

IRWA's 2013 Project of the Year

# The Louisville-Southern Indiana Ohio River Bridges Project



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## Indiana and Kentucky bring safety, mobility and economic growth to the Louisville region.

The Louisville-Southern Indiana Ohio River Bridges Project is a joint undertaking between the Indiana Department of Transportation (INDOT) and the Kentucky Transportation Cabinet (KYTC) to improve cross-river mobility in the Louisville, Kentucky metropolitan area.

Indiana will oversee the East End Crossing between Utica, IN, and Prospect, KY. This bridge and approaches will link the Lee Hamilton Expressway in Indiana, and the Gene Snyder Freeway in Kentucky, completing a loop around the east end of the Louisville metropolitan area. Kentucky will fund and construct the Downtown Crossing, which will connect Jeffersonville with downtown Louisville. This bridge will be located adjacent to the existing Kennedy

Bridge and will carry northbound I-65 traffic, while the Kennedy Bridge will be reconstructed and converted from a two-way structure to carry only southbound I-65 traffic.

A third component of the project, due for reconstruction, is the Kennedy Interchange in Louisville, Kentucky. The interchange has served as the junction for interstate travel through the metropolitan downtown area since it opened in 1962. Referred to as “Spaghetti Junction” for its interweaving design, the interchange has long suffered from traffic congestion and safety issues. With its tight weaves and sharp curves, the ramps no longer conform to modern standards, and its accident rate is far higher than the state’s average.

The interchange connects three interstate highways—I-64, I-65 and I-71—and crosses over the Ohio River into Jeffersonville, Indiana. Once a powerful catalyst for manufacturing and transportation in the region, the Ohio River junction has suffered from cross-river mobility and safety issues. Options for relieving congestion had been studied since the 1970s, but design limitations and funding challenges complicated matters. After decades of planning, it was determined that one new bridge would not solve the long-term transportation needs of the region. A two-bridge solution emerged, and a bi-state agreement would make it a reality.

## THE BI-STATE PLAN UNFOLDS

After decades of planning, the project commenced. Along the way, planners of the Ohio River Bridges Project scaled back the original budget by \$1.5 billion to the current \$2.6 billion to make it financially palatable, and addressed a series of obstacles raised by residents and activists on both sides of the river. Although friction over its tolls and environmental impact still resonates, construction has started, and the two new bridges linking Kentucky and southern Indiana are expected to open in 2016.

In 1996, findings from an Ohio River Bridges study stated that rush hour traffic at the Kennedy Bridge resulted in a crash rate that was 172 percent higher than Kentucky's state average. And with its major commercial barge traffic, the existing structures had taken hits over the years. In response, Kentucky and Indiana officials agreed to pursue plans to construct the East End Crossing bridge and approaches to complete a loop around the east end of the Louisville area, and to construct the Downtown Crossing bridge adjacent to the existing Kennedy Bridge, which would be reconstructed.

## COST-SAVING MEASURES

Once the Federal Highway Administration (FHWA) issued a Record of Decision in 2003, the long-awaited project could begin. The KYTC and INDOT proceeded with design and related project activities, but construction stalled due to a lack of funding. To address the issue, in 2010, the Louisville Metropolitan Planning Organization amended its transportation plans to include tolls. However, more cost-cutting measures were needed. The team examined potential design alternatives to reduce costs, and a Supplemental Environmental Impact Statement (SEIS) outlined the recommended cost-savings. These included reconstructing the Kennedy Interchange in its current location, removing a pedestrian/bicycle lane from the downtown bridge, reducing the number of lanes on the East End bridge, and eliminating flyover ramps and other design changes on the Indiana approach to the downtown bridge.

Federal approval of the revised Record of Decision was received in 2012, allowing INDOT and KYTC to invest federal funds in the modified preferred alternative. Revisions included using tolls as a funding source and more than \$1.5 billion in project cost savings, while retaining the two new Ohio River bridge

crossings, connected approaches, and the reconstruction of the Kennedy Interchange as primary project components.

## FORMALIZING THE TWO-STATE AGREEMENT

To lay the framework for right of way planning and acquisition strategies for Indiana and Kentucky, a highly-structured agreement was needed. The team drafted a Bi-State Project Development and Management Agreement that outlined the coordinated decision-making process and assigned specific responsibilities and obligations to the respective states.

The governors of Indiana and Kentucky agreed that each state would finance and oversee construction of one-half of the project. INDOT, in conjunction with the Indiana Finance Authority, is responsible for overseeing the financing, design and construction of the East End Crossing. The KYTC has taken the lead on financing, designing and constructing the Downtown Crossing. INDOT acquired all the right of way necessary for both bridges in Indiana. KYTC acquired the right of way that was needed in Kentucky. The fact that INDOT was acquiring right of way for use and improvement by KYTC on Indiana soil was unprecedented.

The INDOT right of way component consisted of 247 acres composed of 94 parcels, five of which were historic structures. In addition, 41 parcels necessitated the relocation of 293 total displacees. One of these parcels required the relocation of a Housing and Urban Development-financed apartment complex for mentally and physically disabled adults. Another involved community facilities for veterans of foreign wars, drug and alcohol recovery and diabetes treatment, as well as several national franchise businesses.



Signing the historic bi-state agreement in March 2012 were then-Indiana Gov. Mitch Daniels, left, and Kentucky Gov. Steve Beshear. Standing from left, Kerry Stemler, then-Co-Chairman of the Louisville and Southern Indiana Bridges Authority, Steve Schultz, then-Executive Director of the Authority, and Charles Buddeke, then-Chairman of the Authority.



Both states agreed on a right of way clear date of June 30, 2013, for Indiana to obtain the right of way required for the Downtown Crossing in Indiana and a March 28, 2013, date for Kentucky to obtain the right of way in Kentucky for the East End Crossing. As defined in a Bi-State Development Agreement, each state would be liable to the other for failure to obtain the respective right of way on time should the failure result in a delay claim against one of the states. Delay claims could have reached up to \$80,000 per day for the Downtown Crossing bridge and \$100,000 per day for the East End Crossing bridge.

The Bi-State Development Agreement featured a multi-disciplinary Bi-State Management Team composed of representatives from each state's departments of transportation and finance agencies, the FHWA, consultants and community partners. Community advisory teams were assembled and provided guidance on local and regional issues, historical and environmental resource concerns and economic development.



During a recent groundbreaking ceremony, a crane hoisted the American, Kentucky and Indiana flags over a construction site for the downtown span of the Ohio River Bridges Project.

In the event that conflict resolution was needed, a joint board was established as the appeal authority.

To handle the complexities of contract administration and oversight of their respective alternative delivery contracts, technical teams were assembled with stakeholders from both states. These technical teams, which included INDOT staff and consultants, assisted with design review, contract administration, right of way acquisition, construction inspection, quality control and quality assurance activities. Additionally, each state appointed a representative to serve on the other state's technical team. This went a long way in helping the teams review and develop those portions of the project that were constructed within the jurisdiction of the appointing state.

### REAL ESTATE'S ROLE

INDOT's Real Estate Division provided general right of way program oversight and discipline-specific parcel management assistance to the appraising, buying and relocation teams assigned to work the project. According to Scott Adams, INDOT Director, Real Estate Division, "Early identification of the right of way team's size, type, and skillset was needed to achieve project goals and overcome challenges. We knew this was paramount to timely and cost-effective decision-making and execution of project plans."

Scott added, "This led to establishing a right of way project team that was comprised of both INDOT staff and independent consultants, working side-by-side in appraising, buying and relocating the parcels. This increased the capacity of work for the entire team, and enabled individual agents to secure parcels faster. The concept reinforced the value of teamwork across all disciplines and improved communication."

### PROJECT FINANCING AND COORDINATION

The project's size and scope dictated the highest level of organization, coordination and collaboration. While right of way activities were funded by a traditional 80/20 split of federal and state funds, the construction funding, design, legal and other project development processes differed between the two states. Both state legislatures passed laws, issued various forms of debt and procured federal funds participation where possible to facilitate the project's goals.

In Indiana, legislation was passed in 2006, 2010 and 2011 for the state to enter into Public-Private Partnerships (P3s), and INDOT and the Indiana Finance Authority procured a private-sector team to finance and construct the East End Crossing and to perform long-term operations and maintenance of the bridge. The preferred P3 proposal, submitted by WVB East End Partners, a team of investors and other regional, national and international firms, proposed a design-build cost of the East End Crossing for \$763 million, 23 percent less than previous cost estimates of \$987 million. The preferred proposal also commits to opening the new bridge to traffic eight months ahead of schedule. WVB East

End Partners is contributing \$78 million of private equity and has raised \$702 million in tax-exempt private activity bonds.

It was agreed that the Indiana Finance Authority would make \$392 million in milestone payments during the construction period. The revenue generated from tolls would be allocated to retire the bonds and provide a source of funds for a 35-year facility maintenance obligation of WVB East End Partners.

“Organizational buy-in was the key to project success,” said INDOT Project Manager Kevin Hetrick, who had overall project management responsibility, including right of way acquisition. “To deliver a project of this magnitude, commitment was needed from all levels of the organization and across all divisions. In this case, from the governor’s office, through the Indiana Finance Authority and INDOT’s management, and our real estate and environmental divisions. There was a common, clearly defined goal to reach commercial close of the P3 project by end of 2012 and acquire all the right of way by June 2013. Every needed resource was provided to meet these goals.”

Hetrick, who also served as the liaison between the real estate and technical design staffs, was focused on disseminating acquisition-related information quickly. “Delivering the project on schedule, under budget and with the highest level of quality was our top priority,” he said. “The process of acquiring the necessary real estate could not begin until after the Environmental Impact Statement was completed. Once it was completed in mid-2012, we had less than a year to clear the right of way so that construction could start on schedule.”

## HISTORIC IMPACTS

Five of the properties needed for the Downtown Crossing bridge were historic structures located in Jeffersonville, IN. Consistent with the National Historic Preservation Act of 1966, the project’s potential effect on those properties and districts was evaluated during the environmental phase and resulted in mitigation measures that were detailed in the project’s Section 106 Memorandum of Agreement. Individual preservation plans were developed for each critical resource, including acquisition and relocation of five contributing structures within the Old Jeffersonville Historic District, acquisition and preservation of Utica Township Lime Kilns, as well as the acquisition, planting, protection and management of lands designated for reforestation and preservation.

The commitment to relocate the five historic single-family homes was logistically complex and politically problematic. Each of these resources was located directly within the right of way footprint of the Downtown Crossing bridge approach. A detailed engineering and value study of more than 40 vacant lots within the historic district produced only one viable location. While other lots were pursued, local zoning variances were sought and denied by the city, leading to concern for timely delivery of right of way clear and cost overruns. Eventually, four additional lots were located and secured.



Some key players from INDOT’s multidisciplinary project team were, from left, Jim Crall, Appraisal Manager; Mike Jett, Operations Manager; Todd Clift, Acquisitions Manager and Scott Adams, Real Estate Director.

The homes were moved and are being prepared for sale as state surplus property at their new locations.

## CLEARED FOR CONSTRUCTION

By focusing on the goal, INDOT acquired and certified clear for construction 100 percent of the parcels needed – before the deadline. INDOT’s right of way team was afforded 376 days to acquire and clear the needed right of way. The East End Crossing bridge was clear 66 days ahead of schedule. The Downtown Crossing bridge was clear 11 days ahead of schedule. The entire acquisition process required 258 days, roughly 16 percent faster than the right of way target date, coming in well in advance of the June 30 deadline. And better yet, the total cost of right of way acquisition, including all services and relocation expenses for both bridges, came in at \$38.2 million — \$18.8 million under budget.

Ron Heustis, Senior Project Manager for INDOT said, “Indiana had placed itself in a good position by doing early acquisition of a number of parcels. When the acquisition process was suspended during the approval of a revised Record of Decision, the time for acquiring the remaining properties became critical. Having a team that was willing to share and listen to ideas and then quickly act on the best solution was critical to the success,” he said. “The INDOT Real Estate team has the people and processes in place to make these types of projects successful. Their knowledge of Federal and State right of way codes and the ability to work within those codes to expedite the process to the extent possible was the most important factor to an excellent outcome.”

Added focus provided by a “Good to Great” directive by Indiana Governor Mike Pence gave the team additional motivation to succeed by carefully executing each phase of the process with purpose and diligence. Careful consideration to compliance with



Showcasing a rendering of the East End Crossing is INDOT Project Manager Kevin Hetrick (left) and Jim Stark, INDOT Deputy Commissioner of Innovative Project Delivery.

the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) was also paramount to the team's successful delivery of clear right of way. INDOT's timely certification of right of way clear for both bridges enabled the Bi-State Management Team, IFA and KPTIA to successfully execute the terms of its agreements with the respective design-build contractors and facilitate the start of construction of both bridges as scheduled.

### LEVERAGING BEST PRACTICES

Relying on FHWA's Every Day Counts Toolbox and other INDOT right of way best practices, INDOT employed several successful strategies to deliver its portion of the project ahead of schedule and under budget. This included the complete exercise of eminent domain authority, along with diligent management of the entire condemnation process through the courts. In addition, the team obtained right of entry grants on all available parcels to achieve early access to right of way. Administrative settlements were used to expedite negotiations and relieve congestion in the courts. And appraisal waiver valuations for parcels valued less than \$10,000 were utilized to speed delivery of offers to purchase and obtain acceptance from owners.

The right of way team, composed of INDOT staff and independent consultants, delivered services in appraising, buying and relocation. This increased the team's overall capacity and enabled agents to secure parcels faster. The concept reinforced the value of teamwork across all disciplines and improved communication. Weekly parcel-specific status reports were prepared and reviewed by INDOT's right of way team, and adjustments to schedules and priorities were discussed and evaluated regularly.

Jim Stark, the INDOT Deputy Commissioner of Innovative Project Delivery noted, "The lessons learned on this project were that once you set a manageable schedule for work to be done, you have to ensure that the schedule would be met. The INDOT project team was instrumental in creating a well thought out plan and then implementing it. All involved did a great job."

Scott Adams added: "Every person, every tool, every resource was allotted to make this extremely complex—and historically significant—project a success. This project was a resounding success and a model for our projects going forward."

### LONG-TERM ECONOMIC DEVELOPMENT

The start of construction signals the end of a four-decade wait for area motorists, residents and businesses. The East End Crossing will not only bring improved mobility for motorists, but also facilitate long-term economic development prospects of the region. A 6,000-acre decommissioned army depot, now being redeveloped as the River Ridge Commerce Center, is exploding with new development opportunities. In anticipation of the bridge connection, several corporations have already announced planned expansions or relocations to River Ridge, including Amazon, America Place, Standard Register, and a Japan-based steel manufacturing company. Hundreds of jobs are on their way to southern Indiana and metropolitan Louisville due to the Ohio River Bridges Project.

Promise of the East End Crossing has also spawned a \$22.5 million partnership between INDOT, the city of Jeffersonville, Clark County, IN, River Ridge Development Authority, and the Port Authority of Indiana to designate and construct a heavy-haul road. The new heavy-haul road will directly link River Ridge to an additional 1,000 acres of nearby Indiana Port Authority land and will provide direct access to the Old Salem Road interchange and the East End Crossing bridge. Similar residential and commercial development opportunities are emerging as a result of the Downtown Crossing and East End Crossing bridge connections. The city of Jeffersonville has recently fielded several redevelopment proposals from area developers that include hotels, restaurants and retail tenants with supporting residential components.

Scott Adams says winning IRWA's Project of the Year was a significant boost to INDOT staff and agency morale. "It's a real-life success story of the agency's CORE 4 Values—Respect, Teamwork, Accountability and Excellence—in action. A noteworthy honor and achievement for INDOT, area motorists, residents, and businesses that will benefit from the time and cost-savings realized by improved cross-river mobility offered by the Downtown Crossing and East End Crossing bridge connections." 🌟