

**US 51 BRIDGE REPLACEMENT OVER THE OHIO RIVER**  
**Citizens Advisory / Environmental Justice Group Meeting #2**  
**Meeting Record #2**  
**July 9<sup>th</sup>, 4:00 PM to 6:00 PM (CDT)**  
**WebConference Meeting**



CAG/EJ Attendees

Name	Representing
<b>Stacey Courtney</b>	Planning and Community Development Division
<b>Todd Cooper</b>	Ballard County Judge Executive
<b>Hannah Chretien</b>	Ballard County Chamber of Commerce and Ballard County Economic & Industrial Development
<b>Jimmy Ellis</b>	Reverend First Missionary Baptist Church
<b>Monica Smith</b>	Cairo Public Library
<b>Tiffany George</b>	Southern Five Regional Planning District
<b>Jim Lefevre</b>	Ballard County Health Center
<b>Janet Hunt</b>	Property Owner
<b>Shelby Adkinson</b>	Shawnee College Cairo Extension Center
<b>Vernon Stubblefield</b>	Community Leader
<b>Allen Tappan</b>	Waterfront Services Co.

Additional Public Participants

Becky Martin  
 Bobby Hunt  
 Cara Mills  
 Dayna Tappan

Presenters

Kyle Poat, KYTC, Chief District Engineer  
 Aaron Stover, Michael Baker International, Project Manager  
 John Mettelle, Michael Baker International, Environmental Lead  
 Jason Stith, Michael Baker International, Structures Lead  
 Brad Gregory, HMB, Roadway

Project Attendees

Chris Kuntz, KYTC  
 Keith Todd, KYTC  
 Brad Whybark, KYTC  
 Ken Sperry, KYTC  
 Tim Foreman, KYTC  
 Blake Combs, FHWA  
 Eric Rothermel, FHWA  
 Patty Dunaway, Michael Baker International  
 Anna Klenke, Michael Baker International  
 Shannon Provance, HDR  
 Jeff Schaefer, HDR  
 Devin Chittenden, HDR  
 Rebecca, Colvin, HDR  
 Matt Sipes, HMB



Aaron Stover welcomed the members of the US 51 Bridge Replacement Citizens Advisory and Environmental Justice Group (CAG/EJ) and introduced the speakers who presented on the following topics. The full presentation can be seen in Appendix A.

- **Current Bridge Maintenance Project** (Presented by Kyle Poat)
- **Where Are We In The Project Development Process?** (Presented by Aaron Stover and John Mettille)
- **Project Alternatives Update** (Presented by Brad Gregory and Jason Stith)
- **Environmental Impacts** (Presented by John Mettille)
- **Upcoming Meetings and Public Information** (Presented by Aaron Stover)

Questions and comments from the CAG/EJ members were integrated into the presentation and are described below. Questions were received by text to a designated line or by using the chat feature in WebEx.

**Comment:** As of yesterday, the Phoenix Paper Mill is still planning a large expansion and they plan on increasing supply chains going to the mill by about 200% over starting in 2023 over a 20-year period...that needs to be considered for future traffic counts.

**Question:** What is the likelihood that the alternative 3 closure period will be one week? Could it potentially be longer?

**Answer:** The project team feels comfortable this is a realistic estimate; however, there is always a potential it could be longer based on how the contractor approaches the work.

**Comment:** Just a comment not a question on alternative 3. We have longer time periods of that road closure every year due to flooding. One week is very minimal in the grand scheme of the project.

**Question:** What is the designed traffic speed on the new bridge?

**Answer:** 55 mph on the bridge; 35 mph on the curve.

**Question:** Under existing conditions, the bridge had to be closed in one for the equipment to cross. With the wider lanes and shoulders, can traffic continue to move in both directions?

**Answer:** This depends on how wide the equipment is. The twelve-foot lane option also includes a wider shoulder in each direction which will assist with wider vehicles crossing the bridge.

**Question:** Is there an Alternate showing as the strongest possibility?

**Answer:** The project team would like the CAG/EJs committee opinion on the strongest alternative. A summary of positives and negatives for each alternative is shown on slide 56.



**Question/Comment:** Is the committee aware of the 4-lane expansion of the highway 60 project? Currently the first phase will connect the four lane from Paducah through the city of Kevil down to LaCenter, but the goal is to extend it down to Wickliffe.

**Answer:** The traffic for the US 60 project in Kevil is double the volume of the Wickliffe section. The Kevil project is being designed as a four lane but may only be built as a 2 lane based on traffic and funding.

The meeting concluded with several questions being asked to the group with responses given by survey/poll:

*Question 1: If you were to eliminate one of the alternatives, which one would it be? Follow-up discussion on the reasons why (Can be submitted via text or email):*

- A.ALT 1      4 votes
- B.ALT 2      0 votes
- C.ALT 3      1 vote

*Question 2: The key differentiators we see are:*

*Maintenance of traffic  
Navigation Impacts  
Impacts on Mooring Operations  
Complexity of construction  
Do you agree?*

- A.YES          5 votes
- B.NO          1 vote

*Question 3: Rank the four differentiators in order of importance with 1 being most important to you.*

*Maintenance of traffic  
Navigation Impacts  
Impacts on Mooring Operations  
Complexity of construction  
Is there anything else we should consider or have missed? Please list or send via email or text.*

*Answers:*

- 2,1,3,4
- Future economic development, 2. Impacts on Mooring Operations, 3. Navigation Impacts, 4. Maintenance of Traffic, 5. Complexity of construction
- 1 - Impacts to Mooring and River Navigation 2 Roadway navigation 3 Maintenance of traffic 4 complexity
- Maintenance of traffic, 1; Navigation Impacts,3; Impacts on Mooring Operations, 4; Complexity of construction,2.
- 1 maintenance of traffic; 2 complexity of construction; 3 navigation impact; 4 impact on mooring



A follow up survey was sent out to the entire CAG/EJ group. The results of the survey can be seen in Appendix B.

The next CAG/EJ Meeting is tentatively scheduled for September but will be adjusted based on project progression.

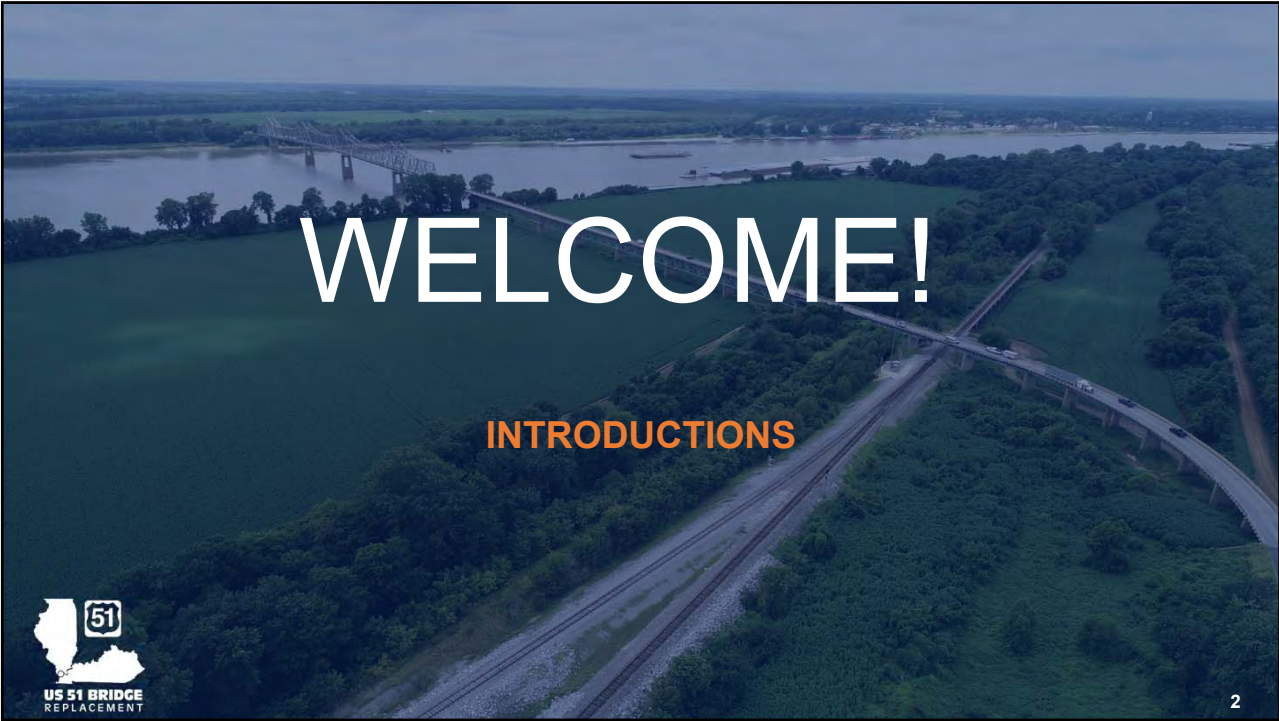
**Thank you for your participation!**

# **Appendix A**

## **Presentation**



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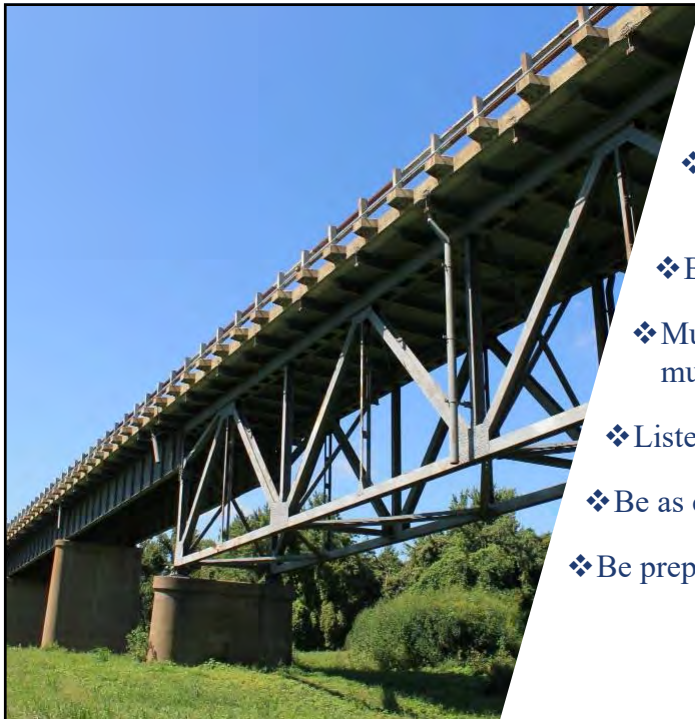


## MAINTENANCE PROJECT UPDATE



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## MEETING CODE OF CONDUCT

- ❖ ALL IDEAS HAVE VALUE, ALL IDEAS WILL BE HEARD
- ❖ Be respectful of others and their ideas
- ❖ Mute phones/devices, everyone will be muted through the system as well
- ❖ Listen to those speaking
- ❖ Be as concise as possible
- ❖ Be prepared to comply with time limits



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## MEETING GROUND RULES (cont.)

- ❖ Attendees will be able to ask or submit questions during the presentation. There are several options to submit comments or questions. Please include your name when doing so.
  - a. Use the chat box feature on the WebEx Screen.
  - b. Use the raise hand feature on WebEx if you would like to speak and you will be unmuted.
  - c. Text questions to 270-230-7770
  - d. Email: [patty.dunaway@mbakerintl.com](mailto:patty.dunaway@mbakerintl.com)
  - e. Opportunities to comment will be made throughout the presentation.
- ❖ Please state your name prior to speaking.
- ❖ Anytime there is a change in speaker make sure that person restates their name.
- ❖ The meeting will be recorded.
- ❖ KYTC, IDOT & Michael Baker International reserve the right to mute or disconnect virtual meeting participants for using inappropriate language or not being an invited or announced attendee.



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## MEETING AGENDA

- Project Goals
- Where Are We in the Project Development Process?
- Project Alternatives Update
- Environmental Impacts
- Project Schedule
- Public Information
- Questions



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## PROJECT GOALS

- Improve safety, mobility and reliability of the bridge
- Federally approved Categorical Exclusion Level 3 (CEL3) documentation
- Consensus between Cooperating Agencies, Stakeholders and the Public
- A bridge that is constructible
- A bridge that is affordable



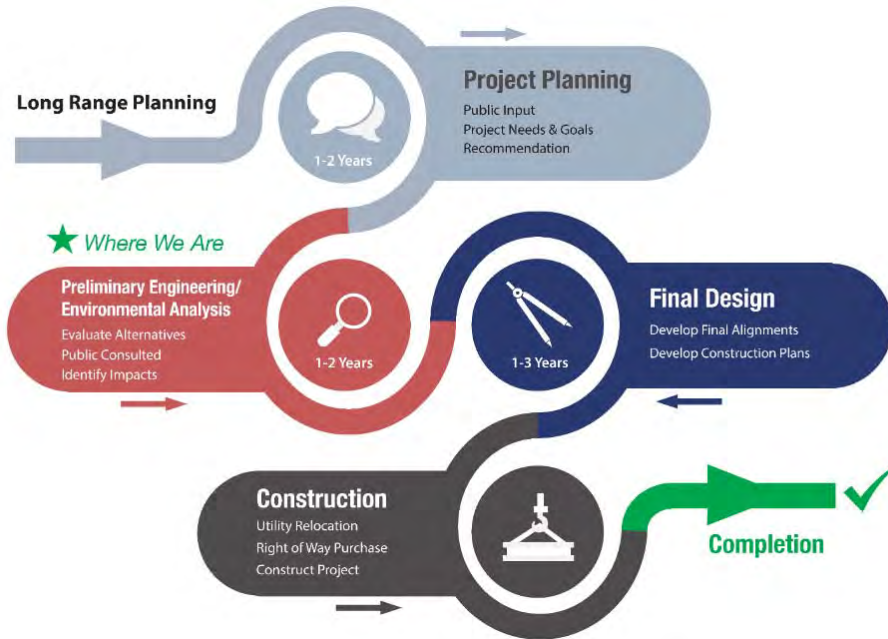
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**WHERE ARE WE IN THE DEVELOPMENT PROCESS?**

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# TYPICAL PROJECT DEVELOPMENT PROCESS



# THE NEPA PROCESS



**FHWA Environmental Review Kit**  
[https://www.environment.fhwa.dot.gov/nepa/nepa\\_projDev.aspx](https://www.environment.fhwa.dot.gov/nepa/nepa_projDev.aspx)

# SECTION 106



**Section 106 Citizen's Guide**  
<https://www.achp.gov/digital-library-section-106-landing/citizens-guide-section-106-review>



## PURPOSE & NEED

The purpose of the US 51 Bridge Project is to improve cross river mobility between Wickliffe, Kentucky and Cairo, Illinois, by addressing the safety and reliability issues caused by the narrow lane widths, lack of shoulders and tight curve of the existing bridge and its approaches.

## SECONDARY GOALS

- Satisfy U.S. Coast Guard requirements
- Support local freight routes and maritime activities
- Constructible solution
- Minimize costs
- Minimize disruption to Wickliffe and Cairo during construction
- Minimize impacts to mooring rights, tourism, human and natural environment, and historic resources
- Support consistent travel time between Wickliffe and Cairo
- Decrease delay due to incidents on the bridge
- Connectivity to bicycle facilities

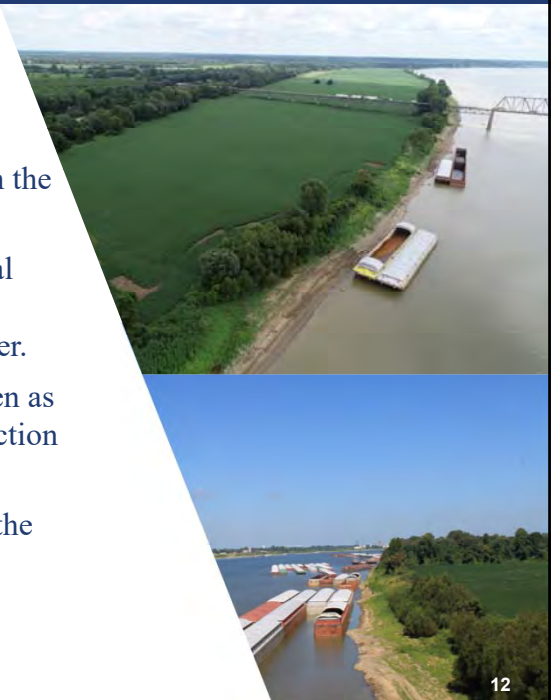


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## WHAT DID WE HEAR?

- Industry is prevalent in the area and depends on the bridge for reliable transportation.
- Bridge is important for access to groceries, local medical clinics/pharmacies, businesses, and education opportunities on both sides of the river.
- Closure/traffic impact during construction is seen as a negative. Effective communication of construction impacts and closures is key.
- Make any closure periods of the bridge during the summer when school is not in session.
- Avoid or minimize impacts to mooring rights.



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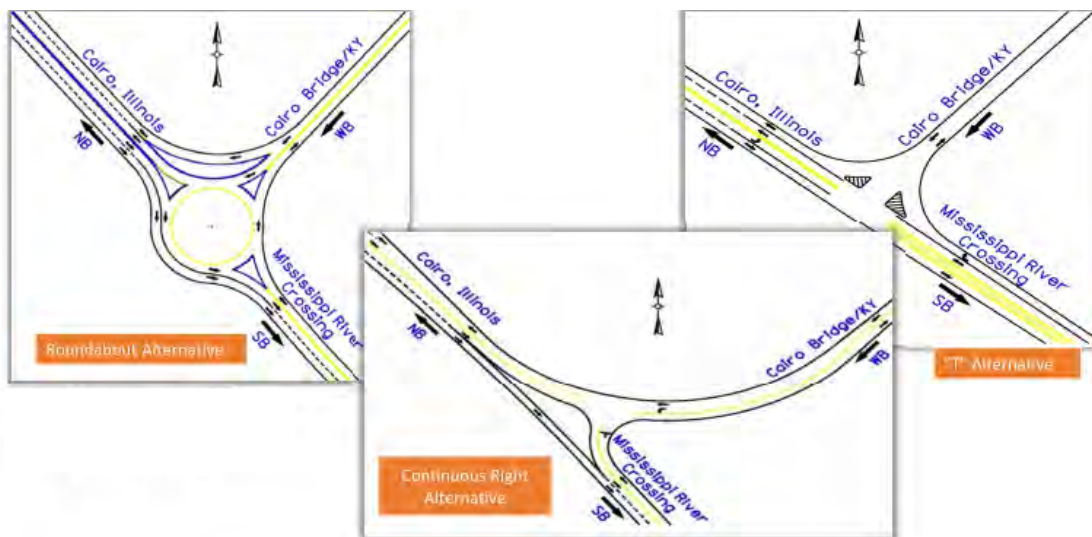


## PROJECT ALTERNATIVES UPDATE

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## INTERSECTION ALTERNATIVES



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## TRAFFIC PROJECTIONS

### Traffic Projections for the US 51 Ohio River Bridge:

HISTORIC TRAFFIC	AADT
2013 Traffic Count (KYTC)	5,350 vpd
2019 Current Year (Estimated)	5,500 vpd
TRAFFIC FORECAST	AADT
2025	5,600 vpd
2045	6,200 vpd

Notes: Future years forecast using 0.5% annual growth rate  
 AADT = Average annual daily traffic  
 vpd = Vehicles per day

- Approximately 35% of traffic using bridge is truck traffic
- A two-lane roadway can serve approximately 18,000 to 19,000 vehicles per day



## BRIDGE WIDTH

Bridge Cross Section	Bridge Cost	IL Design Exception Needed	KY Design Exception Needed	Bicycle Accommodations	Emergency Refuge	Agricultural Traffic
52' (2 Lane/4 Lane)	\$341M	NO	NO	●	●	●
44' (10' Shld)	\$288M	NO	NO	●	●	●
40' (8' Shld)	\$270M	NO	NO	●	⦿	⦿
36' (6' Shld)	\$246M	YES	YES	X	X	X

Note: The 52' ultimate 4-Lane typical section will require a design exception for both states and will not accommodate bicycles, agricultural traffic, or emergency refuge.

● - Will accommodate    ⦿ - Will accommodate with greater restriction    X - Will not accommodate

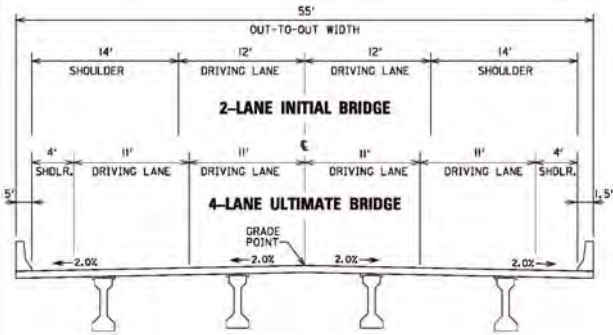
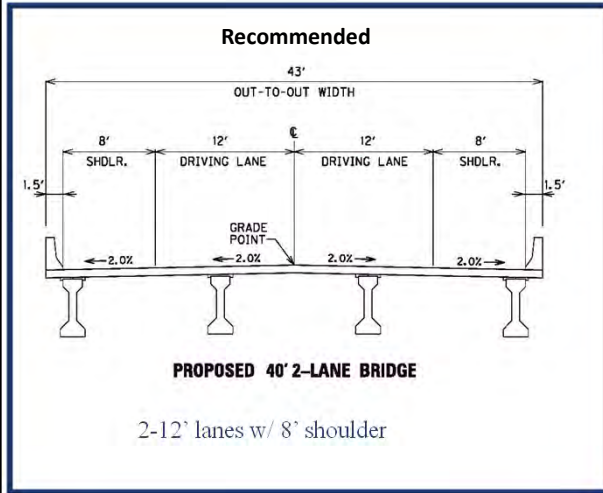
**Critical factors include:** overall number of lanes required, width of lanes and shoulders, and overall project costs.

**Number of lanes** is based on the current and predicted traffic volumes, potential for future growth, lack of a multi-lane bridge becoming an obstacle for economic growth, and lane continuity and connectivity.

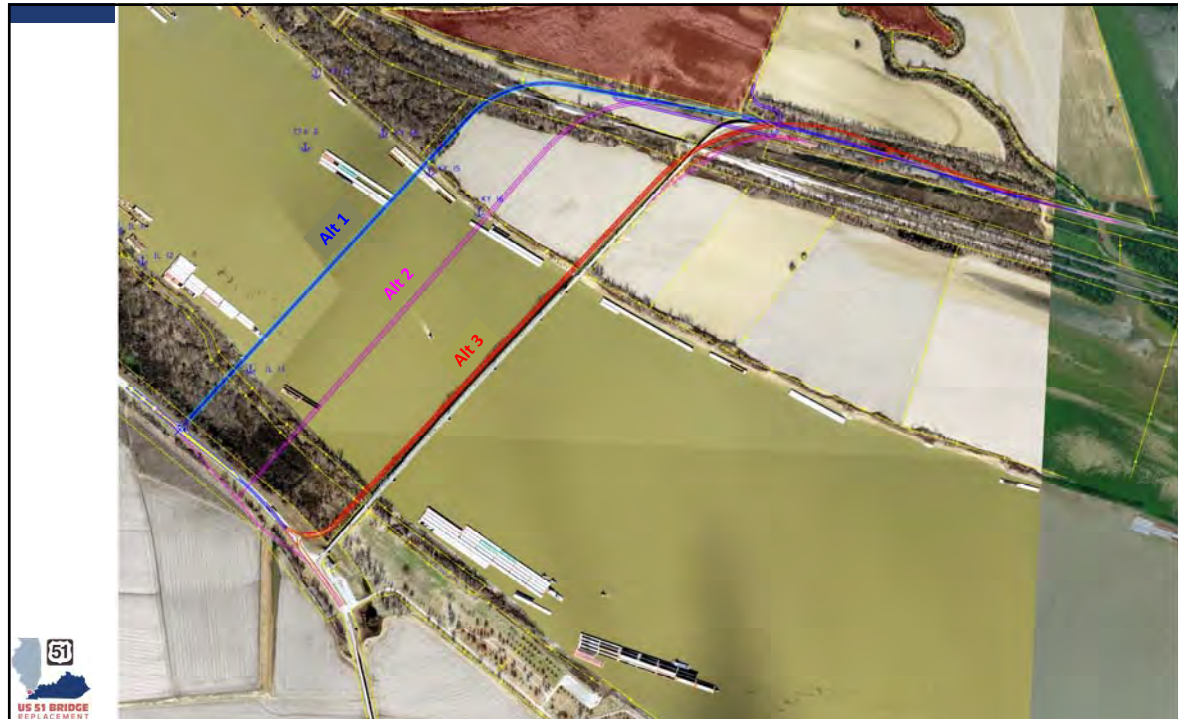
**Shoulder width** is based on bicycle traffic, room for emergency stopping, space for maintenance activities and the presence of agricultural traffic.



# TYPICAL SECTIONS

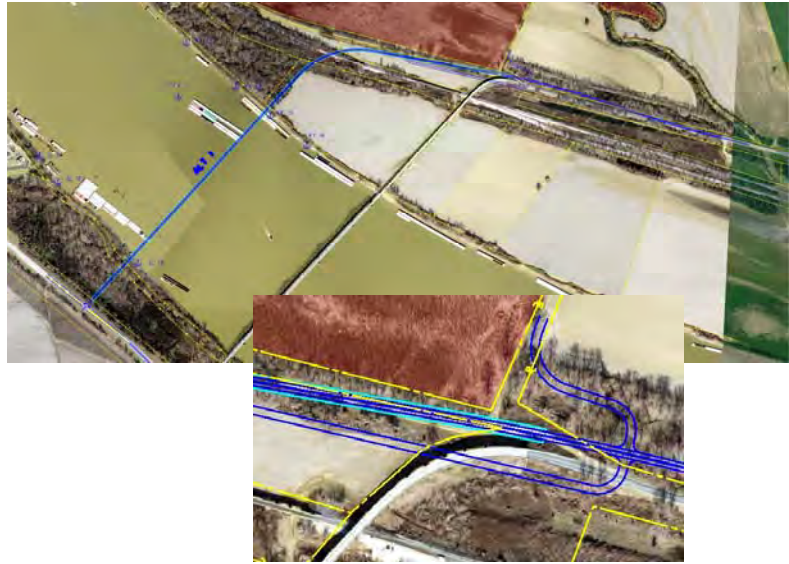


Initial – 2-12' lanes w/ 14' shld  
 Ultimate – 4-11' lanes w/ 4' shld



## ALTERNATE 1

- 1800 feet upstream of the existing bridge
- 2.03 miles long
- Roadway pulls off US 51 just west of Minor Slough Bridge
- Roadway / Bridge threads between existing bridge and USDA parcel.
- Crossing railroad 200' north of second railroad bridge.
- Possible single lane closures during tie-in to existing.



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## ALTERNATE 2

- 980 feet upstream of the existing bridge
- 1.94 miles long
- Roadway pulls off US 51 just west of Minor Slough Bridge
- Roadway / Bridge threads between existing bridge and USDA parcel.
- Crossing railroad dead center of the two bridges - 300' north and 300' south.
- Possible single lane closures during tie-in to existing.

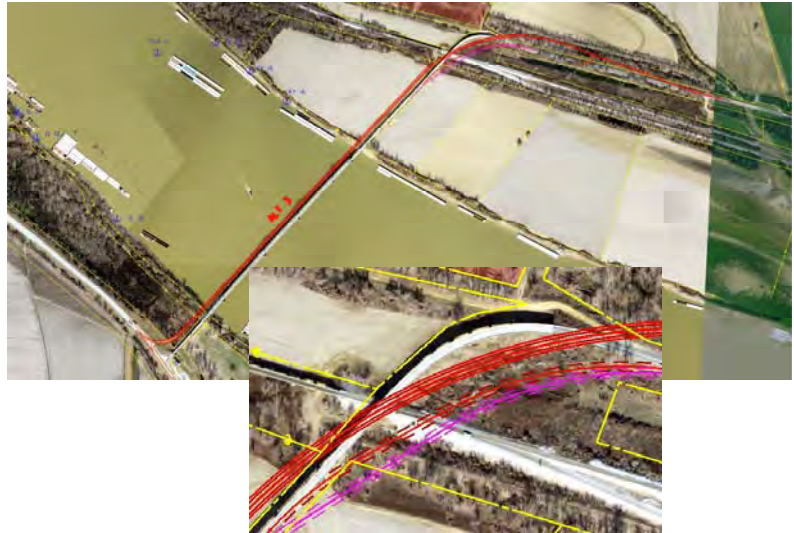


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## ALTERNATE 3

- 85 feet upstream of the existing bridge
- 1.88 miles long
- Because of railroad clearance, the proposed curve was flattened and crosses the existing bridge.
- A temporary bridge is necessary to maintain traffic during construction.
  - Two alternates are shown for the temporary bridge.
- It will require closing the bridge for about a week to tie in temporary bridge.



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## UPDATE ON ENGINEERING CONSIDERATIONS

### Railroad

- Confirmed restriction on any alignment within 100' of the railroad bridges.
- This restriction resulted in changes to alignment 3 and will require the use of a temporary bridge to maintain traffic.
- Ongoing coordination with potential need to move switching station to make room for temporary bridge if alignment 3 is chosen.

### Conclusions

- Alignment 1 and 2 have no railroad impacts other than typical clearance requirements for any bridge over a railroad.
- Alignment 3 was altered by the railroad restrictions and will require temporary bridge to maintain traffic during project.



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# Bridge Design

## Design Considerations

- Dead Load – Self Weight/Future Wearing Surface
- Live Load – Design for Trucks
- Seismic – 1000 year event
- Wind
- Barge Impact
- Hydraulics – Scour
- Thermal Load – Expansion/Contraction
- Fatigue – Repetitive Use

## Bridge Types/Components

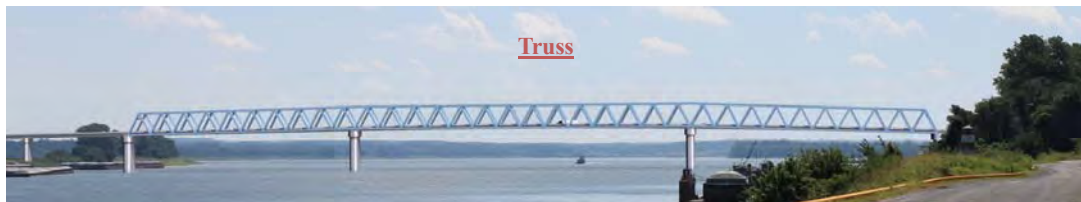
- Foundation
  - Shafts
  - Spread Footings
  - Piles
- Substructure
  - Concrete Piers
  - Abutments
- Superstructure
- Deck
- Approach Spans - Steel Girders or Precast Concrete Beams
- Main Span
  - Arch – Rib, Tie, Hangers
  - Truss – Top & Bottom Chord, Verticals/Diagonals
  - Cable-Stay – Pylon (towers), Cables



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# Bridge Types



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## Bridge Types

Arch



Truss



Cable-Stay



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## UPDATE ON ENGINEERING CONSIDERATIONS

### Seamen's Church Institute (SCI)

- 4-days of maritime traffic simulations in the bridge vicinity.
- Approximately 200 simulations completed with licensed towboat captains.

### Conclusions

- Preference for alignments 2 and 3 over alignment 1
- No significant challenges navigating 800' or 900' clear span bridge
- No significant challenges navigating the new bridge during construction
- Concerns about fleet mooring for alignment 1 or 2
- Waiting for the final report from SCI



Kyle Poat: KYTC D1 CDE (Not a licensed Captain).



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## UPDATE ON ENGINEERING CONSIDERATIONS

### US Coast Guard

- US Coast Guard attended Seamen's Church Institute simulations.
- Observed simulations and noted feedback from the towboat captains at SCI.
- Awaiting final report from SCI to make final determination on the required horizontal clearance of the navigation span.
- There is no USCG requirements for spans other than the navigation span.



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**ENVIRONMENTAL IMPACTS**

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**HISTORIC RESOURCES IMPACTS**

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## STATUS OF HISTORIC RESOURCES INVESTIGATIONS

- Area of Potential Effect and field methodology have been approved by KYTC, IDOT, and both KY and IL State Historic Preservation Offices (SHPO's)
- Preliminary records checks have been conducted
- Historic structure fieldwork was completed March and May 2020
- Eligibility and affects analysis is on-going



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## LISTED AND ELIGIBLE HISTORIC AND CULTURAL RESOURCES

National Register of Historic Places (NRHP) Historic Districts

- Cairo Historic District - IL
- NRHP Individually Listed Properties
- St. Patrick Catholic Church- IL
- Determined Eligible for the NRHP

- US 51 Bridge – KY/IL
- US 60/62 Bridge – IL/MO



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## RESOURCES SURVEYED WITHIN KENTUCKY

Resources surveyed

- BA 241 US 51 Bridge – Eligible
- BA 243 Timber trestle, railroad bridge – Not Eligible

Previously surveyed resources no longer extant

- BA 166 Timber trestle, railroad bridge
- BA 167 Timber trestle, railroad bridge
- BA 168 Timber trestle, railroad bridge



Figure 1. Aerial photograph depicting the APE and the locations of Sites 1 and 2.

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## RESOURCES SURVEYED WITHIN ILLINOIS

- 101 Resources Surveyed  
Eligibility analysis on-going
- Previously surveyed resources no longer extant:  
300109 St. Charles Hotel-Annex  
100681 Commercial building  
100857 Commercial building



Map showing reduced APE, Cairo Historic District, and resource locations.



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## Summary of Historic Resource Impacts

### KY Listed/Eligible Resources:

- US 51 Bridge: Adverse Effect - Alternatives 1, 2, & 3

### Illinois Listed/Eligible Resources:

- Analysis ongoing



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## PREVIOUS WORK AND ARCHAEOLOGICAL SITE POTENTIAL

Kentucky project area has not been subjected to prior survey; two previous surveys intersect Illinois project area

- No previously recorded sites within the alternatives present in Kentucky or Illinois
- Potential for archaeological sites low to moderate in Illinois and low in Kentucky
- Natural processes have significantly impacted the area, lowering the potential for Native American and other archaeological sites
- Historic disturbances have also occurred, especially in Alternative 3



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## STATUS OF INVESTIGATIONS

### Phase I Archaeological Survey

- Phase I survey to be completed for preferred alternative only
- Illinois side has been cleared for Archeology, no further work is required.

### Underwater Scanning (Multibeam and Bathymetric)

- Two anomalies found that may be cultural



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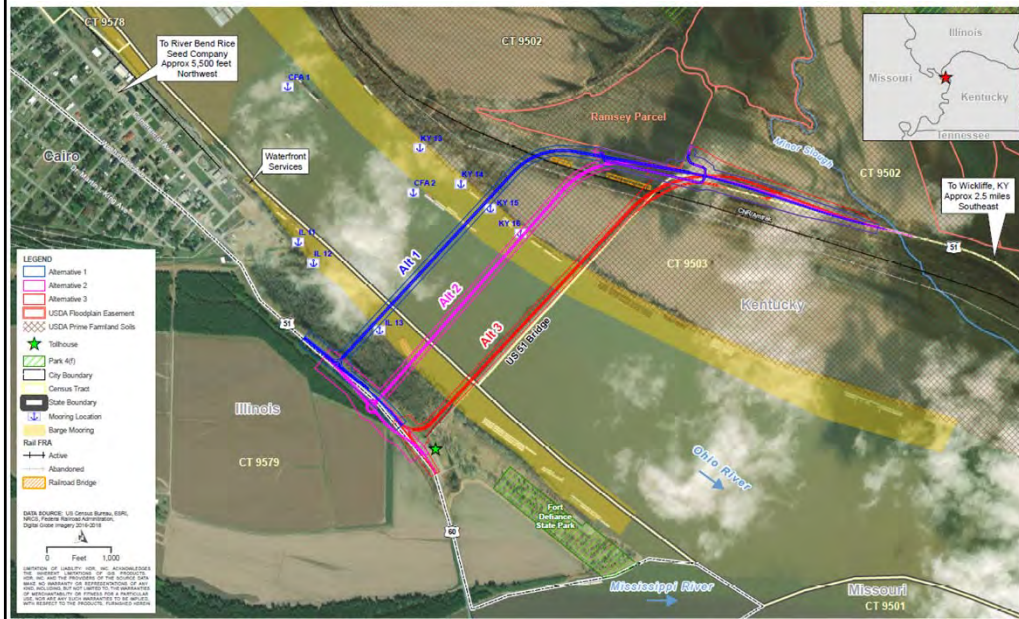
## HUMAN ENVIRONMENT IMPACTS

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# Key Socioeconomic Issues



- USDA-NRCS (Ramsey) parcel
- CN Railroad
- Fort Defiance State Park boundary
- Fleeting and mooring
- Waterfront Services
- Prime farmland – KY
- Construction

# Socioeconomic Impacts

- No residential or business relocations
- No communities or community facilities impacted
- No adverse affects are anticipated to impact Environmental Justice communities prevalent in the area (although EJ is ongoing area of sensitivity)
- No Section 4(f) or Section 6(f) impacts to parks or other protected lands
- Pedestrian and bicycle facilities – positive impacts due to addition of 8-foot shoulders
- Visual – Public will be provided opportunity to comment on bridge type
- Transportation – positive long-term impacts





## Right-of-Way Impacts

- All Alternatives will require right-of-way and temporary easements

Preliminary differences between alternatives are:

	Alternative 1	Alternative 2	Alternative 3
Right-of-Way (Acres)	14.41	14.84	20.94
Temporary Easement (Acres)	12.75	11.96	7.25

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## Farmland Impacts

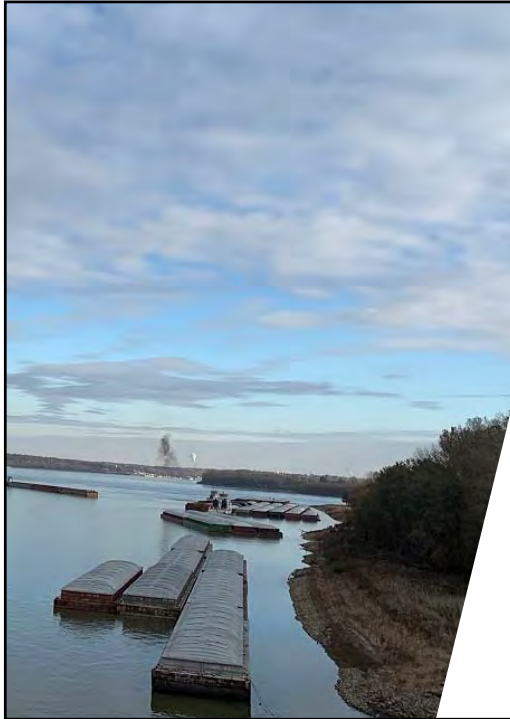
- Prime Farmland considered under the Farmland Protection Policy Act
- Coordination with IL and KY USDA Natural Resource Conservation Services
- No significant farmland impacts
- Ongoing coordination regarding Floodplain Easement

	Alternative 1	Alternative 2	Alternative 3
Prime and Unique Farmland- KY (ac.)	39.13	37.50	39.71
Prime and Unique Farmland- IL (ac.)	0	0	0
USDA NRCS Emergency Watershed Protection Program – Floodplain Easement (ac.)	0.54 (temporary easement)	0.54 (temporary easement)	0

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## Economic Impacts

- Bridge to remain open during construction to minimize economic impact; only short-term one-lane or full closures
- Primary economic impact concern is potential impacts to permitted mooring locations and barge mooring

Alternative 1	Alternative 2	Alternative 3
2 permitted mooring locations; may impact two additional	1 permitted mooring location; may impact two additional	0 - No impact to barge mooring or permitted mooring locations

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## Construction Impacts

- **Positive Impacts:** temporary impacts resulting from construction employment, construction workers purchasing goods and services from local restaurants, convenience stores, etc.
- **Short-term Impacts:** temporary delays due to one-lane closures on existing bridge, temporary impacts to barge traffic (maneuvering of construction equipment and two bridges during construction phase)
- **Alternative 3:** increased potential for short term full closure due to temporary bridge tie-in

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## NATURAL ENVIRONMENT IMPACTS


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### Natural Environment

- Terrestrial and aquatic resources will be impacted by the proposed project.
- There are 5 streams impacted by the project, the Ohio River and 4 small tributaries in Illinois.
- There are several types of potential terrestrial impacts from the project most notably forests and wetlands.
- There are 15 species listed as Threatened or Endangered with the potential to occur within the project footprint.



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## Aquatic Impacts



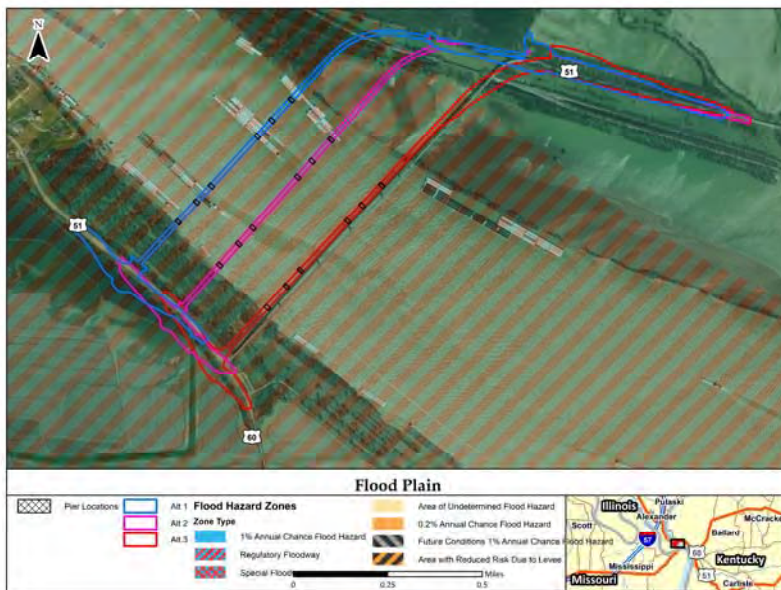
- Alternative 3 impacts the greatest linear feet of stream at 1,072.63 feet. Alternative 1 impacts the fewest linear feet of stream at 84 feet.
- There is no difference between the alternatives in their impacts to the Ohio River.



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## Aquatic Impacts



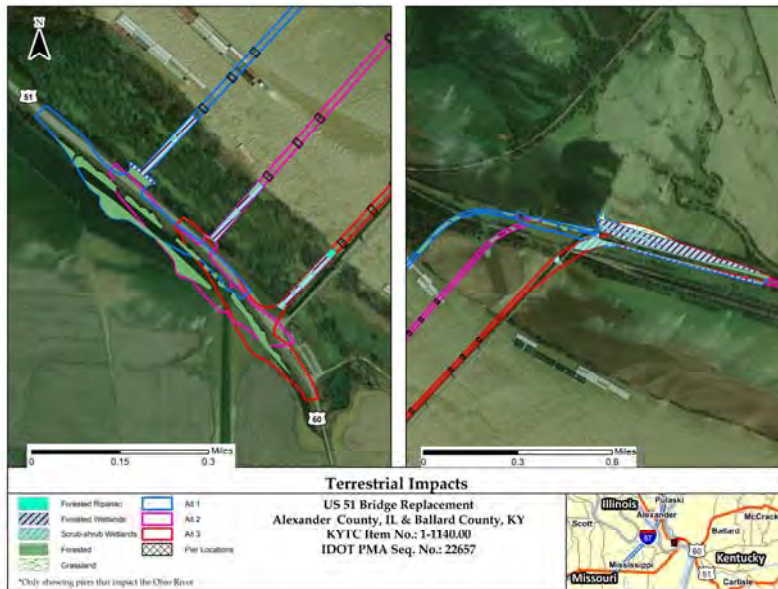
- US 51 in Illinois and the City of Cairo are in an area with a reduced risk of flooding due to the levee.
- US 51 in Kentucky is an area with 1% annual chance of flood.
- The proposed bridge alternatives are in a regulatory floodway.



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## Terrestrial Impacts



- Alternative 1 impact the greatest acreage of forest at 15.41 acres.
- Alternative 3 Impacts the greatest acreage of wetlands at 11.50 acres. Alternative 2 impacts the fewest acres of wetlands at 8.79 acres



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## Threatened and Endangered Species



- The listed species include 11 species of freshwater mussels, 3 species of bat, and 1 species of bird.
- The mussel species, if present, would be potentially affected by impacts to the Ohio River. There is no difference in acreage of river impacted by each alternative.
- The bird and bat species could be affected by impacts to forested habitat.



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## Natural Environment Impacts Summary

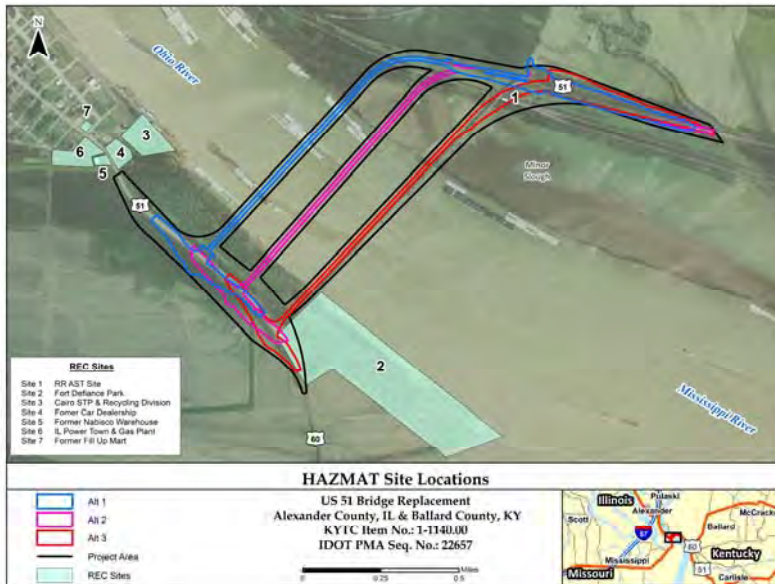
Habitat	Alternative 1	Alternative 2	Alternative 3
Stream Impacts (#)	1	3	4
Ephemeral (lf)	0	514.05	970.34
Intermittent (lf)	0	0	18.29
Perennial (lf)	84	84	84
Streams Total (lf)	84	598.05	1,072.63
(ac)	0.67	0.78	0.72
Wetlands (#)	6	4	4
(ac)	9.48	8.79	11.50
Forested Habitat (ac)	15.41	13.13	12.14
Total Footprint (ac)	41.13	40.29	39.96

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## Hazardous Materials (HAZMAT) Impacts



- There were seven sites with recognized environmental conditions (REC) in the study area.
- Site 1 has the potential to be impacted. It is approximately 100 feet south of the existing US 51 bridge along the railroad track. Impacts to Site 2 are not a HAZMAT concern.



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## HAZMAT Impacts

- The site is an above ground storage tank (AST) associated with the railroad and is only potentially impacted by Alternative 3.
- The selection of Alternative 3 may require coordination with CN Railroad and the relocation of the AST.

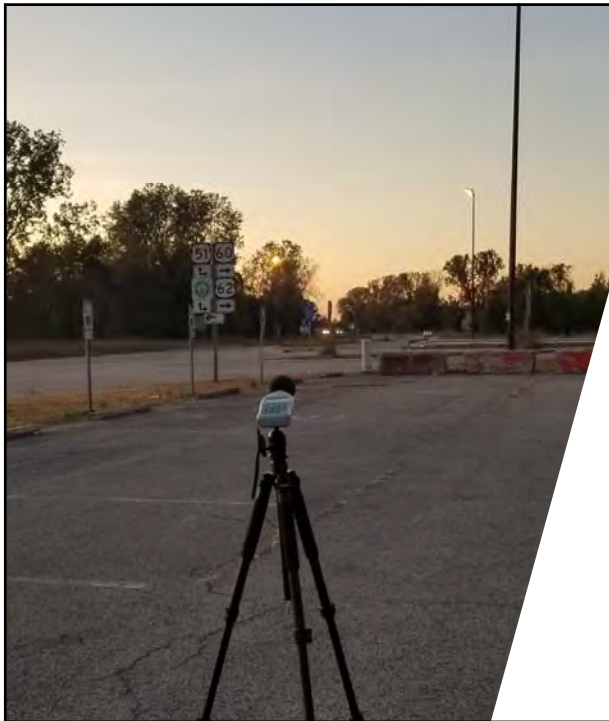


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## Highway Traffic Noise Impacts

- There were two noise receptors identified within 500-feet of the proposed project. Both are in Illinois.
- It was determined these receptors were not impacted by highway traffic noise for any of the three alternatives.
- Following IDOT & KYTC's noise policy, no structural noise barrier is necessary for the project.



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## NATURAL ENVIRONMENT ISSUES BY ALTERNATE

Impacts	Alternative 1	Alternative 2	Alternative 3
Forest (ac.)	15.41	13.13	12.14
Wetlands (ac.)	9.48	8.79	11.50
Streams (LF)	84	598.1	1072.6
Mooring (# of locations)	2 (with potential for 2 additional)	1 (with potential for 2 additional)	0
Potential HAZMAT sites (# of locations)	0	0	1
Farmland (ac.)	39.13	37.50	39.71
Right-of-Way (ac.)	14.41	14.84	20.94
Temporary Easements (ac.)	12.75	11.96	7.25
Potential Closure	No	No	Yes



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## ALTERNATIVE COMPARISON

Categories	No Build	Rehabilitation	Alternative 1	Alternative 2	Alternative 3
<b>Roadway Criteria</b>					
Length of Alternative			2.03 Mi	1.94 Mi	1.88 Mi
Roadway Width	20 ft	20 ft	40ft	40ft	40ft
MOT Impacts	None	Significant single lane closures during construction	Some single lane closures during construction	Some single lane closures during construction	Anticipated 7 day closure w/ Temporary Bridge
<b>Bridge Criteria</b>					
Bridge Length			6,940 ft	6,400 ft	6,230 ft
Temporary Bridge	N/A	N/A	N/A	N/A	900 – 1,200 ft
Complexity of construction	N/A	High	Normal	Normal	High
<b>Environmental Issues</b>					
USDA Easement	None	None	Yes 0.54 ac (temporary easement)	Yes 0.54 ac (temporary easement)	None 0.0 ac
UST/Hazardous Materials	None	Some Bridge	None	None	Some Railroad Tank
Railroad	None	None	None	None	Avoidance through use of Temporary Bridge.
Ohio River Navigation	No Change	Potential impact due to substructure improvements	Least Preferred	Preferred	Improved
Mooring Operations	None 0	None 0	High 2 direct; may impact 2 additional Relocations may be necessary	Medium 1 direct; may impact 2 additional Relocations may be necessary	None 0
Impacts to Natural Environment	None	None	Least Overall impact not a differentiator	Minor impacts no major differentiators	Minor impacts no major differentiators
Impacts to Historic Resources	None	None	106 & 4F impact (bridge)	106 & 4F impact (bridge)	106 & 4F impact (bridge)

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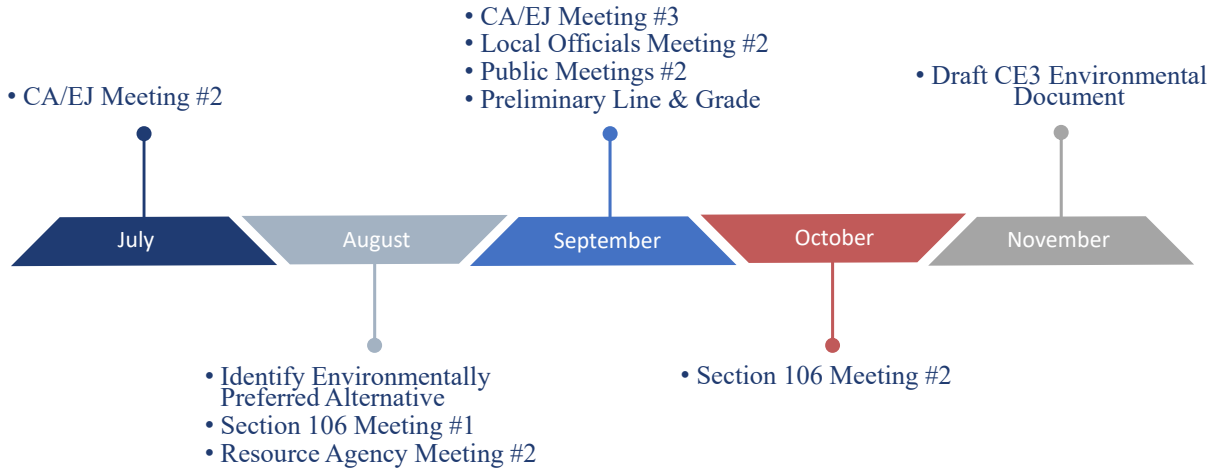


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## SCHEDULE AND OBJECTIVES



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## FOR MORE INFORMATION

**Website**  
<https://us51bridge.com/>

**Facebook**  
<https://www.facebook.com/KYTCDistrict1/>

**Section 106**  
<https://www.achp.gov/digital-library-section-106-landing/citizens-guide-section-106-review>

**FHWA Environmental Review Kit**  
[https://www.environment.fhwa.dot.gov/nepa/nepa\\_projDev.aspx](https://www.environment.fhwa.dot.gov/nepa/nepa_projDev.aspx)

**Attend Future Meetings**



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# QUESTIONS?



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# COMMENTS

Comments can be submitted by email to:  
Chris Kuntz at  
[chris.kuntz@ky.gov](mailto:chris.kuntz@ky.gov)

Written comments can be submitted to:  
KYTC District 1 Office  
5501 Kentucky Dam Road  
Paducah, KY 42003



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# **Appendix B**

# **Post-Meeting Survey**

# **Results**

## Q1 What is your name?

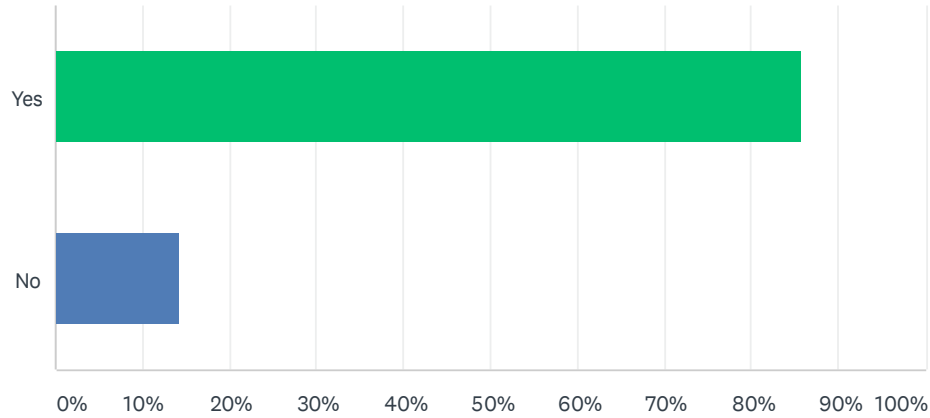
Answered: 14 Skipped: 0

### **Survey Participants:**

Carla Hildebrand  
Brian Derosse  
Janet Hunt  
Sylvio L. Mayolo  
Shelby Adkinson  
Hannah Chretien  
Jerry Pace  
Todd Cooper  
Angela VanCleve  
Tiffany George  
Jim LeFevre  
Stacey Courtney  
David Phillips  
Monica Smith

Q2 The key criteria seen by the project team are the following:-  
 Maintenance of traffic-Navigation Impacts-Impacts on Mooring  
 Operations-Complexity of construction Do you agree with these?

Answered: 14 Skipped: 0



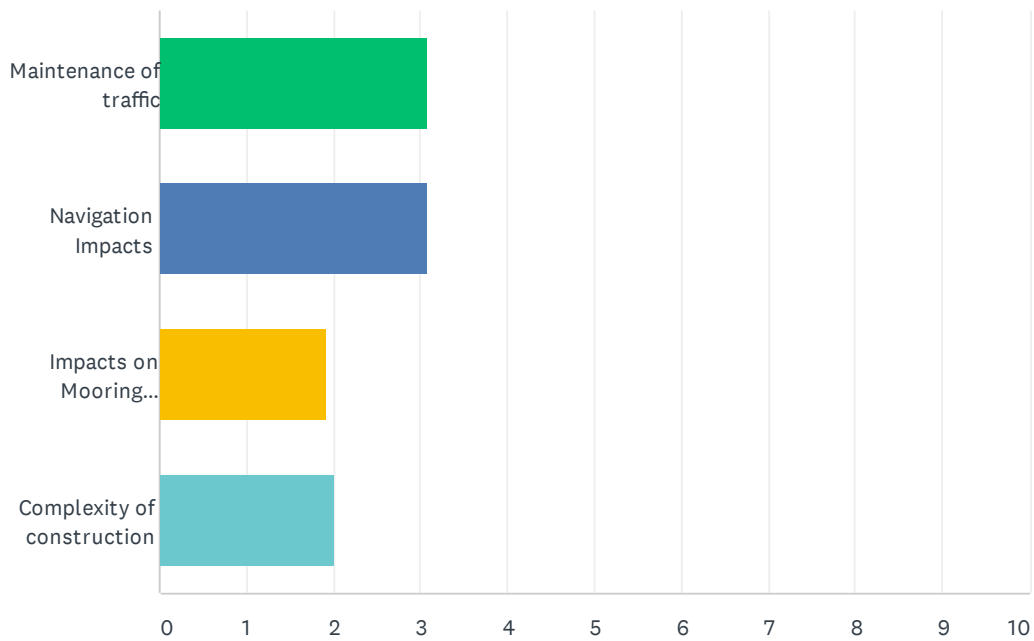
ANSWER CHOICES	RESPONSES	
Yes	85.71%	12
No	14.29%	2
TOTAL		14

**Additional Comments Received:**

**Tying into Route 57 and 55; making future development a priority, such as the construction of the Wickliffe riverport and the plan for a four-lane highway to start in Kevil and continue through Wickliffe and meaningful and impactful economic development by WAVE, MORCEA, West KY Regional Riverport Authority the Cairo Riverport Authority**

### Q3 Please rank the four criteria in order of importance with 1 being most important to you.

Answered: 14 Skipped: 0

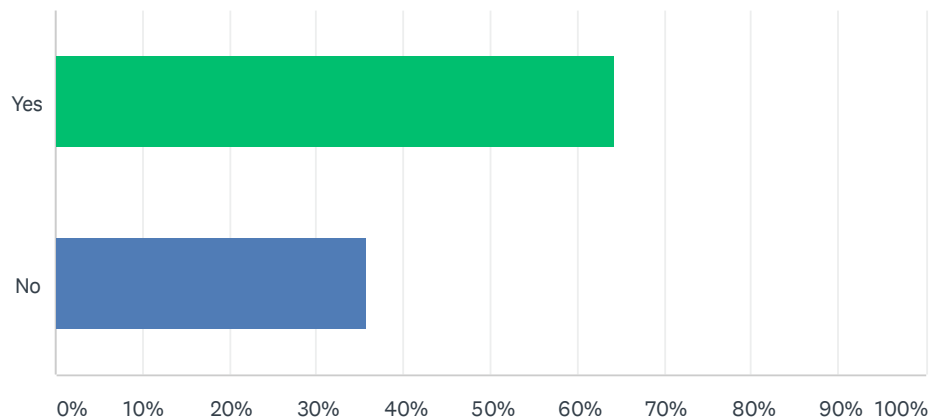


	1	2	3	4	TOTAL	SCORE
Maintenance of traffic	50.00% 7	14.29% 2	28.57% 4	7.14% 1	14	3.07
Navigation Impacts	46.15% 6	23.08% 3	23.08% 3	7.69% 1	13	3.08
Impacts on Mooring Operations	7.69% 1	23.08% 3	23.08% 3	46.15% 6	13	1.92
Complexity of construction	0.00% 0	38.46% 5	23.08% 3	38.46% 5	13	2.00



## Q4 In your opinion, does a 2 lane bridge with 8 foot shoulders meet the project goals?

Answered: 14 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	64.29%	9
No	35.71%	5
TOTAL		14

### Additional Comments Received:

**If we can construct 4 lanes in other sites coming into KY why go halfway when you are constructing something that will service this area. It appears that we are not thinking for needs and planning for the future.**

**Yes it does, as long as those two lanes are spacious.**

**Multiple economic development case studies in rural areas show that 4-lane developments are critical to the growth of rural areas. As it will not be feasible to re-build the bridge again for another hundred years, a 4-lane bridge is critical to the area's growth.**

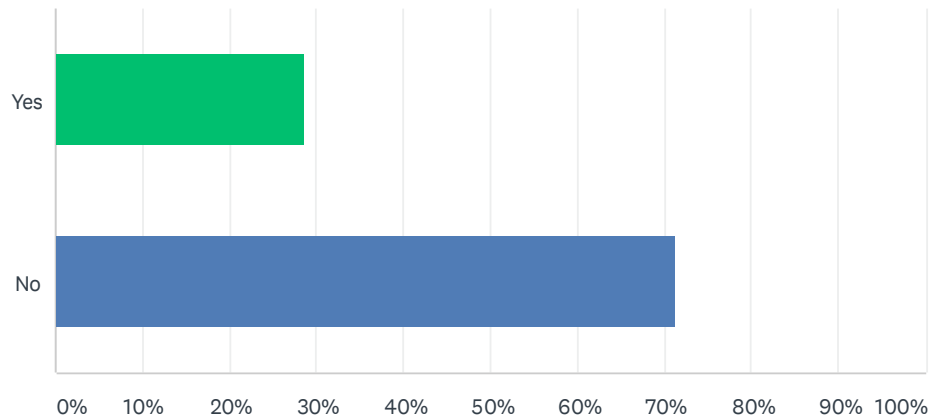
**Referring to my answer in question 1, studies show 4 lane highways are better recurred by potential investments. A four-lane road is heading that way in Kentucky from I-24 only lacking 18 miles, and Illinois has four lanes already almost 100% to I-57.**

**Super 2 or four lane bridge is needed. Illinois side is four lane already. We are trying to get a four lane from Paducah to Cairo currently on the Kentucky side to connect I-24/69 to I-57 and I-55. Why would we consider anything less than a four lane bridge, especially since the cost will not increase tremendously? We need to have the vision to grow for the future, not to stay the same.**

**I have lived here all of the 50 years of my life. I have traveled it many times to my grandparent's home in Cairo, IL. I have also witnessed the traffic that comes through my hometown of Wickliffe, especially traveling Highway 51 on a Friday and Sunday. This bridge has connected not only the North and the South, but 3 states as well. It also serves as a beacon over the confluence of the "Mighty" Mississippi and Ohio Rivers. I had such hopes that we could have a 4-lane bridge as great as the one going into Cape Girardeau (Bill Emerson Memorial Bridge). It certainly didn't have such factors as I believe "our" future bridge has. I hope to see a completion of the project at least in my lifetime. The road from Wickliffe to the bridge is so dangerous. Campers and Semis have increased in the last few years and now especially due to the Covid-19 Virus. I believe a bridge of this magnitude could really enhance our region economically.**

## Q5 Is there anything else we should consider or have missed as a criteria?

Answered: 14 Skipped: 0



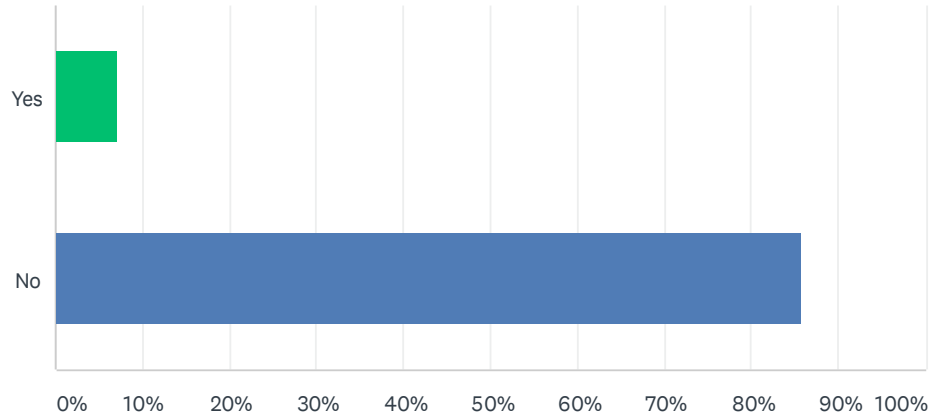
ANSWER CHOICES	RESPONSES	
Yes	28.57%	4
No	71.43%	10
TOTAL		14

**Additional Comments Received:**

**Plan for the future not for the present, 4-lane bridge option, more traffic data collection.**

## Q6 Is there anything else from the human and natural environment we should consider or have missed as being impacted by the project alternatives?

Answered: 14 Skipped: 0



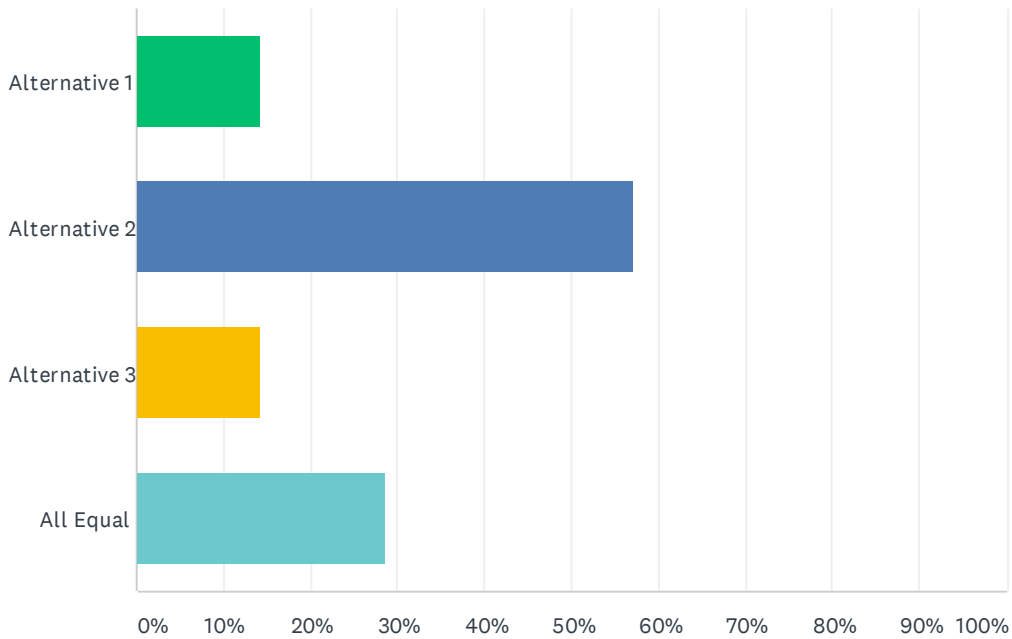
ANSWER CHOICES	RESPONSES
Yes	7.14% 1
No	85.71% 12
TOTAL	14

### Additional Comments Received:

**Ballard County is home to over 16,000 plus acres of state owned refuge for wildlife. Private owned acres equal as much or greater. Between the two, these lands offer a "Hunter's Paradise". We have many hunters and fishermen coming from as far as Canada. I believe if we had a better road and bridge connecting this area, we could expand on our recreational efforts, such as kayaking, camping and hiking.**

### Q7 Which Alternatives do you feel best satisfy U.S. Coast Guard requirements (select all that apply):

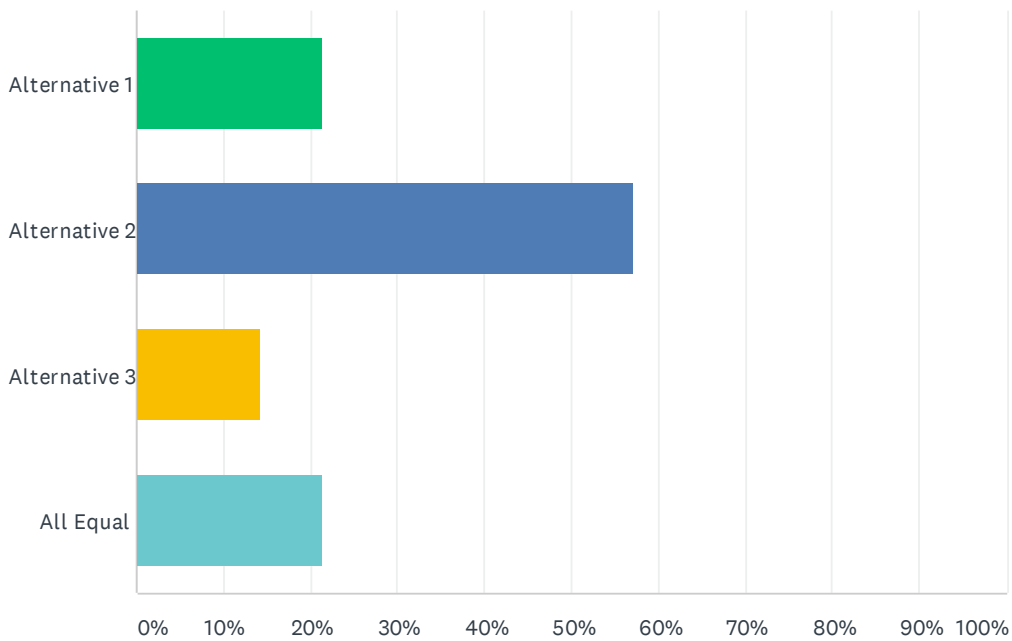
Answered: 14 Skipped: 0



ANSWER CHOICES	RESPONSES
Alternative 1	14.29% 2
Alternative 2	57.14% 8
Alternative 3	14.29% 2
All Equal	28.57% 4
Total Respondents: 14	

### Q8 Which Alternatives do you feel best support local freight routes and maritime activities (select all that apply):

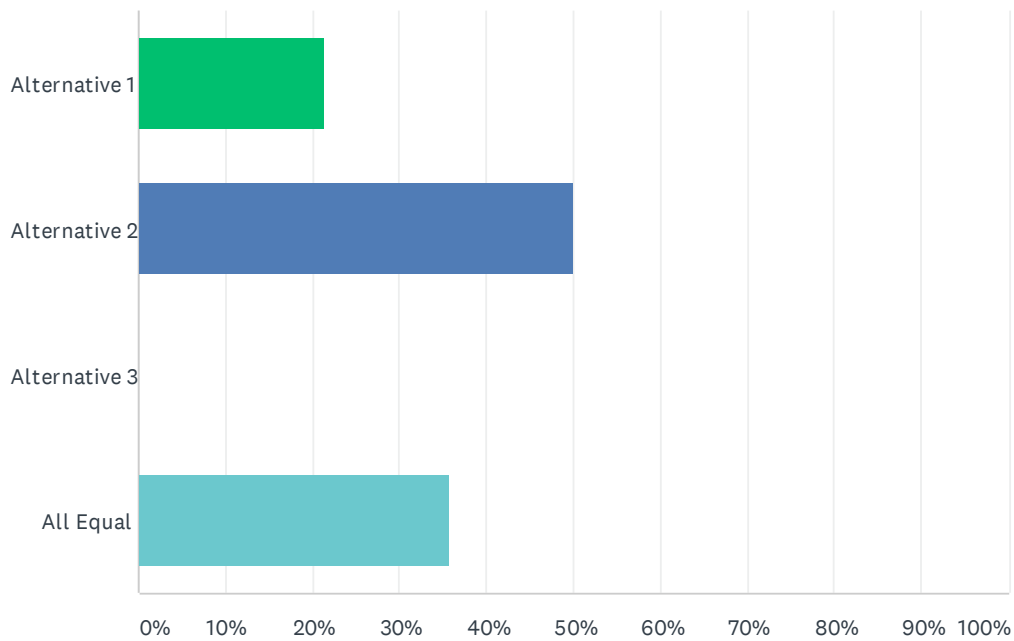
Answered: 14 Skipped: 0



ANSWER CHOICES	RESPONSES
Alternative 1	21.43% 3
Alternative 2	57.14% 8
Alternative 3	14.29% 2
All Equal	21.43% 3
Total Respondents: 14	

### Q9 Which Alternatives do you feel best provide a Constructible solution (select all that apply):

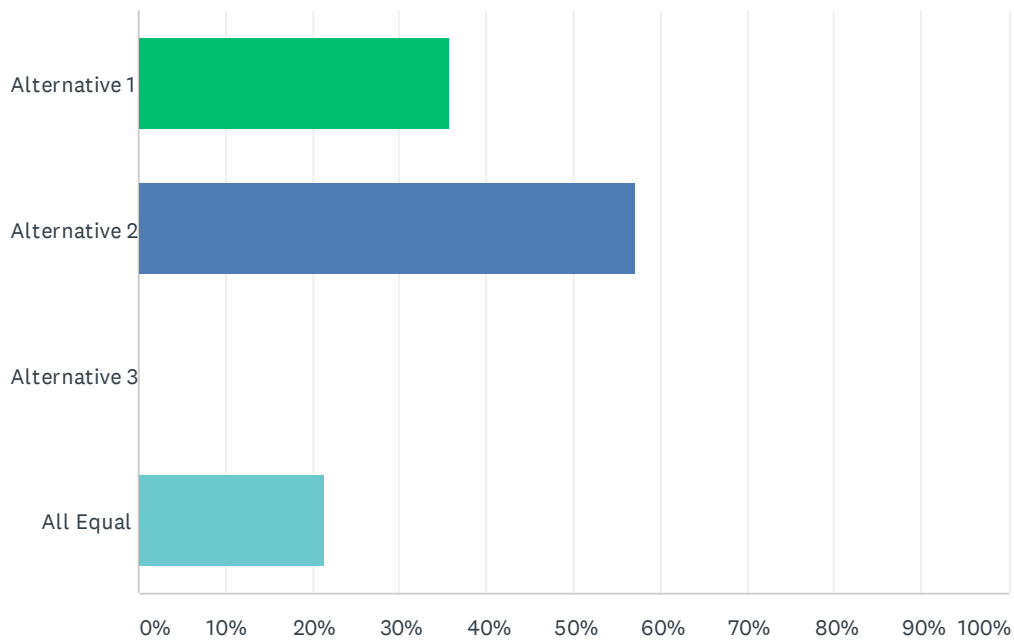
Answered: 14 Skipped: 0



ANSWER CHOICES	RESPONSES	
Alternative 1	21.43%	3
Alternative 2	50.00%	7
Alternative 3	0.00%	0
All Equal	35.71%	5
Total Respondents: 14		

### Q10 Which Alternatives do you feel best minimize disruption to Wickliffe and Cairo during construction (select all that apply):

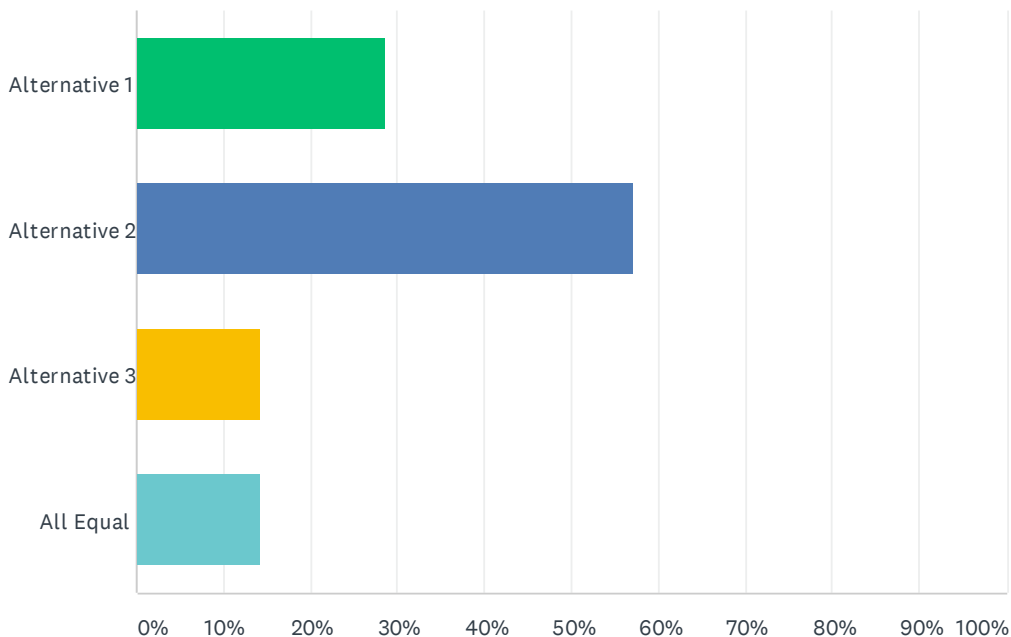
Answered: 14 Skipped: 0



ANSWER CHOICES	RESPONSES
Alternative 1	35.71% 5
Alternative 2	57.14% 8
Alternative 3	0.00% 0
All Equal	21.43% 3
Total Respondents: 14	

**Q11 Which Alternatives do you feel best minimize impacts to mooring, tourism, human and natural environment, and historic resources (select all that apply):**

Answered: 14 Skipped: 0

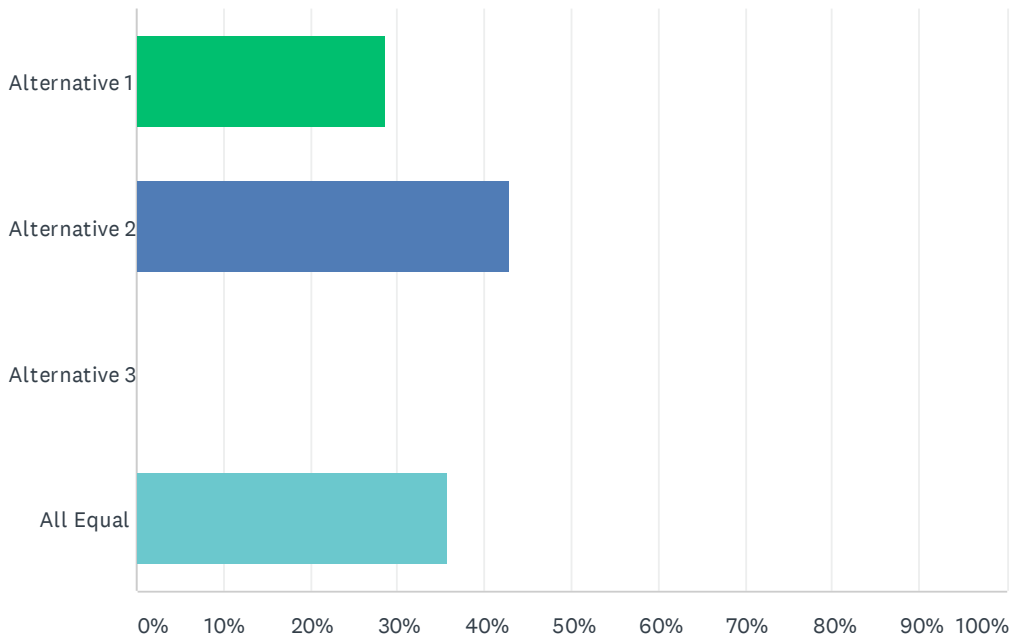


ANSWER CHOICES	RESPONSES
Alternative 1	28.57% 4
Alternative 2	57.14% 8
Alternative 3	14.29% 2
All Equal	14.29% 2
Total Respondents: 14	



### Q12 Which Alternatives do you feel best support consistent travel time between Wickliffe and Cairo (select all that apply):

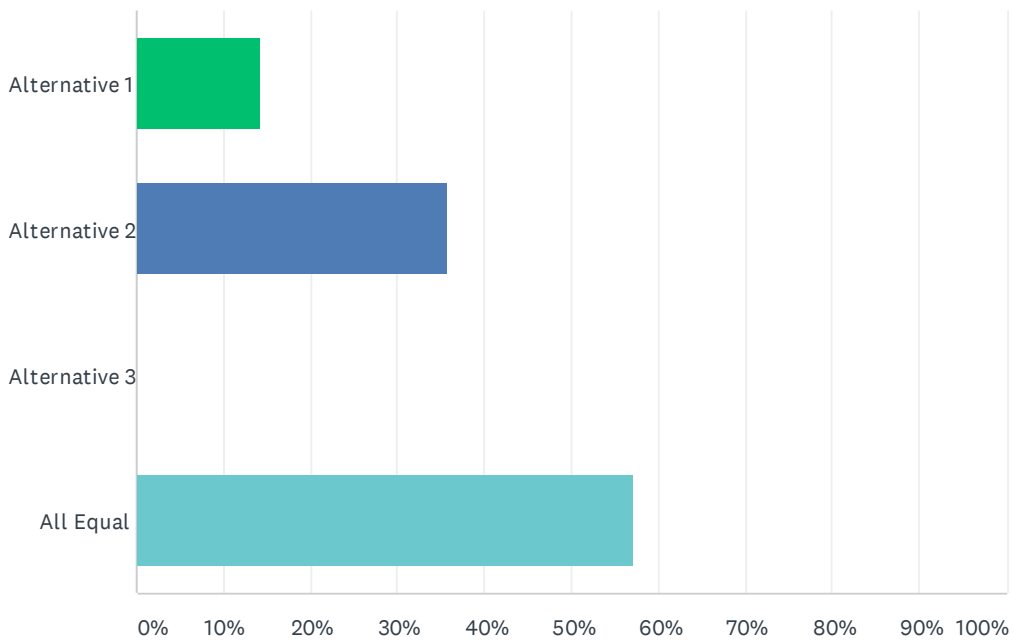
Answered: 14 Skipped: 0



ANSWER CHOICES	RESPONSES
Alternative 1	28.57% 4
Alternative 2	42.86% 6
Alternative 3	0.00% 0
All Equal	35.71% 5
Total Respondents: 14	

### Q13 Which Alternatives do you feel best decrease delays due to incidents on the bridge (select all that apply):

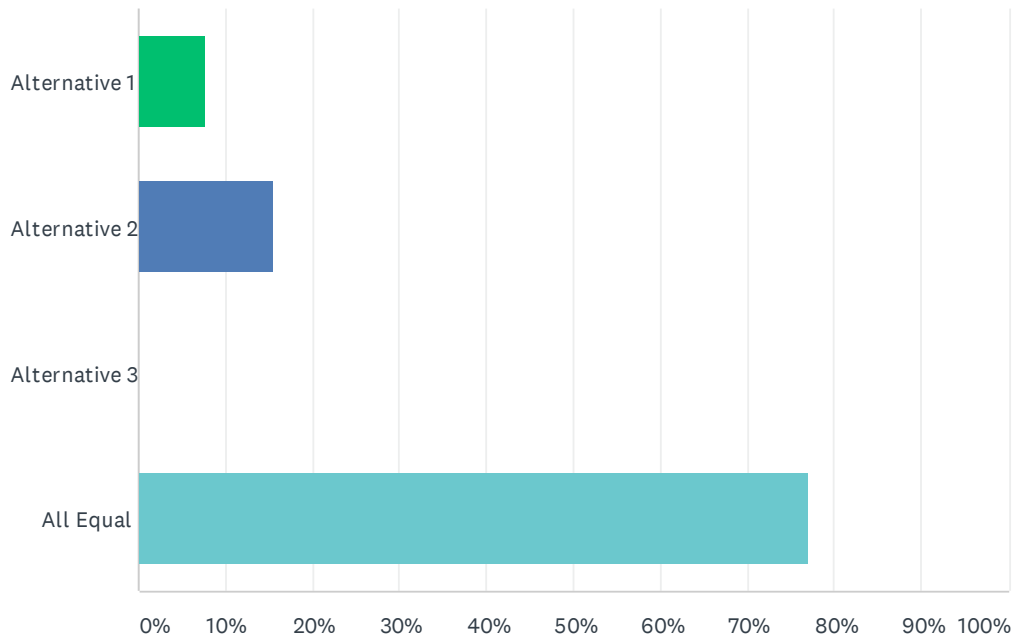
Answered: 14 Skipped: 0



ANSWER CHOICES	RESPONSES
Alternative 1	14.29% 2
Alternative 2	35.71% 5
Alternative 3	0.00% 0
All Equal	57.14% 8
Total Respondents: 14	

### Q14 Which Alternatives do you feel best provide connectivity to bicycle facilities (select all that apply):

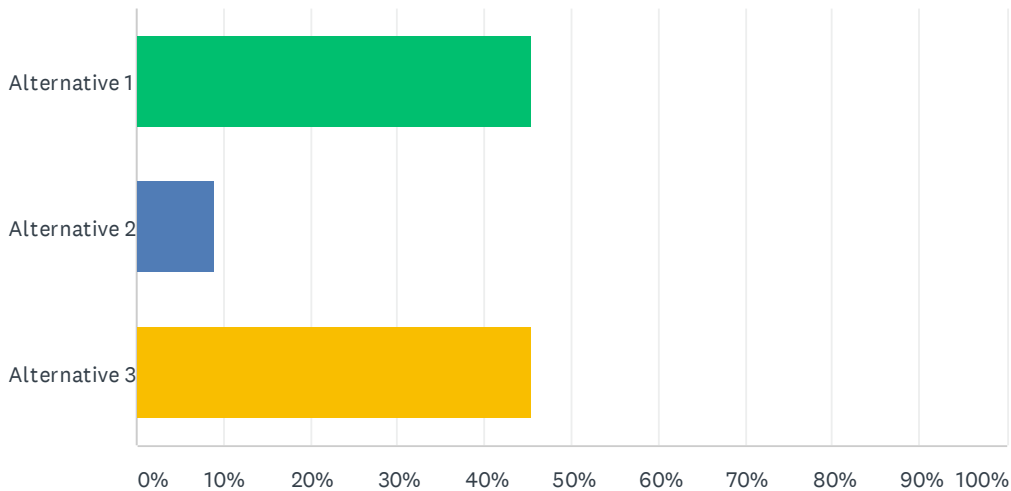
Answered: 13 Skipped: 1



ANSWER CHOICES	RESPONSES
Alternative 1	7.69% 1
Alternative 2	15.38% 2
Alternative 3	0.00% 0
All Equal	76.92% 10
Total Respondents: 13	

## Q15 If you were to eliminate one of the alternatives, which one would it be?

Answered: 11 Skipped: 3



ANSWER CHOICES	RESPONSES
Alternative 1	45.45% 5
Alternative 2	9.09% 1
Alternative 3	45.45% 5
Total Respondents: 11	

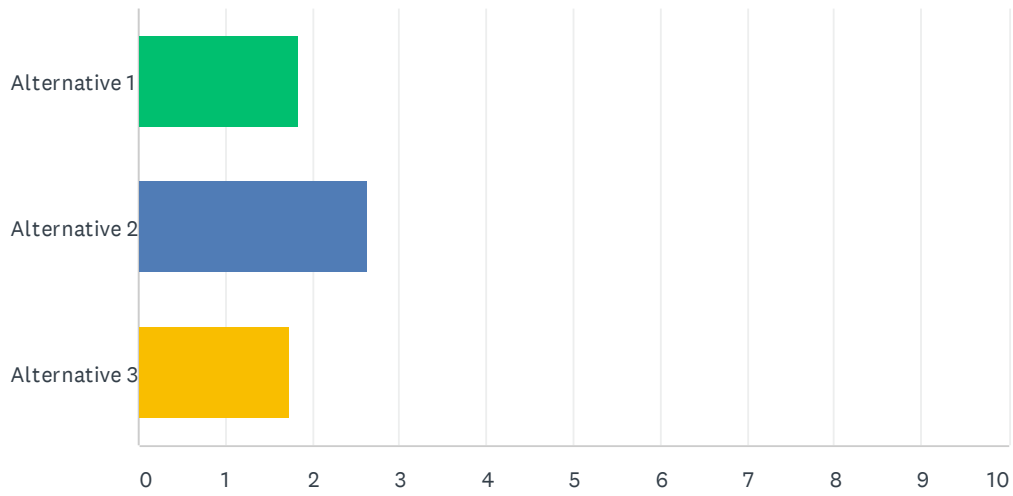
### Additional Comments Received:

**Alternative 1:** The length of the bridge is too long; the need to build more road, maybe more costly; based upon navigational and River Industry impacts; cost and complexity; it has most impact to natural environment; Navigation problems for river pilots

**Alternative 3:** Environmental and wetland impacts; the turn still seems too narrow/drastic; appears to be the least feasible option of the three; the marine industry does not like; it shuts the bridge down potentially hurting area business; cost and complexity; added cost of building a temporary bridge.

### Q16 Based on the presented information, please rank the alternatives based on your preference.

Answered: 13 Skipped: 1



	1	2	3	TOTAL	SCORE
Alternative 1	23.08% 3	38.46% 5	38.46% 5	13	1.85
Alternative 2	72.73% 8	18.18% 2	9.09% 1	11	2.64
Alternative 3	18.18% 2	36.36% 4	45.45% 5	11	1.73

**Q17 Do you have any other comments or concerns related to the project alternatives, environmental impacts and the next steps of the project?**

Answered: 10 Skipped: 4

**Comments Received:**

**I am primarily concerned with the least impact to tourism, and bridge closure.**

**I would like to see the project begin as soon as possible, considering the conditions of our current bridge.**

**A 4-lane bridge is a critical infrastructure need to the area for future growth opportunities. The Illinois-side already has close 4-lane highway access and 4-lane highway construction is already underway from Paducah through Kevil to the city of LaCenter.**

**Four lanes are need for the long term of the area.**

**Four lane bridge, four lane bridge, four lane bridge, four lane bridge.**