

Maintenance

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Project Title:
Review of Truck Mounted
Attenuator Accessories

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Field trials of the Truck-Mounted Attenuator Accessory (TMAA)

Field evaluation of accessories and equipment for TMA trucks that can improve safety and the function of TMA truck operations.

WHAT IS THE NEED?

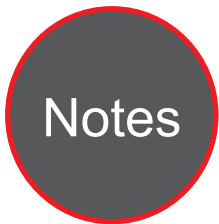
The California Department of Transportation (Caltrans) often performs highway maintenance operations in work zones with temporary lane closures adjacent to high-speed traffic. The high-speed traffic provides a significant safety hazard to highway maintenance personnel. To shield the work zones from errant vehicle impacts, Caltrans routinely deploys shadow trucks with truck-mounted attenuators (TMAs). The TMAs are designed to decelerate lighter vehicles but impacts of high-speed heavy vehicles can exceed TMA dynamic absorption force limits. The impact risk with physical injury for the shadow truck driver is significant. Since the shadow truck TMAs are mobile and cannot be physically scaled up, the best mitigation strategy for impacts is to influence driver behavior.

WHAT ARE WE DOING?

We are procuring up to three (3) TMAA packages that includes installation by the system vendor or a local installer. The researchers will then develop a field-testing plan and two surveys for operator feedback. The researchers will provide training to selected shadow truck operators, and the field-testing will commence, with on-site and phone support from the researchers as needed. The field-testing portion of the project will continue for approximately one year, followed by researchers obtaining feedback from the operators, compiling, and reporting of the results.



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WHAT IS OUR GOAL?

We are testing up to three TMAA packages for approximately one year in the field during normal Caltrans operations on the highway. Operator feedback will be analyzed. The results of the field testing and operator feedback will inform us if the TMAA package is suited to regular Caltrans operations and this technology package is ready for broad deployment.

WHAT IS THE BENEFIT?

The results of this project will provide significant improvements of safety of shadow truck operators and the traveling public. They will improve Caltrans' ability to safely perform moving closure operations. Furthermore, TMAA package deployment will protect Caltrans' liability by recording accident causes.

WHAT IS THE PROGRESS TO DATE?

The project team decided to pursue an alternative vendor to supply and install the Truck-Mounted Attenuator Accessory (TMAA) package. A vendor was recommended by a project panel member based off a good current working relationship. AHMCT met with the new vendor to provide an overview of the research project and determine their interest and capabilities. The vendor was interested in becoming the supplier for the TMA accessories. The researchers talked with the sub-contractors to determine the feasibility of working with the new vendor. The development of an alternative flashing light system to accompany the Lane Closed sign was delayed as the supplier issue needs to be addressed first.