

Bay Area Goods Movement Collaborative

Goods Movement System Infrastructure



The goods movement system is comprised of infrastructure that serves a number of different, yet interrelated functions. In the Bay Area, these functions include Global Gateways, Interregional and Intraregional Corridors, and the Local Goods Movement System. Each of these functions and their associated infrastructure are described below.

GLOBAL GATEWAYS

The global gateways that make up the Bay Area's freight transportation system consist of the major maritime facilities and international airports that handle freight, as well as passenger cargo. It covers those entry and exit points that are essential to moving high volumes of trade into and out of the region.

The elements that make up the global gateways function include the region's maritime ports (Port of Oakland, Port of Richmond, Port of Benicia, Port of Redwood City and Port of San Francisco) along with their associated inland connections. The Port of Oakland is the region's largest port and only container handling facility, and is distinguished from other major West Coast ports as it handles more exports than imports.



Other elements include international airports that handle both freight that is stored under the main deck of an aircraft and dedicated freight aircrafts, including the San Francisco International Airport (SFO) and the Oakland International Airport (OAK).

INTERREGIONAL AND INTRAREGIONAL CORRIDORS

The inter- and intraregional corridors consist of primary highways and rail lines that serve to connect the central Bay Area and Alameda County to the rest of the state and to domestic markets. This network provides primary access to major facilities such as the Port of Oakland, San Francisco and Oakland International Airports, rail yards, and warehouse/industrial districts. Key interregional and intraregional truck corridors in the Bay Area include I-80, I-238, I-580, I-880, U.S. 101, and I-680. Union Pacific rail connections along the Martinez Subdivision and Oakland Subdivisions, as well as the BNSF Stockton Subdivision line are important interregional rail corridors.

Many elements of the international gateway infrastructure in the Bay Area are located within Alameda County.

A handful of key state highway corridors also provide east-west linkages to key goods movement industries. For instance, State Route (SR) 4 provides connections between oil refineries and other industries with the rest of the network and customers. SR 152 provides an important connection to Central Coast agricultural producers. SR 12 and Highway 37 provide key connections along the northern part of the region serving the North Bay and northern Central Valley. Exports such as wine, electronics and medical equipment utilize these corridors to reach the global gateways. Imported consumer products, parts and automobiles also utilize these routes to reach distribution facilities in San Joaquin Valley to be delivered to the Bay Area and beyond.



LOCAL GOODS MOVEMENT SYSTEM

The local goods movement system refers to networks of city streets that move freight to and from its origins and destinations. Last-mile connectors which are also part of the local goods movement system, providing the critical connections between major freight facilities (global gateways, domestic rail terminals, warehouse/ industrial centers and industrial parks) and the interregional and intraregional systems. The growing use of e-commerce and the shift towards a knowledge-based economy means parcel service and deliveries to commercial and residential areas are becoming increasingly important. Major arterial truck routes are often used as alternatives to congested freeways for city-to-city truck movements. Farm-to-market roads in the rural parts of the region are also a vital part of the local goods movement system and serve important economic functions.



Summary of Preliminary Goods Movement System Needs and Issues by Function

GLOBAL GATEWAYS

- Port of Oakland land constraints, deficiencies in cargo handling equipment
- Intensifying port competition
- Marine terminal congestion and its associated impacts on drayage drivers and neighborhoods
- Need for improved communication between truck drivers and marine terminal operators
- Impacts and opportunities for heavy haul networks around ports
- Expanding demand for bulk export facilities
- Conflicts between industrial/warehouse space needs to support growth and impacts on neighborhoods
- Changing mix of air cargo (less computer related exports) and uncertain growth in domestic markets

INTER- AND INTRA-REGIONAL CORRIDORS

- Congestion and delay on shared use freight corridors with passenger traffic such as I-880, I-580 and I-80, and Capitol Corridor
- Truck safety issues along freight corridors due to merging and weaving
- Pavement and bridge condition issues along freight corridors
- Rail bottlenecks especially along Martinez Subdivision
- Safety issues at rail-highway grade crossings
- Safety concerns regarding the movement of crude by rail

LOCAL 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
- Cut through traffic to avoid congestion on major corridors
- Lack of truck route connectivity across city boundaries
- Local road and street pavement damage
- Problems with roadway and street design that impedes truck deliveries

