Collaboration Leads to Massive Statewide Bridge Preservation Effort

(Posted Aug. 31, 2015) Contractors employed by INDOT are now hard at work doing routine and not-so-routine maintenance on 65 road bridges across Indiana.

Bridges involved in the Targeted Bridge Preservation Project are located across all six INDOT districts, and in 36 Indiana counties. Bridges involved include interstate bridges, state road bridges, and U.S. highway structures. Funding for the $50 million project, which involves 29 separate design-build contracts, is provided by INDOT.

“The projects are a combination of bridge rehabilitation and preventive maintenance with one total replacement,” Project Manager Kate Francis said. “The entire program was developed as a method to propose and implement cost-effective strategies for infrastructure preservation quickly.”

Bridge preservation activities are designed to prevent, delay, or mitigate deterioration. Preservation activities include inspection, cleaning, deck overlay, and substructure or superstructure repair. Work on individual bridges in this statewide initiative includes a range of preventive maintenance and repair, substructure repair and rehabilitation, bridge deck overlay, bridge deck replacement, pavement patching and rehabilitation, scour and erosion protection, and superstructure replacement.

The Targeted Bridge Preservation Project was conceived in November 2013 and programmed into the INDOT project planning schedule a month later. Letting of bundled projects began in April 2014 and was completed in May 2015; construction on individual bridge projects started in August 2014 and is continuing through this year and next. The entire project, from conception to letting, was created and launched in just 18 months.

The number of bridges being rehabilitated under this program, by district, is Crawfordsville 13, Fort Wayne five, Greenfield four, LaPorte 15, Seymour 18, and Vincennes 10. Among the counties that will receive the most bridge work are: St. Joseph, which has five bridges slated to receive work; Clinton and Morgan, which each have four bridges scheduled; and Boone and Newton, which each have three bridges included on the project job list.

Bridges involved in the Targeted Bridge Preservation Project are scattered across all six INDOT districts.
“This was a huge effort and it was pulled together incredibly quickly,” said Bridge Division Director Anne Rearick. “Normally, you’d look at taking at least a couple of years to get this number of projects scheduled and let, but everyone pulled together to get it done.”

Funding for the Targeted Bridge Preservation Project was identified by the Finance Department while overseeing the closing of INDOT project purchase orders (P.O.). Money that was earmarked for previous projects, but not spent, was pooled to fund the work.

“Essentially, the success of our P.O. close-out process created an opportunity for a $50 million reinvestment into our bridge assets,” said Capital Projects Fund Management Director Clark Packer. “This was a true win-win for the agency because of two successfully managed processes with clear results.”

The Bridge Division and district employees scoured lists of INDOT bridges that needed preservation work, and those that best matched the scope of services were included in the preservation project list. Although this preservation work would have been accomplished eventually, including those projects in the project list will expedite the needed work.

Engineers examined the maintenance requirements of each bridge, identified potential right-of-way issues, projected construction timelines, and worked with Environmental Services to identify potential environmental issues. The Contracts Administration section helped bundle selected projects so that contractors could submit a single bid to perform similar work on multiple bridges. All the projects were let as design-build, which also reduced planning time.

As a result of this collaborative effort, INDOT tackled a variety of bridge maintenance and preservation projects on an expedited timeline.

Bridges that receive timely repair and maintenance work have improved drive quality, extended life expectancy, less deterioration, and reduced long-term costs from future maintenance and construction. Regular maintenance also reduces the number of bridges with condition ratings varying from good/fair to poor and increases the percentage of bridges with key condition ratings of fair or better.

INDOT plans to spend more than $3.2 billion for bridge and roadway preservation work between 2015 and 2019. This represents a 62 percent increase in road and bridge preservation funding from 2010 to 2014 amounts.

Rearick praised the team that helped to design, package and manage the Targeted Bridge Preservation Project.

“Kate Francis and her group were tasked with delivering $50 million in bridge projects that we could quickly identify and begin work on,” she said. “They brought this in just shy of the $50 million – without going over. She and her group did a great job.”