

DRISI

CALTRANS DIVISION OF RESEARCH,
INNOVATION AND SYSTEM INFORMATION

Research

Notes

Planning, Policy
and
Programming

MAY 2024

Project Title:
Impacts of Changing Agriculture
Supply Chains on California Roads
and Bridges

Task Number: 4315

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Completion Date: January 31, 2025

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Impacts of Changing Agriculture Supply Chains on California Roads and Bridges

Continued/Expanded Research on Enhanced Traffic Signal
Performance Measures

WHAT IS THE NEED?

California's agricultural industry is one of the largest and most productive in the United States. The transportation infrastructure supporting this industry plays a crucial role in efficiently moving agricultural products across the state and to national and international markets. Although California tops in agricultural produce and commodity movements through its vast freight network system, minimal guidance is available to stakeholders on the resiliency and sustainability evaluations of its corridors, intermodal connectors and bridges critical for an efficient agriculture supply chain that is quite dynamic. This proposed research is an effort to evaluate California's freight network system that facilitates the movement of ag-related commodities and equipment.

WHAT ARE WE DOING?

Assessing critical elements of the heavy-vehicle agricultural network (HVAN) consisting of the farm-to-market and farm-to-ranch roads. The findings will guide funding programs and mechanisms, design, construction, and maintenance of agriculture-dependent highways and intermodal connectors, policies and best practices determined from case studies undertaken in this proposed research.

WHAT IS OUR GOAL?

This proposed research will determine and evaluate routes (including State or local and intermodal connectors) heavily impacted by agricultural goods movement identified based on usage attributes. The objective is also to improve compliance with 49 USC §70202 requirements by understanding the heavy-vehicle network for the California Freight Mobility Plan.



DRISI provides solutions and
knowledge that improves
California's transportation system

WHAT IS THE BENEFIT?

The research is to identify agriculture routes/ intermodal connectors, use those attributes to determine the locations of a heavy vehicle agricultural network (HVAN), determine metrics needed to design, construct, and maintain the HVAN, and assess the existing HVAN to determine what needs to be done to improve it. The findings will serve as a foundation to enhance compliance with the requirements outlined in 49 USC §70202 by improving the understanding of the heavy-vehicle network for the California Freight Mobility Plan.

WHAT IS THE PROGRESS TO DATE?

None to date; this project is expected to begin February 1, 2024.

IMAGES



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