## T & E First-Round Winner

**Innovations Challenge** 

### **April 2016**

Prepared by Transportation Planning Missouri Department of Transportation

# Sidewalk Mapper



# **Description**

The Sidewalk Mapper is a tool for checking ADA compliance on existing and proposed pedestrian facilities. This tool allows for quick inspection and documentation of sidewalk to determine ADA compliance. By mounting a two-foot smart level on a rolling carriage, the user no longer needs to stop and set the level on the sidewalk to determine if cross slope is compliant.

### **Benefit**

Using the tool eliminates the need for repeatedly bending over to take measurements, thus preventing back injuries. The addition of the GPS unit allows the user to collect and import data points showing the location of non-compliant and compliant pedestrian facilities into GIS programs, such as ArcMap; or into CADD programs, such as Microstation. The spray wand allows the user to quickly mark non-compliant facilities.

### Materials and Labor

Materials: Most items were taken from existing inventories or scrap materials.

(See materials list on back.)
Total labor hours: 2.5 hours

### For More Information Contact:

Michael Mooney at michael.mooney@modot.mo.gov or (816) 901-4511.

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



| Materials   | Cost    |
|---|---------|
| Polaroid Cube Video Camera                                | \$99    |
| Camera Mount, Joist Bracket and Elevation Bolt            | \$5     |
| Striping Wand, 10" Steel Channel with Elevator Bolt       | \$22    |
| Wand Mount, Scrap 10' Steel Channel with Elevator Bolt    | \$3     |
| Trimble Geo XT Geoexplorer 2005 GPS from excess inventory | \$7,500 |
| GPS Mount using Ram Mount                                 | \$31    |
| Scrap 2" Angle Iron (27" long)                            | \$0     |
| Scrap ½" Steel Axle (30.5" long)                          | \$0     |
| Scrap ½" Steel Conduit (4' long)                          | \$0     |
| 196-2E Stabila Electronic Level                           | \$200   |
| 2- 5" Lawn Mower Wheels                                   | \$20    |
| Total   | \$7,880 |

