

APCL : Apprenticeship Construction Technology Norcal

New Degrees and Certificates:

1. Presentation to Academic Senate, including:

- Anticipated resources and costs, including classified professional support and administrative oversight

The only resources needed are Admission and Records to enroll the students into the college. The courses are taught offsite at the LiUNA Norcal Regional Training Center. (San Ramon)

- Need or demand: o CTE (LMI, advisory board)

To be Approved by the Automotive Advisory Board on Nov 30, 2022.

LMI included in PDF.

o Transfer

N/A

o Local (similar programs in service area, some measure of need)

The closest program to this is the LiUNA program in Los Angeles Area.

Mission appropriateness – educational master plan (not required for Transfer programs)

Relevant to: offers educational opportunities and support for completion of students' career-technical goals

- Curriculum required – course sequence

Apprenticeship Construction Technology See below.

- FTEF required (if applicable)

N/A

- Implementation schedule

Fall 2023 with CPL for students currently taking the Teamster classes.

- Program Student Learning Outcomes (PSLOs)

See attached file

- Program map (as part of the Guided Pathway process)

See attached file

A construction worker wearing a white hard hat, a grey hoodie, and a high-visibility safety vest is working on a steel structure. He is using a power tool to tighten a bolt on a steel beam. The background shows a blurred view of a construction site with more steel beams and a ladder.

Construction Laborers in California

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What is Lightcast Data?

Lightcast data is a hybrid dataset derived from official government sources such as the US Census Bureau, Bureau of Economic Analysis, and Bureau of Labor Statistics. Leveraging the unique strengths of each source, our data modeling team creates an authoritative dataset that captures more than 99% of all workers in the United States. This core offering is then enriched with data from online social profiles, resumés, and job postings to give you a complete view of the workforce.

Lightcast data is frequently cited in major publications such as *The Atlantic*, *Forbes*, *Harvard Business Review*, *The New York Times*, *The Wall Street Journal*, and *USA Today*.



Report Parameters

1 Occupation

47-2061 Construction Laborers

1 State

6 California

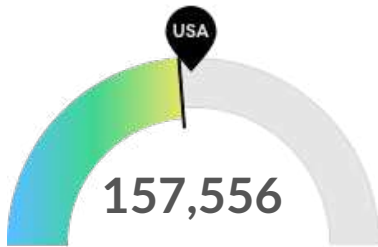
Class of Worker

QCEW Employees, Non-QCEW Employees, and Self-Employed

The information in this report pertains to the chosen occupation and geographical area.

Executive Summary

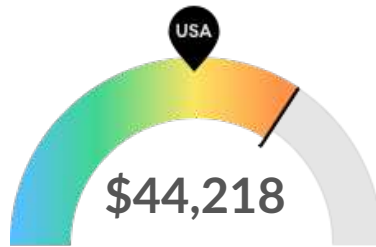
Light Job Posting Demand Over an Average Supply of Regional Jobs



157,556

Jobs (2022)

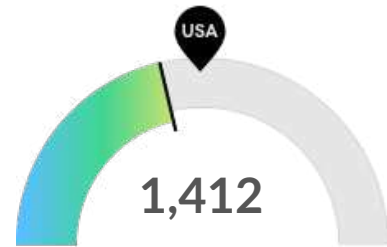
California is about average for this kind of job. The national average for an area this size is 169,323* employees, while there are 157,556 here.



\$44,218

Compensation

Earnings are high in California. The national median salary for Construction Laborers is \$36,420, compared to \$44,218 here.



1,412

Job Posting Demand

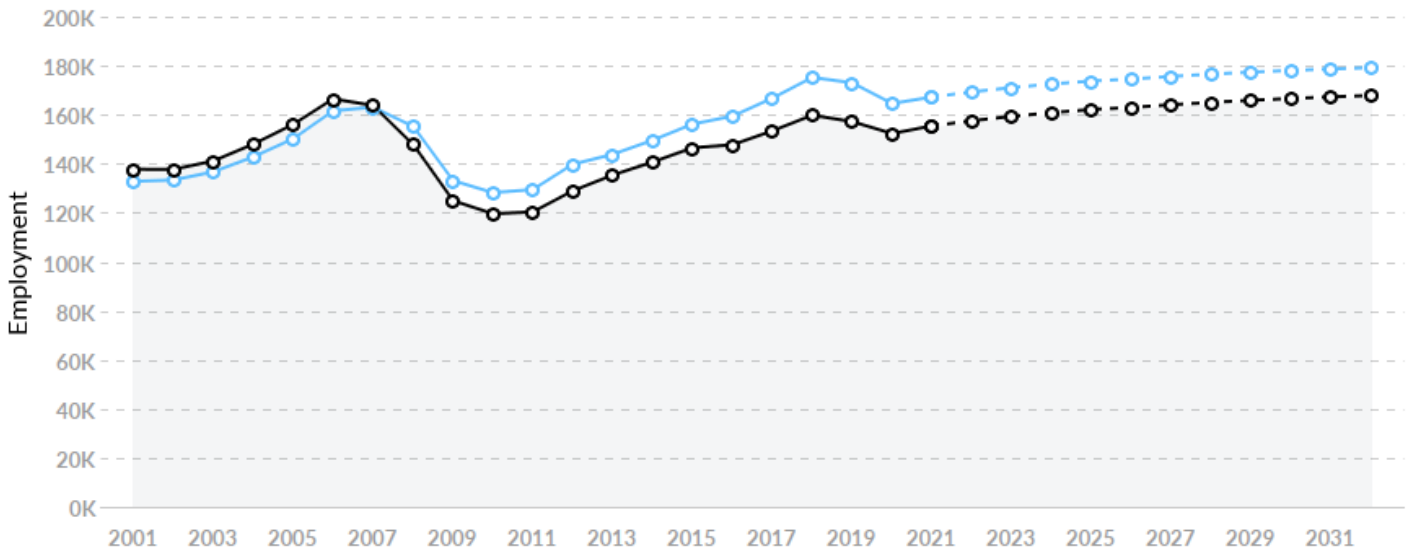
Job posting activity is low in California. The national average for an area this size is 1,760* job posting/mo, while there is 1,412 here.

*National average values are derived by taking the national value for Construction Laborers and scaling it down to account for the difference in overall workforce size between the nation and California. In other words, the values represent the national average adjusted for region size.

Jobs

Regional Employment Is About Equal to the National Average

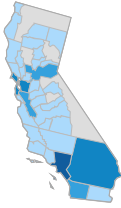
An average area of this size typically has 169,323* jobs, while there are 157,556 here.



Region	2022 Jobs	2027 Jobs	Change	% Change
● California	157,556	164,059	6,503	4.1%
● National Average	169,323	175,631	6,308	3.7%

*National average values are derived by taking the national value for Construction Laborers and scaling it down to account for the difference in overall workforce size between the nation and California. In other words, the values represent the national average adjusted for region size.

Regional Breakdown



MSA	2022 Jobs
Los Angeles-Long Beach-Anaheim, CA	48,085
San Francisco-Oakland-Berkeley, CA	20,217
Riverside-San Bernardino-Ontario, CA	19,747
San Diego-Chula Vista-Carlsbad, CA	13,128
Sacramento-Roseville-Folsom, CA	11,258

Most Jobs are Found in the Residential Building Construction Industry Sector

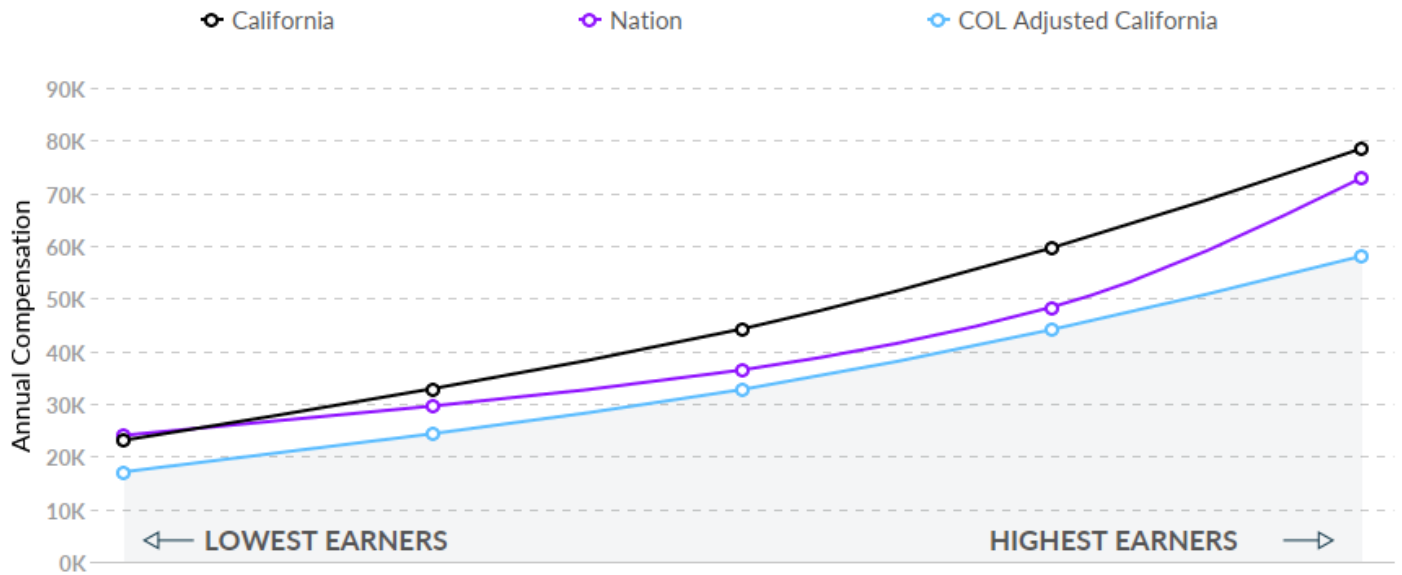


Industry	% of Occupation in Industry (2022)
Residential Building Construction	22.1%
Other Specialty Trade Contractors	16.5%
Foundation, Structure, and Building Exterior Contractors	10.7%
Building Finishing Contractors	9.9%
Nonresidential Building Construction	8.0%
Building Equipment Contractors	7.6%
Other	25.3%

Compensation

Regional Compensation Is 21% Higher Than National Compensation

For Construction Laborers, the 2021 median wage in California is \$44,218, while the national median wage is \$36,420.



Job Posting Activity



11,292 Unique Job Postings

The number of unique postings for this job from Jan 2022 to Aug 2022.



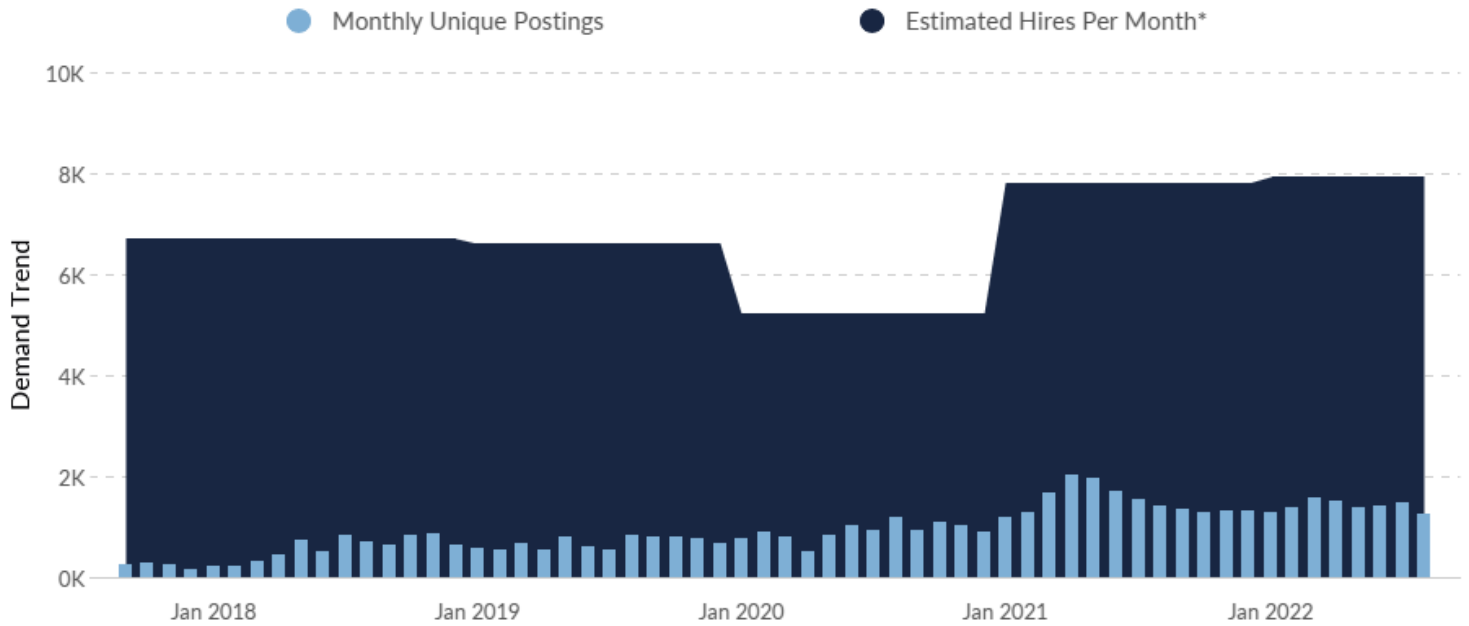
2,533 Employers Competing

All employers in the region who posted for this job from Jan 2022 to Aug 2022.













38 Day Median Duration











Posting duration is 8 days longer than what's typical in the region.



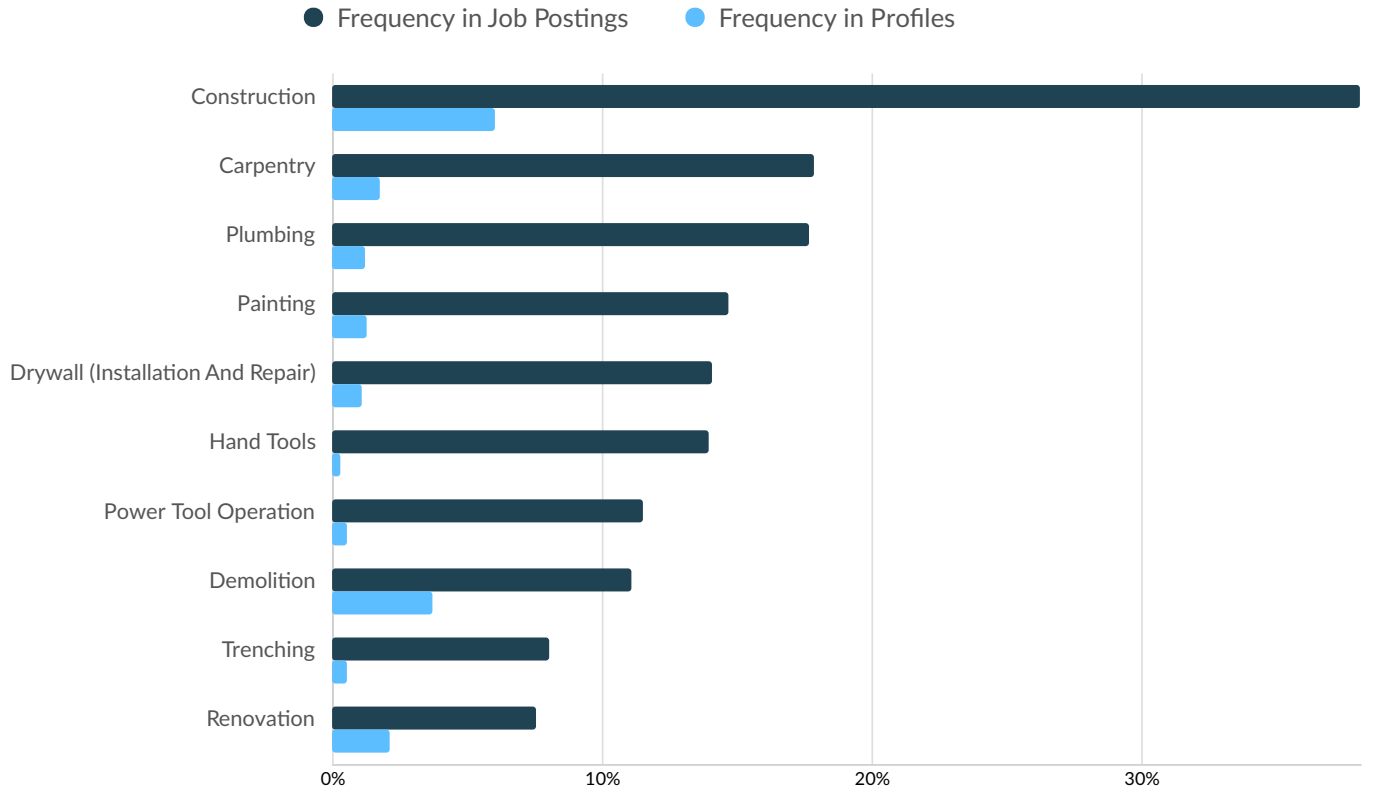
Occupation	Avg Monthly Postings (Jan 2022 - Aug 2022)	Avg Monthly Hires (Jan 2022 - Aug 2022)
Construction Laborers	1,412	7,946

*A hire is reported by the Quarterly Workforce Indicators when an individual's Social Security Number appears on a company's payroll and was not there the quarter before. Lightcast hires are calculated using a combination of Lightcast jobs data, information on separation rates from the Bureau of Labor Statistics (BLS), and industry-based hires data from the Census Bureau.

Top Companies	Unique Postings
PeopleReady	278 
Aerotek	255 
E.Construct.USA	202 
Schnitzer Steel	54 
Mastec North America	48 
Hci	45 
Edison International	44 
Sunrun	41 
Randstad	37 
Installed Building Products	36 

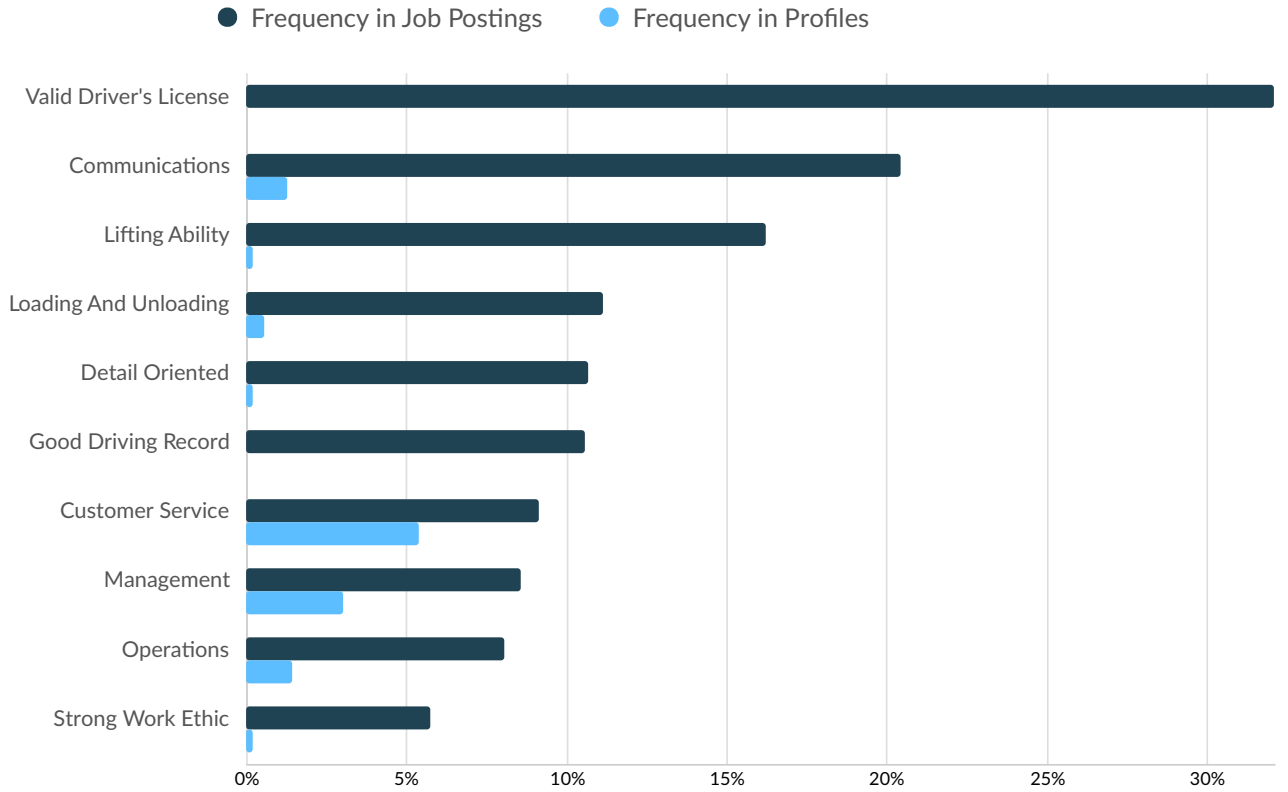
Top Job Titles	Unique Postings
Construction Laborers	1,615 
Handymen	1,505 
Construction Workers	677 
General Laborers	603 
Fiber Construction Engineers	376 
Laborers	374 
Skilled Laborers	344 
Construction Coordinators	217 
General Construction Laborers	211 
Plumbing Installers	158 

Top Specialized Skills



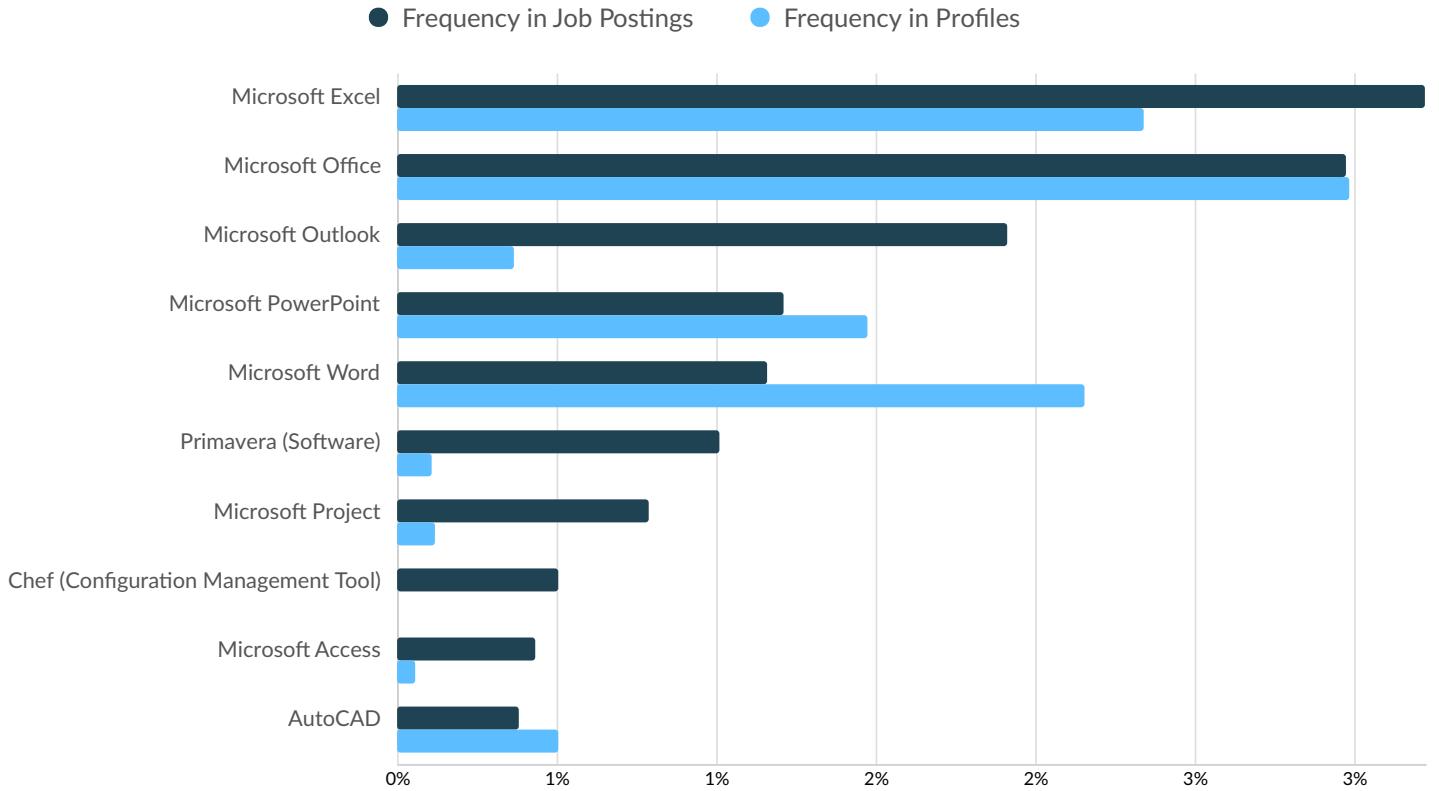
Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Construction	4,306	38%	778	6%
Carpentry	2,018	18%	225	2%
Plumbing	2,001	18%	154	1%
Painting	1,659	15%	162	1%
Drywall (Installation And Repair)	1,593	14%	141	1%
Hand Tools	1,578	14%	37	0%
Power Tool Operation	1,304	12%	73	1%
Demolition	1,255	11%	478	4%
Trenching	910	8%	71	1%
Renovation	851	8%	276	2%

Top Common Skills



Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Valid Driver's License	3,626	32%	2	0%
Communications	2,307	20%	166	1%
Lifting Ability	1,834	16%	24	0%
Loading And Unloading	1,261	11%	71	1%
Detail Oriented	1,208	11%	25	0%
Good Driving Record	1,194	11%	3	0%
Customer Service	1,034	9%	691	5%
Management	968	9%	393	3%
Operations	909	8%	184	1%
Strong Work Ethic	648	6%	25	0%

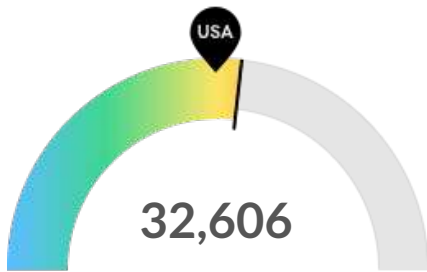
Top Software Skills



Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Microsoft Excel	364	3%	301	2%
Microsoft Office	336	3%	384	3%
Microsoft Outlook	216	2%	47	0%
Microsoft PowerPoint	137	1%	190	1%
Microsoft Word	131	1%	277	2%
Primavera (Software)	114	1%	14	0%
Microsoft Project	89	1%	15	0%
Chef (Configuration Management Tool)	57	1%	0	0%
Microsoft Access	49	0%	7	0%
AutoCAD	43	0%	65	1%

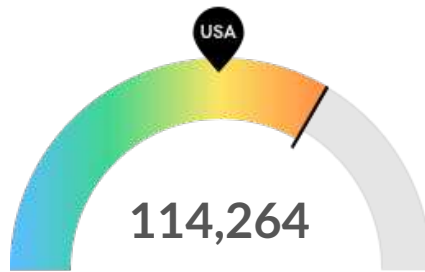
Demographics

Retirement Risk Is High, While Overall Diversity Is High



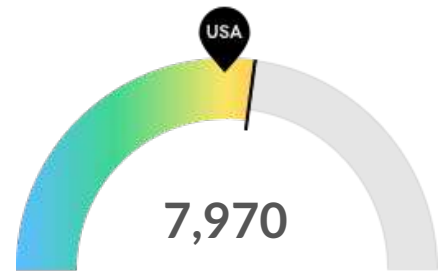
Retiring Soon

Retirement risk is high in California. The national average for an area this size is 29,375* employees 55 or older, while there are 32,606 here.



Racial Diversity

Racial diversity is high in California. The national average for an area this size is 71,642* racially diverse employees, while there are 114,264 here.

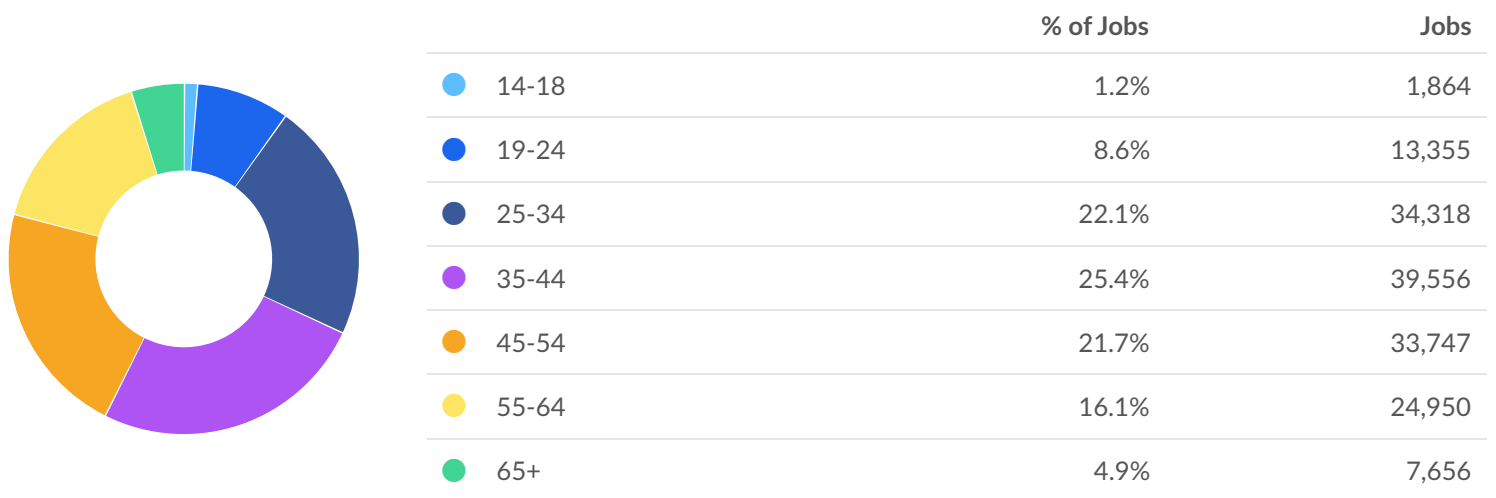


Gender Diversity

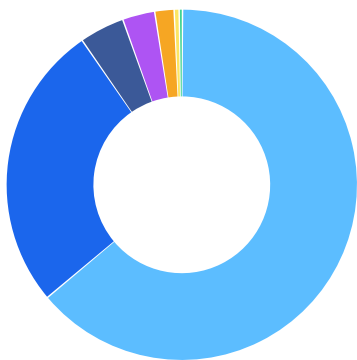
Gender diversity is high in California. The national average for an area this size is 7,050* female employees, while there are 7,970 here.

*National average values are derived by taking the national value for Construction Laborers and scaling it down to account for the difference in overall workforce size between the nation and California. In other words, the values represent the national average adjusted for region size.

Occupation Age Breakdown

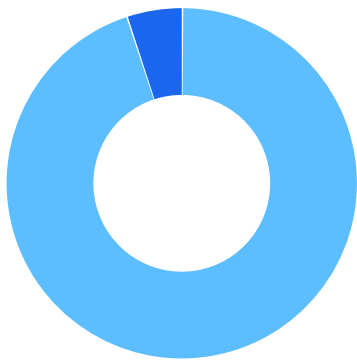


Occupation Race/Ethnicity Breakdown



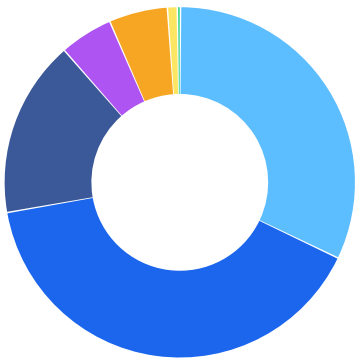
	% of Jobs	Jobs
Hispanic or Latino	63.8%	99,212
White	26.5%	41,183
Asian	4.2%	6,458
Black or African American	3.0%	4,639
Two or More Races	1.8%	2,763
American Indian or Alaska Native	0.5%	711
Native Hawaiian or Other Pacific Islander	0.3%	481

Occupation Gender Breakdown



	% of Jobs	Jobs
Males	94.9%	147,477
Females	5.1%	7,970

National Educational Attainment



	% of Jobs
● Less than high school diploma	32.0%
● High school diploma or equivalent	40.1%
● Some college, no degree	16.3%
● Associate's degree	4.9%
● Bachelor's degree	5.4%
● Master's degree	0.9%
● Doctoral or professional degree	0.3%

Occupational Programs



2 Programs

Of the programs that can train for this job, 2 have produced completions in the last 5 years.



387 Completions (2020)

The completions from all regional institutions for all degree types.



18,556 Openings (2020)

The average number of openings for an occupation in the region is 4,132.

CIP Code	Top Programs	Completions (2020)
46.0415	Building Construction Technology/Technician	368
46.9999	Construction Trades, Other	19

Top Schools	Completions (2020)
San Jose City College	59
CET-El Centro	46
Orange Coast College	37
Palo Verde College	25
CET-Watsonville	24
CET-San Diego	23
CET-Soledad	19
Butte College	17
El Camino Community College District	17
CET-Oxnard	16

Appendix A

Construction Laborers (SOC 47-2061):


Perform tasks involving physical labor at construction sites. May operate hand and power tools of all types: air hammers, earth tampers, cement mixers, small mechanical hoists, surveying and measuring equipment, and a variety of other equipment and instruments. May clean and prepare sites, dig trenches, set braces to support the sides of excavations, erect scaffolding, and clean up rubble, debris, and other waste materials. May assist other craft workers. Construction laborers who primarily assist a particular craft worker are classified under Helpers, Construction Trades (47-3010). Excludes Hazardous Materials Removal Workers (47-4041).

Sample of Reported Job Titles:

Construction Worker
Construction Laborer
Toolman
Site Work Laborer
Scaffolding Operator
Post Framer
Form Setter
Equipment Operator (EO)
Drop Crew Laborer
Bituminous Asphalt Technician

Related O*NET Occupation:

Construction Laborers (47-2061.00)

A construction worker wearing a white hard hat, a grey hoodie, and a high-visibility safety vest is working on a large steel structure. He is using a power tool to tighten a bolt on a steel beam. The background shows more of the steel framework and another worker in the distance.

Construction Laborers in 4 California MSAs

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Report Parameters

1 Occupation

47-2061 Construction Laborers

4 MSAs

23420 Fresno, CA

33700 Modesto, CA

32900 Merced, CA

44700 Stockton, CA

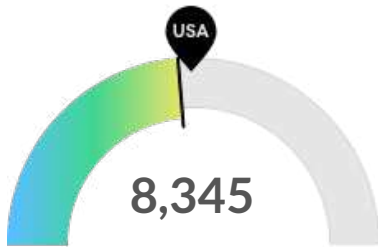
Class of Worker

QCEW Employees, Non-QCEW Employees, and Self-Employed

The information in this report pertains to the chosen occupation and geographical areas.

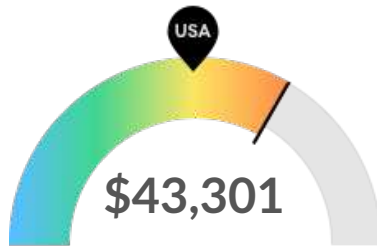
Executive Summary

Average Job Posting Demand Over an Average Supply of Regional Jobs



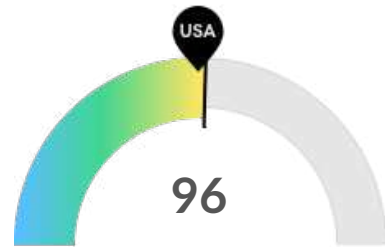
Jobs (2022)

Your area is about average for this kind of job. The national average for an area this size is 9,016* employees, while there are 8,345 here.



Compensation

Earnings are high in your area. The national median salary for Construction Laborers is \$36,420, compared to \$43,301 here.



Job Posting Demand

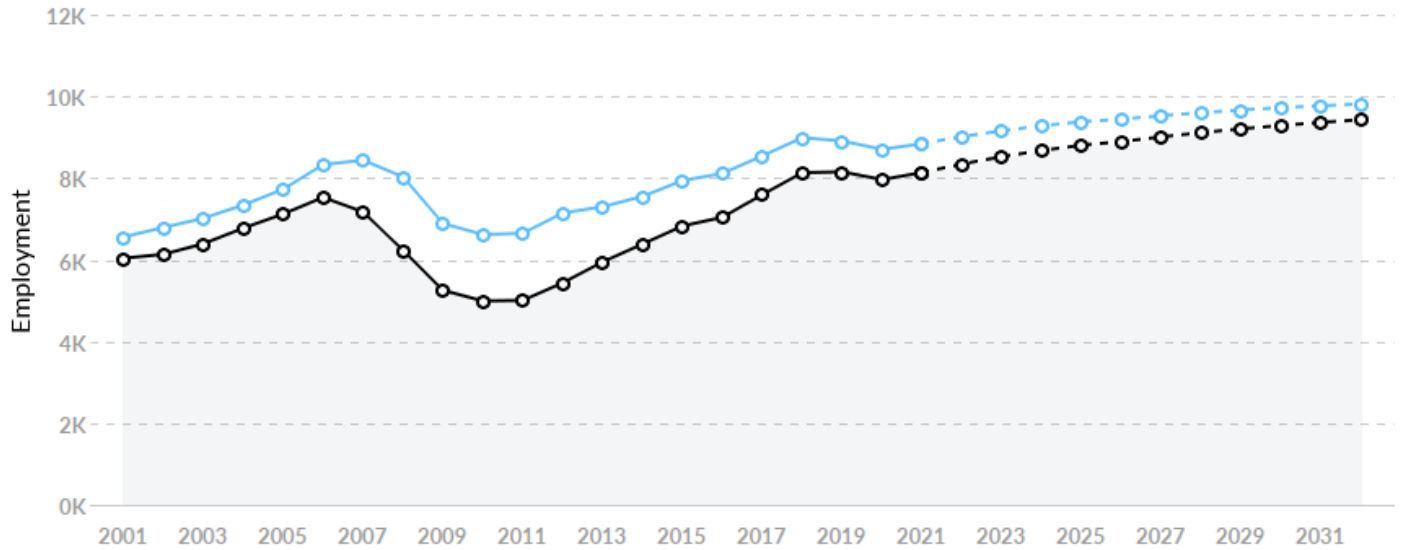
Job posting activity is about average in your area. The national average for an area this size is 94* job postings/mo, while there are 96 here.

*National average values are derived by taking the national value for Construction Laborers and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.

Jobs

Regional Employment Is About Equal to the National Average

An average area of this size typically has 9,016* jobs, while there are 8,345 here.



Region	2022 Jobs	2027 Jobs	Change	% Change
● 4 California MSAs	8,345	9,009	664	8.0%
● National Average	9,016	9,527	511	5.7%

*National average values are derived by taking the national value for Construction Laborers and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.

Regional Breakdown



MSA	2022 Jobs
Fresno, CA	3,077
Stockton, CA	2,368
Modesto, CA	2,070
Merced, CA	830

Most Jobs are Found in the Residential Building Construction Industry Sector

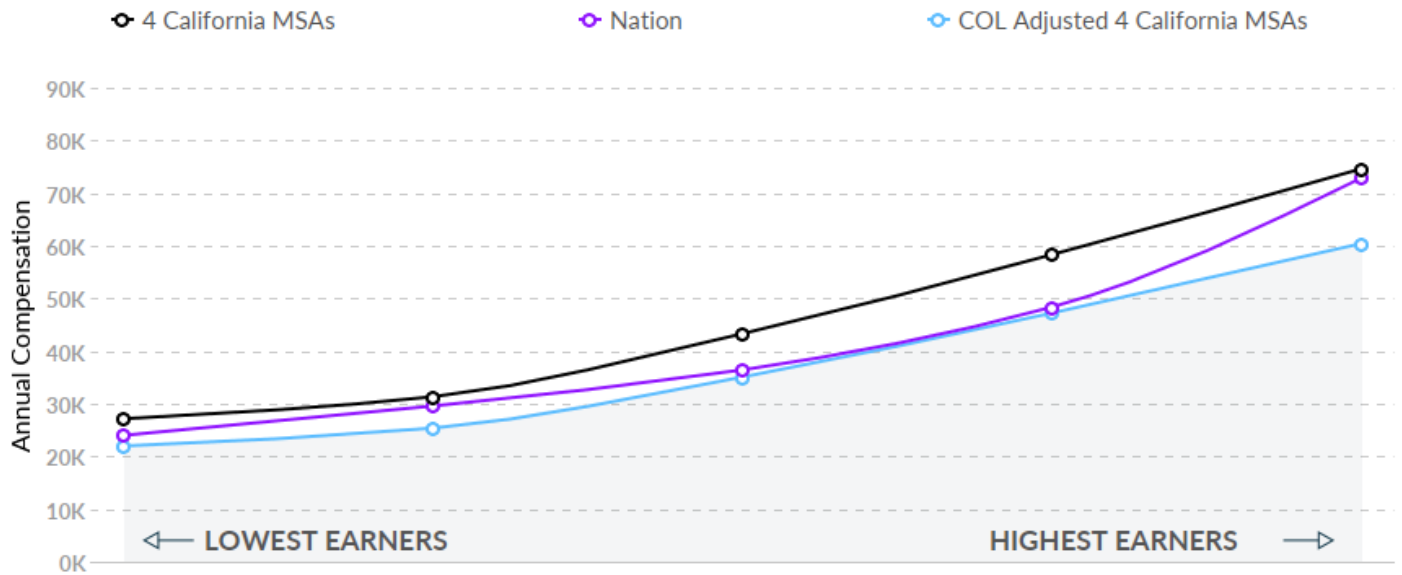


Industry	% of Occupation in Industry (2022)
Residential Building Construction	20.2%
Other Specialty Trade Contractors	18.3%
Foundation, Structure, and Building Exterior Contractors	12.9%
Building Finishing Contractors	9.3%
Utility System Construction	7.9%
Nonresidential Building Construction	7.1%
Other	24.2%

Compensation

Regional Compensation Is 19% Higher Than National Compensation

For Construction Laborers, the 2021 median wage in your area is \$43,301, while the national median wage is \$36,420.



Job Posting Activity



771 Unique Job Postings

The number of unique postings for this job from Jan 2022 to Aug 2022.



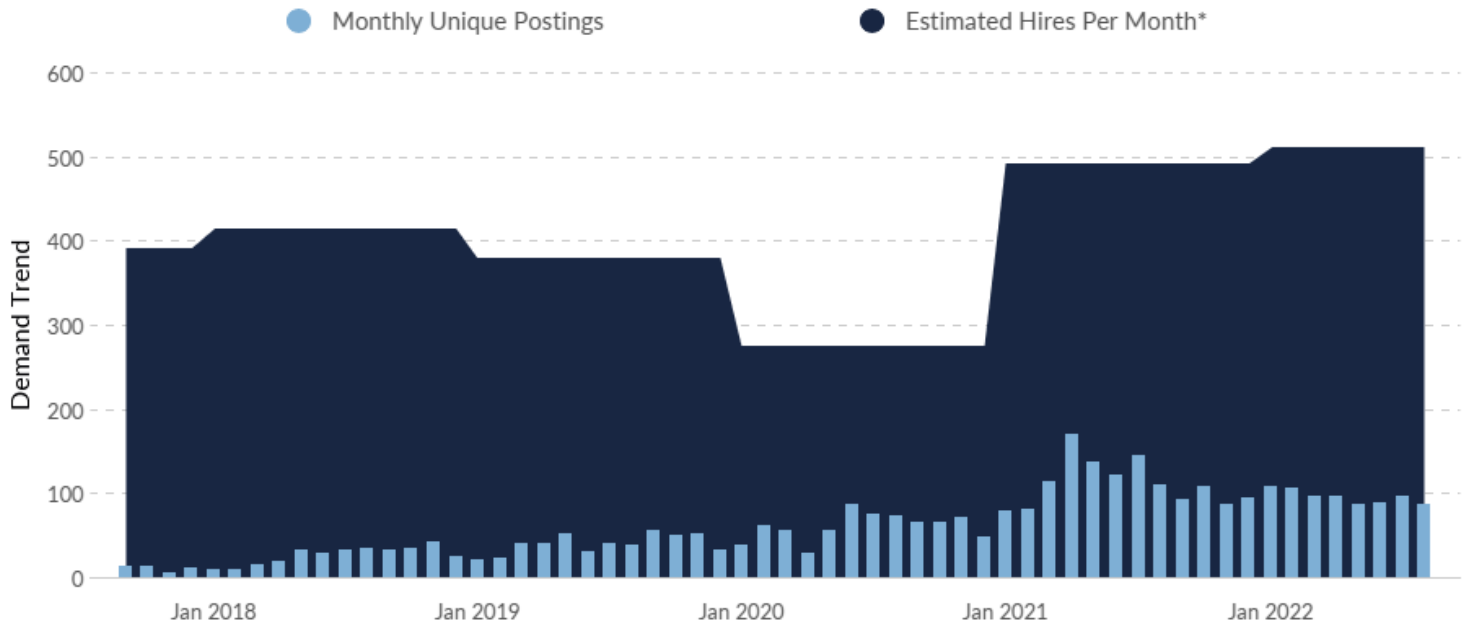
194 Employers Competing

All employers in the region who posted for this job from Jan 2022 to Aug 2022.



38 Day Median Duration

Posting duration is 8 days longer than what's typical in the region.

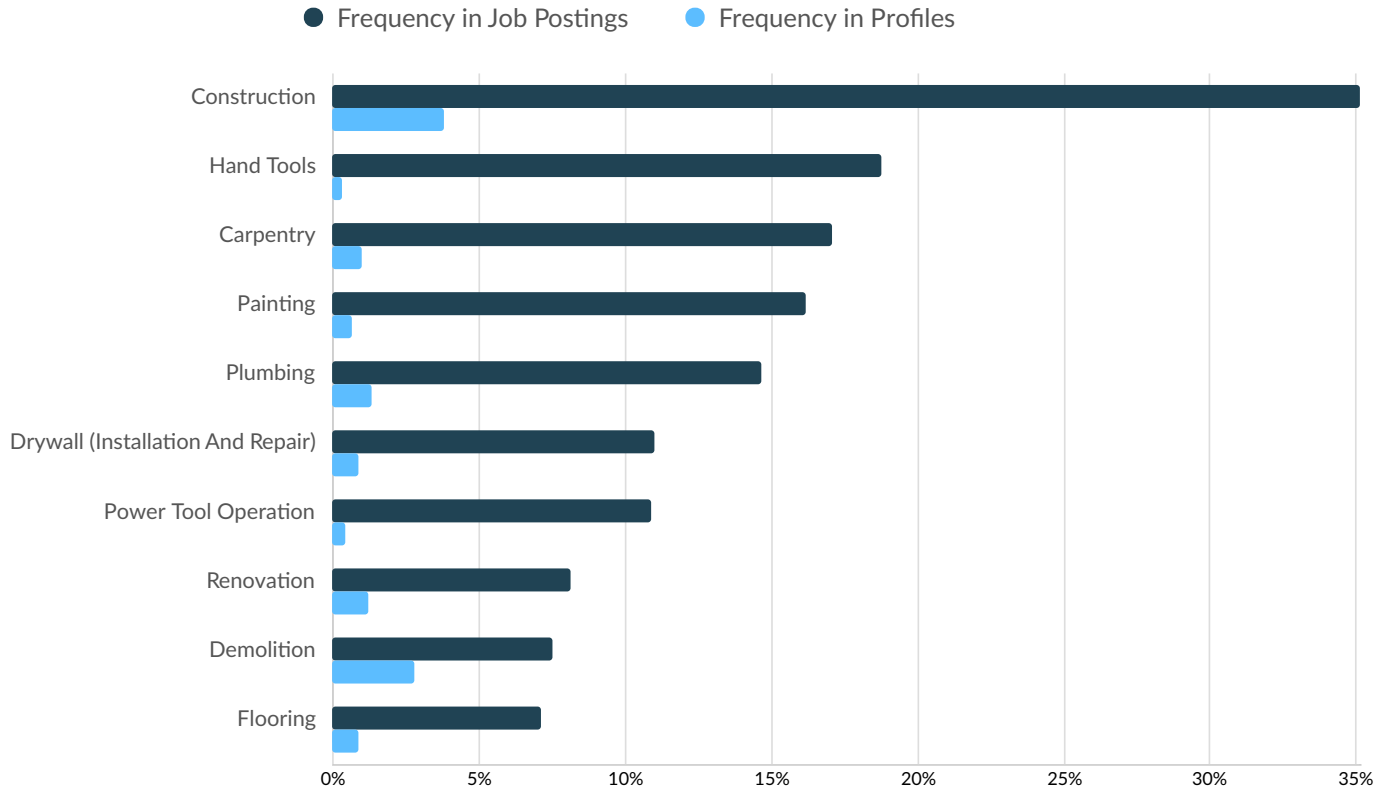


Occupation	Avg Monthly Postings (Jan 2022 - Aug 2022)	Avg Monthly Hires (Jan 2022 - Aug 2022)
Construction Laborers	96	511

*A hire is reported by the Quarterly Workforce Indicators when an individual's Social Security Number appears on a company's payroll and was not there the quarter before. Lightcast hires are calculated using a combination of Lightcast jobs data, information on separation rates from the Bureau of Labor Statistics (BLS), and industry-based hires data from the Census Bureau.

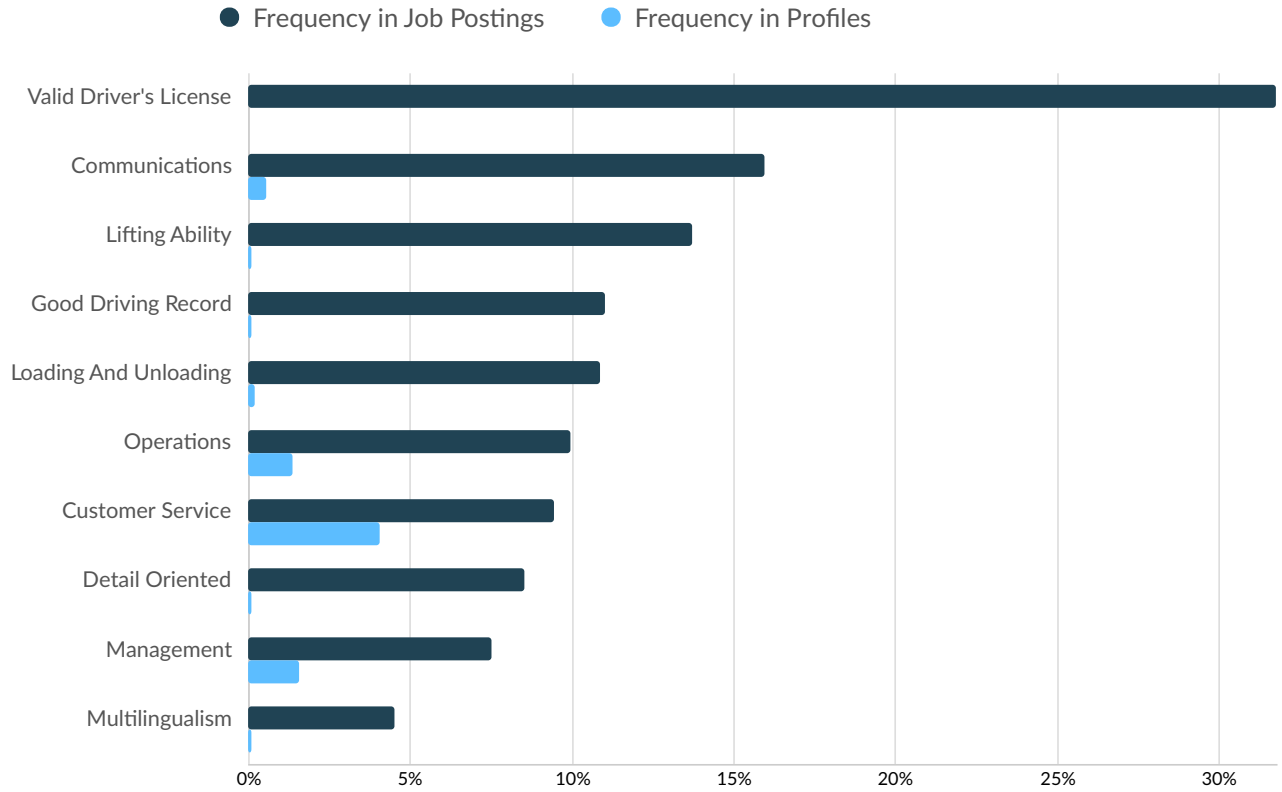
Top Companies	Unique Postings	Top Job Titles	Unique Postings
PeopleReady	25 	Construction Laborers	139 
E.Construct.USA	19 	Handymen	103 
Schnitzer Steel	17 	General Laborers	63 
Basalite Concrete Products	11 	Construction Workers	59 
Randstad	11 	Fiber Construction Engineers	32 
Aerotek	9 	General Construction Laborers	23 
Mastec North America	9 	General Production Laborers	16 
Clean Harbors	8 	Laborers	15 
CRH	7 	Production Laborers	12 
Sound Crete Contractors	7 	Skilled Laborers	10 

Top Specialized Skills



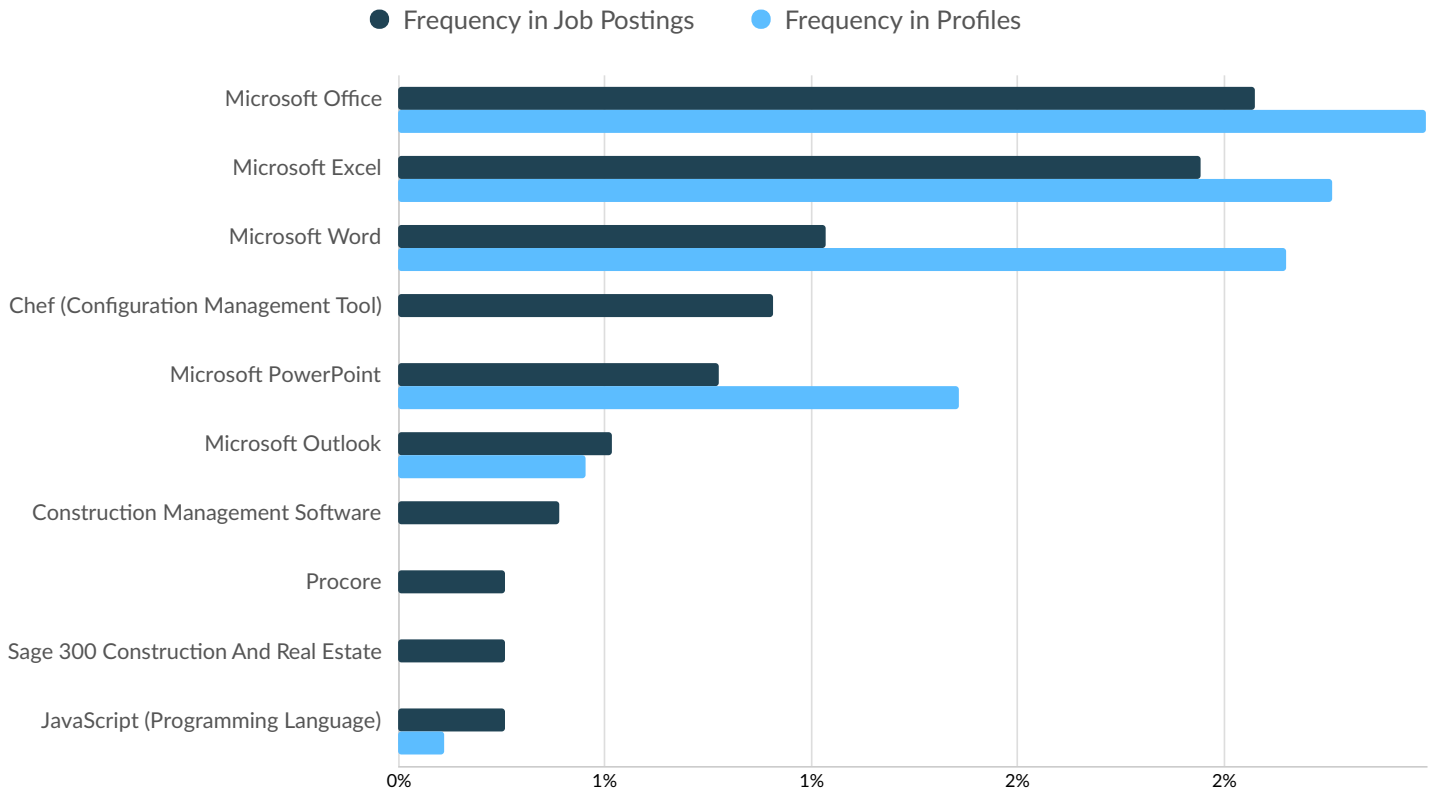
Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Construction	271	35%	34	4%
Hand Tools	145	19%	3	0%
Carpentry	132	17%	9	1%
Painting	125	16%	6	1%
Plumbing	113	15%	12	1%
Drywall (Installation And Repair)	85	11%	8	1%
Power Tool Operation	84	11%	4	0%
Renovation	63	8%	11	1%
Demolition	58	8%	25	3%
Flooring	55	7%	8	1%

Top Common Skills



Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Valid Driver's License	245	32%	0	0%
Communications	123	16%	5	1%
Lifting Ability	106	14%	1	0%
Good Driving Record	85	11%	1	0%
Loading And Unloading	84	11%	2	0%
Operations	77	10%	12	1%
Customer Service	73	9%	36	4%
Detail Oriented	66	9%	1	0%
Management	58	8%	14	2%
Multilingualism	35	5%	1	0%

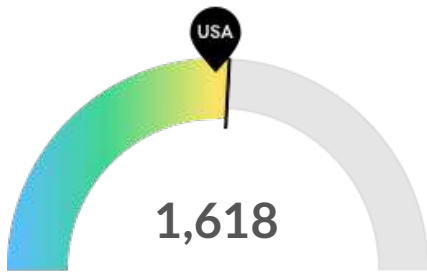
Top Software Skills



Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Microsoft Office	16	2%	22	2%
Microsoft Excel	15	2%	20	2%
Microsoft Word	8	1%	19	2%
Chef (Configuration Management Tool)	7	1%	0	0%
Microsoft PowerPoint	6	1%	12	1%
Microsoft Outlook	4	1%	4	0%
Construction Management Software	3	0%	0	0%
Procore	2	0%	0	0%
Sage 300 Construction And Real Estate	2	0%	0	0%
JavaScript (Programming Language)	2	0%	1	0%

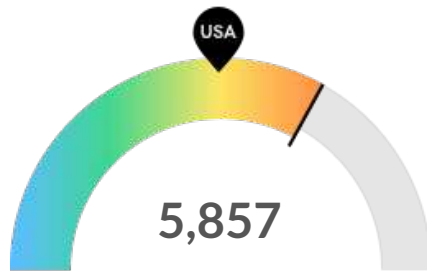
Demographics

Retirement Risk Is About Average, While Overall Diversity Is High



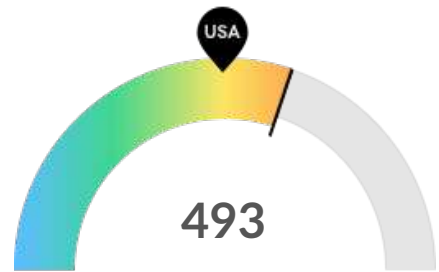
Retiring Soon

Retirement risk is about average in your area. The national average for an area this size is 1,537* employees 55 or older, while there are 1,618 here.



Racial Diversity

Racial diversity is high in your area. The national average for an area this size is 3,750* racially diverse employees, while there are 5,857 here.

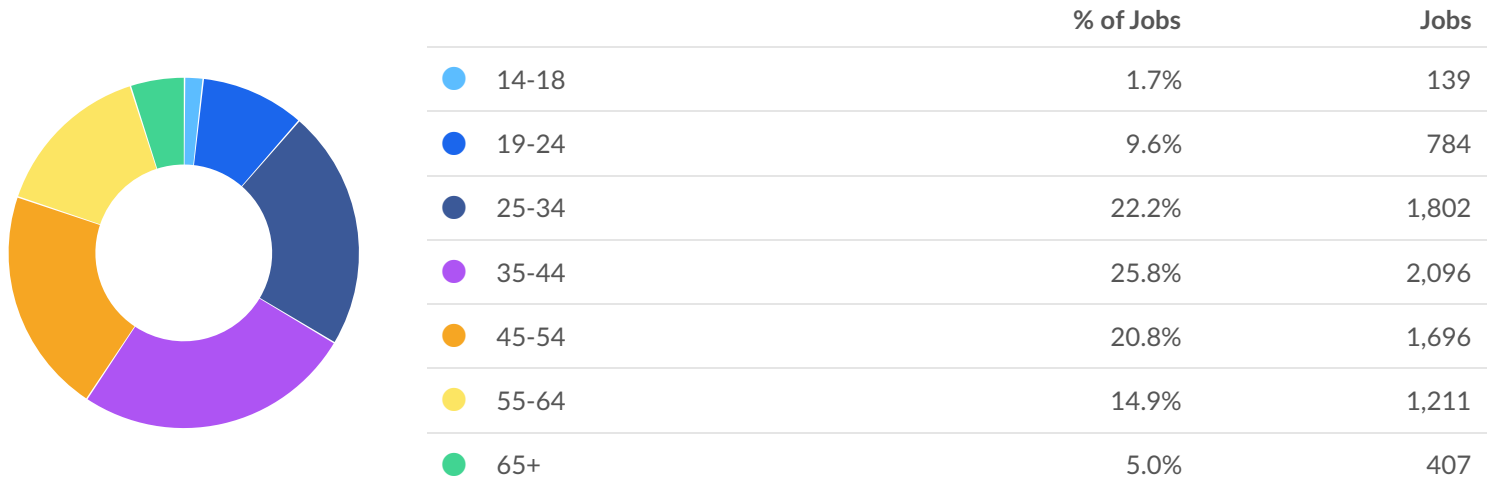


Gender Diversity

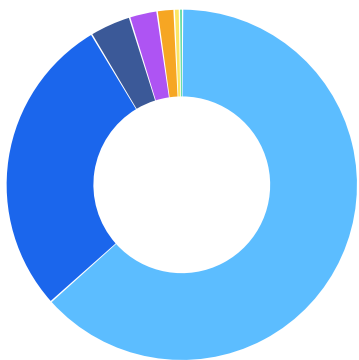
Gender diversity is high in your area. The national average for an area this size is 369* female employees, while there are 493 here.

*National average values are derived by taking the national value for Construction Laborers and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.

Occupation Age Breakdown

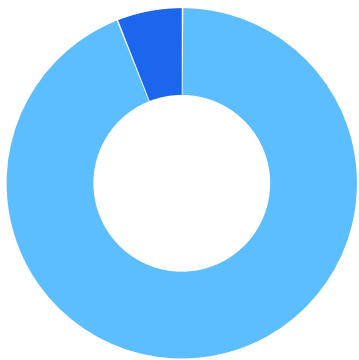


Occupation Race/Ethnicity Breakdown



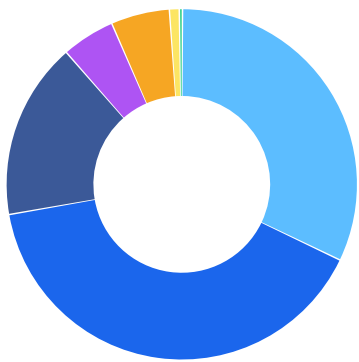
	% of Jobs	Jobs
Hispanic or Latino	63.3%	5,152
White	28.0%	2,279
Asian	3.8%	308
Black or African American	2.6%	208
Two or More Races	1.6%	127
American Indian or Alaska Native	0.5%	39
Native Hawaiian or Other Pacific Islander	0.3%	23

Occupation Gender Breakdown



	% of Jobs	Jobs
Males	93.9%	7,643
Females	6.1%	493

National Educational Attainment



	% of Jobs
● Less than high school diploma	32.0%
● High school diploma or equivalent	40.1%
● Some college, no degree	16.3%
● Associate's degree	4.9%
● Bachelor's degree	5.4%
● Master's degree	0.9%
● Doctoral or professional degree	0.3%

Occupational Programs



1 Program

Of the programs that can train for this job, 1 has produced completions in the last 5 years.



4 Completions (2020)

The completions from all regional institutions for all degree types.



1,021 Openings (2020)

The average number of openings for an occupation in the region is 236.

CIP Code	Top Programs	Completions (2020)
46.0415	Building Construction Technology/Technician	4 <div style="width: 100%; height: 10px; background-color: #0070C0;"></div>
Top Schools		Completions (2020)
Fresno City College		4 <div style="width: 100%; height: 10px; background-color: #0070C0;"></div>

Appendix A

Construction Laborers (SOC 47-2061):


Perform tasks involving physical labor at construction sites. May operate hand and power tools of all types: air hammers, earth tampers, cement mixers, small mechanical hoists, surveying and measuring equipment, and a variety of other equipment and instruments. May clean and prepare sites, dig trenches, set braces to support the sides of excavations, erect scaffolding, and clean up rubble, debris, and other waste materials. May assist other craft workers. Construction laborers who primarily assist a particular craft worker are classified under Helpers, Construction Trades (47-3010). Excludes Hazardous Materials Removal Workers (47-4041).

Sample of Reported Job Titles:

Construction Worker
Construction Laborer
Toolman
Site Work Laborer
Scaffolding Operator
Post Framer
Form Setter
Equipment Operator (EO)
Drop Crew Laborer
Bituminous Asphalt Technician

Related O*NET Occupation:

Construction Laborers (47-2061.00)

A construction worker wearing a white hard hat, a grey hoodie, and a high-visibility safety vest is working on a large steel structure. He is using a power tool to tighten a bolt on a steel beam. The background shows other workers and the complex framework of the building under construction.

Construction Laborers in 2 California MSAs

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What is Lightcast Data?

Lightcast data is a hybrid dataset derived from official government sources such as the US Census Bureau, Bureau of Economic Analysis, and Bureau of Labor Statistics. Leveraging the unique strengths of each source, our data modeling team creates an authoritative dataset that captures more than 99% of all workers in the United States. This core offering is then enriched with data from online social profiles, resumés, and job postings to give you a complete view of the workforce.

Lightcast data is frequently cited in major publications such as *The Atlantic*, *Forbes*, *Harvard Business Review*, *The New York Times*, *The Wall Street Journal*, and *USA Today*.



Report Parameters

1 Occupation

47-2061 Construction Laborers

2 MSAs

41860 San Francisco-Oakland-Berkeley, CA

41940 San Jose-Sunnyvale-Santa Clara, CA

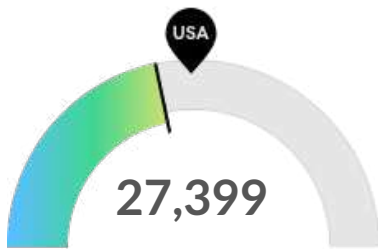
Class of Worker

QCEW Employees, Non-QCEW Employees, and Self-Employed

The information in this report pertains to the chosen occupation and geographical areas.

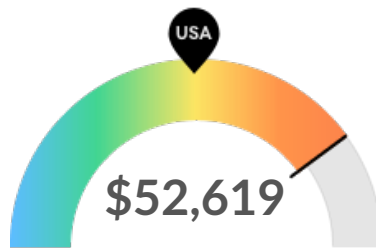
Executive Summary

Light Job Posting Demand Over a Thin Supply of Regional Jobs



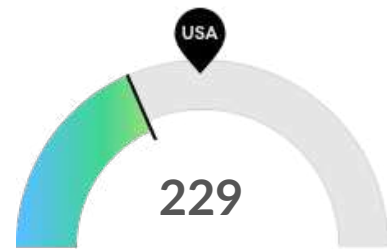
Jobs (2022)

Your area is not a hotspot for this kind of job. The national average for an area this size is 33,301* employees, while there are 27,399 here.



Compensation

Earnings are high in your area. The national median salary for Construction Laborers is \$36,420, compared to \$52,619 here.



Job Posting Demand

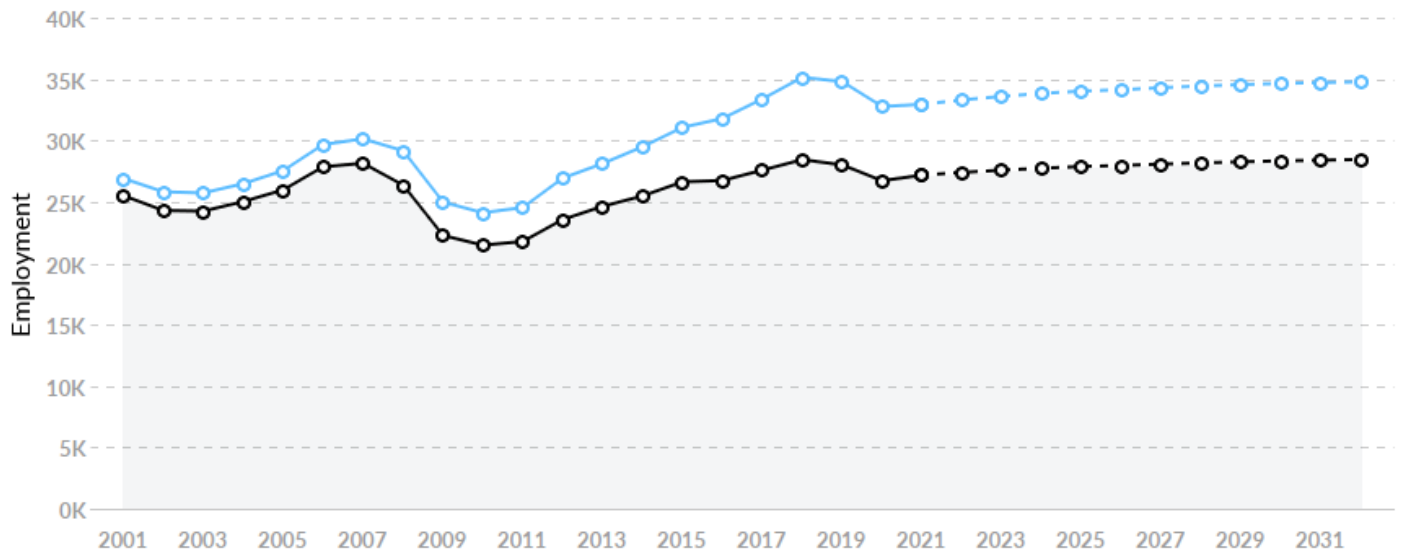
Job posting activity is low in your area. The national average for an area this size is 346* job postings/mo, while there are 229 here.

*National average values are derived by taking the national value for Construction Laborers and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.

Jobs

Regional Employment Is Lower Than the National Average

An average area of this size typically has 33,301* jobs, while there are 27,399 here. This lower than average supply of jobs may make it more difficult for workers in this field to find employment in your area.



Region	2022 Jobs	2027 Jobs	Change	% Change
● 2 California MSAs	27,399	28,074	675	2.5%
● National Average	33,301	34,298	996	3.0%

*National average values are derived by taking the national value for Construction Laborers and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.

Regional Breakdown



MSA	2022 Jobs
San Francisco-Oakland-Berkeley, CA	20,217
San Jose-Sunnyvale-Santa Clara, CA	7,182

Most Jobs are Found in the Residential Building Construction Industry Sector

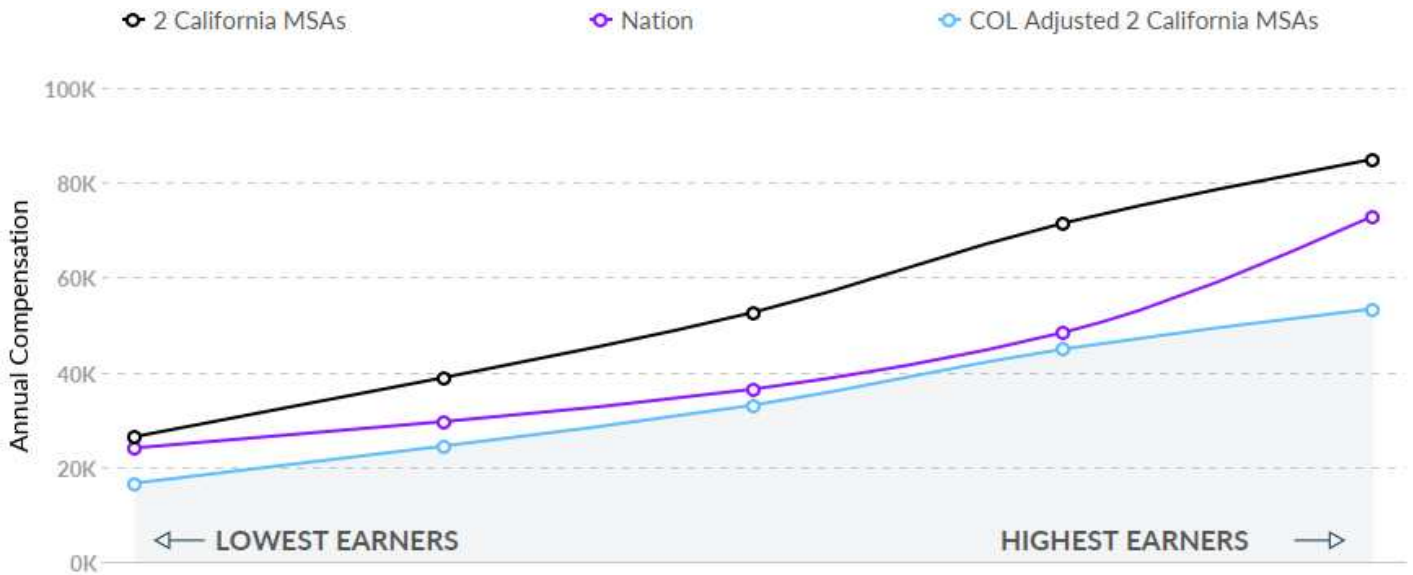


Industry	% of Occupation in Industry (2022)
● Residential Building Construction	26.3%
● Other Specialty Trade Contractors	14.8%
● Nonresidential Building Construction	10.0%
● Building Finishing Contractors	9.2%
● Foundation, Structure, and Building Exterior Contractors	8.9%
● Building Equipment Contractors	7.3%
● Other	23.5%

Compensation

Regional Compensation Is 44% Higher Than National Compensation

For Construction Laborers, the 2021 median wage in your area is \$52,619, while the national median wage is \$36,420.



Job Posting Activity



1,833 Unique Job Postings

The number of unique postings for this job from Jan 2022 to Aug 2022.



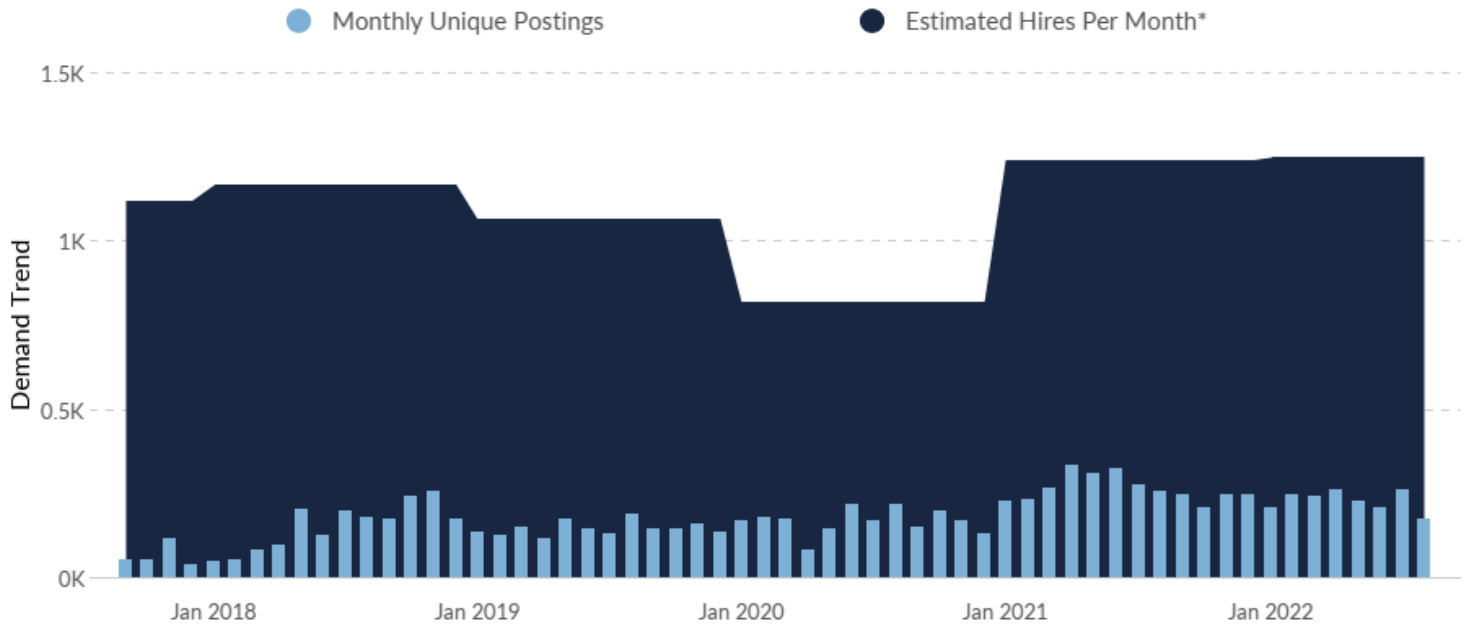
606 Employers Competing

All employers in the region who posted for this job from Jan 2022 to Aug 2022.













38 Day Median Duration











Posting duration is 9 days longer than what's typical in the region.



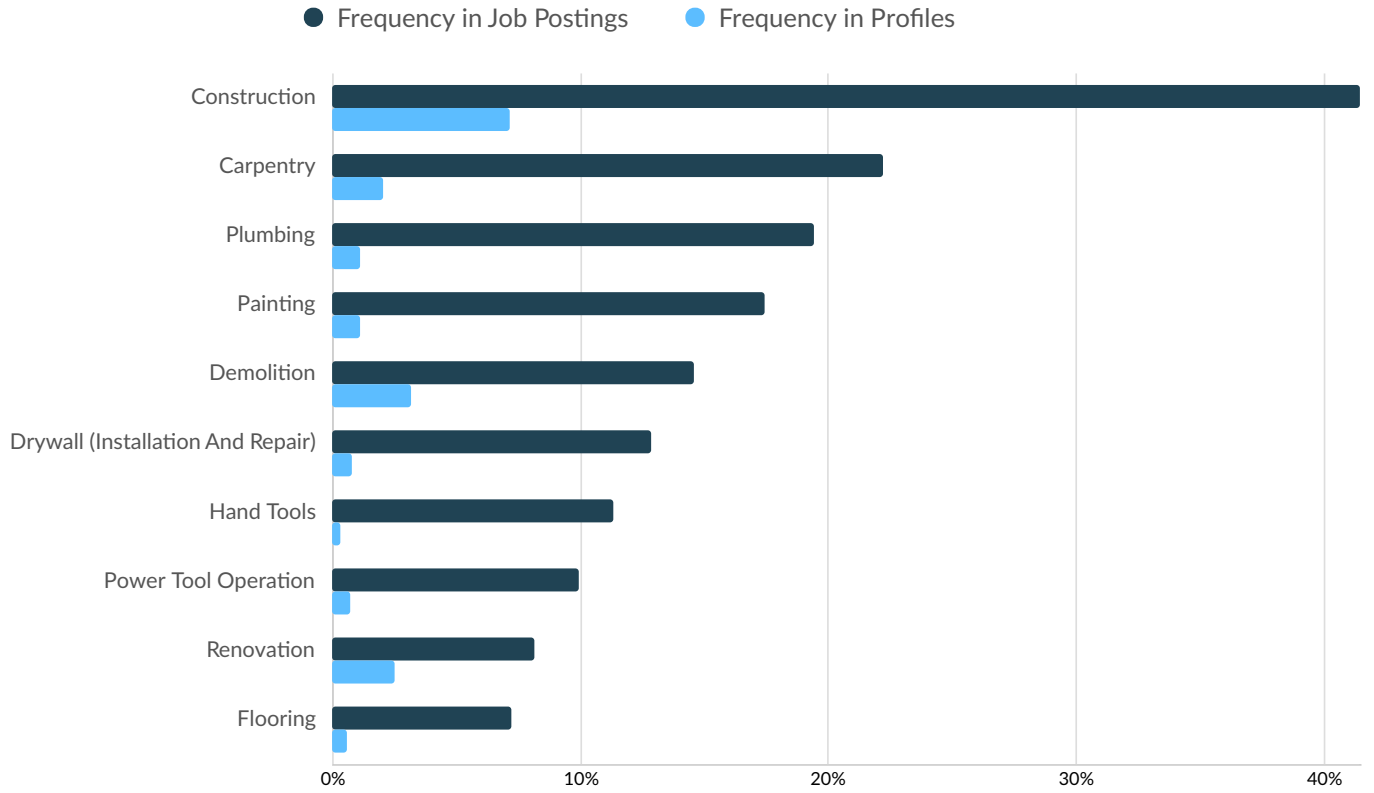
Occupation	Avg Monthly Postings (Jan 2022 - Aug 2022)	Avg Monthly Hires (Jan 2022 - Aug 2022)
Construction Laborers	229	1,247

*A hire is reported by the Quarterly Workforce Indicators when an individual's Social Security Number appears on a company's payroll and was not there the quarter before. Lightcast hires are calculated using a combination of Lightcast jobs data, information on separation rates from the Bureau of Labor Statistics (BLS), and industry-based hires data from the Census Bureau.

Top Companies	Unique Postings
PeopleReady	70 
E.Construct.USA	55 
Work With Your Handz	29 
Aerotek	28 
Schnitzer Steel	17 
Marin	14 
Marin H2O	14 
Randstad	13 
Itod	12 
Touch Up Home	12 

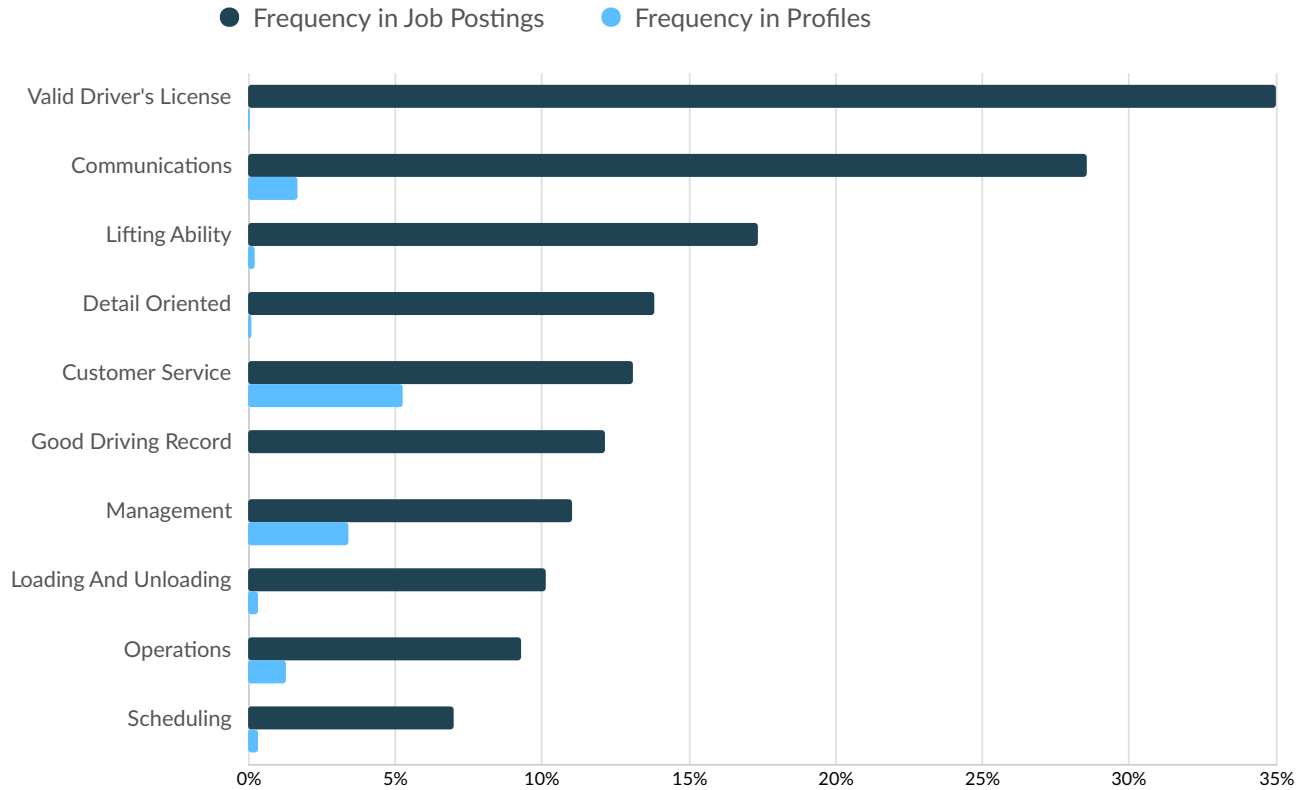
Top Job Titles	Unique Postings
Handymen	257 
Construction Laborers	246 
Construction Workers	87 
General Laborers	83 
Fiber Construction Engineers	65 
Construction Coordinators	58 
Skilled Laborers	53 
Plumbing Installers	44 
Laborers	38 
Construction Schedulers	32 

Top Specialized Skills



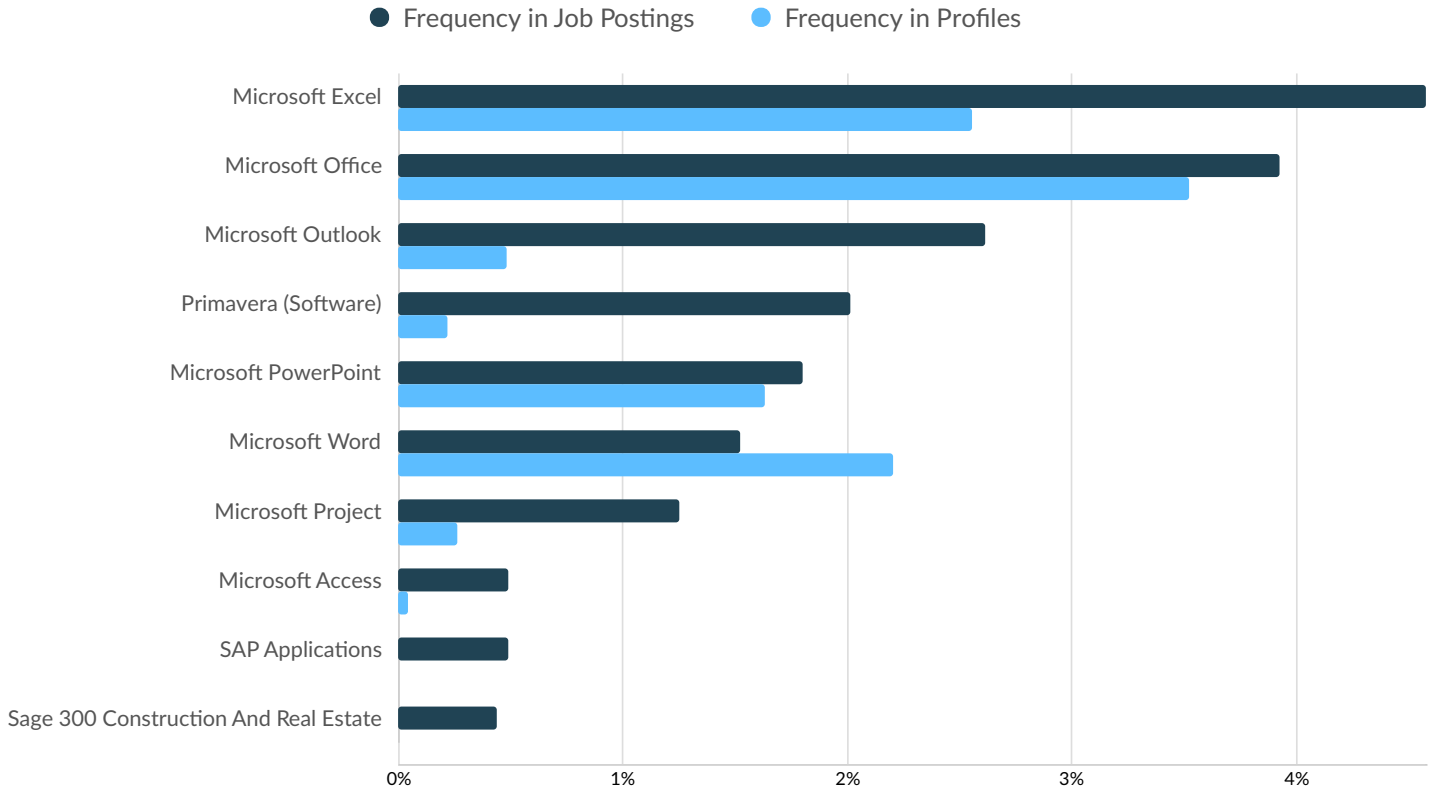
Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Construction	760	41%	162	7%
Carpentry	407	22%	47	2%
Plumbing	356	19%	25	1%
Painting	320	17%	25	1%
Demolition	267	15%	72	3%
Drywall (Installation And Repair)	236	13%	18	1%
Hand Tools	208	11%	7	0%
Power Tool Operation	182	10%	17	1%
Renovation	150	8%	57	3%
Flooring	133	7%	14	1%

Top Common Skills



Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Valid Driver's License	642	35%	1	0%
Communications	524	29%	38	2%
Lifting Ability	318	17%	5	0%
Detail Oriented	254	14%	3	0%
Customer Service	240	13%	120	5%
Good Driving Record	223	12%	0	0%
Management	202	11%	77	3%
Loading And Unloading	186	10%	8	0%
Operations	171	9%	29	1%
Scheduling	128	7%	7	0%

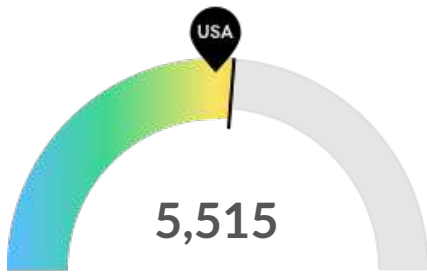
Top Software Skills



Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Microsoft Excel	84	5%	58	3%
Microsoft Office	72	4%	80	4%
Microsoft Outlook	48	3%	11	0%
Primavera (Software)	37	2%	5	0%
Microsoft PowerPoint	33	2%	37	2%
Microsoft Word	28	2%	50	2%
Microsoft Project	23	1%	6	0%
Microsoft Access	9	0%	1	0%
SAP Applications	9	0%	0	0%
Sage 300 Construction And Real Estate	8	0%	0	0%

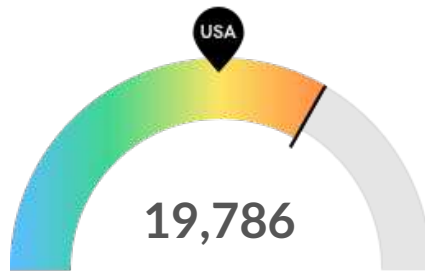
Demographics

Retirement Risk Is About Average, While Overall Diversity Is High



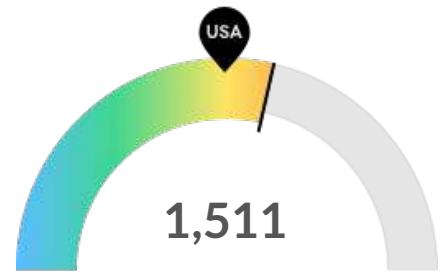
Retiring Soon

Retirement risk is about average in your area. The national average for an area this size is 5,136* employees 55 or older, while there are 5,515 here.



Racial Diversity

Racial diversity is high in your area. The national average for an area this size is 12,526* racially diverse employees, while there are 19,786 here.

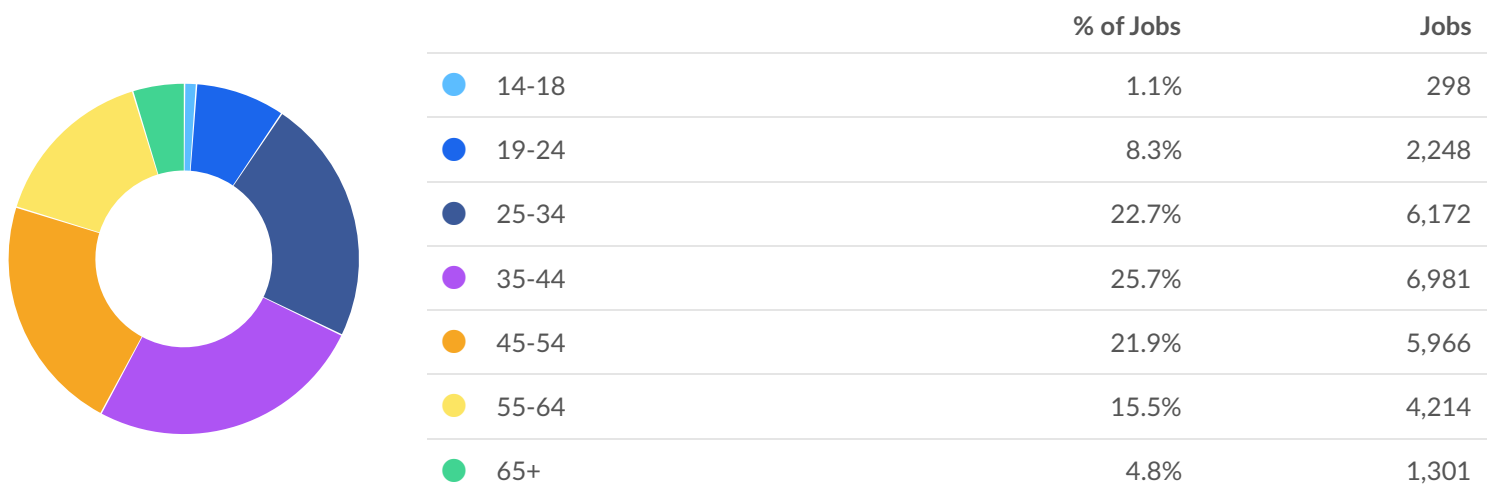


Gender Diversity

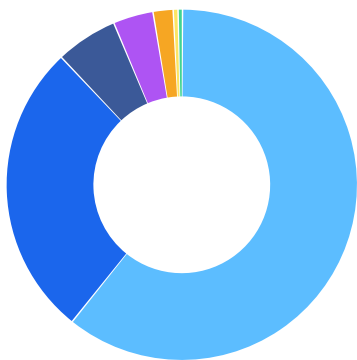
Gender diversity is high in your area. The national average for an area this size is 1,233* female employees, while there are 1,511 here.

*National average values are derived by taking the national value for Construction Laborers and scaling it down to account for the difference in overall workforce size between the nation and your area. In other words, the values represent the national average adjusted for region size.

Occupation Age Breakdown

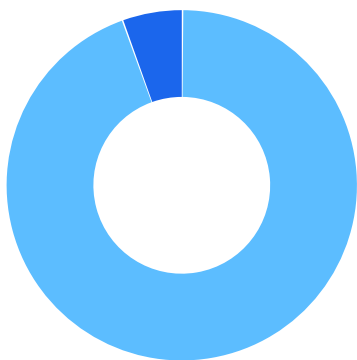


Occupation Race/Ethnicity Breakdown



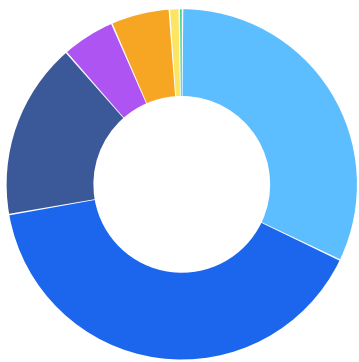
	% of Jobs	Jobs
Hispanic or Latino	60.7%	16,492
White	27.2%	7,393
Asian	5.7%	1,555
Black or African American	3.7%	1,006
Two or More Races	1.8%	502
Native Hawaiian or Other Pacific Islander	0.4%	121
American Indian or Alaska Native	0.4%	111

Occupation Gender Breakdown



	% of Jobs	Jobs
Males	94.4%	25,669
Females	5.6%	1,511

National Educational Attainment



	% of Jobs
● Less than high school diploma	32.0%
● High school diploma or equivalent	40.1%
● Some college, no degree	16.3%
● Associate's degree	4.9%
● Bachelor's degree	5.4%
● Master's degree	0.9%
● Doctoral or professional degree	0.3%

Occupational Programs



1 Program

Of the programs that can train for this job, 1 has produced completions in the last 5 years.



77 Completions (2020)

The completions from all regional institutions for all degree types.



3,220 Openings (2020)

The average number of openings for an occupation in the region is 772.

CIP Code	Top Programs	Completions (2020)
46.0415	Building Construction Technology/Technician	77

Top Schools	Completions (2020)
San Jose City College	59
CET-San Jose	9
City College of San Francisco	6
Diablo Valley College	3

Appendix A

Construction Laborers (SOC 47-2061):

Perform tasks involving physical labor at construction sites. May operate hand and power tools of all types: air hammers, earth tampers, cement mixers, small mechanical hoists, surveying and measuring equipment, and a variety of other equipment and instruments. May clean and prepare sites, dig trenches, set braces to support the sides of excavations, erect scaffolding, and clean up rubble, debris, and other waste materials. May assist other craft workers. Construction laborers who primarily assist a particular craft worker are classified under Helpers, Construction Trades (47-3010). Excludes Hazardous Materials Removal Workers (47-4041).

Sample of Reported Job Titles:

Construction Worker
Construction Laborer
Toolman
Site Work Laborer
Scaffolding Operator
Post Framing
Form Setter
Equipment Operator (EO)
Drop Crew Laborer
Bituminous Asphalt Technician

Related O*NET Occupation:

Construction Laborers (47-2061.00)

Course Outline for APCL 94

WORK EXPERIENCE - LIUNA LABORER'S' CONSTRUCTION APPRENTICESHIP

Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 94 — WORK EXPERIENCE - LIUNA LABORER'S' CONSTRUCTION APPRENTICESHIP — 1.00 - 14.00 units

College supervised on-the-job training. Apprenticeship work experience in an occupation related to student's apprenticeship program. Cooperative effort of the work supervisor, student, Joint Apprenticeship Training Council (JATC) or Program Sponsor, and instructor to achieve work-based learning objectives. Student must be enrolled in an apprenticeship program. Each Unit of Credit requires 75 hours of paid work experience. Students can earn 1 to 8 units per semester for a maximum of 16 units of Cooperative Work Experience, which includes General Work Experience and Occupational Work Experience/Internship.

1.00 - 14.00 Units Work Experience

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Grading Methods:

Pass/No Pass

Discipline:

- Work Experience Instructors or Coordinators

	<u>MIN</u>	<u>MAX</u>
Work Experience Hours:	75.00	1050.00
Total Hours:	75.00	1050.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: WX - May be taken any number of times for a maximum of 16 units of Cooperative Work Experience

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Achieve learning objectives established with the instructor, supervisor, and student at the beginning of the school term
- B. Apply and refine skills learned in the classroom to the work site
- C. Apply educational content, level of maturity, personality, behavior, attitudes toward a job, inter-personal relationships, and identify areas for improvement
- D. Relate work experience to apprenticeship courses
- E. Identify career opportunities, job requirements, employer expectations, and promotional requirements in an occupational setting
- F. Assess personal goals and needs, making a concerted effort towards self-improvement

V. CONTENT:

- A. Instructor, student, and work site supervisor will:
 1. Determine activities related to the apprenticeship training program and the required professional trade skills
 2. Determine learning opportunities
 3. Determine experiences to broaden knowledge of the job and profession.
- B. Each learning objective will be approved by college instructor and have alignment with the approved apprenticeship program. The semester will include college/JATC:
 1. Visits to the student's work site
 2. Discussions with supervisor as to the quality/importance of each objective
 3. Identifying level of accomplishment
 4. Determining personal and professional development of student

VI. METHODS OF INSTRUCTION:

- A. Individual consultation with students
- B. Individual consultation with employer

VII. TYPICAL ASSIGNMENTS:

- A. Student journal/report
- B. Draft of objectives
- C. Final list of objectives

VIII. EVALUATION:

Methods/Frequency

- A. Class Performance
 - Semester long
- B. Other
 - 1. Instructor's appraisal of student's journal and final report
 - a. Once per semester
 - 2. Supervisor's and instructor's evaluations of completion of objectives
 - a. Minimum two per semester

IX. TYPICAL TEXTS:

- 1. No textbooks are required for this course. Instructors will provide references to or compilations of resources as needed.

X. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Access to a computer and internet connection.

**Course Outline for APCL 100
 FORKLIFT ORIENTATION INITIAL**

Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 100 — FORKLIFT ORIENTATION INITIAL — 2.50 units

An introduction to gain an understanding of current regulations, common types of Rough Terrain Variable Reach Lift trucks and understand why you conduct pre-shift inspections. Learn techniques for the safe operation of Rough Terrain Variable Reach lift truck by hands-on operation and maneuvering in accordance with OSHA Standard 29 CFR 1910.178(I).

2.00 Units Lecture 0.50 Units Lab

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Grading Methods:

Letter or P/NP

Discipline:

- Transportation

	MIN
Lecture Hours:	36.00
Expected Outside of Class Hours:	72.00
Lab Hours:	27.00
Total Hours:	135.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe job site safety applications
- B. Assess OSHA regulations and safety for Variable Reach Lift trucks
- C. Identify the various types of Rough Terrain Lift trucks.
- D. Identify the main parts of Rough Terrain Lift trucks.
- E. Perform Safe Operate Rough Terrain Lift Trucks.

V. CONTENT:

- A. Variable Reach Lift truck regulations
- B. Types of Rough Terrain Lift trucks
- C. Parts of Rough Terrain Lift trucks
- D. Lift Truck Safety
- E. Equipment Limitations
- F. Procedures for lifting loads

VI. LAB CONTENT:

- A. Rough Terrain Lift truck Operation and procedures
- B. Pre-shift inspections

VII. METHODS OF INSTRUCTION:

- A. **Lecture** - Lecture on various topics
- B. **Written Exercises** - Substantial writing assignments are NOT required (less than 25% of grade).
- C. **Lab** - Demonstration of pre-shift inspection, Lift Truck Safety, operation, equipment limitations, and procedures for lifting loads.
- D. **Discussion** - Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks
- E. **Written Exercises** - Written Exams will be given regarding safe operation and regulations for operating lift trucks.

VIII. TYPICAL ASSIGNMENTS:

- A. Lecture-based assignments
 - 1. Take notes on safety lecture
- B. Text reading
 - 1. Read Chapter One
- C. Hands-On
 - 1. Demonstration of pre-shift inspection, Lift Truck Safety, operation, equipment limitations, and procedures for lifting loads.
- D. Oral Assessments
 - 1. Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks
- E. Exams
 - 1. Written Exams will be given regarding safe operation and regulations for operating lift trucks.

IX. EVALUATION:

Methods/Frequency

- A. Exams/Tests
 - After each module.
- B. Class Participation
 - Weekly.
- C. Class Work
 - Weekly.
- D. Class Performance
 - Weekly.

X. TYPICAL TEXTS:

- 1. Miller, William. *CDL Study Guide 2022-2023*. 1 ed., Independant, 2022.
- 2. Proprietary IVES Rough Terrain Lift Truck Operator Workbook Materials provided by LiUNA! Northern California District Council of Laborers Union

XI. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety Glasses
- B. Safety Vests
- C. Work Gloves
- D. Sturdy non-slip steel toe shoes

**Course Outline for APCL 101
 FUNDAMENTALS OF CONSTRUCTION**

Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 101 — FUNDAMENTALS OF CONSTRUCTION — 4.50 units

An introduction to provide the trainees with basic overview of the general practices of construction work, including safety, tools, techniques, terms, safe work habits and knowledge of the industry. In accordance with the CAL-OSHA CCR Title 8 and OSHA CFR 1926 Construction Standards that are applicable to courses being covered.

3.00 Units Lecture 1.50 Units Lab

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Grading Methods:

Letter or P/NP

Discipline:

- Transportation

	MIN
Lecture Hours:	54.00
Expected Outside of Class Hours:	108.00
Lab Hours:	81.00
Total Hours:	243.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe job site safety applications
- B. Interpret OSHA Construction standards.
- C. Identify various tools used in the construction industry.

V. CONTENT:

- A. General practices of construction work
- B. Safe work habits
- C. Identification and use of tools
- D. Industry terminology
- E. Grade Checking
- F. Pavement Breakers and compaction
- G. Techniques for laying asphalt, concrete and pipes

VI. LAB CONTENT:

- A. Handling tools
- B. techniques in grade checking
- C. Techniques for laying asphalt, concrete and pipes

VII. METHODS OF INSTRUCTION:

- A. **Lecture** - Lecture on various topics
- B. **Lab** - Various hands-on lab assignments

VIII. TYPICAL ASSIGNMENTS:

- A. Lecture-based assignments
 - 1. Take notes on the safety lecture
- B. Text reading

1. Read Chapter One
- C. Lab Based Assignments
 1. Demonstration of proper use of pavement breakers and compaction tools.
- D. Oral Assessments
 1. Explain current OSHA regulations applicable to course content.
- E. Exams
 1. Written Exams may be given regarding tool identification, construction techniques, safety, etc.

IX. EVALUATION:

Methods/Frequency

- A. Exams/Tests
After each module.
- B. Class Participation
Weekly.
- C. Class Work
Weekly.
- D. Class Performance
Weekly.

X. TYPICAL TEXTS:

1. Miller, William. *CDL Study Guide 2022-2023*. 1 ed., Independant, 2022.
2. Proprietary Handouts from Laborers' Education and Training. All Materials will be provided by LiUNA! Laborers' Union

XI. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety Glasses
- B. Safety Vests
- C. Work Gloves
- D. Sturdy non-slip steel toe shoes

**Course Outline for APCL 102
 HAZARDOUS WASTE REMOVAL INITIAL**

Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 102 — HAZARDOUS WASTE REMOVAL INITIAL — 2.50 units

An introduction to instruct trainees in the types of hazards and situations that can be encountered on the job site. trainees will learn protective measures, proper use of equipment and learn safety and health issues, in accordance with 29 CFR 1910.120, 132, 143, 146, and 1200.

2.00 Units Lecture 0.50 Units Lab

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Grading Methods:

Letter or P/NP

Discipline:

- Transportation

	MIN
Lecture Hours:	36.00
Expected Outside of Class Hours:	72.00
Lab Hours:	27.00
Total Hours:	135.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe job site safety applications
- B. Apply the general requirements of Hazardous Waste Standards.
- C. Define Key terms associated with Hazardous Waste.
- D. Identify and classify hazardous wastes.

V. CONTENT:

- A. Hazard Recognition
- B. Hazard communication
- C. Health Effects
- D. Personal Protective Equipment
- E. Decontamination Procedures
- F. Site Safety and Health Plan
- G. Material handling and sampling
- H. workplace Monitoring
 - I. Permit-required confined space
 - J. Superfund
- K. Community relations

VI. LAB CONTENT:

- A. Proper adjustments/fit of personal protective equipment
- B. Identify hazardous situations
- C. Practice material handling

VII. METHODS OF INSTRUCTION:

- A. **Lecture** - Lecture on various topics
- B. **Lab** - Demonstration of safe handling of hazardous materials. Demonstration of proper use of personal protective equipment.

VIII. TYPICAL ASSIGNMENTS:

- A. Lecture-based assignments
 - 1. Take notes on safety lecture
- B. Text reading
 - 1. Read Chapter One
- C. Hands-On
 - 1. Demonstration of pre-shift inspection, Lift Truck Safety, operation, equipment limitations, and procedures for lifting loads.
- D. Oral Assessments
 - 1. Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks
- E. Exams
 - 1. Written Exams will be given regarding safe operation and regulations for operating lift trucks.

IX. EVALUATION:

Methods/Frequency

- A. Exams/Tests
 - After each module.
- B. Class Participation
 - Weekly.
- C. Class Work
 - Weekly.
- D. Class Performance
 - Weekly.

X. TYPICAL TEXTS:

- 1. Miller, William. *CDL Study Guide 2022-2023*. 1 ed., Independant, 2022.
- 2. Proprietary Laborers' Education and Training Hazardous Waste Worker Manual Materials provided by LiUNA! Northern California District Council of Laborers union

XI. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety Glasses
- B. Safety Vests
- C. Work Gloves
- D. Sturdy non-slip steel toe shoes

Course Outline for APCL 103

SAFETY CERTIFICATION

Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 103 — SAFETY CERTIFICATION — 2.50 units

Introduction to safety requirements set forth by the Occupational Safety and Health Administration (OSHA), Construction Industry Standards and General Standards, as they relate to the Construction Industry. Students may earn OSHA 10, OSHA 30, Cal-OSHA 10, and/or Cal-OSHA 30.

2.00 Units Lecture 0.50 Units Lab

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Grading Methods:

Letter or P/NP

Discipline:

- Transportation

	MIN
Lecture Hours:	36.00
Expected Outside of Class Hours:	72.00
Lab Hours:	27.00
Total Hours:	135.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe job site safety applications
- B. Examine general guidelines to safely operate equipment.
- C. Categorize proper material handling and storage procedures.
- D. Identify and explain appropriate personal protective equipment necessary for different job situations.

V. CONTENT:

- A. OSHA introduction
- B. General Safety and Health
- C. Personal Protective Equipment
- D. Material Handling
- E. Tools: Hand and Power
- F. Electrical safety
- G. Fall protection
- H. Cranes, Derricks, Hoists, Elevator and Conveyors
 - I. Excavation
 - J. Stairways and Ladders.

VI. LAB CONTENT:

- A. Proper adjustments/fit of personal protective equipment
- B. Practicing Proper lifting/carrying techniques
- C. Identifying hazardous situations with tools and equipment

VII. METHODS OF INSTRUCTION:

- A. **Lecture** - Lecture on various topics
- B. **Written Exercises** - Substantial writing assignments are NOT required (less than 25% of grade).
- C. **Lab** - Demonstration of pre-shift inspection, Lift Truck Safety, operation, equipment limitations, and procedures for lifting loads.
- D. **Discussion** - Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks

E. **Written Exercises** - Written Exams will be given regarding safe operation and regulations for operating lift trucks.

VIII. TYPICAL ASSIGNMENTS:

- A. Lecture-based assignments
 - 1. Take notes on safety lecture
- B. Text reading
 - 1. Read Chapter One
- C. Hands-On
 - 1. Demonstration of pre-shift inspection, Lift Truck Safety, operation, equipment limitations, and procedures for lifting loads.
- D. Oral Assessments
 - 1. Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks
- E. Exams
 - 1. Written Exams will be given regarding safe operation and regulations for operating lift trucks.

IX. EVALUATION:

Methods/Frequency

- A. Exams/Tests
 - After each module.
- B. Class Participation
 - Weekly.
- C. Class Work
 - Weekly.
- D. Class Performance
 - Weekly.

X. TYPICAL TEXTS:

- 1. Miller, William. *CDL Study Guide 2022-2023*. 1 ed., Independant, 2022.
- 2. Proprietary Construction Industry Regulations student Manual. All materials are provided by LiUNA! Laborers' Union

XI. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety Glasses
- B. Safety Vests
- C. Work Gloves
- D. Sturdy non-slip steel toe shoes

Course Outline for APCL 104
AERIAL WORK PLATFORM INITIAL
Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 104 — AERIAL WORK PLATFORM INITIAL — 1.00 units

An introduction to provide the trainees with the knowledge of current regulations, common type of aerial work platforms and understand the need to conduct pre-shift inspections. Learn techniques for safe operation and maneuvering. Teach trainees to work safely on and around self-propelled aerial work platforms, such as scissor-lifts and boom lifts.

0.25 Units Lecture 0.75 Units Lab

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers

Grading Methods:

Letter or P/NP

Discipline:

- Transportation

	MIN
Lecture Hours:	4.50
Expected Outside of Class Hours:	9.00
Lab Hours:	40.50
Total Hours:	54.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe job site safety applications
- B. Identify various types of Aerial Work Platforms.
- C. Compare strategies to promote safety on and around self-propelled Aerial Work Platforms.

V. CONTENT:

- A. Types of Aerial Work Platforms
- B. Parts of Aerial Work Platforms including the scissor and boom lifts
- C. Safety Regulation for Aerial Work Platforms
- D. Safe operation
- E. Lift Capacity

VI. LAB CONTENT:

- A. Procedures for safe operation
- B. Maneuvering scissor-lifts and boom lifts

VII. METHODS OF INSTRUCTION:

- A. **Lecture** - Lecture on various topics
- B. **Written Exercises** - Substantial writing assignments are NOT required (less than 25% of grade).
- C. **Lab** - Demonstration of safe operation of aerial work platforms.
- D. **Written Exercises** - Written Exams will be given regarding safe operation and regulations for aerial work platforms. Explain current regulations Explain common types of aerial work platforms.

VIII. TYPICAL ASSIGNMENTS:

- A. Lecture-based assignments
 - 1. Take notes on safety lecture
- B. Text reading

1. Read Chapter One
- C. Hands-On
 1. Demonstration of pre-shift inspection, Lift Truck Safety, operation, equipment limitations, and procedures for lifting loads.
- D. Oral Assessments
 1. Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks
- E. Exams
 1. Written Exams will be given regarding safe operation and regulations for operating lift trucks.

IX. EVALUATION:

Methods/Frequency

- A. Exams/Tests
After each module.
- B. Class Participation
Weekly.
- C. Class Work
Weekly.
- D. Class Performance
Weekly.

X. TYPICAL TEXTS:

1. Miller, William. *CDL Study Guide 2022-2023*. 1 ed., Independant, 2022.
2. Proprietary IVES Aerial Lift Operator Workbook, Book lift, Scissors lift Material provided by LiUNA! Northern California District Council of Laborers union

XI. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety Glasses
- B. Safety Vests
- C. Work Gloves
- D. Sturdy non-slip steel toe shoes

Course Outline for APCL 105

RIGGING AND SIGNALING

Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 105 — RIGGING AND SIGNALING — 2.50 units

Provide the trainees with an understanding of the safe approach to Rigging and Signaling. Describe and demonstrate the state procedures of Rigging and Signaling in accordance with OSHA CFR 1926.251 and 1926.5 Construction.

2.00 Units Lecture 0.50 Units Lab

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Grading Methods:

Letter or P/NP

Discipline:

- Transportation

	MIN
Lecture Hours:	36.00
Expected Outside of Class Hours:	72.00
Lab Hours:	27.00
Total Hours:	135.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe job site safety applications
- B. Determine the importance of safe rigging.
- C. Identify the safety hazards of rigging.
- D. Understand why standard hand signals must be used.

V. CONTENT:

- A. What is rigging
- B. Hazards of rigging
- C. OSHA Safety Regulations
- D. Hand Signals
- E. Inspection requirements
- F. Safe working loads
- G. Sling angles

VI. LAB CONTENT:

- A. Rigging loads
- B. Hand Signals

VII. METHODS OF INSTRUCTION:

- A. **Lecture** - Lecture on various topics
- B. **Written Exercises** - Substantial writing assignments are NOT required (less than 25% of grade).
- C. **Lab** - Demonstration of the safe approach to Rigging and Signaling.
- D. **Discussion** - Explain current regulations. Explain procedures for safe approach to Rigging and Signaling.
- E. **Written Exercises** - Written Exams will be given regarding regulations and safety regarding rigging & signaling.

VIII. TYPICAL ASSIGNMENTS:

- A. Lecture-based assignments

1. Take notes on safety lecture
- B. Text reading
 1. Read Chapter One
- C. Hands-On
 1. Demonstration of pre-shift inspection, Lift Truck Safety, operation, equipment limitations, and procedures for lifting loads.
- D. Oral Assessments
 1. Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks
- E. Exams
 1. Written Exams will be given regarding safe operation and regulations for operating lift trucks.

IX. EVALUATION:

Methods/Frequency

- A. Exams/Tests
After each module.
- B. Class Participation
Weekly.
- C. Class Work
Weekly.
- D. Class Performance
Weekly.

X. TYPICAL TEXTS:

1. Miller, William. *CDL Study Guide 2022-2023*. 1 ed., Independant, 2022.
2. Proprietary LiUNA! Hoisting and Rigging All materials provided by LiUNA! Laborers' Union

XI. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety Glasses
- B. Safety Vests
- C. Work Gloves
- D. Sturdy non-slip steel toe shoes

Course Outline for APCL 106
SKID STEER LOADER ORIENTATION INITIAL

Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 106 — SKID STEER LOADER ORIENTATION INITIAL — 2.50 units

An introduction to provide student trainees with a good understanding of how to operate mobile equipment, learn current safety procedures, and proper maintenance of a skid steer loader (Bobcat).

2.00 Units Lecture 0.50 Units Lab

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Grading Methods:

Letter or P/NP

Discipline:

- Transportation

	MIN
Lecture Hours:	36.00
Expected Outside of Class Hours:	72.00
Lab Hours:	27.00
Total Hours:	135.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe job site safety applications
- B. Explain how weight distribution affects skid-steer loader stability and steering.
- C. Important factors of maintenance for safe, efficient, and productive operation.
- D. Identify the loader's safety features and their importance.

V. CONTENT:

- A. Regulations
- B. Safe Operation of Skid Steer Loader (Bobcat)
- C. Types of attachments for Skid Steer Loaders
- D. Main Parts of a Skid steer Loader
- E. Understanding Skid Steer Loader Safety
- F. Fuel types and Fire Safety
- G. Lifting capabilities

VI. LAB CONTENT:

- A. Safe Skid Steer Loader Operation
- B. Maintenance of Skid Steer Loaders.

VII. METHODS OF INSTRUCTION:

- A. **Lecture** - Lecture on various topics
- B. **Written Exercises** - Substantial writing assignments are NOT required (less than 25% of grade).
- C. **Lab** - Demonstrate safe operation of bobcat (skid steer loader)
- D. **Discussion** - Explain current regulations Explain common types of skid steer loader attachments.
- E. **Written Exercises** - Written Exams will be given regarding safe operation of skid steer loaders.

VIII. TYPICAL ASSIGNMENTS:

- A. Lecture-based assignments

1. Take notes on safety lecture
- B. Text reading
 1. Read Chapter One
- C. Hands-On
 1. Demonstration of pre-shift inspection, Lift Truck Safety, operation, equipment limitations, and procedures for lifting loads.
- D. Oral Assessments
 1. Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks
- E. Exams
 1. Written Exams will be given regarding safe operation and regulations for operating lift trucks.

IX. EVALUATION:

Methods/Frequency

- A. Exams/Tests
After each module.
- B. Class Participation
Weekly.
- C. Class Work
Weekly.
- D. Class Performance
Weekly.

X. TYPICAL TEXTS:

1. Miller, William. *CDL Study Guide 2022-2023*. 1 ed., Independant, 2022.
2. Proprietary IVES Skid Steer Loader Operator Workbook. Materials will be provided by LiUNA! Laborers' Union

XI. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety Glasses
- B. Safety Vests
- C. Work Gloves
- D. Sturdy non-slip steel toe shoes

Course Outline for APCL 107

CONCRETE TECHNIQUES

Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 107 — CONCRETE TECHNIQUES — 5.00 units

Familiarize students with concrete safety, its history, properties and components. It includes a hands-on portion in accordance with Cal-OSHA CCR Title 7 1712-1722 and OSHA CFR 1926.703.

3.50 Units Lecture 1.50 Units Lab

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Grading Methods:

Letter or P/NP

Discipline:

- Transportation

	MIN
Lecture Hours:	63.00
Expected Outside of Class Hours:	126.00
Lab Hours:	81.00
Total Hours:	270.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe job site safety applications
- B. Analyze the importance of proper curing and protection of concrete.
- C. Apply the materials, processes, and safety related to concrete work.

V. CONTENT:

- A. Safety and Health
- B. Personal Protective Clothing
- C. Introduction to concrete
- D. Concrete math
- E. Concrete forms
- F. Pouring
- G. Pumping concrete
- H. Placing and vibrating
 - I. Finishing and curing
- J. Maintenance and clean-up
- K. Walls and flat work

VI. LAB CONTENT:

- A. Forms
- B. Mixing
- C. Pouring
- D. Finishing

VII. METHODS OF INSTRUCTION:

- A. **Lecture** - Lecture on various topics
- B. **Written Exercises** - Substantial writing assignments are NOT required (less than 25% of grade).
- C. **Lab** - Demonstrate safe operation of concrete laying equipment
- D. **Discussion** - Explain current regulations Explain the basic components of concrete

E. **Written Exercises** - Written Exams will be given regarding concrete mixing and laying.

VIII. TYPICAL ASSIGNMENTS:

- A. Lecture-based assignments
 - 1. Take notes on safety lecture
- B. Text reading
 - 1. Read Chapter One
- C. Hands-On
 - 1. Demonstration of pre-shift inspection, Lift Truck Safety, operation, equipment limitations, and procedures for lifting loads.
- D. Oral Assessments
 - 1. Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks
- E. Exams
 - 1. Written Exams will be given regarding safe operation and regulations for operating lift trucks.

IX. EVALUATION:

Methods/Frequency

- A. Exams/Tests
 - After each module.
- B. Class Participation
 - Weekly.
- C. Class Work
 - Weekly.
- D. Class Performance
 - Weekly.

X. TYPICAL TEXTS:

- 1. Miller, William. *CDL Study Guide 2022-2023*. 1 ed., Independant, 2022.
- 2. Proprietary Concrete Techniques Laborer booklet. All materials are provided by LiUNA! Laborers' Union

XI. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety Glasses
- B. Safety Vests
- C. Work Gloves
- D. Sturdy non-slip steel toe shoes

Course Outline for APCL 108
ASPHALT PAVING TECHNIQUES
Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 108 — ASPHALT PAVING TECHNIQUES — 4.50 units

An introduction to familiarize the trainees with the skills they need to work with Asphalt safely and learn the proper use of tools and equipment needed when working with Asphalt.

3.00 Units Lecture 1.50 Units Lab

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Grading Methods:

Letter or P/NP

Discipline:

- Transportation

	MIN
Lecture Hours:	54.00
Expected Outside of Class Hours:	108.00
Lab Hours:	81.00
Total Hours:	243.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe job site safety applications
- B. Utilize proper skills to work with asphalt safely.
- C. Assess of the proper utilization of tools when working with asphalt.

V. CONTENT:

- A. Terms and Definitions
- B. Safety procedures
- C. Protective Equipment and clothing
- D. Heat Stress
- E. Health Hazards from Fumes and Chemicals
- F. Compaction
- G. Basic asphalt laying techniques
- H. Raking
 - I. Safe operation of equipment

VI. LAB CONTENT:

- A. Utilization of proper protective equipment and clothing
- B. Compaction
- C. Laying techniques and raking
- D. Heat scenarios
- E. Safe operation of equipment

VII. METHODS OF INSTRUCTION:

- A. **Lecture** - Lecture on various topics
- B. **Written Exercises** - Substantial writing assignments are NOT required (less than 25% of grade).
- C. **Lab** - Demonstrate safe operation of asphalt laying equipment
- D. **Discussion** - Explain current regulations Explain health hazards from fumes and chemicals.
- E. **Written Exercises** - Written Exams will be given regarding safety regulations and proper techniques for laying asphalt.

VIII. TYPICAL ASSIGNMENTS:

- A. Lecture-based assignments
 - 1. Take notes on safety lecture
- B. Text reading
 - 1. Read Chapter One
- C. Hands-On
 - 1. Demonstration of pre-shift inspection, Lift Truck Safety, operation, equipment limitations, and procedures for lifting loads.
- D. Oral Assessments
 - 1. Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks
- E. Exams
 - 1. Written Exams will be given regarding safe operation and regulations for operating lift trucks.

IX. EVALUATION:

Methods/Frequency

- A. Exams/Tests
 - After each module.
- B. Class Participation
 - Weekly.
- C. Class Work
 - Weekly.
- D. Class Performance
 - Weekly.

X. TYPICAL TEXTS:

- 1. Miller, William. *CDL Study Guide 2022-2023*. 1 ed., Independant, 2022.
- 2. Proprietary Laborers' Education and training Asphalt Raking Training Manual and/or student handouts. Materials provided by LiUNA Northern California District Council of Laborers Union

XI. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety Glasses
- B. Safety Vests
- C. Work Gloves
- D. Sturdy non-slip steel toe shoes

Course Outline for APCL 109
BLUEPRINT READING ORIENTATION, BASIC
Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 109 — BLUEPRINT READING ORIENTATION, BASIC — 1.50 units

An introduction to provide student trainees with a good understanding of how to read construction blueprints.

1.50 Units Lecture

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Grading Methods:

Letter or P/NP

Discipline:

- Transportation

	MIN
Lecture Hours:	27.00
Expected Outside of Class Hours:	54.00
Total Hours:	81.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe job site safety applications
- B. Understand blueprints.

V. CONTENT:

- A. Regulations
- B. How to find and understand legends
- C. How to find and understand the compass
- D. How to use the scale ruler
- E. Understanding how to read details and sections
- F. How to locate specific items on blue prints

VI. METHODS OF INSTRUCTION:

- A. **Lecture** - Lecture on various topics
- B. **Written Exercises** - Substantial writing assignments are NOT required (less than 25% of grade).
- C. **Discussion** - Explain current regulations Explain common types of skid steer loader attachments.
- D. **Written Exercises** - Written Exams will be given regarding safe operation of skid steer loaders.

VII. TYPICAL ASSIGNMENTS:

- A. Lecture-based assignments
 - 1. Take notes on safety lecture
- B. Text reading
 - 1. Read Chapter One
- C. Hands-On
 - 1. Demonstration of pre-shift inspection, Lift Truck Safety, operation, equipment limitations, and procedures for lifting loads.
- D. Oral Assessments
 - 1. Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks
- E. Exams
 - 1. Written Exams will be given regarding safe operation and regulations for operating lift trucks.

VIII. EVALUATION:

Methods/Frequency

- A. Exams/Tests
After each module.
- B. Class Participation
Weekly.
- C. Class Work
Weekly.
- D. Class Performance
Weekly.

IX. TYPICAL TEXTS:

1. Miller, William. *CDL Study Guide 2022-2023*. 1 ed., Independant, 2022.
2. Proprietary IVES Blueprint reading. Materials will be provided by LiUNA! Laborers' Union

X. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety Glasses
- B. Safety Vests
- C. Work Gloves
- D. Sturdy non-slip steel toe shoes

**Course Outline for APCL 110
 CONFINED SPACE AWARENESS**

Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 110 — CONFINED SPACE AWARENESS — 0.50 units

An introduction to provide students with basic awareness training only regarding the hazards and health effects when working around confined spaces. (This class does not qualify trainees for work inside a confined space)

0.50 Units Lecture

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Grading Methods:

Letter or P/NP

Discipline:

- Transportation

	<u>MIN</u>
Lecture Hours:	9.00
Expected Outside of Class Hours:	18.00
Total Hours:	27.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe job site safety applications
- B. Understand regulations pertaining to confined spaces.

V. CONTENT:

- A. Introduction
- B. Types of Confined Spaces
- C. Controlling hazards in confined spaces
- D. Testing for Hazardous Atmospheres
- E. The Laws, rules and regulations

VI. METHODS OF INSTRUCTION:

- A. **Lecture** - Lecture on various topics
- B. **Written Exercises** - Substantial writing assignments are NOT required (less than 25% of grade).
- C. **Discussion** - Explain current regulations Explain common types of skid steer loader attachments.
- D. **Written Exercises** - Written Exams will be given regarding safe operation of skid steer loaders.

VII. TYPICAL ASSIGNMENTS:

- A. Lecture-based assignments
 - 1. Take notes on safety lecture
- B. Text reading
 - 1. Read Chapter One
- C. Oral Assessments
 - 1. Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks
- D. Exams

1. Written Exams will be given regarding safe operation and regulations for operating lift trucks.

VIII. EVALUATION:

Methods/Frequency

- A. Exams/Tests
After each module.
- B. Class Participation
Weekly.
- C. Class Work
Weekly.
- D. Class Performance
Weekly.

IX. TYPICAL TEXTS:

1. Miller, William. *CDL Study Guide 2022-2023*. 1 ed., Independant, 2022.
2. Proprietary IVES Confined Spaces workbook. Materials will be provided by LiUNA! Laborers' Union

X. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety Glasses
- B. Safety Vests
- C. Work Gloves
- D. Sturdy non-slip steel toe shoes

Course Outline for APCL 111

FIRST AID, CPR AND AED

Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 111 — FIRST AID, CPR AND AED — 0.50 units

An introduction to provide students with the basic skills necessary to perform the immediate help needed for sudden emergency situations at the job site such as accidents, injury or illness, by the use of CPR and or First Aid and proper use of AED.

0.50 Units Lecture

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Grading Methods:

Letter or P/NP

Discipline:

- Transportation

	MIN
Lecture Hours:	9.00
Expected Outside of Class Hours:	18.00
Total Hours:	27.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe job site safety applications
- B. Perform Basic life support

V. CONTENT:

- A. Why Learn first Aid
- B. Take Action in an Emergency
- C. Basic Life Support
- D. Bleeding and Wound Care
- E. Shock
- F. Burns/Serious Injuries
Bone, joint and muscle injuries
- G. Sudden illness
- H. Poisoning
- I. Heat and Cold Emergencies
- J. Rescuing and moving victims

VI. METHODS OF INSTRUCTION:

- A. **Lecture** - Lecture on various topics
- B. **Written Exercises** - Substantial writing assignments are NOT required (less than 25% of grade).
- C. **Discussion** - Explain current regulations Explain common types of skid steer loader attachments.
- D. **Written Exercises** - Written Exams will be given regarding safe operation of skid steer loaders.

VII. TYPICAL ASSIGNMENTS:

- A. Lecture-based assignments
 - 1. Take notes on safety lecture
- B. Text reading
 - 1. Read Chapter One
- C. Oral Assessments
 - 1. Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks
- D. Exams
 - 1. Written Exams will be given regarding safe operation and regulations for operating lift trucks.

VIII. EVALUATION:

Methods/Frequency

- A. Exams/Tests
 - After each module.
- B. Class Participation
 - Weekly.
- C. Class Work
 - Weekly.
- D. Class Performance
 - Weekly.

IX. TYPICAL TEXTS:

- 1. Miller, William. *CDL Study Guide 2022-2023*. 1 ed., Independant, 2022.
- 2. National safety Council Standard First Aid , CPR, and AED Manual. Materials will be provided by LiUNA! Laborers' Union

X. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety Glasses
- B. Safety Vests
- C. Work Gloves
- D. Sturdy non-slip steel toe shoes

Course Outline for APCL 112

FLAGGING CERTIFICATION

Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 112 — FLAGGING CERTIFICATION — 0.50 units

This ATSSA Flagging Certification class teaches trainees how to protect fellow construction workers, motorists, and pedestrians by safely directing vehicle operators through traffic-controlled construction zone. In accordance with the ATSSA Part 6E of the MUTCD Federal Standards.

0.50 Units Lecture

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Grading Methods:

Letter or P/NP

Discipline:

- Transportation

	MIN
Lecture Hours:	9.00
Expected Outside of Class Hours:	18.00
Total Hours:	27.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe job site safety applications
- B. Perform Basic flagging signs

V. CONTENT:

- A. Requirements listed in the MUTCD Part 6E Flogger Control
- B. Basic Principles of TTC zones
- C. Learning Signs and devices associated with Traffic Control
- D. Tools and equipment needed for flagging
- E. Handle the stop and slow paddles
- F. Recognize different types of drivers
- G. Alternative methods to communicate with other Flogger Setup of night time flagging
- H. Communicating effectively with public, supervisors and co-workers

VI. METHODS OF INSTRUCTION:

- A. **Lecture** - Lecture on various topics
- B. **Written Exercises** - Substantial writing assignments are NOT required (less than 25% of grade).
- C. **Discussion** - Explain current regulations Explain common types of skid steer loader attachments.
- D. **Written Exercises** - Written Exams will be given regarding safe operation of skid steer loaders.

VII. TYPICAL ASSIGNMENTS:

- A. Lecture-based assignments
 - 1. Take notes on safety lecture
- B. Text reading

1. Read Chapter One
- C. Oral Assessments
 1. Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks
- D. Exams
 1. Written Exams will be given regarding safe operation and regulations for operating lift trucks.

VIII. EVALUATION:

Methods/Frequency

- A. Exams/Tests
After each module.
- B. Class Participation
Weekly.
- C. Class Work
Weekly.
- D. Class Performance
Weekly.

IX. TYPICAL TEXTS:

1. Miller, William. *CDL Study Guide 2022-2023*. 1 ed., Independant, 2022.
2. Proprietary workbook and manuals for Flagging. Materials will be provided by LiUNA! Laborers' Union

X. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety Glasses
- B. Safety Vests
- C. Work Gloves
- D. Sturdy non-slip steel toe shoes

Course Outline for APCL 113

TRAFFIC CONTROL

Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 113 — TRAFFIC CONTROL — 0.50 units

To provide students with the knowledge of how to protect fellow construction workers, motorists and pedestrians, by safety directing vehicle operators through the traffic controlled construction zone, in accordance with the ATSSA Part 6 MUTCD Federal Standards.

0.50 Units Lecture

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Grading Methods:

Letter or P/NP

Discipline:

- Transportation

	MIN
Lecture Hours:	9.00
Expected Outside of Class Hours:	18.00
Total Hours:	27.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe job site safety applications
- B. Summarize temporary traffic control elements

V. CONTENT:

- A. Fundamental Principles
- B. Temporary Traffic Control Elements
- C. Pedestrian and Worker safety
- D. Temporary Traffic control zone Devices
- E. Temporary Traffic control zone activities
- F. Typical Applications
- G. Control of traffic through Traffic Incident Management Areas

VI. METHODS OF INSTRUCTION:

- A. **Lecture** - Lecture on various topics
- B. **Written Exercises** - Substantial writing assignments are NOT required (less than 25% of grade).
- C. **Discussion** - Explain current regulations Explain common types of skid steer loader attachments.
- D. **Written Exercises** - Written Exams will be given regarding safe operation of skid steer loaders.

VII. TYPICAL ASSIGNMENTS:

- A. Lecture-based assignments
 - 1. Take notes on safety lecture
- B. Text reading
 - 1. Read Chapter One

- C. Oral Assessments
 - 1. Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks
- D. Exams
 - 1. Written Exams will be given regarding safe operation and regulations for operating lift trucks.

VIII. EVALUATION:

Methods/Frequency

- A. Exams/Tests
 - After each module.
- B. Class Participation
 - Weekly.
- C. Class Work
 - Weekly.
- D. Class Performance
 - Weekly.

IX. TYPICAL TEXTS:

- 1. Miller, William. *CDL Study Guide 2022-2023*. 1 ed., Independant, 2022.
- 2. Proprietary workbook and manuals for Flagging. Materials will be provided by LiUNA! Laborers' Union

X. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety Glasses
- B. Safety Vests
- C. Work Gloves
- D. Sturdy non-slip steel toe shoes

Las Positas College
 3000 Campus Hill Drive
 Livermore, CA 94551-7650
 (925) 424-1000
 (925) 443-0742 (Fax)

Course Outline for APCL 114

OSHA 10 HOUR NORCAL

Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 114 — OSHA 10 HOUR NORCAL — 1.00 units

Introduce the student to the safety requirements set forth by the Federal Occupational Safety and Health Administration (OSHA), 29 CFR 1926 Construction Industry Standards, and 29 CFR 1910 General Standards, as they relate to the Construction Industry.

1.00 Units Lecture

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Grading Methods:

Letter or P/NP

Discipline:

- Transportation

	MIN
Lecture Hours:	18.00
Expected Outside of Class Hours:	36.00
Total Hours:	54.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe job site safety applications
- B. Understand regulations OSHA rules.

V. CONTENT:

- A. OSHA Introduction
- B. General Safety and Health Subpart C
- C. Personal Protective Equipment Subpart E
- D. Material handling Subpart H
- E. Tools- Hand and Power Subpart I
- F. Electrical Subpart K
- G. Fall protection Subpart M
- H. Cranes, Derricks, Hoists, Elevator and Conveyors Subpart N
 - I. Excavation Subpart P
 - J. Stairways and ladders Subpart X

VI. METHODS OF INSTRUCTION:

- A. **Lecture** - Lecture on various topics
- B. **Written Exercises** - Substantial writing assignments are NOT required (less than 25% of grade).
- C. **Discussion** - Explain current regulations Explain common types of skid steer loader attachments.
- D. **Written Exercises** - Written Exams will be given regarding safe operation of skid steer loaders.

VII. TYPICAL ASSIGNMENTS:

- A. Lecture-based assignments
 - 1. Take notes on safety lecture
- B. Text reading
 - 1. Read Chapter One
- C. Oral Assessments
 - 1. Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks
- D. Exams

1. Written Exams will be given regarding safe operation and regulations for operating lift trucks.

VIII. EVALUATION:

Methods/Frequency

- A. Exams/Tests
After each module.
- B. Class Participation
Weekly.
- C. Class Work
Weekly.
- D. Class Performance
Weekly.

IX. TYPICAL TEXTS:

1. Miller, William. *CDL Study Guide 2022-2023*. 1 ed., Independant, 2022.
2. Proprietary IVES Smart mark workbook. Materials will be provided by LiUNA! Laborers' Union

X. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety Glasses
- B. Safety Vests
- C. Work Gloves
- D. Sturdy non-slip steel toe shoes

Course Outline for APCL 115

OSHA 30 HOUR NORCAL

Effective: Fall 2023

I. CATALOG DESCRIPTION:

APCL 115 — OSHA 30 HOUR NORCAL — 2.00 units

Introduce the student supervisors to the safety requirements and how to navigate through regulations set forth by the Federal Occupational Safety and Health Administration (OSHA), 29 CFR 1926 Construction Industry Standards, and 29 CFR 1910 General Standard, as they relate to the Construction Industry.

2.00 Units Lecture

Enrollment Limitation

Admission to this course is limited to apprentices registered with the state of California Department of Apprenticeship Standards. Registered Apprentice with LiUNA! Northern California District Council of Laborers.

Grading Methods:

Letter or P/NP

Discipline:

- Transportation

	MIN
Lecture Hours:	36.00
Expected Outside of Class Hours:	72.00
Total Hours:	108.00

II. NUMBER OF TIMES COURSE MAY BE TAKEN FOR CREDIT: 1

III. PREREQUISITE AND/OR ADVISORY SKILLS:

IV. MEASURABLE OBJECTIVES:

Upon completion of this course, the student should be able to:

- A. Describe job site safety applications
- B. Understand regulations pertaining general safety in health subpart C

V. CONTENT:

- A. OSHA Introduction
- B. General Safety and Health Subpart C
- C. Personal Protective Equipment Subpart E
- D. Material handling Subpart H
- E. Tools- Hand and Power Subpart I
- F. Electrical Subpart K
- G. Fall protection Subpart M
- H. Cranes, Derricks, Hoists, Elevator and Conveyors Subpart N
 - 1. Excavation Subpart P
- J. Stairways and ladders Subpart X

VI. METHODS OF INSTRUCTION:

- A. **Lecture** - Lecture on various topics
- B. **Written Exercises** - Substantial writing assignments are NOT required (less than 25% of grade).
- C. **Discussion** - Explain current regulations Explain common types of skid steer loader attachments.
- D. **Written Exercises** - Written Exams will be given regarding safe operation of skid steer loaders.

VII. TYPICAL ASSIGNMENTS:

- A. Lecture-based assignments
 - 1. Take notes on safety lecture
- B. Text reading
 - 1. Read Chapter One
- C. Oral Assessments
 - 1. Explain current regulations Explain common types of Rough Terrain Variable Reach Lift trucks
- D. Exams

1. Written Exams will be given regarding safe operation and regulations for operating lift trucks.

VIII. EVALUATION:

Methods/Frequency

- A. Exams/Tests
After each module.
- B. Class Participation
Weekly.
- C. Class Work
Weekly.
- D. Class Performance
Weekly.

IX. TYPICAL TEXTS:

1. Miller, William. *CDL Study Guide 2022-2023*. 1 ed., Independant, 2022.
2. Proprietary IVES Smart mark workbook. Materials will be provided by LiUNA! Laborers' Union

X. OTHER MATERIALS REQUIRED OF STUDENTS:

- A. Safety Glasses
- B. Safety Vests
- C. Work Gloves
- D. Sturdy non-slip steel toe shoes

Norcal Laborers Construction - A CA - Certificate of Achievement (16 to fewer than 60 semester units)

Fall 2023

Course Sequence

Required Core		Units
APCL 102	Hazardous Waste Removal Initial	2.5
APCL 106	Skid Steer Loader Orientation Initial	2.5
APCL 94	Work Experience - LiUNA Laborer's' Construction Apprenticeship	16
APCL 100	Forklift Orientation Initial	2.5
APCL 101	Fundamentals of Construction	4.5
APCL 103	Safety Certification	2.5
APCL 104	Aerial Work Platform Initial	1
APCL 105	Rigging and Signaling	2.5

Total Units

34

PID 1151

Norcal Laborers LiUNA Laborers' Construction - A CA - Certificate of Achievement (16 to fewer than 60 semester units)

Fall 2023

Course Sequence

Required Core		Units
APCL 102	Hazardous Waste Removal Initial	2.5
APCL 106	Skid Steer Loader Orientation Initial	2.5
APCL 94	Work Experience - LiUNA Laborer's' Construction Apprenticeship	16
APCL 100	Forklift Orientation Initial	2.5
APCL 101	Fundamentals of Construction	4.5
APCL 103	Safety Certification	2.5
APCL 104	Aerial Work Platform Initial	1
APCL 105	Rigging and Signaling	2.5
APCL 107	Concrete Techniques	5
APCL 108	Asphalt Paving Techniques	4.5

Total Units

43.5

PID 1152

Norcal Laborers Traffic Control - A CA - Certificate of Achievement (16 to fewer than 60 semester units)

Fall 2023

Course Sequence

Required Core		Units
APCL 114	OSHA 10 Hour Norcal	1
APCL 111	First Aid, CPR and AED	0.5
APCL 112	Flagging Certification	0.5
APCL 113	Traffic Control	0.5
APCL 110	Confined Space Awareness	0.5
APCL 109	Blueprint Reading Orientation, Basic	1.5
APCL 102	Hazardous Waste Removal Initial	2.5
APCL 115	OSHA 30 Hour Norcal	2
APCL 106	Skid Steer Loader Orientation Initial	2.5
APCL 94	Work Experience - LiUNA Laborer's' Construction Apprenticeship	16

Total Units	27.5
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LiUNA - APCL

Course – 100

SLO's : Upon completion of this course, student will be able to

Identify the main parts of Rough Terrain Lift trucks.

Perform pre-shift inspection and safe operation of Variable Reach Lift truck as determined by the instructor.

LiUNA - APCL

Course – 101

SLO's : Upon completion of this course, student will be able to

Determine the proper tool(s) to use for a specified job.
Understand the OSHA Construction standards.

LiUNA - APCL

Course – 102

SLO's : Upon completion of this course, student will be able to

Identify and explain protective measures to be taken when dealing with hazardous waste.

Understand the purpose and general requirements of Hazardous Waste Standards.

LiUNA - APCL

Course – 103

SLO's : Upon completion of this course, student will be able to

Know general guidelines to safely operate equipment.

Identify, evaluate, and control health and safety hazards in the work place.

LiUNA - APCL

Course – 104

SLO's : Upon completion of this course, student will be able to

Safely operate and maneuver scissor-lifts and boom lifts.

Identify various types of Aerial Work Platforms.

LiUNA - APCL

Course – 105

SLO's : Upon completion of this course, student will be able to

Demonstrate the safety procedures of rigging and signaling.

Understand why standard hand signals must be used.

LiUNA - APCL

Course – 106

SLO's : Upon completion of this course, student will be able to

Demonstrate concrete construction techniques to industry standards.

Explain how weight distribution affects skid-steer loader stability and steering.

LiUNA - APCL

Course – 107

SLO's : Upon completion of this course, student will be able to

Demonstrate concrete construction techniques to industry standards.

Understand the materials, processes, and safety related to concrete work..

LiUNA - APCL

Course – 108

SLO's : Upon completion of this course, student will be able to

Demonstrate proper use of tools and equipment needed when working with Asphalt.

Utilize proper skills to work with asphalt safely.

LiUNA - APCL

Course – 109

SLO's : Upon completion of this course, student will be able to

Demonstrate proper reading of blueprint legends.

Utilize proper skills to work with blueprint scaling.

LiUNA - APCL

Course – 110

SLO's : Upon completion of this course, student will be able to

Describe different types of Confined Spaces
Summarize regulations pertaining to confined spaces.

LiUNA - APCL

Course – 111

SLO's : Upon completion of this course, student will be able to

Summarize why to learn first aid
Perform Basic Life Support

LiUNA - APCL

Course – 112

SLO's : Upon completion of this course, student will be able to

Summarize the requirements listed in the MUTCD Part 6E Flogger Control
Recognize different types of drivers

LiUNA - APCL

Course – 113

SLO's : Upon completion of this course, student will be able to

Summarize the requirements listed in the MUTCD Part 6 Flagger Control
Recognize different types of drivers

LiUNA - APCL

Course – 114

SLO's : Upon completion of this course, student will be able to

Summarize General Safety and Health requirements from Subpart C
Describe Personal Protective Equipment from Subpart E

LiUNA - APCL

Course – 115

SLO's : Upon completion of this course, student will be able to

Summarize General Safety and Health requirements from Subpart C
Describe Personal Protective Equipment from Subpart E

NORCAL Laborers - APCL PSLO

PSLO's : Upon completion of this program, student will be able to

Discuss overview of CAL/OSHA regulations.

Explain the operating procedures for equipment safety

Discuss compliance issues with vehicle inspections

LiUNA - APCL

Program :

PSLO's : Upon completion of this program, student will be able to

Discuss overview of CAL/OSHA regulations.

Explain the operating procedures for equipment safety

Discuss compliance issues with vehicle inspections