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 5th 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
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

Total = $628

- Electronics, $110, 17%
- Machinery, $82, 13%
- Petroleum and Petroleum products, $81, 13%
- Agriculture and food products, $63, 10%
- Motorized vehicles, $43, 7%
- Mixed freight, $31, 5%
- Precision instruments, $38, 6%
- Pharmaceuticals, $20, 3%
- Textiles/leather, $23, 4%
- Misc. mfg. prods., $18, 3%
- Alcoholic beverages, $17, 3%
- Articles-base metal, $14, 2%
- Other, $88, 14%

Source: Federal Highway Administration FAF3.
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.

Source: 2012 Federal Highway Administration FAF3.
Goods Movement Dependent Industries in the Bay Area

Employment in Bay Area, 2010 in Thousands of Employees

- Non-Goods Movement Dependent: 2,324; 68%
- Goods Movement Dependent: 1,062; 32%
- Wholesale: 124, 12%
- Retail: 336, 32%
- Construction: 42, 13%
- Agriculture and Natural Resources: 25, 2%
- Transportation & Utilities: 99, 9%

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

#### Area

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

#### Occupational Title

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

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.

**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)