**Sign Height Measuring Tool**

**Description**
The Sign Height Measuring Tool is an inexpensive tool allowing employees to quickly check existing signs for proper height and provides them the ability to install new signs at standard heights to ensure uniformity in MoDOT’s roadway signs. This tool is light-weight and portable and stores easily in a vehicle. The laser light is visible in all light conditions.

**Benefit**

**Efficiency:** By using the measuring tool, an employee can test sign heights on roadways without getting off the shoulder or going onto the slope. The need to take a tape measure to check heights has been eliminated. This tool allows more signs can be checked per day, with fewer chances for employee injury.

**Cost:** The initial cost to manufacture the tool is inexpensive. A standard PVC pipe is used for the pole and a 2” metal strap is used to make the 1.5” ledge for the level. The level can be purchased at any home improvement store for approximately $37.

**Quality:** The quality of MoDOT signs has improved greatly over previous years because of the consistency in installing and checking their height. This process alleviates removing or reinstalling signs except when they have faded or become damaged. Using this measuring tool in all MoDOT maintenance sheds, would increase sign quality throughout the state.

**Organizational Impact:** The measuring tool has improved the process of sign uniformity by giving an accurate height of our roadway signs at a very low cost. The tool has been used on object markers, chevrons and all rural signs. To make this a working tool in urban areas where sign heights are higher than rural area signs, a two foot piece of PVC pipe can be added. With
chevron and object markers measuring four feet high, an additional ledge can be added to an existing tool to accurately measure the height of these markers.

**Safety:** Installing signs at the correct height ensures signs meet the MUTCD recommended sign heights, as well as MoDOT standards. Accurately installing signs keeps citizens safe on Missouri’s roadways. By using this tool, MoDOT crews no longer traverse on slopes or ditches to check heights, keeping them in safer areas of the roadway.

**Environmental:** There are no negative environmental impacts to using this measuring tool.

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**For More Information**
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Additional photos can be seen by accessing the Innovations Challenge homepage at [http://www/i/intranet/cr/SolutionsAtWork/Innovations.htm](http://www/i/intranet/cr/SolutionsAtWork/Innovations.htm).