**APPENDIX G - MEETING SUMMARIES** 





### **Meeting Minutes**

TO: Eileen Vaughan Carol Callan-Ramler

Co-Project Manager

KYTC Central Office

Co-Project Manager

KYTC District Office #6

200 Mero Street

421 Buttermilk Pike

Frankfort, KY 40622 Crescent Springs, KY 41017

FROM: Brian Aldridge

Project Manager

Stantec Consulting Services Inc.

DATE: December 4, 2015

SUBJECT: KY 8 Licking River Bridge Scoping Study

Kenton County – From KY 17 (MP 7.321) to Campbell County Line (MP 7.662) Campbell County – From Kenton County Line (MP 0.000) to US 60 (MP 13.043)

Project Team Kick-Off Meeting

A project team kick-off meeting for the subject project was held at the District 6 office in Covington, Kentucky on November 13, 2015 at 10:30 a.m. EST. The following individuals were in attendance:

Carol Callan–Ramler KYTC - District 6 Planning Troy Hearn\* KYTC – Central Office Planning Beth Jones KYTC – Central Office Planning Sharon Laylock KYTC - District 6 Environmental Shane McKenzie KYTC – Central Office Planning Daniel Menetrey KYTC – District 6 Planning KYTC – Central Office Planning Mikael Pelfrey Jonathan Reynolds\* KYTC – Central Office Planning

James Simpson KYTC – Central Office Highway Design

Lynn Soporowski\* KYTC – Central Office Planning
Eileen Vaughan KYTC – Central Office Planning

Bob Yeager KYTC – District 6 Project Development

Brian Aldridge Stantec Consulting Services Inc.
Bill Amrhein Stantec Consulting Services Inc.
Steve Farmer Stantec Consulting Services Inc.
Tony Hunley Stantec Consulting Services Inc.
Ashley Williamson Stantec Consulting Services Inc.

<sup>\*</sup>Joined via teleconference



Prior to the meeting, the project team visited the study area. Following the visit to the study area, Carol Callan-Ramler welcomed everyone and said the purpose of the meeting was to discuss the progress to date on the KY 8 Licking River Bridge Scoping Study.

Handouts included copies of the presentation, an agenda, and maps of the study area. Brian Aldridge delivered a brief presentation. The following enumerated items were discussed.

- 1. The purpose of the meeting is to present the results of the existing conditions analysis and to get feedback from the project team before developing improvement alternatives. The KY 8 study area includes the existing KY 8 corridor in Kenton County from KY 17 to the Campbell County line and in Campbell County from the Kenton County line to US 60 intersections. The study area includes a 2,000 foot wide corridor centered on KY 8.
- 2. This project is one of the many projects listed in the KYTC Six Year Highway Plan in Campbell and Kenton Counties. The Licking River Bridge replacement project has been identified as Item No. 6-1086.00:
  - a. Replace bridge over the Licking River on West 4th Street (KY 8) in Covington/Newport at Kenton/Campbell County line.
  - b. The project is not funded in the current biennium, but has federal bridge replacement (BRX) funds allocated for 2021.
- 3. Some highlights from the existing conditions inventory were discussed. Within the study corridor, KY 8 is functionally classified as an Urban Principal Arterial with a posted speed limit of 30 miles per hour (mph). The bridge over the Licking River is a steel truss with three 11-foot wide lanes, with two lanes in the westbound direction and a single lane in the eastbound direction. There are sidewalks on the outside of the bridge.
- 4. KY 8 is not a designated truck route, but is rated AAA for 80,000 pound trucks. It was noted that the existing bridge has not been load rated. US 27 is the nearest federal-designated truck route.
- 5. The bridge over the Licking River has a 2015 Average Daily Traffic (ADT) volume of 17,500 vehicles per day (VPD) with 10 percent trucks. The highest daily volume on the bridge was about 25,000 VPD and occurred in the early 1990's. Based on output from the Ohio Kentucky Indiana (OKI) Regional Travel Model, the corridor is not expected to see significant traffic growth through 2040. The model in its current form includes the replacement of Brent Spence Bridge, a project that would affect the traffic demand within the study area. Stantec requested OKI to assess the impact of a four-lane bridge. The model output suggests an additional eastbound lane would not appreciably increase traffic on the bridge.
- 6. After performing a capacity analysis of the existing and future traffic, all roadway segments operate at less than full capacity with an eastbound one lane volume to



- capacity (V/C) ratio of 0.85 and westbound two lane V/C ratio of 0.67. The results of this analysis suggest the current lane configuration can adequately accommodate the existing and future traffic demand.
- 7. The crash history for the project corridor was discussed in detail. There were 134 crashes reported for the project area between 2012 and 2014. A table was shown highlighting two segments with Critical Crash Rate Factors (CRF) greater than 1.0, suggesting that crashes are not occurring randomly within these areas. As KY 8 comprises a one-way couplet on each side of the river (4<sup>th</sup> Street and 5<sup>th</sup> Street), the segment CRF analysis was performed using one-way segment crash rates provided by the Kentucky Transportation Research Center. Brian noted that spot analysis is not feasible since average spot crash rates are only available for two-way streets.

	1	STUDY	PERIOD IN YEAR	28	3			
Roadway Number	Roadway Name	Begin Intersection	End Intersection	AADT	Number of Crashes	Section Crash Rate (per 100 MVM)	Functional Class	Critical Crash Rate Factor (CCRF)
KY 8 (2012 - 2014)	)							
KY 8	5th Street	KY 17	Garrard St	6,408	35	2917	Urban Principal Arterial	2.3
KY 8	4th Street	KY 17	Garrard St	10,388	20	2171	Urban Principal Arterial	1.6
KY 8	4th Street	5th Street	KY 8	17,519	10	100	Urban Principal Arterial	0.2
KY 8	5th Street	KY 8	KY 9	6,815	14	1110	Urban Principal Arterial	0.9
KY 8	4th Street	KY 8	KY 9	8,382	8	516	Urban Principal Arterial	0.4

- 8. Of the 134 reported crashes, 0 (0%) resulted in a fatality, 26 (19%) resulted in injuries, and 108 (81%) were property damage only collisions.
- 9. As part of Stantec's Environmental Overview, natural and human environmental resources within the study area were identified. Brian noted that historic resources are the primary concern for the study, and the overview includes identifying the boundaries for and contributing properties within the historic districts along the Ohio and Licking Rivers. The Licking River Bridge was built in 1937 and is considered eligible for the National Register of Historic Places (NRHP).
- 10. Brian briefly discussed the results from the Socioeconomic Study prepared by the Northern Kentucky Area Development District. Based on a review of Census data, there are low income areas southeast of the Licking River Bridge. Overall, approximately 28.8% of the study area population is minority and approximately 23.4% of the population is low income. These percentages are greater than both the county and state percentages for minority and low income populations. Bob Yeager noted that if the bridge is replaced in its original location that relocation of the low income housing should not be needed.
- 11. Brian introduced the draft Purpose and Need Statement for the project.



- a. The KY 8 (4<sup>th</sup> Street) Bridge over the Licking River was constructed in 1936. It currently carries more than 17,500 vehicles per day. After nearly 80 years, the bridge is nearing the end of its useful service life. The purpose of the Licking River Bridge Project is to rehabilitate or replace the bridge within its existing corridor to make it structurally safe. The project will improve efficiency, connectivity, and safety for vehicles, bicycles, and pedestrians.
- b. There was some discussion regarding the Purpose and Need. The project team discussed and changed the third sentence of the draft Purpose and Need Statement to read "... ensure the bridge is structurally safe."
- 12. The OKI Regional Bicycle Plan details the location of bike lanes, bike racks, shared use paths, etc. The Kentucky Route 8 River Path was given priority consideration in the plan with shared use paths and existing roadway improvements recommended. The Licking River Greenway has trail proposals along the Licking River. The project team discussed a separate pedestrian bridge and who would maintain the bridge after construction. Bob Yeager mentioned to try to get cities to take over the maintenance. Lynn Soporowski mentioned she would be in favor of a pedestrian bridge and in Lexington free transit was offered when a bridge was being reconstructed in Lexington. She recommended Beth Jones work with OKI to set up bicycle/pedestrian locations for counts in the spring.
- 13. Bill Amrhein discussed the four preliminary bridge alternatives. Coordination with the U.S. Coast Guard (USCG) has been initiated. The USCG requires certain vertical and horizontal clearances for navigable waterways, and the main span of any replacement bridge will span the river and bear on piers constructed in the dry of the riverbank. The four preliminary bridge alternatives discussed are as follows:
  - a) Alternative 1 Truss Bridge
    - a. This bridge would have a similar look to the existing bridge and could take a full construction season to build. This alternative would provide a structure that is both aesthetically pleasing and similar to the existing in appearance. The proposed bridge could maintain grades similar to the existing bridge. A temporary pedestrian bridge may be needed.
  - b) Alternative 2 Plate Girder Vehicular Bridge and Signature Pedestrian Bridge
    - a. This bridge is similar to the existing "Girl Scout Bridge" on 11<sup>th</sup> Street (KY 1120) over the Licking River between Covington and Newport. This concept provides the most straightforward and least expensive construction for the roadway structure, but would require an increase in the profile grade to maintain minimum USCG vertical clearance requirements. A standalone signature pedestrian bridge would be constructed parallel to the roadway bridge. The separate structure could be constructed first to accommodate bicyclists and pedestrians throughout the construction of the roadway bridge,



resulting in more right-of-way needs and creating a separate facility to maintain.

- c) Alternative 3 Stage Constructed Plate Girder Bridge
  - a. This concept would construct the Plate Girder Bridge from Alternative 2 with accommodations for bicyclists and pedestrians on the structure. Stage construction would better maintain traffic as well as bicycle and pedestrian accommodations throughout construction without need for a temporary (or permanent) separate structure.
- d) Alternative 4 Signature Extradosed Bridge.
  - a. The Extradosed Bridge is a hybrid of a cable stay and deck girder bridge. It has the highest cost of the alternatives, but it would not require as high of a raised vertical as the Plate Girder Bridge options. Disadvantages include the possible need for a temporary pedestrian bridge, significant disruption to vehicular traffic, and more complex construction.
- 14. The project team discussed a number of design elements that will be considered during the alternative development process. The group had an open discussion about these items as follows:
  - a. This project will provide a shared use path (likely to be located on the north side to better connect to the Newport River Trail) or an extra wide sidewalk.
     A five foot wide sidewalk would be constructed on the south side of the bridge.
  - b. The existing rock wall located on 4<sup>th</sup> Street southwest of the bridge can likely be relocated into the adjacent parking lot to allow for an expanded roadway or pedestrian facilities.
  - c. Regardless of the option carried forward, a vehicular detour would be necessary for a period of time. (Alternative 3 may eliminate the need for a long-term detour.) A temporary pedestrian bridge could be considered with all but Alternative 2, but would add considerable cost to the project. Some options for pedestrians and/or bicyclists could include free transit and/or taxi vouchers.
  - d. The alternative development process should focus on two bridge types for which renderings and cost estimates will be developed. The project team decided to advance Alternative 1 (Truss Bridge) and the Alternative 3 (Stage Constructed Plate Girder Bridge). A four lane option as well as potential options for sidewalks and a shared use path will be evaluated with each concept. Alternatives should show profile differences from the existing bridge.
  - e. As part of KYTC Item No. 6-8101.00 in Campbell County, KY 9 is to be rerouted and a roundabout will be constructed near the confluence of 4<sup>th</sup> Street and 5<sup>th</sup> Street (just east of the Licking River Bridge). It was confirmed that even though the roundabout has been designed for one lane on the eastbound approach, it can be reconfigured to accommodate an additional lane from the bridge.



- 15. The next steps will be for Stantec to complete the existing conditions analysis and work on alternative development.
- 16. Brian discussed the project schedule. This study includes three project team meetings with the next meeting in January 2016 to discuss alternatives. May 2016 would be the final project team meeting where study recommendations would be finalized.

The meeting ended at approximately 12:30 p.m. EST.



# **Meeting Minutes**

TO: Eileen Vaughan Carol Callan-Ramler

Co-Project Manager

KYTC Central Office

Co-Project Manager

KYTC District Office #6

200 Mero Street

421 Buttermilk Pike

Frankfort, KY 40622 Crescent Springs, KY 41017

FROM: Brian Aldridge

Project Manager

Stantec Consulting Services Inc.

DATE: February 26, 2016

SUBJECT: KY 8 Scoping Study

Kenton County – From KY 17 (MP 7.321) to Campbell County Line (MP 7.662) Campbell County – From Kenton County Line (MP 0.000) to US 60 (MP 13.043)

Project Team Meeting #2

A project team meeting for the subject project was held at the District 6 office in Crescent Springs, Kentucky on February 10, 2016 at 11:00 a.m. EST. The following individuals were in attendance:

Matt Arlinghaus KYTC – District 6
Mike Bezold KYTC – District 6
Andrew Bush KYTC – District 6
Carol Callan–Ramler KYTC – District 6
Rob Hans KYTC – District 6

Beth Jones KYTC – Central Office Planning

Daniel Menetrey KYTC – District 6

Mikael Pelfrey KYTC – Central Office Planning Steve Ross KYTC – Central Office Planning Eileen Vaughan KYTC – Central Office Planning

Bob Yeager KYTC – District 6

Brian Aldridge Stantec Consulting Services Inc.
Bill Amrhein Stantec Consulting Services Inc.
Tom Creasey Stantec Consulting Services Inc.
Glenn Hardin Stantec Consulting Services Inc.
Len Harper Stantec Consulting Services Inc.
Tony Hunley Stantec Consulting Services Inc.

Carol Callan-Ramler welcomed everyone and said the purpose of the meeting was to discuss the progress to date on the KY 8 Licking River Bridge Scoping Study.



Handouts included an agenda as well as typical sections and profiles of the bridge alternatives. Brian Aldridge delivered a brief presentation. The following enumerated items were discussed:

- 1. The purpose of the meeting is to present preliminary alternatives for the project team to review. The KY 8 study area includes the existing KY 8 corridor in Kenton County from KY 17 to the Campbell County line and in Campbell County from the Kenton County line to US 27. The study area includes a 2,000 foot wide corridor centered on KY 8.
- This project is not funded in the current biennium, but has federal bridge replacement (BRX) funds allocated for 2021 in the current KYTC Six Year Highway Plan. The project was not included in the first draft of Kentucky's Recommended 2016 Highway Plan.
- 3. Some highlights from the existing conditions inventory were discussed. Within the study corridor, KY 8 is functionally classified as an Urban Principal Arterial with a posted speed limit of 30 miles per hour (mph). The bridge over the Licking River is a steel truss with three 11-foot wide lanes, with two lanes in the westbound direction and a single lane in the eastbound direction. There is a sidewalk on each side of the bridge.
- 4. The bridge over the Licking River has a 2015 Average Daily Traffic (ADT) volume of 17,500 vehicles per day (vpd) with 10 percent trucks. Based on output from the Ohio Kentucky Indiana (OKI) Regional Travel Model, the corridor is not expected to see significant traffic growth through 2040. After performing a capacity analysis of the existing and future traffic, all roadway segments operate at less than full capacity with an eastbound one lane volume—to-capacity (V/C) ratio of 0.85 and westbound two lane V/C ratio of 0.67. The results of this analysis suggest the current lane configuration can adequately accommodate the existing and future traffic demand.
- 5. As part of Stantec's Environmental Overview, natural and human environmental resources within the study area were identified. Brian noted that historic resources and the historic districts are the primary concern for the study. The Licking River Bridge was built in 1936 and is considered eligible for the National Register of Historic Places (NRHP).
- 6. The OKI Regional Bicycle Plan details the location of bike lanes, bike racks, shared use paths, etc. Funding has been programmed for the Licking River Greenway which has trail proposals along the Ohio River and the Licking River.
- 7. The United States Coast Guard (USCG) sent a response letter on January 14, 2016. They determined that a new bridge at this location shall meet or exceed the existing horizontal and vertical clearance of the Girl Scout Bridge (KY 1120/12<sup>th</sup> Street). The horizontal clearance is 276.4 feet and the vertical clearance is 64.19 feet above



- normal pool at the Girl Scout Bridge. Mr. Allan Monterroza will be the USCG contact for this project moving forward.
- 8. Tony Hunley discussed the bridge rehab option. He noted that the existing truss has not been load rated. Without a load rating Stantec cannot create a detailed cost estimate for the bridge rehab option. However, based on Stantec's observations of the existing truss and its approaches, rehabilitation of the existing truss appears to be a feasible option that could increase the life of the bridge.
- 9. Brian presented the preliminary alternatives. The group had an open discussion about these items as follows:
  - a. The decision was made at the first project team meeting to focus on two bridge types for which renderings and cost estimates were developed. The project team decided to advance Alternative 1 (Truss Bridge) and Alternative 3 (Stage Constructed Plate Girder Bridge). Profiles were also developed showing differences from the existing bridge.
  - b. The decision was made at the first project team meeting to use a four-lane bridge typical section. This could be striped as three lanes with shoulders or bike lanes. The preliminary alternatives also included eight-foot wide sidewalks on each side of the bridge.
    - i. Comment: The bridge should accommodate bicycles and four-lanes of traffic. With 375 to 400 pedestrians using the sidewalks on each side of the bridge each day, a single shared-use path would not be ideal. Stantec will revise the typical section to include bike lanes in addition to the eight-foot wide sidewalks already shown. This will require additional widening and an increased turning radius at Garrard Street.
  - c. Both preliminary alternatives hold the existing curb line on the north side of the bridge and tie back to the existing sidewalk. This will create the least amount of impacts to adjacent properties and the historic districts.
  - d. A new truss bridge would have a similar look to the existing bridge. The proposed bridge could maintain grades similar to the existing bridge and still meet USCG vertical clearance requirements. To meet USCG horizontal clearance requirements the river piers will be placed on the banks thereby increasing the truss span. The construction cost estimate for this alternative is \$16.9 million.
  - e. The steel plate girder bridge concept provides the most straightforward and least expensive construction for the roadway structure, but would require an increase in the profile grade to maintain minimum USCG vertical clearance requirements. Stage-construction would maintain traffic and better provide for bicycle and pedestrian accommodations throughout construction. The



staged construction would require a shift in alignment and additional widening into the Licking Riverside Historic District. This would also introduce a lane shift in the alignment of the KY 8 through lanes across the Garrard Street intersection. Eliminating the staged construction would remove the shift in alignment and reduce impacts to the historic district. In order to reduce impacts the project team decided to move forward with the plate girder bridge alternative without the staged construction. The construction cost estimate for the plate girder bridge alternative is \$14.7 million.

- f. Regardless of which alternative is carried forward, a new truss bridge or a plate girder bridge, it will likely take a full construction season to build. A vehicular detour would be necessary during that time.
- g. The truss bridge alternative is \$2.2 million more expensive than the plate girder bridge alternative. Under NEPA, additional mitigation (i.e. spending an additional \$2.2 million on the truss bridge alternative) is only required in extenuating circumstances. It is unknown at this time whether the viewshed from the historic districts makes this bridge replacement an extenuating circumstance. That is something that will be decided during the environmental process.
- 10. The next step will be for Stantec to refine the alternatives based on the comments from the project team.
- 11. Brian discussed the project schedule. The final project team meeting is anticipated for May 2016. At that time Stantec will present the refined alternatives and study recommendations will be finalized.

The meeting ended at approximately 12:30 p.m. EDT.



# **Meeting Minutes**

TO: Eileen Vaughan Carol Callan-Ramler

Co-Project Manager

KYTC Central Office

Co-Project Manager

KYTC District Office #6

200 Mero Street

421 Buttermilk Pike

Frankfort, KY 40622 Crescent Springs, KY 41017

FROM: Brian Aldridge

Project Manager

Stantec Consulting Services Inc.

DATE: May 18, 2016

SUBJECT: KY 8 Scoping Study

Kenton County – From KY 17 (MP 7.321) to Campbell County Line (MP 7.662) Campbell County – From Kenton County Line (MP 0.000) to US 27 (MP 0.543)

Project Team Meeting #3

A project team meeting for the subject project was held at the District 6 office in Crescent Springs, Kentucky on May 10, 2016 at 1:30 p.m. EST. The following individuals were in attendance:

Matt Arlinghaus KYTC – District 6
Carol Callan–Ramler KYTC – District 6
Rob Hans KYTC – District 6
Stacee Hans KYTC – District 6

Troy Hearn KYTC – Bike & Pedestrian Program

Sharon James KYTC – District 6

Beth Jones KYTC – Central Office Planning
Mikael Pelfrey KYTC – Central Office Planning
Eileen Vaughan KYTC – Central Office Planning

Bob Yeager KYTC – District 6

Brian Aldridge Stantec Consulting Services Inc.
Glenn Hardin Stantec Consulting Services Inc.
Len Harper Stantec Consulting Services Inc.
Tony Hunley Stantec Consulting Services Inc.
Graham Winchester Stantec Consulting Services Inc.

Carol Callan-Ramler welcomed everyone and said the purpose of the meeting was to discuss the draft report for the Mary Ingles Highway Scoping Study, the revised alternatives for the KY 8 Licking River Bridge, and to determine the project team recommendations for the KY 8 Licking River Bridge Scoping Study.



Handouts included typical sections and renderings of the updated bridge alternatives and a comparison matrix of all the alternatives.

Brian Aldridge delivered a brief presentation. The following enumerated items were discussed:

- 1. The purpose of the Mary Ingles Highway Scoping Study discussion is to address comments on the draft report.
  - a. The draft report for the Mary Ingles Highway Scoping Study was submitted in February. To better understand the pavement failures, District 6 asked Stantec to identify the location of known pavement failures. Based on maintenance records, site reconnaissance, and historic street view images, Stantec identified 25 locations where the roadway has been repaired (see **Figure 1**). Of those, 23 roadway repairs were south of the railroad overpass at MP 5.0.
  - b. Question: Since most of the repairs are south of the railroad overpass could we only reconstruct or close that portion of KY 8?

Answer: This could be considered in future project phases.

- c. The Kentucky Transportation Cabinet (KYTC) continues to address pavement failures as they occur, resulting in significant cost and inconvenience to the traveling public as the roadway is often closed completely or partially to traffic while maintenance activities are underway. The pavement repairs actually make the overall problem worse because the additional weight from the pavement increases the subgrade failures.
- d. Question: Can the road be converted to a shared-use facility if it is closed to vehicular traffic?
  - Answer: The roadway is not failing because of traffic loads but because of subgrade conditions. Taking the traffic off KY 8 would not stop the slope failures. There have been several recent significant breaks in the pavement, which in some locations exceeds five feet in depth. These pavement and slope failures can occur with little to no warning. Local municipalities or agencies would have to agree to take over the maintenance costs if it were converted to a shared-use facility. Because the maintenance costs have been and will continue to be substantial, it is unlikely they would agree to this.
- e. KYTC District 6 will provide right-of-way cost estimates for the rerouting options. It is assumed for cost estimating purposes that the existing KY 8 would be closed between the entrance to the Riverside Gardens Marina (near MP 4.0) and KY 445 (MP 7.902). This would include the acquisition of three homes and the Aquaramp Marina. Northern Kentucky Water District has



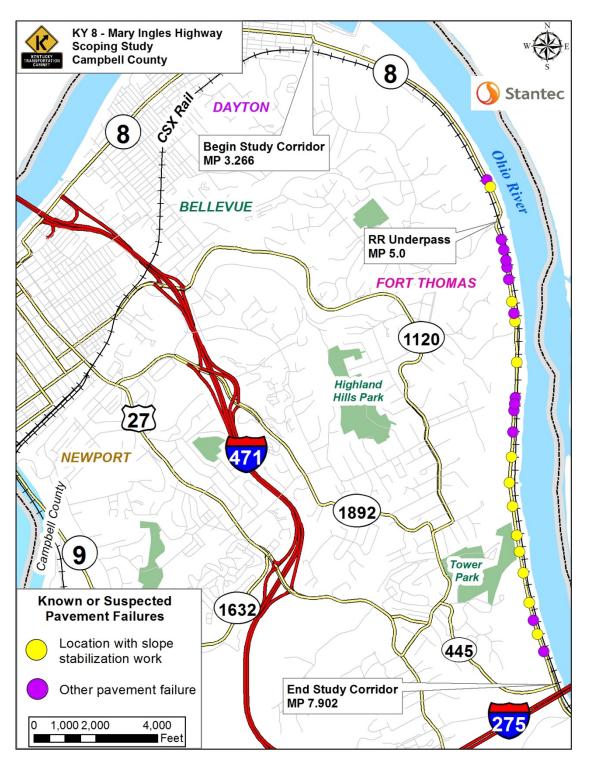


Figure 1



two water intake pumps in the study area that would require access even if KY 8 were closed to through traffic. Under this scenario he Northern Kentucky Water District would be responsible for maintaining that portion of the road.

- f. There are no utility costs associated with the rerouting options. The utility companies would be responsible for removing or maintaining the existing utilities along KY 8.
- g. The project team decided not to make an alternative recommendation for the Mary Ingles Highway Scoping Study. The report will list the cost and impacts of each alternative to inform future decision makers.
- 2. The purpose of the KY 8 Licking River Bridge discussion is to present the revised alternatives and discuss project team recommendations.
- 3. Some highlights from the existing conditions inventory were discussed. The KY 8 study area includes the existing KY 8 corridor in Kenton County from KY 17 to the Campbell County line and in Campbell County from the Kenton County line to US 27. The bridge has a 2015 Average Daily Traffic (ADT) volume of 17,500 vehicles per day (vpd) and averages 730 pedestrians per day (based on counts collected by the Ohio-Kentucky-Indiana Regional Council of Governments, the MPO for the region).
- 4. After performing a capacity analysis of the existing and future traffic, all roadway segments operate at less than full capacity with an eastbound one lane volume—to-capacity (V/C) ratio of 0.85 and westbound two lane V/C ratio of 0.67. The results of this analysis suggest the current lane configuration can adequately accommodate the existing and future traffic demand.
- 5. The United States Coast Guard (USCG) determined that a new bridge at this location shall meet or exceed the existing horizontal and vertical clearance of the Licking Valley Girl Scout Bridge (KY 1120/12<sup>th</sup> Street). The horizontal clearance is 276.4 feet and the vertical clearance is 64.19 feet above normal pool at the Licking Valley Girl Scout Bridge. The main span of the Licking River Bridge currently has 251.1 feet of horizontal clearance.
- 6. All alternatives hold the existing curb line on the north side of the bridge and widen to the south. This will create the least amount of impacts to adjacent properties and the historic districts. Widening to the south will directly impact an existing rock wall and an adjacent parking lot. The parking lot is for the Workforce Development Cabinet's building which is currently vacant. Right-of-way estimates assume the acquisition of that property and the parking lot will be \$920,000. KYTC District 6 will reach out to the Finance Cabinet about the future of that property and the parking lot.



- 7. Since the last project team meeting the Licking River Bridge was load rated for 17 tons. Signs have been posted at the bridge. Tony Hunley contacted bridge maintenance and determined the bridge was fully loaded rated. Stantec will use this new information to calculate a cost estimate for the major rehabilitation alternative.
- 8. At the previous meeting, three alternatives were presented: a steel truss, a stage constructed steel plate girder, and a steel plate girder. Alternative 2, the stage constructed steel plate girder, was dismissed and not updated. It was also decided at the last project team meeting that the bridge should accommodate bicycles and four-lanes of traffic. The typical sections for Alternative 1 and Alternative 3 were updated to include four-foot bike lanes, exclusive of the gutter pan, which would provide six feet between the curb and travel lane. Troy Hearn suggested to modify the typical to include a one-foot bike buffer consisting of two four inch wide white stripes with a four inch gap. After the meeting, Stantec updated the typical sections accordingly, which are shown in **Figure 2** and **Figure 3**.

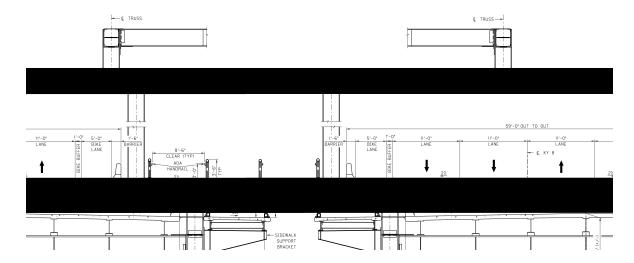


Figure 2 – Alternative 1 Truss Typical Section



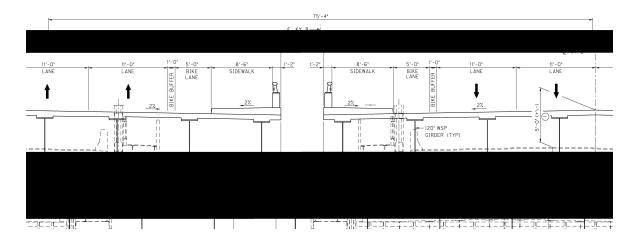


Figure 3 – Alternative 3 Steel Girder Typical Section

- 9. The project team was provided a matrix comparison of all the alternatives (see **Table** 1). The updated typical section of Alternative 1 Steel Truss is 86.6 feet wide, approximately 30 feet wider than the current bridge. This alternative would cost \$20.8 million in construction and \$2.08 million in design. The updated typical section of the Alternative 3 Steel Plate Girder is 75.3 feet wide, approximately 20 feet wider than the original bridge. This alternative would cost \$16.51 million in construction and \$1.65 million in design.
- 10. The project team dismissed the major rehabilitation alternative from further consideration because it does not satisfy the purpose and need of the project. This alternative would improve safety only in that it provides a safe bridge. The bridge would remain functionally obsolete with current (minimal) pedestrian accommodations and no dedicated bicycle accommodations.
- 11. The project team recommended Alternative 1 and Alternative 3 move forward for consideration in future project phases.
- 12. Stacee Hans pointed out that the fourth lane is not necessary based on current and projected traffic volumes. It may be difficult to justify the impacts of the additional lane to the State Historic Preservation Office (SHPO).
- 13. The next step will be for Stantec to update the KY 8 Mary Ingles Highway Scoping Study report based on the comments from the project team. For the KY 8 Licking River Bridge Scoping Study, Stantec will calculate a cost estimate for the major rehabilitation alternative based on the KYTC load rating report and complete the draft report.
- 14. Brian discussed the project schedule. The draft report will be submitted by June 15<sup>th</sup>.





# KY 8 - Licking River Bridge Scoping Study Kenton and Campbell County KYTC Item No. 6-1086.00

# Comparison of Alternatives

Alternate	Description	Representative Graphic	Satisfies Purpose and Need? (The project will improve efficiency, connectivity, and safety for vehicles, bicycles, and pedestrians.)	Maintenance of Traffic Concerns	Construction Total	Design Total	Project Team Recommendation
O-BUILD	Do nothing alternative.		No - does not improve efficiency, connectivity, or safety for any mode.	N/A	0\$	0\$	Given current load rating of 17 tons, the No-Build alternative was dismissed as infeasible.
0 MAJOR REHABILITATION	Improvements to existing bridge to prolong structure life and increase load carrying capacity. Bridge was recently load rated for 17 tons.		No - would improve safety only in that it provides a safe bridge. Bridge would remain functionally obsolete with current (minimal) pedestrian accommodations and no dedicated bicycle accommodations.	Would likely require closure of the bridge for up to one construction season.	Unknown	Unknown	
1 STEEL TRUSS	Replace the existing bridge with a steel truss, similar in character to the existing bridge. Requires shifting the piers horizontally out of the river and minimal increase in roadway profile grade per U.S. Coast Guard requirements.		Yes - provides wide sidewalks and bicycle lanes as well as an additional travel lane for vehicles.	Would require closure of the bridge for one construction season.	\$19,080,000	\$1,910,000	
2 STAGE CONSTRUCTED STEEL PLATE GIRDER	Replace the existing bridge with a steel plate girder  2 bridge, constructed part-width to facilitate  STAGE maintenance of traffic for both vehicles and  CONSTRUCTED pedestrians. Requires a significant increase in  STEEL PLATE GIRDER readway profile (approximately 6) and overbuilding the structure to accomodate traffic.		Yes - provides wide sidewalks and bicycle lanes as well as an additional travel lane for vehicles.	Traffic could be maintained throughout construction. Requires some overbuilding of the structure that further impacts the Licking Riverside Historic District.	\$18,440,000	\$1,840,000	Dismissed at Project Team Meeting #2
3 Steel Plate Girder	Replace the existing bridge with a steel plate girder bridge, similar in nature to the "Girl Scout Bridge" as TEEL PLATE GIRDER Carrying 12th Street over the Licking River. Requires a significant increase in roadway profile (approximately 6").		Yes - provides wide sidewalks and bicycle lanes as well as an additional travel lane for vehicles.	Would require closure of the bridge for one construction season.	\$16,510,000	\$1,650,000	

Revised: May 2016. All cost estimates updated to include four 11' travel lanes, two 6' bicycle lanes, and two 8' sidewalks.

# Table 1 - Comparison of Alternatives



The meeting ended at approximately 2:30 p.m. EDT.