



**Productivity First-Round Winner**  
Innovations Challenge

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Prepared by Transportation Planning  
Missouri Department of Transportation

## Pull Box Riser



### Description

Pull boxes on two resurfacing projects on I-29 were originally installed in the shoulder and when subsequent overlays came along they were covered up or paved around, leaving two or three inch drop offs in some cases. In the past, the only alternatives to fix the issue were to relocate the entire pull box behind the guardrail and pave over it, only to potentially dig out later when an electrical issues occurs or add a riser to make the top of the pull box flush with the new asphalt. A new, innovative fix to this problem is to add a locally manufactured Pull Box Riser which is designed to fit snugly into the existing box opening and secured from lateral movement. The riser is constructed out of 3/8 inch thick steel with a 3/4 inch lip at the top for the existing cover to rest in. The riser rests upon the existing cast iron frame and is painted to prevent future rust and corrosion.

### Benefit

The fabricated risers are less than half the cost of risers found online and can be installed in about one hour, compared to a two-week lag time ordering online. Since this product is installed directly on the side of the roadway, usually at interstate interchanges, it reduces the amount of highway exposure to MoDOT workers to increase their safety. To install the riser, only two employees are needed with the riser and asphalt as needed materials. Since the riser is fabricated in St. Joseph, a local company is being supported by the department.

### Materials and Labor

1 hour of staff time with \$503 in materials.

### For More Information Contact:

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Additional photos or videos can be seen by accessing the Innovations Challenge SharePoint page at: <http://sharepoint/systemdelivery/TP/Documents/InnovationsChallenge.aspx>.