

**Planning, Policy  
and  
Programming****July 2024****Project Title:**Dynamic Monitoring of Supply  
Chain Resilience**Task Number:** 3470**Start Date:** July 1, 2023**Completion Date:** June 30, 2024**Task Manager:**Connor Campbell  
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## Dynamic Monitoring of Supply Chain Resilience

Provide public information for the decision-making process of different stakeholders.

### WHAT WAS THE NEED?

The pandemic and the events leading to the start of the pandemic (e.g., tariffs) significantly affected the movement of goods around the world, and today, we are still experiencing major issues in the freight system, with gridlock at the seaports, container congestion, lack of warehouse space, and labor shortages, among others.

In the first year of the COVID pandemic, 2020, about 19% of all supply chains in the U.S. were stopped and sales decreased. About 20% of supply chain businesses reported congestion in ports and the unloading of good from one ship to another ship as the main problems.

### WHAT WAS OUR GOAL?

The proposed tool provides public information for the decision-making process of different stakeholders (e.g., planning agencies, and companies).

### WHAT DID WE DO?

This project included four tasks:

1. Data collection and analysis
2. Update data processing, text analysis and relationship modeling tools
3. Dashboard creation, testing, demonstration, and incorporating of feedback
4. Final reporting



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

## WHAT WAS THE OUTCOME?

Quarterly progress meeting was held in December 2023 and draft deliverables provided with another meeting held in March 2024 where the researchers informed us that they had progressed by incorporating various application programming interfaces into the system and expanded on existing data sets for the dashboard. The project was completed on June 30th, 2024. The final report was posted to the website in September 2024.

## WHAT IS THE BENEFIT?

The tool can help identify best practices to handle supply chain issues, based on the resilience and sustainability strategies implemented at other locations.

## LEARN MORE

Research Final Report:

<https://dot.ca.gov/-/media/dot-media/programs/research-innovation-system-information/documents/final-reports/caltrans-to-070-jaller-final-report-6-18-24-a11y.pdf>

## IMAGES



Image 1: What is Supply Chain Management?