

# BRIDGING ITS FUTURE

## Projects Breathe New Life Into Southern Indiana



The East End Crossing features a new bridge spanning 2,500 feet across the Ohio River. The two main towers are 300 feet tall with 104 stay cables supporting the bridge deck.

Today, she talks passionately about the wave of progress transforming a region she grants had previously lacked a “sense of urgency to change.” The \$2.3 billion Ohio River Bridges Project is invigorating advancement in the area, like attracting continued growth in the River Ridge Commerce Center and spurring development in Indiana’s southeastern counties.

“We’re about 20% of the Louisville metro area’s population,” Dant Chesser explains, referring to the combined population of Clark, Floyd, Scott, Washington and Harrison counties. “We feel that with River Ridge, the new bridges, in addition to having the (Port of Jeffersonville) and good rail access, we’re 80% of the region’s opportunity.”

The Ohio River Bridges Project encompasses two parts.

The Downtown Crossing:

- Constructing the new Abraham Lincoln Bridge, revamping the existing John F. Kennedy Memorial Bridge and improving interstate

connections on both sides of the Ohio River.

- By the end of 2016, the Kennedy Bridge will carry six lanes of I-65 southbound traffic, while the Lincoln Bridge will carry six lanes of I-65 northbound traffic. Previously, the Kennedy Bridge carried vehicles both ways over the river.

The East End Crossing:

- Construction of the East End bridge – set to open by the end of 2016 – and roadways leading to it. Located about 10 miles from downtown Louisville, it will connect Prospect, Kentucky with Utica, Indiana.
- The first Indiana exit off the new bridge will take travelers in one direction to the Port of Jeffersonville, and the other direction will lead to the booming River Ridge Commerce Center.

**By Katie Coffin**

Wendy Dant Chesser humorously recalls childhood days throwing rocks with her friends at the Big Four pedestrian bridge (then a vacant railroad bridge) connecting Jeffersonville to Louisville Waterfront Park.

“That’s what kids did! That goes to show you the extent of my imagination, I guess,” laughs the president and CEO of One Southern Indiana. “Now, if you throw rocks anywhere down there, there’s a lot of people, you’re bound to hit somebody. We don’t encourage our children to do that these days.”

The early bird gets the worm. Walsh Construction submitted its bid to finish 18 months early with the overall project. "On top of that, we told the owner that we would start in July 2013 and have the (Lincoln) bridge open by April 2016. We were able to advance that by a solid four months to open in December 2015," project manager Steven Schauer reports. The top photo is a rendering of the completed Downtown Crossing.

## A tale of two bridges

There is arguably nothing more frustrating than bumper-to-bumper traffic, especially if it's a twice-daily occurrence on one's commute to work. This was the plight of the Louisville metro area that Walsh Construction – a Chicago-based general contracting, construction management and design-build firm – was tapped to cure after winning the bid.

The Kentucky Transportation Cabinet provided Walsh 30% design documents with specifications for configurations and lanes. From there, Walsh collaborated with Jacobs Engineering to complete the design.

Once construction of the cable-stayed Lincoln Bridge concluded last December four months ahead of schedule, work crews focused on updating the Kennedy Bridge. Replacement of the deck and stringers is expected to add another 50 years to the life of the structure, which originally was constructed in 1963. While the Kennedy Bridge undergoes updates, I-65 northbound and southbound traffic will flow on the Lincoln Bridge.

"Spaghetti Junction" is infamous in Louisville as the confluence of I-65, I-64 and I-71, creating a traffic bottleneck. Untangling this weave of bridges, ramps and interchanges – resembling a bowl of the stringy pasta from an aerial view – represents nearly half of the Downtown Crossing project. This section alone had about 40 bridges, and new ramps are separating traffic and creating longer, safer merges.

"To be able to maintain 120,000 cars travelling through every day and to be able to build new bridges and move traffic, it's a logistics effort the project team really did a good job on," commends Steven Schauer, project manager at Walsh Construction.

## Bridging the gap

What goes into building a structure over a river that thousands of vehicles cross daily?



As with most things in life, one works from the bottom up.

The bridge foundation is comprised of drilled shafts that are 12 feet in diameter, and there are four drilled shafts per tower. After the location is set for the shafts, barges are anchored into position, and then the equipment works off the barge to drill the holes down through the mud and into the bedrock for a firm base.

Once the footing that connects all of the drilled shafts is complete, work begins on the towers. This consists of installing reinforcement steel, placing concrete and then jumping the formwork up to the next level to repeat the process until reaching the roadway level. The portion of the towers that extends above the

road is hollow to allow for access to inspect and maintain the bridge.

Fun fact: The shape of the towers on the Lincoln Bridge is a baseball home plate, paying tribute to the home of the Louisville Slugger.

The final piece is building the main super structure: the roadway.

"We survey each time we put the next segment in place to make sure it's accurate and headed in the right direction so all the pieces connect at the end of the day," Schauer acknowledges.

## Overcoming obstacles

A project of this magnitude is not without its challenges. One of the greatest

hurdles was working around heavy vehicular traffic.

"In order to do that, there was a lot of sequencing," Schauer recognizes. "We'd have to build a part, then move the traffic; build (another) part, move the traffic again; build some more and potentially move the traffic again. There was a lot of good effort by the team to figure out how to minimize the impact to the public."

"Traffic was bad enough here that we haven't impacted it to make it much worse," he laughs.

While the land brought its own set of challenges, the water flowed with more of its own. Since the Ohio River is navigable, barges and other river traffic are travelling through almost every day, forcing work crews to let them pass.

During construction on the Lincoln Bridge, work crews had to deal with 60 days of floods that halted work completely.

"The velocity of the river is so high, plus the water is so high, that we can't hold our equipment in place nor do we feel comfortable holding it in place during that water flow," Schauer explains. "Additionally, the proximity to the existing Kennedy Bridge is less than 100 feet, so we couldn't afford to have a problem where something might shift in the river flow and damage a bridge that's open to traffic."

### New front door' for River Ridge

Southern Indiana is "rockin' and rollin'" with the soon-to-open East End bridge and the boom at River Ridge, Dant Chesser declares.

Seven miles from downtown Louisville, River Ridge spans 6,000 nearly shovel-ready acres. Currently, there are about 7,000 jobs in the complex and it's only 15% occupied. The goal is to create the top destination for advanced manufacturing, distribution and industrial



Nearly 700 crew members have worked on the Downtown Crossing project since construction began. As part of the renovation, more than 3.5 million pounds of old steel are being removed from the Kennedy Bridge, with new steel being installed.



competes with what Louisville has. This will be our first major development in Class A office space, at least anything new and substantial."

She asserts that "the minute those bridges open," change will happen swiftly with more and more developers jumping on the retail, commercial and housing opportunities.

companies from across the nation and around the world.

The commerce center is located along an expansive stretch of Indiana State Road 62 that is wide open for further development at the first exit off the East End bridge.

Glenda Gasparine, president and CEO of the Southern Indiana Realtors Association, moved to the region three years ago from outside the Pittsburgh area. She said there is rapid growth in the residential real estate market as well, but it's playing catch-up thus far.

"One of the things that's happening with the growth is we don't have enough homes on the market," she indicates. "The market prices are increasing because there's a shortage of houses for sale, and we have a limited supply. New developments are going up with newly constructed homes."

As she's looked into marketing for the association, she reveals an interesting trend – a large portion of the potential buyers looking in southern Indiana are from Kentucky.

### Cascade of convenience

Another real estate impact will come in the form of office space.

"We're trying to diversify by attracting back-office kind of development," Dant Chesser explains. "We really don't have a lot of Class A office space in southern Indiana that