

Regional Economic Analysis Profile

Eastern Sierra Economic Sub-Market

Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne Counties

April 2015



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** This Economic Sub-Market includes Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne Counties.

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SUMMARY OF THE EASTERN SIERRA ECONOMIC SUB-MARKET INDUSTRY CLUSTERS

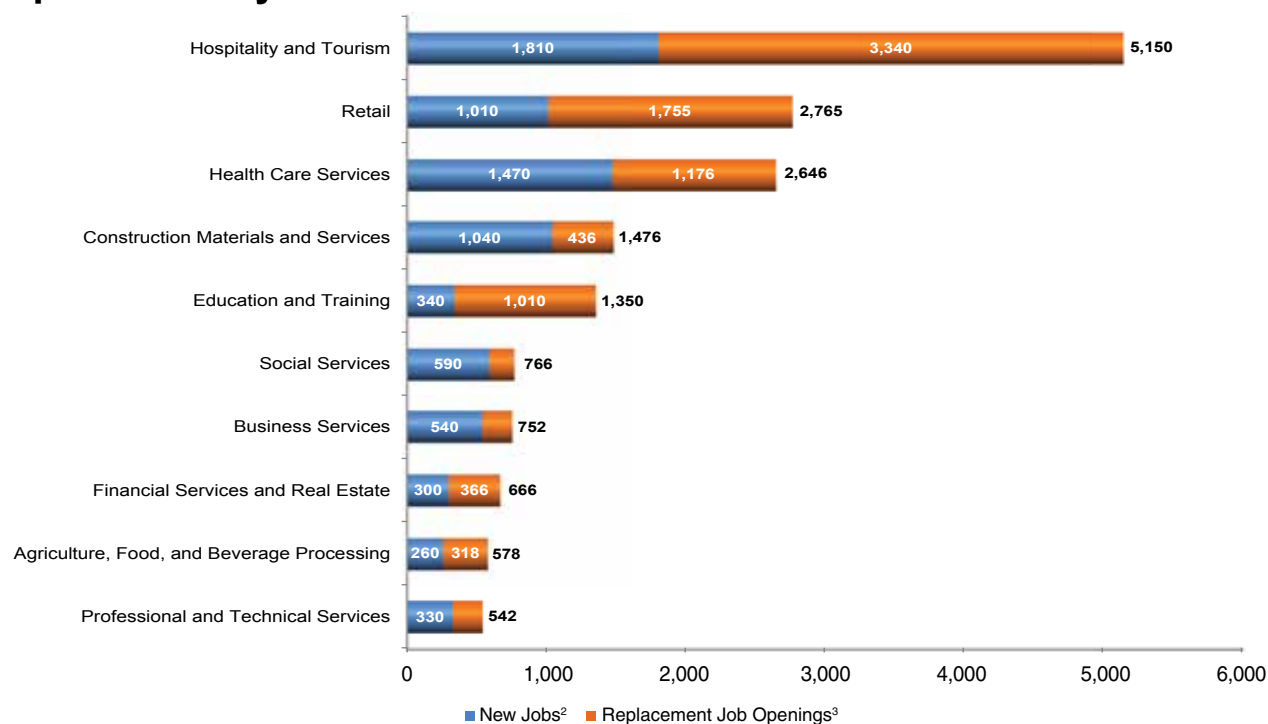
What is an Industry Cluster?

Industry clusters are groups of associated industries in a economic market that stimulate the creation of new businesses and job opportunities in a particular field. The application of workforce and economic development resources toward the continual development of industry clusters will help stimulate economic growth and boost the number of employment opportunities for the labor force.

Purpose of this Report

The purpose of this report is to help align the state's workforce institutions and programs around the needs of Eastern Sierra Economic Sub-Market industry clusters. In the first generation, the Eastern Sierra Region report ([September 2014](#)) highlighted the top three industry clusters ranked by the projected total job openings: Hospitality and Tourism, Retail, and Health Care Services. In this second generation, the Eastern Sierra Economic Sub-Market report (February 2015) will again highlight the Health Care Services Cluster, as well as bring attention to the Construction Materials and Services and Education and Training clusters. This report focuses on the future employment demand of economic sub-market industry clusters and features them as primary investment opportunities for the California workforce development system. The goal of this report is to account for industry clusters with the largest number of projected total job openings¹ and helps the California workforce development system prepare the state's workforce to compete for these future job opportunities.

Top 10 Industry Clusters in the Eastern Sierra Economic Sub-Market**



Source: California Employment Development Department, *Projections of Employment 2012-2022*. Industry and occupational employment projections for 2012-2022 in this report may not be directly comparable to the published 2012-2022 employment projections available online at www.labormarketinfo.edd.ca.gov.

¹ Total job openings are the sum of new jobs and replacement job openings.

² New jobs are only openings due to growth and do not include job declines. If an occupation's employment change is negative, there is no job growth and new jobs are set to zero.

³ Replacement job openings estimate the number of job openings created when workers retire or permanently leave an occupation and need to be replaced.

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INDUSTRY CLUSTER DESCRIPTIONS

The following are descriptions of the Eastern Sierra Economic Sub-Market's** top 10 industry clusters followed by a list of the top industries with the highest projected job openings in the cluster.

The **Hospitality and Tourism** industry cluster includes interrelated industries such as eating establishments, hotels and motels, casinos, museums, and sightseeing transportation. During 2013-2014,* this cluster comprised almost 10,800 workers, or 25.8 percent of the economic sub-market's employment. Industries within this cluster with the most projected job openings include:

- Restaurants and Other Eating Places
- Traveler Accommodation
- Other Amusement and Recreation Industries
- RV (Recreational Vehicle) Parks and Recreational Camps
- Drinking Places (Alcoholic Beverages)

The **Retail** industry cluster includes grocery and department stores, dollar stores, retail pharmacies, and clothing specialty stores. During 2013-2014,* this cluster comprised almost 5,800 workers, or 13.8 percent of the economic sub-market's employment. Industries projected to have the largest number of jobs (new and replacement) include:

- Automobile Dealers
- Other Motor Vehicle Dealers
- Automotive Parts, Accessories, and Tire Stores
- Electronics and Appliance Stores
- Building Material and Supplies Dealers

The **Health Care Services** industry cluster includes acute care and outpatient hospitals, nursing homes and rehabilitation centers, adult day care centers, and community service agencies for the elderly. It employed nearly 5,700 people in the economic sub-market during 2013-2014,* accounting for 13.7 percent of the workforce. Industries in this cluster may include both public and private employment. Top industries within this cluster include:

- General Medical and Surgical Hospitals
- Offices of Dentists
- Offices of Physicians
- Nursing Care Facilities (Skilled Nursing Facilities)
- Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly

The **Construction Materials and Services** industry cluster is comprised of builders of mechanical systems such as electrical, heating, and water; specialty trades outfits such as drywall, flooring, and painting contractors; residential and commercial builders; and contractors who complete foundation and framing work. During 2013-2014,* over 2,600 workers made up the cluster's employment, representing 6.3 percent of the economic sub-market's total workforce. Industries showing the highest projected job openings include:

- Residential Building Construction
- Building Equipment Contractors
- Other Specialty Trade Contractors
- Foundation, Structure, and Building Exterior Contractors
- Building Finishing Contractors

The **Education and Training** industry cluster is comprised of public and private elementary and high schools, community colleges, universities, and professional schools with programs such as dental, law, and medical. Other establishments include English as a Second Language (ESL) programs, test preparation and tutoring, or driving instruction. During 2013-2014,* this cluster employed more than 4,200 people in the economic sub-market, accounting for 10.1 percent of the workforce. Top industries within this cluster include:

- Elementary and Secondary Schools
- Junior Colleges
- Other Schools and Instruction
- Technical and Trade Schools
- Colleges, Universities, and Professional Schools

* Quarterly Census of Employment and Wages (QCEW), a federal-state cooperative program, for the period April 2013 through March 2014.

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INDUSTRY CLUSTER DESCRIPTIONS

The **Social Services** industry cluster is comprised of establishments and agencies (public and private) that provide non-residential services for the welfare of children, adults, the elderly, and disabled. Examples include nonmedical in-home care programs, day care centers, and community food banks. In total, the cluster employed almost 1,400 people and accounted for 3.3 percent of the economic sub-market's workforce in 2013-2014.* Industries include:

- Individual and Family Services
- Community Food and Housing, and Emergency and Other Relief Services
- Vocational Rehabilitation Services
- Child Day Care Services

The **Business Services** industry cluster is comprised of industries that include temporary help agencies, employer organizations, janitorial services, security systems services, and carpet cleaning establishments. During 2013-2014,* this cluster comprised almost 1,200 workers, or 2.9 percent of the economic sub-market's employment. Top industries in this cluster include:

- Services to Buildings and Dwellings
- Office Administrative Services
- Employment Services
- Waste Treatment and Disposal
- Management of Companies and Enterprises

The **Financial Services and Real Estate** industry cluster includes commercial banks, savings institutions, credit unions, credit card companies, insurance firms, and real estate appraisers or property management companies. During 2013-2014,* this cluster comprised almost 1,500 workers, or 3.5 percent of the economic sub-market's employment. Industries showing the highest projected job openings include:

- Depository Credit Intermediation
- Activities Related to Real Estate
- Lessors of Real Estate
- Agencies, Brokerages, and Other Insurance Related Activities
- Offices of Real Estate Agents and Brokers

The **Agriculture, Food, and Beverage Processing** industry cluster includes establishments primarily engaged in growing crops, raising animals, and manufacturing food and beverages, as well as support activities for crop and animal production. This cluster employed almost 1,400 people during 2013-2014,* or 3.2 percent of the economic sub-market's workforce. Top industries in this cluster include:

- Beverage Manufacturing
- Support Activities for Crop Production
- Bakeries and Tortilla Manufacturing
- Animal Slaughtering and Processing
- Fruit and Tree Nut Farming

The **Professional and Technical Services** industry cluster is comprised of interrelated industries that include engineering and architectural firms, law offices, advertising companies, and accounting firms. In 2013-2014,* more than 1,300 people were employed in the economic sub-market, or 3.2 percent of the workforce. Top industries within this cluster include:

- Management, Scientific, and Technical Consulting Services
- Other Professional, Scientific, and Technical Services
- Architectural, Engineering, and Related Services
- Accounting, Tax Preparation, Bookkeeping, and Payroll Services
- Legal Services

* Quarterly Census of Employment and Wages (QCEW), a federal-state cooperative program, for the period April 2013 through March 2014.

INDUSTRY CLUSTER DEFINITIONS

The following is a list of the North American Industry Classification System (NAICS) codes and corresponding industries that fall under each of the top 10 industry clusters in the Eastern Sierra Economic Sub-Market.**

Hospitality and Tourism

4871	Scenic and Sightseeing Transportation, Land
4872	Scenic and Sightseeing Transportation, Water
4879	Scenic and Sightseeing Transportation, Other
5615	Travel Arrangement and Reservation Services
7121	Museums, Historical Sites, and Similar Institutions
7131	Amusement Parks and Arcades
7132	Gambling Industries
7139	Other Amusement and Recreation Industries
7211	Traveler Accommodation
7212	RV (Recreational Vehicle) Parks and Recreational Camps
7213	Rooming and Boarding Houses
7223	Special Food Services
7224	Drinking Places (Alcoholic Beverages)
7225	Restaurants and Other Eating Places

Retail

4411	Automobile Dealers
4412	Other Motor Vehicle Dealers
4413	Automotive Parts, Accessories, and Tire Stores
4431	Electronics and Appliance Stores
4441	Building Material and Supplies Dealers
4451	Grocery Stores
4452	Specialty Food Stores
4453	Beer, Wine, and Liquor Stores
4461	Health and Personal Care Stores
4471	Gasoline Stations
4481	Clothing Stores
4482	Shoe Stores
4483	Jewelry, Luggage, and Leather Goods Stores
4511	Sporting Goods, Hobby, and Musical Instrument Stores
4521	Department Stores
4529	Other General Merchandise Stores
4532	Office Supplies, Stationery, and Gift Stores
4533	Used Merchandise Stores
4542	Vending Machine Operators

Health Care Services

6211	Offices of Physicians
6212	Offices of Dentists
6213	Offices of Other Health Practitioners
6214	Outpatient Care Centers

Health Care Services (Continued)

6215	Medical and Diagnostic Laboratories
6216	Home Health Care Services
6219	Other Ambulatory Health Care Services
6221	General Medical and Surgical Hospitals
6222	Psychiatric and Substance Abuse Hospitals
6223	Specialty (except Psychiatric and Substance Abuse) Hospitals
6231	Nursing Care Facilities (Skilled Nursing Facilities)
6232	Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facilities
6233	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly
6239	Other Residential Care Facilities

Construction Materials and Services

2123	Nonmetallic Mineral Mining and Quarrying
2213	Water, Sewage and Other Systems
2361	Residential Building Construction
2362	Nonresidential Building Construction
2372	Land Subdivision
2373	Highway, Street, and Bridge Construction
2379	Other Heavy and Civil Engineering Construction
2381	Foundation, Structure, and Building Exterior Contractors
2382	Building Equipment Contractors
2383	Building Finishing Contractors
2389	Other Specialty Trade Contractors
3211	Sawmills and Wood Preservation
3271	Clay Product and Refractory Manufacturing
3272	Glass and Glass Product Manufacturing
3273	Cement and Concrete Product Manufacturing
3274	Lime and Gypsum Product Manufacturing
3279	Other Nonmetallic Mineral Product Manufacturing
3339	Other General Purpose Machinery Manufacturing
3351	Electric Lighting Equipment Manufacturing

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INDUSTRY CLUSTER DEFINITIONS

Education and Training

- 6111 Elementary and Secondary Schools
- 6112 Junior Colleges
- 6113 Colleges, Universities, and Professional Schools
- 6114 Business Schools and Computer and Management Training
- 6115 Technical and Trade Schools
- 6116 Other Schools and Instruction
- 6117 Educational Support Services

Social Services

- 6241 Individual and Family Services
- 6242 Community Food and Housing, and Emergency and Other Relief Services
- 6243 Vocational Rehabilitation Services
- 6244 Child Day Care Service

Business Services

- 5511 Management of Companies and Enterprises
- 5611 Office Administrative Services
- 5612 Facilities Support Services
- 5613 Employment Services
- 5614 Business Support Services
- 5419 Other Professional, Scientific, and Technical
- 5616 Investigation and Security Services
- 5617 Services to Buildings and Dwellings
- 5619 Other Support Services
- 5621 Waste Collection
- 5622 Waste Treatment and Disposal
- 5629 Remediation and Other Waste Management Services

Financial Services and Real Estate

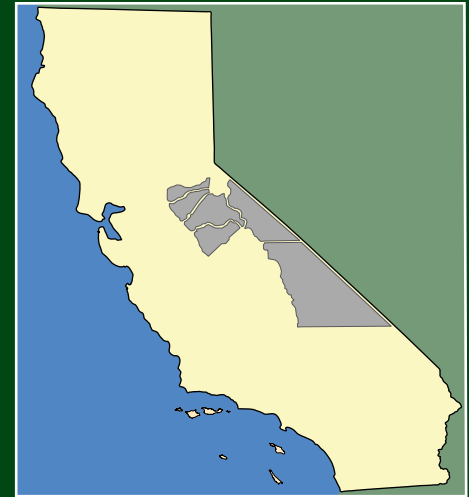
- 5211 Monetary Authorities-Central Bank
- 5221 Depository Credit Intermediation
- 5222 Nondepository Credit Intermediation
- 5223 Activities Related to Credit Intermediation
- 5231 Securities and Commodity Contracts Intermediation and Brokerage
- 5232 Securities and Commodity Exchanges
- 5239 Other Financial Investment Activities
- 5241 Insurance Carriers
- 5242 Agencies, Brokerages, and Other Insurance
- 5251 Related Activities Insurance and Employee Benefit Funds
- 5259 Other Investment Pools and Funds
- 5311 Lessors of Real Estate
- 5312 Offices of Real Estate Agents and Brokers
- 5313 Activities Related to Real Estate

Agriculture, Food, and Beverage Processing

- 1111 Oilseed and Grain Farming
- 1112 Vegetable and Melon Farming
- 1113 Fruit and Tree Nut Farming
- 1114 Greenhouse, Nursery, and Floriculture Production
- 1119 Other Crop Farming
- 1121 Cattle Ranching and Farming
- 1122 Hog and Pig Farming
- 1123 Poultry and Egg Production
- 1124 Sheep and Goat Farming
- 1125 Aquaculture
- 1129 Other Animal Production
- 1151 Support Activities for Crop Production
- 1152 Support Activities for Animal Production
- 3111 Animal Food Manufacturing
- 3112 Grain and Oilseed Milling
- 3113 Sugar and Confectionery Product Manufacturing
- 3114 Fruit and Vegetable Preserving and Specialty Food Manufacturing
- 3115 Dairy Product Manufacturing
- 3116 Animal Slaughtering and Processing
- 3117 Seafood Product Preparation and Packaging
- 3118 Bakeries and Tortilla Manufacturing
- 3119 Other Food Manufacturing
- 3121 Beverage Manufacturing
- 3122 Tobacco Manufacturing
- 3253 Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing
- 3261 Plastics Product Manufacturing

Professional and Technical Services

- 5411 Legal Services
- 5412 Accounting, Tax Preparation, Bookkeeping, and Payroll Services
- 5413 Architectural, Engineering, and Related Services
- 5414 Specialized Design Services
- 5416 Management, Scientific, and Technical Consulting Services
- 5418 Advertising, Public Relations, and Related Services
- 5419 Other Professional, Scientific, and Technical Services



Occupational Analysis: Health Care Services Cluster

Eastern Sierra Economic Sub-Market

Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne Counties

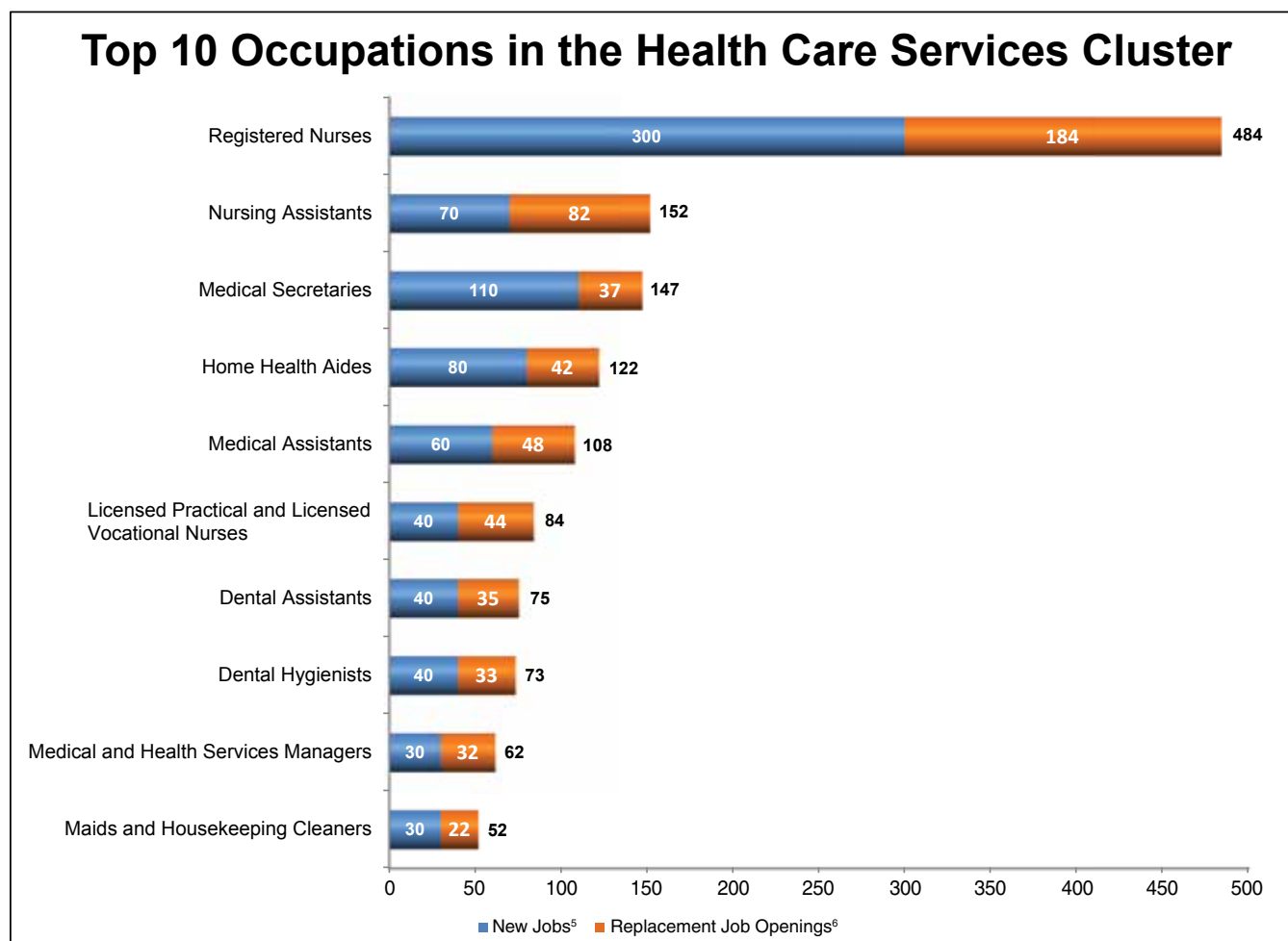
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What is the Health Care Services Cluster?

The Health Care Services cluster is comprised of 14 industries that include hospitals and doctors' offices, diagnostic laboratories, continuing care retirement communities, home health care services, and other activities related to health care. The workers employed within this cluster span all skill levels and share skills and work activities both within the cluster and in many other industry clusters, suggesting the potential for skills transference and upward mobility with additional training.

Top 10 Occupations in the Health Care Services Cluster

The graph below identifies the top 10 occupations in the Health Care Services cluster, based on the Eastern Sierra Economic Sub-Market's** new job growth plus replacement openings. In sum, these 10 occupations represent more than half of the 2,646 total job openings projected in this cluster between 2012 and 2022. Moreover, many share the same required skills such as active listening, critical thinking, monitoring, reading comprehension, social perceptiveness, and speaking.⁴



Source: California Employment Development Department, *Projections of Employment 2012-2022*. Industry and occupational employment projections for 2012-2022 in this report may not be directly comparable to the published 2012-2022 employment projections available online at www.labormarketinfo.edd.ca.gov.

⁴ U.S. Department of Labor's [Occupational Information Network \(O*NET\)](http://www.onetonline.org) at www.onetonline.org.

⁵ New jobs are only openings due to growth and do not include job declines. If an occupation's employment change is negative, there is no job growth and new jobs are set to zero.

⁶ Replacement job openings estimate the number of job openings created when workers retire or permanently leave an occupation and need to be replaced.

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Top 10 Occupations and Recent Job Demand in the Health Care Services Cluster

The table below further profiles the Eastern Sierra Economic Sub-Market's** top 10 occupations in the Health Care Services cluster by listing the total job openings for 2012-2022, median hourly and annual wages, and entry-level education requirements. Also included are online job advertisements extracted from The Conference Board Help Wanted OnLine™ (HWOL) data series over a recent 120-day period. HWOL compiles, analyzes, and categorizes job advertisements from numerous online job boards, including CalJOBSSM (www.caljobs.ca.gov), California's online job listing system.

Occupations	Total Job Openings ⁷ (2012-2022)	Median Hourly Wage (2014)	Median Annual Wage (2014)	Entry Level Education ⁸	HWOL Job Ads ⁹ (120 days)
Registered Nurses ¹⁰	484	\$49.34	N/A	Associate's degree	222
Nursing Assistants	152	\$14.34	\$29,825	Postsecondary non-degree award	33
Medical Secretaries	147	\$17.53	\$36,463	High school diploma or equivalent	10
Home Health Aides	122	\$11.51	\$23,941	Less than high school	12
Medical Assistants	108	\$15.74	\$32,732	Postsecondary non-degree award	16
Licensed Practical and Licensed Vocational Nurses	84	\$25.40	\$52,826	Postsecondary non-degree award	53
Dental Assistants	75	\$20.15	\$41,907	Postsecondary non-degree award	18
Dental Hygienists	73	\$48.41	\$100,692	Associate's degree	3
Medical and Health Services Managers	62	\$55.05	\$114,508	Bachelor's degree	28
Maids and Housekeeping Cleaners	52	\$10.64	\$22,140	Less than high school	28

Source: California Employment Development Department, *Projections of Employment 2012-2022; Occupational Employment Statistics Wage Survey, updated to 3rd Q, 2014; The Conference Board Help Wanted OnLine™ (HWOL) Data Series, 120-day period ending April 3, 2015.*

⁷ Total job openings are the sum of new jobs and replacement job openings.

⁸ U.S. Department of Labor, Bureau of Labor Statistics (BLS) 2012 education levels.

⁹ Totals represent job advertisements from employers in all industries. One job opening may be represented in more than one job advertisement.

¹⁰ Wages do not include Mono and Inyo counties.

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Top Occupations for the Health Care Services Cluster by Education Level

The table below identifies the occupations with the most total job openings, categorized by Bureau of Labor Statistics (BLS) 2012 entry-level education requirements, within the Health Care Services cluster. The table includes the Eastern Sierra Economic Sub-Market's** projected total job openings and median hourly and annual wages. In addition, recent totals of online job advertisements over 120-day period are included. Grouping occupations by education levels allows individuals to better gauge the potential for skills transference and upward mobility within the cluster.

Occupations	Total Job Openings ¹¹ (2012-2022)	Median Hourly Wage (2014)	Median Annual Wage (2014)	HWOL Job Ads (120 days)
Requires a Bachelor's Degree or Higher				
Medical and Health Services Managers	62	\$55.05	\$114,508	28
Physical Therapists	40	\$45.40	\$94,436	125
Medical Scientists, Except Epidemiologists	21	\$42.20	\$87,777	5
Speech-Language Pathologists	16	\$42.75	\$88,923	52
Nurse Practitioners	16	\$60.42	\$125,683	12
Requires Some College, Postsecondary Non-Degree Award, or Associate's Degree				
Registered Nurses ¹²	484	\$49.34	N/A	222
Nursing Assistants	152	\$14.34	\$29,825	33
Medical Assistants	108	\$15.74	\$32,732	16
Licensed Practical and Licensed Vocational Nurses	84	\$25.40	\$52,826	53
Dental Assistants	75	\$20.15	\$41,907	18
Requires a High School Diploma or Equivalent or Less				
Medical Secretaries	147	\$17.53	\$36,463	10
Home Health Aides	122	\$11.51	\$23,941	12
Maids and Housekeeping Cleaners	52	\$10.64	\$22,140	28
First-Line Supervisors of Office and Administrative Support Workers	49	\$24.10	\$50,130	52
Personal Care Aides	49	\$9.45	\$19,644	17

Source: California Employment Development Department, Projections of Employment 2012-2022; Occupational Employment Statistics Wage Survey, updated to 3rd Q, 2014; The Conference Board Help Wanted OnLine™ (HWOL) Data Series, 120-day period ending April 3, 2015.

¹¹ Total job openings are the sum of new jobs and replacement job openings.

¹² Wages do not include Mono and Inyo counties.

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Skill Requirements in the Health Care Services Cluster

The table below lists the 10 top skills required for top occupations in the Health Care Services cluster, categorized by entry-level education requirements. Active listening, critical thinking, and reading comprehension are the most commonly shared skills, followed by monitoring, social perceptiveness, and speaking. The skills and work activities identified for each occupation are from the U.S. Department of Labor's Occupational Information Network (O*NET).

Occupations	Skills													
	Active Learning	Active Listening	Complex Problem Solving	Coordination	Critical Thinking	Instructing	Judgment and Decision Making	Learning Strategies	Monitoring	Operations Analysis	Reading Comprehension	Science	Service Orientation	Social Perceptiveness
Requires a Bachelor's Degree or Higher														
Medical and Health Services Managers		●		●	●		●		●	●	●			●
Physical Therapists		●		●	●		●		●		●		●	●
Medical Scientists, Except Epidemiologists	●	●	●		●	●	●				●	●		●
Speech-Language Pathologists	●	●			●	●		●	●		●		●	●
Nurse Practitioners	●	●			●	●	●		●		●	●		●
Requires Some College, Postsecondary Non-Degree Award, or Associate's Degree														
Registered Nurses	●	●		●	●			●	●		●		●	●
Nursing Assistants	●	●		●	●				●		●		●	●
Medical Assistants	●	●		●	●				●		●		●	●
Licensed Practical and Licensed Vocational Nurses		●		●	●				●		●		●	●
Dental Assistants	●	●			●	●			●		●		●	●
Requires a High School Diploma or Equivalent or Less														
Medical Secretaries		●		●	●				●		●		●	●
Home Health Aides	●	●		●	●			●	●		●		●	●
Maids and Housekeeping Cleaners		●		●	●	●			●		●		●	●
First-Line Supervisors of Office and Administrative Support Workers		●		●	●			●	●		●		●	●
Personal Care Aides	●	●		●	●				●		●		●	●

Source: U.S. Department of Labor's [Occupational Information Network \(O*NET\)](http://www.onetonline.org) at www.onetonline.org.

Work Activities in the Hospitality and Tourism Cluster

The table below lists the 10 top work activities required for top occupations in the Hospitality and Tourism cluster, categorized by entry-level education requirements. The most common include establishing and maintaining interpersonal relationships; communicating with supervisors, peers, or subordinates; coordinating the work and activities of others; and organizing, planning, and prioritizing work.

Occupations	Work Activities																			
	Analyzing Data or Information	Assisting and Caring for Others	Coaching and Developing Others	Communicating with Persons Outside Organization	Communicating with Supervisors, Peers, or Subordinates	Coordinating the Work and Activities of Others	Developing Objectives and Strategies	Documenting/Recording Information	Establishing and Maintaining Interpersonal Relationships	Evaluating Information to Determine Compliance with Standards	Getting Information	Guiding, Directing, and Motivating Subordinates	Handling and Moving Objects	Identifying Objects, Actions, and Events	Inspecting Equipment, Structures, or Material	Making Decisions and Solving Problems	Monitor Processes, Materials, or Surroundings	Monitoring and Controlling Resources	Organizing, Planning, and Prioritizing Work	Performing for or Working Directly with the Public
Requires a Bachelor's Degree or Higher																				
Medical and Health Services Managers		●		●	●			●			●				●	●	●		●	●
Physical Therapists		●						●	●			●	●		●	●		●		●
Medical Scientists, Except Epidemiologists	●			●				●		●			●			●		●		●
Speech-Language Pathologists		●				●		●		●			●		●	●		●		●
Nurse Practitioners		●						●	●	●			●		●	●	●	●		●
Requires Some College, Postsecondary Non-Degree Award, or Associate's Degree																				
Registered Nurses		●		●				●		●			●		●	●		●		●
Nursing Assistants		●		●				●		●		●	●		●	●		●		
Medical Assistants		●		●				●	●	●			●			●		●	●	●
Licensed Practical and Licensed Vocational Nurses		●		●				●	●			●	●		●	●		●		●
Dental Assistants		●						●	●	●		●	●		●	●		●		●
Requires a High School Diploma or Equivalent or Less																				
Medical Secretaries		●		●	●			●		●			●		●			●		●
Home Health Aides		●		●				●	●			●	●		●		●			●
Maids and Housekeeping Cleaners				●				●		●		●	●	●				●	●	●
First-Line Supervisors of Office and Administrative Support Workers			●	●	●	●		●		●	●						●		●	●
Personal Care Aides		●		●				●	●			●	●		●	●		●		

Source: U.S. Department of Labor's [Occupational Information Network \(O*NET\)](http://www.onetonline.org) at www.onetonline.org.

Related Occupations for the Health Care Services Cluster

The table below lists top occupations in the Health Care Services cluster by entry-level education requirements and provides a sample of related occupations. These related occupations match many of the skills, education, and work experience needed for the top Health Care Services cluster occupations.

Health Care Services Occupations	Related Occupations
Requires a Bachelor's Degree or Higher	
Medical and Health Services Managers	<ul style="list-style-type: none"> • Management Analysts • Chief Executives • Human Resources Managers
Physical Therapists	<ul style="list-style-type: none"> • Health Specialties Teachers, Postsecondary • Nursing Instructors and Teachers, Postsecondary • Occupational Therapists
Medical Scientists, Except Epidemiologists	<ul style="list-style-type: none"> • Pharmacists • Geneticists • Preventive Medicine Physicians
Speech-Language Pathologists	<ul style="list-style-type: none"> • Healthcare Social Workers • Health Specialties Teachers, Postsecondary • Nursing Instructors and Teachers, Postsecondary
Nurse Practitioners	<ul style="list-style-type: none"> • Physician Assistants • Clinical Nurse Specialists • Nurse Midwives
Requires Some College, Postsecondary Non-Degree Award, or Associate's Degree	
Registered Nurses	<ul style="list-style-type: none"> • Acute Care Nurses • Critical Care Nurses • Licensed Practical and Licensed Vocational Nurses
Nursing Assistants ¹³	<ul style="list-style-type: none"> • N/A
Medical Assistants	<ul style="list-style-type: none"> • Pharmacy Technicians • Physical Therapist Assistants • Dental Assistants
Licensed Practical and Licensed Vocational Nurses	<ul style="list-style-type: none"> • Acute Care Nurses • Cardiovascular Technologists and Technicians • Radiologic Technicians
Dental Assistants	<ul style="list-style-type: none"> • Dental Hygienists • Surgical Technologists • Endoscopy Technicians
Requires a High School Diploma or Equivalent or Less	
Medical Secretaries	<ul style="list-style-type: none"> • Medical Records and Health Information Technicians • Receptionists and Information Clerks • Bill and Account Collectors
Home Health Aides	<ul style="list-style-type: none"> • Personal Care Aides • Occupational Therapy Aides • Physical Therapist Aides
Maids and Housekeeping Cleaners	<ul style="list-style-type: none"> • Janitors and Cleaners, Except Maids and Housekeeping Cleaners • Dining Room and Cafeteria Attendants and Bartender Helpers • Food Servers, Nonrestaurant
First-Line Supervisors of Office and Administrative Support Workers	<ul style="list-style-type: none"> • General and Operations Managers • Human Resources Specialists • Administrative Services Managers
Personal Care Aides	<ul style="list-style-type: none"> • Home Health Aides • Ambulance Drivers and Attendants, Except Emergency Medical Technicians • Physical Therapist Aides

Source: U.S. Department of Labor's [Occupational Information Network \(O*NET\)](http://www.onetonline.org) at www.onetonline.org.

¹³ Currently no related occupations reported by O*NET.

Employer Demand for the Health Care Services Cluster

The following table lists the Eastern Sierra Economic Sub-Market** employers in the Health Care Services cluster who posted the most job advertisements during the 120-day period ending April 3, 2015. The table also includes the number of job advertisements from the previous year's period, as well as the numerical change and year-over percent change in these postings for the same 120-day period.

Health Care Services Cluster Employers	Recent Job Advertisements ¹⁴ (120-day period)	Prior Year Job Advertisements (120-day period)	Numerical Change	Year-Over Percent Change (HWOL Job Advertisements)
Sonora Regional Medical Center	72	59	13	22.0%
Mark Twain Medical Center	68	4	64	1,600.0%
John C. Fremont Healthcare District	39	50	-11	-22.0%
Avalon Health Care, Inc.	35	25	10	40.0%
Sutter Health	34	18	16	88.9%
Onward Healthcare	18	8	10	125.0%
Southern Inyo Hospital	13	0	13	—
Adventist HealthCare	6	0	6	—
Dignity Health	6	27	-21	-77.8%
Aureus Medical Group	5	0	5	—
Satellite Healthcare	3	1	2	200.0%
Therapists Unlimited	3	3	0	0.0%
American Mobile Healthcare	3	4	-1	-25.0%
Sutter Medical Group	2	0	2	—
360 Healthcare Staffing	2	0	2	—
Toiyabe Indian Health Project	2	2	0	0.0%
Alphavista Services, Inc.	2	0	2	—

Source: The Conference Board Help Wanted OnLine™ (HWOL) Data Series: Period ending April 3, 2015.

¹⁴ Totals do not include employers with anonymous job advertisements.

** This Economic Sub-Market includes Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne Counties.

Instructional Programs for the Top Health Care Services Cluster Occupations

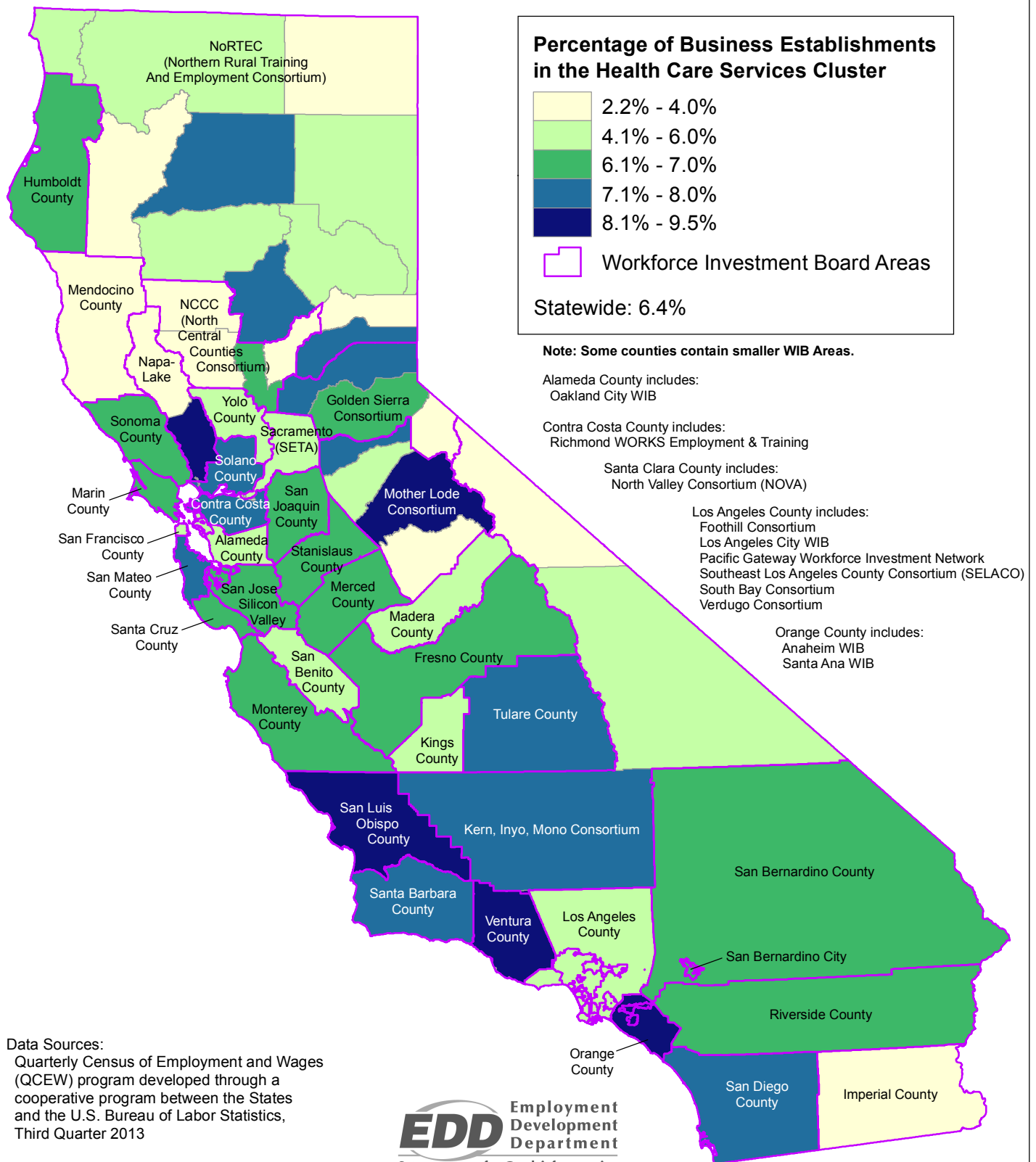
The table below provides examples of instructional programs related to some of the top occupations in the Health Care Services cluster, particularly those that require less than a bachelor's degree. These programs train individuals for occupations throughout many industries and are not limited to the Social Services cluster. To view a more complete list of training programs, select the source links under the table below. The Taxonomy of Programs categorizes and describes instructional programs only for California Community Colleges.

Occupations	Classification of Instructional Program (CIP)		Taxonomy of Programs (TOP)	
	CIP Code	CIP Title	TOP Code	TOP Title
Registered Nurses	51.3801	Registered Nursing/Registered Nurse	123000	Nursing
	51.3813	Clinical Nurse Specialist	123010	Registered Nursing
	51.3821	Geriatric Nurse/Nursing		
Nursing Assistants	51.2601	Health Aide	123030	Certified Nurse Assistant
	51.3902	Nursing Assistant/Aide and Patient Care Assistant/Aide		
	51.3999	Practical Nursing, Vocational Nursing and Nursing Assistants, Other		
Medical Assistants	51.0710	Medical Office Assistant/Specialist	051420	Medical Office Technology
	51.0712	Medical Reception/Receptionist	120800	Medical Assisting
	51.0713	Medical Insurance Coding Specialist/Coder	120820	Administrative Medical Assisting
Licensed Practical and Licensed Vocational Nurses	51.3901	Licensed Practical/Vocational Nurse Training	123020	Licensed Vocational Nursing
	51.3999	Practical Nursing, Vocational Nursing and Nursing Assistants, Other		
Dental Assistants	51.0601	Dental Assisting/Assistant	124010	Dental Assistant
Medical Secretaries	51.0710	Medical Office Assistant/Specialist	051420	Medical Office Technology
	51.0714	Medical Insurance Specialist/Medical Biller		
	51.0716	Medical Administrative/Executive Assistant and Medical Secretary		
Home Health Aides	51.2602	Home Health Aide/Home Attendant	123080	Home Health Aide
First-Line Supervisors of Office and Administrative Support Workers	51.0705	Medical Office Management/Administration	050630	Management Development and Supervision
	51.0711	Medical/Health Management and Clinical Assistant/Specialist	050970	E-Commerce (business emphasis)
	52.0204	Office Management and Supervision	051440	Office Management
Personal Care Aides	51.2602	Home Health Aide/Home Attendant	123080	Home Health Aide

Source: U.S. Department of Education [Integrated Postsecondary Education Data System \(IPEDS\)](https://nces.ed.gov/ipeds/) at www.nces.ed.gov; [California Community Colleges TOP-to-CIP Crosswalk](https://www.cccco.edu) 7th Edition (2010), www.cccco.edu.

California Health Care Services Cluster

Percentage of Total County Establishments, 2013



Data Sources:
Quarterly Census of Employment and Wages (QCEW) program developed through a cooperative program between the States and the U.S. Bureau of Labor Statistics, Third Quarter 2013

Cartography by:
Labor Market Information Division
California Employment Development Department
<http://www.labormarketinfo.edd.ca.gov>
July 2014

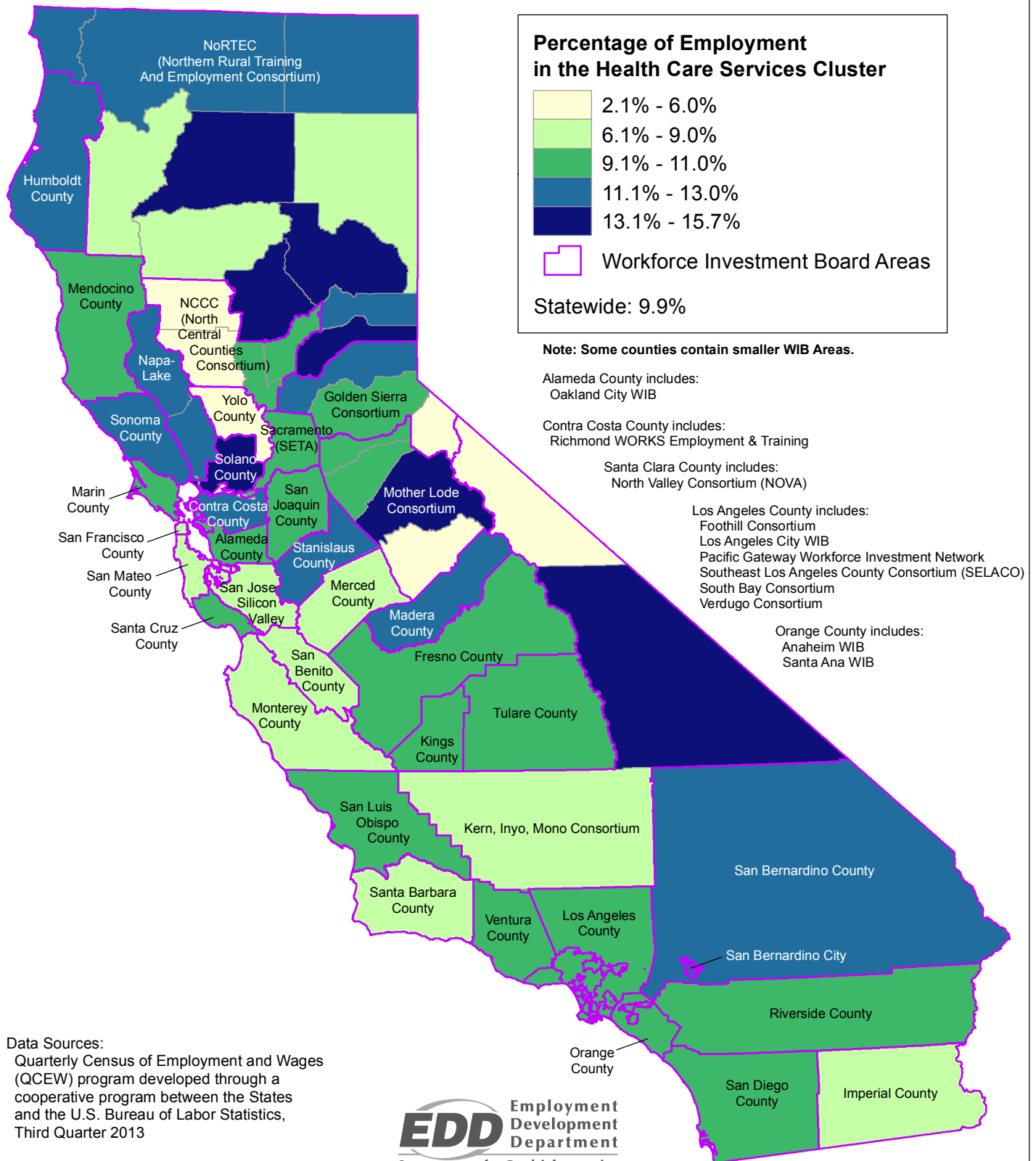
EDD Employment Development Department
State of California

LaborMarketInfo

File T036

California Health Care Services Cluster

Percentage of Total County Employment, 2013



Data Sources:
Quarterly Census of Employment and Wages (QCEW) program developed through a cooperative program between the States and the U.S. Bureau of Labor Statistics, Third Quarter 2013

Cartography by:
Labor Market Information Division
California Employment Development Department
<http://www.labormarketinfo.edd.ca.gov>
July 2014

EDD Employment Development Department
State of California

LaborMarketInfo

File T036



Occupational Analysis: Construction Materials and Services Cluster

Eastern Sierra Economic Sub-Market
Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne Counties

April 2015

What is the Construction Materials and Services Cluster?

The Construction Materials and Services cluster is comprised of 19 industries related to the construction of buildings, bridges, and roads, as well as the manufacture of materials needed to erect them. Employers in this cluster include equipment and finishing contractors, builders of electrical, heating, and plumbing systems, and contractors who specialize in framing or tile work. Workers employed within this cluster often share skills and work activities both within the cluster and in many other industry clusters, suggesting the potential for skills transference and upward mobility with additional training.

Top 10 Occupations in the Construction Materials and Services Cluster

The graph below identifies the top 10 occupations in the Construction Materials and Services cluster, based on the Eastern Sierra Economic Sub-Market's** new job growth plus replacement openings. In sum, these 10 occupations represent more than half of the 1,476 total job openings projected in this cluster between 2012 and 2022. Moreover, many share the same required skills such as critical thinking, monitoring, active listening, and monitoring.¹⁵



Source: California Employment Development Department, *Projections of Employment 2012-2022*. Industry and occupational employment projections for 2012-2022 in this report may not be directly comparable to the published 2012-2022 employment projections available online at www.labormarketinfo.edd.ca.gov.

¹⁵ U.S. Department of Labor's [Occupational Information Network \(O*NET\)](http://www.onetonline.org) at www.onetonline.org.

¹⁶ New jobs are only openings due to growth and do not include job declines. If an occupation's employment change is negative, there is no job growth and new jobs are set to zero.

¹⁷ Replacement job openings estimate the number of job openings created when workers retire or permanently leave an occupation and need to be replaced.

** This Economic Sub-Market includes Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne Counties.

Top 10 Occupations and Recent Job Demand in the Construction Materials and Services Cluster

The table below further profiles the Eastern Sierra Economic Sub-Market's** top 10 occupations in the Construction Materials and Services cluster by listing the total job openings for 2012-2022, median hourly and annual wages, and entry-level education requirements. Also included are online job advertisements extracted from The Conference Board Help Wanted OnLine™ (HWOL) data series over a 120-day period. HWOL compiles, analyzes, and categorizes job advertisements from numerous online job boards, including CalJOBSSM (www.caljobs.ca.gov), California's online job listing system.

Occupations	Total Job Openings ¹⁸ (2012-2022)	Median Hourly Wage (2014)	Median Annual Wage (2014)	Entry Level Education ¹⁹	HWOL Job Ads ²⁰ (120 days)
Carpenters	166	\$26.92	\$55,995	High school diploma or equivalent	8
Sawing Machine Setters, Operators, and Tenders, Wood	91	\$19.10	\$39,729	High school diploma or equivalent	0
Painters, Construction and Maintenance	90	\$22.15	\$46,083	Less than high school	5
Plumbers, Pipefitters, and Steamfitters	87	\$26.69	\$55,505	High school diploma or equivalent	8
Cost Estimators	79	\$24.71	\$51,397	Bachelor's degree	6
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	77	\$16.95	\$35,243	High school diploma or equivalent	19
Construction Laborers	59	\$20.46	\$42,563	Less than high school	16
Heavy and Tractor-Trailer Truck Drivers	56	\$19.87	\$41,316	Postsecondary non-degree award	27
Office Clerks, General	53	\$14.38	\$29,907	High school diploma or equivalent	25
Electricians	49	\$26.72	\$55,576	High school diploma or equivalent	5

Source: California Employment Development Department, *Projections of Employment 2012-2022; Occupational Employment Statistics Wage Survey, updated to 3rd Q, 2014; The Conference Board Help Wanted OnLine™ (HWOL) Data Series, 120-day period ending April 3, 2015.*

¹⁸ Total job openings are the sum of new jobs and replacement job openings.

¹⁹ U.S. Department of Labor, Bureau of Labor Statistics (BLS) 2012 education levels.

²⁰ Totals represent job advertisements from employers in all industries. One job opening may be represented in more than one job advertisement.

** This Economic Sub-Market includes Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne Counties.

Top Occupations for the Construction Materials and Services Cluster by Education Level

The table below identifies the occupations with the most total job openings, categorized by Bureau of Labor Statistics (BLS) 2012 entry-level education requirements, within the Construction Materials and Services cluster. The table includes the Eastern Sierra Economic Sub-Market's** projected total job openings and median hourly and annual wages. In addition, recent totals of online job advertisements over 120-day period are included. Grouping occupations by education levels allows individuals to better gauge the potential for skills transference and upward mobility within the cluster.

Occupations	Total Job Openings ²¹ (2012-2022)	Median Hourly Wage (2014)	Median Annual Wage (2014)	HWOL Job Ads (120 days)
Requires a Bachelor's Degree or Higher				
Cost Estimators	79	\$24.71	\$51,397	6
General and Operations Managers	31	\$36.10	\$75,082	29
Accountants and Auditors	16	\$26.96	\$56,065	37
Construction Managers	13	\$53.11	\$110,470	21
Civil Engineers	12	\$44.25	\$92,047	26
Requires Some College, Postsecondary Non-Degree Award, or Associate's Degree				
Heavy and Tractor-Trailer Truck Drivers	56	\$19.87	\$41,316	27
First-Line Supervisors of Production and Operating Workers	13	\$28.32	\$58,905	17
Architectural and Civil Drafters	10	\$44.78	\$93,131	2
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	3	\$24.30	\$50,544	2
Industrial Engineering Technicians	2	N/A	N/A	2
Requires a High School Diploma or Equivalent or Less				
Carpenters	166	\$26.92	\$55,995	8
Sawing Machine Setters, Operators, and Tenders, Wood	91	\$19.10	\$39,729	0
Painters, Construction and Maintenance	90	\$22.15	\$46,083	5
Plumbers, Pipefitters, and Steamfitters	87	\$26.69	\$55,505	8
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	77	\$16.95	\$35,243	19

Source: California Employment Development Department, *Projections of Employment 2012-2022*; *Occupational Employment Statistics Wage Survey*, updated to 3rd Q, 2014; *The Conference Board Help Wanted OnLine™ (HWOL) Data Series*, 120-day period ending April 3, 2015.

²¹ Total job openings are the sum of new jobs and replacement job openings.

^{**} This Economic Sub-Market includes Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne Counties.

Skill Requirements in the Construction Materials and Services Cluster

The table below lists the 10 top skills required for top occupations in the Construction Materials and Services cluster, categorized by entry-level education requirements. Critical thinking and reading comprehension are the most commonly shared skills, followed by active listening and monitoring. The skills and work activities identified for each occupation are from the U.S. Department of Labor's Occupational Information Network (O*NET).

Occupations	Skills																			
	Active Learning	Active Listening	Complex Problem Solving	Coordination	Critical Thinking	Equipment Maintenance	Installation	Judgment and Decision Making	Learning Strategies	Management of Financial Resources	Management of Personnel Resources	Mathematics	Monitoring	Negotiation	Operation and Control	Operation Monitoring	Operations Analysis	Quality Control Analysis	Reading Comprehension	Repairing
Requires a Bachelor's Degree or Higher																				
Cost Estimators	●	●	●	●	●					●		●	●					●		●
General and Operations Managers	●	●		●	●					●		●	●					●	●	●
Accountants and Auditors ²²	●	●			●		●					●	●					●		●
Construction Managers		●		●	●		●						●	●				●		●
Civil Engineers	●		●	●	●		●					●	●			●		●	●	●
Requires Some College, Postsecondary Non-Degree Award, or Associate's Degree																				
Heavy and Tractor-Trailer Truck Drivers		●	●	●	●								●		●	●		●		●
First-Line Supervisors of Production and Operating Workers		●		●	●					●		●	●					●	●	●
Architectural and Civil Drafters ²³	●		●	●	●		●					●	●					●	●	●
Heating, Air Conditioning, and Refrigeration Mechanics and Installers ²⁴		●		●	●	●	●										●	●	●	●
Industrial Engineering Technicians		●	●		●		●					●	●					●	●	●
Requires a High School Diploma or Equivalent or Less																				
Carpenters ²⁵		●		●	●		●					●	●					●	●	●
Sawing Machine Setters, Operators, and Tenders, Wood		●		●	●	●							●		●	●		●	●	●
Painters, Construction and Maintenance		●		●	●		●			●		●	●					●	●	●
Plumbers, Pipefitters, and Steamfitters ²⁶	●	●	●	●	●			●							●		●	●	●	●
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	●	●			●								●					●	●	●

Source: U.S. Department of Labor's [Occupational Information Network \(O*NET\)](http://www.onetonline.org) at www.onetonline.org.

²² Skills listed represent Accountants, a specialty occupation of Accountants and Auditors.

²³ Skills listed represent Architectural Drafters, a specialty occupation of Architectural and Civil Drafters.

²⁴ Skills listed represent Heating and Air Conditioning Mechanics and Installers, a specialty occupation of Heating, Air Conditioning, and Refrigeration Mechanics and Installers.

²⁵ Skills listed represent Construction Carpenters, a specialty occupation of Carpenters.

²⁶ Skills listed represent Pipe Fitters and Steamfitters, a specialty occupation of Plumbers, Pipefitters, and Steamfitters.

Work Activities in the Construction Materials and Services Cluster

The table below lists the 10 top skills required for top occupations in the Construction Materials and Services cluster, categorized by entry-level education requirements. The most common include organizing, planning, and prioritizing work; communicating with supervisors, peers, or subordinates; and making decisions and solving problems.

Occupations	Work Activities																																	
	Analyzing Data or Information	Coaching and Developing Others	Communicating with Persons Outside Organization	Communicating with Supervisors, Peers, or Subordinates	Controlling Machines and Processes	Coordinating the Work and Activities of Others	Developing and Building Teams	Documenting/Recording Information	Drafting, Laying Out, and Specifying Technical Devices, Parts, and Equipment	Establishing and Maintaining Interpersonal Relationships	Estimating the Quantifiable Characteristics of Products, Events, or Information	Evaluating Information to Determine Compliance with Standards	Getting Information	Guiding, Directing, and Motivating Subordinates	Handling and Moving Objects	Identifying Objects, Actions, and Events	Inspecting Equipment, Structures, or Material	Making Decisions and Solving Problems	Monitor Processes, Materials, or Surroundings	Monitoring and Controlling Resources	Operating Vehicles, Mechanized Devices, or Equipment	Organizing, Planning, and Prioritizing Work	Performing Administrative Activities	Performing for or Working Directly with the Public	Performing General Physical Activities	Processing Information	Provide Consultation and Advice to Others	Repairing and Maintaining Electronic Equipment	Repairing and Maintaining Mechanical Equipment	Resolving Conflicts and Negotiating with Others	Scheduling Work and Activities	Thinking Creatively	Updating and Using Relevant Knowledge	
Requires a Bachelor's Degree or Higher																																		
Cost Estimators	●			●			●			●		●						●				●				●	●							●
General and Operations Managers			●	●		●				●								●		●		●									●	●	●	
Accountants and Auditors ²⁷	●			●						●		●	●					●				●	●			●								●
Construction Managers			●	●		●	●			●			●					●				●									●	●		
Civil Engineers			●	●		●				●								●				●					●				●	●		●
Requires Some College, Postsecondary Non-Degree Award, or Associate's Degree																																		
Heavy and Tractor-Trailer Truck Drivers					●					●			●		●	●	●	●			●	●				●								
First-Line Supervisors of Production and Operating Workers		●		●	●	●				●				●	●												●				●	●		
Architectural and Civil Drafters ²⁸				●			●	●	●		●					●		●				●										●	●	
Heating, Air Conditioning, and Refrigeration Mechanics and Installers ²⁹	●				●										●	●	●	●				●			●			●	●				●	
Industrial Engineering Technicians				●	●				●	●					●			●	●			●											●	●
Requires a High School Diploma or Equivalent or Less																																		
Carpenters ³⁰				●	●	●								●	●				●		●	●				●								●
Sawing Machine Setters, Operators, and Tenders, Wood				●	●				●						●	●	●		●		●				●				●					
Painters, Construction and Maintenance				●		●			●					●	●			●	●			●			●								●	
Plumbers, Pipefitters, and Steamfitters ³¹															●		●	●	●			●	●		●	●				●	●			●
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive				●					●			●				●		●				●	●	●		●								●

Source: U.S. Department of Labor's [Occupational Information Network \(O*NET\)](http://www.onetonline.org) at www.onetonline.org.

²⁷ Work Activities listed represent Accountants, a specialty occupation of Accountants and Auditors.

²⁸ Work Activities listed represent Architectural Drafters, a specialty occupation of Architectural and Civil Drafters.

²⁹ Work Activities listed represent Heating and Air Conditioning Mechanics and Installers, a specialty occupation of Heating, Air Conditioning, and Refrigeration Mechanics and Installers.

³⁰ Work Activities listed represent Construction Carpenters, a specialty occupation of Carpenters.

³¹ Work Activities listed represent Pipe Fitters and Steamfitters, a specialty occupation of Plumbers, Pipefitters, and Steamfitters.

Related Occupations for the Construction Materials and Services Cluster

The table below lists top occupations in the Construction Materials and Services cluster by entry-level education requirements and provides a sample of related occupations. These related occupations match many of the skills, education, and work experience needed for the top Construction Materials and Services cluster occupations.

Construction Materials and Services Occupations	Related Occupations
Requires a Bachelor's Degree or Higher	
Cost Estimators	<ul style="list-style-type: none"> Logistics Managers Financial Analysts Transportation Planners
General and Operations Managers	<ul style="list-style-type: none"> Administrative Services Managers First-Line Supervisors of Office and Administrative Support Workers Logistics Managers
Accountants and Auditors	<ul style="list-style-type: none"> Bookkeeping, Accounting, and Auditing Clerks Financial Analysts Personal Financial Advisors
Construction Managers	<ul style="list-style-type: none"> Energy Engineers Architectural and Engineering Managers Transportation Engineers
Civil Engineers	<ul style="list-style-type: none"> Logistics Engineers Energy Engineers Transportation Engineers
Requires Some College, Postsecondary Non-Degree Award, or Associate's Degree	
Heavy and Tractor-Trailer Truck Drivers	<ul style="list-style-type: none"> Pile-Drivers Light Truck or Delivery Services Drivers Paving, Surfacing, and Tamping Equipment Operators
First-Line Supervisors of Production and Operating Workers	<ul style="list-style-type: none"> First-Line Supervisors of Construction Trades and Extraction Workers First-Line Supervisors of Mechanics, Installers, and Repairers Industrial Production Managers
Architectural and Civil Drafters	<ul style="list-style-type: none"> Geographic Information Systems Technicians Commercial and Industrial Designers Civil Engineering Technicians
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	<ul style="list-style-type: none"> Maintenance and Repair Workers, General Plumbers Electricians
Industrial Engineering Technicians	<ul style="list-style-type: none"> Validation Engineers Electrical Engineering Technicians Manufacturing Production Technicians
Requires a High School Diploma or Equivalent or Less	
Carpenters	<ul style="list-style-type: none"> Brickmasons and Blockmasons Rough Carpenters Fence Erectors
Sawing Machine Setters, Operators, and Tenders, Wood	<ul style="list-style-type: none"> Welders, Cutters, and Welder Fitters Engine and Other Machine Assemblers Cutting, Punching and Press Machine Setters, Operators, and Tenders, Metal and Plastic
Painters, Construction and Maintenance	<ul style="list-style-type: none"> Insulation Workers, Floor Ceiling and Wall Insulation Workers, Mechanical Roofers
Plumbers, Pipefitters, and Steamfitters	<ul style="list-style-type: none"> Millwrights Maintenance and Repair Workers, General Boilermakers
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	<ul style="list-style-type: none"> Office Clerks, General Bill and Account Collectors Hotel, Motel, and Resort Desk Clerks

Source: U.S. Department of Labor's [Occupational Information Network \(O*NET\)](http://www.onetonline.org) at www.onetonline.org.

Employer Demand for the Construction Materials and Services Cluster

The following table lists the Eastern Sierra Economic Sub-Market** employers in the Construction Materials and Services cluster who posted the most job advertisements during the 120-day period ending April 3, 2015. The table also includes the number of job advertisements from the previous year's period, as well as the numerical change and year-over percent change in these postings for the same 120-day period.

Construction Materials and Services Cluster Employers	Recent Job Advertisements ³² (120-day period)	Prior Year Job Advertisements (120-day period)	Numerical Change	Year-Over Percent Change (HWOL Job Advertisements)
Excel Personnel	4	0	4	—
Tuolumne Utilities District	3	0	3	—
Flatiron Construction Corp.	1	0	1	—
Allteck Line Contractors Inc.	1	0	1	—
Calaveras Public Utility District	1	2	-1	-50.0%
Pioneer Log Homes of British Columbia Ltd.	1	0	1	—
Dragados USA	1	0	1	—
South Feather Water & Power Agency	1	0	1	—
Calaveras County Water District	1	3	-2	-66.7%

Source: The Conference Board Help Wanted OnLine™ (HWOL) Data Series: Period ending April 3, 2015.

³² Totals do not include employers with anonymous job advertisements.

** This Economic Sub-Market includes Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne Counties.

Instructional Programs for the Top Construction Materials and Services Cluster Occupations

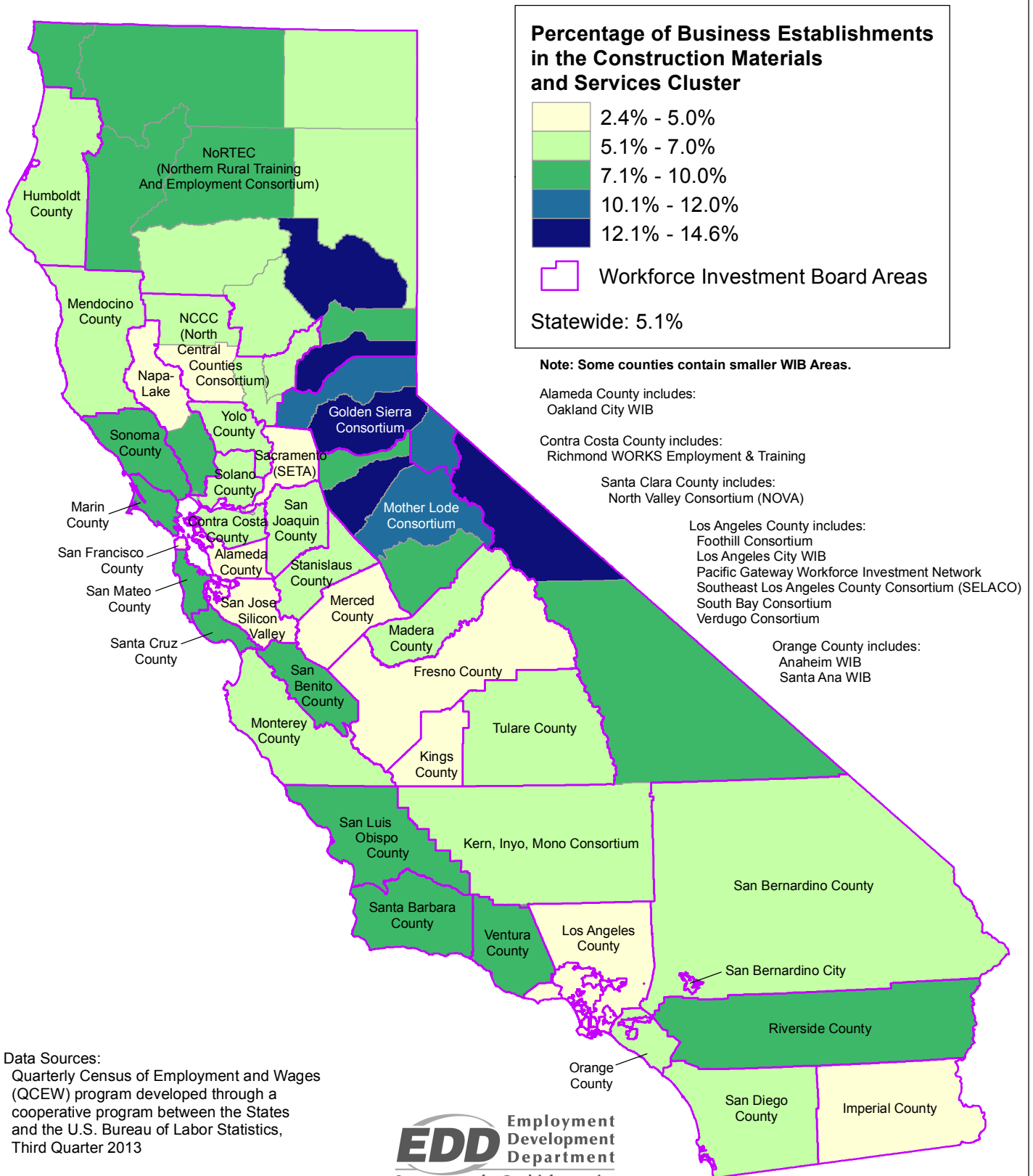
The table below provides examples of instructional programs related to some of the top occupations in the Construction Materials and Services cluster, particularly those that require less than a bachelor's degree. These programs train individuals for occupations throughout many industries and are not limited to the Construction Materials and Services cluster. To view a more complete list of training programs, select the source links under the table below. The Taxonomy of Programs categorizes and describes instructional programs only for California Community Colleges.

Occupations	Classification of Instructional Program (CIP)		Taxonomy of Programs (TOP)	
	CIP Code	CIP Title	TOP Code	TOP Title
Heavy and Tractor-Trailer Truck Drivers	49.0205	Truck and Bus Driver/Commercial Vehicle Operator and Instructor	094750	Truck and Bus Driving
First-Line Supervisors of Production and Operating Workers	52.0205	Operations Management and Supervision	N/A	N/A
Architectural and Civil Drafters	04.0901	Architectural Technology/Technician	095300	Drafting Technology
	04.0902	Architectural and Building Sciences/Technology	095310	Architectural Drafting
	04.0999	Architectural Sciences and Technology, Other	095320	Civil Drafting
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	15.0501	Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology/Technician	094600	Environmental Control Technology
	47.0201	Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/Technician	N/A	N/A
Industrial Engineering Technicians	15.1501	Engineering/Industrial Management	095050	Aircraft Fabrication
	15.1503	Packaging Science	095600	Manufacturing and Industrial Technology
	41.0303	Chemical Process Technology		
Carpenters	46.0201	Carpentry/Carpenter	N/A	N/A
Sawing Machine Setters, Operators, and Tenders, Wood	48.0703	Cabinetmaking and Millwork	095250	Mill and Cabinet Work
Painters, Construction and Maintenance	46.0408	Painting/Painter and Wall Coverer	095270	Painting, Decorating, and Flooring
Plumbers, Pipefitters, and Steamfitters	46.0502	Pipefitting/Pipefitter and Sprinkler Fitter	095230	Plumbing, Pipefitting and Steam fitting
	46.0503	Plumbing Technology/Plumber		
	46.0599	Plumbing and Related Water Supply Services, Other		
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	52.0401	Administrative Assistant and Secretarial Science, General	051400	Office Technology/Office Computer Applications
	52.0402	Executive Assistant/Executive Secretary		

Source: U.S. Department of Education [Integrated Postsecondary Education Data System \(IPEDS\)](https://nces.ed.gov/ipeds/) at [www.nces.ed.gov](https://nces.ed.gov/ipeds/); [California Community Colleges TOP-to-CIP Crosswalk](https://www.cccco.edu/) 7th Edition (2010), www.cccco.edu.

California Construction Materials and Services Cluster

Percentage of Total County Establishments, 2013



Data Sources:
Quarterly Census of Employment and Wages (QCEW) program developed through a cooperative program between the States and the U.S. Bureau of Labor Statistics, Third Quarter 2013

Cartography by:
Labor Market Information Division
California Employment Development Department
<http://www.labormarketinfo.edd.ca.gov>
March 2015

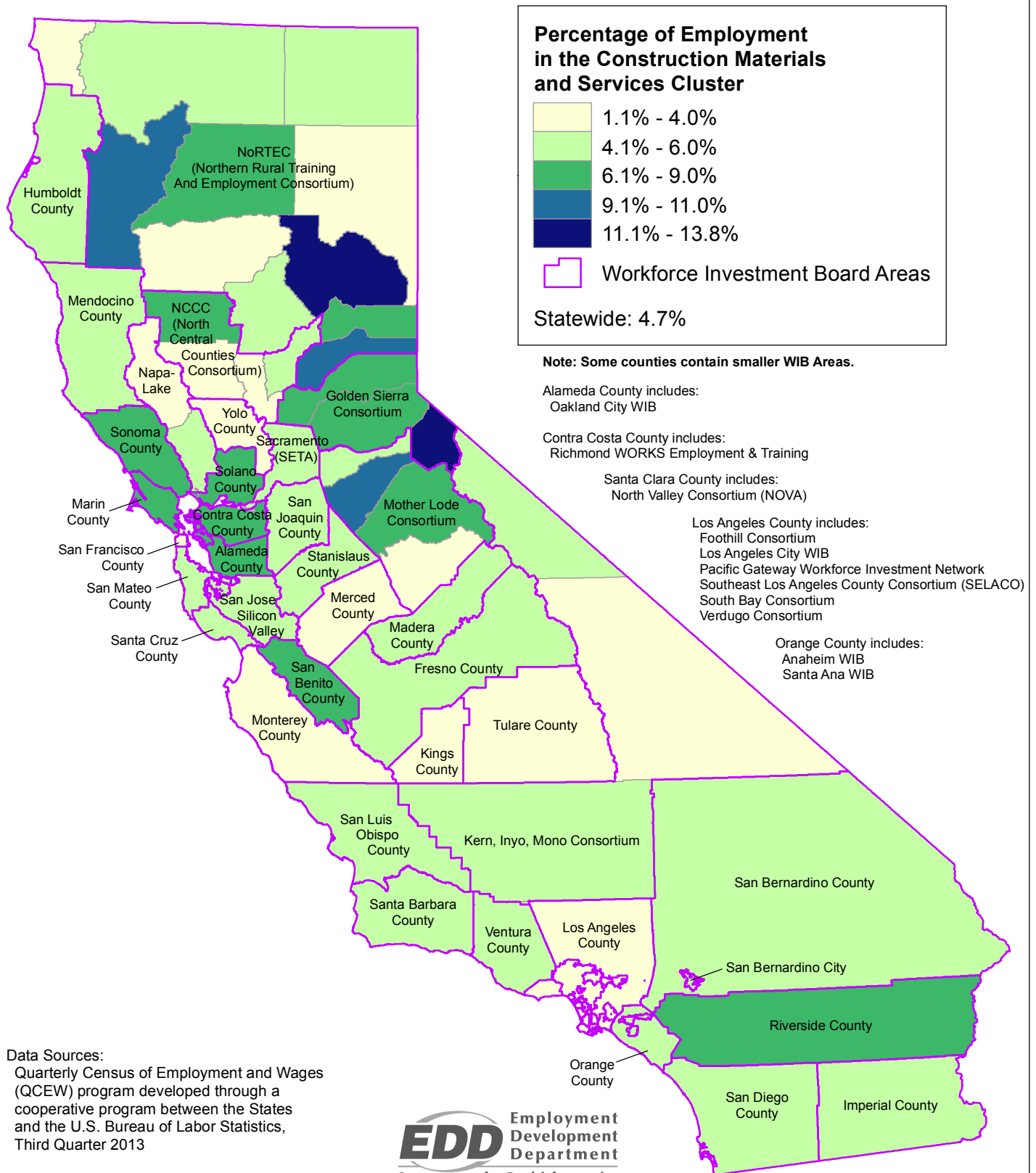
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California Construction Materials and Services Cluster

Percentage of Total County Employment, 2013



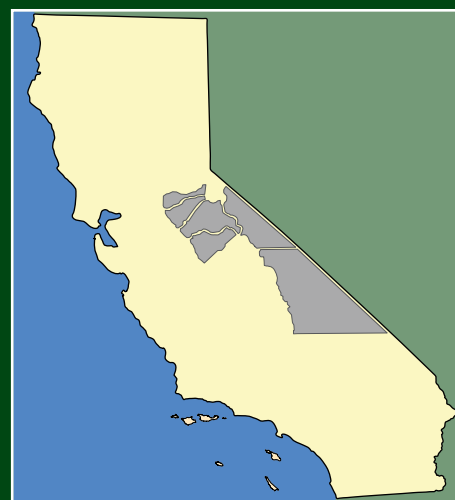
Data Sources:
Quarterly Census of Employment and Wages (QCEW) program developed through a cooperative program between the States and the U.S. Bureau of Labor Statistics, Third Quarter 2013

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Occupational Analysis: Education and Training Cluster

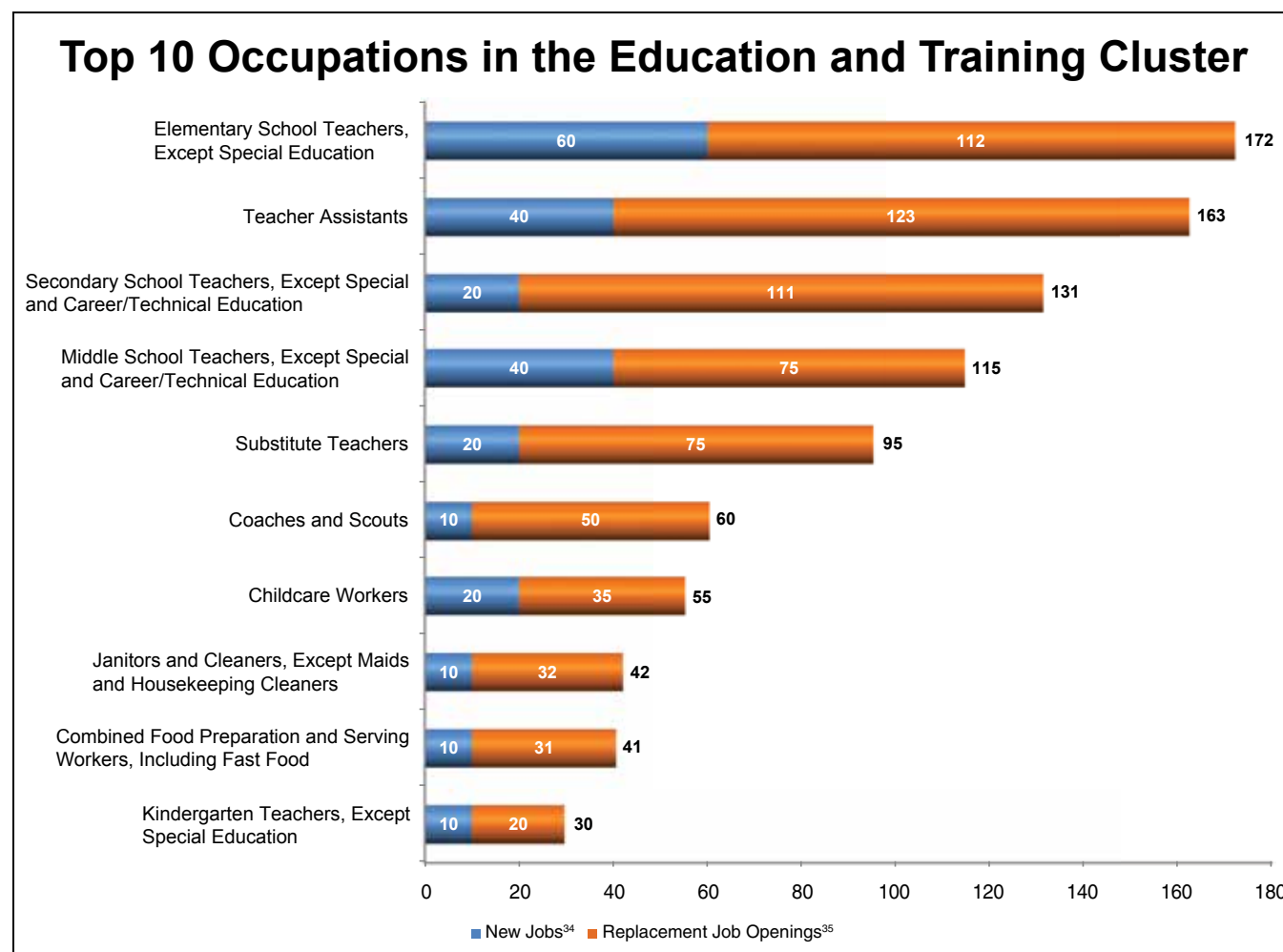
Eastern Sierra Economic Sub-Market
Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne Counties
April 2015

What is the Education and Training Cluster?

The Education and Training cluster is comprised of public and private elementary and high schools, community colleges, universities, and professional schools with programs such as dental, law, and medical. Other establishments include trade schools and tutoring businesses. The workers employed within this cluster span all skill levels and share skills and work activities both within the cluster and in many other industry clusters, suggesting the potential for skills transference and upward mobility with additional training.

Top 10 Occupations in the Education and Training Cluster

The graph below identifies the top 10 occupations in the Education and Training cluster, based on the Eastern Sierra Economic Sub-Market's** new job growth plus replacement openings. In sum, these 10 occupations represent more than half of the 1,350 total job openings projected in this cluster between 2012 and 2022. Moreover, many share the same required skills such as active listening, critical thinking, social perceptiveness and speaking.³³



Source: California Employment Development Department, *Projections of Employment 2012-2022*. Industry and occupational employment projections for 2012-2022 in this report may not be directly comparable to the published 2012-2022 employment projections available online at www.labormarketinfo.edd.ca.gov.

³³ U.S. Department of Labor's [Occupational Information Network \(O*NET\)](http://www.onetonline.org) at www.onetonline.org.

³⁴ New jobs are only openings due to growth and do not include job declines. If an occupation's employment change is negative, there is no job growth and new jobs are set to zero.

³⁵ Replacement job openings estimate the number of job openings created when workers retire or permanently leave an occupation and need to be replaced.

** This Economic Sub-Market includes Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne Counties.

Top 10 Occupations and Recent Job Demand in the Education and Training Cluster

The table below further profiles the Eastern Sierra Economic Sub-Market's** top 10 occupations in the Education and Training cluster by listing the total job openings for 2012-2022, median hourly and annual wages, and entry-level education requirements. Also included are online job advertisements extracted from The Conference Board Help Wanted OnLine™ (HWOL) data series over a recent 120-day period. HWOL compiles, analyzes, and categorizes job advertisements from numerous online job boards, including CalJOBSSM (www.caljobs.ca.gov), California's online job listing system.

Occupations	Total Job Openings ³⁶ (2012-2022)	Median Hourly Wage (2014)	Median Annual Wage (2014)	Entry Level Education ³⁷	HWOL Job Ads ³⁸ (120 days)
Elementary School Teachers, Except Special Education	172	N/A	\$68,221	Bachelor's degree	18
Teacher Assistants	163	N/A	\$28,346	Some college, no degree	24
Secondary School Teachers, Except Special and Career/ Technical Education	131	N/A	\$69,247	Bachelor's degree	24
Middle School Teachers, Except Special and Career/ Technical Education	115	N/A	\$67,121	Bachelor's degree	12
Substitute Teachers	95	N/A	\$38,261	Bachelor's degree	0
Coaches and Scouts	60	N/A	\$39,910	Bachelor's degree	6
Childcare Workers	55	\$11.21	\$23,330	High school diploma or equivalent	7
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	42	\$13.25	\$27,541	Less than high school	34
Combined Food Preparation and Serving Workers, Including Fast Food	41	\$9.50	\$19,757	Less than high school	32
Kindergarten Teachers, Except Special Education	30	N/A	\$69,712	Bachelor's degree	3

Source: California Employment Development Department, *Projections of Employment 2012-2022*; *Occupational Employment Statistics Wage Survey*, updated to 3rd Q, 2014; The Conference Board Help Wanted OnLine™ (HWOL) Data Series, 120-day period ending April 3, 2015.

³⁶ Total job openings are the sum of new jobs and replacement job openings.

³⁷ U.S. Department of Labor, Bureau of Labor Statistics (BLS) 2012 education levels.

³⁸ Totals represent job advertisements from employers in all industries. One job opening may be represented in more than one job advertisement.

** This Economic Sub-Market includes Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne Counties.

Top Occupations for the Education and Training Cluster by Education Level

The table below identifies the occupations with the most total job openings, categorized by Bureau of Labor Statistics (BLS) 2012 entry-level education requirements, within the Education and Training cluster. The table includes the Eastern Sierra Economic Sub-Market's** projected total job openings and median hourly and annual wages. In addition, recent totals of online job advertisements over 120-day period are included. Grouping occupations by education levels allows individuals to better gauge the potential for skills transference and upward mobility within the cluster.

Occupations	Total Job Openings ³⁹ (2012-2022)	Median Hourly Wage (2014)	Median Annual Wage (2014)	HWOL Job Ads (120 days)
Requires a Bachelor's Degree or Higher				
Elementary School Teachers,	172	N/A	\$68,221	18
Secondary School Teachers, Except Special and Career/ Technical Education	131	N/A	\$69,247	24
Middle School Teachers, Except Special and Career/Technical Education	115	N/A	\$67,121	12
Coaches and Scouts	60	N/A	\$39,910	6
Kindergarten Teachers, Except Special Education	30	N/A	\$69,712	3
Requires Some College, Postsecondary Non-Degree Award, or Associate's Degree				
Teacher Assistants	163	N/A	\$28,346	24
Preschool Teachers, Except Special Education	14	\$14.49	\$30,134	5
Registered Nurses ⁴⁰	2	\$49.34	N/A	222
Computer User Support Specialists	2	\$21.25	\$44,188	68
Requires a High School Diploma or Equivalent or Less				
Childcare Workers	55	\$11.21	\$23,330	7
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	42	\$13.25	\$27,541	34
Combined Food Preparation and Serving Workers, Including Fast Food	41	\$9.50	\$19,757	32
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	27	\$16.95	\$35,243	19
Office Clerks, General	19	\$14.38	\$29,907	25

Source: California Employment Development Department, Projections of Employment 2012-2022; Occupational Employment Statistics Wage Survey, updated to 3rd Q, 2014; The Conference Board Help Wanted OnLine™ (HWOL) Data Series, 120-day period ending April 3, 2015.

³⁹ Total job openings are the sum of new jobs and replacement job openings.

⁴⁰ Wages do not include Mono and Inyo counties.

** This Economic Sub-Market includes Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne Counties.

Skill Requirements in the Education and Training Cluster

The table below lists the 10 top skills required for top occupations in the Education and Training cluster, categorized by entry-level education requirements. Active listening and critical thinking are the most commonly shared skills, followed by speaking and social perceptiveness. The skills and work activities identified for each occupation are from the U.S. Department of Labor's Occupational Information Network (O*NET).

Occupations	Skills													
	Active Learning	Active Listening	Coordination	Critical Thinking	Instruction	Judgment and Decision Making	Learning Strategies	Management of Personnel Resources	Monitoring	Persuasion	Reading Comprehension	Service Orientation	Social Perceptiveness	Speaking
Requires a Bachelor's Degree or Higher														
Elementary School Teachers, Except Special Education		●	●	●		●	●		●		●		●	●
Secondary School Teachers, Except Special and Career/Technical Education		●		●	●	●	●		●		●		●	●
Middle School Teachers, Except Special and Career/Technical Education	●	●		●	●		●		●		●		●	●
Coaches and Scouts		●		●	●	●	●	●	●				●	●
Kindergarten Teachers, Except Special Education	●	●		●		●	●		●		●		●	●
Requires Some College, Postsecondary Non-Degree Award, or Associate's Degree														
Teacher Assistants		●	●	●	●		●		●		●		●	●
Preschool Teachers, Except Special Education		●	●	●			●		●		●	●	●	●
Registered Nurses	●	●	●	●			●		●		●	●	●	●
Computer User Support Specialists	●	●	●	●	●				●		●	●	●	●
Requires a High School Diploma or Equivalent or Less														
Childcare Workers	●	●	●	●		●	●		●			●	●	●
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	●	●	●	●		●					●	●	●	●
Combined Food Preparation and Serving Workers, Including Fast Food		●	●	●	●		●			●	●	●	●	●
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	●	●		●					●		●	●	●	●
Office Clerks, General		●	●	●					●		●	●	●	●

Source: U.S. Department of Labor's [Occupational Information Network \(O*NET\)](http://www.onetonline.org) at www.onetonline.org.

Work Activities in the Education and Training Cluster

The table below lists the 10 top work activities required for top occupations in the Education and Training cluster, categorized by entry-level education requirements. The most common include establishing and maintaining interpersonal relationships; communicating with supervisors, peers or subordinates; and organizing, planning and prioritizing work.

Occupations	Work Activities																			
	Assisting and Caring for Others	Coaching and Developing Others	Communicating with Supervisors, Peers, or Subordinates	Controlling Machines and Processes	Coordinating the Work and Activities of Others	Developing and Building Teams	Developing Objectives and Strategies	Documenting/Recording Information	Establishing and Maintaining Interpersonal Relationships	Getting Information	Handling and Moving Objects	Identifying Objects, Actions, and Events	Inspecting Equipment, Structures, or Material	Interacting With Computers	Interpreting the Meaning of Information for Others	Judging the Qualities of Things, Services, or People	Making Decisions and Solving Problems	Monitor Processes, Materials, or Surroundings	Organizing, Planning, and Prioritizing Work	Performing Administrative Activities
Requires a Bachelor's Degree or Higher																				
Elementary School Teachers, Except Special Education	•	•				•		•									•	•		
Secondary School Teachers, Except Special and Career/Technical Education	•	•						•			•						•	•		
Middle School Teachers, Except Special and Career/Technical Education	•	•		•		•		•						•				•		
Coaches and Scouts	•			•				•			•				•			•		
Kindergarten Teachers, Except Special Education	•	•		•	•			•							•		•	•		
Requires Some College, Postsecondary Non-Degree Award, or Associate's Degree																				
Teacher Assistants	•	•	•					•	•								•	•		•
Preschool Teachers, Except Special Education	•	•						•							•	•	•	•		
Registered Nurses	•	•						•	•		•				•	•	•		•	
Computer User Support Specialists		•						•	•		•		•		•	•		•		•
Requires a High School Diploma or Equivalent or Less																				
Childcare Workers	•	•						•	•						•	•	•		•	
Janitors and Cleaners, Except Maids and Housekeeping Cleaners		•	•					•	•		•				•	•	•	•	•	
Combined Food Preparation and Serving Workers, Including Fast Food	•	•		•				•	•	•	•							•		•
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive		•						•	•		•				•		•	•	•	•
Office Clerks, General	•	•						•	•	•			•				•		•	•

Source: U.S. Department of Labor's [Occupational Information Network \(O*NET\)](http://www.onetonline.org) at www.onetonline.org.

Related Occupations for the Education and Training Cluster

The table below lists top occupations in the Education and Training by entry-level education requirements and provides a sample of related occupations. These related occupations match many of the skills, education, and work experience needed for the top Education and Training cluster occupations.

Education and Training Occupations	Related Occupations
Requires a Bachelor's Degree or Higher	
Elementary School Teachers, Except Special Education	<ul style="list-style-type: none"> Preschool Teachers, Except Special Education Kindergarten Teachers, Except Special Education Middle School Teachers, Except Special and Career/Technical Education
Secondary School Teachers, Except Special and Career/Technical Education	<ul style="list-style-type: none"> Career/Technical Education Teachers, Middle School Instructional Coordinators Librarians
Middle School Teachers, Except Special and Career/Technical Education	<ul style="list-style-type: none"> Elementary School Teachers, Except Special Education Adult Basic and Secondary Education and Literacy Teachers and Instructors Secondary School Teachers, Except Special and Career/Technical Education
Coaches and Scouts	<ul style="list-style-type: none"> Recreation Workers Secondary School Teachers, Except Special and Career/Technical Education Training and Development Managers
Kindergarten Teachers, Except Special Education	<ul style="list-style-type: none"> Preschool Teachers, Except Special Education Elementary School Teachers, Except Special Education Middle School Teachers, Except Special and Career/Technical Education
Requires Some College, Postsecondary Non-Degree Award, or Associate's Degree	
Teacher Assistants	<ul style="list-style-type: none"> Nannies Social and Human Service Assistants Personal Care Aides
Preschool Teachers, Except Special Education	<ul style="list-style-type: none"> Kindergarten Teachers, Except Special Education Childcare Workers Nannies
Registered Nurses	<ul style="list-style-type: none"> Licensed Practical and Licensed Vocational Nurses Medical Assistants Emergency Medical Technicians and Paramedics
Computer User Support Specialists	<ul style="list-style-type: none"> Web Administrators Desktop Publishers Computer Operators
Requires a High School Diploma or Equivalent or Less	
Childcare Workers	<ul style="list-style-type: none"> Home Health Aides Personal Care Aides Teacher Assistants
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	<ul style="list-style-type: none"> Dishwashers Maids and Housekeeping Cleaners Food Preparation Workers
Combined Food Preparation and Serving Workers, Including Fast Food	<ul style="list-style-type: none"> Cooks, Fast Food Food Preparation Workers Food Servers, Nonrestaurant
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	<ul style="list-style-type: none"> Office Clerks, General Receptionists and Information Clerks Executive Secretaries and Executive Administrative Assistants
Office Clerks, General	<ul style="list-style-type: none"> Receptionists and Information Clerks Bill and Account Collectors Medical Secretaries

Source: U.S. Department of Labor's [Occupational Information Network \(O*NET\)](http://www.onetonline.org) at www.onetonline.org.

Employer Demand for the Education and Training Cluster

The following table lists the Eastern Sierra Economic Sub-Market** employers in the Education and Training cluster who posted the most job advertisements during the 120-day period ending April 3, 2015. The table also includes the number of job advertisements from the previous year's period, as well as the numerical change and year-over percent change in these postings for the same 120-day period.

Education and Training Cluster Employers	Recent Job Advertisements ⁴¹ (120-day period)	Prior Year Job Advertisements (120-day period)	Numerical Change	Year-Over Percent Change (HWOL Job Advertisements)
Amador County Office Of Education	18	21	-3	-14.3%
Mariposa County Unified School District	13	2	11	550.0%
Vallecito Union School District	10	1	9	900.0%
Bishop Unified School District	7	7	0	0.0%
Kern Community College District	7	0	7	—
A- Plus Educational Centers	9	0	9	—
Lone Pine Unified	3	0	3	—
Yosemite Community College District	2	0	2	—
Sonora Union High School District	2	3	-1	-33.3%
Mammoth Unified School District	2	0	2	—
Gold Rush Charter School	2	9	-7	-77.8%
Curtis Creek School District	2	2	0	0.0%
International Student Exchange	1	0	1	—
Columbia Union School District	1	0	1	—
Jamestown Elementary School	1	0	1	—

Source: The Conference Board Help Wanted OnLine™ (HWOL) Data Series: Period ending April 3, 2015.

⁴¹ Totals do not include employers with anonymous job advertisements.

** This Economic Sub-Market includes Amador, Calaveras, Inyo, Mariposa, Mono, and Tuolumne Counties.

Instructional Programs for the Education and Training Cluster Occupations

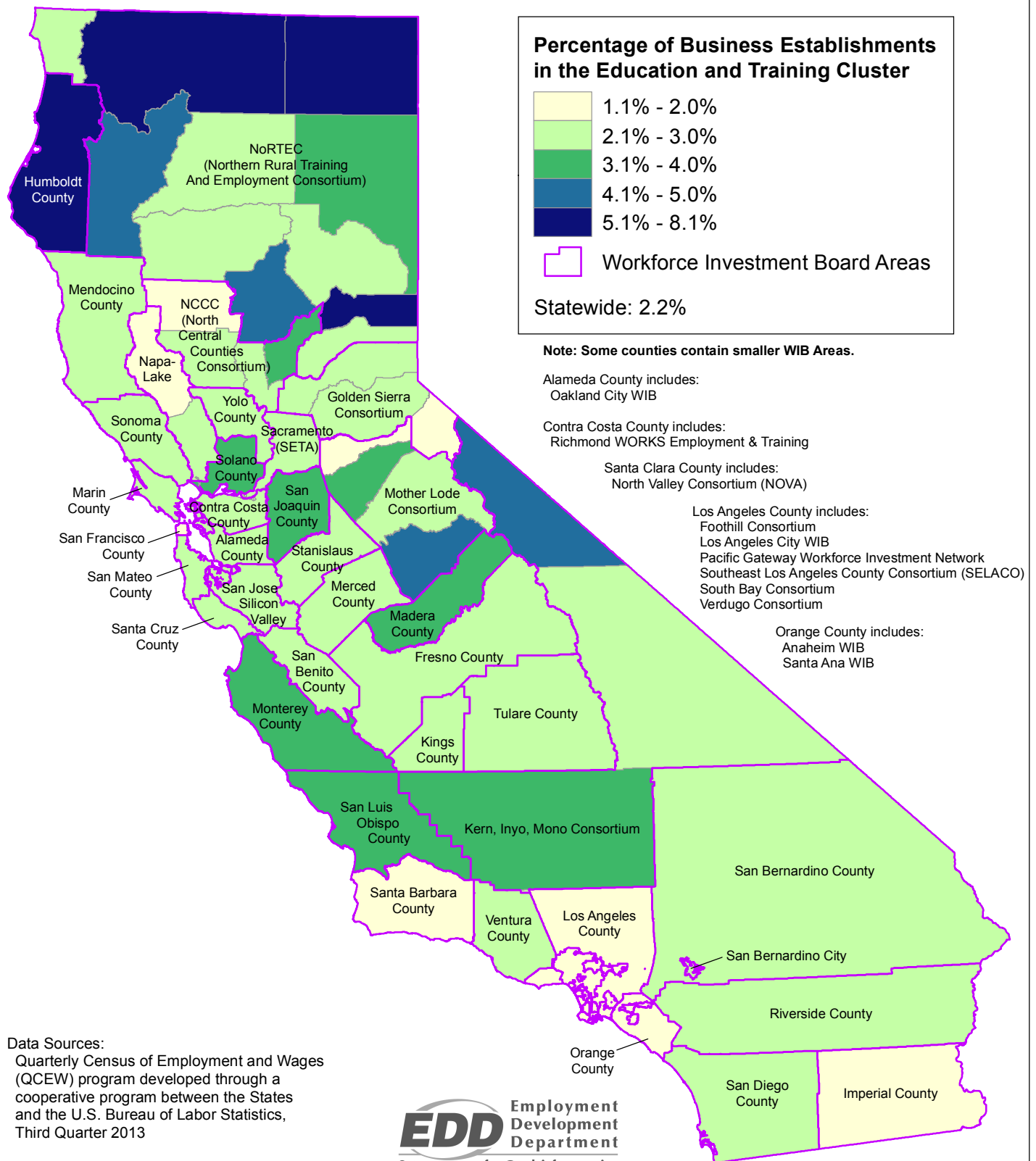
The table below provides examples of instructional programs related to some of the top occupations in the Education and Training cluster, particularly those that require less than a bachelor's degree. These programs train individuals for occupations throughout many industries and are not limited to the Education and Training cluster. To view a more complete list of training programs, select the source links under the table below. The Taxonomy of Programs categorizes and describes instructional programs only for California Community Colleges.

Occupations	Classification of Instructional Program (CIP)		Taxonomy of Programs (TOP)	
	CIP Code	CIP Title	TOP Code	TOP Title
Teacher Assistants	13.1501	Teacher Assistant/Aide	080200 080210	Educational Aide (Teacher Assistant) Educational Aide (Teacher Assistant), Bilingual
Preschool Teachers, Except Special Education	13.1209 13.1210 19.0708	Kindergarten/Preschool Education and Teaching Early Childhood Education and Teaching Child Care and Support Services Management	130580	Child Development Administration and Management
Registered Nurses	51.3801 51.3899 51.3815	Registered Nursing/Registered Nurse Registered Nursing, Nursing Administration, Nursing Research and Clinical Nursing, Other Occupational and Environmental Health Nursing	123000 123010	Nursing Registered Nursing
Computer User Support Specialists	01.0106 11.1006 51.0709	Agricultural Business Technology Computer Support Specialist Medical Office Computer Specialist/Assistant	070820	Computer Support
Childcare Workers	19.0709	Child Care Provider/Assistant	130500 130540 130550	Child Development/Early Care and Education Preschool Age Child The School Age Child
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	52.0401 52.0402	Administrative Assistant and Secretarial Science, General Executive Assistant/Executive Secretary	051400	Office Technology/Office Computer Applications
Office Clerks, General	52.0408	General Office Occupations and Clerical Services	N/A	N/A

Source: U.S. Department of Education [Integrated Postsecondary Education Data System \(IPEDS\)](http://www.nces.ed.gov/ipeds) at www.nces.ed.gov; [California Community Colleges TOP-to-CIP Crosswalk](http://www.cccco.edu) 7th Edition (2010), www.cccco.edu.

California Education and Training Cluster

Percentage of Total County Establishments, 2013



Data Sources:
Quarterly Census of Employment and Wages (QCEW) program developed through a cooperative program between the States and the U.S. Bureau of Labor Statistics, Third Quarter 2013

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July 2014

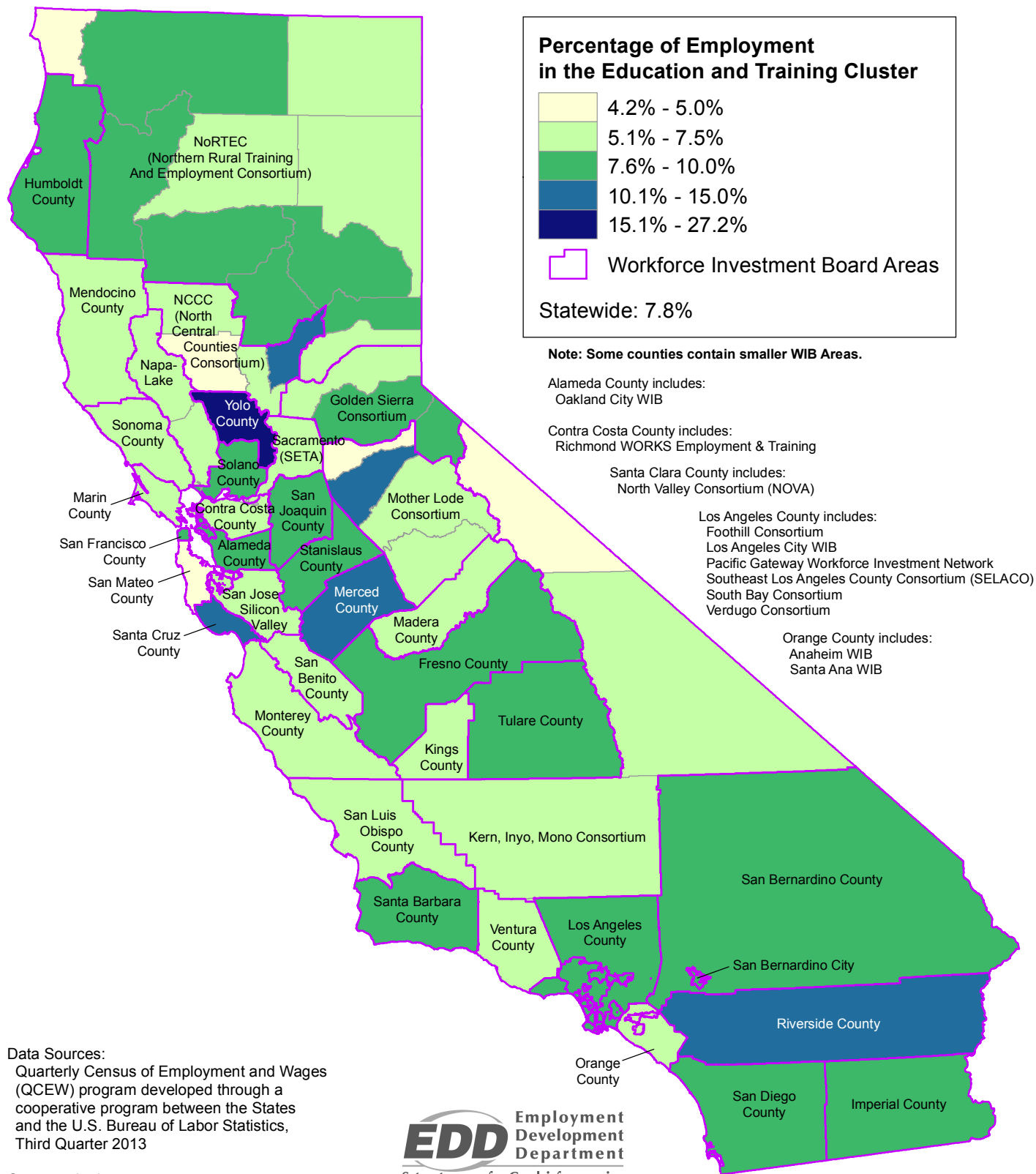
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California Education and Training Cluster

Percentage of Total County Employment, 2013



Data Sources:
Quarterly Census of Employment and Wages (QCEW) program developed through a cooperative program between the States and the U.S. Bureau of Labor Statistics, Third Quarter 2013

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