

KYTC Announces Preliminary ‘Signature’ Bridge Designs for KY 8 Licking River Bridge Replacement Project

Bridge will improve safety and connectivity on the Northern Kentucky riverfront for decades to come

COVINGTON, Ky. (August 10, 2023) – The signature design of the KY 8 Licking River replacement bridge is beginning to come into focus. The Kentucky Transportation Cabinet (KYTC) announces four bridge concepts that will move forward for final consideration. These preliminary bridge concepts will be used by the Design-Build Team to guide the technical design of the bridge project over the next few months.

“The main focus for each of these concepts is providing safe and improved access for bicyclists and pedestrians, while also meeting current and future transportation needs,” said Miguel Rosales, President of Rosales + Partners, Bridge Architect for the KY 8 Licking River Bridge Replacement Project. “I’m excited to share these preliminary concepts that fit within the context of the Covington and Newport communities and will enhance the Northern Kentucky skyline.”

The four bridge concepts moving forward for final consideration are: arch, cable-stayed, inclined arch and suspension.

The concepts:

Concept 1 – Arch



The Arch bridge concept spans 446 feet over the Licking River and features three slender steel arches that reach 58 feet over the roadway. Below the bridge deck, distinct V-shaped concrete piers frame the river. This concept features two 12-foot wide cantilevered shared-use path walkways with open river and city views.

“The three gracious steel arches with carefully designed V-shaped piers visually connect the arches to the shorelines of the Licking River. The arches frame the vehicular lanes and create a gateway experience between the cities of Covington and Newport. The absence of bracing between the arches makes this bridge distinct and contemporary in appearance,” Rosales said.

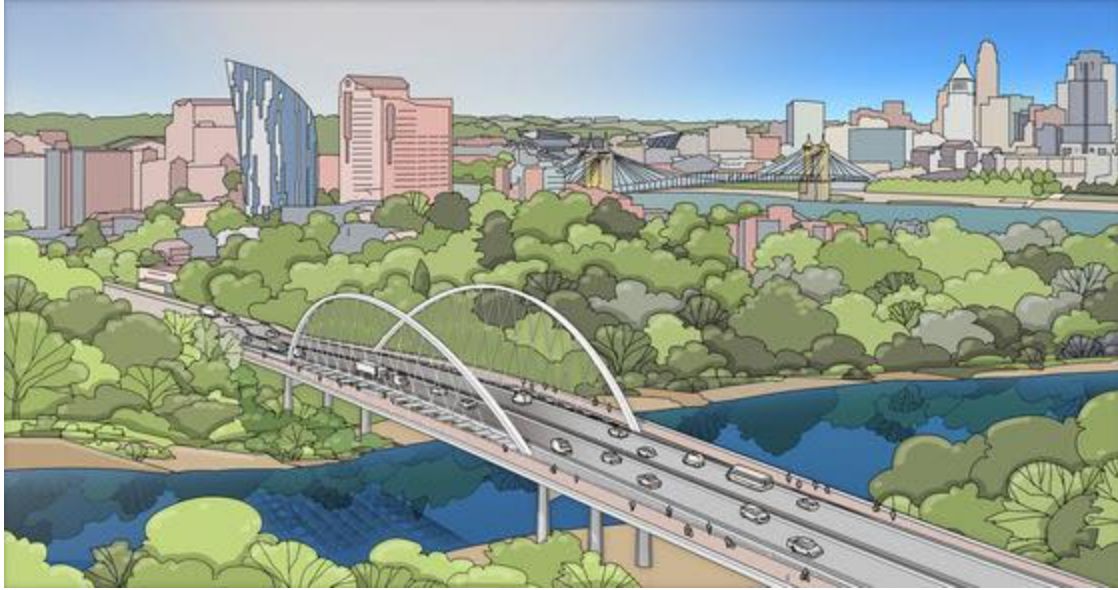
Concept 2 – Cable-Stayed



The Cable-Stayed bridge concept spans 340 feet over the Licking River and features six concrete needle towers with a harp arrangement of parallel cables. These towers, at 74 feet above the roadway, create visually interesting shadow and light effects surrounding the bridge. This concept also has two 12-foot wide cantilevered shared-use paths with open river and city views.

“The elegant and slender concrete towers have been designed to act as visual markers along the river. Because of their height, the iconic towers will be visible from long-range views. Their cable harp-like arrangement with parallel cables creates visual order and transparency. This type of bridge with its maritime architectural theme will be unique in the area,” Rosales said.

Concept 3 – Inclined Arch



The Inclined Arch concept spans 340 feet over the Licking River and features two inclined steel arches. These arches would be 64 feet above the roadway. The Inclined Arch concept also features two 12-foot wide shared-use path walkways. These walkways are supported by cables from the bridge arches.

“In this concept, two inclined arches create a unique experience for pedestrians and bicyclists because of the way they frame two cable-supported curved walkways that are visually separated from the vehicular lanes. The arch incline creates an appearance of open arms welcoming locals and visitors alike to the area. The arches also create a dynamic gateway experience between Covington and Newport with their transparent, angular cable arrangement and inclined steel arches,” Rosales said.

Concept 4 – Suspension



The Suspension concept spans 340 feet over the Licking River and features four steel, slender needle towers rising 90 feet above the roadway. The concept has two shared-use path walkways supported with cables. These walkways are curved and have a minimum 12-foot variable width.

“This concept introduces contemporary suspension bridge components that frame two multi-modal cable supported walkways. The walkways are curved to geometrically integrate with the twin catenary, gracious suspension cables. The bridge has a visual relationship with the historic Roebling Suspension Bridge without imitating it as its appearance is contemporary and streamlined,” Rosales said.

Commitment to safety:

Each of the four concepts moving forward for final consideration are rooted in safety. All concepts feature two 12-foot-wide shared-use path walkways. These walkways are separated from vehicular traffic and meet the current standards set by the Americans with Disabilities Act and other guidance for railing height and sidewalk width.

“We’ve listened to community members and local leaders since the project’s inception. We understand the desire for this bridge to be a signature structure while focusing on safety for all,” said Cory Wilson, KYTC District 6 Branch Manager. “KYTC is committed to constructing a bridge that supports multi-modal traffic and provides a dedicated shared-use path for bicyclists and pedestrians.”

KYTC has committed to maintaining bicycle and pedestrian access at this crossing during construction.

Additionally, traffic calming measures will be implemented into the bridge's final design where possible. These may include reduced lane-widths, intersection features, signal timing, and pavement markings meant to improve safety for vehicles, pedestrians, and bicycles. More details on specific traffic calming measures will be released once a final bridge type is selected.

What's next?

The concepts will be presented to the City of Covington and City of Newport during the Tuesday, August 15, and Monday, August 28 commission meetings, respectively.

Over the next month the aesthetics committee, made up of community leaders from Newport and Covington, will bring valuable input from their constituents to the project team for consideration in the final bridge concept selection. KYTC will continue to work with the design-build team to refine the designs. KYTC will make a final bridge type selection in October.

Project Background:

The KY 8 Licking River Bridge is a critical connection for commuters, freight, pedestrians, and bicyclists traveling between Covington and Newport. Built in 1936, the current bridge has exceeded its original design life and has weight limits that preclude some trucks and mass transit vehicles.

In May, KYTC announced the selection of PCL/Stantec/Rosales to partner in the design and construction of the new KY 8 Licking River Bridge. The design-build team will work collaboratively with KYTC to develop concepts, refine designs, and ultimately build the replacement bridge. This design-build team was selected through a procurement process that considered qualifications and project approach, rather than cost.

Using a progressive design-build delivery method allows for collaboration between the KYTC, the designer, and the construction contractor. Each part of the team brings a unique

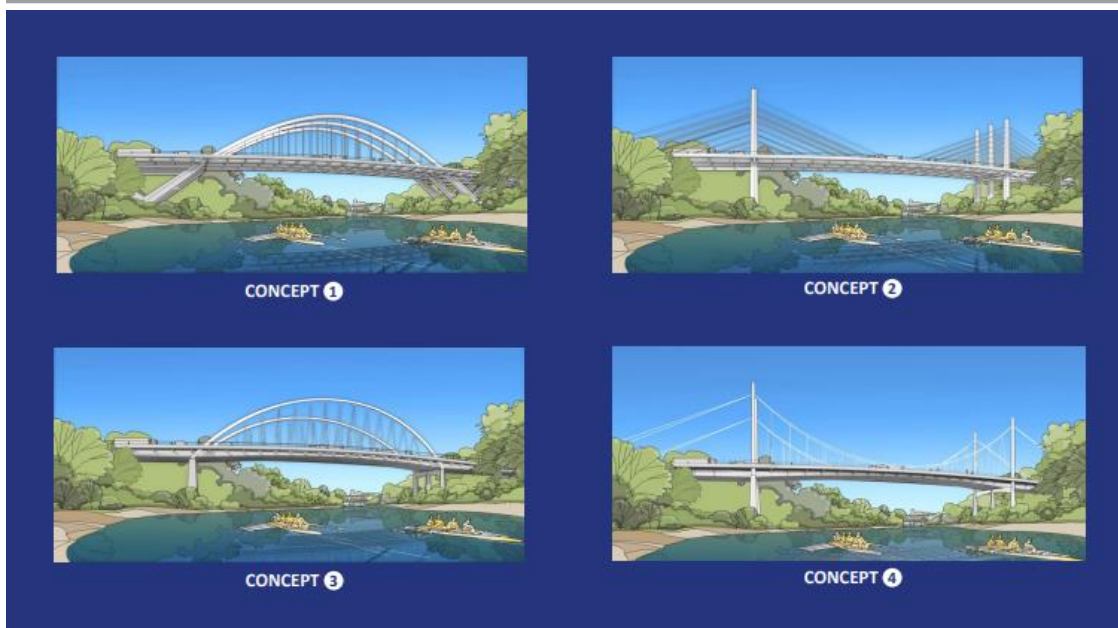
perspective that helps identify challenges early in the process and then develop solutions to ensure the project is delivered at an acceptable cost and schedule.

The project will improve access to the central business districts of Covington and Newport while also supporting local businesses and underserved communities in historic neighborhoods. A bridge replacement will allow the Transit Authority of Northern Kentucky to operate local and express bus routes on the bridge, serving as a vital connection for public transit users.

With significant development occurring in Newport and Covington, a replacement bridge is necessary to support the growing needs of all travelers using the KY 8 Licking River Bridge crossing. The four-lane bridge concept allows flexibility for future transportation uses as the vehicular and mass-transit needs of the surrounding communities develop and evolve.

The public can provide feedback for consideration by the project team through the [KY 8 Licking River Bridge Replacement Project](#) website.

###



Ground level renderings of the four preliminary bridge concepts. **PHOTO COURTESY: KYTC District 6**