



EAST END BRIDGE

OPEN HOUSES

December 13, 2005 – IN Approach, Utica Community Center, 3-8 PM

December 15, 2005 – KY Approach, Best Western Brownsboro Inn, 3-8 PM

SUMMARY

INTRODUCTION

As guests arrived they were asked to sign in and were given a packet of information (agenda, FAQs, "Where We Are Now", comment sheet, contact information, project guidelines and parameters, project map, upcoming schedule). They then had the opportunity to view board displays of 15 different bridge type concepts, encompassing various arch, cable-stayed and truss designs. Each display was depicted in context on the planned bridge site. Additional boards included a graphic presentation of the Bridge Type Selection Process, the project map and a cross-section of the bridge. Members of the East End Bridge design team met with guests, discussing the project and answering questions.

Invitations for the Open Houses were mailed to the entire project database, numbering approximately 1,850 people. In addition, advertisements were placed in The Louisville Courier-Journal, the New Albany Tribune and the Jeffersonville Evening News. There were print stories previewing the Open Houses as well as print and broadcast coverage of the Utica Open House, given its status as the first of two basically identical events.

A total of 326 people signed in at the two Open Houses (125 in Utica and 201 in Prospect).

EAST END BRIDGE PRESENTATION

Each Open House included two identical presentations at approximately 4:00 p.m. and 6:00 p.m. These presentations lasted 45 minutes to an hour. East End Bridge Section 5 Manager Dan Carrier began each presentation by welcoming those in attendance and briefly explaining that they would be seeing several bridge design concepts and would have the chance to express their preferences through polling. Dan explained that the feedback gathered from the polling and discussion would be used to help develop bridge alternatives for presentation in Step 3 of the Bridge Type Selection Process. Dan then discussed the Bridge Type Selection Process and the current status of the Bridges Project. Dan also explained why a suspension bridge has been eliminated as a possible design type due to span length/pier configuration and cost. Dan then turned the presentation over to Miguel Rosales, the architect for the East End Bridge, to give a general overview of the 15 design concepts.

Miguel explained the characteristics of the 15 concepts and he and Dan took questions and comments from the audience (comments, questions and responses are included below).

Ted Grossardt, with the University of Kentucky Transportation Center, was then introduced to explain and direct the polling process. Participants were given polling devices and directed to rank each of the 15 concepts from 1 (low) to 10 (high) as they were presented. Following the polling, Ted went through the results and gathered feedback from participants about why they liked or didn't like particular concepts.

Dan closed the presentation by reminding the guests that the design concepts would be on the project's Web site (www.kyinbridges.com) and that they could offer additional comments there and also let their friends know about that opportunity to comment. Dan also reminded guests that he and other members of the East End Bridge team were available for one-on-one discussions after the presentation.

DISCUSSION / COMMENTS

Utica, IN

December 13, 2005

3:00 p.m. to 8:00 p.m.

Public Comments/Questions	PB Team Response (As Necessary)
Is a box girder bridge not suitable for this location?	The span length for the east end bridge is beyond the range of a box girder.
What is the width of the water here vs. downtown?	Our span is about 2200', with a 900' navigation channel in the middle. The downtown channel is 700', with the channel closer to the KY shore.
Is this being designed exclusive of the downtown bridge, i.e. they will not be the same bridge?	Correct. There are 2 different design teams, but the public involvement process is the same for both bridges.
Is there a pedestrian walkway on the bridge?	Yes, on the downstream side.
Where would you get on as a pedestrian in Utica?	The Utica side will be generally at-grade, so access could be adjacent to the bridge.
Will the walkway continue along the interstate on either side, or will it connect to local roads?	This has not been defined for the approaches, but will likely connect to River Road on the KY side. It is more difficult to get down to the river on the IN side, since the bluff is about 80' up.
Is there a difference between the bridge types in cost initially or in maintenance over the years?	For the polling, we'd like to ignore costs and think about appearance. Cost & constructibility are factors, but the bridges shown can be constructed within the project

	budget.
Lighting makes a bridge spectacular – will this one be lit?	Lighting concepts will be considered in the next step of the process. Some of the images we are showing tonight show some lighting concepts.
Will this be a toll bridge?	The current ROD does not include a toll for the east end bridge.
What about painting the bridge?	Not all bridges have to be painted, and there are more modern painting systems that can be used.
Why don't any of the designs use a truss underneath the bridge?	The deck truss is not feasible due to the grade required to get down into the tunnel on the Kentucky side.
Why don't any of the designs have arches under the bridge?	This presents the same problem as the deck truss, it would require too steep a grade into the tunnel.
In icy conditions, is there an advantage to having the cables over or not over the road?	Falling ice has been known to happen, but it's a rare condition. The bridge team is not aware that this is an established safety problem.
Would one bridge type be built faster than another?	They are all modern designs and should be similar in construction time.
What about cost?	The concepts you have seen tonight will be refined into the alternatives and at that point we will have a better idea about costs.
What is the project budget?	\$221 million for the east end bridge.
Is it cheaper to build an ugly bridge than a pretty bridge?	No.
Will the concepts be put on the Web site?	In the next week, the concepts shown tonight will be available for comment on the Web site.
If a barge hits a pier, does one type of pier stand up better than another?	Put your money on the bridge, whether it's the thinner or thicker version of the pier.
Is the cost for the different bridges compatible and will it figure into the final decision?	The concepts we are showing you can be converted into alternatives that will fit into the construction budget. We don't have to pick the cheapest bridge.
We should build a bridge that takes the least amount of paint.	
Low maintenance and painting would be ideal for the new bridge. What is the maintenance on the cable bridges?	The cables can be coated in wax, covered in plastic, and can even be put in duct work and grouted, if that's determined to be needed.
Would the height of the bridge impact the air box for an air show?	No.
How tall is the Kennedy Bridge?	This bridge is a little more than 100' tall, measured from the deck, and about 150' tall from the water.
Are the towers built from the deck up and are they hollow?	The towers are usually hollow to allow for a maintenance corridor, with 2-3 foot thick

	walls.
Will it be a 4-lane bridge?	The bridge will be 3 lanes in each direction, with full shoulders inside and outside, a median and a walkway on the downstream side.
Will you have to go to US 62 to get access to walkway?	On the Indiana side, access will likely be on the bluff. On the Kentucky side, it will likely be near River Road.
Will cars have access to the walkway?	No.
Pick one of the concepts that has something overhead where you could put a sign that says "KY" in one direction and "IN" in the other.	

C1

Public Comments/Questions	PB Team Response (As Necessary)
Not too many piers in the water.	
Modern looking – this is a good thing.	
It is bold – also a good thing.	
Graceful.	
It has pizzazz, and is very futuristic.	
This one is different and modern.	
It makes a statement – here I am!	
It is similar to the Cooper River Bridge – that's good.	
The piers are a bit massive.	
The minimum number of piers in the water is nice.	

A1

Public Comments/Questions	PB Team Response (As Necessary)
This looks like an octopus.	
Looks like a gateway arch.	
This has more piers in the water – a bad thing.	
Looks like a star wars creature – could be good or bad!	
Looks like the St. Louis Arch.	

T1

Public Comments/Questions	PB Team Response (As Necessary)
This one appears to have more iron, which is good for ironworkers, and it feels secure.	

Would the truss bridges be painted or weathering steel?	For major river crossings, the bridge would likely be painted. Weathering steel would have stains on piers.
This one would be better downtown, and something more elegant would be more appropriate for the east end.	

C2

Public Comments/Questions	PB Team Response (As Necessary)
	Notice that this one has cables closer to the tower and the deck is thinner.
The cables closer to the tower make it more symmetrical.	
The slimmer deck is nice.	
Having fewer piers in the water is nice.	
Do birds roost on the cables across the deck?	The cables are steep and covered in plastic, so it's not very common to have this problem.
Between concepts 15, 7 and 4, which is the most thin deck?	Based on the spacing of the cables, it is likely to be concept 4.
This bridge has a wow affect, good height, sleekness and lightness.	The cables on the outside are thinner, and the cables in the middle of the road are thicker.
Has a clean look.	

A2

Public Comments/Questions	PB Team Response (As Necessary)
This one has too many piers in the water.	
The view from the deck is open, not obtrusive.	
It has good views.	
Graceful.	

T2

Public Comments/Questions	PB Team Response (As Necessary)
This one would need too much paint.	
It is too boxy and mundane.	
It's awful.	
It looks like a railroad bridges	
Too old fashioned.	

C3

Public Comments/Questions	PB Team Response (As Necessary)
This one is elegant, not as obtrusive as some of the others.	
It is light.	
It has height, which is a good thing.	
There are fewer piers in the water, also a good thing.	
The cables on the outside make me feel secure.	
How far apart would the cables be?	You can make the cables any spacing you want. This sample has them farther from the pier, showing a thicker deck around the pier. Spacing for the others in this sample is about 30-40 feet.

C6

Public Comments/Questions	PB Team Response (As Necessary)
The simplicity of this one is good.	
I like the openness and the view from the deck.	
It makes me feel insecure, it is too open.	
This one is more attractive from the side than from the center.	
The design does not block the view from the road.	
Does this one require a bigger abutment?	It requires another pier on each side, making it a 5-span rather than a 3-span like some of the other cable bridges.
The deck is thicker, which is less attractive.	
Could you make the tower more attractive?	Yes, it can be refined in shape, color, treatment, or other ways.
This one has more piers in the water – this is a bad thing.	
Having fewer cables on top of the deck is the trade off for more piers, so you have less obstruction of the view on the deck.	Most people will see the bridge by driving over it, so the driver's view can be very important.

T4

Public Comments/Questions	PB Team Responses (As Necessary)
This looks clunky and obtrusive.	
It has too many supports and looks cluttered.	
It makes the span look too short.	
This design would look better downtown.	

This looks like too much maintenance, and too many piers in the water.	
There are too many obstructions.	
As you come down the river, you are coming from an historic into an historic area, and the futuristic designs are not consistent with the landscape and character of the area.	
Another way to look at it is that the more modern styles are tying the new in with the old that's already there.	
The east end has a very panoramic view and this bridge is too cluttered for the area.	

A4

Public Comments/Questions	PB Team Response (As Necessary)
This one has too many piers.	
I like the low look to it.	
Are drivers bothered by the open sides?	There will be a barrier of a safe height to protect drivers, pedestrians and bikes.

C5

Public Comments/Questions	PB Team Response (As Necessary)
This one looks very similar to C7.	The main difference is that C7 has vertical cables, and cables coming all the way into the tower, so the deck is more consistent in thickness. The height is comparable.

C7

Public Comments/Questions	PB Team Response (As Necessary)
This has good side views on each side and limited number of piers.	
It looks more to scale and fits the flow of the land and water, while some of the others seem too tall.	
Will the deck be slimmer with the cable support?	Yes.
This one is less intrusive.	
It has a minimal number of piers in the water and the towers are low, both of which are good.	
It has unobstructed views both up and	

down the river.	
The fewer number of cables is better.	

DISCUSSION / COMMENTS

Prospect, KY

December 15, 2005

3:00 p.m. to 8:00 p.m.

Public Comments/Questions	PB Team Response (As Necessary)
Is there a difference in price between them?	All of the concepts presented here will fit within the project budget.
Is there more maintenance in a truss bridge?	There are generally more surfaces to paint with a truss.
With cables in the center, how much sway is there?	There should not be any sway with a bridge of this size.
Will the design allow for future expansion of lanes?	For concepts that have a tower in the middle, this would prevent the use of the median as a lane. The shoulders in the existing cross section can be used for emergencies, and all of the concepts will provide this.
Would this accommodate a rapid transit system in the future?	The current ROD does not require this. A long span structure like this can support commuter rail as long as advanced thought is given.
Is there any provision for bikes and pedestrians?	There will be a 17' walkway on the downstream side of the bridge, and would be part of all of the concepts.
Did you work on the bridge in Owensboro? It is a beautiful bridge.	The East End bridge designer, Rushu Hsu, did design the Natcher Bridge.
Are all of the concepts feasible?	The bridge engineers have looked at all of the concepts and they are all feasible.
If any of the piers are struck by barge traffic, would one type of pier hold up better than another?	Put your money on the pier.
Is one bridge faster to build than another?	They would all take about the same amount of time.
What is the time for construction?	Any of these could be built in 3-4 years, or less if necessary. Sometimes it depends on what time of year the construction is started.
Has the future traffic been taken under	The FEIS considered future traffic and

consideration?	identified the needed cross-section to handle it.
Is the maximum load capacity the same on all the concepts?	It should be the same for all concepts, and is based on AASHTO standards.
The construction schedule depends on the funding, and it's not clear where the funding is coming from yet.	
The FEIS indicated that in 20 years the traffic would be around 68,000 vpd, and this is not worth the cost of the bridge.	
Flooding can occur at 70' above the flood level. Has this been considered?	The locks and dams system should help control this. Flooding would affect the approach sections more than the bridge itself.
There's a second bridge planned for downtown, and is this being considered as part of the east end project?	Each bridge is being built to fit the context of each site.
How high is the bridge?	The vertical clearance will be 71' above the water.
Is the tunnel on the Kentucky side only?	Yes. There is a bluff on the Indiana side.
What is the reason for skewing the bridge?	This is related to the connections and roadways on each side of the river.
Is it cheaper to build a bridge over and under like the Sherman Minton?	For this site, a double deck bridge would not be as effective due to the approaches.
How many people do you expect to survey with this system?	This is the largest group we have had so far.
Why isn't there a double-deck bridge as one of the concepts?	The grade required to get down into the tunnel precludes the use of a double-deck at this location.
Is there a handout with these concepts?	These concepts will be put on the website and preferences can be reported as well.
Between the Brent Spence bridge and the East End bridge, which will be built first?	This depends on the financial plans for each bridge, and these are not completed yet.
Which has the strongest foundation related to barge impacts?	Put your money on the pier. All of the concepts will be able to stand up to barge traffic.
Where is the barge channel?	It is in the center at this location. There is a 900' navigational channel.
Will pedestrian and bicycle traffic be allowed?	All of the concepts include a 17' walkway on the downstream side.
If you are trying to preserve the beauty of the site, then we should not consider the truss at this location.	The truss is feasible at this site, so we wanted to show the concept for contrast.
Is one any cheaper than another?	All of the concepts will fit within the construction budget.
Which one is the cheapest?	The cost estimates will be made once we refine the concepts into alternatives.
There is a cable-stayed bridge in	Probably C1, since the towers are diamond

Owensboro. Which of these look like that one?	shaped. The difference is that the Natcher bridge has cables on the outside.
There is also one in Huntington, WV.	
Is there any difference in the approach requirements between the concepts?	No.
The cable stayed looks more appropriate on the east end, where there's no other bridge to obstruct the view of it.	
What kind of bridge is the Golden Gate bridge? Can we not have something like this?	It is a suspension bridge. Classical suspension bridges are for larger spans. We have tried to incorporate some of the suspension characteristics into some of the concepts.
Will the maintenance costs be considered for each type of bridge?	Life cycle costs and construction costs will be included in the analysis of the alternatives.
How will the bridges be paid for?	The financial plan is being developed now and should be ready next year.
What kinds of thoughts did you have in selecting these concepts?	The site is already beautiful, so we wanted to make simple and transparent concepts.
Can the box girder be used at this site?	That type will not work at this site, partially due to the descent into the tunnel on the KY side.
Is there are concern about being near the fault zone?	The seismic requirements, wind requirements, and earthquake standards will all be considered for all the concepts.
Are these bridges painted?	Materials have not been decided. Trusses are generally steel. The cables can be coated in wax and covered in plastic, so painting is not required.
The navigational channel for this bridge is different for the east end than it is downtown?	The east end channel is 900' in the middle of the river. The downtown channel is closer to the KY shore and more narrow. The vertical requirements are the same.
Which of these looks closest to the Cooper River bridge?	Probably C1.
Is there any way to keep development away from this site?	There are ways to protect from this, although we don't know what is in place for the site now.
Do these images show the proper number of piers?	Yes. All of the concepts have 4 piers. Some of the concepts have piers in the secondary channels near the shore, for a total of 6 piers.
When we do the voting, can you tell how high they are?	We can give a rough idea. The tall towers are about 300' from the water. The short towers are about 220-225'. The two arches are about 200'. The trusses and low arches are the lowest.
Can any of the concepts be made of any materials?	Arch bridges would be made of steel. Cable stayed bridges are concrete, with

	coated cables, and the structural steel would have to be painted.
Can we make the bridge taller than 300'?	We will be working within the parameters of the ROD, which says a nominal height of 300'. Don't worry about the bridge being visible; it will be very visible on the site.

C1

Public Comments/Questions	PB Team Response (As Necessary)
Like the towers.	
Looks similar to the Owensboro bridge.	This is true because the towers are joined at the top. The Owensboro bridge has cables on the outside.
Is the 71' clearance a federal regulation?	Yes, this is required by the Coast Guard for this location.
Why are the piers slanted under the bridge?	This is aesthetic. The legs could be more A-shaped as well. Pulling them in makes it a bit more elegant.
We should make a more imposing structure of this or any of the other cable bridges.	The FEIS includes the commitment to make the bridge about 300' tall.
Artistic and modern.	
Beautiful and modern.	
Elegant and simple.	
It's been up the longest, so we know it the best.	
Like the arch over the driving area, it gives a sense of entry.	
The piers are more interesting and it has a good driver's view.	
Less interference with the landscape from the shore view.	
It has a feeling strength and security.	
The angled piers are nice, like the diamond shape.	
Could this one be made of something to keep it white and bright?	There are coatings that can be used.

C2

Public Comments/Questions	PB Team Response (As Necessary)
Fewer piers in the river are good.	
Like the cables spanning the entire length	

of the bridge.	
The towers look more attractive, it is more symmetrical, and the cables go to the edge, which looks better.	
Would this bridge be able to have light rail in the future?	Any concept with towers in the middle would make it difficult to add another lane of traffic or trains in the middle.
Cables on the side make it feel more secure.	
Do the cables require painting?	The cables are coated with wax and coated in plastic, so they do not have to be painted.
How would the bridges be lit?	All of the concepts will have the same safety lighting. The aesthetic lighting will be discussed in the next step, probably next spring. It is usually best to hide the source of the lighting as much as possible.
It feels too much like a spider web.	
The towers are too tall.	
Like the clearance under the bridge.	
It looks like a sailboat on the river.	
Is this one about 300' tall?	Yes. The same height as C1. It might appear to be a little taller, since C1 is joined at the top.

A2

Public Comments/Questions	PB Team Response (As Necessary)
4:00	
There are too many piers in the river.	
This is more attractive than some. Also liked the lower arch through the median.	
Looks like a rainbow crossing the river, and this would be very attractive from the river. Driving across it is not as attractive.	
It would be pretty lit at night.	
Does this one have 3 sets of piers?	It does require the additional piers in the secondary channel.

T2

Public Comments/Questions	PB Team Response (As Necessary)
These look like railroad bridges.	
They can't seem to get the one downtown painted.	

C3

Public Comments/Questions	PB Team Response (As Necessary)
The cables look incomplete, with the missing cables in the middle.	
How is this different?	This has a thicker deck near the towers, since there are fewer cables there.
Fewer piers are nice.	

A3

Public Comments/Questions	PB Team Response (As Necessary)
Blends into the landscape more.	
More challenges for the skateboarders.	
It is one of the lowest – that's a positive.	
Too many piers in the water.	

C6

Public Comments/Questions	PB Team Response (As Necessary)
This one is nice and wide open.	

A4

Public Comments/Questions	PB Team Response (As Necessary)
Too many piers in the water.	
Looks like low maintenance, which is good.	
A walkway over the top would be breathtaking. Ha.	
Looks too much like a Florida causeway.	
Very graceful.	
This is the most minimal, with an open view on the sides.	
Is this one the lowest?	Yes.
The arch in the middle looks like an afterthought.	
It is not bold and does not make a statement.	
It is more piers in the water – a negative.	
It must have the least maintenance of any of them.	
The clearance from the water to the deck looks lower.	It is 71' for all of the concepts.
Looks like a good skateboard challenge.	

C5

Public Comments/Questions	PB Team Response (As Necessary)
Do not like the towers.	
Like the cables in the center, as it gives a better view off the side.	
This does not look graceful, it is more chunky.	
Taller towers are more dramatic than this one.	
Does the center structure protect from crossover traffic?	The median barrier will stop you from crossing, not the cables.
Why is the road deck flat and not arched?	Because the Indiana approach is high and the Kentucky side goes down into the tunnel, a crown is not really feasible.
Is the pedestrian path at the same grade as the roadway?	This has not been decided yet.
How big are the cables? How much will they obstruct the view?	Cables in the center of the road are larger than cables on the outside of the bridge. The Cooper River bridge has cables with 16" casings. The size can vary also, with cables at the end of the bridge carrying heavier loads than cables in the center.
Could any of the piers be used for cell phone towers?	Not familiar with the requirements for microwave towers, and don't know of any cases where this has been done.

C7

Public Comments/Questions	PB Team Response (As Necessary)
Fewer piers in the river are better.	
Looks a bit like a suspension bridge – that's good.	
Gives a wide-open view.	
The large cable at the top ties the towers together.	
The shape reminds me of sailboats.	
Are the towers shorter than some of the other cable bridges?	There are low towers, which are about 220' tall, and high towers, which are about 300' tall.
Could not expand into the center lane because of the cables.	
It is unique and modern, and that is good.	
Don't like the cables in the middle, or the cantilever look of the edges.	
Like the sweep of the cable in the middle.	
Like the openness of the sides, nothing blocking the driver's view.	
It is not overpowering and it is graceful.	

The driver does not have to look through cables.

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