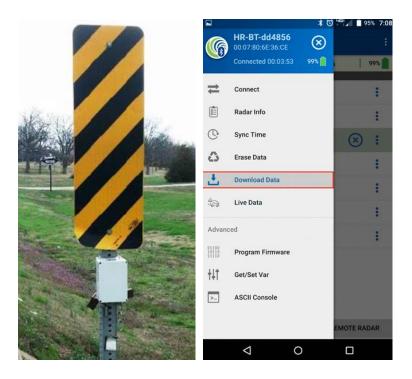
Projects First-Round Winner

Innovations Challenge

April 2017

Prepared by Transportation Planning Missouri Department of Transportation

Armadillo Speed Sensor



Description

Many MoDOT traffic studies and permits require a speed study. The traditional method has been to nail down a device on the roadway surface to collect that data. That process took time and put individuals in the middle of the road. The Armadillo Speed Sensor is an innovative way to deploy a speed study on the side of the road out of the lane of traffic. The lightweight device can be attached to a sign post or on a tripod. The unit registers all lanes at one time and provides data for each lane. Due to an 11-day battery life, the data can be gathered for a longer period of time. The software is easy to use and the data is downloaded through Bluetooth. The speed study data is sent via email to a traffic studies specialist in an easy-to-use spreadsheet. Once the data is received, the sensor can be moved to a new location.

Benefit

Using the sensor eliminates individuals working in a lane of traffic, it increases the speed in which the sensor can be placed and reduces the number of employees needed to install a sensor. While units cost more than traditional in-traffic devices, other materials and equipment are not needed to install the traffic device on the road surface. How better to improve worker safety than by finding innovative ways to eliminate workers in the road altogether. In addition to the safety improvement, there's a cost savings of about \$367 for deploying the sensor as well as labor costs.

Materials and Labor

No additional staff time hours with \$2,800 in materials. Diagram is shown on the back page.



For More Information Contact:

LeAnn Blankenship at <u>F.Blankenship@modot.mo.gov</u> or (417) 621-6570. Alternate contacts: Mike Bock, Eric Turner, Teresa Turner and Lori Palmer

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

