

CAREERS IN GLOBAL TRADE AND LOGISTICS





Prepared for the South Central Coast Region - Priority Sector Global Trade





REPORT SUMMARY



International trade and logistics represent a significant source of economic vitality and jobs in the state of California. According to the governor's office, international trade and logistics support more than 4.7 million jobs in the state, ranking it first in the United States in two-way trade.¹ Further, research conducted by the Economic Development Collaborative (EDC) and Xopolis for the World Trade Center Oxnard, found that companies involved in international trade substantially outperformed their non-trading counterparts both in sales and in employment.²

With more and more businesses expanding into global markets, opportunities for those interested in careers involving global trade and logistics will increase as well. The question, however, for job seekers and educational institutions, is how to identify and train for the opportunities and the skill sets that global companies are seeking.

The California Community Colleges supports a strategic plan designed to improve student success outcomes, increase transfer rates and eliminate achievement gaps. Mid-career professionals looking to build on their skills or embark on a new career can look into the California Community Colleges training opportunities that provide hands-on experience while building the comprehensive skill sets needed to follow your career pathway.

This report, commissioned by the California Community Colleges through its employer engagement initiatives and compiled by the EDC and Xopolis, aims to provide a more fine-grained analysis of the international trade and logistics job market and the skills driving employment in this sector.

Key Findings

1 Top 3 regional clusters for global trade are:

- a. Retail, Hospitality, Tourism.
- b. Advanced Manufacturing.
- c. ICT & Digital Media.
- 2 Labor demand for global trade and logistics companies grew faster than that of the rest of the economy, increasing over 33 percent from 2017 to 2019 and outpacing total regional demand growth by 7 percentage points.
- 3 Global trade and logistics companies seek a relatively higher proportion of skilled workers with bachelor's or master's degrees.
- 4 Global traders in the region post a higher demand for higher paying jobs such as operations managers, engineers, operations, and marketing analysts.
- 5 Global traders demand skills such as sales, operation, leadership, and innovation, relatively more than their peers.

^{1.} http://www.business.ca.gov/Programs/International-Affairs-and-Trade/International-Affairs-and-Trade

^{2.} https://edcollaborative.com/wp-content/uploads/2019/10/EDC-Manufacturing-Traders-1.pdf

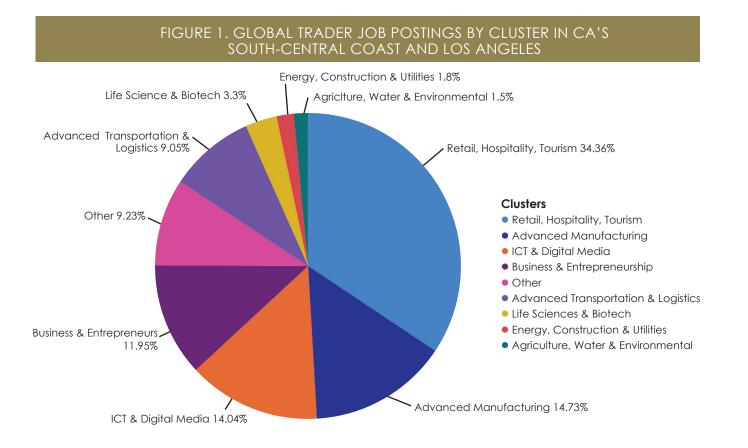
SCOPE OF THE RESEARCH AND DISCUSSION OF FINDINGS

In total, this trade report was an examination of over 167,100 companies in California. Out of these companies our research identified 2,343 international trade and logistics companies within the counties of Los Angeles, Ventura, Santa Barbara and San Luis Obispo as well as another 2,665 companies outside the region but in the state.³

Out of the total international trade establishments studied, we were able to identify over 66,000 job postings from companies conducting global trade activity in the region. From this information, we were able to divide regional firms into major clusters such as Retail, Hospitality, Tourism; Advanced Manufacturing; Advanced Transportation and Logistics; Agriculture, Water & Environmental; Business & Entrepreneurship; Energy, Construction & Utilities; ICT & Digital Media; and Life Sciences & Biotechnology.

Figure 1 below shows the number of job postings included in our analysis for each of the clusters of interest. Most job postings by companies trading globally concentrate in the Retail, Hospitality, Tourism sector (34%), followed by Advanced Manufacturing (15%); ICT & Digital Media (14%); and Business & Entrepreneurship (12%).

The cluster category of Other (9%) is largely dominated by traditional manufacturing industries, such as Cut and Sew Apparel Manufacturing; Tire Manufacturing (except Retreading); Footwear Manufacturing; and Toilet Preparation Manufacturing. Some wholesale activities such as Other Grocery and Related Products Merchant Wholesalers; and Other Chemical and Allied Products Merchant Wholesalers, are also included in this category.



Source: Xopolis estimates of EMSI job postings. More discussion on data and methodology is presented in the Appendix.

JOBS POSTING ON THE RISE FOR GLOBAL FIRMS

Labor demand for global trade and logistics companies increased over 33 percent from 2017 to 2019 and continues to grow regionally.⁴ Relatively speaking, the growth in job postings for global traders outpaced that of the whole region by nearly 7 percentage points over the same time. This suggests an increasing importance of global trade and logistics companies in the region.

Our data allowed us to look at job postings for each month of the last 3 years (Figure 2). Our results concluded that there has been a substantial increase in job postings over the last 3 years by companies which have international trade activity.

Figure 2 provides comparative data for the ten municipalities in Ventura County, including total current jobs, projected job change, real-time job openings, and net commuters.

The data confirms that Ventura County has a widely distributed jobs base, though with only moderate projected job growth and a consistent pattern of labor exports, with significant numbers of most every city's labor force finding jobs outside the County. This is the result both of a shortage of local employment opportunities and the County's proximity to the larger job markets in the Los Angeles metropolitan region.

Labor demand from global trade and logistics companies for the first three quarters in 2019 was 33 percent higher than over the same period in 2017, and continues to grow regionally.

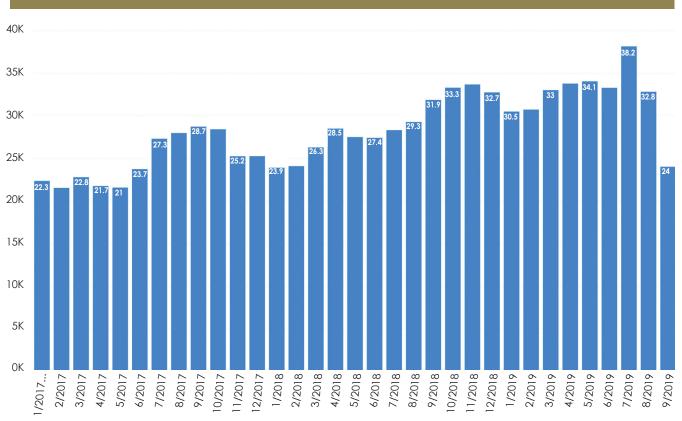


FIGURE 2. GLOBAL TRADERS JOB POSTINGS, 2016-2019

Source: Xopolis estimates of EMSI job postings. More discussion on data and methodology is presented in the Appendix.

4. We compared postings for months of January to September for each year, as data for the rest of 2019 is not yet available.

For example, between January and September 2017, there were 217,638 job postings by internationally trading companies, and in 2019 there were 290,322 job postings by internationally trading companies in the region, an increase of 33 percent. Comparatively, total job postings for the region grew 27 percent over the same period. This upward trend underscores that not only are global trade and logistics companies an important part of our economy but the job opportunities within these companies are increasing faster year over year than the rest of the economy.

Table 1 below breaks down the growth in job posting by industry clusters. It also reports the relative change for international trade companies compared to all companies in our three-county region.

Figure 4 focuses on projected job growth, through 2024. The largest job growth over the next five years is anticipated to continue in traditional service oriented sectors including the Health Care and Social Assistance cluster (including educational services) at a 20% growth rate adding over 6,000 jobs, and the Hospitality cluster at 7% growth rate. The Management of Companies and Administrative Support cluster is expected to experience sizable growth adding more than 2,250 jobs combined over the next five years.

Construction is projected to grow by 6%, adding over 1,300 jobs within the next five years, and the Professional, Technical, and Information cluster will continue to increase by a projected 985 jobs over the same time period.

It is noteworthy to highlight that although the manufacturing sector displays negative projected growth, the sector remains the largest single contributor to economic output in the County. For more on the manufacturing sector, see the Economic Output section below.

TABLE 1. JOB POSTINGS GROWTH 2017 – 2019 GLOBAL TRADERS VS ALL COMPANIES

	2017 - 2019 % Change in Job Postings			
	Galobal Trade & Logistics (%)	All Companies (%)	Relative Change (pp)	
ICT & Digital Media	73	30	42	
Advanced Manufacturing	72	45	27	
Life Sciences & Biotechnology	52	34	19	
Other	45	28	17	
Advanced Transportation & Logistics	-6	-4	-1	
Retail, Hospitality, Tourism	21	23	-2	
Business & Entrepreneurship	15	35	-20	
Agriculture, Water & Environmental	-16	6	-22	
Energy, Construction & Utilities	-4	50	-55	
LA, Ventura, Santa Barbara & San Luis Obispo Counties	33	27	7	

* Postings between January to September for each year are included to match available data for 2019. Source: Xopolis estimates of EMSI job postings data.

Notably, labor demand for global traders in the ICT & Digital Media; Advanced Manufacturing; and Life Sciences & Biotechnology clusters are growing fastest relative to their peers at 42 percentage points, 27 percentage points, and 19 percentage points higher respectively.

On the other hand, labor demand for global traders in Energy, Construction & Utilities; Agriculture, Water & Environment; and Business & Entrepreneurship clusters are declining fastest relative to their non-trade peers by -55 percentage points and -22 percentage points, respectively.

The relative increases and declines align with expectations of clusters where global trade activity is likely more concentrated compared to more local-serving clusters such as Business & Entrepreneurship.

EDUCATION AND SKILLS BY CLUSTER

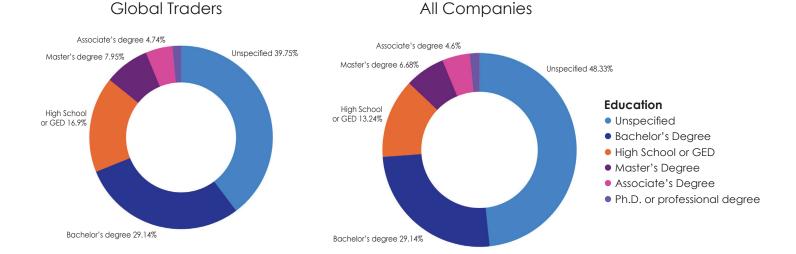


Hiring behavior of global trade and logistics businesses is significantly different than their peers, even those in the same industries. Companies involved in global trade and logistics activities require more skilled labor, relative to others in the region.

As displayed in Figure 3 below, a higher proportion of international trade companies list a bachelor's or a master's degree as a requirement in their job postings, nearly 5 percentage points more.

Similarly, a smaller proportion of international trade companies list a high school diploma or do not specify any educational requirements in their job postings, nearly 8.5 percentage points fewer. This suggests that companies in international trade seek more high-skilled talent than other businesses in the three-county region.

FIGURE 3. EDUCATIONAL REQUIREMENTS FOR TRADERS VS ALL COMPANIES IN REGION



Source: Xopolis estimates of EMSI job postings data. More discussion on data and methodology is presented in the Appendix.

A further critical comparison that we made in our study was comparing the relative percentage of job titles, certifications, and educational fields demanded by global traders as compared to their non-trade regional peers (Figure 4).

This comparison revealed that specific job titles such as retail operations, sales, distribution, and management were in higher demand in global companies than in non-global companies. Along the lines of certifications, our findings indicated that Master of Business Administration, Series 7 general security certifications, financial planning, and project management professionals were among those certifications most sought after by global companies. The top skill sets demanded are sales, customer service, leadership, operations and problem-solving

We narrowed our analysis to companies with primary business activities in the Advanced Transportation and Logistics cluster and found that global traders have higher skills demand even in a trade-driven industry. We found that for global traders, 28 percent required a high school diploma or GED, 7.8 percent required an associate's degree, 48 percent required bachelor degrees, and 13 percent had master's degrees with the remaining 3% having doctorates.

This is characteristic of an industry with high skill demand. In comparison, more than 76 percent of job postings by companies in this cluster that do not trade internationally did not specify any degree requirements, with a significant majority of these job posting seeking Truck and Bus driver.

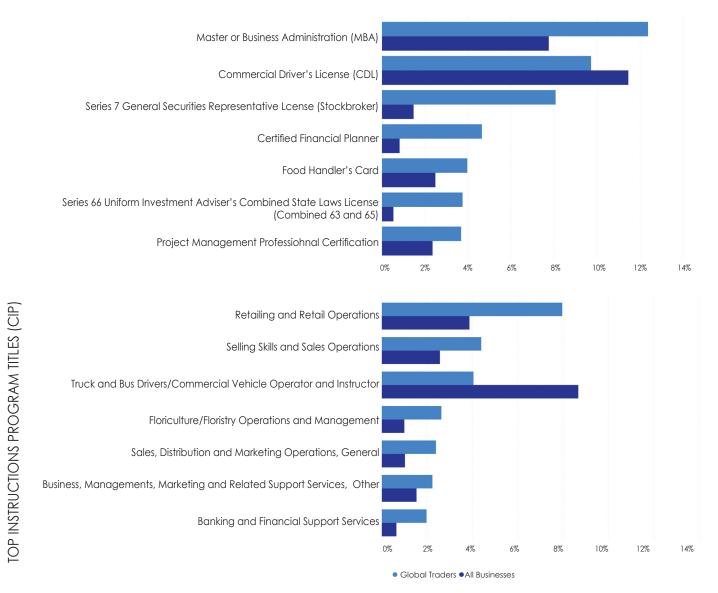


FIGURE 4. FIELDS OF STUDY FOR GLOBAL TRADERS VS ALL BUSINESSES IN REGION

Source: Xopolis estimates of EMSI job postings data. More discussion on data and methodology is presented in the Appendix.

GLOBAL TRADERS TOP COMPANIES AND JOBS BY INDUSTRY CLUSTER

When investigating job opportunities offered by global trade companies, overall our findings indicate that the median salary for global traders was slightly higher than those firms which did not. Our findings also indicated that overall, there were slightly higher rates of full-time employment to part-time employment of global traders compared to non-traders.

In investigating the relative occupational demand for global trade companies, we found that positions such as marketing manager, software developer, customer service, sales managers, industrial engineers, operations, marketing, and management analysts were in higher demand for those companies that were global.

As an example, our research indicated that global companies had twice as many postings for marketing and operations managers compared to non-trading firms. In the area of logistics, operations managers, purchasing, and distribution managers had double the demands compared to their non-global counterparts.

Our research also identified the names of the firms that had the most job postings. For instance, among our global trader's companies like Northrop Grumman, Oracle Bank of America, and Disney all had well over 10,000 job postings in our study period.



FIGURE 5. TOP OCCUPATIONS BY JOB POSTINGS FOR GLOBAL TRADERS

Global Traders
 All Businesses

MEDIAN SALARY Global Traders All

\$58.86K

All Businesses

\$57.45K

EMPLOYMENT TYPE

Employment type	Global Traders	All Businesses
Fulltime (>32 hours)	89.97%	88.28%
Part-time(<32 hours)	6.66%	7.51%
Part-time/full-time)	3.37%	4.21%

Source: Xopolis estimates of EMSI job postings data. More discussion on data and methodology is presented in the Appendix.

GLOBAL TRADE VS. NON-TRADE PERSONAS & INTERACTIVE DASHBOARD

To root out research and findings in a policy-framework, our analysis explored the differences between global and non-global employment in terms of job posting personas. For example, depending upon the type of cluster and industry, median salaries and educational attainment in job titles can vary substantially.

These findings and other analytic tools are made available by an interactive dashboard database in our study. This dashboard tool, a first of its kind, will enable students, academics and policymakers to explore the various types of career positions, pay levels, and qualifications on industry, job skill, and company level. The aim is to give texture to the vast amount of opportunities in global trade.

Figure 6 below provides a snapshot of this interactive tool that juxtaposes simulated candidate resumes based on aggregated information contained in job postings. The information contained in each panel reflects the median salary, the total number of job postings in our dataset, and rank ordered lists of the education, skills, job titles, certifications, and fields of study for an "average" candidate in each sector and 6-digit detailed NAICS industry, that is selectable in the interactive format.

This interactive dashboard is the first of its kind and represents a novel policy tool for quick comparison of the global trade and logistics workforce at a detailed level of disaggregation. The information contained in this report is a subset of all the data available through the online dashboard.

Our goal is to make the data and analysis presented in this report transparent and accessible for policymakers, educators, and students, to explore in detail our report findings.

The dashboards are made up of a variety of interactive demographics that allow for exploration into the various types of comparisons of trade and non-trade firms in education, skill levels, opportunities, and compensation. Each of these interactive graphics allows for customization that will enable those interested in specific careers or companies to better understand the career demands in an ever-increasing global economy.

FIGURE 6. CANDIDATE PERSONAS FOR GLOBAL TRADE AND NON-TRADE BUSINESSES

Candidate in Trade Company

Candidate in Non-Trade Company

¢ = 0,0 / 1/	2/0//	SELECT CLUSTER		214
\$58.86K 369K	All	\$57.45K	3M	
Median Salary	Number of Postings		Median Salary	Number of Postings
Education	Skills	SELECT INDUSTRY	Education	Skills
Unspecified	Selling Techniques Leadership Witter Communication Problem Source Management Microsoft Offer Presentations Sales Operations Innovation Sales Operations	All	Unspecified	Communications Leadership
39.75%	Presentations Sales Operations Innovation Sales Operations Customer, Service		49.33%	CommunicationsLeadership
Bachelor's degree 29.14%	Communications Customer Experience Merchandising Microsoft Excel		Bachelor's degree	Microsoft Excel Sales problem Solving Operations Valid Driver's License Workten Communication Provided Briver's License Accounting Restauration
1		POWERED BY	1	
Jc Retail Sales Associates	bb Titles	California	Job	Titles
4.89%		Community	3.12%	
Customer Service Representativ	ves (Office and Administrative Support)	Colleges	Registered Nurses	
2.36%			2.30%	
Cer	tifications		Certifi	cations
Master Of Business Administrati	ion (MBA)	ECONOMIC	Commercial Driver's License (CDL)	
12.37%		EDC DEVELOPMENT COLLABORATIVE	11.62%	
Commercial Driver's License (CDL)			Master Of Business Administration ()	MBA)
9.72%			7.31%	
• • • • • • • • • • • • • • • • • • • •	resentative License (Stockbroker)		Bachelor of Science in Nursing (BSN)	
Retailing and Retail Operations.		CIP Title Truck and Bus Driver/Commercial Vehicle Operator and Instructor.		
7.96%			9.19%	
Selling Skills and Sales Operations.		XOPOLIS	Retailing and Retail Operations.	
4.38%			3.40%	

Candidate in Trade Company

Candidate in Non-Trade Company

		SELECT CLUSTER			
\$63.14K 44K	Business & Entrepreneurship	\$56.46K	621K		
Median Salary	Number of Postings	 Advanced Manufacturing Advanced Transportation & Logistics 	Median Salary	Number of Postings	
Education	Skills	Agriculture, Water & Environmental	Education	Skills	
Unspecified 47.96% Bachelor's degree 31.28%	Leadership Sales Loans Customer Service Internations Financial Services Investments Communications Mortgage Loans Public Solving	Business & Entrepreneurship Energy, Construction & Utilities ICT & Digital Media Life Sciences & Biotech Other Retail, Hospitality, Tourism	Unspecified 41.10% Bachelor's degree 33.48%	Reserch Customer Service Operations Innovation With Communication Microsoft Exel Microsoft Exel Sales, Problem Soling Communications while these term	
-	Job Titles		Job Titles		
Bank Tellers 7.68%		POWERED BY 1.51%		2)	
Financial Advisors (Business and Financial Operations) 5.77% Certifications		California Community Colleges	Insurance Sales Agents		
			Certifications		
Series 7 General Securities Rep 27.55%	presentative License (Stockbroker)	Coneges	Master Of Business Administration (MBA) 15.08%		
Certified Financial Planner 15.73%		EDC ECONOMIC : DEVELOPMENT	Certified Public Accountant 5.32%		
Series 66 Uniform Investment Adviser : Combined State Laws License (COLLABORATIVE	Project Management Professional Certification		
	CIP Title		CIF	P Title	
Banking and Financial Support S	Services.		Retailing and Retail Operations.		
15.18%		XOPOLIS	2.45%		
Finance, General.			Business Administration and Manag	rement General	
7.56%			1.66%		
Einstein Dianning and Comilean					

Global Trader's Job Postings for Select Middle-Skill Job Groups

Select Middle-Skill Category	Middle-Skills Jobs	Occupation Title	Global Traders (%)	All Businesses (%) 🔨
Buyers and Purchasing Agents Cost Estimators Customs Brokers	E-Commerce	Marketing Managers	24.39%	23.70%
	E-Commerce	Sales Managers	15.25%	17.45%
E-Commerce First-Line Supervisors	Sales Representatives	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	9.25%	12.73%
 First-Elie Supervisors Logistics Sales Representatives Wholesale and Retailer Buyers 	Sales Representatives	Sales Representatives, Services, All Other	8.17%	11.40%
	Sales Representatives	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	7.65%	5.54%
	E-Commerce	Business Operations Specialists, All Other	5.90%	7.87%
	Wholesale and Retailer Buyers	Purchasing Agents, Except Wholesale, Retail, and Farm Products	4.66%	3.37%
	Logistics	Logisticians	4.34%	1.85%
Agriculture, Water	Logistics	Laborers and Freight, Stock, and Material Movers, Hand	4.17%	3.16%
Life Sciences & Environmental - 1K & Biotech - 2K Business & Entrepreneurship - 3K	Logistics	First-Line Supervisors of Transportation and Material- Moving Machine and Vehicle Operators	3.88%	3.78%
	Logistics	Shipping, Receiving, and Traffic Clerks	3.73%	1.95%
	Logistics	Production, Planning, and Expediting Clerks	2.30%	1.72%
ICT & Digital	Logistics	Storage and Distribution Managers	1.68%	1.00%
Other - 4K	Logistics	Cargo and Freight Agents	1.14%	0.53%
Advanced Transportation & Logistics -5K	Wholesale and Retailer Buyers	Wholesale and Retail Buyers, Except Farm Products	0.93%	0.44%
	Logistics	Transportation Managers	0.60%	0.55%
	Cost Estimators	Cost Estimators	0.58%	1.33%
	Customs Brokers	Customs Brokers	0.42%	0.18%
	Logistics	Logistics Managers	0.22%	0.13%
	E-Commerce	Security Management Specialists	0.20%	0.07%
	Logistics	Logistics Analysts	0.14%	0.06%
Refuil, Hospitality,	E-Commerce	Online Merchants	0.10%	0.10%
Manufacturing - 6K Tourism -12K	First-Line	First-Line Supervisors of Helpers, Laborers, and Material	0.09%	0.08%
	Total		100.00%	100.00% ~

Source: Screenshot of EDC and Xopolis' California's South-Central Coast Global Trade Workforce Interactive Dashboard.

SUMMARY

Our research demonstrates that businesses engaging in global trade are characteristically different in their labor demand than their peers who do not trade internationally. Specifically, global traders have a higher demand for higher quality, higher paying jobs than their non-trading counterparts. We also identified that these jobs require more intensive training and education than counterparts, creating a challenge both for the workers that seek to fill those jobs and for the educational institutions that seek to train and prepare them for the opportunities.

Rising to that challenge, our research—particularly as made available through an online dashboard tool <u>https://bit.ly/207imPs</u> including educational attainment, skill sets and certifications, that industry demands.

We are thankful to the California Community College, Economic Workforce Development for funding this research and for its commitment to creating the information and curriculum that supports both workers and employers in their shared efforts to thrive in the fast-growing global economy.

APPENDIX A

Methodology

This research report has taken a novel three-step approach.

First this report uses data collected on firm-level import and export shipment activity over the last three years in Los Angeles, Ventura, San Luis Obispo and Santa Barbara counties. This data was collected using the Journal of Commerce "Piers" database, which is the definition of Global Trade Companies for this report. This database uses information collected on import and export ocean bills of lading and represents about 90% of all shipment volume recorded.

Second, this report matched that data with establishment-level economic time series data allowing us to look at the economic performance of those companies conducting international trade activity against those firms that have not. This data was collected using the YTS (Your Time Series) database.

Last, this report matched all of that data to all of the electronic job postings for both the global trading firms as well as their non-trading counterparts. This data was collected using the EMSI Labor market analytics database. By being able to compare the job postings of these trading and non-trading firms we were able to identify the jobs and skill sets that were in demand over their non-trading counterparts.

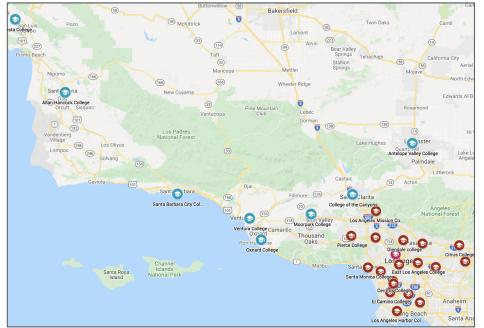
LOS ANGELES AND SOUTH CENTRAL COAST REGIONS CALIFORNIA COMMUNITY COLLEGES

LOS ANGELES REGION

Ventura College

🙆 Cerritos College 😔 Los Angeles Southwest College 😒 Citrus College 😂 Los Angeles Trade Technical College 📀 Compton College S Los Angeles Valley College 😂 East Los Angeles College 🔕 Mt. San Antonio College 🔕 El Camino College 😂 Pasadena City College 📀 Glendale College Pierce College 😂 Long Beach City College 🗿 Rio Hondo College 😂 Los Angeles City College 😒 Santa Monica College 😏 Los Angeles Harbor College 🛛 😏 West Los Angeles College 😂 Los Angeles Mission College SOUTH CENTRAL COAST REGION Oxnard College Antelope Valley College 오 Santa Barbara City College Sollege of the Canyons Allan Hancock College Moorpark College

Cuesta College



As the largest system of higher education in the nation, the California Community Colleges is uniquely positioned to help residents of all backgrounds improve their career and income potential while creating a better future for themselves and their families. Our 115 colleges serve more than 2.1 million students annually and transfer nearly 80,000 each year to the University of California and California State University systems while providing hundreds of thousands more with the skill-based, career-centered education needed to secure good-paying jobs.

With low tuition and a longstanding policy of full and open access, the California Community Colleges are designed around a remarkable idea, that higher education should be available to everyone.

