# **Projects First-Round Winner**

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

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Prepared by Transportation Planning Missouri Department of Transportation

# **Adjustable Guardrail**



# **Description**

MoDOT spends millions of dollars each year to bring substandard guardrail up to the standard 29" height to top of guardrail following resurfacing jobs. Raising the rail allows for future resurfacing projects without further modifying the guardrail. The conventional process for guardrail adjustment is to completely remove each individual piece of rail and post, then replacing with new post and rail. Using this new method, the existing guardrail and offset blocks are removed from the posts and holes are then punched in the existing posts to allow the guardrail to be installed three inches higher. The existing plastic offset blocks are replaced with new wooden blocks and installed along with the original guardrail at the new height on the existing posts.

#### **Benefit**

A Taney County test project of this method resulted in a \$4,477 reduction of labor and a \$26,537 reduction in material cost for a \$31,014 total in savings compared to the original contract amount of \$64,260.00 for 4,725 linear feet of new Type A guardrail. The alternate guardrail installation resulted in approximately a 48 percent savings. In some instances this process also will eliminate the need for milling on our asphalt overlays.

### Labor

20 hours

#### For More Information Contact:

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Additional photos can be seen by accessing the Innovations Challenge homepage at: <a href="http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm">http://wwwi/intranet/cr/SolutionsAtWork/Innovations.htm</a>.

