic analysis presented in Section 5.1 indicates that a small percentage of future job growth in eastern Jefferson and Oldham counties would relocate to eastern Clark County if an eastern bridge were constructed. That analysis did not indicate that any existing jobs would relocate from Kentucky to Indiana, and both areas will continue to see healthy employment growth through 2025 under any of the build bridge/highway alternatives evaluated in the EIS. Implementation of the Selected Alternative is expected to produce significant benefits for residents in both Kentucky and Indiana by improving cross-river mobility, including in the eastern area, and making the transportation system more efficient.

Comment 3 – Question the drainage catchment basin, which would hold more than 18,900 cubic yards and if a location had been considered for a basin of that size.

FHWA Response – The identification of a basin required for managing storm water discharge for the Project through the Louisville Water Company Wellhead Protection Area was inadvertently shown on Page 7-225 of the FEIS in cubic yards instead of cubic feet. The size of a drainage basin to manage storm water runoff from the roadway and bridge was determined to be approximately 18,900 cubic feet. This size basin would also be adequate as part of a spill containment plan for the Project. An aboveground system, lined to avoid leakage, could easily be developed within the area to be acquired for right of way or possibly include some amount of underground retention. Again in either instance, the system would be designed and constructed to avoid leakage.

Betty Jarboe

Comment – Give priority to the downtown bridge

FHWA Response – The Financing Options Document and Responses to DEIS Comments B.9 and B.10 discuss the staging of construction of the project. It provides for constructing both bridges at the same time with the I-265 Bridge open in 2014 and the new I-65 Bridge in 2020.

Henry Mullen

Comment 1 – Questions the reasoning for avoiding historical property (Drumanard).

FHWA Response – Section 106 of the National Historic Preservation Act of 1966 requires Federal agencies to take into account the impacts of their undertaking on historic sites on or eligible for the NRHP. Should the undertaking result in an adverse effect on such historical resources, Section 106 requires mitigation of such impacts and documentation of those mitigation commitments in an MOA. In addition, Section 4(f) of the United States Department of Transportation Act (49 U.S.C. 303) prevents Federal DOT agencies (FHWA, FTA, FAA, and FRA) from using land from publicly owned parks, recreational areas, wildlife/waterfowl refuges or from historic properties unless there is no feasible and prudent alternative that would avoid such use and the project includes all possible planning to minimize harm to protected resources. Therefore, FHWA is guided in its decision making process by two statutes that require the avoidance and minimization of harm to historic properties. Specifically, the avoidance of Drumanard has been deemed to be a feasible and prudent alternative to using property from Drumanard for construction of Alternative A-15. Thus, FHWA believes it is obligated to incorporate this avoidance measure in the Project.

Comment 2 – Questionable noise analysis

FHWA Response – The noise analysis was performed in accordance with the FHWA’s Highway Traffic Noise Prediction Model and is detailed in Section 5.5 of the FEIS and in Chapter 7 of the FEIS, in Response to DEIS Comment H.4.

Comment 3 – The construction of the bridge at an angle other than normal flow will cause eddies to develop on the downstream end of the piers.

FHWA Response – The formation of eddies can be minimized by installing piers parallel to the shoreline rather than at an angle following Alternative A-15. Besides the creation of eddies, piers placed at an angle may impact navigational paths as well and therefore would not be prudent. The location of piers will be determined during the design phase of the Project and in conjunction with the bridge type selection.

Comment 4 – Give Priority to the downtown bridge

FHWA Response – The Financing Options Document and Responses to DEIS Comments B.9 and B.10 discuss the staging of construction of the project. It provides for constructing both bridges at the same time with the I-265 Bridge open in 2014 and the new I-65 Bridge in 2020.

Comment 5 – Opposes any interchange at U.S. 42.

FHWA Response – The half-diamond interchange at U.S. 42 is a component of Alternative A-15. This would allow northbound traffic to exit onto U.S. 42, but would restrict southbound traffic from doing the same. As explained in the FEIS, Section 3.7.2, and in Response to DEIS Comment B.23, the half-diamond interchange at U.S. 42 best

satisfies travel needs at this location (including maintenance of existing access) while minimizing potential impacts to the natural and human environment.

Comment 6 – Clarify why Alternative A-15 was chosen.

FHWA Response – The identification of the Selected Alternative, including a discussion of Alternative A-15 in the East End, is detailed in Section 3.7 of the FEIS and Section 2 of the ROD. Additionally, Alternative A-15 was the direct result of an intensive public involvement campaign involving citizens from the town of Utica, the City of Prospect and other affected communities. Therefore, Alternative A-15 has been determined to be in the best interest not only of the State, but also of the public in general.

Comment 7 – Questionable access road to Transylvania Avenue from the tunnel.

FHWA Response – The access road in question is a gated one lane emergency access road, which would enter I-265 from Transylvania Avenue. The road is required to provide emergency response access should an incident occur within the proposed tunnel. The general public will not be able to utilize this access road, and it will only be used in the event of an emergency in the proposed tunnel.

Comment 8 – The incorporation of a bike path on the bridge exiting to River Road would result in an absolute mess on a road that is already too narrow.

FHWA Response – KIPDA, the Metropolitan Planning Organization for the LMA, is proposing as part of its Regional Bicycle and Pedestrian Plan a bike path from Zorn Avenue in downtown Louisville, along River Road to Hays Kennedy Park. The Project does not propose any improvements along River Road, but to provide a cross-river bike path from River Road in Kentucky to Salem Road in Indiana.

Comment 9 – What land will be acquired at the Harbor?

FHWA Response – Alternative A-15, the eastern portion of the Selected Alternative, would require the taking of one building and the acquisition of approximately 0.9 acre of land.

Comment 10 – What is the projected date for the final plan and comment period?

FHWA Response – The FHWA has taken into consideration the information provided in the FEIS and supporting technical reports and input received from federal, state, and local agencies and the public in making the decision about what and where to build. There will be no additional comment periods on the ROD; however, during the development of right-of-way and construction plans, opportunities will be provided for the public to have access to these plans for additional review and comment.

Comment 11 – Is there any protection against use of an open trench in case the tunnel is not constructed?

FHWA Response – The tunnel is an essential component of Alternative A-15 of which the social, environmental and historical impacts were coordinated with the stakeholders through the NEPA process and with Section 106 consulting parties. Elimination of the tunnel may result in different impacts than those already conveyed. Therefore, should the tunnel not be constructed, a reevaluation under NEPA, Section 4(f) and Section 106 would be required.

Brent Nemec

Comment 1 – A full sound wall protection should be provided around Bridgepointe.

FHWA Response – Section 5.5.1 of the FEIS details mitigation measures proposed for noise impacts. Further definition of these mitigation measures is included in Section 4 of the ROD.

Comment 2 – Coordinate with Bridgepointe property investors and landowners to mitigate damages to the city and residents from the project.

FHWA Response – FHWA, in cooperation with INDOT and KYTC and their Project consultant, and in consultation with federal, state, and local agencies, and the public, has engaged in a thorough and comprehensive review of the likely environmental effects of this Project and provided for mitigation of those effects to the extent practicable. Mitigation measures and steps for development of the appropriate details for inclusion in construction plans are identified and summarized in Chapter 8 of the FEIS and Section 4 of the ROD.

An ombudsman for the Indiana and Kentucky portions of the Project were included in the mitigation measures prepared for the Project. The ombudsman provides the public with a person who can facilitate the resolution of questions, concerns, or complaints during development of the Project, including during any construction activities associated with the Project. The mitigation measures for impacts to historic properties also include advisory teams (Kentucky Historic Preservation Advisory Team for the Kentucky portion of the Project) who will have opportunities to review and comment on Project plans as they are being developed. The City of Prospect will be invited to participate on this advisory team.

Comment 3 – Keep the interchange at Brownsboro Road a one-way interchange for a minimum of 50 years.

FHWA Response – FHWA reviewed this request during the Section 106 Consultation and in preparation of the FEIS. On Page 3-94 of the FEIS, provision was included in the Preferred Alternative for only a partial interchange at U.S. 42, which essentially provided

for the traffic movements to and from I-71 that are provided within the existing highway system. This decision was made after carefully reviewing impacts to the transportation system and the human and natural environment of this area. Section 2 of the ROD also provides for only a partial interchange at U.S. 42 for the A-15 alternative portion of the Project. Any change to include a full interchange would require extensive study and an evaluation of impacts to the human and natural environment and a consideration of costs. Given the procedural requirements that would have to be satisfied to include such an interchange at this location and the uncertainty of predicting local access requirements, FHWA believes it would be unreasonable to provide a stipulation that this interchange remain as a partial interchange for a minimum of 50 years.

Comment 4 – Provide a written summary of any factually supported growth assumptions and traffic studies, which clearly demonstrate the benefits of an east end bridge.

FHWA Response – As detailed in Sections 2.2 and 3.6 of the FEIS and Responses to DEIS Comments A.4, A.6, A.8, A.9, A.24, A.25, A.26, A.27, A.30 and A.34, the need for an eastern bridge across the Ohio River is justified.

Comment 5 – Include a stipulation in the ROD to fully acquire private home and lot in Bridgepointe.

FHWA Response – The request for full acquisition of a private home (Nemec property) in Bridgepointe was considered and a response provided in the FEIS Response to DEIS Comment R.8. The properties where either some or all of the property would be needed for the Project were evaluated as a part of the review of environmental consequences. Although it appeared that some amount of the Nemec property would be needed for the Project, the house and a sufficient amount of land would be left. The additional land required for the Project will be determined during the design phase of work, during which efforts will be made to minimize impacts to properties along the Project. Property owners will be offered the fair market value for any land and/or improvements that need to be acquired for the Project.

Comment 6 – Provide a written response regarding mitigation of the construction impacts on Bridgepointe from Alignments A-13, A-15 and A-16.

FHWA Response – Mitigation of construction impacts anticipated by the Preferred Alternative, Alternative A-15, are described in Chapter 8 of the FEIS. Alternatives A-13 and A-16 are not part of the Selected Alternative; therefore, no mitigation is necessary.

Craig Oliver

Comment 1 – Possible harm to groundwater aquifer that provides regional drinking water.

FHWA Response – Groundwater and wellhead protection was detailed in Section 5.8.2 of the FEIS and in Chapter 7 of the FEIS, in Response to DEIS Comment J.1. Protection of these resources is also detailed in the ROD in Section 4.

Comment 2 – Clarify why Alternative A-15 was chosen.

FHWA Response – The identification of the Selected Alternative, including a discussion of Alternative A-15 in the East End, is detailed in Section 3.7 of the FEIS and Section 2 of the ROD. Additionally, Alternative A-15 was the direct result of an intensive public involvement campaign involving citizens from the town of Utica, the City of Prospect and other affected communities. Therefore, Alternative A-15 has been determined to be in the best interest not only of the State, but of the public in general.

Comment 3 – Is Alternative A-15 the best interest of the state (e.g. loss of jobs)?

FHWA Response – Alternative A-15 was determined by both the State of Indiana and the Commonwealth of Kentucky, in combination with Alternative C-1 and the relocated Kennedy Interchange, as the best solution to restrictions on cross-river mobility. Additionally, Alternative A-15 was the direct result of an intensive public involvement campaign involving citizens from throughout eastern Jefferson County and southeastern Clark County. Therefore, Alternative A-15 has been determined to not only be in the best interest of the state, but the public in general.

Theresa Stanley

Comment 1 – Clarify plans to mitigate noise impacts.

FHWA Response – Section 5.5.1 of the FEIS details mitigation measures proposed for noise impacts. Further definition of these mitigation measures is included in Section 4 of the ROD.

Comment 2 – How will the wellhead protection changes be paid for, monitored, and what is their location? Who will set the standards for water purity?

FHWA Response – FHWA, in cooperation with INDOT and KYTC and their Project consultant has engaged in extensive consultation with the Louisville Water Company concerning the Project and possible impacts to their facilities, including the wellhead protection area near Prospect. Meetings were held with representatives of the company as the Project was being developed to identify issues and to coordinate with planning work underway for their facilities, such as the current project to construct a hard-rock tunnel along the Ohio River upstream of Harrods Creek with collection wells within the floodplain to be connected to the tunnel. Most recently, a meeting was held with the Louisville Water Company and the KYTC, Division of Water, to review measures for the development of construction plans through the wellhead protection area for the A-15 alternative. The conceptual plans for measures to avoid harm to the wellhead protection

area (and thereby to avoid impacts to the quality of water provided by the Louisville Water Company) are included on pages 8-6 and 8-7 of the FEIS and in Section 4 of the ROD. The development of details for inclusion in the construction plans will provide protection for both the wellhead protection area and regional water supplies provided by the Louisville Water Company. In addition, as noted in the response to the Louisville Water Company Comment 1, there will be continued coordination with the agency during development of the Project design plans.

Comment 3 – Will other projects be ignored due to the costs allocated to this project? Please put more effort into responding to the public's questions.

FHWA Response – Information regarding project costs can be found in the FEIS Summary Section S.2.3. The associated Financing Options Document further details project costs, project phasing, historical revenue trends and projected future revenues, and a reasonable financing strategy. The Financing Options Document reflects the intent of the States to commit funds from their available resources to support construction of the proposed project over the estimated 2007-2020 construction period. The historical trend information, the projected future revenues available to the States, and the strategy articulated to finance the project serve as a reasonable demonstration that the States are positioning themselves to give priority to funding the proposed project, at the same time as they continue to give priority to maintenance of their existing system.