

VI. INITIAL PROJECT INPUT

Throughout the course of the study, opportunities were given to local officials and government agencies to provide input to the study process through a correspondence letter. Because no future phases have been scheduled for this project, it is difficult to anticipate what future projects may result; therefore, no formal meetings were held with elected officials or the public. Before any spot improvements were identified, the project team requested input from a variety of public agencies. This chapter describes the input received through the first project team meeting, resource agency coordination, and additional correspondences. Additional team meetings are discussed as part of the alternatives development and refinement processes in later chapters.

A. Project Team Meeting I

A project team meeting was conducted October 23, 2003, in Central City, Kentucky. Attendees included representatives from KYTC Districts 2, 3, and Central Office; FHWA; the Green River, Pennyriple, and Barren River ADDs; and the study consultant, Wilbur Smith Associates (WSA). Muhlenberg County Judge Executive Rodney Kirtley also joined the meeting. The project team convened to discuss the purpose, goals, and objectives of the proposed project and to review preliminary existing conditions data for the study corridor. The meeting minutes are included in **Appendix E**.

This programming study is intended to recommend safety improvements on US 431, divided between two phases. Two prior study reports were noted. Discussion focused on the following items.

- US 431 provides an economic link to Owensboro for communities to the south.
- The primary goal of the study is to improve safety, considering both short term and long term projects. Auxiliary goals include improving access and regional connectivity.
- Public input will be sought through resource agency coordination. Since no future phases of the study are approved, it is difficult to anticipate what future actions may result from the study's recommendations.

B. Resource Agency Coordination

Many local, state and federal resource agencies, with diverse areas of public responsibility, were included in this planning process. Input was solicited through written

requests from the Division of Planning in September 2004. Each agency was sent a copy of the study area map, maps showing traffic volumes and Level of Service (LOS) for 2003 and 2030, crash information maps, and environmental footprint maps by county. A copy of the letter submitted to the agencies, a list of addressees, and copies of the response letters from the various resource agencies are located in **Appendix F**. This section describes the input received from these organizations. The remainder of recipients did not provide a response.

The following 28 agencies and individuals responded by offering comments or concerns regarding the project.

- *Barren River ADD* – This study seems to identify the locations presenting safety concerns, but it would be helpful if additional crash information were given.
- *Delta Regional Authority* – The project would be beneficial to the DRA counties, but no additional comments are offered at this time.
- *Eldon Eaton, Mayor of Livermore* – The city supports widening US 431 to improve safety and increase business prospects. The segment of roadway at the foot of the Green River Bridge is cited as a dangerous intersection; widening could alleviate this problem spot.
- *Federal Aviation Administration* – As long as construction activities do not exceed 200 feet in height, no impacts to FAA are anticipated.
- *Greater Owensboro Chamber of Commerce* – Improving US 431 from Muhlenberg County north to Owensboro is vital for much of the retail community, especially the portion of US 431 which has seen tremendous growth in recent years. US 431 has developed a reputation for being narrow and dangerous. It is widely believed that consumers in McLean and Muhlenberg Counties avoid US 431 and travel south to Bowling Green instead of taking the shorter trip to Owensboro. Spot safety improvements are long overdue and a vital concern to the business community. The Chamber of Commerce would like to request (1) Phase II of this project be given top priority; (2) Phase II improvements would be incorporated into the Six Year Plan; and (3) the KYTC would initiate a plan to 4-lane the existing route.
- *Kentucky Cabinet for Economic Development* – Logan County has five industrial sites; two of these, Lewisburg and Adairville, may be impacted due to any road widening. Muhlenberg County has no direct impacts anticipated for existing industrial sites or

available buildings. The closest site is 5 to 6 miles west of the project corridor although some access improvement and regional connectivity may result. No buildings or industrial sites in McLean County are expected to be impacted. In Daviess County, direct impacts are anticipated as several buildings are either located on US 431 or are one block removed. This project would improve traffic ingress and egress for Owensboro, thus addressing the transportation needs of the community.

- *Kentucky Commerce Cabinet* – There are several areas of interest relating to cultural activities and a developing tourism industry which could be impacted by roadway improvements. Phase I has sensitive areas due to the large number of historical sites, wildlife management areas, and national wetlands. Environmental impacts upon these areas should be a particular concern. Improvements in Phase II may impact national wetlands and river ways. There are several historic structures in Livia and a cemetery in McLean County which may be impacted.
- *Kentucky Department of Agriculture* – No specific concerns are noted.
- *Kentucky Department of Aviation* – There are no impacts anticipated to airports or air traffic. If construction equipment exceeds 200 feet above ground level, a permit is required.
- *Kentucky Department of Fish and Wildlife Resources* – Based on current information, 15 federally-listed threatened or endangered species occur within 10 miles of the project area and 68 state-listed threatened or endangered species have been identified within two miles of the corridor. Habitats likely to contain these species should be surveyed. Impacted wetlands should be delineated. Key forestry, water resources, and erosion control measures are suggested to minimize lasting impacts.
- *Kentucky Department for Natural Resources* – One active rock quarry lies in the project area, south of Lewisburg in Logan County. Additionally, the project lies in an area of known oil and gas exploration activity which may require coordination with owners.
- *Kentucky Department of Parks* – The study will not directly impact any Department of Parks facilities; however, the route is in the vicinity of Lake Malone and Ben Hawes State Parks. Sediment control to prevent runoff to the lake is a concern.
- *Kentucky Division for Air Quality* – Precautions should be taken to prevent particulate matter from becoming airborne, including covering open bodied trucks and avoiding

depositing earth onto paved roadways. Open burning is prohibited for all but the express purposes detailed in the Open Burning Fact Sheet. The project must meet the conformity requirements of the Clean Air Act and the transportation planning provisions of Titles 23 and 49 of the US Code. The division suggests investigating local government requirements as well.

- *Kentucky Division of Conservation* – There are three agricultural districts in Logan County which may be impacted by the project. State agencies are required to mitigate any impact their programs may have on these districts. Additionally, prime farmlands and farmlands of statewide importance could be impacted by the project. Best management practices are also recommended to control erosion and sedimentation.
- *Kentucky Division of Forestry* – No specific problems with individual trees or forestland were identified along this route. Native tree planting is encouraged to replace trees cleared for highway construction or agricultural uses.
- *Kentucky Division of Mine Reclamation and Enforcement* – This project would not impact any active mining operations and there are no proposed new operations in the area. It is likely to encounter oil and gas wells; owners may need to be contacted if these are impacted.
- *Kentucky Education Cabinet* – This agency has no comments at this time.
- *Kentucky Geological Survey* – Phase I lies in the Mississippian Plateau and Western Kentucky Coal Field physiographic regions. Karst features, such as caves and sinkholes, unconsolidated sediments along streams, and pre- or post-landslide hazards are likely to be encountered. It is likely to encounter ownership issues for oil and gas wells, as well as coal and limestone deposits. The corridor crosses several natural gas pipelines, compressor stations, and other related service facilities within Phase I. Numerous faulted areas occur in the Coal Field region. Some limestones, excepting St Louis Limestones, may be usable for construction activities. Peak ground acceleration due to earthquake ground motion is 0.09 to 0.15g, with a low potential for slope liquefaction or failure.

Phase II lies in the Western Kentucky Coal Field physiographic region as well. Unconsolidated sediments are likely and may result in pre- or post-landslide hazards. Oil and gas wells, coal, and limestone in the area may lead to ownership issues. There are several natural gas pipelines crossing in the current corridor, and it is possible to

encounter compressor stations and other related service facilities. It is likely Phase II may cross over abandoned underground mines. Limestone beds may be useful as construction stone. Faulted areas may be encountered. Peak ground acceleration due to earthquake ground motion is 0.15g, with a low potential for slope liquefaction or failure in unconsolidated sediments.

- *Kentucky Justice and Public Safety Cabinet, Vehicle Enforcement* – Any widening should accommodate large trucks, especially since US 431 was added to the designated highway list to improve truck access to Russellville. No other problems with roadway widening are foreseen.
- *Kentucky State Nature Preserves Commission* – Rare plant species may occur along the roadside, especially in the Russellville area. Mitigations and native species restoration may be necessary if these are impacted.
- *Kentucky State Police, Henderson* – Specific improvements are suggested, including widening (Muhlenberg Co MP 0.00-1.50), shoulder upgrades (Muhlenberg Co MP 0.00-2.50, 5.00-11.60), turning lanes (Main St intersection at Island, KY 140 intersection at Utica), and straightening (Daviess Co MP 2.50-5.00) the existing alignment.
- *Kentucky State Police, Madisonville* – Traffic and LOS are greater in the Phase II portions of the study area than Phase I, both for the current year and future. More injury and fatality crashes in Muhlenberg County occur along US 431 south of the parkway than north. Widening (entire route), truck/passing lanes (near KU plant at Central City), warning signage for high crash sites, and improved clear zones are recommended. Additionally, high crash zones in need of special consideration were identified at MP 5.000-6.000, MP 8.000-9.900, MP 11.000-12.100, MP 18.240-19.117, and MP 22.000-24.347 in Muhlenberg County.

[Note: Comments from the State Police Madisonville branch were reviewed during the second project team meeting. It was decided during this discussion that the suggested warning signage in high crash zones will not address safety issues along the alignment and may create a false sense of security in unmarked zones. This creates a liability issue therefore the signage recommendation will not be pursued further.]

- *KYTC Geotechnical Branch* – From Tennessee to Russellville, US 431 is underlain by various limestones and sandstone. Sinkholes are likely to be encountered and should be avoided if possible. Few or no streams should be encountered due to subsurface

drainage. From Russellville to Central City, the route is underlain by various limestones and sandstones and the Lisman, Carbondale, Tradewater, Caseyville, Waltersburg, Golconda, and Cypress Formations. Limestone from some formations may be suitable for construction applications. Limestones, sandstones, and shales encountered in this section may be susceptible to weathering. Numerous faults cross east-west through the area and should be crossed in fill sections when possible; cut slopes may need to be flatter than normal. Oil and gas wells should be avoided. Underground coal and strip mines exist; precautions should be taken to avoid cut slopes and surface runoff. From Central City to Owensboro, underlying bedrock is from Sturgis, Lisman, Carbondale, Tradewater, and Casey Formations with Alluvium, Outwash, Lacustrine, and Loss deposits. Deposits are highly susceptible to weathering. Flatter cut slopes and soil stabilization may be required. East-west faults are common and should be intersected perpendicular to strike in cut sections.

The Branch has no specific concerns at this time, but more detailed study should be made as corridors are determined. Mine subsidence may be a concern. Corridors may need to be refined to avoid mines and wells, but it is unlikely fault zones can be avoided.

- *KYTC Permits Branch* – This Branch recommends classifying the project as partially controlled access, with possible access points identified on plans and adjoining right-of-way deeds specifying such. Access control fencing is also recommended. The route should be designed to match the posted speed limit. If US 431 is to be included on the NHS, additional coordination with this office is required.
- *Rodney Kirtley, Muhlenberg County Judge Executive* – Most of the entire Phase I stretch of US 431 is thought to be extremely dangerous. Dead Man's Curve near Belton, even though it has been widened recently, still desperately needs straightening. There are two very narrow bridges near the community of Penrod that are very dangerous. An extremely high number of large trucks travel US 431, serving the Paradise Steam Plant, Logan Aluminum, and the Owensboro Riverport. The trucks increase the danger on this stretch of US 431.

Within Phase II, the curve near the Kentucky Utilities plant is difficult to negotiate and has been the site of numerous fatalities over the past few years. There are few passing opportunities and a high number of trucks traveling this portion of the route. With future development of the Thoroughbred Energy Plant in Muhlenberg County, truck traffic is likely to increase.

- *Owensboro MPO Transportation Advisory Committee* – Segments of US 431 in Daviess County have been identified in the long range plan and unscheduled projects list for widening to a four lane facility. With 30,000 vehicles per day, US 431 is a busy route serving the commercial portion of south Owensboro. The KYTC is encouraged to rate improvements to Phase II of this project ahead of Phase I.
- *US Coast Guard* – Livermore Highway Bridge, Mile 71.3, Green River is located in the area identified in Phase II of this project. Because this structure lies over a navigable waterway, extensive coordination with this office is required if bridge location or bridge plans are changed.
- *Brent Yonts, State Representative for 15th Legislative District in the Kentucky House of Representatives* – US 431 carries a lot of traffic and trade as a connection from Tennessee to Indiana. Despite short term repairs, four-laning this corridor (similar to US 68 from Bowling Green to Murray) would be a major improvement, stimulating economic development and improving safety. Utility, right-of-way, and relocation may be costly, but federal funding should be obtained to widen this route.

C. Additional Input

Following the aforementioned resource agency coordination effort, additional feedback was received from various elected officials. A newspaper article describing Congressman Yonts' support to widen US 431 to four lanes and letters of support from Mayor Boarman of Whitesville and Mayor Yassney of Russellville are included in **Appendix E** following the resource agency responses.