

Goods Movement Webinar

August 23, 2023



Meeting Instructions

Welcome

Agenda

| Item | Presenter |
|--|--|
| Welcome | Chair Lee Ann Eager California Transportation Commission |
| Inland Ports: TradePort California | Simran Jhutti Fresno Council of Governments |
| SCAG Goods Movement Approach | Scott Strelecki Southern California Association of Government |
| Mega-Regional Freight Planning Framework | Kenneth Kao Metropolitan Transportation Commission |
| Closing Remarks | Chair Lee Ann Eager California Transportation Commission |

Presentation 1

TradePort California



TradePort California Overview

Simran Jhutti
Fresno Council of Governments



Origins

- The concept of utilizing “inland ports” to move goods in California originated with the Port of Los Angeles. It is a goods movement strategy to help alleviate the supply chain challenges at the Ports of Los Angeles and Long Beach
- Since 2020, Fresno COG has been serving as the lead agency for the 8 San Joaquin Valley COGs and SACOG (Sacramento Association of Governments) in development of this goods movement strategy to help alleviate the supply chain challenges at the Ports of Los Angeles/Long Beach.
- The California Inland Port project has since been renamed/rebranded to “*TradePort California*” to distinguish it from other inland ports throughout the country.

Public Objectives

1. *Contribute to a More Efficient National Supply Chain System*
2. *Substantially Reduce GHG and Air Criteria Pollutants in California*
3. *Significantly Increase Economic Competitiveness; Especially in Rural/Challenged Areas*
4. *Reduce VMT, Road Congestion, Maintenance, & Increase Traffic Safety*
5. *Built Around Social Equity and Environmental Justice Principles*
6. *Promote Collaboration and Partnership Across Public and Private Sectors*
7. *Addresses Agricultural Export Challenges facing the San Joaquin Valley*

TradePort California Public Partners

Ports (Phase 1)

- Port of Los Angeles
- Port of Long Beach

Air Quality Districts (Phase 2)

- South Coast Air Quality Management District
- San Joaquin Valley Air Pollution Control District
- Sacramento Air Quality Management

Metropolitan Planning Organizations/ Regional Transportation Planning Agencies (Phase 2 & 3)

- Kern Council of Governments (KCOG)
- Kings County Association of Governments (KCAAG)
- Tulare County Association of Governments (TCAG)
- Fresno Council of Governments (FCOG)
- Madera County Transportation Commission (MCTC)
- Stanislaus Council of Governments (StanCOG)
- San Joaquin Council of Governments (SJCOG)
- Sacramento Area Council of Governments (SACOG)

California Department of Transportation (Phase 3)

- District 6

U.S. Department of Transportation Build America Bureau (Phase 4)



Phase One

- Feasibility Analysis/Market Size Analysis
- Truck vs. Rail Transportation Costs
- Criteria Pollutant Reduction Analysis
- Greenhouse Gas Impacts
- Transportation System User Safety Benefits

Phase Two

- Establish Executive Advisory Group (EAG-Public/Private Professionals)
- Market Readiness Analysis/Develop Preliminary Business Model
- Preliminary Cost Estimates for Tradeports
- Class One Railroads Engagement

Phase Three

- Develop Project Financial Model
- Business Plan for high-efficiency TradePorts utilizing sustainable energy
- Conduct Site Suitability Analysis for TradePorts/Satellites
- Begin development of delivery entity framework (JPA)
- Detailed indirect and direct capital costs
- Develop P3 (Public/Private) Delivery Options

Phase Four

- Development of a Public-Private Financing Structure
- Legal and regulatory analysis for Entity Establishment
- Develop Risk Management Strategy
- Complete Project Design

Understanding Goods Movement In California and the United States

Connecting California



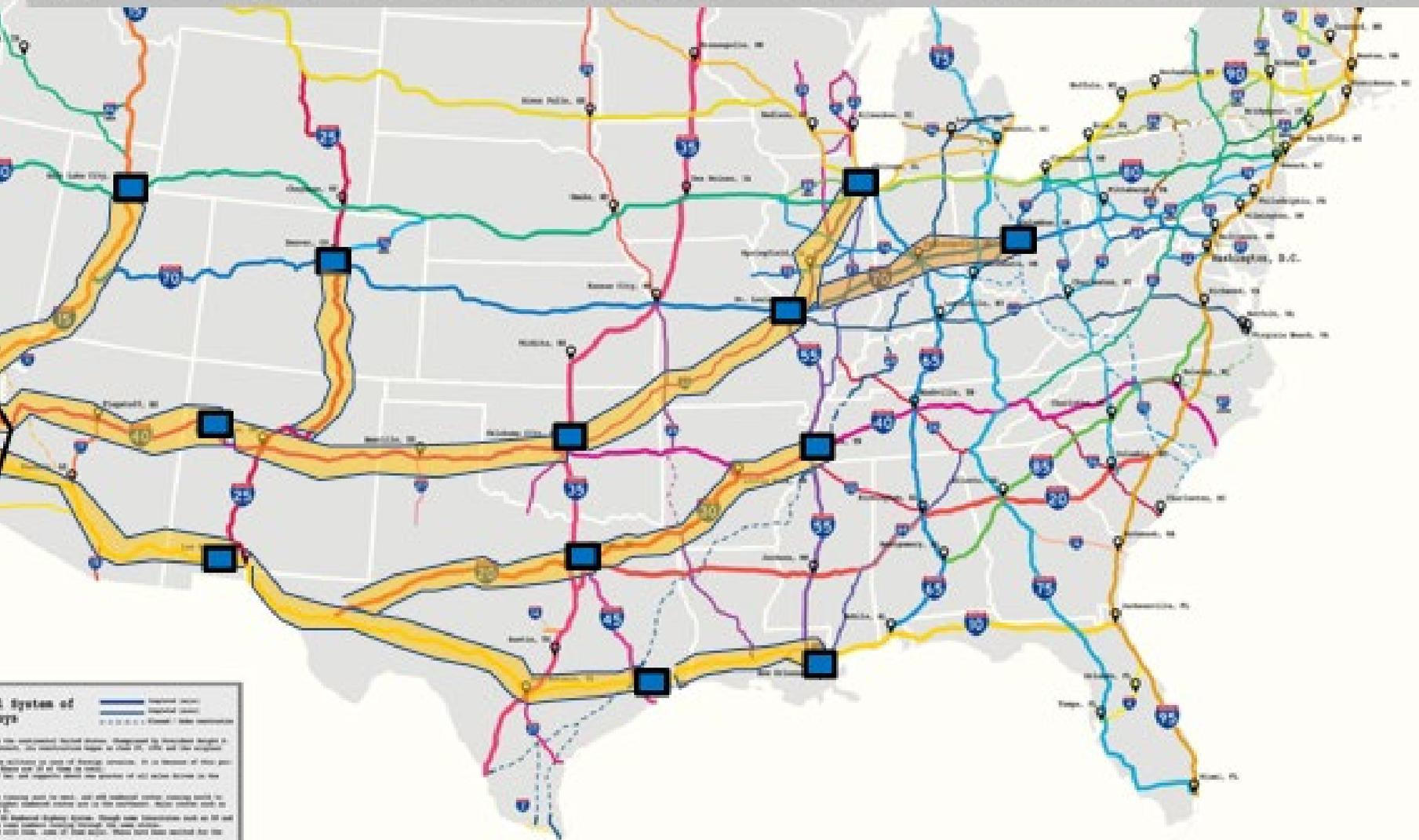
Dwight D. Eisenhower National System of Interstate and Defense Highways

Established by the Federal-Aid Highway Act of 1956, the Interstate System is a network of controlled-access, multi-lane, divided highways that are built, owned, and operated by the states. It is the backbone of the nation's highway system and is the most important mode of long-distance travel in the United States.

The system is based on a grid, with some additional routes added to meet local and regional needs. It is the backbone of the nation's highway system and is the most important mode of long-distance travel in the United States.

Legend:

- Interstate Highway
- State Highway
- U.S. Highway
- Other Highway

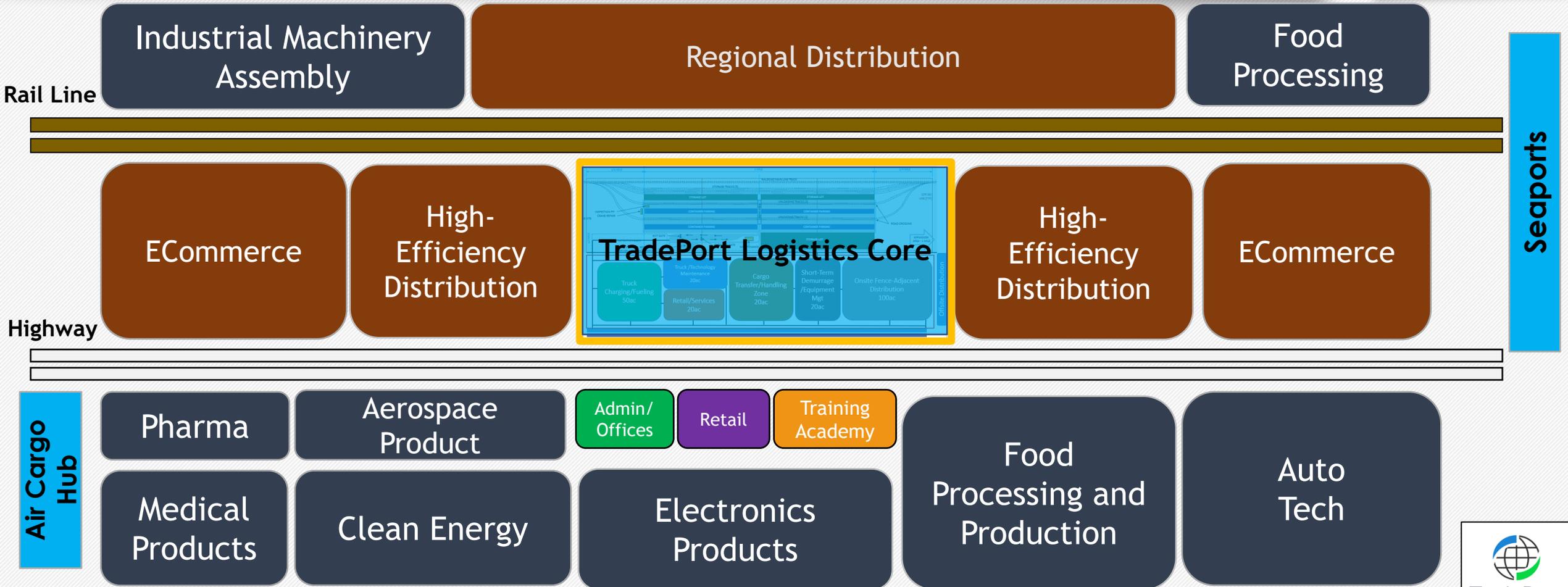


TradePort California Concept

- Population: 14M in Market Area; 31m (Incl. LA)
- 425 Mile-Long Zone
- 1.1m Intl TEUs Annually/20,000 Trucks Per Week
- Practically All Via (Diesel) Truck
- UP/BNSF Transcon Line Parallel CA99 Corridor
- Central Valley Hubs Serve Bay Area & LA Markets
- Baseload Inbound: Consumer Goods
- Baseload Outbound: Agricultural Products
- 74% of Containerized Cargo Moves Via LA Region Ports



TradePort Asset Investment Diagram





TradePort
CALIFORNIA



Fresno Council
of Governments

Thank you!

Simran Jhutti
Senior Regional Planner

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www.tradeportcal.com

Presentation 2

SCAG Goods Movement Approach

THE 2024 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY
OF THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS



Scott Strelecki

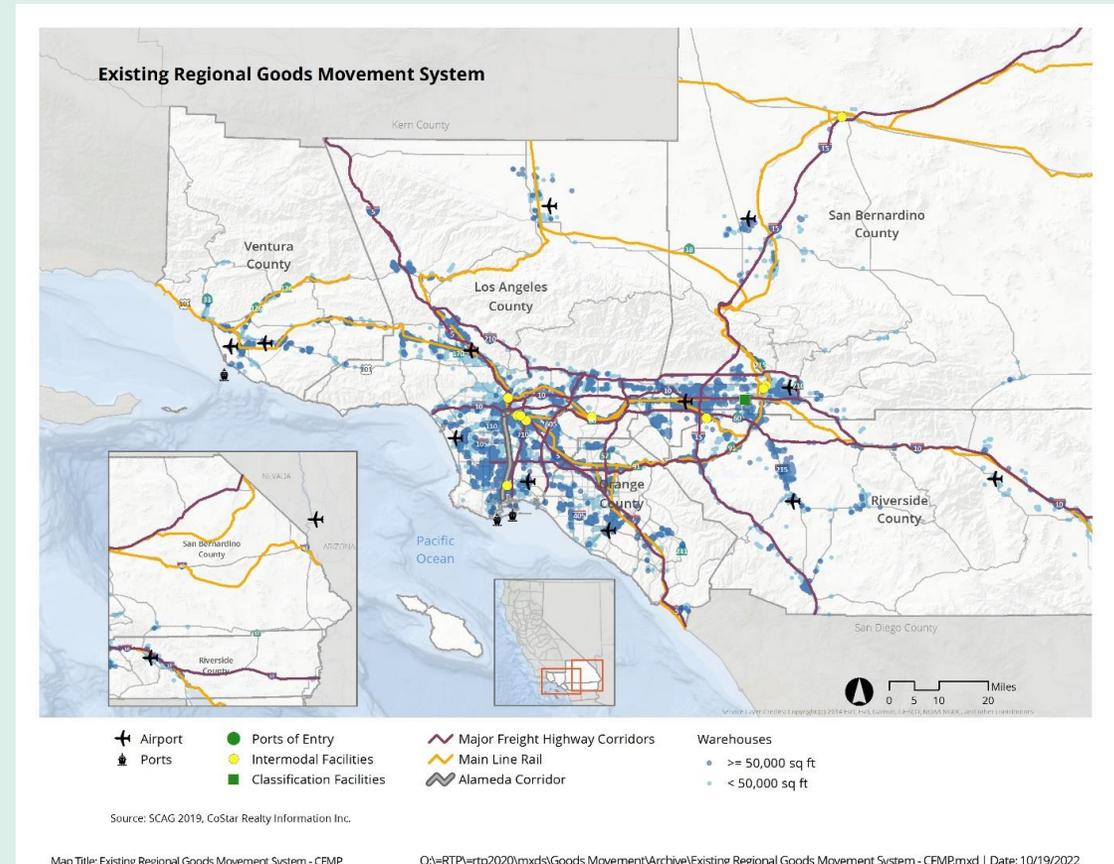
Planning Supervisor – Goods
Movement

August 23, 2023

Overview

SCAG Goods Movement System

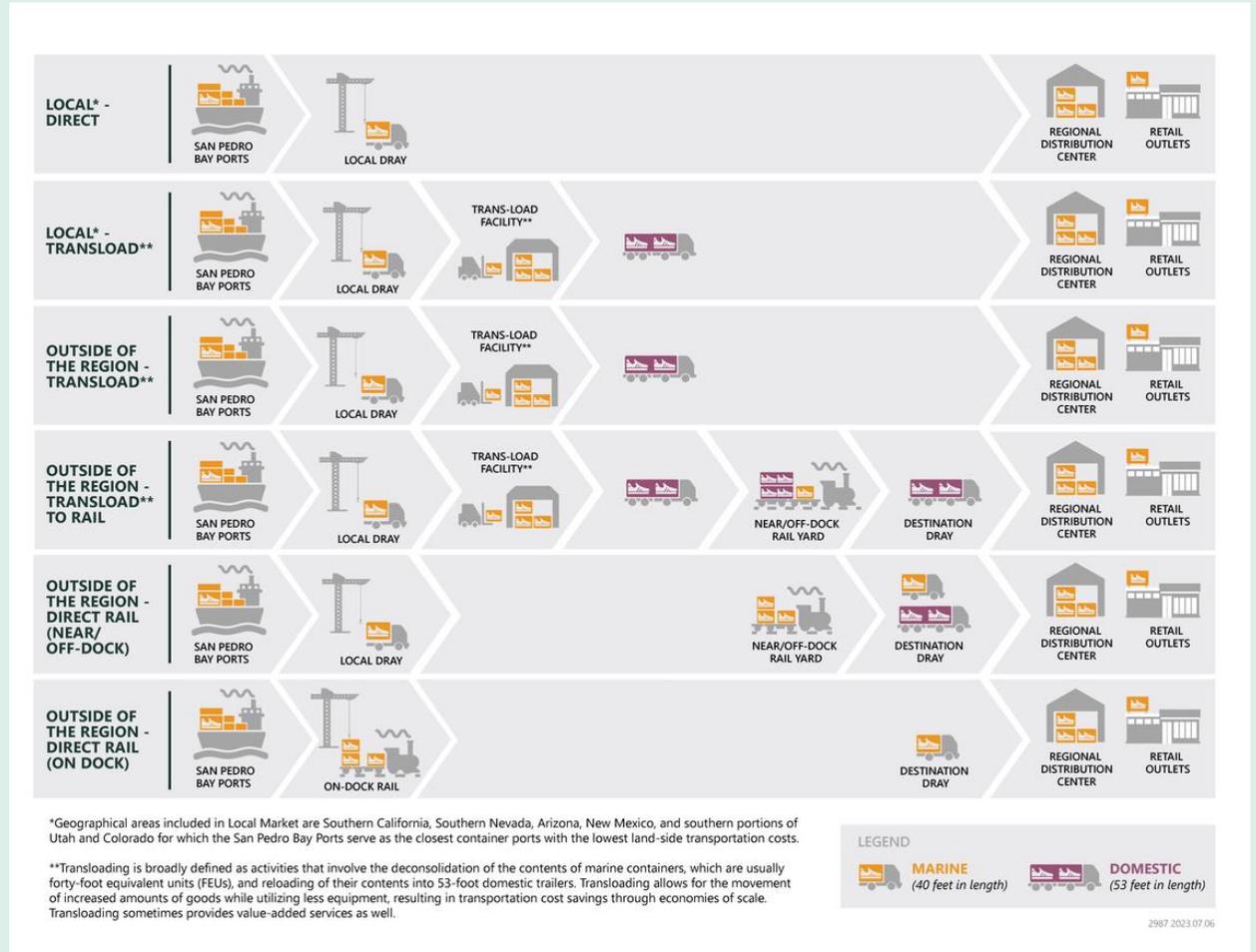
- International trade: \$600 billion
- Ports LA/LB: 17 million TEUs
 - 4.7 million TEUs Alameda Corridor
- Highway system: 56,276 road miles, 1,634 miles of highways-Interstates
- Rail: 915 weekly freight trains
- Air cargo: >3.4 million freight tons
- Industrial: >1.5 billion sq. ft.



Source: SCAG

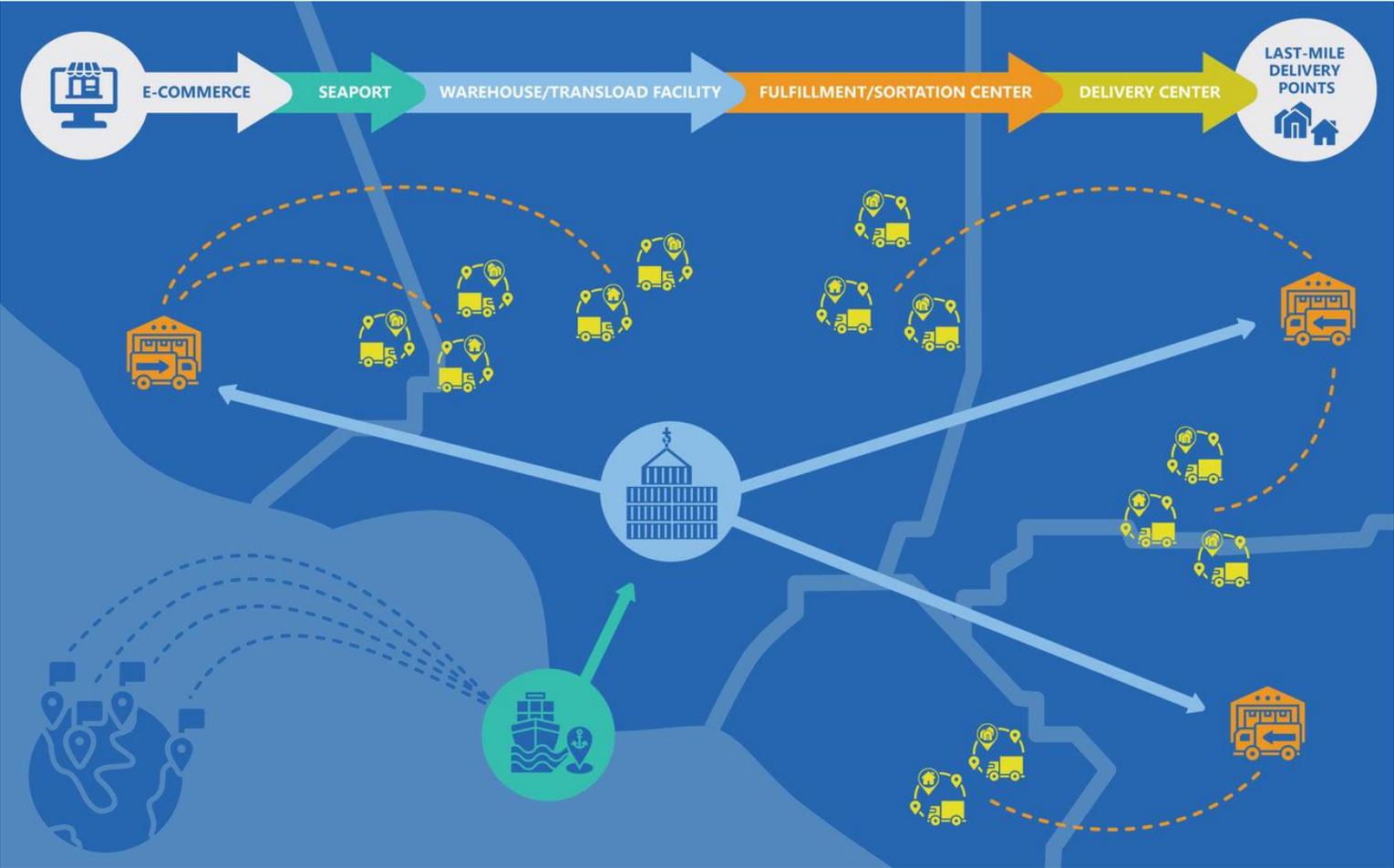
Why Goods Movement is Essential

- Provides access to international gateways
- Supports regional manufacturing activities
- Serves the needs of local businesses and residents
- Supports a thriving logistics industry



Source: SCAG

Supply Chains Are More Complex



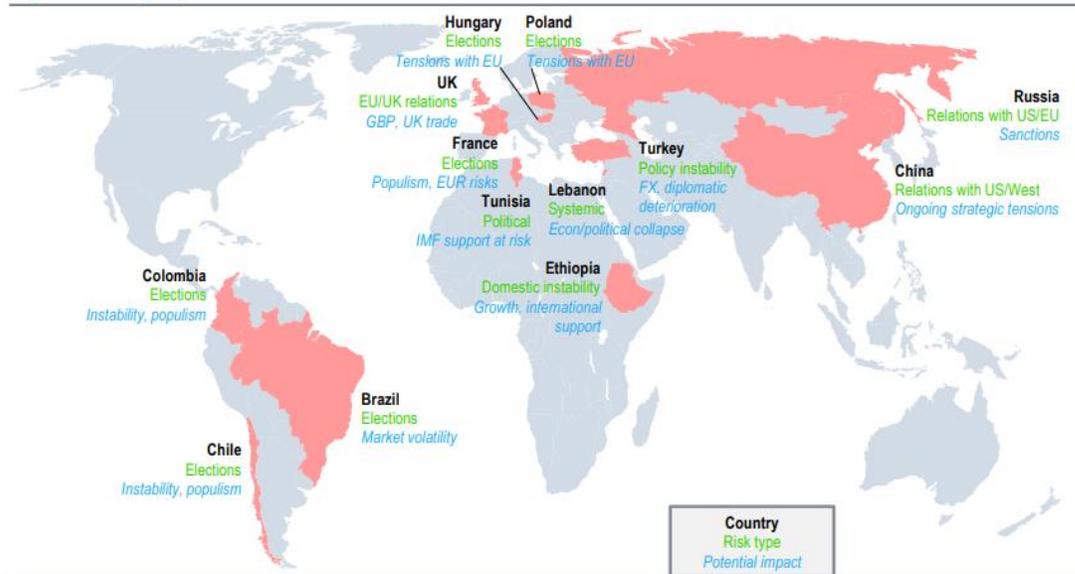
Source: SCAG

Variables Beyond Control



■ Russian military control
▨ Limited Russian influence
 ...tute for the

Figure 1: 2022 geopolitical risks



Source: Standard Chartered Research

Goods Movement Call-to-Action



- SCAG Regional Council adoption of the Goods Movement Resolution in March 2023
- Incorporation into Connect SoCal Regional Planning Policies
 - **Policy 1** - Leverage and prioritize investments particularly where there are mutual co-benefits to both freight and passenger/commuter rail.
 - **Policy 2** - Prioritize community and environmental justice concerns together with economic needs and support workforce development opportunities particularly around deployment of zero-emission and clean technologies, and their supporting infrastructure.
 - **Policy 3** - Explore and advance the transition toward zero-emissions and clean technologies and other transformative technologies where viable.

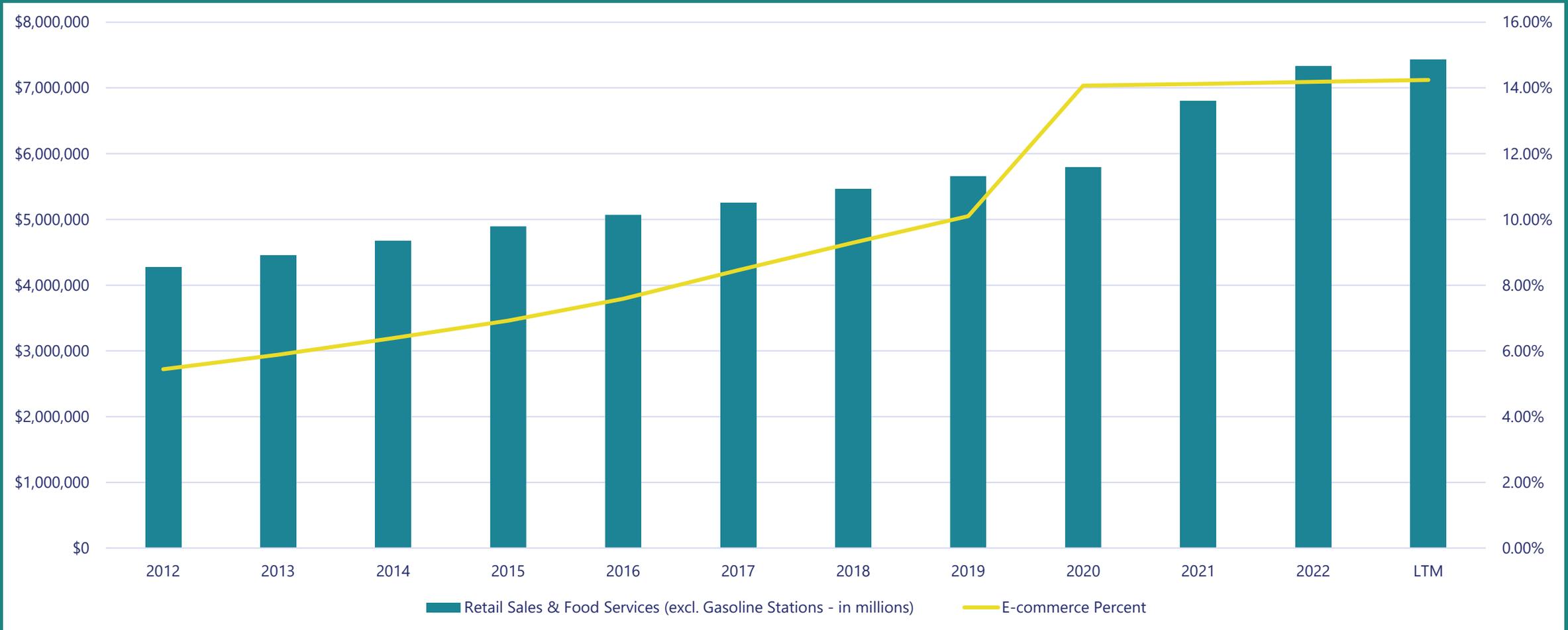
Goods Call-to-Action (continued)

- Incorporation into Connect SoCal Regional Planning Policies (cont.)
 - **Policy 4** - Advance comprehensive systems-level planning of corridor/supply chain operational strategies, integrated with road and rail infrastructure, and inland port concepts.
 - **Policy 5** - Ensure continued, significant investment in a safe, secure, clean and efficient transportation system, including both highways and rail, to support the intermodal movement of goods across the region.

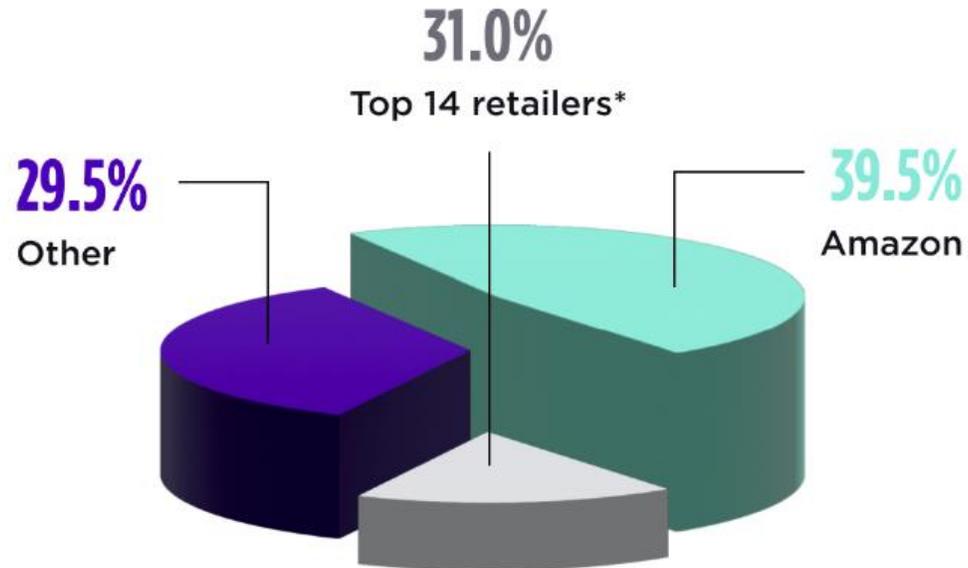


Key Supply Chain Trends & Challenges

U.S. E-Commerce Penetration



US RETAIL ECOMMERCE SALES BY COMPANY, 2022 (% OF TOTAL RETAIL ECOMMERCE SALES)

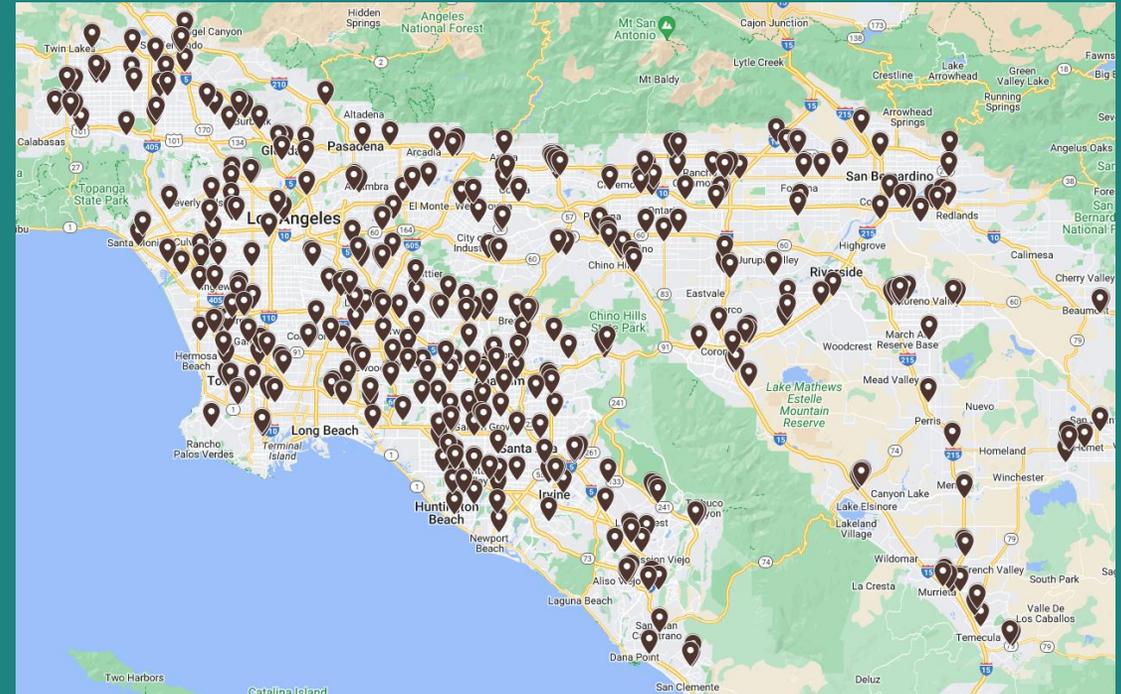


Source: eMarketer, Feb 2022

*Walmart Inc. Apple, eBay, Target, The Home Depot, Best Buy, Carvana, Costco Wholesale, The Kroger Co., Chewy, Wayfair, Macy's, Etsy Inc., Lowe's

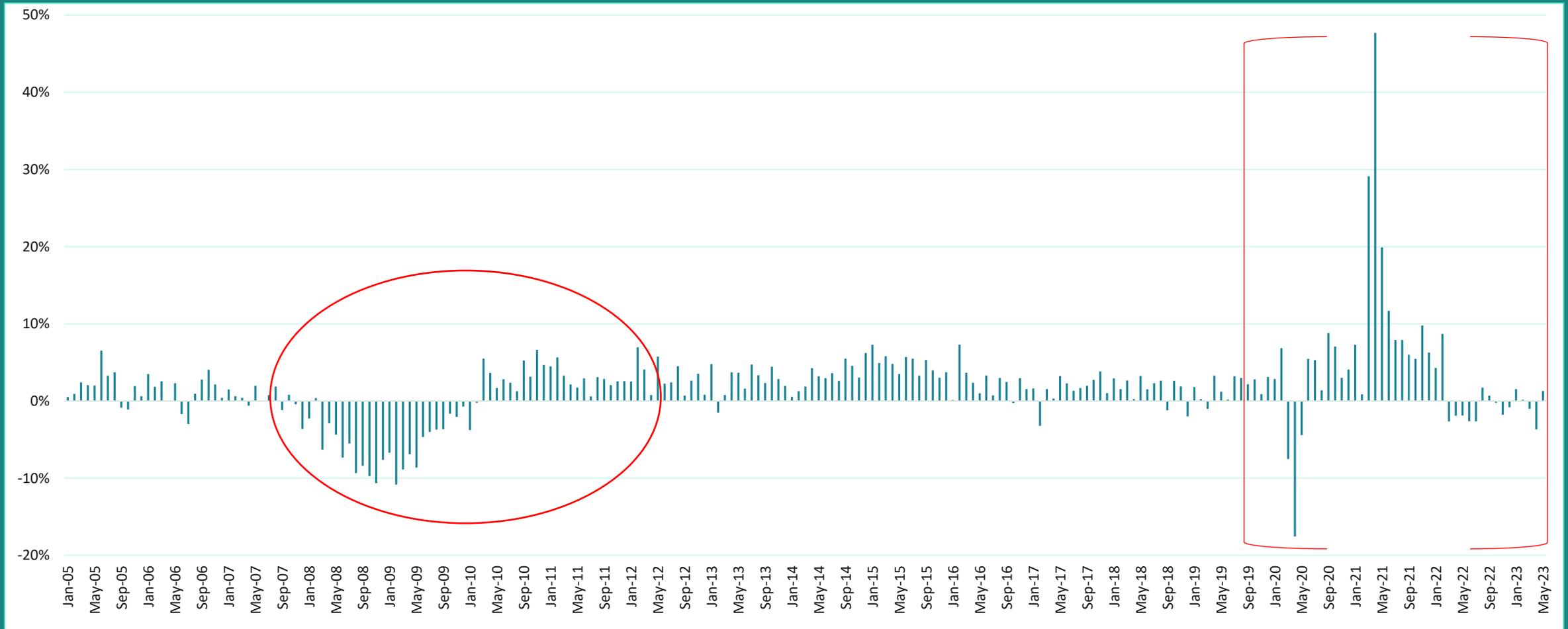


Source: BigCommerce



Source: CoStar Visualized through Google Maps

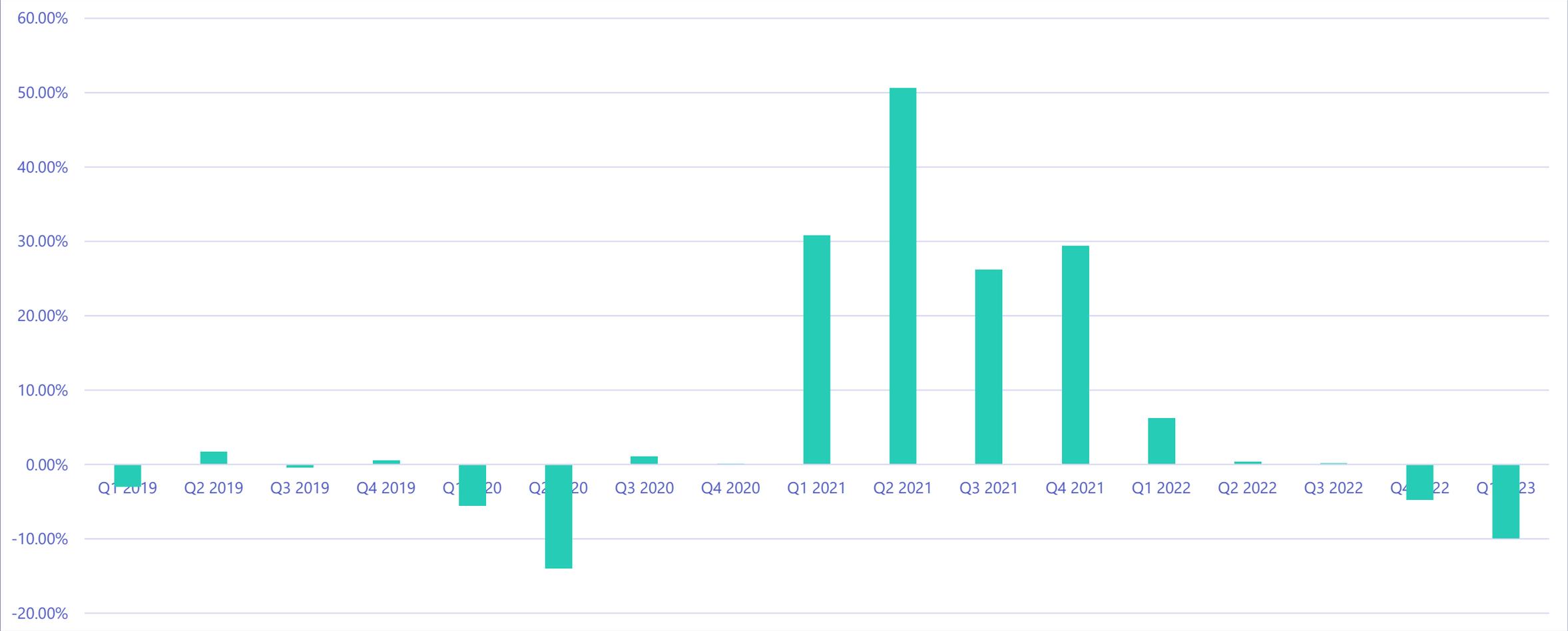
Retail & Food Services Sales Activity



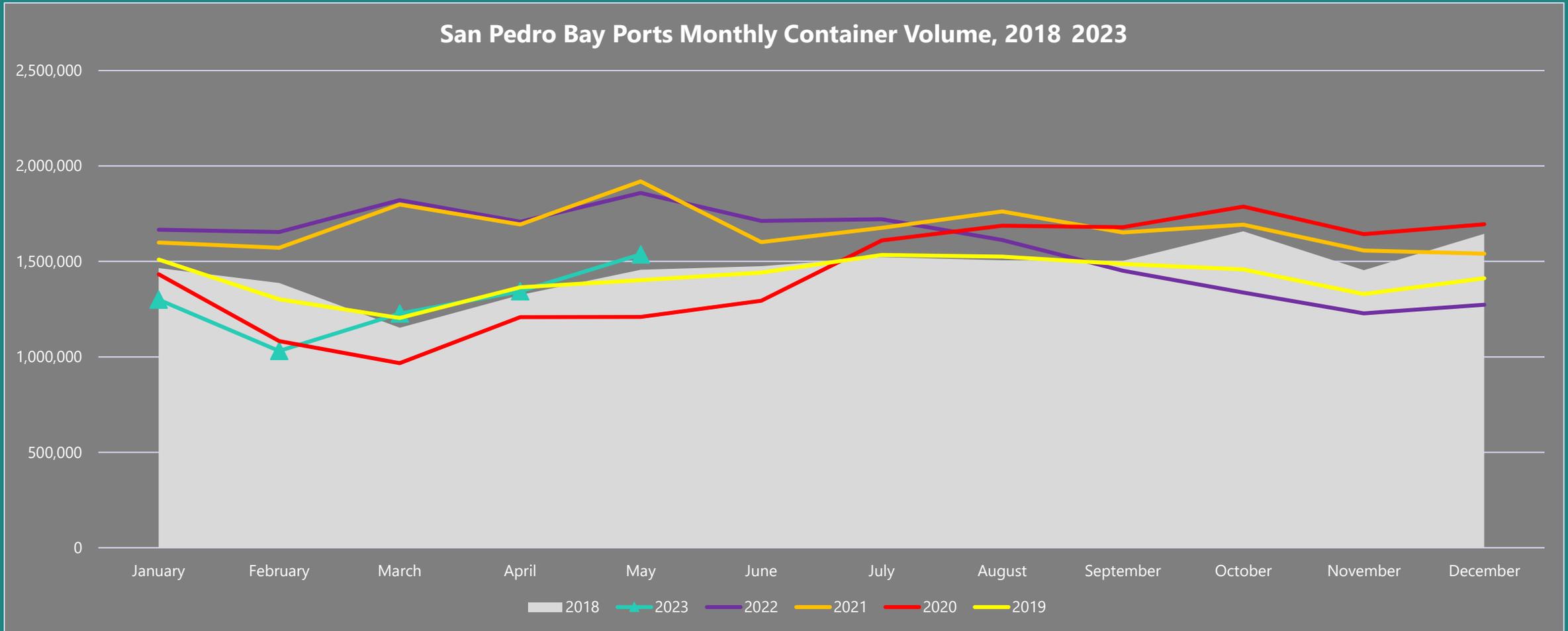
Los Angeles MSA Retail & Food Services Sales Activity



Riverside MSA Retail & Food Services Sales Activity

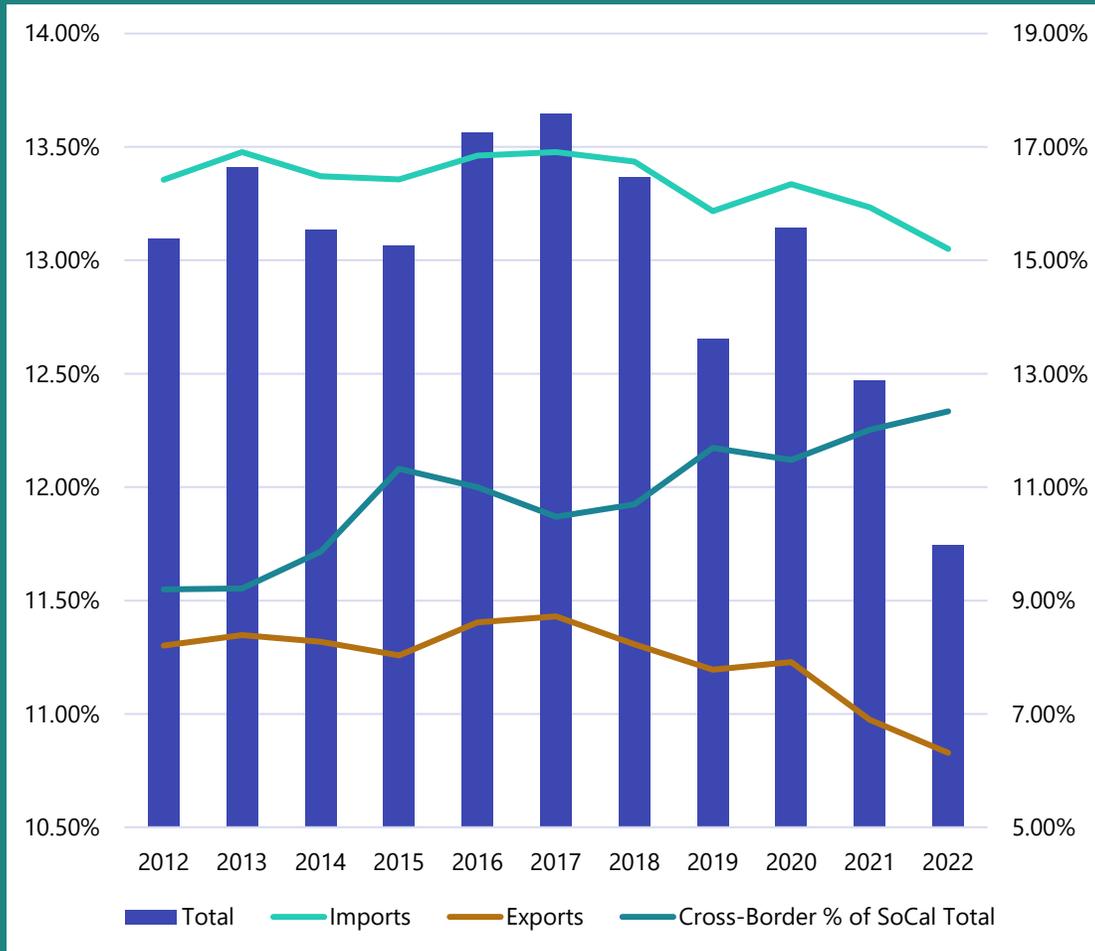


Seaport Performance

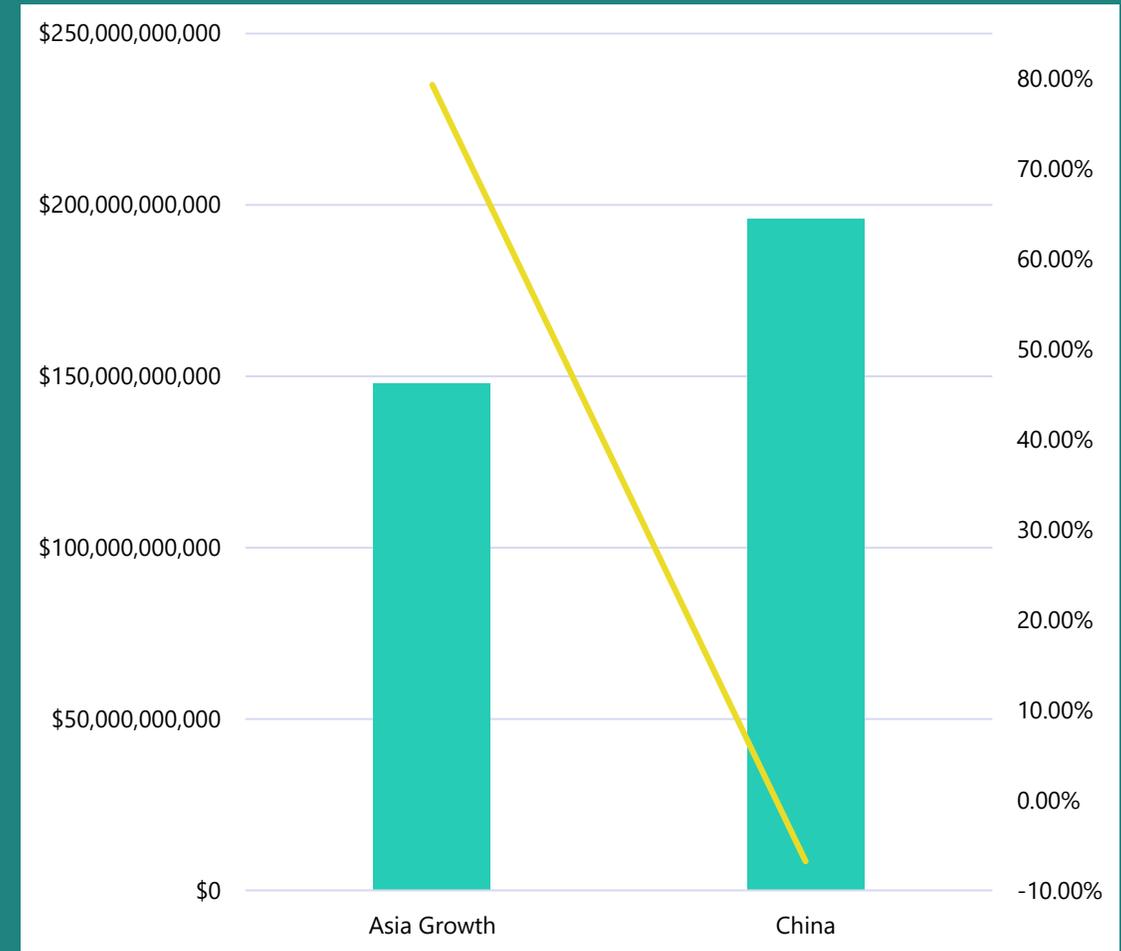


Source: Port of Los Angeles & Port of Long Beach Container Statistics Websites

SCAG Region Portion of U.S. International Trade – Asian Trade Shifts

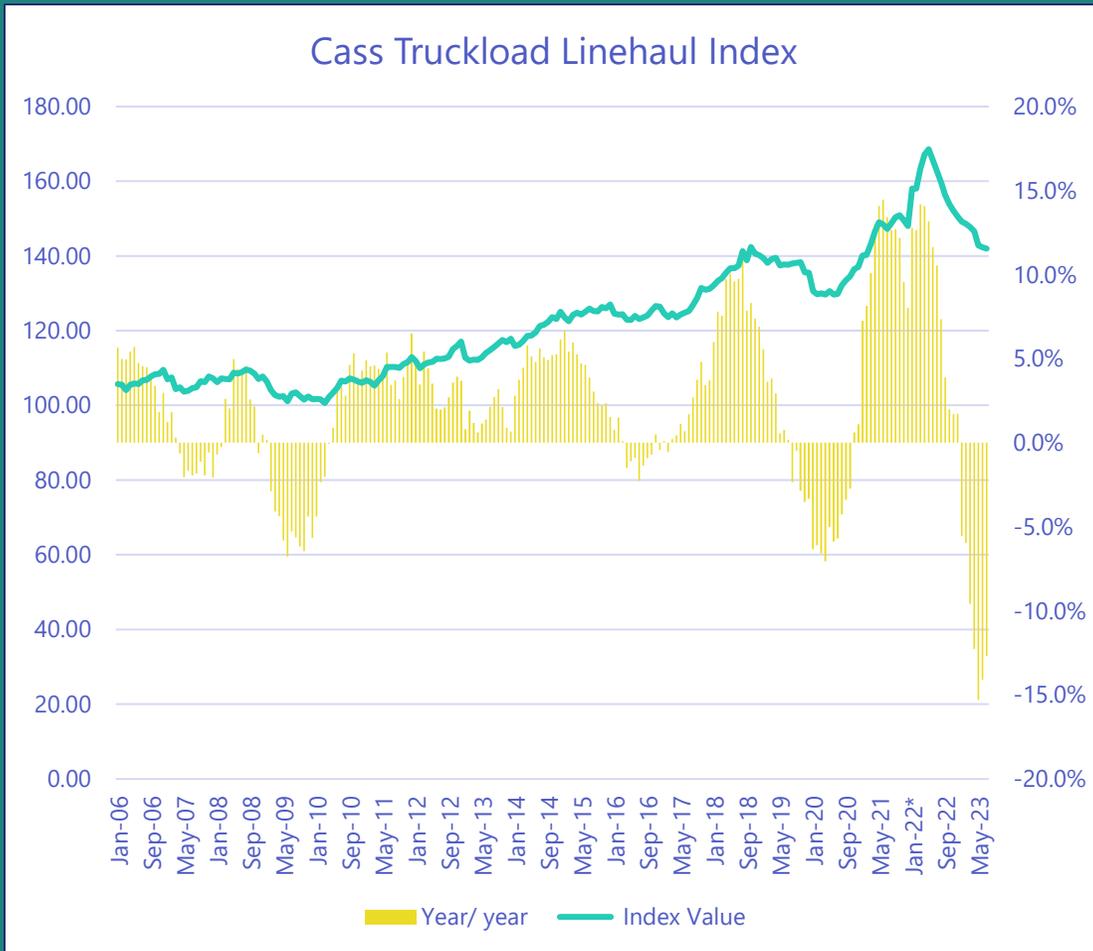


Source: U.S. Census Bureau, USA Trade Online

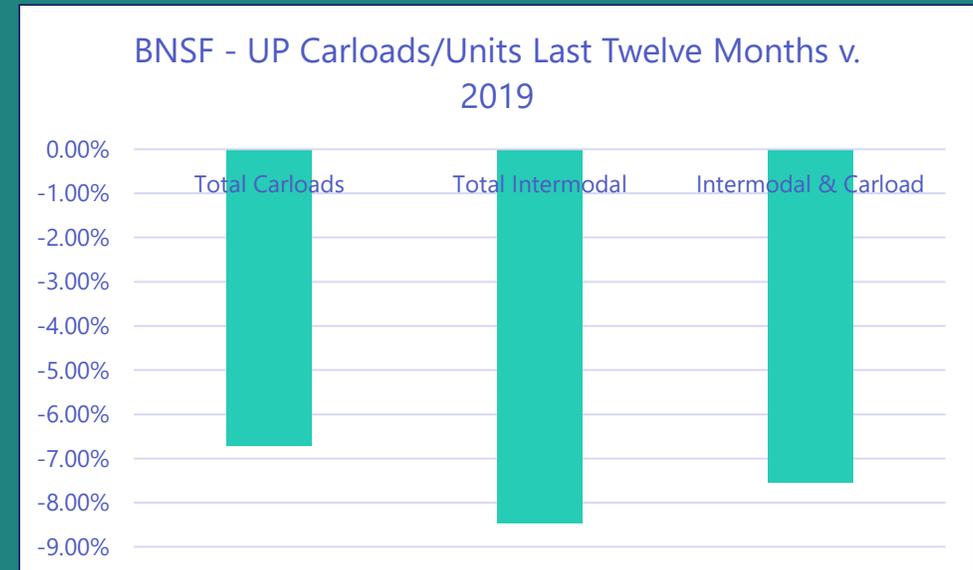
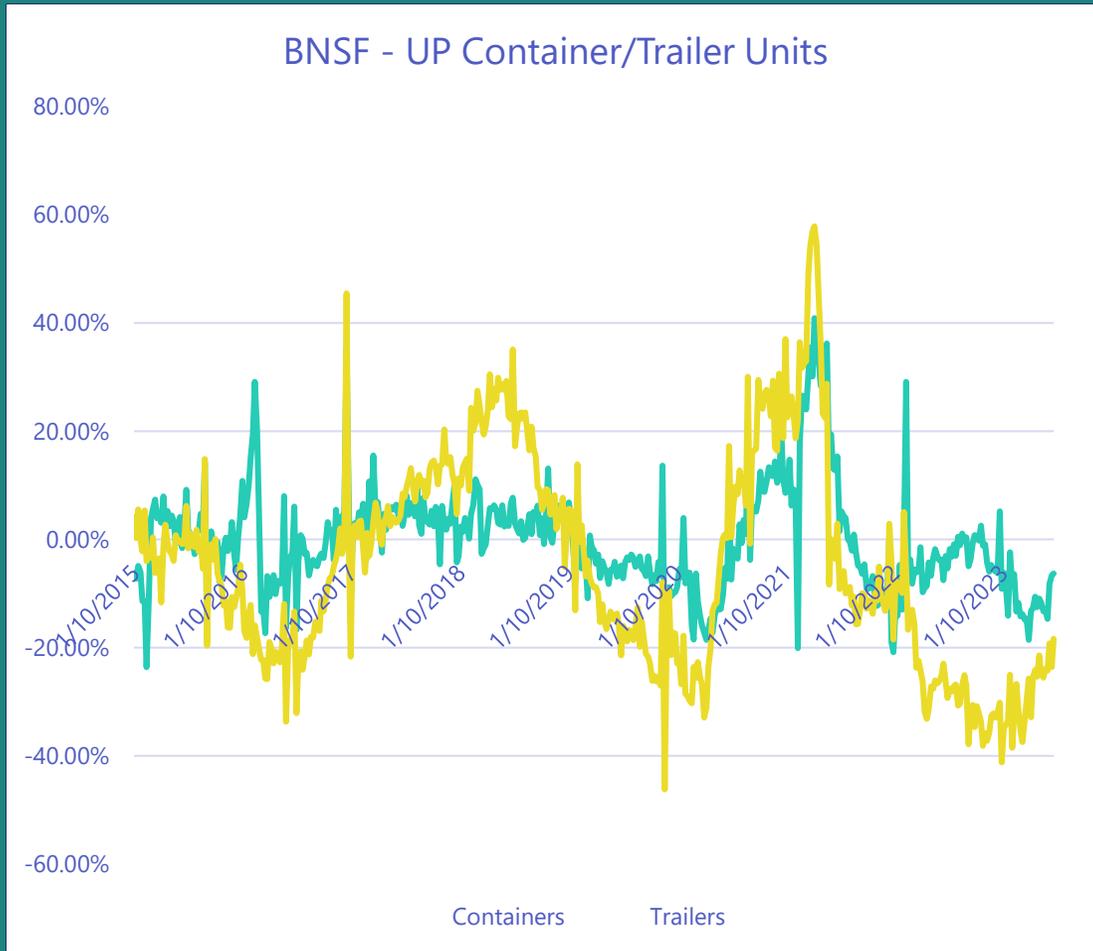


Source: U.S. Census Bureau, USA Trade Online

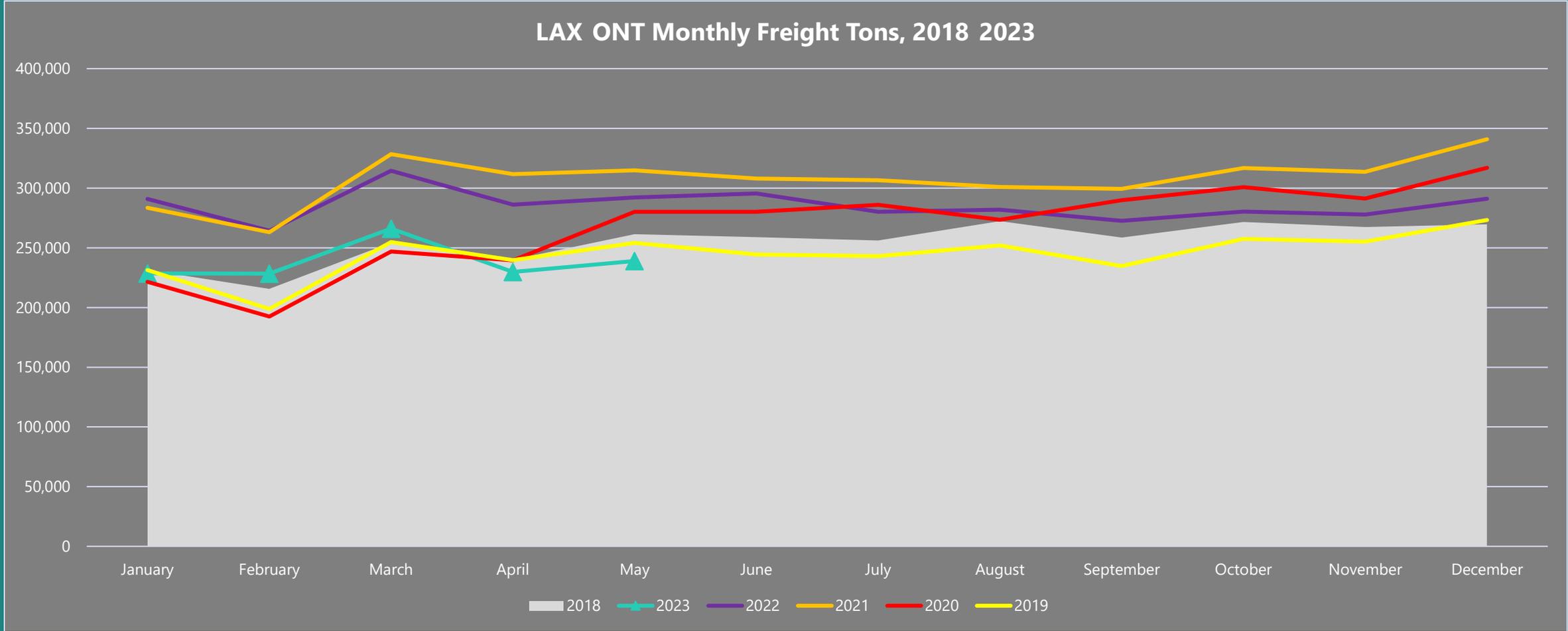
Trucking Performance



Railroad Performance

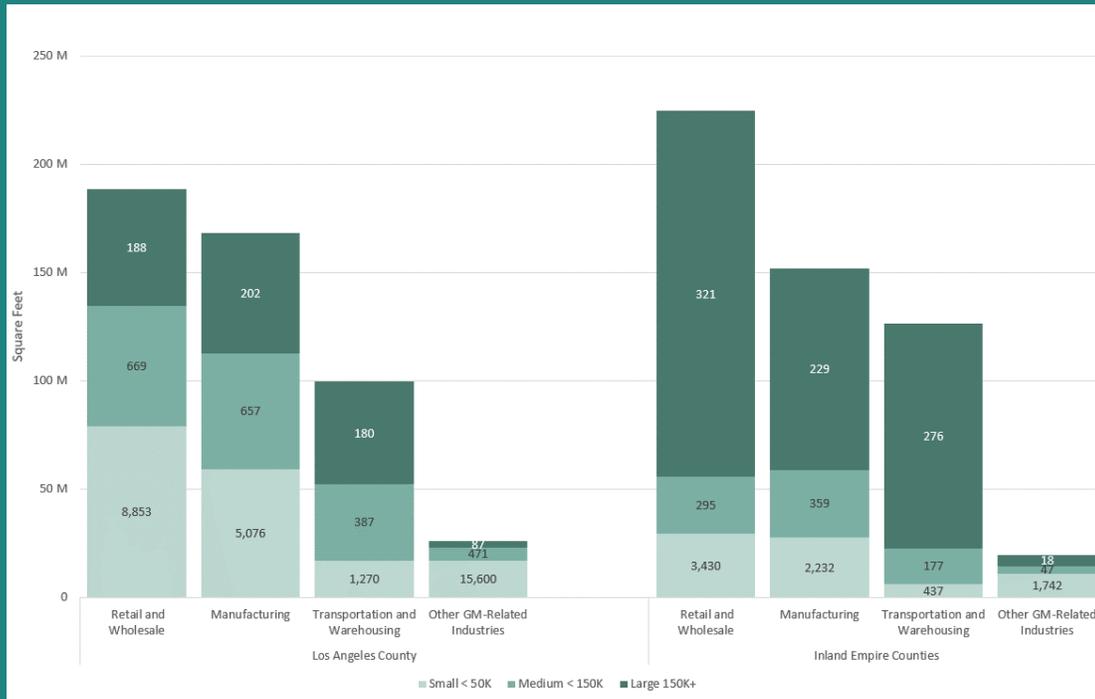


Air Cargo Performance

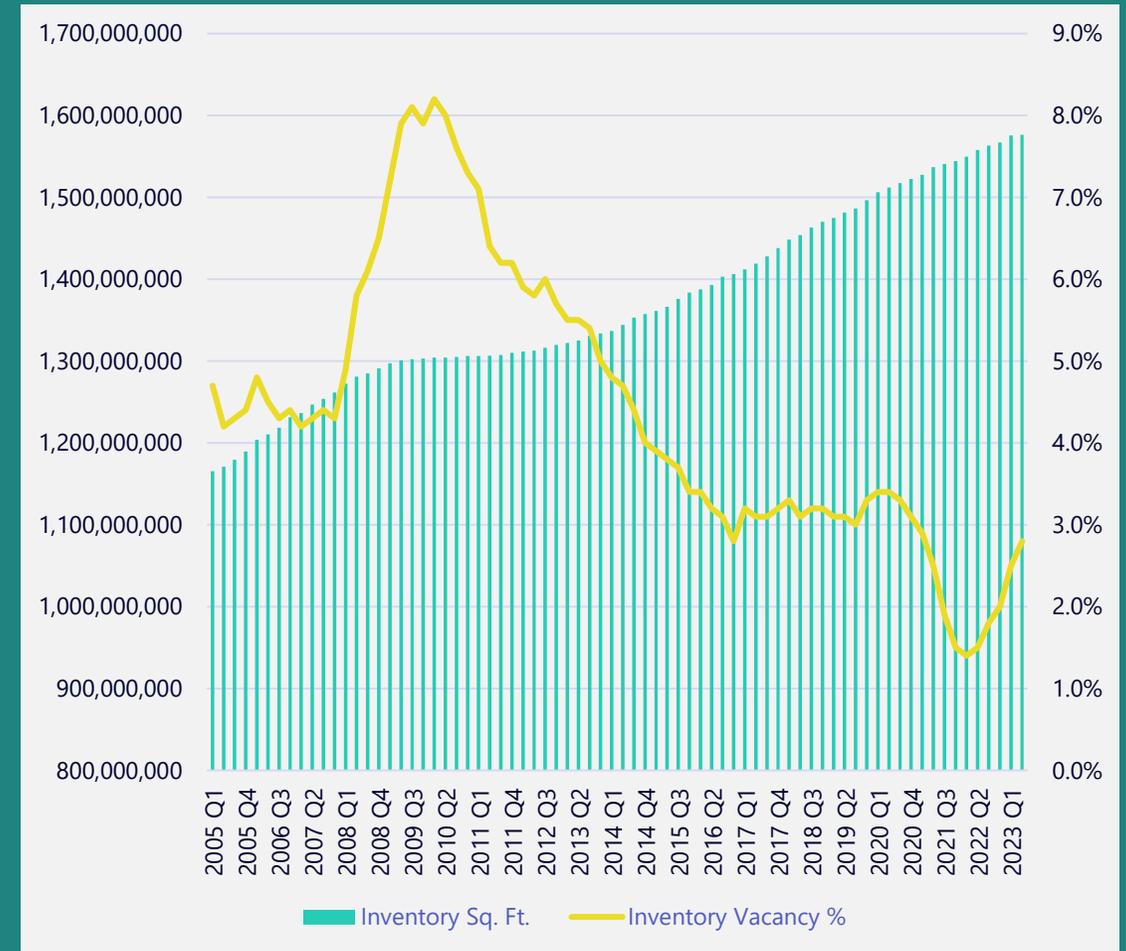


Source: Los Angeles World Airports & Ontario International Airport Air Cargo Statistics Websites

Industrial Facility Performance



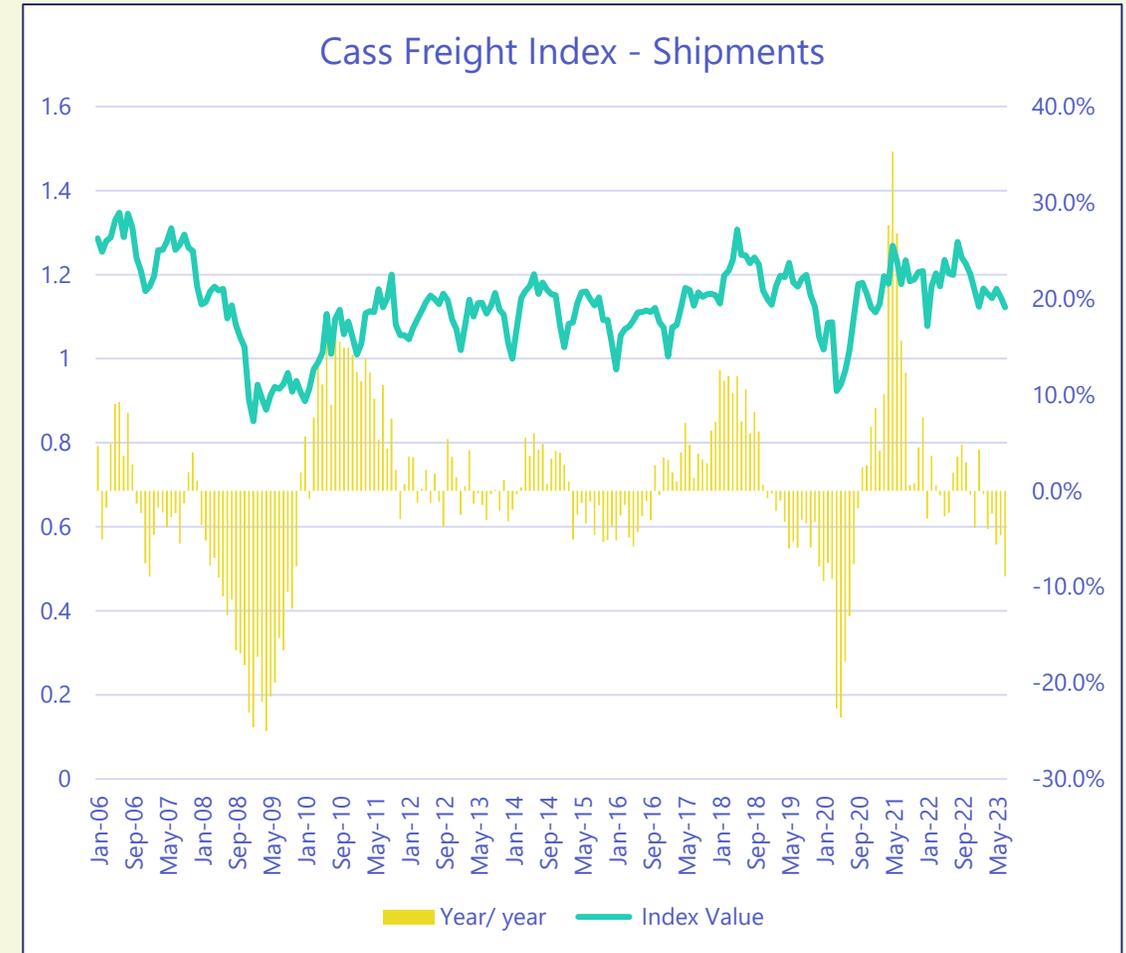
Source: CoStar



Source: CoStar

Key Supply Chain Challenges

- Supply Chain Factors
 - Freight Cycles
 - Geopolitics
 - Resilience
- Regulatory Environment
- Operations
 - Roadway Congestion/Bottlenecks
 - Truck Parking
 - Rail Service
 - Industrial Facilities
- Local Communities
- Safety & Security



Source: Monthly Cass Freight Index Report

Connect SoCal 2024 Goods Movement Strategies

Policy 1 –Rail Investment Strategies

- Integrated Passenger & Freight Rail Study
 - Metrolink SCORE
 - Beyond SCORE
 - CA High Speed Rail
 - Co-benefit projects
 - Passenger service, freight rail operations, grade crossings
 - Freight projects
- State-Federal Coordination
 - Listening sessions
 - Regional buy-in



Source: SCAG

Policy 2 – Community and Environmental Justice Strategies

- Goods Movement Communities Opportunities Assessment
 - Community engagement
 - Revisiting priority issues
 - Focus on workforce development
- Strengthened Partnerships
 - Recommitment to relationships
 - Trusted perspectives
 - Improved knowledge



Source: SCAG

Policy 3 – Zero-Emission and Clean Technology Strategies

- Last Mile Freight Program
 - 26 near-zero and zero emission projects
 - Vehicle procurement
 - Infrastructure development
 - Key goals
 - Improve air quality benefits
 - Identify potential issues towards scalability
 - Program progression
 - Phase 1 implementation
 - Phase 2 development

\$16,751,000
HAS BEEN APPROVED
FOR PHASE 1 PROJECT
IMPLEMENTATION.

-  **EMISSIONS REDUCTIONS**
-  **INFORM INDUSTRY & PUBLIC**
-  **RETURN ON INVESTMENT (ROI) DETAILS**
-  **CREATE TRANSPARENCY**
-  **ADDRESS CHALLENGES**



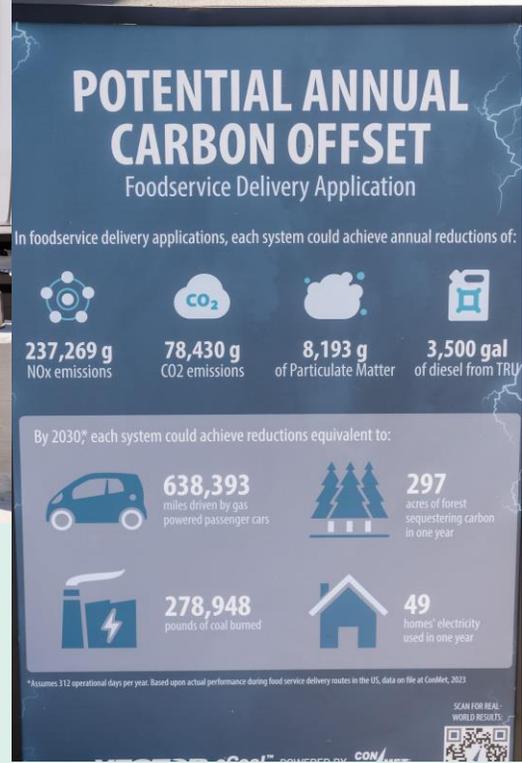
E-COMMERCE AND COVID-19 HAVE ADDED FURTHER STRESS TO GLOBAL SUPPLY CHAINS

CORE PRINCIPLES

- > Creating transparency as to critical barriers impeding the transformation of the last mile freight market;
- > Measuring success for both public and private entities;
- > Optimizing where investments can generate the strongest benefits for further growth; and
- > Achieving air quality reduction targets.

Source: SCAG

Policy 3 – Zero-Emissions and Clean Technologies Strategies (continued)



...AND OUR PUBLIC PARTNERS

Policy 4 – Comprehensive System-Level Planning Strategies

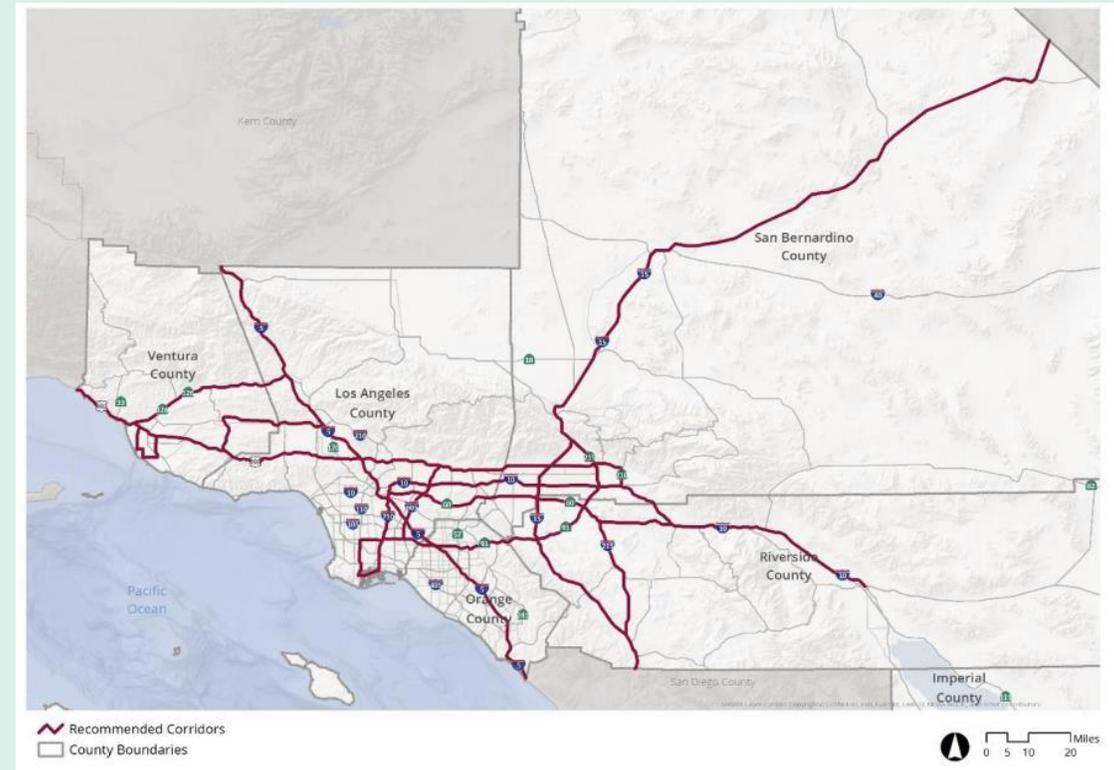
- Zero-Emission Truck Supporting Infrastructure Study
 - Stakeholder engagement
 - Technical Advisory Committee
 - Industry surveys, interviews
 - Market demand
 - Truck markets
 - Infrastructure needs
 - Regional action plan
 - Phased development
 - Guidelines
- Comprehensive Regional Goods Movement Plan Update



Source: SCAG

Policy 5 – Freight System Investment Strategies

- Intermodal Systems
 - Seaports
 - On-dock, near-dock, access
 - Rail System
 - Mainline, sidings, facilities, grade crossings
 - Interstates - Highways
 - East-West Freight Corridor
 - Other corridors, access
- State/Federal Alignment
 - California Freight Mobility Plan
 - Trade Corridor Enhancement Program
 - Senate Bill 671
 - National Electric Vehicle Infrastructure Program



Source: SCAG

Policy 5 – Freight System Investment Strategies (continued)



- Ports/Rail

- Port of Long Beach SWIFT project
- Port of Los Angeles MSF project
- Hobart/Commerce Yard
- Commerce flyover project
- Port of Los Angeles Rail Mainline/Wilmington Separation
- SR-47 interchange improvements
- McKinley Street/Third Street grade separations
- Turnbull Canyon Rd. grade separation

- Border

- Calexico East POE bridge widening

- Zero-Emission

- EV South Oasis
- Southern California Hydrogen Fueling Facilities

- Bottleneck Relief

- I-605/SR-91 interchange improvement
- SR-57/SR-60 interchange/other improvements
- SR-91 improvements (Atlantic to Cherry)
- SR-71/SR-91 interchange connector
- I-10 truck climbing lane
- I-15 lanes improvements

Short-Term Milestones

- Draft Goods Movement Technical Report – fall 2023
- Goods Movement Listening Sessions – fall 2023

Ongoing Work

- Zero-Emission Truck Infrastructure Study Report
- Last Mile Freight Program
- Comprehensive Regional Goods Movement Plan Update



Source: SCAG

Questions? Comments?

FOR MORE INFORMATION, PLEASE VISIT
SCAG.CA.GOV/CONNECT-SOCAL



Presentation 3

Mega-Regional Freight Planning Framework

Northern California Mega-Region: Freight Planning Framework



Kenneth Kao
Assistant Director
Metropolitan Transportation Commission
August 23, 2023

A nighttime photograph of the San Francisco skyline across the water, with the Golden Gate Bridge on the left. The bridge's towers are illuminated with warm yellow lights, and the city lights are visible in the background under a dark blue sky.

Metropolitan Transportation Commission

Metropolitan Planning Organization for the San Francisco Bay Area

- 7.7 million people
- 9 counties, 12 urbanized areas,
101 cities and towns
- 25 transit operators
- 3.7 million jobs

Statewide Goods Movement Efforts

Quarterly Meetings

- California Freight Advisory Committee (CFAC)
- Project Delivery and Planning Meetings with District 4

Planning and Coordination

- Statewide MPO Coordination
- Assignment of CUFC/CRFC
- California State Rail Plan
- California Freight Mobility Plan



Regional Planning Efforts

Intra-Regional Planning Efforts

- Goods Movement Executive Team Meetings
- SF Bay Area Goods Movement Plan (2016)
- Goods Movement Investment Strategy (2018)

N. California Megaregion Goods Movement Study

- Funded in-part by Caltrans
- Includes members from Sacramento, San Joaquin, Monterey Bay

Northern California Megaregion Group

- Sacramento, San Joaquin, and MTC
- Megaregion Dozen, Roadway Usage Charge, Electric Vehicle/Bus strategy



Plan Bay Area 2050, adopted Oct. 2021, reflects the priorities of the Bay Area Goods Movement Plan, including over \$5 billion in these investments



Increase Port of Oakland efficiency



Reduce emissions



Reduce neighborhood impacts



Strategic highway investments



Goods Movement Investment Strategy (2018)

- Enables the region to coordinate and compete for state and federal fund sources
- Delivers projects that can improve mobility and economic vitality
- Addresses community and environmental concerns of freight



\$3.8 billion is estimated to be available between 2018 and 2028 for Bay Area goods movement projects

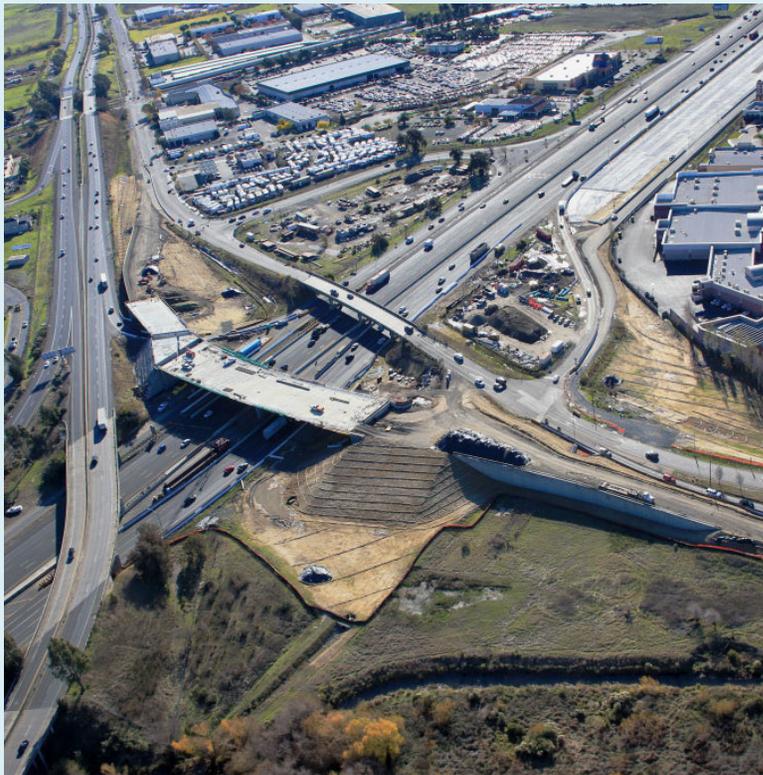
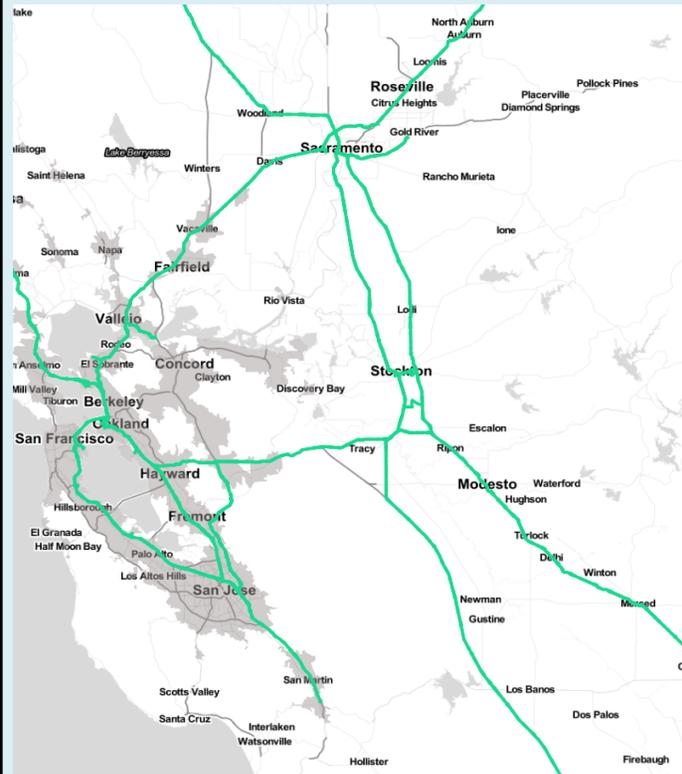
■ Federal ■ State ■ Regional ■ Local ■ Other



\$3.8 billion over 10 years



Improve truck mobility through roadway bottlenecks, primarily at interchanges along the Primary Highway Freight System



Focus Area 1:

Roadway

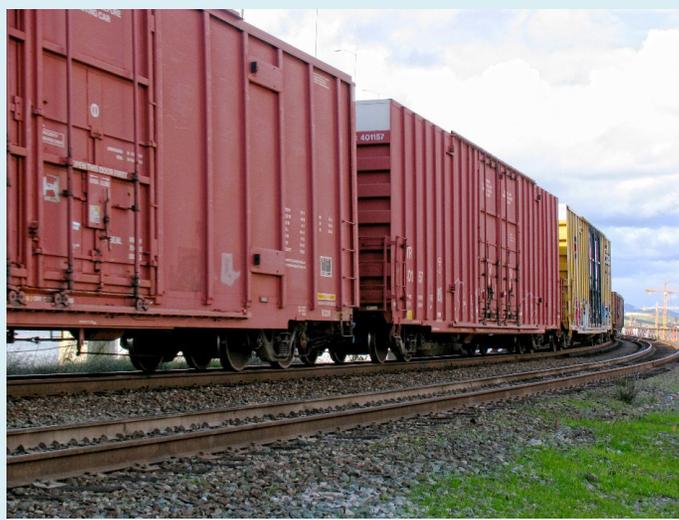
\$2.2 billion (58%)

Includes improvements to:

- I-80 corridor (\$640 million)
- I-880 corridor (\$200 million)
- I-580 corridor (\$310 million)
- SR-37 and SR-152 Planning & Improvements (\$130 million)



Increase economic competitiveness of the Port of Oakland while addressing increasingly pressing tradeoffs between freight and commuter rail



Focus Area 2:

Rail

\$1.2 billion (32%)

Includes:

- Port of Oakland Go Port (\$500 million)
- Rail Connectivity Improvements (\$230 million)
- Safety Improvements (\$130 million)

Address community and environmental impacts of freight and fund regional demonstration pilots



Focus Area 3:

Community protection
\$350 million (10%)

Includes:

- Equipment-based Reductions
- Regional Demonstrations (Truck and Rail)
- Community impact reduction receptor-side mitigations

Northern California Mega-Region

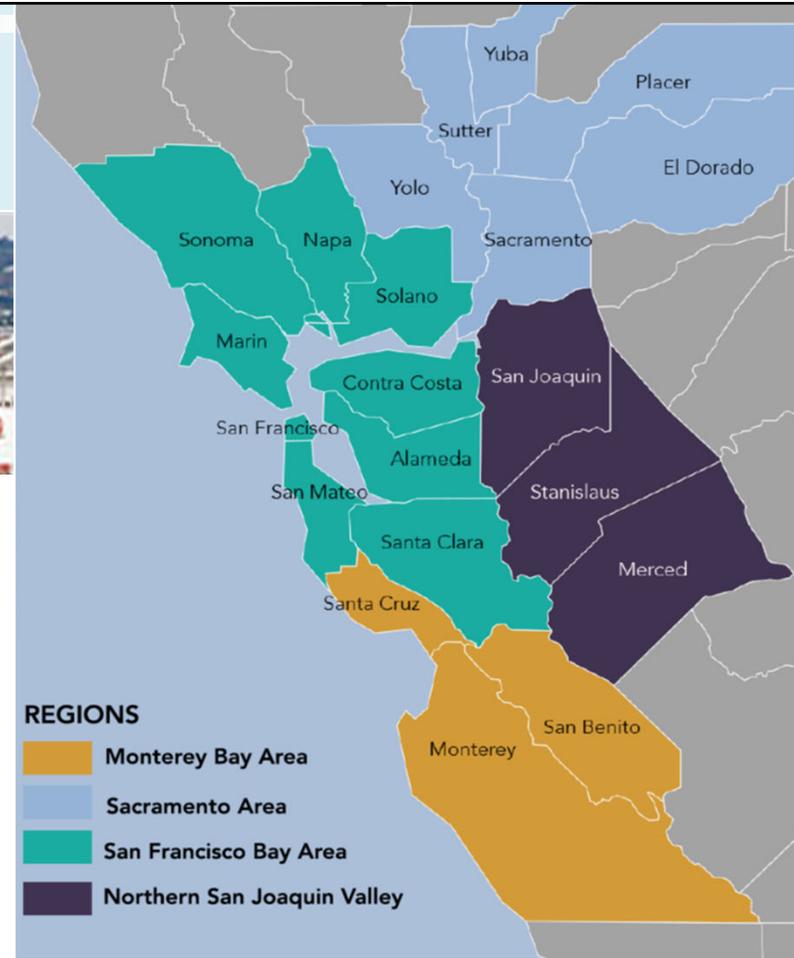


The Northern California Megaregion Compared to Other U.S. Megaregions
Sorted by Gross Regional Product (GRP)

| Megaregion | Square Mileage | 2014 Population | 2014 GRP (\$ in millions) | 2010-2014 GRP CAGR | 2014 GRP Per Capita (\$) | % of 2014 U.S. GDP |
|----------------------------|----------------|-------------------|---------------------------|--------------------|--------------------------|--------------------|
| Northeast | 61,942 | 54,782,704 | 3,750,607 | 3.27% | 68,463 | 21.53% |
| Great Lakes | 205,452 | 55,696,501 | 2,747,601 | 3.63% | 49,332 | 15.77% |
| Southern California | 61,986 | 25,368,827 | 1,412,877 | 3.42% | 55,693 | 8.11% |
| Texas Triangle | 85,312 | 21,283,372 | 1,338,669 | 6.98% | 62,897 | 7.69% |
| Northern California | 24,149 | 12,063,285 | 875,579 | 5.28% | 72,582 | 5.03% |
| Gulf Coast | 59,519 | 14,286,289 | 872,818 | 5.18% | 61,095 | 5.01% |
| Piedmont Atlantic | 59,525 | 18,448,418 | 815,170 | 4.01% | 44,186 | 4.68% |
| Southern Florida | 38,356 | 18,323,894 | 769,259 | 3.75% | 41,981 | 4.42% |
| Cascadia | 47,226 | 8,780,816 | 543,703 | 3.90% | 61,919 | 3.12% |
| Front Range | 56,810 | 5,892,278 | 316,988 | 4.15% | 53,797 | 1.82% |
| Arizona Sun Corridor | 48,803 | 5,977,688 | 259,698 | 3.59% | 43,445 | 1.49% |

Data Source: Regional Plan Association America 2050, "Defining U.S. Megaregions"; U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Census Bureau, American Community Survey

Analysis: Bay Area Council Economic Institute



Population: 12.2 million, accounts for 31.5% of California's population

Gross Regional Product (GRP): \$875 billion in 2014, the highest GRP per capita of any U.S. megaregion

Megaregion Dozen Summary

- Four projects in each of the three MPOs, adopted Sept. 2021 and updated Jan. 2022
- Cohesive set of projects advancing Megaregion goals, including economic vitality
- Highway, rail, port, and transit projects bounded by Sacramento, Stockton, and 238/880 Interchange in Bay Area
- Support for future funding opportunities



Megaregion Dozen: Projects

❖ MTC Bay Area

- Amtrak South Bay Connect
- Port of Oakland Electrification
- I-80 WB Truck Scales (Solano Co)
- Valley Link

❖ Sacramento

- I-80/US-50 Managed Lanes
- I-5 Managed Lanes
- Sac to Roseville Third Track
- Valley Rail Expansion

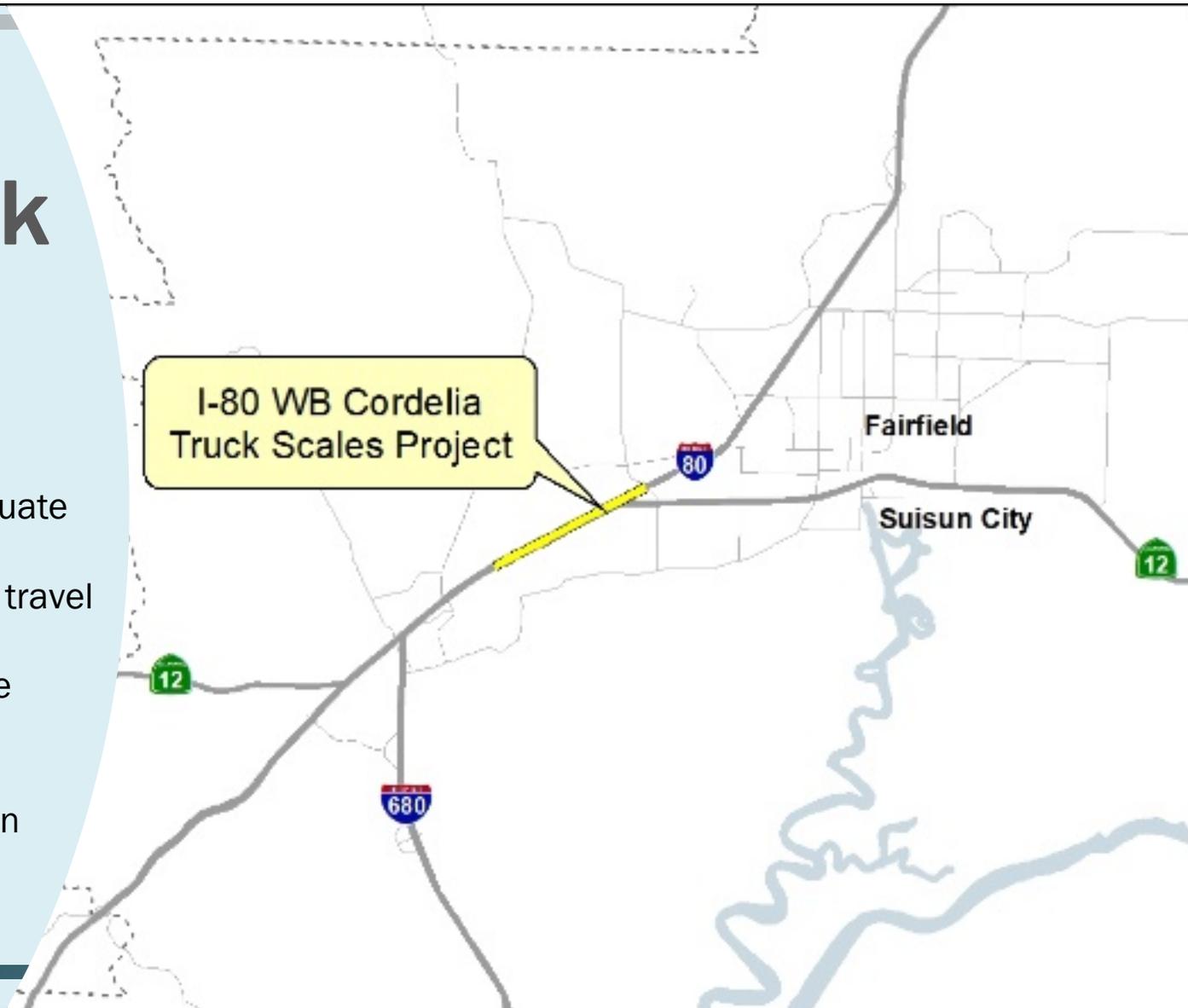
❖ San Joaquin

- SR-99/120 Interchange
- I-205 Managed Lanes
- Central Valley Gateway Project
- ACE/Valley Link Rail Improvements



I-80 WB Truck Scales

- On I-80 in Solano County
- Relocate and reconstruct inadequate truck scales facility
- Alleviate significant interregional travel chokepoint
- Truck backup and merging create additional operational issues
- Received \$24M TCEP for PS&E
- \$129M funded in TCEP for CON in FY25



I-80 WB Cordelia
Truck Scales Project

Fairfield

Suisun City

12

680

80

12



Port of Oakland Green Power Microgrid

- Implement green power microgrid to support electric vehicles, electric cargo handling equipment, and shore power.
- Reduce emissions and improve resilience at Northern California's busiest seaport
- Currently in environmental
- \$42M TCEP received for implementation in FY25



Thank You

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Closing Remarks



Questions? Contact Us!

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Thank you!

