Chapter 1-6: Labor, Employment, and Workforce Development in California's Freight Industry

Labor Structure

Labor in California's freight industry is as diverse and complex as the industry itself. The freight industry provides very good paying jobs such as those in the maritime industry represented by the International Longshoremen and Warehouse Union (ILWU), and also low paying jobs such as some independent truck drivers and warehouse workers. All levels of employment are undergoing constant change and face great challenges as new technologies are developed and are applied throughout the industry, national and international competition puts downward pressure on wages, and air quality mandates and regulations unique to California add cost to each shipment.

Employees in the maritime industry have relatively high secure jobs with among the highest wages freight industry wages. Though new technologies, particularly those that are able to automate functions currently done by people, threaten some jobs, the new technologies also provide new employment opportunities. The Class I and short line railroads provide very good blue collar jobs and railroad careers tend to be relatively stable. The trucking industry has drivers that work directly for a firm as an employee, contract drivers, and independent drivers. Salaries are often dependent by specialty with less than truckload and regional truck drivers being paid higher wages. There is a shortage of truck drivers both nationally and in California. It is becoming much more difficult and costly for independent owner/operators who want to drive. As a result many are becoming fleet drivers and working for larger carriers. Some of these have become unionized through the Teamsters Union. Highly-skilled air cargo pilots enjoy very good wages and benefits, and have benefited recently from new legislation to reduce hours of operation d to limit pilot fatigue. Warehousing and distribution centers provide many thousands of blue collar jobs and are critical components of many local economies, particularly in the Inland Empire and along the highest volume truck routes in the Southern California region. The e-commerce boom that is underway promises many new jobs across a wide range of skills.

Training and workforce development is an integral part of the hiring process and critical in all modes where federal and state safety and security regulations must be rigorously observed. Retention in the industry, with the exception of trucking, is fairly strong, particularly in the maritime and rail industries, with higher turnover in trucking where there continues to be driver shortages. When the economy improves, truck drivers leave the industry and seek employment in the higher paying construction industry. In general, there has been a recent increase in freight sector hiring as the economy continues its recovery from the recession.

Freight Railroads

Rail management and rail labor are both committed to providing America with safe, efficient, and cost-effective freight transportation services. In 2012, U.S. freight railroads had approximately 180,000 employees, including 163,000 on Class I railroads and 17,000 on non-Class I railroads (short line and regional railroads). Nationwide, each freight rail job supports 4.5 jobs elsewhere in the economy. Each $1 billion in new rail investment supports more than 17,000 jobs.

Railroad employees are among the best-paid workers in American industry. In 2011, the average U.S. freight railroad employee earned wages of $74,900 and fringe benefits of $34,000 — for total compensation of $108,900. By contrast, the average wage per full-time employee in the United States in 2011 was $54,400 (73 percent of the comparable rail figure) and average total compensation was $67,700 (62 percent of the rail figure). In 2011, there were approximately 8,900 people employed by railroads in California, with average salary and benefits of $110,470.

Approximately 86 percent of Class I rail employees and more than half of non-Class I rail employees are unionized, represented by one of more than a dozen different labor unions. Labor relations in the rail industry are subject to the Railway Labor Act (RLA). Under the RLA, labor contracts do not expire. Rather, they remain in effect until modified by the parties involved through a complex process that can take years.

In 2013 railroads intended to hire some 11,000 new workers nationally. The nation's freight railroads have more than a century-long commitment to the nation's service men and women, and continue to hire veterans at a robust pace, between 20-25 percent of current employees. (Association of American Railroads, Railroads and Labor)

Trucking

In 2012, the trucking industry in California provided 618,800 jobs, or one out of 20 in the state.

Total trucking industry wages paid in California in 2012 exceeded $30.2 billion, with an average annual trucking industry salary of $48,774. Over half of all drivers have a high school diploma or less. In addition to truck drivers, another 20,000 Californians are employed in supervisory and administrative roles in the trucking industry with an annual mean wage of $58,000. Drivers who work for trucking firms are typically represented by the Teamsters Union, though not all trucking firms are unionize, independent owner/operators are not unionized, and there is an ongoing dispute regarding truckers sometimes intentionally being misclassified as independent owner-operators by the trucking firms they serve and so by law, cannot be unionized. This dispute is being addressed in a series of legal actions.

At some point during the supply chain, the trucking industry transports almost all of the items produced in, imported into, or exported out of California. As of May 2013, there were over 32,810 trucking companies located in California, most of them small, locally owned businesses. These companies are served by a wide range of supporting businesses both large and small. Trucks transported 88 percent of total manufactured tonnage in the state in 2010 (3,823,000 tons per day) and is the number one freight mode in California. Over 78 percent of California communities depend exclusively on trucks to move their goods. (California Fast Facts, American Transportation Research Institute)

The Federal Highway Administration has predicted a 92.5 percent growth in freight demand from 2002-2035. Because of this anticipated growth, demand for all commercial freight modes (truck, ship, rail) will increase, with the expectation that trucking will continue to have the dominate share of the activity. It is likely that the forecasted growth rate will change when the FHWA is able to incorporate new data covering the recent recession and the still unfolding economic recovery. With the constant advent of new technologies and shifting international trade and logistics, all forecasts have inherent inaccuracies, particularly in out-years. Still, it is helpful to understand for both workforce development and infrastructure planning that the general trend is for significant expansion of the freight sector over the next 20 years.

California's trucking industry still faces a number of economic challenges that affect its ability to sustain its vital role in the overall state economy. For example, the trucking industry is constantly facing a shortage of qualified drivers. Increasingly stringent regulations have put a premium on experienced drivers with proven, safe driving records. States across the country are exploring ways to address the truck driver shortage by utilizing their workforce development boards and community colleges to provide truck driver training.

Environmental regulations have put additional strain on California's truck capacity, the number of available trucks to haul freight. Truck capacity has reduced approximately 25 percent in the State's three major port drayage markets of Los Angeles, Long Beach, and Oakland in recent years. In 2014, fleet owners of three or fewer trucks face their first regulatory deadlines under the Statewide Truck and Bus Rule that is being implemented by the California Air Resources Board. These smaller fleets of three or fewer trucks make up almost half of the State's entire truck capacity. Many of the fleet owners lack the financial capacity to purchase used or new trucks that meet required emissions thresholds. (Delivering Sustainable Freight, California Trucking Association Special Report, Fall 2013)

California's trucking industry is at a crossroads of regulatory requirements, growing costs, labor shortages, competition, and aging roadway infrastructure. The entire industry is changing at a rapid pace with new industry practices taking hold. After the deregulation of the industry during the 1980's, the hurdle for entering the trucking business was dramatically lowered. Practically anyone with a truck and an insurance bond could establish a small trucking business. The result was the boom of micro trucking firms operating in California across all segments of the industry. However, many micro firms are now finding it difficult to profitably operate and are going out of business. A used truck tractor that meets current emissions standards can cost \$50,000 and up, depending upon mileage. A new truck tractor used for hauling intermodal trailers and containers can cost upwards of \$140,000 to \$150,000. Financing can be difficult to obtain for new driver/owners. Lenders want to see driver/owners with at least two years of experience before they consider a new loan. The primary concern is that someone will purchase a new truck, find that they can't profitably stay in trucking or don't like the work demands, and so return or default on the vehicle. Driving is a lifestyle and it takes time for new drivers to adapt to the demands of trucking, and get consistent loads. Trucking is undergoing a consolidation of ownership and operations into a fewer number of larger, better capitalized firms. (Sacramento Truck Center, March 2014)

Ocean Shipping

In the ocean shipping industry there are two primary organizations that separately represent labor and cargo carriers on the U. S. West Coast including California. Labor is represented by the International Longshore and Warehouse Union.. Carriers are represented by the Pacific Maritime Association (PMA). The relationship between these two organizations can become contentious as evidenced by a 2002 strike which severely impacted West Coast ports.

As of December 2012, PMA members employed nearly 14,000 registered longshore, clerk and foreman workers at 29 West Coast ports in California, Oregon and Washington, and thousands more workers, who typically work part-time. Since the 2002 agreement that brought the widespread use of newer technologies to the West Coast, the registered workforce has increased by 32 percent. The PMA and the ILWU are nearing the end of a six-year contract that runs from 2008-2014.

The 2002 strike and port shutdown left some 100 ships outside the San Pedro Bay port complex breakwater and unable to dock and unload. The 10-day lockout at West Coast ports cost the U.S. economy an estimated $1 billion per day and took six months before supply chains fully recovered. The delays cost ships some $50,000 per day in fuel and other costs.

In 2012 another strike at the Port of Los Angeles (POLA) and Port of Long Beach (POLB) lasted for 8 days. Eight hundred clerks represented by the ILWU had been on strike against the Los Angeles/Long Beach Harbor Employers Association, which represents management for the shipping lines and cargo terminals. It has been estimated e that the strike cost the nation's economy up to $1 billion a day. Tens of thousands of truckers, railroad, warehouse, and other support workers were also temporarily out of work because the strike stopped the flow of goods they normally handled.

The primary issues that the ILWU members strike over are wages, benefits, and implementation of efficiency and other technologies used by port terminal operators that are perceived as a threat to jobs. Much of this technology is already in place in other countries, particularly Europe where two people can unload a container ship using the latest remote sensing and tracking technology.

The challenge of transitioning California’s freight industry to a more efficient and less impactful status, while retaining high-paying jobs and providing the needed education and training for the freight industry workforce is an essential aspect of planning California’s freight industry future. Addressing this will require involvement by public and private entities outside of the freight infrastructure planning and delivery process typically involved with freight plans. (Pacific Maritime Association, Journal of Commerce)

Employment

Los Angeles, San Diego, and Inland Empire

Nearly 21 million people live in the six Southern California Association of Government (SCAG) counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura), and there is easy access to fast growing markets in Arizona and Nevada and the border region of Mexico. There are nearly 500,000 business establishments in the SCAG region, employing over seven million people. Direct access to such a large consumer market is attractive to the goods movement and other industries.

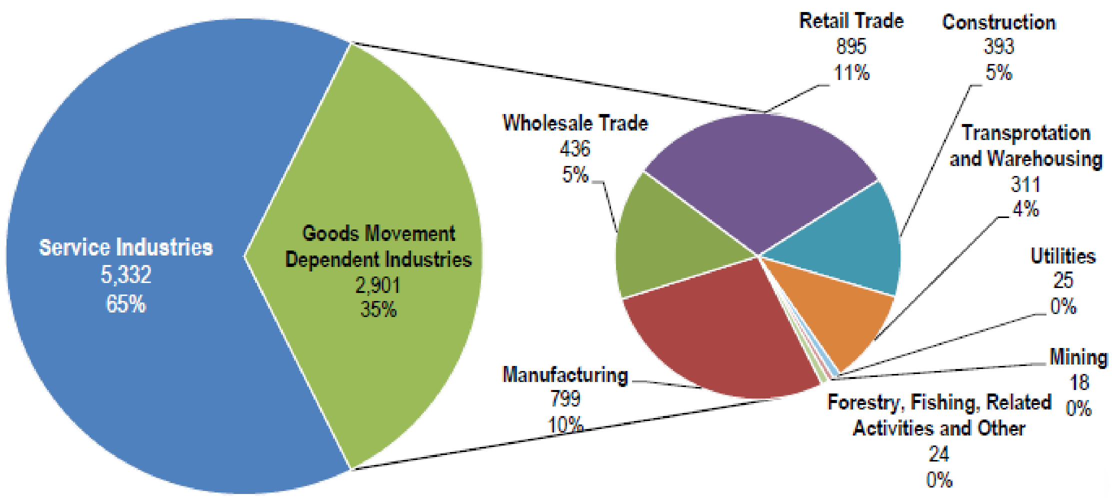
Goods movement-dependent industries – including manufacturing, wholesale and retail trade, construction, and transportation/warehousing – employed over 2.9 million people in Southern California and contributed $249 Billion to Gross Regional Product (GRP) in 2010. These businesses, particularly manufacturing firms and consumer product distributors (who maintain large warehouses and national distribution centers in the region), form much of Southern California's export base.

International trade is one of the most important economic engines in Southern California. Industry related employment is one gauge of an industry's importance to the regional economy. Based on the Los Angeles Economic Development Council's (LAEDC) analysis, there were 176,900 international trade oriented jobs in Los Angeles County in 2011, an increase of 12.5% compared with 2010. International trade employment accounted for nearly 4.7% of total nonfarm payroll jobs in Los Angeles County.

Across the region, there were a total of 268,300 international trade-related jobs in 2011. Los Angeles County has the largest number of jobs, followed in order by Orange County (44,700 jobs), the Inland Empire - San Bernardino and Riverside counties (39,000 jobs), and Ventura County (7,700 jobs).

The mix of manufacturing activities in the SCAG region, which is closely related to freight, provides employment at several levels. Globalized industries such as aerospace and computers/electronics, typically involve design and testing (rather than assembly) and provide relatively few jobs, but are often relatively high wage jobs. The development and production of precision machinery is an important sector that employs a range of professional and highly-skilled technician positions. Conversely, other industries such as food, beverage and chemical production provide more jobs that do not require advanced degrees and sophisticated training but still offer many attractive, well-paying blue-collar jobs as well as lower paying jobs that require few technical skills. The wide range of industries, suppliers, and other support services already in the region acts as a catalyst to attract additional economic activity (and jobs) to the region. (LAEDC, 2013-2014 Economic Forecast and Industry Outlook, February, 2013, On the Move, Southern California Delivers the Goods, Comprehensive Regional Goods Movement Plan and Implementation Study, SCAG, February 2013)

Figure 2.3 **Industry Contribution to Employment by Goods Movement Dependent Sectors,**
2010 (thousands of jobs)



Source: REMI PI+ v1.2.4 Model Data.

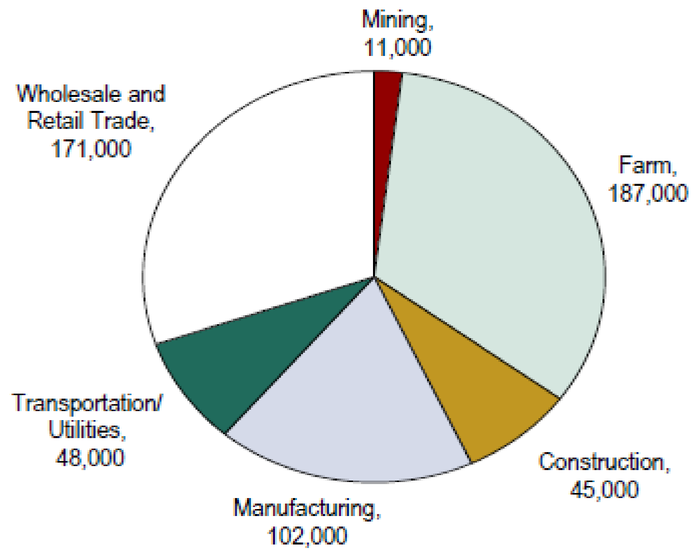
(On the Move, Southern California Delivers the Goods, Comprehensive Regional Goods Movement Plan and Implementation Study, SCAG, February 2013)

In the recent report, San Diego Maritime Industry Report 2012 (San Diego Workforce Partnership, San Diego Regional Economic Development Corporation and the Maritime Alliance), referred to the maritime industry as the Blue Economy. It is the “the sum of all economic activity having to do with oceans, seas, harbors, ports and coastal zones...” Within the Blue Economy is a subset referred to as the Blue Tech economy which is ““becoming ever more enmeshed in even the most traditional maritime." This sector meets the unique needs of the maritime industry. In San Diego, one of the largest drivers is the U.S. Navy and the need for innovation for the Defense Department and defense industries. Much off San Diego County is technology driven, and includes biomedical research and development, communications, and computer science. These sectors build on the vibrant technological research capabilities of the County's businesses and University of California San Diego. San Diego is a large manufacturing center in the U.S. with 93,400 workers. The largest manufacturing sectors in the County were computer and electronic products with 24,500 workers, and transportation equipment with 13,800 workers. Other sectors include miscellaneous (medical instruments) products with 10,100 workers, machinery manufacturing (8,400workers) and chemicals (7,300 workers). San Diego also has the only sizable shipbuilding industry on the West Coast. International trade, particularly with Mexico, is a major component of the area's economy. The San Diego Customs District is a major channel for U.S.-Mexico trade. In 2012, total two way trade through the Customs District reached $57.4 billion, with Mexico accounting for $48.7 billion, or 84.9 percent of the total.

California Central Valley

In 2010, there were about 1.2 million people employed across all economic sectors in the San Joaquin Valley. Of this total, over 44 percent (564,000 jobs) were associated with goods movement-dependent industries, including agriculture (187,000), wholesale and retail trade (170,000), manufacturing (102,000), and transportation and utilities (48,000). By 2040, goods movement-dependent jobs are expected to increase by over 45 percent (nearly 250,000 jobs). This growth will be lead by non-farm industries, including transportation and warehousing, wholesale, and retail trade.

Figure 4.2 Total Goods Movement-Dependent Employment in the SJV
2010



Source: California Forecast, 2011, Moody's economy.com (for mining employment).

San Joaquin Valley Interregional Goods Movement Plan, Task 1 Cambridge Systematics, January 2012

Currently, the proportion of goods movement-dependent jobs within each of the eight counties in the San Joaquin Valley ranges from 40 percent of total jobs in Kings County to over 50 percent of jobs in Tulare County. In the future, goods movement-dependent jobs are expected to decline slightly as a relative proportion of total jobs (44 to 41 percent of total jobs), as the percentage of the workforce employed in service and government jobs continues to rise. The transportation sector (tied largely to the growth in international trade as well as agricultural production) is expected to grow substantially by 2040, increasing by over 90 percent (40,000 jobs). Agriculture and manufacturing employment are expected to remain relatively flat over the next 30 years with annual increases of less than 1 percent. Mining sector jobs are expected to decline. (San Joaquin Valley Interregional Goods Movement Plan, January, 2012)

The Port of Stockton, with more than 2,000 acres under port ownership, has a large manufacturing and processing base that augments its port operations. These firms provide a wide range of highly skilled and low skilled positions. With the Port having direct access to California's two Class 1 Railroads, direct access to Interstate 5, participation in the M-580 Marine Highway partnership with the Port of Oakland for the transport of containers on barges, and an aggressive business development perspective, it is expected that job growth at the Port complex will be strong and continue to serve as an important economic boost for a economically depressed region in the northern San Joaquin Valley.

California Central Coast

Businesses in the Central Coast region provided a total of 782,000 jobs for area residents in 2009, many of which are logistics dependent. Employment levels reflect population patterns, with Monterey and Santa Barbara Counties having the largest employment bases in 2009, followed by San Luis Obispo, Santa Cruz, and San Benito Counties. Total employment in the Central Coast region remained relatively stable during much of the last decade, but dropped in 2009 as a result of the national recession. All five counties in the region lost jobs in 2009, including more than 12,000 positions in Santa Barbara County and nearly 10,000 jobs in Monterey County. Overall, the regional employment base contracted by 4.6 percent in 2009 (loss of 37,000 jobs).

Farming is not a top 10 industry by employment in any of the five Central Coast counties, despite the fact that the region is a major agricultural center. This may be due to the following:

- Technological advances over the years have made farming less labor-intensive. As a result, producers can substitute capital for labor, thus producing more with fewer employees.

- Many agriculture support jobs are classified under the “forestry, fishing, and related activities” category. Only those employees that are engaged in the direct production of agriculture commodities (regardless of whether the employee is a sole proprietor, partner, or hired labor) are included in the “farming” category.

- Economic data sources can only capture those employees that are on a traditional payroll, thereby missing undocumented and casual employees.

Nonetheless, agriculture, which is a freight-dependent economic sector, is critical to the region’s economic health, and it drives other industries, such as transportation and refrigerated warehousing (coolers). With the Salinas Valley often referred to as the “nation’s salad bowl”, the importance of the agricultural industry to the Central Coast, and the need for high quality access to the national freight system, particularly for highly perishable and row crops, cannot be over emphasized. (Central Coast California Commercial Flows Study, Cambridge Systematics, February 2012)

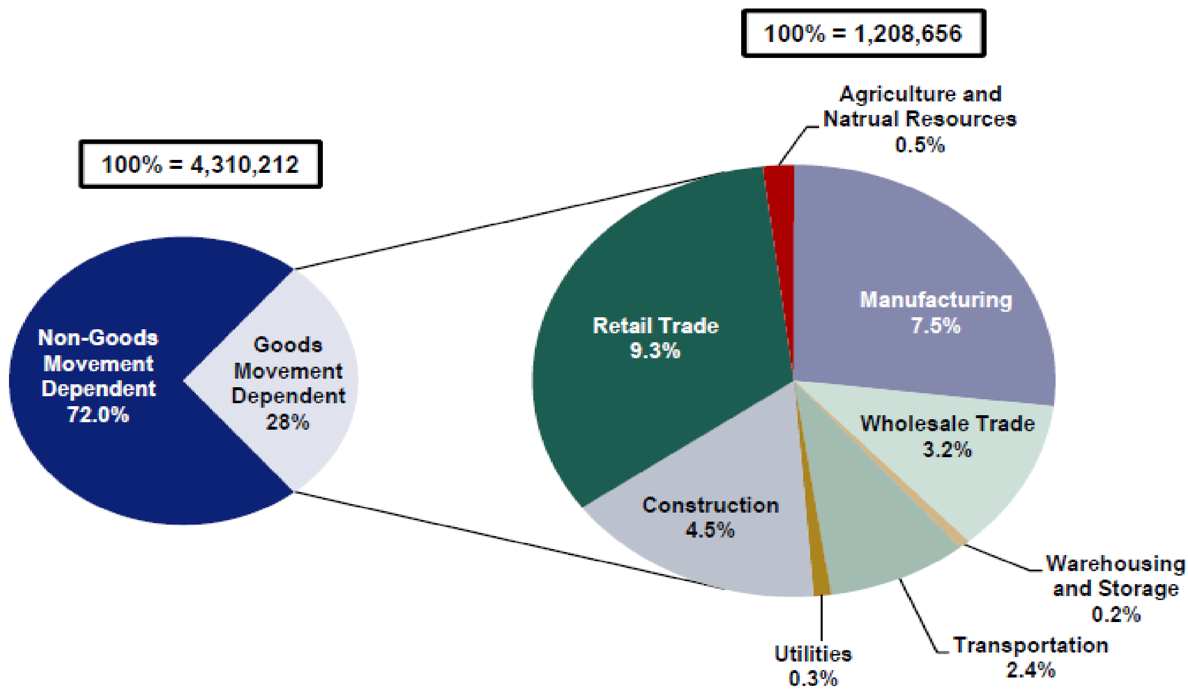
San Francisco Bay Area

Goods movement-dependent industries provide over 1.2 million jobs (28 percent of total regional employment). The employment data for goods movement-dependent industries by county and industry sector illustrates some important patterns in terms of the economic importance of goods movement-dependent industries in the Bay Area.

Over the last 20 years, there have been significant changes in the Bay Area economy that are reflected in employment trends. In the 1980s and 1990s, a major driving force behind growth in the region was the development and manufacturing of computer hardware, particularly related to the growing demand for personal computer systems. Much of the manufacturing activities have moved out of the region to lower wage and lower land cost location elsewhere in California, other states, and other countries. It is not anticipated that large scale, mass market computer related manufacturing will return to the Bay Area.

Another trend that impacted goods movement industries in the Bay Area was the movement of older, traditional manufacturing, warehousing, and distribution activities out of the Bay Area. This was primarily due to high costs of land and labor in the Bay Area, along with higher regulatory compliance costs than in other parts of the U.S. and overseas locations. In the case of the loss of warehousing and distribution activities, the availability of cheaper land, lower labor costs, and better access to the Interstate Highway System from locations in the San Joaquin Valley were all contributing factors.

Employment in Goods Movement-Dependent Industries in the Bay Area, 2011



Source: IMPLAN 2011 Economic Input-Output Model.

San Francisco Bay Area Freight Mobility Study, Figure 3.1, Cambridge Systematics, October, 2013

As represented in the figure above, neither “Transportation and Warehousing” nor “Wholesale Trade” have high concentrations even in Bay Area sub regions, where goods movement hubs are located, such as the Port of Oakland and Oakland International Airport. However, to the extent that goods movement industries, particularly value-added logistics services and warehousing, can provide good paying jobs to replace lost manufacturing jobs, the region may not be realizing the full economic benefits of its goods movement hub status in terms of regional job diversity.

The five Bay Area seaports (Redwood City, San Francisco, Oakland, Richmond, and Benicia) provide various maritime and logistics related employment. By far, the Port of Oakland is the largest direct employer with nearly 29,000 employees. Ninety-nine percent of all containers handled by Northern California ports pass through the Port of Oakland. The Port non-direct related employment in Northern California is approximately 73,000 jobs. The Ports of

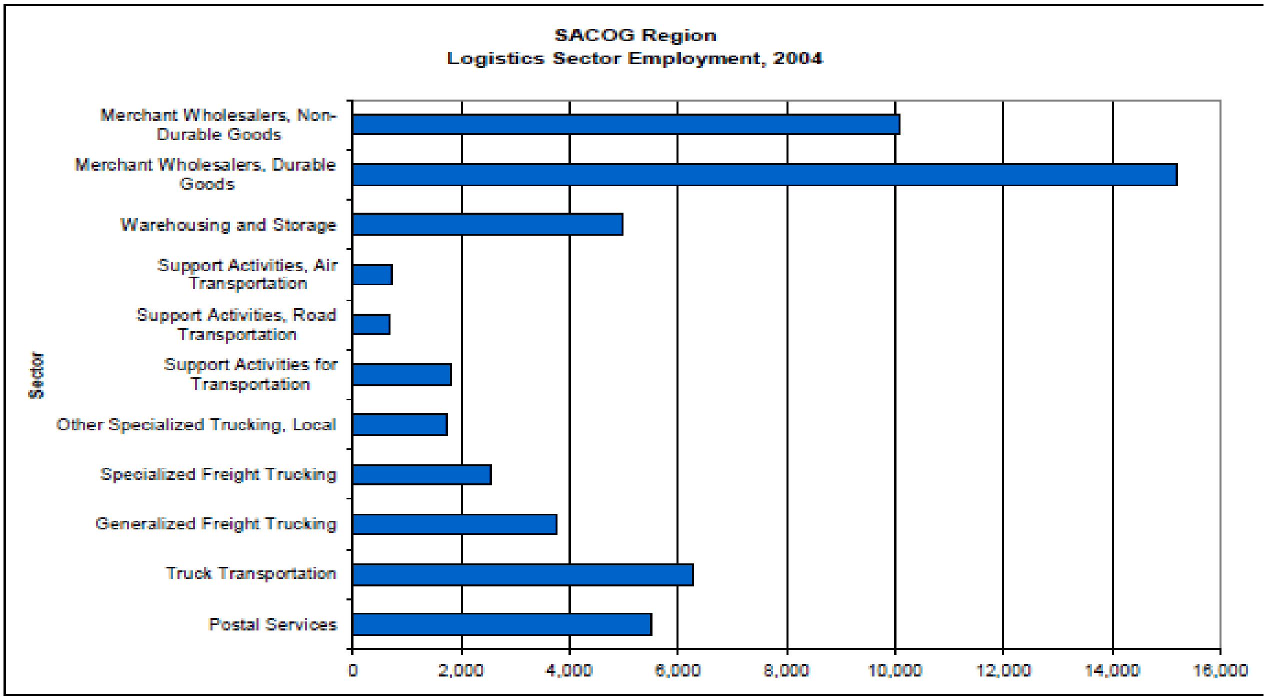
Richmond, San Francisco, and Benicia also provide significant employment, while Redwood City is a lesser port in terms of its size and employment. (Port of Oakland Jobs Brochure)

Sacramento Region

Logistics employment in Sacramento County is a relatively low share of the total, due to the higher share of government and office sector employment in Sacramento itself. Logistics employment in Yolo County is much higher, reflecting the concentration of logistics activity in West Sacramento and Woodland. Logistics sector employment in the region yields annual payrolls of $2.1 billion. Agricultural production for export is an important economic sector for the region's rural areas and is the base of the economy for many counties. The region is a global exporter of rice, nuts and fruit. The Port of West Sacramento is a valuable asset for both exporting these commodities and importing fertilizers and other bulk items.

A key question facing the Sacramento region is whether to encourage the growth of the logistics industry, and if the answer is yes, how to do so without negatively impacting the region's focus on developing its core in a sustainable manner that reduces demands on the transportation system and the potential need to expand the highway system. This is a particular challenge for Sacramento due to the close proximity of the region's major freight transportation facilities and its downtown and the convergence of the Sacramento and American Rivers just north of downtown, with an extensive flood bypass channel in excess of two miles wide just west of the City. These geographic constraints limit the potential for new freight infrastructure.

While growth in logistics businesses beyond those required to support the region's own production and consumption would add jobs, the growth may also demand expansion of some transportation facilities and development of new logistics facilities on either brownfields (already developed areas) or greenfields (undeveloped land) that now host agricultural uses. In the Sacramento region, the goods producing sectors represent 14 percent of the region's total employment. Although manufacturing does not represent an area of specialization, the region continues to serve as a lower cost alternative to the Bay Area. The trend in manufacturing to reduce inventory and rely on just-in-time delivery of goods and materials demands a transportation network that is fast and reliable and positions the region well to serve the northern portion of the Bay Area.



SACOG Regional Goods Movement Study, Phase I Executive Summary, September 10, 2006, Tioga Group

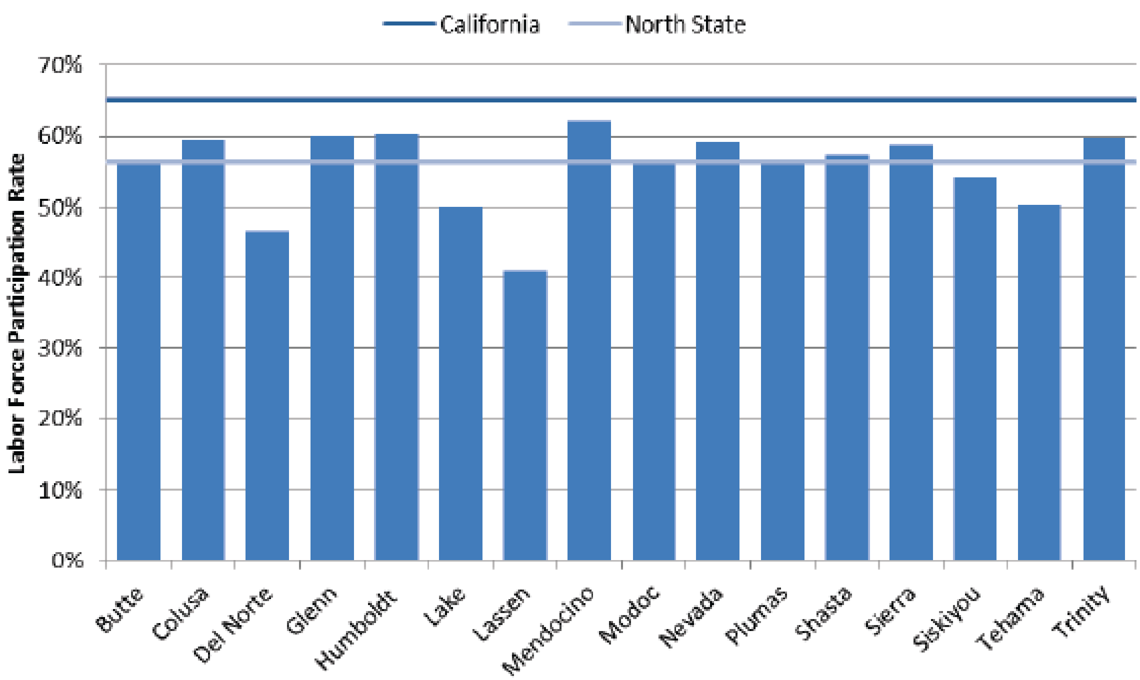
North State Super Region

The North State Super Region (NSSR) had a 12.5 percent unemployment rate in 2012, which was higher than the overall State rate of 10.9 percent. Four of the region's counties had unemployment rates over 15 percent. Self employment accounted for 10 percent of earnings among the NSSR's labor force compared to 8 percent for the rest of the state. Fourteen percent of the NSSR workforce relies on government transfer payments such as social security, disability, public assistance, and other transfer payments compared to seven percent for the rest of California.

According to IMPLAN data, total employment in the NSSR fell during the Great Recession, but several sectors experienced employment gains. The finance, real estate, and professional services sectors added at least 5,000 workers from 2006-2010. Transportation, amusement and recreation, crop production, health care, and government sectors added at least 2,500 workers. These gains helped offset significant job losses in construction (-5,331), wood products (-3,298), and retail trade (-2,933) sectors during the same period. NSSR businesses lost $55 million in visitor and tourism related spending from 2006-2010. Agriculture and forestry, relatively underrepresented in the state and national economies, accounted for 7,081 jobs and 1.4 percent of NSSR employment; nationally they accounted for 0.3 percent of employment.

National and international export of agricultural (rice and other grains, nuts, and fruit) and forestry products are vital to local economies.

Labor Force Participation Rates in California and the North State 2012



Beyond agricultural, forestry, mining, and truck services, there is not a strong freight sector in the North State Super Region. There is very little manufacturing, very low population densities, and no large cities in the Region. However the importance of freight to the success and vitality of the aforementioned economic sectors is acute. Access to state and international markets is primarily provided by the State Highway System, particularly Interstate 5. Railroads also provide important access, particularly for grain and lumber shipments.

Work Force Development (to be added)