



CASE STUDY

Kentucky Transportation Cabinet Bridges Project





Goal

When tasked with setting up a fast-paced program to repair or replace hundreds of bridges throughout the state, the Kentucky Transportation Cabinet (KYTC) needed a software solution to help manage the sudden influx of bridge projects.

Challenge

They needed to implement the solution quickly, integrate with existing systems, and provide access to dozens of partners, including partnering consultants, contractors and state workers and agency partners.

Solution

e-Builder provided a comprehensive, centralized solution that could scale quickly and include all the details and data needed to run the bridge program.

Ongoing Benefits

The KYTC and its partner organizations now have a central repository for storing and sharing data, documents, and reports, helping to keep everyone on the same page.

The Kentucky Transportation Cabinet (KYTC) is responsible for inspecting 14,000 bridges across Kentucky, 9,000 of which are maintained by the state and 5,000 by local counties. When gathering and entering data, the organization relied on spreadsheets and manual paperwork. In 2018, the state legislature passed a dramatic new highway plan that allotted \$350 million to renovate or replace 340 bridges in two years. “That was about five times more than we typically addressed in a single year,” says KYTC program manager Royce Meredith. “It was a huge order, and we knew we’d need a team effort to succeed.”

To tackle the challenge, the KYTC awarded a program management and design contract to a 22-firm program team led by Stantec. The team adopted e-Builder to manage the bridge projects to help scale quickly and provide a central information hub for the many teams and individuals involved.

“We initially had to gather information on more than 1,000 bridges to determine whether they needed renovation or replacement and develop automated processes within e-Builder to manage it all...”

- Dr. Tony Hunley, Bridge Project Leader | Stantec





Scaling Quickly

The accelerated timeline for the bridge projects meant the KYTC and the program team needed to scale up e-Builder very quickly, which proved challenging. “We were starting from scratch, and while e-Builder has a framework, you have to configure it to your processes,” says Meredith. “What we were doing had never been done before, and we constantly said we were building the engine on the airplane while trying to fly it at the same time.”

Dr. Tony Hunley, Stantec’s bridge practice leader and the consultant team’s program manager, spearheaded the e-Builder implementation. The program team had some past experience using e-Builder with clients, and they engaged program management expert and consultant, KFA Inc., to help fine-tune the implementation process for the bridge project. “We initially had to gather information on more than 1,000 bridges to determine whether they needed renovation or replacement and develop automated processes within e-Builder to manage it all,” says Hunley. “We had almost daily boardroom meetings with KFA and multiple teams working on how to build out e-Builder.”

“We developed the full workflow of a project for the KYTC from screening through project closeout in e-Builder—all in less than a year. To date, that workflow has been utilized on more than 400 bridges.”

- Dr. Tony Hunley, Bridge Project Leader | Stantec

They started the project in late May and by early August KFA had built out the screening process and mobilized teams across consulting firms. “We’d committed to have the screening done within 120 days of the beginning of the contract,” Hunley says, “including scope, prioritization, and a cost estimate for each bridge, and we met that goal.”

Managing Every Project Phase with e-Builder

While working on the screening phase, the implementation teams also needed to explore how they would workflow the design phase within e-Builder. “There are a lot of moving parts involved in the design phase such as utility agreements and purchasing right of way,” says Hunley. “For this program, we started preparing for all these elements at once in order to hit the finish line on time.”



Using e-Builder, they could monitor each process from screening through developing plan specifications and estimates, bidding, and project management. “We developed the full workflow of a project for the KYTC from screening through project closeout in e-Builder—all in less than a year,” says Hunley. “To date, that workflow has been utilized on more than 400 bridges.”

The Stantec team built out other processes within e-Builder, including the ability to track total spending and allow design teams to update costs along the way. They developed a complete set of design-build processes, enabling firewalled access to select outside entities such as the design-build contractor and engineer. They also created an issue process, similar to an RFI, to report and evaluate problems.

“We’d all worked on big projects before where important details would get lost in emails. With e-Builder, everyone had notifications on their dashboard when they logged in, so nothing got lost—and that helped us a lot. Ultimately, e-Builder was the innovative way to approach this project.”

- Royce Meredith, Program Manager | Kentucky Transportation Cabinet

Hunley admits that the pace of the project and software build-out meant the first six months were chaotic. “We struggled with reporting in e-Builder, especially in the early days,” he says. “KFA was a valuable entity for us because we could tell them what we needed and they’d build customized reports for us.” They also helped with integrating invaluable financial information, querying data from the KYTC’s system and pulling it seamlessly into e-Builder.

Eventually, the software was built out and the teams’ confidence levels increased. The massive collection of projects began to flow smoothly through the workflow systems. “We developed a saying: ‘If it’s not in e-Builder, it didn’t happen,’” says Hunley. “The software became our single source of truth for all teams and consultants. We would not have been able to deliver the program at such a rapid pace without e-Builder.”

Get Smart. Get Started. Get Results.

e-Builder Enterprise is designed for owners like you to manage the funding, tracking and reporting of your Infrastructure Investment and Jobs Act projects. By choosing e-Builder Enterprise, the trusted software-as-a-service (SaaS) platform for owners, you are joining organizations that have managed tens of thousands of projects valued at over \$1 trillion.

Visit our [Infrastructure page](#) to learn more.





Start Your Free Demo Tour.

The best way to understand how e-Builder Enterprise can transform your capital program management is to see it for yourself.

To request a demo:

Visit e-builder.net or call 800.580.9322

Start Your FREE Demo

