

First-Round Winner

Innovations Challenge
<http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm>

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Prepared by Customer Relations
Missouri Department of Transportation

Raising Spirit of St. Louis Boulevard



Description

The Spirit of St. Louis Boulevard over I-64 had a vertical clearance deficiency of 14.6 feet. The overpass had been hit and straightened numerous times. As part of the Daniel Boone Bridge Project, the Spirit of St. Louis Boulevard Bridge was raised approximately 25 inches. The structure was lifted in place by a series of hydraulic jacks to the new elevation. Precast blocks and steel bolsters were used to support the superstructure in its final location. Through innovation, MoDOT was able to salvage this structure at a fraction of the cost of a full replacement. Besides reduced future maintenance costs, safety was also improved. The costs associated with design and construction was approximately \$895,000.

Benefit

Through innovation, the existing structure was used in place without a full replacement. The cost for raising the bridge was estimated at 50% less than a full replacement. The entire structure was raised within a 30-day closure window as opposed to a traditional six-month replacement. The process of jacking drastically simplified the scope as opposed to a full replacement. Due to the elimination of the vertical clearance deficiency the safety of the corridor was significantly improved.

For More Information:

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Additional photos can be seen at the Innovations Challenge homepage:
<http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm>

