

Project #8 – Co-locating Electric Charging Stations and Parking Facilities for Agricultural Freight Trucks for Efficient and Resilient Agricultural Supply Chain in California

Project Start and End Date: 07/01/2024 – 06/30/2025

Principal Investigator(s): Shailesh Chandra (CSLB), Linna Li (CSLB)

1. Accomplishments during this reporting period

1B. What was accomplished in this reporting period?

A conference paper written by a student supervised by me has been accepted for presentation at the 104th TRB Annual Meeting to be presented in Washington, DC in January. My student working on this project was selected as the Transportation Research Board (TRB) Minority Student Fellows Program for the year 2024-25.

1C. What opportunities for training and professional development has the program provided?

A group of students of my Geographic Information System (GIS) class are working on a project to understand freight truck challenges for the agricultural sector. We are planning to organize a workshop for truck owners and operators sometime in December to understand challenges faced by the trucking industry.

1D. How have the results been disseminated?

Nothing to report as of now.

1E. What do you plan to do during the next reporting period to accomplish the goals?

Collect and analyze data on agricultural freight movement and looking for the possibility of conducting a workshop for various stakeholders on the project.

2. Participants & Collaborating Organizations

2A. What organizations have been involved as partners?

We will have more information on this next month.

2B. Have other collaborators or contacts been involved?

We are collaborating with other colleagues from the College of Business and College of Liberal Arts on this project.

3. Outputs

3A. Publications, conference papers, and presentations

Herrera, B., and Chandra, S. "Invited Student Paper: Optimal Electric Charging Stations for Freight Trucks in California", Ref.: Ms. No. TRBAM-25-02958, 104th TRB Annual Meeting, Washington, D.C., January 5-9, 2025.

Items 3B—3F

Nothing to report.

4. Outcomes

4A. Increased understanding and awareness of transportation issues

Finding optimal truck parking locations has always been a problem in California. This research digs deep into solutions to solve this problem by gathering inputs from various stakeholders - both public and private.

Items 4B—4F

Nothing to report.

5. Impacts

No impacts to report.

6. Changes/Problems

No changes or problems to report.