



Fiscal Year (FY) 2024-25 Research Initial Scope of Work (ISOW)

Task ID: 4461

Task Title: Impact of Outdoor Advertising Displays along the State Highway System on traffic safety.

1. What is the need? Briefly describe the problem this research will address and the reason(s) for conducting this research. Include any pertinent background information. If this request is part of a multi-task project, explain how this request relates to the project as a whole.

As the cost of the construction and placement of digital displays decreases, their use has significantly increased. Several static displays are also being converted to digital displays. This increase in digital displays is true for not only off-premises State permitted displays, but for on-premises and non-commercial displays as well. Caltrans needs clear evidence of whether displays, both static and digital, along the State Highway System (SHS), impact the safety of the SHS users. It is unknown currently what impact these digital displays have on the safety of drivers on the SHS. Caltrans needs to establish a traffic engineering methodology for determining the amount of risk these digital displays pose to SHS users on various facility types (freeways, expressways, conventional highways) throughout the State. As a byproduct of this research Caltrans also needs to know if the digital displays have any visual impacts on the surrounding communities.

2. What is the product? Briefly describe the anticipated product of this research and how it will solve the problem.

The product will be a report, based on verifiable research data, either proving or disproving the notion that digital displays create unsafe distractions for SHS users. The report will also, as part of Caltrans continuing effort to improve safety, address the Gaps in Findings and Next Steps for Caltrans as outlined in Effects of Outdoor Advertising Displays on Driver Safety report dated October 11, 2012. Finally, the report will provide information on reported visual impacts of these displays on surrounding communities.

3. What is the plan to implement the product following a successful research project? Briefly describe the steps the customer's division or program will take to achieve implementation.

This report will be used to develop policies and guidelines regarding outdoor advertising displays. It will also be used to determine if current digital display dimensional criteria,

i.e., sign spacing, size, lighting, etc. needs to be revised. The report will help develop future policies, updates to the Federal-State Agreement on outdoor advertising displays, state laws and regulations to improve driver safety as it is impacted by digital displays. The report will also be used to develop or improve existing database for statewide display inventory and related safety impacts.

4. Related Research: *If any.*
Effects of Outdoor Advertising Displays on Driver Safety