Tool and Equipment First-Round Winner

Innovations Challenge

April 2018

Prepared by Transportation Planning Missouri Department of Transportation

Guardrail Height Jig



Description

The Guardrail Height Jig innovation is used to measure the height of guardrail which is especially useful in areas of sloped pavements. The lower edge of the jig is placed on the shoulder pavement while the upper edge rests on the top of the guardrail. The distance from the top of the lower leg to the top of the upper leg is the height of the rail.

Benefit

This tool makes measuring the height of guard rails easier and more accurate by establishing a surface parallel to the pavement at the top of the guardrail, providing a large area where the height measurement can be made. This tool makes collecting the data faster and simplifies work by taking the guess work out of where to take the measurement. Employee safety is improved by speeding up the measurement process which reduces employee exposure to traffic volumes. This tool also eliminates the need to work close to sharp guardrail edges and greatly reduces the need for employees to bend over to read the measurements.

Materials and Labor

Less than \$50 in materials costs with 2 hours of staff time.

Materials list: Guardrail Height Measurement Jig

- 2 * 1"x4"x52" boards
- 4 * 36" metal rulers
- 4 * 1/4" bolts
- 8 * 1/4" washers
- $2 * \frac{1}{4}$ " wing nuts
- 2 * 1/4" capped nylon lock nuts

For More Information Contact:

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Additional information, photos or videos can be seen by accessing the Innovations Challenge SharePoint page at:

 $\underline{http://sharepoint/systemdelivery/TP/Documents/InnovationsChallenge.aspx}$

