

**I-66 CORRIDOR STUDY
WESTERN KENTUCKY TO MISSOURI
BALLARD / McCRACKEN COUNTY - ITEM # 1-23.00**

EXECUTIVE SUMMARY OF FINDINGS AND RECOMMENDATIONS

Prepared for

Kentucky Transportation Cabinet (KYTC) – Division of Planning

Kentucky Transportation Cabinet (KYTC) – District 1



Missouri Department of Transportation (MoDOT)



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ES EXECUTIVE SUMMARY

The Kentucky Transportation Cabinet (KYTC), and the Missouri Department of Transportation (MoDOT), with the financial support of the Federal Highway Administration (FHWA), undertook the I-66 Corridor Planning Study. The I-66 project was identified in the KYTC's 2001–2006 Six-Year Highway Plan and this study is part of the on-going project development process to examine a feasible corridor for the portion of I-66 in western Kentucky.

The I-66 study area is located in Western Kentucky and southeastern Missouri. The study area includes portions of Marshall, McCracken, Ballard, Carlisle, and Graves counties in Kentucky as well as Scott, Mississippi, and Cape Girardeau Counties in Missouri. Sections of Southern Illinois including portions of Alexander, Pulaski, and Massac counties were also included as a corridor was analyzed in Illinois despite the limited participation of the Illinois Department of Transportation during the initial stages of the study. The project involved identifying and analyzing several possible corridors between Western Kentucky and Southeastern Missouri, including corridors through Southern Illinois. The purpose of this planning study was to identify a recommended corridor or corridors for a new Interstate I-66 to serve as a basis for identifying future alternatives in the NEPA process.

Project Goals

The project began in the fall of 2001 with a presentation to the Purchase Area Development District (PADD). Also in the fall of 2001, there was a meeting with local officials in Missouri. Both meetings were designed to introduce the project as a whole to respective political stakeholders in each state. Subsequent public workshops and Project Work Group meetings were held in the spring of 2002 to define the study goals. Those goals were:

- Support Completion of I-66 Across Southern Kentucky, Providing System Continuity from West Virginia to Missouri
- Reduce Traffic Congestion
- Improve Accessibility and Connectivity
- Enhance Roadway Safety
- Support Economic Development and Community Growth
- Capitalize on Existing and Planned Investments
- Improve Community Character / Quality of Life

As corridors were identified and evaluated, these goals were used as the basic criteria for either setting a corridor aside from further consideration or for carrying it forward in the study process.

Corridor Development

Corridors were developed through an interactive process involving the public, KYTC, MoDOT, FHWA, the Project Work Group, and the consultant staff. After the first round of meetings with these groups, 22 corridors were identified. These corridors were approximately 2,000 feet wide and generally started at I-24 near Paducah, Kentucky heading westward into Missouri and/or Illinois. All but one corridor included a new river crossing over the Ohio River or the Mississippi River.

Public Involvement

Public Involvement was a vital part of the study. There were four sets of public workshops (total of eight (8) meetings) held in both Kentucky and Missouri at each of the project's milestones.

Meetings were held in open-house workshop format. Comment forms were available at all meetings and great efforts were made to solicit public comments at each meeting. Those in attendance generally included members of the public, resource/regulatory agency staff, members of the Project Work Group, representatives from the KYTC, MoDOT, and the FHWA, as well as the consultant staff. Key issues identified during the public involvement process included the following:

- People living in the region are very supportive of the idea of a limited access highway linking western Kentucky and Missouri.
- Economic development is important to the region. Increased and improved access is a key to future economic success in this area.
- The proposed project and any other improvements would help relieve other facilities that are perceived as inadequate.
- The residents of the region are proud of the local historic and natural resources and want to protect them along with their quality of life.
- Resource agencies have identified issues related to floodway encroachment on the Birds Point – New Madrid Floodway in Missouri, navigation issues on the Mississippi River, issues associated with structures in the floodplain/floodway and potential impacts of a corridor and/or structures to the wildlife management areas in Northwest Ballard County (Kentucky).

Corridor Analysis

The corridor analysis was a three-tiered process. Level One screening was an initial qualitative based analysis focusing on general feasibility and resulted in 14 of the original 22 corridors, as well as a No-Build Option being recommended for further

screening in Level Two. Because a number of the 14 corridors were similar, they were combined into seven corridors, and a No-Build Option, which were advanced to Level Two screening. During the Level Two screening, the seven corridors and the No-Build Option were subjected to a higher level of qualitative and quantitative screening. This Level Two screening focused on:

- Transportation operations (traffic)
- Documented support for or against the corridor
- Known and potential environmental and community issues
- Estimated order of magnitude capital costs.

Five corridors, including the No-Build Option, were then advanced to the Level Three screening. They included:

1. No-Build Option – only existing and committed projects in KYTC’s 2001 – 2006 Six-Year Highway Plan and MoDOT improvement program.
2. Corridor 8 – the same as Corridor 11 in/along existing KY 286, US 60 or US 62 corridors to a point north and east of Wickliffe, proceeding north west on new route across the Ohio River on a new bridge to I-57 in Illinois.
3. Corridor 8B – US 60 improvements from Paducah to Wickliffe with a new Mississippi River crossing.
4. Corridor 11/12/13/14/15 & 21 – new controlled access corridor parallel to US 62 and KY 286 with a new Mississippi River crossing.
5. Corridor 20 – unspecified corridor connecting I-24 north of Paducah to I-55 near Cape Girardeau, Missouri with no new river crossing over the Mississippi or Ohio Rivers.

Further Corridor Analysis and Recommendations

The Level 3 Screening represented the most detailed analysis. The corridors were further refined and more details were provided in the following categories

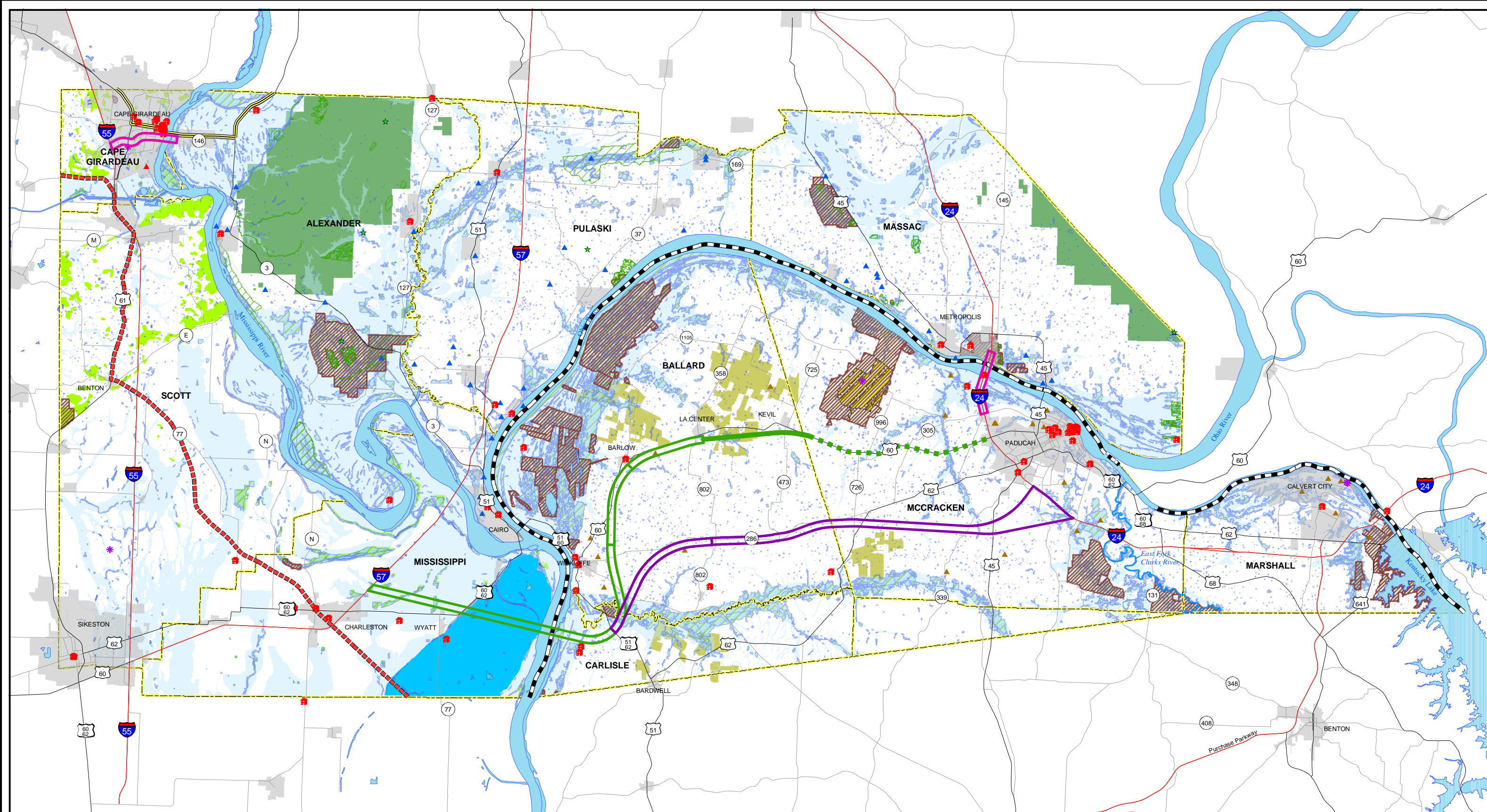
- Transportation operations (traffic) – to include revised model runs with some manual adjustments, including vehicle miles of travel (VMT) and vehicle hours of travel (VHT)
- Documented support for or against the corridor – including all comments / support received to date
- Known and potential environmental and community impacts – including quantification of impacts to community by type as well as property impacts
- Estimated order of magnitude capital costs – refined to include separate costs for right-of-way, utilities, design, construction costs and contingencies

The following summary represents the results of the technical analysis from the most detailed screening, the Level 3 Analysis:

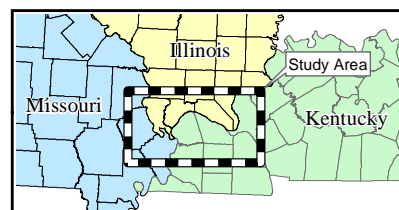
- The No-Build Option is sufficient to meet the needs of the region in the near future but not in the project's horizon year of 2030. It narrowly and minimally addresses the study's goals, objectives, and issues and has minimal support. Therefore, although the No-Build Option will likely meet the needs of the region in the short term, it is not sufficient for longer-term needs.
- Corridor 8 can meet the needs of the project and address some of the goals, objectives, and issues of the study. It does provide a new route and a river crossing. However, the potential impacts caused by this corridor to sensitive natural resource and wildlife management areas are extremely detrimental. These adverse potential impacts, coupled with the fact that there are other corridors with fewer potential impacts, render Corridor 8 fatally flawed from an environmental standpoint. Therefore, Corridor 8 is not recommended to proceed into the next stage(s) of project development by the KYTC.
- Corridor 8B can meet the needs of the project, address the goals, objectives and issues of the study and provide a new upgraded US 60 (partially controlled access facility) in the long term with a new bridge crossing the Mississippi River south of Wickliffe, Kentucky, (no further north than Lower Mississippi River Mile Marker 949), capitalizing on improvements already made to US 60. Corridor 8B is a viable option for satisfying the short and long-term transportation needs of western Kentucky.
- Corridor 11/12/13/14/15/ and 21, can also meet the needs of the project, address the goals, objectives, and issues of the study, and provide a long-term new limited access highway with a new bridge crossing the Mississippi River near Wickliffe, Kentucky. However, given the need for additional right-of-way and the higher costs of this corridor, it is unlikely to be funded for construction in the time horizon of the study.
- Corridor 20, although unspecified as to the route through southern Illinois, does meet the needs of the project, address some of the goals, objectives, and issues of the study, and provides a new highway through southern Illinois. Further, it would satisfy the Congressional designation of a route for I-66 in this region. However, it does not address the transportation needs of western Kentucky

A project of this magnitude requires a significant level of Federal and State funding. There is currently no additional federally designated funding for this project. With the current version of the KYTC Six-Year Highway Plan significantly over-programmed and the aforementioned situation, KYTC is unable at this time to pursue a build option. If the stated conditions change, this decision does not preclude future project development activities from taking place for a limited access highway in Western Kentucky.

Independent of this decision, KYTC, MoDOT, or IDOT can restart the project development activities in their respective states using this study. In this case, the corridors from this I-66 study that should be included in a next phase of project development are Corridors 8B, 11, and 20. In addition, other corridors may be developed at a future date. (See the full project report and the various technical appendices for more details regarding this study.)



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|---|--|---|
| Alternative Corridors
Existing 60 Improved
Improvements Programmed
8b
11
20 | National Historic Register Site
Illinois Natural Area Location
NPL Sites
Active/Permitted Landfills (MO)
Landfills (KY)
Landfills (IL)
Trail of Tears - Auto route
Trail of Tears - Bengé's Route
Trail of Tears - Water Route | Agricultural District
Wildlife Preserve/Conservation Area/Park
Forested Area (MO)
Shawnee National Forest
Wetland
100 Year Floodplain
New Madrid Floodway
Superfund Site (KY)
PROJECT STUDY AREA |
|---|--|---|



Location Map

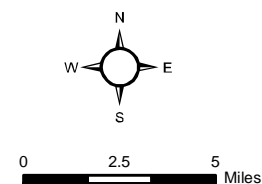


Figure 14
**LEVEL 3
 ALTERNATIVES**
 I-66 CORRIDOR STUDY
 Western Kentucky to Missouri
 KYTC Item No. 1-23.00

I-66 Corridor Study
Western Kentucky to Missouri
Final Level 3 Screening Summary

Alt. / Corridor No.	Description	Length of Route - Total Miles / New Roadway	Traffic Operations ¹											
			Screen Line #1: Paducah			Screen Line #2: W. McCracken Co.			Screen Line #3: Ballard County			Screen Line #4: Mississippi River		
			Average Daily Traffic	Average Daily Truck Traffic (%)	Level of Service	Average Daily Traffic	Average Daily Truck Traffic (%)	Level of Service	Average Daily Traffic	Average Daily Truck Traffic (%)	Level of Service	Average Daily Traffic	Average Daily Truck Traffic (%)	Level of Service
0	No Build (serves as basis for comparison to other alternatives) - Includes projects currently programmed in the KYTC's Six Year Plan	0 mi / 0 mi	43,000 (US 60)	3,400 (8%)	E (4 lanes)	17,000 (US 60)	1,500 (9%)	A-B (4 lanes)	10,000 (US 60)	1,100 (11%)	E (2 lanes)	11,000 (Bridge Over Ohio River)	1,800 (16%)	E (2 lanes)
8	From I-24 at Paducah in/along existing KY 286, US 60 or US 62 corridors to a point east of Wickliffe, proceed north west on new route across the Ohio River on a new bridge to I-57 in Illinois	33.33 mi / 33.33 mi	31,000	3,700 (12%)	C	16,000	2,400 (15%)	A-B	See Note 5 Below					
8B	US 60 planned highway improvements per KYTC 6 Year Plan and Long Range Plan from Paducah to Wickliffe. Includes new connector road and new bridge over the Mississippi River south of Wickliffe US 60 to I-57 in Missouri.	38.50 mi / 15 mi	40,000 (US 60)	2,800 (7%)	E (4 lanes)	12,000 (US 60)	800 (7%)	A (4 lanes)	5,000 (US 60)	300 (6%)	A (4 lanes)	7,000	1,000 (14%)	A (4 lanes)
11 / 12 / 13 / 14 / 15 / 21	From I-24 south of Paducah follow new route southwest parallel to KY 286 to point south of Wickliffe over Mississippi River on new bridge to US 60 / US 62 to I-57	40.93 mi / 40.93 mi	30,000	4,000 (13%)	C	14,000	2,500 (18%)	A-B	11,000	2,700 (25%)	A	9,000	2,200 (20%)	A
20	Rebadge existing interstate I-24 as I-66 in KY and build connector in southern Illinois and rebadge I-55 or I-57 as I-66 in Missouri	48.32 mi / 48.32 mi	16,000	1,800 (11%)	A	16,000	1,800 (11%)	A	17,000	1,900 (11%)	A	27,000	2,100 (8%)	A-B

(1) Future Year = 2030 (2) Due to conditions near Cape Girardeau, MO (3) Based on Environmental Constraints Map (4) In Millions of 2003 Constant Dollars (5) Limited Traffic Operations Analysis Were Performed Due To Environmental Constraints

I-66 Corridor Study
Western Kentucky to Missouri
Final Level 3 Screening Summary

Alt. / Corridor No.	Description	Traffic Operations ¹						Support	
		Total Vehicle Miles of Travel (VMT in Millions)	Total Vehicle Hours of Travel (VHT in Millions)	Travel Time in Minutes Paducah to Sikeston (Savings from No-Build)	Travel Time in Minutes Paducah to Cape Girardeau (Savings from No-Build)	Safety / Security	Connectivity / Access	Corridor	Issues
0	No Build (serves as basis for comparison to other alternatives) - Includes projects currently programmed in the KYTC's Six Year Plan	938.5	18.72	76.5 mins	93.6 mins	Improves US 60 in place improvements largely to safety, little for security	Keeps existing connectivity and access	There is minimal support for continuing with current plans. Especially noted are the plans to improve Hwy 60.	Impacts to adjacent development on US 60
8	From I-24 at Paducah in/along existing KY 286, US 60 or US 62 corridors to a point east of Wickliffe, proceed north west on new route across the Ohio River on a new bridge to I-57 in Illinois	See Note 5 Below				Provides improvement - connects I-24 to I-57 in Illinois	Provides new river crossing location over Ohio River	There has been no vocal support for Alternative 8 during public workshops	Wetland, floodplain and potential wildlife refuge impacts, Corps of Engineers preferred river crossing
8B	US 60 planned highway improvements per KYTC 6 Year Plan and Long Range Plan from Paducah to Wickliffe. Includes new connector road and new bridge over the Mississippi River south of Wickliffe US 60 to I-57 in Missouri.	942.5	18.76	72.7 mins (3.8 mins)	94.8 mins (N/A)	Provides some level of improvement - New bridge over Mississippi River	Keeps existing connectivity and access, provides for new river crossing	Support exists for US 60 improvements and support has been expressed for a new bridge near Wickliffe, KY	Impacts to adjacent development on US 60 plus wetland and floodplain impacts at preferred river crossing
11 / 12 / 13 / 14 / 15 / 21	From I-24 south of Paducah follow new route southwest parallel to KY 286 to point south of Wickliffe over Mississippi River on new bridge to US 60 / US 62 to I-57	942.6	18.76	57.9 mins (18.6 mins)	84.0 mins (9.6 mins)	Provides improvement - New bridge over Mississippi River	Provides new river crossing location over Mississippi River	Support is strong for Alternative 11/12/13/14/15/21.	Farmland impacts, uses least favorable river crossing
20	Rebadge existing interstate I-24 as I-66 in KY and build connector in southern Illinois and rebadge I-55 or I-57 as I-66 in Missouri	942.4	18.75	76.1 mins (0.4 mins)	68.1 mins (25.5 mins)	Provides improvement - New roadway connecting I-24 and I-55 / I-57	Good connections for southern Illinois, little benefit for KY	There has been strong support for Alternative 20 in Illinois. Likewise, there is no support for Alternative 20 from residents of Kentucky.	Some economic benefits to southern Illinois, little economic benefit for KY, impacts to Shawnee National Forest, use of Bill Emerson bridge

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I-66 Corridor Study
Western Kentucky to Missouri
Final Level 3 Screening Summary

Alt. / Corridor No.	Description	Community Impacts					
		Farmland (miles/acres)	Kentucky Agriculture Districts (miles/acres)	State / Federal Forest - Parks / Recreation (miles/acres)	Urban (miles/acres)	Probable Environmental Justice Impacts	Property Impacts (in acres)
0	No Build (serves as basis for comparison to other alternatives) - Includes projects currently programmed in the KYTC's Six Year Plan	Community impacts documented in US 60 improvement project - no additional impacts anticipated					
8	From I-24 at Paducah in/along existing KY 286, US 60 or US 62 corridors to a point east of Wickliffe, proceed north west on new route across the Ohio River on a new bridge to I-57 in Illinois	21 mi/7,222 ac	1.3 mi/343 ac	0 mi/0 ac	1 mi/135 ac	Medium	2,113
8B	US 60 planned highway improvements per KYTC 6 Year Plan and Long Range Plan from Paducah to Wickliffe. Includes new connector road and new bridge over the Mississippi River south of Wickliffe US 60 to I-57 in Missouri.	30.54 mi/10,665 ac	2.58 mi/623 ac	0 mi/0 ac	1.88 mi/468 ac	Low	1,100
11 / 12 / 13 / 14 / 15 / 21	From I-24 south of Paducah follow new route southwest parallel to KY 286 to point south of Wickliffe over Mississippi River on new bridge to US 60 / US 62 to I-57	28.87 mi/8,324 ac	2.30 mi/870 ac	0 mi/0 ac	0.17 mi/74 ac	Low	2,325
20	Rebadge existing interstate I-24 as I-66 in KY and build connector in southern Illinois and rebadge I-55 or I-57 as I-66 in Missouri	35.23 mi/8,511 ac	N/A	8.67 mi/2,102 ac	3.88 mi/504 ac	High ²	2,930

(1) Future Year = 2030 (2) Due to conditions near Cape Girardeau, MO (3) Based on Environmental Constraints Map (4) In Millions of 2003 Constant Dollars (5) Limited Traffic Operations Analysis Were Performed Due To Environmental Constraints

I-66 Corridor Study
Western Kentucky to Missouri
Final Level 3 Screening Summary

Alt. / Corridor No.	Description	Environmental Impacts ³						Capital Costs ⁴				
		No. of Listed Natl. Historic Registry Sites	Nature / Wildlife Preserves / Conservation Lands (miles/acres)	No. of Stream Crossings	Bird's Point - New Madrid Floodway (miles/acres)	Floodplain / Floodway (miles/acres)	Wetlands (miles/acres)	Roadway	Bridge	Right-of-Way / Utilities	Contingency / Engineering / Mobil. / Demobil.	Total
0	No Build (serves as basis for comparison to other alternatives) - Includes projects currently programmed in the KYTC's Six Year Plan	Community impacts documented in US 60 improvement project - no additional impacts anticipated						No incremental capital costs anticipated over those programmed in 6 Year Plan Total Costs in 6 Year Plan are \$26.3 million				
8	From I-24 at Paducah in/along existing KY 286, US 60 or US 62 corridors to a point east of Wickliffe, proceed north west on new route across the Ohio River on a new bridge to I-57 in Illinois	1 (0.4 miles of Trail of Tears NHT)	2 mi/455 ac	49	None	7.20 mi / 1,001 ac	4.0 mi/1,001ac	\$265	\$266	\$128	\$108	\$767
8B	US 60 planned highway improvements per KYTC 6 Year Plan and Long Range Plan from Paducah to Wickliffe. Includes new connector road and new bridge over the Mississippi River south of Wickliffe US 60 to I-57 in Missouri.	1 (0.4 mi of Trail of Tears)	0 mi/0 ac	82	3 mi/723 ac	11.74 mi/2,970 ac	1.56 mi/441 ac	\$254	\$297	\$29	\$111	\$691
11 / 12 / 13 / 14 / 15 / 21	From I-24 south of Paducah follow new route southwest parallel to KY 286 to point south of Wickliffe over Mississippi River on new bridge to US 60 / US 62 to I-57	1 (0.4 mi of Trail of Tears)	0 mi/0 ac	87	3 mi/723 ac	12.38 mi/3,323 ac	1.17 mi/509 ac	\$328	\$292	\$151	\$124	\$895
20	Rebadge existing interstate I-24 as I-66 in KY and build connector in southern Illinois and rebadge I-55 or I-57 as I-66 in Missouri	2 (2.9 mi of Trail of Tears)	0.03 mi/64 ac	51	0 mi/ 0 ac	12.78 mi/3,113 ac	2.78 mi/843 ac	\$363	\$18	\$128	\$77	\$586

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