Evaluation of the AutoCone 130 Cone Trailer

Evaluate AutoCone 130’s performance to determine if it minimizes road workers’ exposure to traffic and risk of injuries.

WHAT IS THE NEED?

California Department of Transportation (Caltrans) sets up highway lane closures daily throughout California to create work zones for highway maintenance activities. Presently, a cone truck requires a minimum crew of two: a truck driver and a worker who drops off and picks up the traffic cones by hand. In high traffic areas, traffic cone placement for lane closure leads to extensive traffic exposure for the workers and thus increases the risk of injuries.

AutoCone 130 is a cone placement trailer that is designed to reduce workers’ exposure to traffic. It stores, places, and picks up 130 traffic cones automatically, requiring only the truck’s driver to operate. The AutoCone 130 places the cones on the road and picks up cones that are standing upright or have been knocked over. The trailer allows the operator to choose when to drop a cone, or it can be set up to automatically drop cones at preset intervals.

This research will test the AutoCone 130 trailer’s ability to improve safety for the workers. Successful research could lead to the implementation of automated equipment for cone placing and retrieving.

WHAT ARE WE DOING?

The research team from the Advanced Highway Maintenance and Construction Technology (AHMCT) Research Center will evaluate the operation of an AutoCone 130 cone trailer and determine if it works as advertised, document any changes in
Worker exposure to the traffic, compile benefits, drawbacks, and feedback from staff after using the machine, and provide recommendation for using the equipment.

**WHAT IS OUR GOAL?**

The safety of the workers and the users of California’s transportation system is Caltrans’ number one priority. Caltrans is continually working to improve the safety of all employees and the public. The AutoCone 130 will potentially lower the risk of traffic exposure by reducing the number of operators to one and by putting the operator into the safety of the cab.

**WHAT IS THE BENEFIT?**

If AutoCone 130 performs as advertised by the manufacturer, this device will potentially reduce the labor for lane closures and improve the safety of the maintenance workers conducting lane closures.

**WHAT IS THE PROGRESS TO DATE?**

The research team at the University of California, Davis is working with Caltrans on finalizing the final report detailing the results of the evaluation.