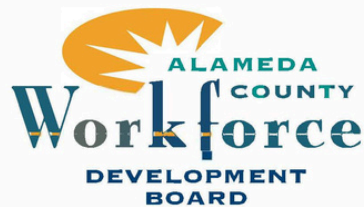




# ECONOMIC & WORKFORCE ANALYSIS PY2025 - 2028



In Partnership with  East Bay

## Table of Contents

<b>1. POPULATION AND MIGRATION TRENDS</b>	<b>3</b>
<b>2. LABOR FORCE PARTICIPATION AND UNEMPLOYMENT</b>	<b>7</b>
<b>3. EDUCATIONAL ATTAINMENT AND IN-DEMAND DEGREES AND SKILLS</b>	<b>10</b>
<b>4. MAJOR INDUSTRIES, OCCUPATIONS, AND IN-DEMAND JOB POSTINGS</b>	<b>15</b>
<b>5. THE EAST BAY'S TARGETED AND STRATEGIC INDUSTRIES</b>	<b>21</b>
– CONSTRUCTION	22
– HEALTH CARE & SOCIAL ASSISTANCE	25
– MANUFACTURING	28
– MARITIME	33
– PROFESSIONAL, SCIENTIFIC, AND TECHNICAL SERVICES	36
– INFORMATION	40
– PUBLIC ADMINISTRATION AND EDUCATION	43
– TRANSPORTATION & WAREHOUSING	46
<b>6. TRENDS IMPACTING THE FUTURE OF THE EAST BAY WORKFORCE</b>	<b>50</b>
<b>7. APPENDIX</b>	<b>52</b>

# Analytical Overview of the East Bay

The East Bay has a strong reputation as a highly productive, dynamic, and innovative economy with a skilled and educated workforce serving a wide range of businesses in the greater Bay Area. For decades, the region has become a major hub for innovation and entrepreneurship, anchored by top-tier institutions such as UC Berkeley, California State University-East Bay, ten community colleges, and three national laboratories, giving employers direct access to abundant talent. It is in many ways not surprising that Lightcast, a global leader in labor market analytics, forecasts that the East Bay economy will outpace the statewide job growth of 7%, achieving an 8% increase between 2023 and 2033 (**Figure 1**).

While highly productive and diverse, the future of jobs is complex and evolving. Like most advanced economies, the East Bay economy is undergoing a profound transformation driven by rapid advances in artificial intelligence, high performance computing, and automation. These innovations are fundamentally changing how work is organized and the types of workers and skills needed now and in the future. Additionally, post-pandemic shifts have altered where work is performed, and challenges related to the Bay Area's high cost of living and access to education and training resources will continue to exacerbate economic disparities if proactive interventions are not being made. Tracking current and emerging workforce needs, planning for regional economic development efforts, and aligning resources for strategic action will be crucial to creating an environment where all East Bay workers and residents can thrive and access the Bay Area's tremendous opportunities.

Intended to inform the broader Regional Plan being undertaken by the EASTBAYWorks partnership of the four East Bay workforce development boards, this chapter will explore regional and county-level current and recent past data trends on the following topics:

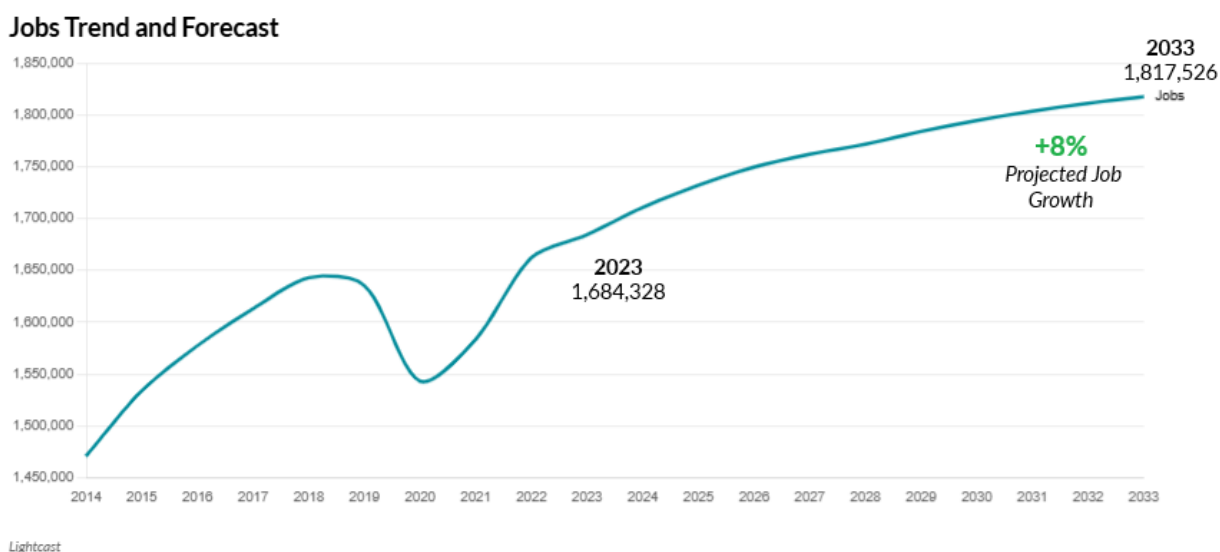
1. Population and Migration Trends
2. Labor Force Participation and Unemployment
3. Educational Attainment and In-Demand Degrees and Skills
4. Major Industries, Occupations, and In-Demand Job Postings
5. The East Bay's Targeted and Strategic Industries
6. Trends Impacting the Future of the East Bay Workforce
7. Appendix

This report will primarily utilize data from Lightcast, which derives workforce data and insights from official government sources such as the U.S. Census Bureau, Bureau of Economic Analysis, and Bureau of Labor Statistics, as well as real-time labor market trends of job posting platforms.<sup>1</sup> Data limitations are discussed in **Appendix A. Data Limitations**

---

<sup>1</sup> Lightcast Data Overview. <https://lightcast.io/products/data/overview>

**Figure 1. East Bay Jobs Trend and Forecast**



Updated 11-15-2024

Dashboard by **eIMPACT**.  
A Lightcast Company

Source: Lightcast, 2024.

## 1. Population and Migration Trends

### Population & Birth Rates

According to the California Department of Finance, the East Bay's population was 2,788,495 as of January 2024. Alameda County's population represented nearly 60 percent of the regional population and Contra Costa County constituted 40 percent. Between 2020 and 2024, the population declined by nearly 59,800 residents, or 2 percent—a slightly higher rate of decline than the state overall at 1 percent.

Over the next five years (2025-2030), the State of California projects the population in Alameda and Contra Costa counties will grow by 2.1 percent and 1.2 percent, respectively, while it projects an increase of 1.4 percent statewide (**Figure 2**).

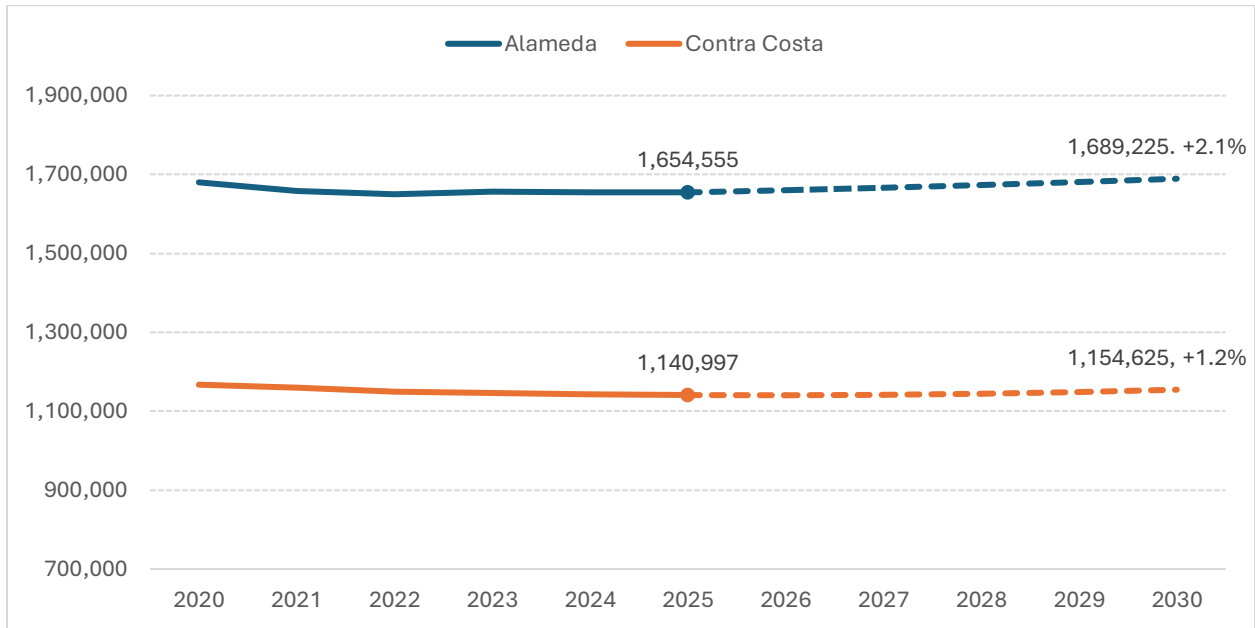
Both the region and the state are seeing a decline in birth rates. In 2023, the East Bay recorded approximately 27,300 births, down from 30,000 in 2019, marking a 9 percent decrease. Alameda County experienced an 11 percent decline, while Contra Costa County saw a 5 percent drop. Statewide, birth rates fell by 11 percent between 2019 and 2023.

The State projects that this downward trend will continue over the next decade, with birth rates expected to gradually increase after 2035. The State projects that birth rates will continue to decrease over the next 10-year period and will gradually increase after year 2035.

### Net Migration of East Bay Residents

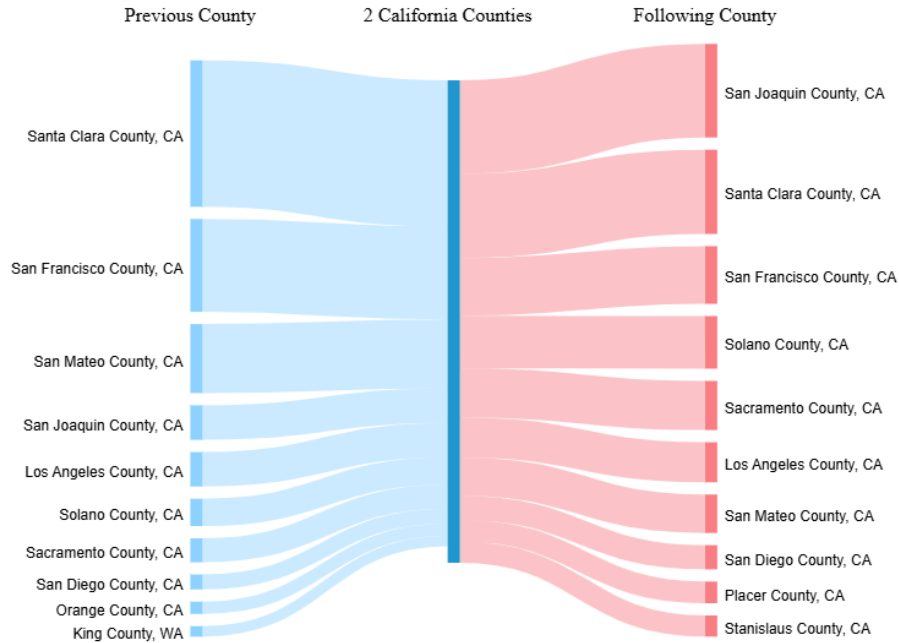
As of 2022 (the latest available data from the Internal Revenue Service), the East Bay saw a negative net migration of nearly 31,000 residents, indicating that more people moved out of the region than moved in that year. **Figure 3** shows the top counties experiencing inbound and outbound migration of East Bay residents.

**Figure 2. Population by County, 2020-2030 (Projected)**



Source: CA Department of Finance, 2024.

**Figure 3. Inbound and Outbound Migration, 2022**



Top Previous Counties	Migrations	Top Following Counties	Migrations
Santa Clara County, CA	15,539	San Joaquin County, CA	9,936
San Francisco County, CA	9,859	Santa Clara County, CA	8,939
San Mateo County, CA	7,319	San Francisco County, CA	6,121
San Joaquin County, CA	3,668	Solano County, CA	5,582
Los Angeles County, CA	3,653	Sacramento County, CA	5,219
Solano County, CA	2,902	Los Angeles County, CA	4,248
Sacramento County, CA	2,545	San Mateo County, CA	4,077
San Diego County, CA	1,581	San Diego County, CA	2,561
Orange County, CA	1,302	Placer County, CA	2,300
King County, WA	1,111	Stanislaus County, CA	2,246

Note: The left column shows residents of other counties migrating to the East Bay. The right column shows residents migrating from East Bay to other counties.  
 Source: IRS, 2022; Lightcast, 2024.

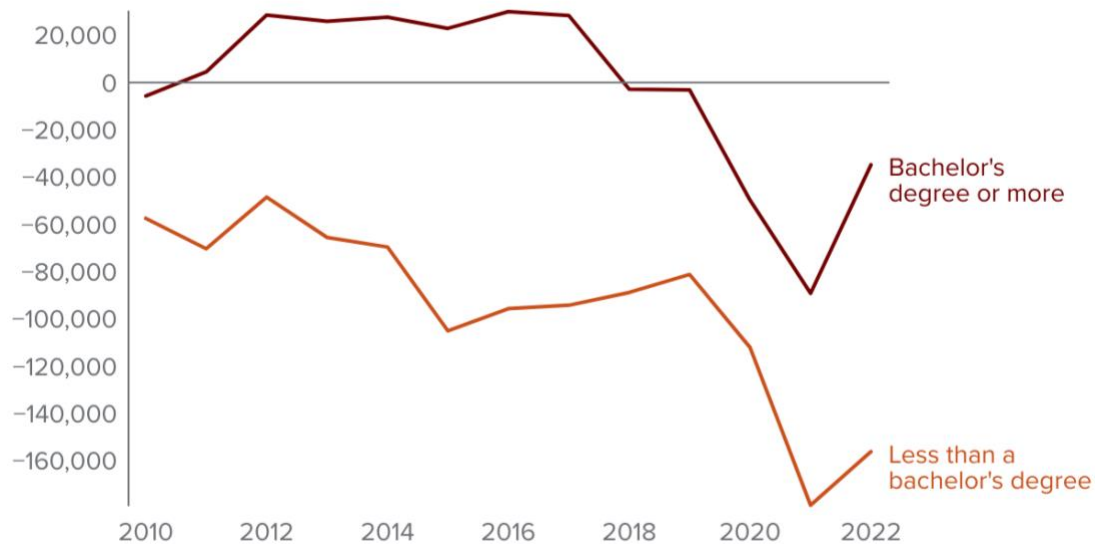
## Statewide Trends

According to the Department of Finance, the state has been experiencing a net migration loss for several years, in which the number of people moving out of the state in a year exceeds the number moving in. Since 2016, net domestic outmigration has exceeded net international migration, leaving natural increase as the only source of population growth. Natural increase is constrained by continuing fertility declines and increased deaths from an aging population.

Regarding international migration to the state, it reached 115,900 people in the year preceding July 2023, nearing pre-COVID-19 pandemic levels. While net international migration added population during this period, negative domestic net migration still outweighed these gains, resulting in an overall net migration loss of 144,500 residents.

According to the Public Policy Institute of California, the state has begun losing college graduates, although not as significantly as those with less education.<sup>2</sup> However, there's been a slight turnaround: the net loss of college graduates significantly decreased in 2022. California is once again attracting young college graduates in their 20s, achieving a net gain of over 20,000 in this group in 2022. This shift is crucial for a state economy that increasingly relies on highly educated workers. Notably, 2021 was the only year since 2000 that California experienced a net loss among young college graduates, marking a return to a long-standing trend, as shown in **Figure 4**.

**Figure 4. Net Interstate Migration by Educational Attainment, ages 20-64**



Source: American Community Survey accessed via IPUMS; PPIC analysis, 2024.

## 2. Labor Force Participation and Unemployment

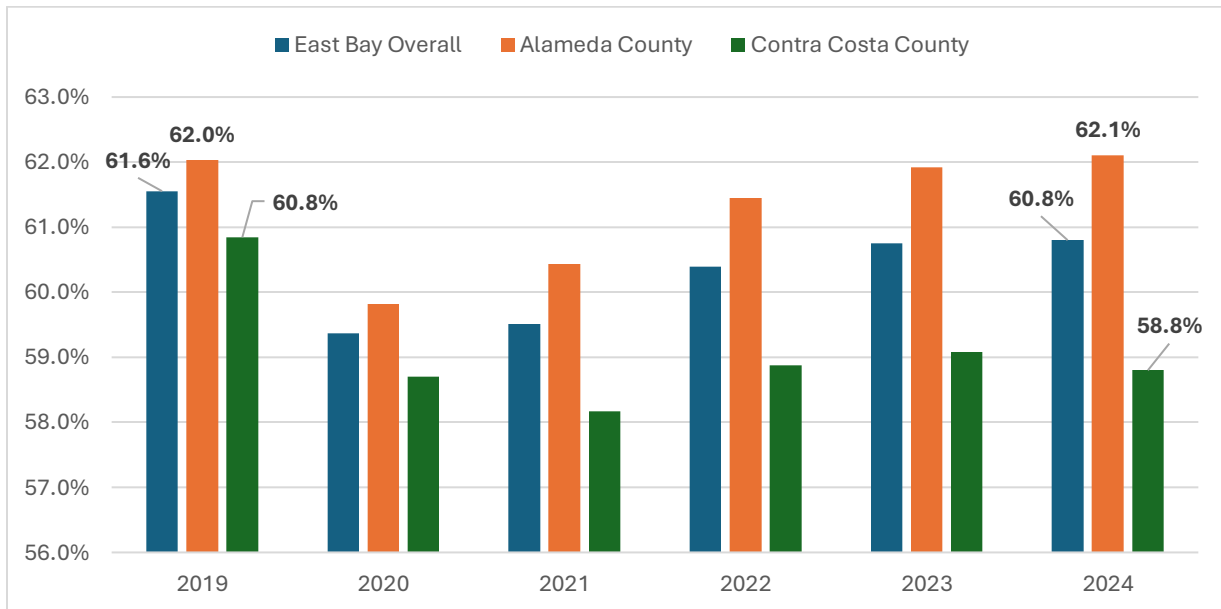
**The Labor Force Participation Rate** is the percentage of the population ages 16 and older who are employed or actively looking for work, as a share of the total non-institutionalized civilian working-age population. The labor force participation rate is an important economic indicator of current labor market trends and a metric to gauge the overall health of the economy.

As of December 2024, the East Bay's overall labor force participation rate was 60.8 percent, 62.1 percent in Alameda County, and 58.8 percent in Contra Costa County, as shown in **Figure 5**. While the East Bay overall and Alameda County have made a full recovery since pre-pandemic (2019) levels, Contra Costa County is experiencing a slight lag.

**The Unemployment Rate** measures the percentage within the labor force who are currently without a job. Unlike the labor force participation rate, the unemployment rate does not take into account those who have given up looking for work. Nonetheless, it is helpful to look at both rates together to better understand an economy's real employment status. A low unemployment rate and high labor participation rate, in general, indicate a healthy economy with plentiful job opportunities and low economic distress.

As of December 2024, East Bay's unemployment rate was 4.5 percent. Alameda County's unemployment rate stood at 4.5 percent, while Contra Costa County was slightly above at 4.6%. As shown in **Figure 6**, unemployment rates are gradually recovering from pre-pandemic levels, albeit a bit slower in Contra Costa County.

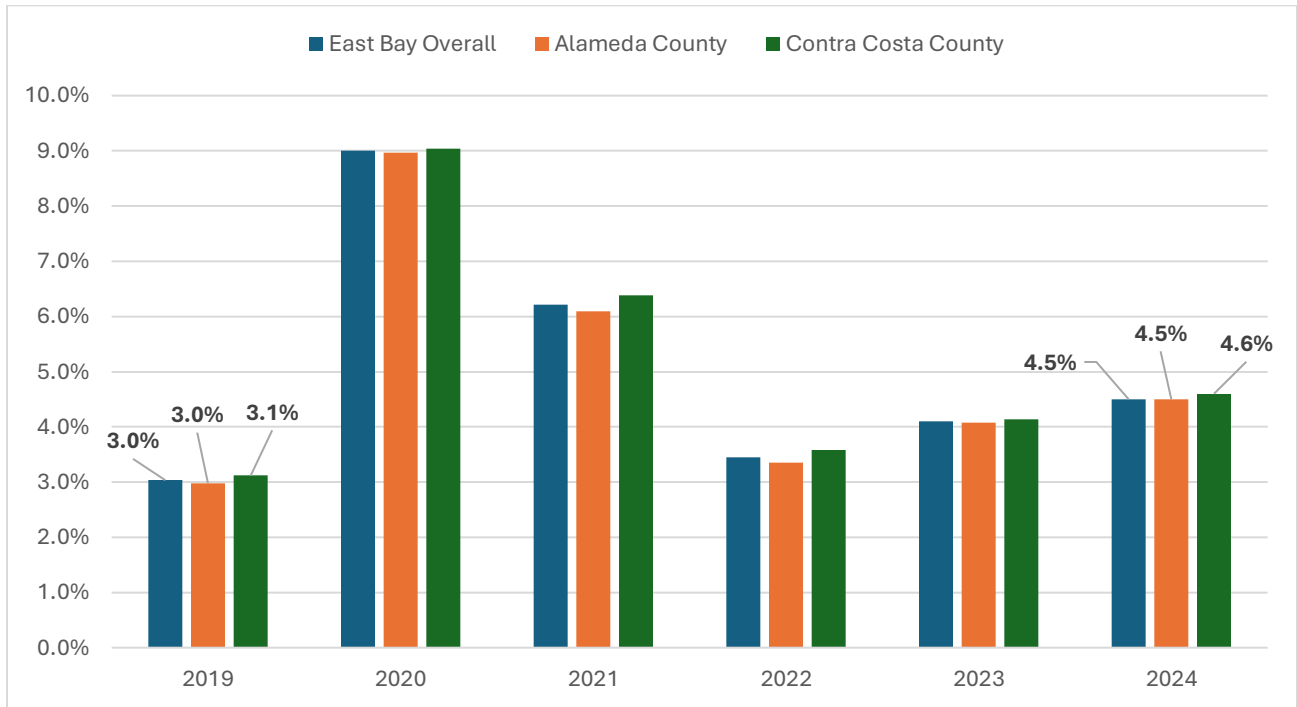
**Figure 5. Labor Force Participation Rates, 2019-December 2024**



Source: U.S. Bureau of Labor Statistics; Lightcast, 2025.



**Figure 6. Unemployment Rates, 2019-December 2024**



Source: U.S. Bureau of Labor Statistics; Lightcast, 2025.

### **A Closer Look at the Unemployed**

In the East Bay, the “prime working age” cohort (aged 25 to 54) who are currently unemployed stands at 67.4 percent. It is slightly higher in Alameda County (68 percent), and lower in Contra Costa County (66.6 percent), as shown in

**Figure 7.** One-quarter of the unemployed are found in the 55 years and older cohort in the East Bay overall and two counties.

Looking at the share of unemployed by race, the white population constituted 47.8 percent of unemployed East Bay residents, 44.4 percent in Alameda County, and 51.7 percent in Contra Costa County (

**Figure 7).** The second largest share were among the Asian population found highest in Alameda County at 33 percent. The percentage of unemployed Black residents stood at nearly 22 percent for the East Bay overall and in both counties (**Figure 8**).

As shown in

**Figure 9**, the top 3 occupations with the highest unemployment rates were in the Management (15 percent), Office & Administrative Support (11 percent), and Construction industries (10 percent).

**Figure 7. Percentage of Unemployed by Age, September 2024**

	<b>East Bay Overall</b>	<b>Alameda County</b>	<b>Contra Costa County</b>
<b>Unemployed Persons</b>	<b>62,192</b>	<b>36,944</b>	<b>25,248</b>
< 22	2.46%	2.32%	2.68%
22-24	5.36%	5.31%	5.43%
25-34	24.60%	25.31%	23.55%
35-44	22.71%	22.71%	22.69%
45-54	18.83%	18.76%	18.94%
55-59	10.21%	10.10%	10.36%
60-64	8.55%	8.46%	8.67%
65+	7.3%	7.04%	7.67%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

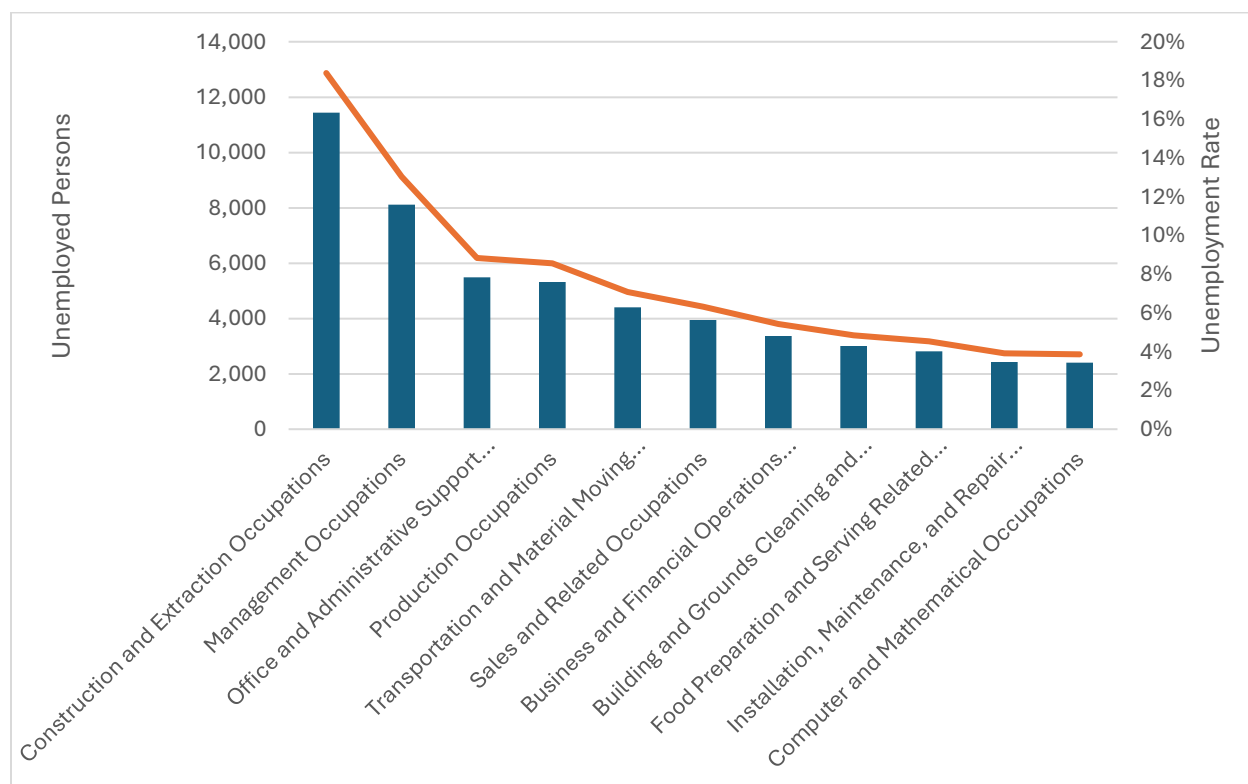
Source: U.S. Bureau of Labor Statistics; Lightcast, 2024.

**Figure 8. Percentage of Unemployed by Race, September 2024**

	<b>East Bay Overall</b>	<b>Alameda County</b>	<b>Contra Costa County</b>
<b>Unemployed Persons</b>	<b>62,192</b>	<b>36,944</b>	<b>25,248</b>
American Indian or Alaskan Native	1.42%	1.39%	1.47%
Asian	29.84%	33.32%	24.9%
Black or African American	21.96%	21.97%	21.94%
White	46.78%	43.42%	51.70%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source: U.S. Bureau of Labor Statistics; Lightcast, 2024.

**Figure 9. Unemployment Persons & Rates by Occupation, East Bay, December 2024**



Source: U.S. Bureau of Labor Statistics; Lightcast, 2025.

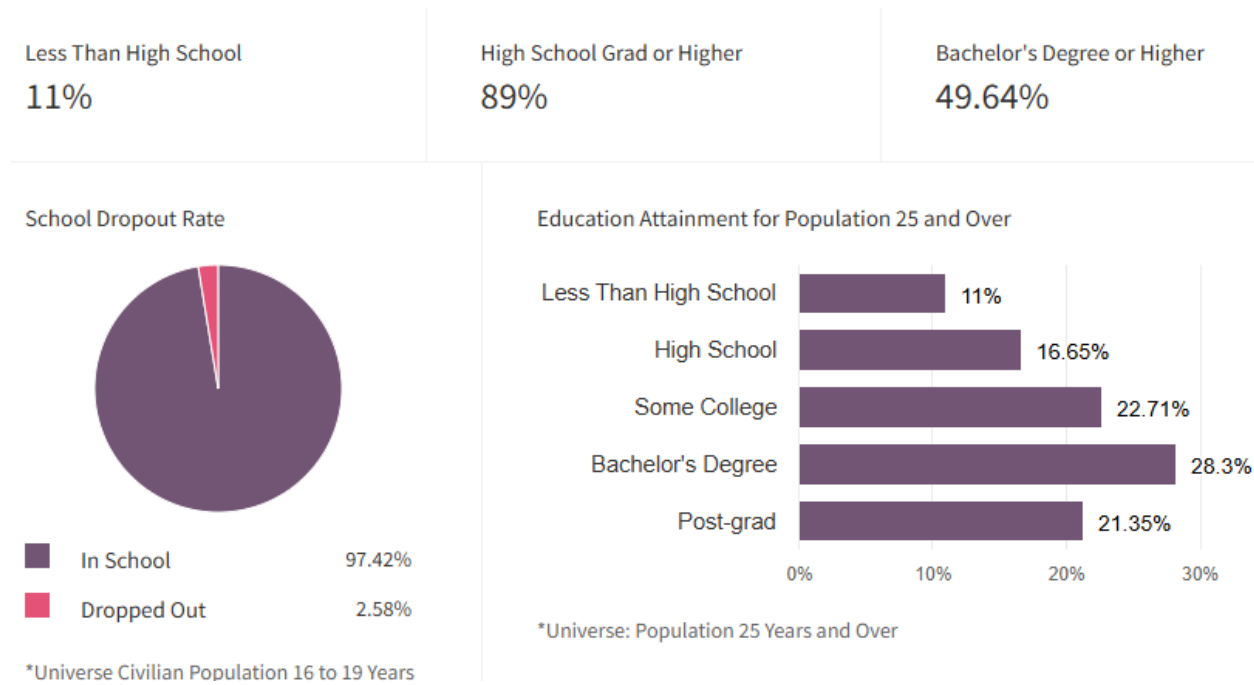
### 3. Educational Attainment and In-Demand Degrees and Skills

#### Educational Attainment

The East Bay region benefits from a highly-educated workforce with nearly one-half and 44 percent of residents holding a Bachelor’s Degree or higher in Alameda County and Contra Costa County, respectively (**Figure 10 and Figure 11**). In 2023, the East Bay saw 43,782 graduates from higher education institutions. About half of these graduates came from UC Berkeley and CSU-East Bay, the region’s four-year public institutions offering undergraduate and graduate programs. Overall graduation rates increased by 4 percent between 2019 and 2023.

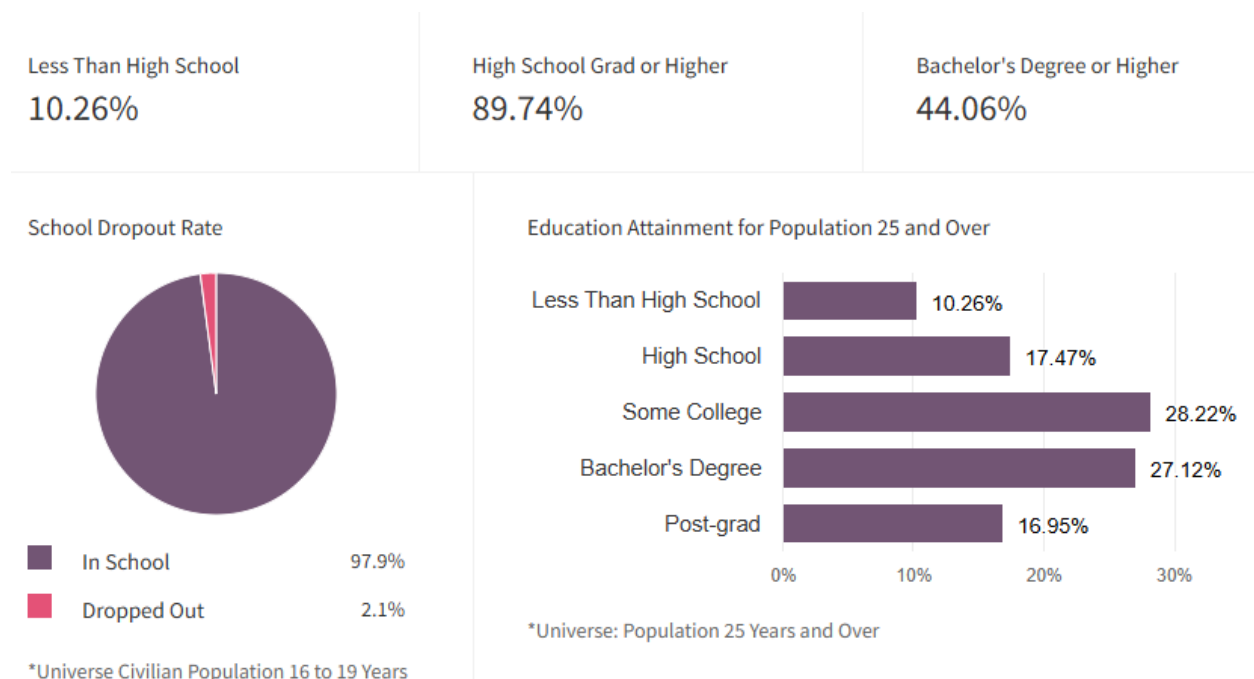
Graduation rates at East Bay community colleges have generally risen, with positive trends at Contra Costa, Chabot, and Las Positas colleges (**Figure 12**). However, rates at Diablo Valley and Ohlone colleges have been somewhat volatile. Laney College’s rates have remained relatively stable, while Unitek College, a for-profit healthcare-focused institution, has experienced modest growth since 2019.

**Figure 10. Educational Attainment: Alameda County, 2021**



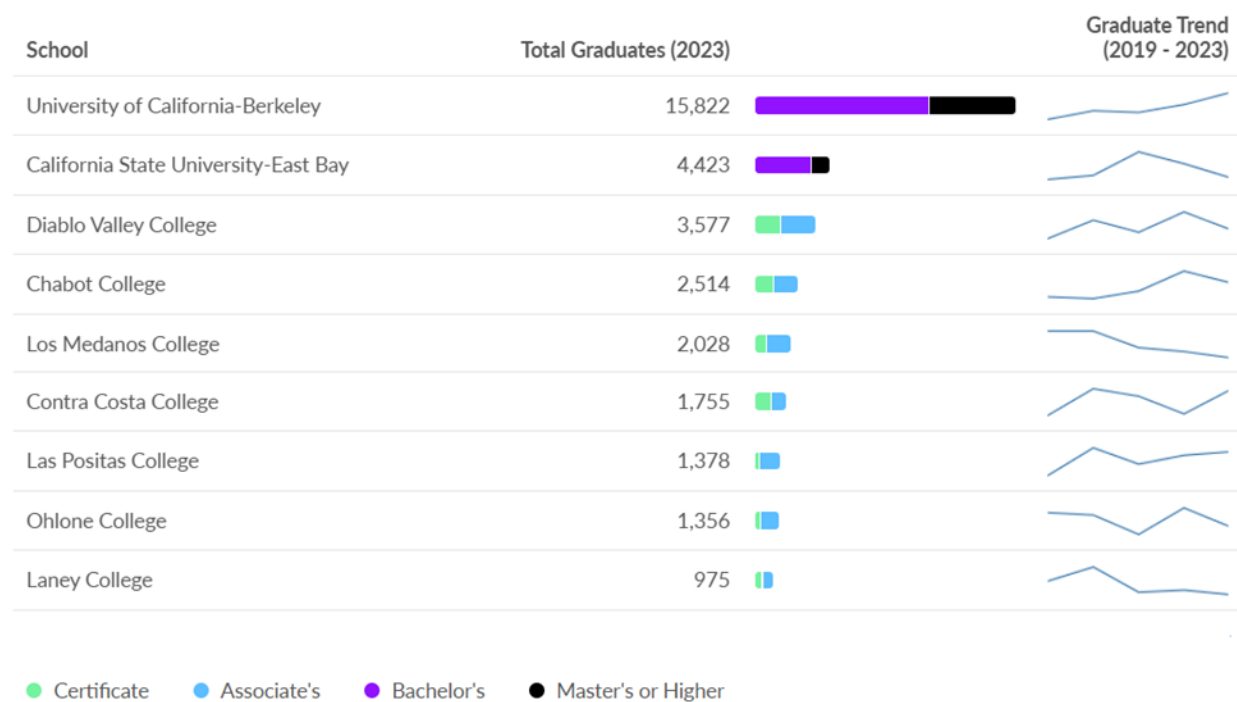
Source: U.S. Census ACS 5-Year Survey, 2021; Social Explorer.

**Figure 11. Educational Attainment: Contra Costa County, 2021**



Source: U.S. Census ACS 5-Year Survey, 2021; Social Explorer.

**Figure 12. Graduation Rates of East Bay Colleges: East Bay, 2023**



Source: National Center for Education Statistics' (NCES), Lightcast, 2024.

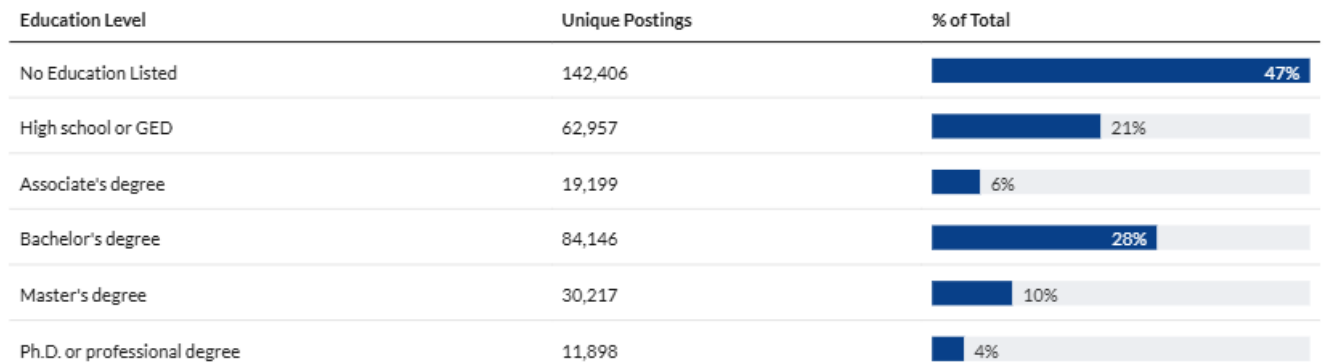
## In-Demand Degrees and Skills

Focusing on in-demand degrees and skills is crucial for several reasons. Employers are more likely to hire individuals with qualifications that match the current market needs. Understanding the types of in-demand degrees and skills can improve job prospects and career stability. Additionally, when educational and workforce institutions focus on these in-demand areas, they can tailor their programs to meet job market requirements, ensuring graduates are well-prepared for their careers. Training in high-demand fields helps individuals fill skill gaps, helping both local companies and communities drive economic growth.

Lightcast analyzes online job postings of popular job boards to provide valuable insights into real-time needs sought by regional employers. The following charts (**Figures 13 – 16**) show a two-year trend of the top-posted jobs by minimum education levels, in-demand degrees, specialized skills, and foundational or "soft" skills that are most frequently in-demand by employers.

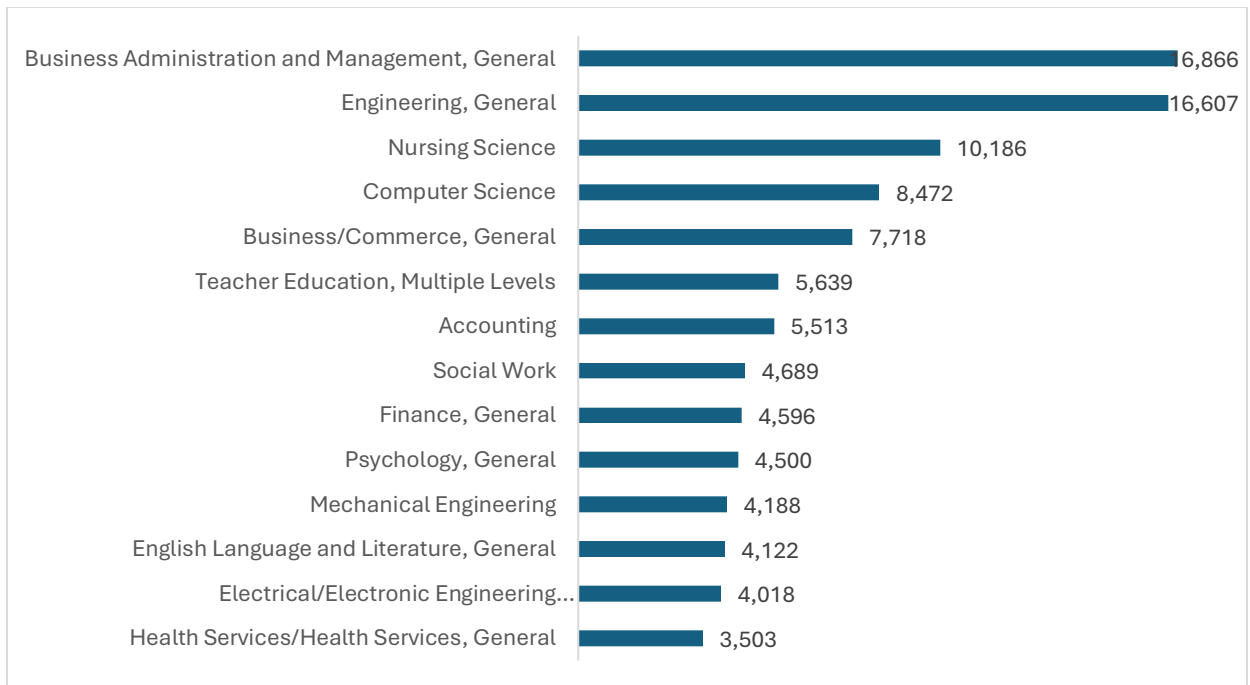


**Figure 13. Job Postings by Minimum Education Level**



Source: Lightcast, 2024.

**Figure 14. Top In-Demand Degrees, Unique Job Postings (September 2023-September 2024)**



Source: Lightcast, 2024.

**Figure 15. Growing Specialized Skills (September 2022-September 2024)**

Skills	Postings	% of Total Postings	Projected Skill Growth
Project Management	58,156	7%	19.8%
Marketing	45,146	6%	23.0%
Auditing	41,390	5%	21.8%
Nursing	37,983	5%	20.1%
Accounting	34,742	4%	24.0%
Finance	30,387	4%	27.3%
Data Analysis	26,190	3%	25.8%
Computer Science	22,997	3%	26.8%
Billing	22,382	3%	20.0%
Restaurant Operation	21,381	3%	28.0%
Process Improvement	20,428	3%	27.0%
Continuous Improvement Process	20,109	3%	23.4%
Customer Relationship Management	19,442	2%	22.1%
Purchasing	18,305	2%	19.6%
Automation	18,006	2%	30.5%

Source: Lightcast, 2024.

**Figure 16. Growing Common/Soft Skills (September 2022-September 2024)**

Skills	Postings	% of Total Postings	Projected Skill Growth
Problem Solving	96,353	12%	11.3%
Writing	93,371	12%	11.8%
Planning	83,836	10%	10.9%
Interpersonal Communications	78,851	10%	12.5%
Microsoft Excel	65,234	8%	17.7%
Coordinating	63,755	8%	14.7%
Research	63,443	8%	17.2%
Microsoft Office	60,700	8%	18.5%
Organizational Skills	60,156	8%	14.3%
English Language	59,526	7%	15.3%
Lifting Ability	57,245	7%	10.6%
Multitasking	56,100	7%	18.4%
Time Management	53,292	7%	14.5%
Self-Motivation	51,985	6%	22.7%

Source: Lightcast, 2024.

## 4. Major Industries, Occupations, and In-Demand Job Postings

### Industry Employment

As of 2023, there were 1.3 million jobs in the East Bay. The largest industries, in terms of employment, are led by Health Care and Social Assistance (15 percent of total jobs), Government (13 percent), Professional Scientific, and Technical Services (9 percent), Manufacturing (9 percent), and Retail Trade (8 percent), as shown in **Figure 17**. Combined, these industries constitute 714,824 jobs or 54 percent of the East Bay's total employment.

From 2018 to 2023, the region saw a decrease of nearly 5,000 jobs, or 0.4 percent. This decline was mainly due to losses in Retail Trade (-9,500 jobs, -8 percent), Wholesale Trade (-7,800 jobs, -16 percent), and Accommodation and Food Services (-6,400 jobs, -6 percent)—sectors hit hardest by government-mandated closures during the COVID-19 pandemic (**Figure 18**). Recovery in these industries has been slow.

On the flip side, industries that experienced the greatest job gains were in Health Care and Social Assistance (19,800 jobs, 11 percent growth), Transportation and Warehousing (10,900 jobs, 25 percent growth), Manufacturing (10,711 jobs, 10 percent growth), Professional, Scientific and Technical Services (4,700 jobs, 4 percent growth), and Utilities (1,565 jobs, 28 percent growth).

As shown in **Figure 19**, the industries with the greatest concentration, or highest location quotient (LQ), in the East Bay are in Utilities (1.6), Professional, Scientific and Technical Services (1.32), Construction (1.18), Health Care and Social Assistance (1.17), Management of Companies and Enterprises, and Manufacturing (1.12). Location quotient (LQ) is a way of understanding the industries that are unique and specialized in your regional economy (compared to the national average). Industries with a high LQ are typically (but not always) export industries, which are important because they bring money into the region, rather than circulating local dollars around the economy (which is more typical for retail or restaurants).

**Figure 17. Industry Employment Composition: East Bay, 2023**

<b>Industry</b>	<b>Jobs</b>	<b>% of Total</b>
Health Care and Social Assistance	201,099	15%
Government	166,407	13%
Professional, Scientific, and Technical Services	122,710	9%
Manufacturing	113,398	9%
Retail Trade	111,210	8%
Accommodation and Food Services	97,036	7%
Construction	89,608	7%
Other Services (except Public Administration)	73,702	6%
Administrative and Support and Waste Management and Remediation Svs	71,814	5%
Transportation and Warehousing	55,196	4%
Wholesale Trade	41,225	3%
Finance and Insurance	37,525	3%
Educational Services	30,973	2%
Information	26,084	2%
Arts, Entertainment, and Recreation	24,664	2%
Real Estate and Rental and Leasing	24,386	2%
Management of Companies and Enterprises	22,247	2%
Utilities	7,178	1%
Agriculture, Forestry, Fishing and Hunting	2,123	0%
Mining, Quarrying, and Oil and Gas Extraction	310	0%
<b>Total</b>	<b>1,318,894</b>	<b>100%</b>

Source: U.S. BLS (QCEW), Lightcast, 2024.

**Figure 18. Industry Employment: East Bay, 2018-2023 Change**

Industry	2018 Jobs	2023 Jobs	Change in Jobs	% Change in Jobs
Health Care and Social Assistance	181,329	201,099	19,770	11%
Transportation and Warehousing	44,322	55,196	10,874	25%
Manufacturing	102,687	113,398	10,711	10%
Professional, Scientific, and Technical Services	118,032	122,710	4,678	4%
Utilities	5,613	7,178	1,565	28%
Agriculture, Forestry, Fishing and Hunting	1,669	2,123	454	27%
Real Estate and Rental and Leasing	23,945	24,386	440	2%
Mining, Quarrying, and Oil and Gas Extraction	228	310	82	36%
Arts, Entertainment, and Recreation	25,013	24,664	(349)	(1%)
Construction	90,184	89,608	(576)	(1%)
Educational Services	32,562	30,973	(1,589)	(5%)
Management of Companies and Enterprises	25,493	22,247	(3,246)	(13%)
Information	29,421	26,084	(3,337)	(11%)
Other Services (except Public Administration)	78,696	73,702	(4,994)	(6%)
Finance and Insurance	42,566	37,525	(5,041)	(12%)
Government	171,534	166,407	(5,127)	(3%)
Administrative and Support and Waste Management and Remediation Services	77,395	71,814	(5,581)	(7%)
Accommodation and Food Services	103,443	97,036	(6,407)	(6%)
Wholesale Trade	49,040	41,225	(7,816)	(16%)
Retail Trade	120,711	111,210	(9,501)	(8%)
<b>Total</b>	<b>1,323,884</b>	<b>1,318,894</b>	<b>(4,989)</b>	<b>(0.4%)</b>

Source: U.S. BLS (QCEW), Lightcast, 2024.

**Figure 19. Industry Employment Concentration: East Bay, 2023**

Industry	2023 Employment Concentration (LQ)
Utilities	1.60
Professional, Scientific, and Technical Services	1.32
Construction	1.18
Health Care and Social Assistance	1.17
Management of Companies and Enterprises	1.14
Other Services (except Public Administration)	1.13
Manufacturing	1.12
Information	1.07
Arts, Entertainment, and Recreation	1.06
Real Estate and Rental and Leasing	1.05
Transportation and Warehousing	0.97
Educational Services	0.93
Administrative and Support and Waste Management and Remediation Services	0.90
Retail Trade	0.89
Accommodation and Food Services	0.88
Government	0.88
Wholesale Trade	0.86
Finance and Insurance	0.70
Agriculture, Forestry, Fishing and Hunting	0.14
Mining, Quarrying, and Oil and Gas Extraction	0.07

Source: U.S. BLS (QCEW), Lightcast, 2024.

## Industry Projections

Lightcast projects that over the next ten years (2023-2033), the top 3 growing industries will be in Health Care and Social Assistance (37,400 jobs, 19 percent growth), Manufacturing (9,600, 8 percent growth), and Transportation and Warehousing (9,600, 17 percent growth). These industries also have high employment concentration with a location quotient (LQ) above 1.0, which demonstrates that these industries are more concentrated in the East Bay than in the nation (**Figure 20**).

Additionally, industries that are projected to grow with high LQ's are found in Professional, Scientific, and Technical Services (3,100 jobs, 3 percent growth), Arts, Entertainment, and Recreation (3,100 jobs, 3 percent growth), and Utilities (1,000 jobs, 14 percent).

**Figure 20. Industry Projections: East Bay, 2023-2033**

Industry	2023 Jobs	2033 Jobs	# Change	% Change	2033 LQ
Health Care and Social Assistance	201,099	238,505	37,406	19%	1.25
Manufacturing	113,398	123,009	9,611	8%	1.19
Transportation and Warehousing	55,196	64,750	9,554	17%	1.02
Accommodation and Food Services	97,036	104,645	7,609	8%	0.92
Government	166,407	172,020	5,613	3%	0.90
Other Services (except Public Administration)	73,702	78,494	4,792	7%	1.17
Arts, Entertainment, and Recreation	24,664	27,807	3,142	13%	1.09
Professional, Scientific, and Technical Services	122,710	125,844	3,134	3%	1.22
Real Estate and Rental and Leasing	24,386	25,657	1,271	5%	1.05
Utilities	7,178	8,214	1,036	14%	1.81
Construction	89,608	90,235	627	1%	1.15
Agriculture, Forestry, Fishing and Hunting	2,123	2,468	345	16%	0.16
Mining, Quarrying, and Oil and Gas Extraction	310	247	(63)	(20%)	0.05
Unclassified Industry	183	10	(172)	(94%)	0.00
Educational Services	30,973	30,530	(443)	(1%)	0.87
Information	26,084	25,385	(699)	(3%)	0.96
Administrative and Support and Waste Management and Remediation Services	71,814	70,288	(1,525)	(2%)	0.85
Management of Companies and Enterprises	22,247	20,335	(1,912)	(9%)	0.93
Retail Trade	111,210	107,017	(4,193)	(4%)	0.88
Finance and Insurance	37,525	32,580	(4,945)	(13%)	0.58
Wholesale Trade	41,225	34,234	(6,991)	(17%)	0.71
<b>Total</b>	<b>1,319,077</b>	<b>1,382,275</b>	<b>63,198</b>	<b>5%</b>	

Note: Lightcast projects industry job counts data 10 years into the future. Three historical trendlines (last 5 years, last 10 years, last 15 years) are projected forward 10 years and averaged, yielding a raw projected trendline. This trendline is then adjusted slightly by taking into account the BLS's National Industry-Occupation Employment Matrix (NIOEM) dataset, which contains national-level employment projections. Lightcast then adjusts the trendlines to state-level projections published by state LMI offices, yielding Lightcast final industry projections data. Read the full explanation of the [industry projections methodology](#). Source: U.S. BLS (QCEW), Lightcast, 2024.

## Top In-Demand Job Postings

The table below (**Figure 21**) shows the most frequently posted job openings by occupation over a two-year period between September 2022 through September 2024.

**Figure 21. Top Posted Occupations (September 2022-September 2024)**

<b>Occupation (SOC)</b>	<b>Unique Postings</b>	<b>Median Posting Duration</b>
Registered Nurses	43,505	27 days
Retail Salespersons	24,064	29 days
Software Developers	15,114	24 days
First-Line Supervisors of Retail Sales Workers	13,364	29 days
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	12,970	28 days
Home Health and Personal Care Aides	12,848	28 days
Customer Service Representatives	12,763	27 days
Computer Occupations, All Other	10,975	25 days
Laborers and Freight, Stock, and Material Movers, Hand	10,790	25 days
General and Operations Managers	10,063	29 days
Heavy and Tractor-Trailer Truck Drivers	9,825	30 days
Medical and Health Services Managers	9,405	28 days
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	9,241	27 days
Project Management Specialists	8,266	27 days

Source: Lightcast, 2024.



## 5. The East Bay's Targeted and Strategic Industries

The four East Bay workforce boards have identified the following eight industries positioned for priority and strategic focus over the next plan cycle:

- Construction (NAICS 23)
- Health Care (NAICS 62)
- Manufacturing (NAICS 31-33)
- Maritime (NAICS 3366 and NAICS 4883)
- Professional, Scientific, and Technical Services (NAICS 54)
- Information (NAICS 51)
- Government (NAICS 90)
- Transportation & Warehousing (NAICS 48-49)

In addition to being the largest industries in the East Bay economy, these driving industries provide jobs and stimulate economic activity in other sectors. By prioritizing strategic investments and focus on these industries, these industries help maintain existing jobs and creates new employment opportunities, reducing unemployment and improving economic opportunities for East Bay residents. The diversity of these industries also ensures a diverse economic base, which reduces economic vulnerabilities to downturns and long-term resilience.

## Construction

This section provides high-level occupational takeaways and data tables for the construction industry.

- The construction industry contributes significantly to the East Bay economy, accounting for 89,600 jobs, or 7 percent of the East Bay’s total employment.
- Major construction employers (250+ workers) include specialty trade contractors as well as residential developers. Construction employers are distributed evenly throughout East Bay communities (**Figure 22**).
- The construction industry provides a wide range of occupations, with over 60 percent associated with construction (with median hourly earnings of \$35/hour), followed by management (\$70/hour) and office/administrative support (\$26/hour), and installation, maintenance, and repair occupations (\$32/hour) (**with other** published Lightcast data. Data may show different payrolled business location or employee counts for certain businesses, or may otherwise appear to be inaccurate.
- **Figure 23**).
- Growth is expected to remain stable due to strong housing demand, despite high costs for labor and construction materials in the Bay Area. However, there is a noticeable shortage of skilled labor in trades, and strong demand persists for project managers, green energy installers, maintenance technicians, and business development professionals.
- **Figure 24** shows the top companies posting jobs and the types of skills sought over the last two years.

**Figure 22. Major Construction Employers (250+ Employees)**

Business Name	Industry Name	Location
Southland Industries	Plumbing, Heating, and Air-Conditioning Contractors	Union City
Walters & Wolf Precast	All Other Specialty Trade Contractors	Fremont
Shea Homes Inc	New Multifamily Housing Construction	Brentwood
Jw Peterson Painting Inc	Painting and Wall Covering Contractors	Livermore
Brookfield Residential	New Multifamily Housing Construction	San Ramon
Ghilotti Construction Group	New Multifamily Housing Construction	Livermore
Overaa Construction	Residential Remodelers	Richmond
Hot Line Construction Inc	All Other Specialty Trade Contractors	Brentwood
Zcon Builders	New Multifamily Housing Construction	Oakland
Condon-johnson & Associates Inc	Site Preparation Contractors	Oakland
California Mechanical Inc	Plumbing, Heating, and Air-Conditioning Contractors	Livermore
Aoc Technologies	Water and Sewer Line and Related Structures Construction	Pleasanton
Pacific Gas And Electric	Residential Remodelers	San Ramon
Hathaway Dimwitty Construction	New Multifamily Housing Construction	Berkeley
Sunbelt Controls	Electrical Contractors and Other Wiring Installation Contractors	Pleasanton
Standard Pacific Gas Line Inc	New Multifamily Housing Construction	San Pablo
Richmond Public Works Admin	Other Heavy and Civil Engineering Construction	Richmond
Webcor Builders	New Multifamily Housing Construction	Alameda

Source: DatabaseUSA, Lightcast, 2024. Business Data by DatabaseUSA.com is third-party data provided by Lightcast to its customers as a convenience, and Lightcast does not endorse or warrant its accuracy or consistency

with other published Lightcast data. Data may show different payrolled business location or employee counts for certain businesses, or may otherwise appear to be inaccurate.

**Figure 23. Construction Occupational Overview**

Description	Employed in Industry (2023)	Employed in Industry (2025)	% of Total Jobs in Industry (2023)	Employed in Industry (2030)	Change (2025 - 2030)	% Change (2025 - 2030)	Median Hourly Earnings
Construction and Extraction Occupations	53,949	54,448	60.2%	54,633	185	0%	\$34.93
Management Occupations	9,370	9,543	10.5%	9,736	193	2%	\$69.83
Office and Administrative Support Occupations	6,874	6,819	7.7%	6,526	(294)	(4%)	\$26.04
Installation, Maintenance, and Repair Occupations	6,004	6,142	6.7%	6,258	116	2%	\$31.81
Business and Financial Operations Occupations	5,649	5,729	6.3%	5,742	12	0%	\$45.96
Sales and Related Occupations	2,074	2,101	2.3%	2,107	<10	--	\$20.96
Transportation and Material Moving Occupations	1,957	1,947	2.2%	1,905	(43)	(2%)	\$22.06
Architecture and Engineering Occupations	1,394	1,418	1.6%	1,430	12	1%	\$54.28
Production Occupations	958	953	1.1%	927	(26)	(3%)	\$23.66
Building and Grounds Cleaning and Maintenance Occupations	451	452	0.5%	447	(<10)	--	\$20.08
Computer and Mathematical Occupations	342	350	0.4%	353	<10	--	\$68.29
Arts, Design, Entertainment, Sports, and Media Occupations	227	233	0.3%	237	<10	--	\$31.41
Life, Physical, and Social Science Occupations	209	215	0.2%	221	<10	--	\$48.43

Source: QCEW, CA EDD, Lightcast, 2024.

**Figure 24. Construction Job Demand: Top Companies Posting and Skills (Last 2 years)**

Company	Total/Unique (Sep 2022 - Sep 2024)	Posting Intensity	Median Posting Duration
Sunrun	1,063 / 372	3 : 1	24 days
ABM Industries	969 / 327	3 : 1	28 days
Johnson Controls	1,013 / 307	3 : 1	30 days
Veev	687 / 291	2 : 1	34 days
East Bay Regional Park District	651 / 247	3 : 1	27 days
John Stewart Company	720 / 231	3 : 1	38 days
Flatiron Construction	669 / 207	3 : 1	26 days
EMCOR Group	663 / 195	3 : 1	29 days
Bay Alarm Company	537 / 195	3 : 1	27 days
Service Experts Heating And Air Conditioning	521 / 175	3 : 1	31 days

Skills	Postings	% of Total Postings	Profiles	% of Total Profiles <sup>?</sup>	Projected Skill Growth	Skill Growth Relative to Market
Construction	3,757	24%	3,654	13%	+10.5%	<b>Growing</b>
Project Management	3,331	21%	5,042	18%	+19.8%	<b>Rapidly Growing</b>
Subcontracting	2,126	14%	1,635	6%	+9.4%	<b>Growing</b>
HVAC	1,829	12%	794	3%	+7.5%	<b>Stable</b>
Construction Management	1,482	10%	2,849	10%	+18.4%	<b>Growing</b>
Plumbing	1,339	9%	621	2%	+9.8%	<b>Growing</b>
Invoicing	1,320	8%	700	3%	+16.2%	<b>Growing</b>
Accounting	1,296	8%	1,255	5%	+24.0%	<b>Rapidly Growing</b>
Change Orders	1,197	8%	1,263	5%	+18.7%	<b>Growing</b>
Marketing	1,123	7%	1,564	6%	+23.0%	<b>Rapidly Growing</b>

Source: Lightcast, 2024. Lightcast analyzes online job postings of popular job boards to provide valuable insights into real-time needs sought by regional employers.

# Health Care & Social Assistance

This section provides high-level occupational takeaways and data tables for the health care industry.

- In terms of employment, health care and social assistance is the largest industry in the East Bay economy, accounting for 201,100 jobs or 15 percent of the region’s employment (**Figure 17**).
- Major general medical and hospitals, which typically employ over 1,000 workers, are distributed evenly throughout East Bay communities (**Figure 25**).
- The health care industry provides a wide range of occupations and wage levels, with one-third of all occupations in home health/personal care (\$17/hour), which is experiencing great demand over the next five years. Jobs in healthcare diagnosing (\$80/hour) as well as health technologists and technicians (\$36/hour) are also expected to increase. Counselors, social workers, and other social service specialists (\$30/hour) also remain high in demand (**Figure 26**).
- **Figure 27** shows the top companies posting jobs, skills, and qualifications over the last two years.

**Figure 25. Major Health Care Employers (1,000+ Employees)**

Employer	Industry
Permanente Medical Group	General Medical and Surgical Hospitals
UC University Health Services	Offices of Physicians
Alta Bates	General Medical and Surgical Hospitals
John Muir Health	General Medical and Surgical Hospitals
Sutter Health	General Medical and Surgical Hospitals
Children's Hospital & Research Center	Offices of Physicians
Washington Hospital Healthcare System	General Medical and Surgical Hospitals
Stanford Health Care	General Medical and Surgical Hospitals
Alameda Health System	General Medical and Surgical Hospitals
Vituity (Staffing Solutions)	General Medical and Surgical Hospitals

Source: DatabaseUSA, Lightcast, 2024.  
 Note: Business Data by DatabaseUSA.com is third-party data provided by Lightcast to its customers as a convenience, and Lightcast does not endorse or warrant its accuracy or consistency with other published Lightcast data. DatabaseUSA.com data is collected using proprietary methods that differ significantly from Lightcast's data sources. In many cases, DatabaseUSA.com data may show different payrolled business location or employee counts for certain businesses, or may otherwise appear to be inaccurate.

**Figure 26. Health Care Occupational Overview**

Description	Employed in Industry (2023)	Employed in Industry (2025)	% of Total Jobs in Industry (2023)	Employed in Industry (2030)	Change (2025 - 2030)	% Change (2025 - 2030)	Median Hourly Earnings
Home Health and Personal Care Aides; and Nursing Assistants, Orderlies, and Psychiatric Aides	60,216	66,082	29.9%	75,219	9,136	14%	\$16.58
Healthcare Diagnosing or Treating Practitioners	36,599	37,845	18.2%	39,869	2,025	5%	\$80.11
Health Technologists and Technicians	14,423	15,178	7.2%	16,326	1,148	8%	\$35.87
Other Healthcare Support Occupations	14,153	14,731	7.0%	15,650	919	6%	\$26.87
Counselors, Social Workers, Other Community & Social Service Specialists	13,063	14,045	6.5%	15,453	1,408	10%	\$30.01
Secretaries and Administrative Assistants	8,500	8,723	4.2%	8,983	260	3%	\$29.21
Other Management Occupations	6,865	7,310	3.4%	8,043	733	10%	\$57.26
Other Personal Care and Service Workers	5,132	5,120	2.6%	5,026	(93)	(2%)	\$18.67
Information and Record Clerks	4,308	4,482	2.1%	4,709	227	5%	\$23.13
Business Operations Specialists	4,148	4,335	2.1%	4,600	265	6%	\$45.96
Preschool, Elementary, Middle, Secondary, and Special Ed Teachers	3,922	4,118	2.0%	4,351	233	6%	\$42.99
Other Office and Administrative Support Workers	2,304	2,385	1.1%	2,464	79	3%	\$23.52
Financial Clerks	2,225	2,310	1.1%	2,411	100	4%	\$26.72
Building Cleaning and Pest Control Workers	2,300	2,336	1.1%	2,397	61	3%	\$19.22
Social Scientists and Related Workers	1,878	1,982	0.9%	2,122	140	7%	\$54.72
Supervisors of Office and Administrative Support Workers	1,798	1,839	0.9%	1,874	35	2%	\$34.78
Operations Specialties Managers	1,482	1,537	0.7%	1,622	85	6%	\$82.56
Food and Beverage Serving Workers	1,529	1,559	0.8%	1,612	53	3%	\$16.91
Other Educational Instruction and Library Occupations	1,473	1,538	0.7%	1,588	51	3%	\$23.08
Top Executives	1,351	1,447	0.7%	1,580	133	9%	\$65.04
Computer Occupations	1,162	1,204	0.6%	1,260	56	5%	\$68.50
Cooks and Food Preparation Workers	1,166	1,194	0.6%	1,222	28	2%	\$18.12

Source: QCEW, CA EDD, Lightcast, 2024.

**Figure 27. Health Care Job Demand: Top Companies Posting, Skills, and Qualifications (Last 2 years)**

Company	Total/Unique (Sep 2022 - Sep 2024)	Posting Intensity	Median Posting Duration
Kaiser Permanente	52,240 / 15,876	3 : 1	29 days
Sutter Health	27,359 / 7,551	4 : 1	29 days
Alameda Health System	16,299 / 3,185	5 : 1	23 days
John Muir Health	7,423 / 2,184	3 : 1	28 days
CareInHomes	10,684 / 2,087	5 : 1	24 days
Telecare	6,320 / 1,656	4 : 1	31 days
La Clinica De La Raza	4,945 / 1,462	3 : 1	29 days
Maxim Healthcare Services	5,140 / 1,377	4 : 1	34 days

Skills	Postings	% of Total Postings	Profiles	% of Total Profiles	Projected Skill Growth	Skill Growth Relative to Market
Nursing	22,995	20%	3,603	5%	+20.1%	<b>Rapidly Growing</b>
Medical Records	11,050	10%	2,781	4%	+12.5%	<b>Growing</b>
Caregiving	10,955	10%	1,261	2%	+23.1%	<b>Rapidly Growing</b>
Treatment Planning	9,962	9%	853	1%	+6.7%	<b>Stable</b>
Mental Health	8,545	8%	2,515	4%	+13.2%	<b>Growing</b>
Psychology	8,345	7%	1,499	2%	+6.8%	<b>Stable</b>
Home Health Care	7,526	7%	2,716	4%	+19.0%	<b>Growing</b>
Social Work	7,278	6%	1,336	2%	+9.7%	<b>Growing</b>
Electronic Medical Record	7,059	6%	2,568	4%	+12.1%	<b>Growing</b>
Billing	6,966	6%	1,674	3%	+20.0%	<b>Rapidly Growing</b>

**Top Qualifications**

Qualification	Postings with Qualification
Registered Nurse (RN)	23,244
Basic Life Support (BLS) Certification	22,642
Valid Driver's License	13,856
Cardiopulmonary Resuscitation (CPR) Certification	8,528
Advanced Cardiovascular Life Support (ACLS) Certification	8,106
Pediatric Advanced Life Support (PALS)	4,748
Licensed Vocational Nurse (LVN)	4,224

Source: Lightcast, 2024. Lightcast analyzes online job postings of popular job boards to provide valuable insights into real-time needs sought by regional employers.



## Manufacturing

This section provides high-level occupational takeaways and data tables for the manufacturing industry.

- In terms of employment, manufacturing is the fourth largest industry in the East Bay economy, accounting for 113,400 jobs or 9 percent of the region's employment (**Figure 17**). The East Bay's dominance in advanced manufacturing is driven by the region's specialized talent, R&D capabilities, and highly dynamic and complex innovation ecosystem.
- Major manufacturing employers are concentrated in Alameda County, with the highest density of auto, biomedical, and semiconductor manufacturing companies located in Fremont (**Figure 28**). The proximity to the Bay Area's technology hubs in Silicon Valley and San Francisco make the East Bay an ideal location for co-locating manufacturing headquarters and production facilities.
- The manufacturing industry provides a wide range of occupations and wage levels, with 15 percent employed as assemblers and fabricators (\$24/hour), which is experiencing great demand over the next five years. Software and programming occupations (\$73/hour) are also expected to grow rapidly. **Figure 29** shows the range of occupations, 5-year growth, and median hourly earnings of manufacturing occupations in the East Bay.
- **Figure 30** shows the top companies posting jobs, skills, and education levels sought over the last two years.

**Figure 28. Major Manufacturing Employers (300+ Employees)**

<b>Employer</b>	<b>Location</b>	<b>Industry</b>
Tesla	Fremont	Automobile and Light Duty Motor Vehicle Manufacturing
Microgenics Corporation	Fremont	Analytical Laboratory Instrument Manufacturing
Air Liquide Electronics U.S. LP	Fremont	Other Basic Inorganic Chemical Manufacturing
Seagate Technology LLC	Fremont	Computer Storage Device Manufacturing
Fabco Holdings Inc.	Livermore	Motor Vehicle Transmission and Power Train Parts Manufacturing
Siemens Medical Solutions Usa, Inc.	Concord	Electromedical and Electrotherapeutic Apparatus Manufacturing
Smtc Manufacturing Corporation of California	Fremont	Printed Circuit Assembly (Electronic Assembly) Manufacturing
Chevron Corporation	San Ramon/Richmond	Petroleum Refineries
Bio-RAD Laboratories, Inc.	Hercules	Analytical Laboratory Instrument Manufacturing
Bottling Group, LLC	Hayward	Soft Drink Manufacturing
Enphase Energy, Inc.	Fremont	Semiconductor and Related Device Manufacturing
Lam Research Corporation	Fremont	Semiconductor and Related Device Manufacturing
Remel Inc.	Fremont	Analytical Laboratory Instrument Manufacturing
Holophane Corporation	Berkeley	Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing
Ariat International, Inc.	San Leandro	Other Leather and Allied Product Manufacturing
Aidells Sausage Company, Inc.	San Lorenzo	Meat Processed from Carcasses
China Custom Manufacturing, Ltd.	Fremont	All Other Plastics Product Manufacturing
Clear-Com LLC	Alameda	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing
Novo Nordisk Inc.	Fremont	Pharmaceutical Preparation Manufacturing
Ic Sensors, Inc.	Fremont	Semiconductor and Related Device Manufacturing
Nitinol Development Corp	Fremont	Ophthalmic Goods Manufacturing
Sugar C&H Company Inc	Crockett	Beet Sugar Manufacturing
Medplast Group, Inc.	Fremont	All Other Plastics Product Manufacturing
Penumbra, Inc.	Alameda	Surgical and Medical Instrument Manufacturing
Freshrealm, Inc.	Richmond	All Other Miscellaneous Food Manufacturing
Little Raymond's Print Shop Inc.	Fremont	Commercial Printing (except Screen and Books)
Carros Sensors & Systems Company, LLC	Walnut Creek	Other Measuring and Controlling Device Manufacturing
Sangamo Therapeutics, Inc.	Richmond	Biological Product (except Diagnostic) Manufacturing
Axt, Inc.	Fremont	Semiconductor and Related Device Manufacturing
Dicon Fiberoptics, Inc.	Richmond	Other Electronic Component Manufacturing
The New IEM LLC	Fremont	Switchgear and Switchboard Apparatus Manufacturing
Nancy's Specialty Foods	Lafayette	All Other Miscellaneous Food Manufacturing
Exelixis, Inc.	Alameda	Totalizing Fluid Meter and Counting Device Manufacturing

Source: Dun & Bradstreet, EconoVue, 2024.

Note: Business data by Dun & Bradstreet is third-party data provided by EconoVue. Employment counts may not always be completely accurate due to reliance on self-reported data from businesses, which can lead to inconsistencies or discrepancies with manufacturing operations reported in the East Bay or in other locations.

**Figure 29. Manufacturing Occupational Overview**

Description	Employed in Industry (2023)	Employed in Industry (2025)	% of Total Jobs in Industry (2023)	Employed in Industry (2030)	Change (2025 - 2030)	% Change (2025 - 2030)	Median Hourly Earnings
Miscellaneous Assemblers and Fabricators	16,510	18,140	14.6%	19,756	1,616	9%	\$23.65
Software and Web Developers, Programmers, and Testers	4,574	4,888	4.0%	5,386	499	10%	\$72.59
Laborers and Material Movers	4,932	5,109	4.3%	5,288	178	3%	\$20.12
Electrical, Electronics, and Electromechanical Assemblers	3,956	4,134	3.5%	4,363	230	6%	\$23.85
First-Line Supervisors of Production and Operating Workers	2,627	2,748	2.3%	2,882	133	5%	\$37.82
Inspectors, Testers, Sorters, Samplers, and Weighers	2,650	2,757	2.3%	2,862	105	4%	\$25.65
Miscellaneous Production Workers	2,750	2,734	2.4%	2,662	(71)	(3%)	\$20.61
Sales Representatives, Wholesale and Manufacturing	2,317	2,358	2.0%	2,393	35	1%	\$38.80
Industrial Engineers, Including Health and Safety	1,859	2,023	1.6%	2,261	238	12%	\$58.51
Logisticians and Project Management Specialists	1,886	1,972	1.7%	2,085	113	6%	\$53.36
Marketing and Sales Managers	1,813	1,836	1.6%	1,848	12	1%	\$79.92
Industrial Production Managers	1,658	1,726	1.5%	1,796	70	4%	\$74.18
General and Operations Managers	1,700	1,746	1.5%	1,792	46	3%	\$62.32
Miscellaneous Food Processing Workers	1,614	1,691	1.4%	1,777	86	5%	\$20.30
Industrial Machinery Installation, Repair, and Maintenance Workers	1,435	1,569	1.3%	1,772	203	13%	\$38.96
Engineering Technologists and Technicians, Except Drafters	1,557	1,613	1.4%	1,677	64	4%	\$37.61
Packaging and Filling Machine Operators and Tenders	1,572	1,613	1.4%	1,652	39	2%	\$20.59
Welding, Soldering, and Brazing Workers	1,443	1,527	1.3%	1,614	86	6%	\$28.12
Mechanical Engineers	1,341	1,441	1.2%	1,580	139	10%	\$60.64
Shipping, Receiving, and Inventory Clerks	1,531	1,538	1.4%	1,510	(28)	(2%)	\$20.80
Miscellaneous Managers	1,483	1,486	1.3%	1,476	(10)	(1%)	\$72.85
Production, Planning, and Expediting Clerks	1,381	1,428	1.2%	1,476	48	3%	\$32.38
Machinists	1,275	1,320	1.1%	1,380	60	5%	\$30.31
Machine Tool Cutting Setters, Operators, and Tenders, Metal and Plastic	1,334	1,352	1.2%	1,342	(<10)	--	\$23.79
Architectural and Engineering Managers	1,245	1,283	1.1%	1,323	40	3%	\$92.37

Description	Employed in Industry (2023)	Employed in Industry (2025)	% of Total Jobs in Industry (2023)	Employed in Industry (2030)	Change (2025 - 2030)	% Change (2025 - 2030)	Median Hourly Earnings
Bakers	1,221	1,255	1.1%	1,295	40	3%	\$20.30
Computer Numerically Controlled Tool Operators and Programmers	1,201	1,219	1.1%	1,226	<10	--	\$27.65
Driver/Sales Workers and Truck Drivers	1,202	1,204	1.1%	1,190	(15)	(1%)	\$24.30
Electrical and Electronics Engineers	1,043	1,096	0.9%	1,167	70	6%	\$65.21
Miscellaneous Business Operations Specialists	1,059	1,090	0.9%	1,122	32	3%	\$43.48
Maintenance and Repair Workers, General	1,007	1,043	0.9%	1,080	37	4%	\$27.09

Source: QCEW, CA EDD, Lightcast, 2024.

**Figure 30. Manufacturing Job Demand: Top Companies Posting, Skills, and Qualifications (Last 2 years)**

Company	Total/Unique (Sep 2022 - Sep 2024)	Posting Intensity	Median Posting Duration
Intel	583 / 300	2 : 1	22 days
Chevron	338 / 102	3 : 1	34 days
Clorox	313 / 91	3 : 1	36 days
Hitachi	168 / 60	3 : 1	15 days
Rover	284 / 58	5 : 1	51 days
Boeing	109 / 48	2 : 1	30 days
Bio-Rad Laboratories	129 / 37	3 : 1	44 days
Mondelez International	72 / 31	2 : 1	24 days
Cytek Biosciences	51 / 26	2 : 1	6 days
Lucid Motors	45 / 25	2 : 1	24 days

Skills	Postings	% of Total Postings	Profiles	% of Total Profiles	Projected Skill Growth	Skill Growth Relative to Market
Project Management	252	15%	10,859	14%	+19.8%	<b>Rapidly Growing</b>
Computer Science	213	12%	818	1%	+26.8%	<b>Rapidly Growing</b>
Marketing	195	11%	7,288	9%	+23.0%	<b>Rapidly Growing</b>
Computer Engineering	171	10%	337	0%	+14.7%	<b>Growing</b>
Python (Programming Language)	165	10%	3,868	5%	+24.5%	<b>Rapidly Growing</b>
Electrical Engineering	164	10%	1,157	1%	+21.2%	<b>Rapidly Growing</b>
Supply Chain	152	9%	2,754	3%	+22.3%	<b>Rapidly Growing</b>
Debugging	137	8%	2,336	3%	+19.5%	<b>Rapidly Growing</b>
New Product Development	133	8%	7,299	9%	+24.1%	<b>Rapidly Growing</b>
Finance	126	7%	3,341	4%	+27.3%	<b>Rapidly Growing</b>

**Education Breakdown**

Education Level	Unique Postings	% of Total
No Education Listed	399	23%
High school or GED	304	18%
Associate's degree	78	5%
Bachelor's degree	923	54%
Master's degree	444	26%
Ph.D. or professional degree	214	12%

Source: Lightcast, 2024. Lightcast analyzes online job postings of popular job boards to provide valuable insights into real-time needs sought by regional employers. These jobs were posted for non-remote and hybrid work.

# Maritime

This section provides high-level occupational takeaways and data tables for the maritime industry.

- Direct jobs within the maritime industry represent a very small portion of the East Bay labor market, although the presence of two major seaports (Port of Oakland & Port of Richmond) and several other ancillary waterfront geographies in the East Bay region make it an important regional industry.
- Maritime employers mostly include navigational services, with some shipbuilding and marine cargo handling companies (**Figure 22**).
- The maritime industry includes many occupations related to goods movement, logistics, and transportation. Ship engineers (\$89/hour) have the highest wage, followed by general and operational managers (\$62/hour), Supervisors of Mechanics, Installers, and Repairers (**with other** published Lightcast data. Data may show different payrolled business location or employee counts for certain businesses, or may otherwise appear to be inaccurate.
- **Figure 23**).
- Growth is expected to remain stable due to strong housing demand, despite high costs for labor and construction materials in the Bay Area. However, there is a noticeable shortage of skilled labor in trades, and strong demand persists for project managers, green energy installers, maintenance technicians, and business development professionals.
- **Figure 24** shows the top companies posting jobs and the types of skills sought over the last two years.

**Figure 31. Maritime Employers (25+ Employees)**

Employer	Industry	Location
Bay Ship & Yacht Co	Ship Building and Repairing	Alameda
American Navigator Yacht	Navigational Services to Shipping	Alameda
United Towing Service	Navigational Services to Shipping	Dublin
Arco Tow Services	Navigational Services to Shipping	Hayward
Marine Exchange	Navigational Services to Shipping	Emeryville
S & S Towing Trucking Service	Navigational Services to Shipping	Brentwood
California Towing Fremont Newark Union City	Navigational Services to Shipping	Fremont
Underwater Resources Inc	Navigational Services to Shipping	San Leandro
Bay Ship & Yacht Co Fleet Service	Ship Building and Repairing	Alameda
Nexus Pacific Transport Yard	Navigational Services to Shipping	Oakland
Argo Chartering Inc	Navigational Services to Shipping	Sunol
Ports Amer Outer Hbr Trml Llc	Marine Cargo Handling	Alameda

Source: DatabaseUSA, Lightcast, 2024.

Note: Business Data by DatabaseUSA.com is third-party data provided by Lightcast to its customers as a convenience, and Lightcast does not endorse or warrant its accuracy or consistency with other published Lightcast data. Employment counts may not always be completely accurate due to reliance on self-reported data from businesses, which can lead to inconsistencies or discrepancies

**Figure 322. Maritime Occupational Overview**

Description	Employed in Industry Group (2023)	% of Total Jobs in Industry Group (2023)	Employed in Industry Group (2025)	Employed in Industry Group (2030)	Change (2025 - 2030)	% Change (2025 - 2030)	Median Hourly Earnings
Laborers and Material Movers	456	16.4%	484	518	33	7%	\$20.12
Sailors and Marine Oilers	222	8.0%	237	254	17	7%	\$34.12
Ship and Boat Captains and Operators	172	6.2%	185	201	16	8%	\$44.01
Heavy Vehicle and Mobile Equipment Service Technicians and Mechanics	169	6.1%	181	196	16	9%	\$38.19
First-Line Supervisors of Mechanics, Installers, and Repairers	90	3.2%	96	103	<10	--	\$45.57
Driver/Sales Workers and Truck Drivers	89	3.2%	94	99	<10	--	\$24.30
First-Line Supervisors of Transportation and Material Moving	84	3.0%	89	96	<10	--	\$30.90
General and Operations Managers	81	2.9%	86	93	<10	--	\$62.32
Ship Engineers	69	2.5%	73	77	<10	--	\$89.79
Miscellaneous Material Moving Workers	66	2.4%	69	74	<10	--	\$18.75
Tank Car, Truck, and Ship Loaders	62	2.2%	66	71	<10	--	\$26.63
Industrial Truck and Tractor Operators	60	2.2%	64	69	<10	--	\$24.36
Miscellaneous Motor Vehicle Operators	47	1.7%	51	56	<10	--	\$20.03
Transportation, Storage, and Distribution Managers	47	1.7%	50	53	<10	--	\$56.71

Source: QCEW, CA EDD, Lightcast, 2024.

**Figure 333 Maritime Job Demand: Top Companies Posting and Skills (Last year)**



**18 Employers Competing**

All employers in the region who posted for this job over the last 12 months.



**131 Unique Job Postings**

The number of unique postings for this job over the last 12 months.



**29 Day Median Duration ⓘ**

Posting duration is 3 days longer than what's typical in the region.



Top Companies	Unique Postings
Maersk	55
Sims Metal Management	11
Bay Ship & Yacht Co.	9
Foss Maritime Company	8
Norton Lilly International	8

Top Job Titles	Unique Postings
In the Box Team Leaders	22
Local Truck Drivers	8
Warehouse Associates	6
Boarding Agents	5
Captains	3



## Professional, Scientific, and Technical Services

- In terms of employment, Professional, scientific, and technical services (PSTS) constitute the third largest industry in the East Bay economy, accounting for 122,700 jobs, or 9 percent of the East Bay’s total employment (**Figure 17**).
- Major PSTS employers (300+ workers) include a range of testing laboratories, consulting services, and computer systems services. PSTS employers are distributed evenly throughout East Bay communities (**Figure 35**).
- The PSTS industry provides a wide range of occupations and wage levels. The top three occupations are computer occupations (\$69/hour), business operations specialists (\$46/hour), and engineers (\$62/hour). Over the next five years, growth of these occupations is projected to remain relatively stable or flat in this industry. **Figure 35** provides a comprehensive list showing the range of occupations, 5-year growth, and median hourly earnings.
- **Figure 30** shows the top companies posting jobs, skills, and education levels sought over the last two years.

**Figure 34. Major Professional, Scientific, and Technical Service Employers (300+ Employees)**

Employer	Location	Industry
Eurofins Food Chemistry Testing	Livermore	Testing Laboratories and Services
Trinet Group, Inc.	Dublin	Human Resources Consulting Services
Milestone Technologies Inc.	Fremont	Computer Systems Design Services
Workday, Inc.	Pleasanton	Custom Computer Programming Services
Berkeley Research Group, LLC	Emeryville	Other Management Consulting Services
Contemporary Services Corporation	San Leandro	Process, Physical Distribution, and Logistics Consulting Services
Good Technology Corporation	San Ramon	Custom Computer Programming Services
Tapetech Tool Company	Concord	Marketing Consulting Services
National Security Technologies, LLC	Livermore	Engineering Services
Nisum Technologies, Inc.	Fremont	Custom Computer Programming Services
United States Department of Energy Livermore Office	Livermore	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)
Arcus Biosciences, Inc.	Hayward	Research and Development in Biotechnology (except Nanobiotechnology)
Apttus Corporation	San Ramon	Computer Systems Design Services
Stv Incorporated	Oakland	Architectural Services
Digital Nirvana, Inc.	Fremont	Administrative Management and General Management Consulting Services
URS Group, Inc.	Oakland	Engineering Services
Osisoft, LLC	San Leandro	Custom Computer Programming Services
EMR Cpr LLC	Union City	Computer Systems Design Services
Roche Molecular Systems, Inc.	Pleasanton	Research and Development in Biotechnology (except Nanobiotechnology)
Zoho Corporation	Pleasanton	Engineering Services
Tryfacta, Inc.	Pleasanton	Custom Computer Programming Services
Startup Farms International, LLC	Fremont	Custom Computer Programming Services
Solvd, Inc.	Walnut Creek	Custom Computer Programming Services
Ai Pony Inc	Fremont	Custom Computer Programming Services

Note: Business Data by DatabaseUSA.com is third-party data provided by Lightcast to its customers as a convenience, and Lightcast does not endorse or warrant its accuracy or consistency with other published Lightcast

data. Employment counts may not always be completely accurate due to reliance on self-reported data from businesses, which can lead to inconsistencies or discrepancies.

**Figure 355. Professional, Scientific, and Technical Services Occupational Overview**

Description	Employed in Industry (2023)	% of Total Jobs in Industry (2023)	Employed in Industry (2025)	Employed in Industry (2030)	Change (2025 - 2030)	% Change (2025 - 2030)	Median Hourly Earnings
Computer Occupations	19,551	15.9%	19,716	19,949	232	1%	\$68.50
Business Operations Specialists	17,247	14.1%	17,601	17,933	332	2%	\$45.96
Engineers	7,819	6.4%	7,954	8,024	70	1%	\$61.98
Other Management Occupations	6,596	5.4%	6,827	7,068	241	4%	\$57.26
Lawyers, Judges, and Related Workers	5,785	4.7%	5,741	5,691	(50)	(1%)	\$84.72
Operations Specialties Managers	5,233	4.3%	5,324	5,419	95	2%	\$82.56
Life Scientists	4,702	3.8%	5,018	5,368	351	7%	\$56.26
Financial Specialists	5,435	4.4%	5,392	5,255	(137)	(3%)	\$45.96
Art and Design Workers	3,790	3.1%	3,722	3,596	(126)	(3%)	\$29.72
Top Executives	3,430	2.8%	3,513	3,564	51	1%	\$65.04
Advertising, Marketing, Promotions, Public Relations, and Sales Managers	3,021	2.5%	3,035	3,026	(9)	(0%)	\$79.13
Life, Physical, and Social Science Technicians	2,742	2.2%	2,880	3,019	139	5%	\$31.30
Drafters, Engineering Technicians, and Mapping Technicians	2,636	2.1%	2,664	2,656	(8)	(0%)	\$37.00
Secretaries and Administrative Assistants	2,848	2.3%	2,772	2,561	(211)	(8%)	\$29.21
Architects, Surveyors, and Cartographers	2,234	1.8%	2,280	2,336	56	2%	\$49.80
Sales Representatives, Services	2,314	1.9%	2,306	2,265	(40)	(2%)	\$38.17
Physical Scientists	2,033	1.7%	2,125	2,215	91	4%	\$53.46
Financial Clerks	2,338	1.9%	2,300	2,202	(98)	(4%)	\$26.72
Legal Support Workers	2,029	1.7%	2,013	1,991	(22)	(1%)	\$35.91
Information and Record Clerks	1,928	1.6%	1,940	1,919	(21)	(1%)	\$23.13
Mathematical Science Occupations	1,544	1.3%	1,652	1,825	173	10%	\$64.63
Other Office and Administrative Support Workers	1,803	1.5%	1,790	1,725	(65)	(4%)	\$23.52
Other Healthcare Support Occupations	1,278	1.0%	1,354	1,479	124	9%	\$26.87
Media and Communication Workers	1,483	1.2%	1,476	1,450	(26)	(2%)	\$38.30

Source: QCEW, CA EDD, Lightcast, 2024.

**Figure 36. PSTS Job Demand: Top Companies Posting, Occupations, and Skills (Last 2 years)**

Company	Total/Unique (Sep 2022 - Sep 2024)		Posting Intensity	Median Posting Duration
AECOM	1,595 / 484		3 : 1	29 days
CTG	181 / 172		1 : 1	31 days
Kadiant	408 / 119		3 : 1	29 days
Mathematica Policy Research	244 / 97		3 : 1	20 days
Five9	84 / 61		1 : 1	20 days
H&R Block	85 / 60		1 : 1	22 days
Thredup	205 / 58		4 : 1	42 days
CDM Smith	66 / 50		1 : 1	32 days
Black & Veatch	87 / 41		2 : 1	26 days
Veeva Systems	121 / 37		3 : 1	35 days

Occupation (SOC)	Total/Unique (Sep 2022 - Sep 2024)		Posting Intensity	Median Posting Duration
Software Developers	330 / 184		2 : 1	26 days
Civil Engineers	486 / 182		3 : 1	30 days
Project Management Specialists	487 / 140		3 : 1	32 days
Counselors, All Other	304 / 117		3 : 1	29 days
Computer Occupations, All Other	210 / 113		2 : 1	26 days
Data Scientists	222 / 108		2 : 1	28 days
Computer User Support Specialists	129 / 74		2 : 1	25 days
Electrical Engineers	166 / 70		2 : 1	20 days
Marketing Managers	165 / 61		3 : 1	35 days

Skills	Postings	% of Total Postings	Profiles	% of Total Profiles	Projected Skill Growth	Skill Growth Relative to Market
Project Management	850	26%	13,610	16%	+19.8%	Rapidly Growing
Marketing	335	10%	9,186	11%	+23.0%	Rapidly Growing
Business Strategies	324	10%	2,542	3%	+25.8%	Rapidly Growing
Business Development	321	10%	5,159	6%	+5.5%	Stable
Computer Science	251	8%	1,301	2%	+26.8%	Rapidly Growing
Finance	233	7%	4,554	5%	+27.3%	Rapidly Growing
Accounting	228	7%	5,438	6%	+24.0%	Rapidly Growing
Auditing	225	7%	4,343	5%	+21.8%	Rapidly Growing
Civil Engineering	212	7%	1,075	1%	+26.2%	Rapidly Growing
Data Analysis	203	6%	6,125	7%	+25.8%	Rapidly Growing

Source: Lightcast, 2024. Lightcast analyzes online job postings of popular job boards to provide valuable insights into real-time needs sought by regional employers. These jobs were posted for non-remote and hybrid work.

## Information

- As of 2023, the information industry accounts for 26,100 jobs, or 2 percent of the East Bay’s total employment (**Figure 17**).
- Major employers (250+ workers) include software companies located in Walnut Creek, Oakland, Emeryville, San Ramon, and Pleasanton (**Figure 35**).
- The information industry provides a wide range of occupations and wage levels, with the top three constituting software and web developers (\$73/hour), sales representatives (\$41/hour), and computer and information system managers (\$95/hour). This industry is projected to see a slight decline over the next five years, though the numbers will be small. This is partly because the industry is not as large in the East Bay compared to other parts of the Bay Area. **Figure 35** provides a comprehensive list showing the range of occupations, 5-year growth, and median hourly earnings.
- **Figure 30** shows the top companies posting jobs, skills, and education levels sought over the last two years.

**Figure 367. Major Information Employers (250+ Employees)**

Employer	Location	Industry
Exadel, Inc.	Walnut Creek	Software Publishers
Fivetran Inc.	Oakland	Software Publishers
Contra Costa Newspapers, Inc.	Walnut Creek	Newspaper Publishers
Tanium, Inc.	Emeryville	Software Publishers
Paylocity Holding Corporation	Oakland	Software Publishers
Margeta, Inc.	Oakland	Software Publishers
Five9, Inc.	San Ramon	Software Publishers
Wind River Systems, Inc.	Alameda	Software Publishers
Tubemogul, Inc.	Emeryville	Software Publishers
Veeva Systems Inc.	Pleasanton	Software Publishers
Pixar	Emeryville	Motion Picture and Video Production
Pandora Media, LLC	Oakland	Media Streaming Distribution Services
AT&T Enterprises, LLC	San Ramon	Wireless Telecommunications Carriers (except Satellite)
Zoomifier Corporation	Pleasanton	Software Publishers
Ice Mortgage Technology, Inc.	Pleasanton	Software Publishers
Soundthinking, Inc.	Fremont	Software Publishers
Barra, LLC	Berkeley	Software Publishers
GE Digital LLC	San Ramon	Software Publishers
Ballena Technologies	Alameda	Media Streaming Distribution Services

Note: Business Data by DatabaseUSA.com is third-party data provided by Lightcast to its customers as a convenience, and Lightcast does not endorse or warrant its accuracy or consistency with other published Lightcast data. Employment counts may not always be completely accurate due to reliance on self-reported data from businesses, which can lead to inconsistencies or discrepancies.

**Figure 38. Information Occupational Overview**

Description	Employed in Industry (2023)	% of Total Jobs in Industry (2023)	Employed in Industry (2025)	Employed in Industry (2030)	Change (2025 - 2030)	% Change (2025 - 2030)	Median Hourly Earnings
Software and Web Developers, Programmers, and Testers	5,001	19.20%	5,153	5,335	181	4%	\$72.59
Miscellaneous Sales Representatives, Services	1,321	5.10%	1,289	1,231	(58)	(4%)	\$41.38
Computer and Information Systems Managers	1,101	4.20%	1,119	1,134	15	1%	\$95.39
Marketing and Sales Managers	990	3.80%	967	922	(45)	(5%)	\$79.92
Actors, Producers, and Directors	855	3.30%	842	834	(<10)	--	\$42.24
Market Research Analysts and Marketing Specialists	814	3.10%	816	814	(<10)	--	\$50.31
Miscellaneous Computer Occupations	665	2.50%	661	647	(14)	(2%)	\$57.12
Computer Support Specialists	556	2.10%	582	604	21	4%	\$35.79
Miscellaneous Managers	605	2.30%	594	575	(20)	(3%)	\$72.85
Database and Network Administrators and Architects	585	2.20%	583	569	(13)	(2%)	\$61.86
General and Operations Managers	566	2.20%	572	569	(<10)	--	\$62.32
Computer and Information Analysts	505	1.90%	530	558	28	5%	\$63.16
Customer Service Representatives	564	2.20%	569	551	(18)	(3%)	\$22.43
Radio and Telecommunications Equipment Installers and Repairers	631	2.40%	587	535	(52)	(9%)	\$38.37
Ushers, Lobby Attendants, and Ticket Takers	511	2.00%	514	506	(<10)	--	\$16.76
Television, Video, and Film Camera Operators and Editors	467	1.80%	473	490	16	3%	\$36.91
Broadcast, Sound, and Lighting Technicians	450	1.70%	457	471	14	3%	\$28.03
Logisticians and Project Management Specialists	459	1.80%	464	463	(<10)	0%	\$53.36
Writers and Editors	590	2.30%	537	459	(78)	(14%)	\$37.29

Source: QCEW, CA EDD, Lightcast, 2024.

**Figure 379. Information Job Demand: Top Companies Posting, Occupations, and Skills (Last 2 years)**

Company	Total/Unique (Sep 2022 - Sep 2024)		Posting Intensity	Median Posting Duration		
Workday	96 / 52		2 : 1	29 days		
Marqeta	125 / 41		3 : 1	37 days		
Reflexion	48 / 24		2 : 1	42 days		
Snowflake Computing	78 / 24		3 : 1	21 days		
Wcirb Of California	82 / 23		4 : 1	30 days		
MathWorks	30 / 17		2 : 1	24 days		
Occupation (SOC)	Total/Unique (Sep 2022 - Sep 2024)		Posting Intensity	Median Posting Duration		
Software Developers	103 / 39		3 : 1	27 days		
Marketing Managers	62 / 19		3 : 1	30 days		
Dishwashers	109 / 18		6 : 1	34 days		
Computer Occupations, All Other	26 / 17		2 : 1	29 days		
Lawyers	38 / 14		3 : 1	15 days		
Financial Managers	32 / 11		3 : 1	43 days		
Data Scientists	27 / 9		3 : 1	20 days		
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	14 / 9		2 : 1	29 days		
General and Operations Managers	36 / 8		5 : 1	24 days		
Skills	Postings	% of Total Postings	Profiles	% of Total Profiles <sup>?</sup>	Projected Skill Growth	Skill Growth Relative Market
Project Management	83	23%	7,021	18%	+19.8%	<b>Rapidly Growing</b>
Marketing	66	18%	5,730	14%	+23.0%	<b>Rapidly Growing</b>
Computer Science	49	14%	1,917	5%	+26.8%	<b>Rapidly Growing</b>
Software Engineering	45	13%	7,514	19%	+23.1%	<b>Rapidly Growing</b>
Software As A Service (SaaS)	44	12%	3,764	9%	+20.9%	<b>Rapidly Growing</b>
Finance	44	12%	2,950	7%	+27.3%	<b>Rapidly Growing</b>
Auditing	43	12%	1,673	4%	+21.8%	<b>Rapidly Growing</b>
Product Management	43	12%	3,949	10%	+25.7%	<b>Rapidly Growing</b>
Customer Relationship Management	41	11%	3,312	8%	+22.1%	<b>Rapidly Growing</b>
Python (Programming Language)	41	11%	4,782	12%	+24.5%	<b>Rapidly Growing</b>

Source: Lightcast, 2024. Lightcast analyzes online job postings of popular job boards to provide valuable insights into real-time needs sought by regional employers. These jobs were posted for non-remote and hybrid work.

## Public Administration and Education

- In terms of employment, government is the second largest industry in the East Bay economy, accounting for 166,409 jobs or 13 percent of the region’s employment which includes public sector employment at the local, state, and federal levels, including public education (**Figure 17**).
- Major employers include public administration offices, higher education institutions, and local school districts (**Figure 25**).
- The health care industry provides a wide range of occupations and wage levels, with the top three in educational instruction and library occupations (\$34/hour), office and administrative support (\$26/hour), and management occupations (\$70/hour). Over the next five years, public sector employment is projected to remain stable or increase slightly. **Figure** provides a comprehensive list showing the range of occupations, 5-year growth, and median hourly earnings.
- **Figure 27** shows the top employers posting jobs, occupations, and skills over the last two years.

**Figure 40. Major Public Administration & Education Employers (1,000+ Employees)**

<b>Employer</b>	<b>Location</b>	<b>Industry</b>
County of Alameda	Oakland	Executive Offices
UC Berkeley	Berkeley	Colleges, Universities, and Professional Schools
Oakland Unified School District	Oakland	Elementary and Secondary Schools
County of Contra Costa	Martinez	Executive Offices
United States Department of Energy Livermore Office	Livermore	Administration of General Economic Programs
City of Oakland	Oakland	Executive Offices
Peralta Community College District	Oakland	Junior Colleges
Contra Costa Community College District	Martinez	Junior Colleges
Chabot-Las Positas Community College District	Dublin	Junior Colleges
Diablo Valley College	Pleasant Hill	Junior Colleges
City of Berkeley	Berkeley	Executive Offices
Alameda Unified School District	Alameda	Elementary and Secondary Schools
Saint Mary's College of California	Moraga	Colleges, Universities, and Professional Schools

Source: Dun & Bradstreet, EconoVue, 2024.

Note: Business data by Dun & Bradstreet is third-party data provided by EconoVue. Employment counts may not always be completely accurate due to reliance on self-reported data from employers, which can lead to inconsistencies or discrepancies.



**Figure 38. Government Occupational Overview**

Description	Employed in Industry (2023)	% of Total Jobs in Industry (2023)	Employed in Industry (2025)	Employed in Industry (2030)	Change (2025 - 2030)	% Change (2025 - 2030)	Median Hourly Earnings
Educational Instruction and Library Occupations	46,293	27.8%	47,118	48,368	1,250	3%	\$34.05
Office and Administrative Support Occupations	23,118	13.9%	22,585	21,596	(989)	(4%)	\$26.04
Management Occupations	11,557	6.9%	11,721	12,005	284	2%	\$69.83
Protective Service Occupations	11,248	6.8%	11,414	11,699	285	2%	\$24.93
Business and Financial Operations Occupations	10,659	6.4%	10,776	10,984	208	2%	\$45.96
Healthcare Practitioners and Technical Occupations	10,099	6.1%	10,444	10,905	462	4%	\$64.51
Community and Social Service Occupations	7,502	4.5%	7,616	7,813	197	3%	\$30.00
Transportation and Material Moving Occupations	5,424	3.3%	5,498	5,629	131	2%	\$22.06
Building and Grounds Cleaning and Maintenance Occupations	5,369	3.2%	5,456	5,591	135	2%	\$20.08
Life, Physical, and Social Science Occupations	4,626	2.8%	4,667	4,743	76	2%	\$48.43
Computer and Mathematical Occupations	4,190	2.5%	4,264	4,410	146	3%	\$68.29
Installation, Maintenance, and Repair Occupations	3,907	2.3%	3,931	3,970	39	1%	\$31.81
Construction and Extraction Occupations	2,960	1.8%	3,005	3,090	85	3%	\$34.93
Personal Care and Service Occupations	2,932	1.8%	2,970	3,037	67	2%	\$18.11
Food Preparation and Serving Related Occupations	2,815	1.7%	2,855	2,902	46	2%	\$17.37
Legal Occupations	2,495	1.5%	2,524	2,579	54	2%	\$63.71
Healthcare Support Occupations	2,386	1.4%	2,467	2,577	109	4%	\$16.72
Architecture and Engineering Occupations	2,337	1.4%	2,370	2,431	62	3%	\$54.28

Source: QCEW, CA EDD, Lightcast, 2024.

**Figure 392. Public Sector Job Demand: Top Employers Posting, Occupations, and Skills (Last 2 years)**

University of California	3,134 / 1,226	3 : 1		32 days		
United States Department of Veterans Affairs	777 / 386	2 : 1		23 days		
Oakland Unified School District	351 / 116	3 : 1		33 days		
Sylvan Learning Center	163 / 90	2 : 1		27 days		
United States Department of Energy	123 / 79	2 : 1		14 days		
United States Department of Homeland Security	224 / 71	3 : 1		22 days		
Verbal Behavior Associates	388 / 66	6 : 1		38 days		
United States Government	106 / 43	2 : 1		19 days		
Occupation (SOC)	Total/Unique (Sep 2022 - Sep 2024)	Posting Intensity		Median Posting Duration		
Education Administrators, Postsecondary	334 / 123	3 : 1		32 days		
Managers, All Other	324 / 104	3 : 1		32 days		
Food Preparation Workers	303 / 97	3 : 1		37 days		
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	212 / 88	2 : 1		21 days		
Human Resources Managers	204 / 83	2 : 1		30 days		
Counselors, All Other	397 / 74	5 : 1		38 days		
Secondary School Teachers, Except Special and Career/Technical Education	178 / 62	3 : 1		30 days		
Child, Family, and School Social Workers	118 / 58	2 : 1		26 days		
Educational, Guidance, and Career Counselors and Advisors	142 / 56	3 : 1		35 days		
Skills	Postings	% of Total Postings	Profiles	% of Total Profiles <sup>?</sup>	Projected Skill Growth	Skill Growth Relative to Market
Project Management	497	18%	5,733	6%	+19.8%	Rapidly Growing
Accounting	286	10%	2,459	3%	+24.0%	Rapidly Growing
Auditing	277	10%	1,824	2%	+21.8%	Rapidly Growing
Student Services	265	9%	2,232	2%	+7.1%	Stable
Finance	261	9%	2,052	2%	+27.3%	Rapidly Growing
Marketing	238	9%	4,455	5%	+23.0%	Rapidly Growing
Fundraising	237	8%	4,145	5%	+24.4%	Rapidly Growing
Workflow Management	225	8%	860	1%	+18.0%	Growing
Administrative Support	211	8%	1,302	1%	+18.7%	Growing
Data Analysis	207	7%	4,760	5%	+25.8%	Rapidly Growing

## Transportation & Warehousing

- In 2023, the transportation and warehousing industry accounted for 55,200 jobs or 4 percent of the region’s employment (**Figure 17**).
- Major employers include the regional transportation systems as well as postal/goods movement handlers, as shown in **Figure** .
- The transportation and warehousing industry employs a wide range of occupations and wage levels. The top three occupations are driver/sales workers and truck drivers (\$24/hour), laborers and material movers (\$20/hour) and passenger vehicle drivers (\$26/hour). Over the next five years, occupations in this industry are projected to grow. **Figure** provides a comprehensive list showing the range of occupations, 5-year growth, and median hourly earnings.
- **Figure** shows the top employers posting jobs, occupations, and skills over the last two years.

**Figure 43. Major Transportation & Warehousing Employers (300+ Employees)**

<b>Employer</b>	<b>Location</b>	<b>Industry</b>
AC Transit	Oakland	Urban Transit Systems
Bay Area Rapid Transit District	Oakland	Urban Transit Systems
Oakland International Airport	Oakland	Airport Operations
First Student	Richmond	School Bus Transportation
Port of Oakland	Oakland	Marine Cargo Handling
United Parcel Service	Oakland	Local Messengers and Delivery
United States Post Office	Oakland	Postal Service
Rxo Last Mile	Union City	General Freight Trucking, Long-Distance
RK Logistics	Fremont	General Freight Trucking, Long-Distance
Norcal Ambulance	Livermore	Ambulance Service

Source: Dun & Bradstreet, EconoVue, 2024.

Note: Business data by Dun & Bradstreet is third-party data provided by EconoVue. Employment counts may not always be completely accurate due to reliance on self-reported data from businesses, which can lead to inconsistencies or discrepancies.

**Figure 44. Transportation & Warehousing Occupational Overview**

Description	Employed in Industry (2023)	% of Total Jobs in Industry (2023)	Employed in Industry (2025)	Employed in Industry (2030)	Change (2025 - 2030)	% Change (2025 - 2030)	Median Hourly Earnings
Driver/Sales Workers and Truck Drivers	14,366	26.0%	15,377	16,808	1,430	9%	\$24.30
Laborers and Material Movers	12,366	22.4%	13,468	14,773	1,305	10%	\$20.12
Passenger Vehicle Drivers	4,325	7.8%	4,333	4,322	(11)	(0%)	\$25.90
Couriers and Messengers	1,698	3.1%	1,920	2,253	333	17%	\$17.37
Industrial Truck and Tractor Operators	1,787	3.2%	1,964	2,140	176	9%	\$24.36
First-Line Supervisors of Transportation and Material Moving	1,710	3.1%	1,840	2,008	168	9%	\$30.90
Flight Attendants	1,262	2.3%	1,290	1,309	19	1%	\$49.14
Shipping, Receiving, and Inventory Clerks	940	1.7%	1,005	1,056	51	5%	\$20.80
Aircraft Pilots and Flight Engineers	828	1.5%	848	863	15	2%	\$102.55
General and Operations Managers	756	1.4%	804	862	58	7%	\$62.32
Transportation, Storage, and Distribution Managers	689	1.2%	735	798	63	9%	\$56.71
Dispatchers	669	1.2%	695	719	24	4%	\$28.52
Cargo and Freight Agents	651	1.2%	675	701	26	4%	\$26.41
Office Clerks, General	607	1.1%	628	641	13	2%	\$23.56
Customer Service Representatives	537	1.0%	564	587	23	4%	\$22.43
Reservation and Transportation Ticket Agents, Travel Clerks	553	1.0%	565	570	<10	--	\$20.56
First-Line Supervisors of Office and Administrative Support Workers	490	0.9%	515	535	20	4%	\$34.78
Miscellaneous Sales Representatives, Services	435	0.8%	452	472	19	4%	\$41.38
Logisticians and Project Management Specialists	360	0.7%	394	447	53	13%	\$53.36
Bus and Truck Mechanics and Diesel Engine Specialists	382	0.7%	397	414	16	4%	\$39.42
Miscellaneous Managers	382	0.7%	395	411	16	4%	\$72.85
Sailors and Marine Oilers	377	0.7%	392	404	13	3%	\$34.12

Source: QCEW, CA EDD, Lightcast, 2024.



**Figure 40. Transportation & Warehousing Job Demand: Top Employers Posting, Occupations, and Skills**

Company	Total/Unique (Sep 2022 - Sep 2024)		Posting Intensity	Median Posting Duration		
UPS	5,630 / 1,013		6 : 1	23 days		
FedEx	5,536 / 1,001		6 : 1	29 days		
Transdev	2,466 / 786		3 : 1	28 days		
United States Postal Service	2,631 / 638		4 : 1	25 days		
Penske Automotive Group	5,320 / 370		14 : 1	22 days		
Ac Transit	967 / 308		3 : 1	27 days		
GoPuff	505 / 250		2 : 1	29 days		
Bay Area Rapid Transit	587 / 229		3 : 1	24 days		
Deutsche Post DHL Group	1,491 / 213		7 : 1	33 days		
Occupation (SOC)	Total/Unique (Sep 2022 - Sep 2024)		Posting Intensity	Median Posting Duration		
Heavy and Tractor-Trailer Truck Drivers	10,140 / 2,273		4 : 1	28 days		
Laborers and Freight, Stock, and Material Movers, Hand	8,166 / 1,326		6 : 1	24 days		
Driver/Sales Workers	3,288 / 596		6 : 1	28 days		
Retail Salespersons	2,114 / 529		4 : 1	29 days		
Customer Service Representatives	2,092 / 510		4 : 1	24 days		
General and Operations Managers	2,210 / 489		5 : 1	31 days		
First-Line Supervisors of Retail Sales Workers	2,092 / 484		4 : 1	30 days		
Postal Service Clerks	1,557 / 399		4 : 1	25 days		
Bus and Truck Mechanics and Diesel Engine Specialists	3,376 / 315		11 : 1	25 days		
Dispatchers, Except Police, Fire, and Ambulance	1,290 / 229		6 : 1	32 days		
Skills	Postings	% of Total Postings	Profiles	% of Total Profiles	Projected Skill Growth	Skill Growth Relative to Market
Warehousing	2,195	16%	641	3%	+13.0%	<span style="background-color: #28a745; color: white; border-radius: 10px; padding: 2px 5px;">Growing</span>
Truck Driving	886	6%	378	2%	+15.7%	<span style="background-color: #28a745; color: white; border-radius: 10px; padding: 2px 5px;">Growing</span>
Forklift Truck	865	6%	221	1%	+5.5%	<span style="background-color: #6c757d; color: white; border-radius: 10px; padding: 2px 5px;">Stable</span>
Merchandising	775	6%	340	2%	+15.0%	<span style="background-color: #28a745; color: white; border-radius: 10px; padding: 2px 5px;">Growing</span>
Pallet Jacks	652	5%	33	0%	+11.6%	<span style="background-color: #28a745; color: white; border-radius: 10px; padding: 2px 5px;">Growing</span>
Auditing	623	4%	461	2%	+21.8%	<span style="background-color: #28a745; color: white; border-radius: 10px; padding: 2px 5px;">Rapidly Growing</span>
Accounting	535	4%	550	3%	+24.0%	<span style="background-color: #28a745; color: white; border-radius: 10px; padding: 2px 5px;">Rapidly Growing</span>
Invoicing	508	4%	361	2%	+16.2%	<span style="background-color: #28a745; color: white; border-radius: 10px; padding: 2px 5px;">Growing</span>

Source: Lightcast, 2024. Lightcast analyzes online job postings of popular job boards to provide valuable insights into real-time needs sought by regional employers. These jobs were posted for non-remote, remote, hybrid, and unknown work locations.

## 6. Trends Impacting the Future of the East Bay Workforce

### Upskilling & Reskilling in the Age of Artificial Intelligence

Digital transformation helps drive productivity growth and increase value creation for employers and consumers alike. For instance, in the manufacturing and retail industries, automation and AI have boosted efficiency, transformed supply chains, eliminated certain repetitive tasks and errors, and opened resources for innovation, allowing workers to focus on strategy, creativity, and problem-solving.

Employers are not dramatically eliminating existing occupations but are instead redefining job roles and skills. They are focusing on upskilling workers in areas like digital literacy, cybersecurity awareness, data analytics, and collaborative software tools to maintain productivity and cohesion as remote/hybrid work becomes the norm. Beyond technical proficiency, soft skills like critical thinking, collaboration, and communication remain crucial in any workplace.<sup>2</sup>

### Impacts from a Carbon-Neutral Transition in Contra Costa County

The closure of refineries in Contra Costa will result in significant job losses in the coming years, impacting the regional economy and local communities, which will lose substantial tax revenue and economic activity, as refineries are major employers and taxpayers.

Closure of refineries can also be disruptive to local and regional supply chains, affecting numerous industries dependent on petroleum products. Additionally, the lack of transition plans can leave communities unprepared for the economic and social impacts of closures. Addressing these challenges requires comprehensive planning, investment in alternative industries, and support for affected workers and communities.

As the Contra Costa County Board of Supervisors recently adopted a new General Plan and Climate Action Plan, the County is committed to addressing historic injustices and disproportionate impacts that certain communities have endured. The transition for both workers and communities to growing industries in the clean energy sector is envisioned to potentially be a once-in-a-lifetime opportunity to benefit from and contribute to investments in renewable energy generation and storage, manufacturing of electric vehicles, residential and commercial building decarbonization, and workforce development. It will happen while promoting and supporting growth in clean energy sectors in underinvested areas that will create a just transition to industries that support the clean energy transition, produce new revenue for local communities, provide high road replacement jobs for displaced refinery workers, and create new job opportunities for the communities that have disproportionately been impacted because of living next to heavy industrial uses.

The vision of developing a clean energy manufacturing cluster was first adopted in 2019 as part of Contra Costa County's Northern Waterfront Economic Development Initiative Strategic Plan. The Northern Waterfront Economic Development Initiative Strategic Action Plan was adopted by

---

<sup>2</sup> McKinsey's Global Survey on Digital Transformations, 2024.

Contra Costa County and the seven cities along the Northern Waterfront after a decade-long, community-driven effort. The Northern Waterfront Economic Development Initiative is a regional cluster-based economic development strategy with a goal of creating 18,000 new jobs by 2035. The Initiative leverages existing competitive advantages and assets by focusing on five targeted clusters (advanced transportation, advanced manufacturing, biomedical/biotech, ag tech & food processing, and clean tech). The hallmark of this initiative is the collaboration among the County and seven partner cities to enhance the economic vitality of the region.

One of the catalysts for this transition on Contra Costa County's Northern Waterfront is a global market assessment for next-generation batteries—the cheaper, safer, and more energy-dense alternative to Li-ion batteries, which is critical to energy transition and decarbonization—that projects the global market at \$400 billion by 2030 (Source: McKinsey). Only a handful of next-generation battery technology research and manufacturing hubs will emerge around the world over the next 5 years to meet this demand, and many believe in the potential for the Northern Waterfront to be in position to become one of these hubs. The Northern Waterfront benefits from its industrial corridor and dense goods movement network, including seaports, airports, rail and highways, that create access to global markets. The Bay Area region already hosts the research heft, a growing network of energy startups, an established venture capital ecosystem, and a large market. All these assets give the Northern Waterfront the head start in creating a durable next-generation battery technology research and manufacturing hub in the Bay Area, and exporting products to both overseas and U.S based markets.

## Uncertainty around federal investments in climate and infrastructure

In the backdrop of the aforementioned aspirations and concurrent with the development of this report, California has been experiencing the largest and most expensive natural disaster in the history of the United States. Although the devastating wildfires in Los Angeles County have not had many direct or immediate impacts on the East Bay and broader Northern California region, the approach, scale, and scope of this disaster – and the way local, regional, state, and federal agencies and organizations will work together around recovery and resiliency efforts – remains an open question. On Thursday, January 23, 2025, President Trump signed an executive order suspending the disbursement of Inflation Reduction Act (IRA) and Infrastructure Investment and Jobs Act (IIJA) funding, putting into question whether pre-approved investments around clean energy and a “carbon-neutral, just transition” will continue to move forward or if they will be clawed back. The degree to which there are additional and deeper changes at the federal level – from how certain funding streams are administered and allocated to the permissible uses of these funds – will undoubtedly factor in prominently in the future landscape. It is worth noting that this could have material impacts on investments in key regional assets that may not always be associated with climate resilience, such as expanding and strengthening the capacity of East Bay ports, which in turn will impact some of the key initiatives cited in this report, such as programs offering a pipeline into maritime trades industries.



# Appendix

## Appendix A. Data Limitations

Employment data from federal, local sources, and third-party sources such as Lightcast, while valuable at the high-level, has several limitations. Understanding these data challenges is crucial for accurately interpreting employment data and making informed decisions. It is recommended that workforce organizations supplement data with qualitative insights from ongoing consultations and surveys of local employers, industry stakeholders, economic development professionals, and workers who can offer a nuanced understanding of the opportunities and challenges of specific industries, as well as workforce needs and skill gaps.

This report relies heavily on Lightcast data. While Lightcast provides comprehensive and valuable labor market insights, it is important to understand its limitations including the following:

- **Misrepresentation of Physical Location:** Some jobs are reported at the headquarters level, rather than by the physical location, potentially misrepresenting the type of jobs performed locally. This is quite common in the manufacturing industry.
- **Job Postings vs. Job Vacancies:** Lightcast analyzes job postings, which are not always the same as actual job vacancies. Some postings may be duplicates, outdated, or not result in hires.
- **Data Deduplication:** Although Lightcast uses a sophisticated two-step approach to de-duplicate job postings, up to 20% of the collected data may still be duplicates.
- **Data Timeliness:** Job postings are updated frequently, but there can be a lag in processing and publishing this data, meaning it may not reflect the most current job market conditions.
- **Geographic Coverage:** While Lightcast covers the entire United States, the granularity of data at the ZIP code level may not capture local nuances accurately, particularly in areas with smaller populations.
- **Data Curation:** The process of curating and cleaning data involves removing outliers and bad data, which might lead to the exclusion of some relevant information.
- **Reliance on Online Sources:** Lightcast's data is primarily gathered from online job postings and profiles, which may not fully represent offline job markets or industries less active online.

## Additional Occupational Tables

**Figure X. Occupational Composition & Growth: East Bay, 2018-2023**

Description	2018 Jobs	2023 Jobs	# Change	% Change
Management	95,933	114,927	18,994	20%
Healthcare Support	75,588	87,937	12,349	16%
Business and Financial Operations	85,249	94,442	9,193	11%
Community and Social Service	22,765	26,089	3,324	15%
Transportation and Material Moving	97,144	100,210	3,067	3%
Life, Physical, and Social Science	18,995	21,808	2,812	15%
Food Preparation and Serving Related	93,020	95,666	2,646	3%
Computer and Mathematical	53,670	56,029	2,359	4%
Healthcare Practitioners and Technical	70,559	70,976	417	1%
Building and Grounds Cleaning and Maintenance	45,882	46,165	282	1%
Protective Service	23,723	23,971	249	1%
Installation, Maintenance, and Repair	39,902	40,013	112	0%
Legal	11,922	11,949	27	0%
Farming, Fishing, and Forestry	2,072	2,033	(39)	(2%)
Military-only	2,863	2,792	(71)	(2%)
Arts, Design, Entertainment, Sports, and Media	29,634	27,891	(1,743)	(6%)
Architecture and Engineering	30,625	27,887	(2,738)	(9%)
Production	66,752	63,682	(3,070)	(5%)
Personal Care and Service	43,107	38,688	(4,419)	(10%)
Construction and Extraction	70,427	64,932	(5,494)	(8%)
Educational Instruction and Library	80,384	72,723	(7,661)	(10%)
Office and Administrative Support	141,424	124,663	(16,761)	(12%)
Sales and Related	122,781	103,603	(19,178)	(16%)
<b>Total</b>	<b>1,324,419</b>	<b>1,319,077</b>	<b>(5,342)</b>	<b>(0%)</b>

**Figure X. Occupational Projections: East Bay, 2023-2033**

Description	2023 Jobs	2033 Jobs	# Change	% Change
Healthcare Support	87,937	110,737	22,800	26%
Healthcare Practitioners and Technical Occupations	70,976	79,080	8,104	11%
Transportation and Material Moving	100,210	107,660	7,450	7%
Food Preparation and Serving Related	95,666	102,969	7,304	8%
Production	63,682	67,660	3,978	6%
Management	114,927	118,520	3,593	3%
Community and Social Service	26,089	29,559	3,470	13%
Personal Care and Service	38,688	42,079	3,392	9%
Educational Instruction and Library	72,723	75,909	3,186	4%
Building and Grounds Cleaning and Maintenance	46,165	48,974	2,809	6%
Computer and Mathematical	56,029	58,041	2,012	4%

Life, Physical, and Social Science	21,808	23,512	1,704	8%
Protective Service	23,971	25,540	1,569	7%
Installation, Maintenance, and Repair	40,013	41,538	1,524	4%
Architecture and Engineering	27,887	29,327	1,440	5%
Construction and Extraction	64,932	65,574	641	1%
Farming, Fishing, and Forestry	2,033	2,115	82	4%
Arts, Design, Entertainment, Sports, and Media	27,891	27,906	15	0%
Unclassified	0	0	0	0%
Military-only	2,792	2,779	(13)	(0%)
Business and Financial Operations	94,442	94,361	(81)	(0%)
Legal	11,949	11,837	(113)	(1%)
Sales and Related	103,603	98,265	(5,338)	(5%)
Office and Administrative Support	124,663	118,333	(6,330)	(5%)
<b>Total</b>	<b>1,319,077</b>	<b>1,382,275</b>	<b>63,198</b>	<b>5%</b>

Projections are generated by applying projected staffing patterns to Lightcast's projected industry employment data. Read the full explanation of Lightcast's [methodology](#).

**Figure X. Top Occupation Employment Concentration: East Bay, 2033 Projection**

Occupation	2033 Employment Concentration
Life, Physical, and Social Science	1.76
Healthcare Support	1.58
Architecture and Engineering	1.32
Computer and Mathematical	1.19
Community and Social Service	1.15
Management	1.13
Personal Care and Service	1.12
Arts, Design, Entertainment, Sports, and Media	1.09
Construction and Extraction	1.07
Building and Grounds Cleaning and Maintenance	1.06
Business and Financial Operations	1.03
Legal	1.01