Yellow Pavement Markings at a Railroad At-Grade Crossing

A before and after study will be conducted to see if the yellow pavement marking helped increase driver’s awareness and improve driving behaviors.

WHAT IS THE NEED?

There are more than 212,000 highway-rail grade crossings where roadways intersect railroad tracks in the United States. California alone has over 10,000 highway-rail crossings. Nationwide, over the ten years from 2008 through 2017, 21,095 accidents, resulting in over 2,500 deaths and over 9,000 injuries, occurred at these crossings. In California alone, 1,393 highway-rail accidents resulted in over 300 deaths and over 750 injuries during this period.

To improve safety at a highway-rail grade crossing, this research will place yellow pavement markings within the dynamic envelope at a railroad at-grade crossing to help decrease injuries and death statistics and help improve awareness.

WHAT ARE WE DOING?

The California Department of Transportation (Caltrans), in conjunction with California Public Utilities Commission (CPUC) and University of California, Berkeley are conducting research to assess before and after studies on driver stopping behavior.

WHAT IS OUR GOAL?

The objective of this research is to assess the effectiveness of yellow pavement markings in influencing safe driver behaviors at a railroad crossing.
WHAT IS THE BENEFIT?

The research has potential to reduce the numbers of accidents occurring at crossings, especially those resulting from inattentiveness or misjudgment.

WHAT IS THE PROGRESS TO DATE?

Experimentation permission was approved by the California Traffic Control Device Committee (CTCDC). However, the contract is contingent upon Federal Highway Administration (FHWA) approval. The research contract is currently on hold until the customers/stakeholders decide on how they want to proceed with this experimental study.