MTI Research Snaps presents:

@MinetaTrans

@MinetaTransportation

#MTIResearchSnaps

Addressing Freight Emissions in San José: Seven Objectives to Reduce GHGs

Presented by **Dr. Serena E. Alexander**
Research Associate, Mineta Transportation Institute
Associate Professor, San José State University
Visiting Scholar, USDOT-OST

December 6, 2022

MINETA TRANSPORTATION INSTITUTE

The Significance of Freight (Emissions)

MINETA TRANSPORTATION INSTITUTE

Project Goal and Methodology

Goal

- To assist the City of San José with developing and implementing strategies to reduce GHG emissions from freight transport as well as inform other local agencies seeking to reduce their own communitywide freight emissions.

Methodology

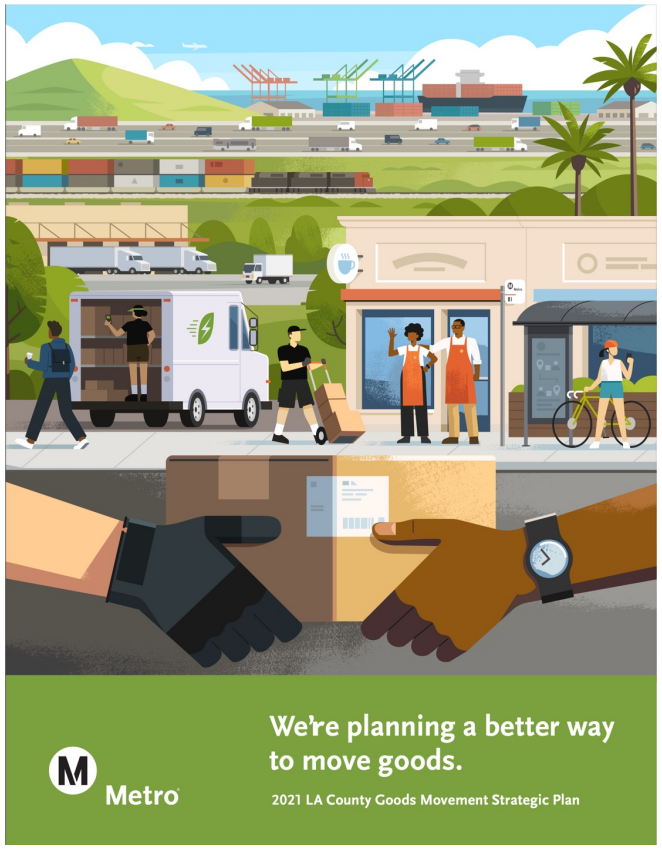
- A geospatial analysis of freight data in San José, as well as the larger Santa Clara County.
- A comprehensive analysis of literature on freight emissions reduction strategies and case studies from real-world strategies employed internationally.
- An extensive consultation with professionals at the City of San José.

MINETA TRANSPORTATION INSTITUTE

Seven Objectives

- Manage freight demand and address consumer expectations
- Utilize low emissions modes and multimodal solutions for freight
- Optimize freight assets and environmental resources
- Focus on the last mile
- Deploy alternative sources of fuel and energy efficiency measures
- Engage the stakeholders and explore collaboration opportunities
- Develop a data sharing platform

MINETA TRANSPORTATION INSTITUTE

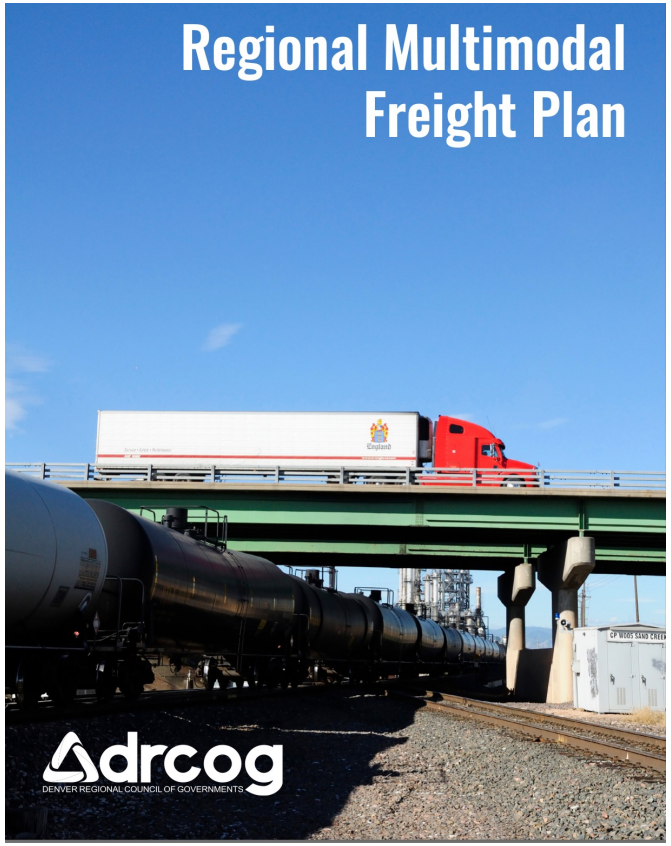


Seattle Department of Transportation

CITY OF SEATTLE
FREIGHT MASTER PLAN

September 2016

SDOT
Seattle Department of Transportation



1. Freight impacts, especially emissions, should be integrated into municipal plans such as climate action plans, as well as land use and new development decisions.

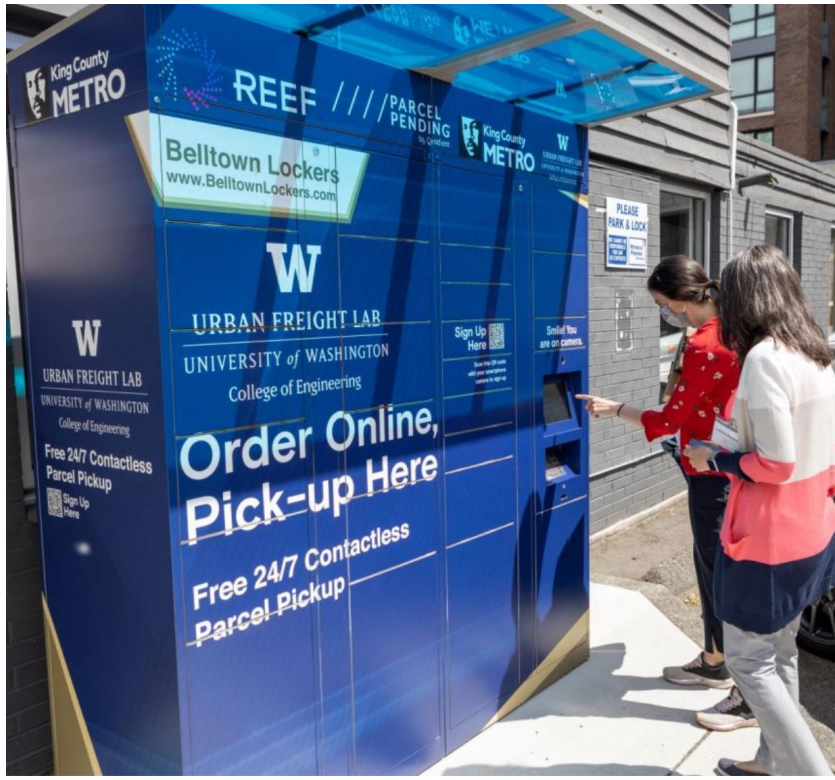
MINETA TRANSPORTATION INSTITUTE

2. With the growth of e-commerce, municipalities should employ diverse strategies, ranging from land use strategies to encouraging off-peak deliveries and green choice alternatives, to manage freight demand and address consumer expectations.

MINETA TRANSPORTATION INSTITUTE

3. Where appropriate, municipalities should utilize curb space to make freight loading and unloading more efficient and to encourage goods movement practices that minimize emissions (e.g., introducing green loading zones for the exclusive use of zero- or low-emissions commercial vehicles).

MINETA TRANSPORTATION INSTITUTE

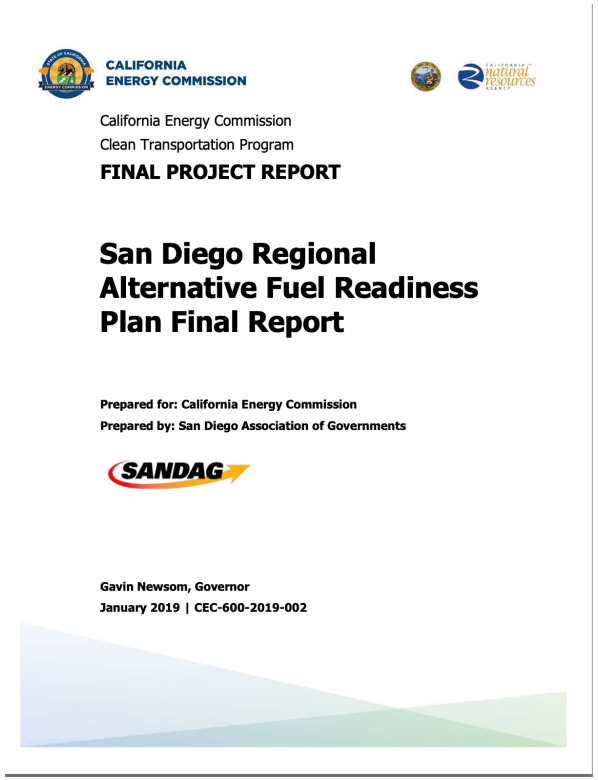


4. Municipalities should pilot solutions that focus on the last mile of deliveries to reduce emissions, such as cargo bikes, delivery robots, microhubs, and common carrier lockers.

MINETA TRANSPORTATION INSTITUTE

5. Where applicable, municipalities can test the viability and effectiveness of restricted multi-use lane strategies, such as allowing low-emissions freight vehicles in bus or bicycle lanes and restricting freight vehicles to the right lane.

MINETA TRANSPORTATION INSTITUTE



CALIFORNIA ENERGY COMMISSION

California Energy Commission
Clean Transportation Program
FINAL PROJECT REPORT

San Diego Regional Alternative Fuel Readiness Plan Final Report

Prepared for: California Energy Commission
Prepared by: San Diego Association of Governments

SANDAG

Gavin Newsom, Governor
January 2019 | CEC-600-2019-002

6. Although strategies to advance alternative vehicle fuel and energy efficiency technologies are often pursued by higher levels of government, municipalities can play an important role in encouraging the use of alternative fuel and energy efficiency measures by incentivizing green freight and efficiency measures and developing an alternative fuel readiness plan.

MINETA TRANSPORTATION INSTITUTE

7. Municipalities should engage in public-private partnerships with freight companies and local businesses while also including other relevant stakeholders to enhance data transparency in the logistics chain, develop and adopt freight emission reduction strategies, and accelerate deployment of zero- or low-emissions vehicles.

MINETA TRANSPORTATION INSTITUTE

8. Municipalities should adopt strategies to reduce GHG emissions from freight hubs and warehousing through technology tools, incentives, and logistics optimization.

MINETA TRANSPORTATION INSTITUTE

Thank you for joining us for:

Addressing Freight Emissions in San José: Seven Objectives to Reduce GHGs

@MinetaTrans

@MinetaTransportation

#MTIResearchSnaps

For more MTI events and webinar visit https://transweb.sjsu.edu/events.

Learn more about the online Graduate Program in Transportation Management that MTI supports at one of our upcoming information sessions: https://transweb.sjsu.edu/education/graduate-events

Have a suggestion for a webinar topic you'd like to see featured? Email alverina.weinardy@sjsu.edu