

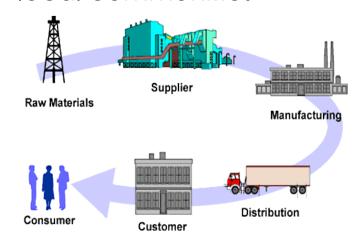
### Goods Movement Overview

## Why Goods Movement?

## Integral part of the region's economy

- Over \$600 billion of goods flow within/through the region each year
- 32 percent of jobs in the region (and 33 percent of jobs in Alameda County) are in goods movement dependent industries; key source of job diversity in the region.
- Heavily reliant on transportation system
- Nation's 5<sup>th</sup> largest marine port and important niche ports (auto, oil)

- Two major cargo airports
- Major highway and rail corridors
- Local streets and roads
- Significant public health and quality of life impacts on local communities



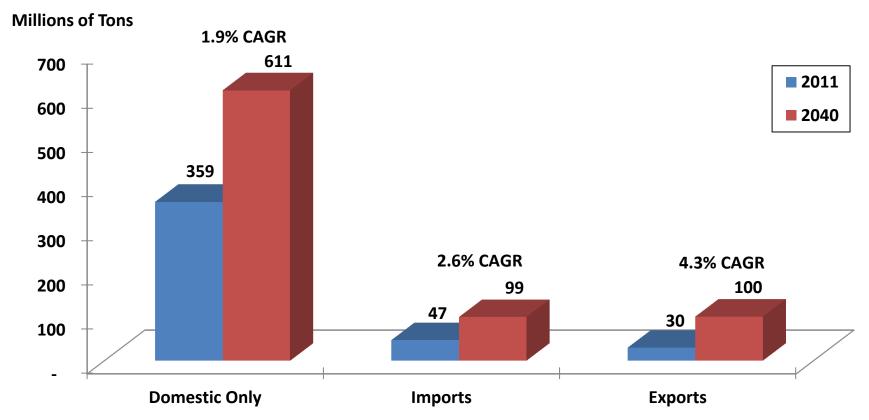
The goods movement system provides connections between each of these steps in this conceptual supply chain.







# Goods Movement in the Bay Area by Trade Type – 2011 and 2040

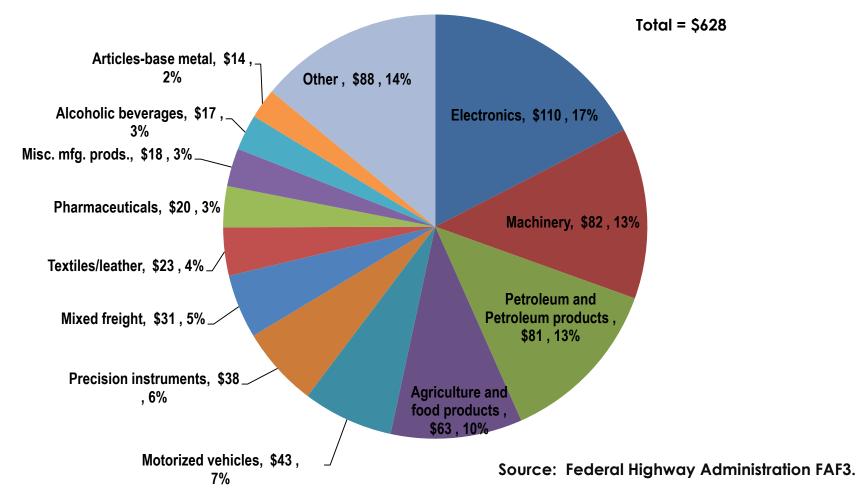


**CAGR - Compound Annual Growth Rate** 

Source: Federal Highway Administration FAF3.



## Bay Area Freight Flows by Commodity, 2011-\$Billions



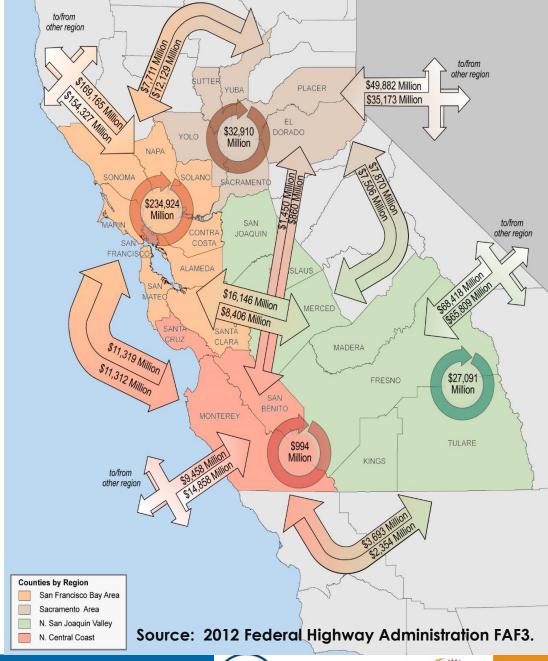
## Northern CA Megaregion

**Bay Area** - international trade hub, specializing in high value manufacturing products as well as agriculture and petroleum products

Sacramento Area – Ag/food products, high value manufacturing, regional warehouse center, connection to Bay Area via I-80 and UP Rail

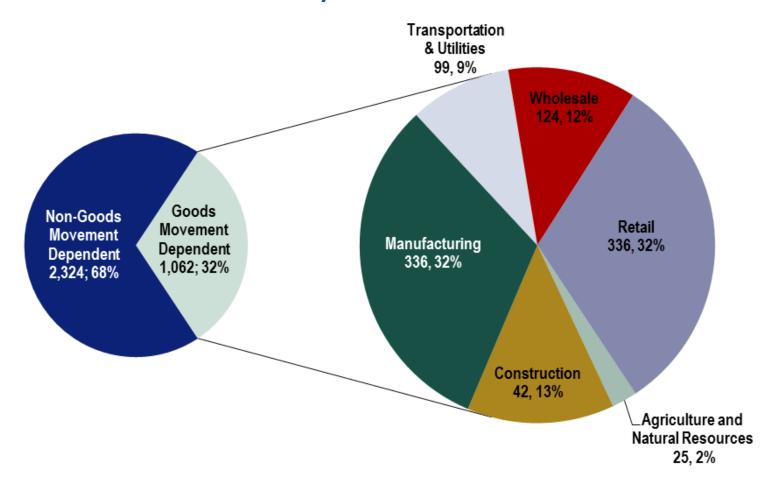
N. San Joaquin Valley – ag/food products, regional DC, Bay Area connections via I-580 (rail and barge) and SR 152

N. Central Coast – wine, fish and ag products, critical ag linkage with San Joaquin Valley



ALAMEDA

# Goods Movement Dependent Industries in the Bay Area



Employment in Bay Area, 2010 in Thousands of Employees

Source: ABAG *Plan Bay Area Economic Forecasts*; factors from CCSCE and Cambridge Systematics Analysis.







## Job Diversity

Area	Total Jobs that do not need college degree	Goods Movement Occupations Jobs that do not need college degree	Percentage of such Jobs in Goods Movement
Oakland-Fremont-Hayward MD – Alameda Co.	240,880	38,411	16%
Total	721,807	102,219	14%

Occupational Title	Median Hourly Wages – Alameda Co.
Cleaners of Vehicles and Equipment	\$10.1
Crane and Tower Operators	\$32.2
Excavating and Loading Machine and Dragline Operators	\$28.7
Industrial Truck and Tractor Operators	\$20.3
Laborers and Freight, Stock, and Material Movers, Hand	\$13.3
Machine Feeders and Offbearers	\$15.1
Material Moving Workers, All Other	\$20.2
Packers and Packagers, Hand	\$10.8
Pump Operators, Except Wellhead Pumpers	\$19.9
Refuse and Recyclable Material Collectors	\$28.0
Truck Drivers, Heavy and Tractor-Trailer	\$23.0
Truck Drivers, Light or Delivery Services	\$15.8
All Bay Area Occupations	\$24.7

Source: Wages and Employment Data from Occupational Employment (May 2012) and Wage (2013 – First Quarter) Data, California EDD; Educational-Level Data from BLS.

Note: Jobs that do not require a college degree are selected if more than 90 percent of the jobs in that occupation do not require a college degree.





# Issues and Needs Identified from Stakeholders

### Who We Talked To

- Ditching Dirty Diesel Collaborative
  - Representing various community and public health groups
- Alameda Labor Council
  - Teamsters, IBEW, ILWU
- Shippers/receivers
  - Farmers, wine producers, manufacturers
- East Bay Biomedical Manufacturing Network
  - Representing various pharmaceutical, biomed companies
- Transportation Providers
  - CA Trucking Association, UP, shortline operators
- East Bay Transportation and Logistics Partnership
- North Bay Leadership Council & Sonoma County Alliance



## Who We Talked To (Continued)

- East Bay EDA- Infrastructure Committee
  - EBMUD, Matson Logistics, PMSA
- Area Transportation Agencies
  - Congestion Management Agency Executive Directors from all nine counties
  - Contra Costa and Solano Transportation Authority Boards,
     West Contra Costa TAC
- Businesses Groups
  - East Bay Leadership Council, Bay Area Council, San Leandro Chamber of Commerce, Oakland Chamber of Commerce, Hispanic Chamber of Commerce
- California Capital and Investment Group

### Additional outreach in progress



### Goods Movement Functional Elements



#### **Global Gateways**

- Handle international trade, and cover entry and exit points that are essential to moving imports/exports.
- Example Infrastructure: Port of Oakland, Oakland International Airport, Rail Intermodal Terminals.



#### Interregional and Intraregional Corridors

- Interregional corridors link Alameda County and the Bay Area with the rest of the U.S.
- Intraregional corridors connect the cities and counties of the Bay Area with each other and provide freeway access to major freight hubs.
- Example infrastructure: I-80, I-580, I-880, U.S. 101, I-680, SR 12, SR 152, SR 4 and Highway 37; BNSF and UP Rail Corridors.



#### **Local Goods Movement System**

- Links global gateways and the interregional and intraregional corridors.
- Connects to major freight generators and provide last-mile pick-up and delivery service in communities.
- Example Infrastructure: local city truck routes and local streets, and last-mile connectors to locations with key freight activities.

## Issues and Needs -Global Gateway

- High concentration of activity at trade hubs results in quality of life and public health impacts on local communities
- Port of Oakland marine terminal congestion and its associated impacts on drayage drivers and neighborhoods
- Insufficient port rail services and need to attract first port of call
- Intensifying port competition
- Heavy-haul network needs
- Conflicts between industrial/warehouse space needs to support growth and impacts on neighborhoods
- Changing mix of air cargo and uncertain growth in domestic markets

# Issues and Needs Interregional and Intraregional Corridors

- Congestion and delay on shared use freight corridors with passenger traffic such as I-880, I-580, I-80, US 101 and Capitol Corridor
- Rail bottlenecks especially along Martinez Subdivision
- Truck safety issues along freight corridors due to merging and weaving; Safety issues at rail-highway grade crossings
- Pavement and bridge condition issues along freight corridors
- Shifting crude supplies leading to increased rail usage and community concerns regarding safety

## Issues and Needs -Urban Goods Movement System

- Public health impacts on neighborhoods with intense freight activities
- Land use conflicts in traditional industrial corridors
- Lack of truck parking/neighborhood parking encroachment
- Conflicts between trucks and other street users (autos, pedestrians, bikes, transit) on collector routes and in commercial areas, and problems with roadway and street design that impedes truck deliveries
- Cut through traffic to avoid congestion on major corridors
- Lack of truck route connectivity across city boundaries
- Local road and street pavement damage

## Trends and Opportunities

## Key Goods Movement Trends – Global Gateways

- Growth in high-value and bulk commodity exports
- Growth in transloading of import consumer products
- Continuing attention on export markets at national level
- Technology innovation Freight Advanced Traveler Information Systems (FRATIS)
- Continuing reductions in emissions but needs for continued research and application of new technologies



## Key Goods Movement Trends -Interregional and Intraregional Corridors

- Growth in intermodal rail demand
- Growth in advanced and specialty manufacturing processes (e.g., specialty foods) that favor Bay Area producers
- Income growth driving consumer demand and e-commerce
- Advances in new vehicle technologies and ITS technologies
- Expanding rail markets and opportunities at Port of Oakland, Solano County, and North Bay

## Key Goods Movement Trends – Urban Goods Movement System

- Income growth driving consumer demand and e-commerce
- Increasing densification of development patterns
- New approaches to managing urban delivery systems (e.g., off-peak delivery, electronic management of parking, ITS applications)