

Occupational Employment Projections 2011-2013

Overview

California's occupational employment is expected to add almost 429,000 new jobs over the projection period. The occupational groups with the most growth are sales and related (49,900), office and administrative support (47,800), and food preparation and serving related (45,800). The occupational groups with the fastest growth rates are computer and mathematical (5.8 percent), healthcare support (4.3 percent), and healthcare practitioners and technical (3.8 percent).

Total job openings are the sum of job growth and replacement needs. Total job openings do not factor in occupational declines. If an occupation's forecasted employment change is negative, the number of opportunities resulting from growth is zero and replacement needs are the only source of job opportunities. Replacement needs estimate the number of workers needed to replace those who have left the labor force or have changed jobs. Eight out of every 10 occupations will have more job openings due to replacement needs than job growth.

Over the 2011-2013 projection period, California is expected to generate:

- 428,900 new jobs from industry growth,
- 760,000 jobs due to replacement needs,
- A combined total of 1,188,900 job openings.

Fastest Growing Occupations

The 50 fastest growing occupations are expected to expand at a rate of 4.7 percent or higher, compared to the expected overall 2.5 percent growth rate for total employment in California. These occupations are forecasted to generate 90,100 new jobs, which accounts for 21 percent of all new jobs. Computer and health care related occupations dominate the top 10 fastest growing occupations.

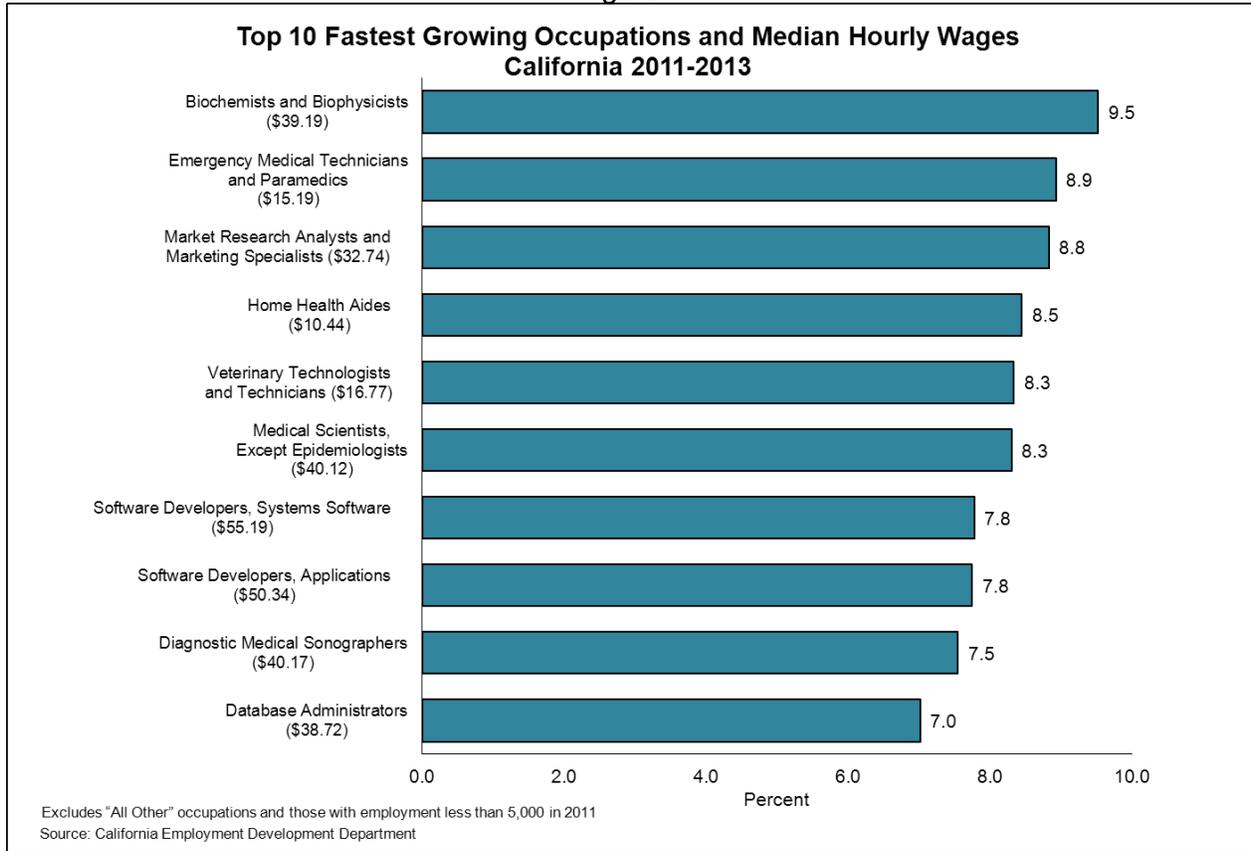
The industries that are expected to generate the most growth for the top 10 fastest growing occupations are shown in *Table 1*.

Table 1: Industries Where Occupational Growth is Concentrated	
Occupation	Top Industry (Industry Percentage Growth Rate)
Biochemists and Biophysicists	Scientific Research and Development Services (6.1)
Emergency Medical Technicians and Paramedics	Ambulatory Health Care Services (5.0)
Market Research Analysts and Marketing Specialists	Management, Scientific, and Technical Consulting (11.1)
Home Health Aides	Community Care Facilities for the Elderly (7.7)
Veterinary Technologists and Technicians	Other Professional, Scientific, and Technical Services (5.3)
Medical Scientists, Except Epidemiologists	Scientific Research and Development Services (6.1)
Software Developers, Systems Software	Computer Systems Design and Related Services (10.7)
Software Developers, Applications	Computer Systems Design and Related Services (10.7)
Diagnostic Medical Sonographers	General Medical and Surgical Hospitals (2.4)
Database Administrators	Computer Systems Design and Related Services (10.7)

Source: California Employment Development Department

Of the top 10 fastest growing occupations, seven pay median wages of more than \$30 an hour. With the exception of diagnostic medical sonographers, which requires an associate degree, these occupations require a bachelor’s degree or higher. The top 10 fastest growing occupations are shown below in *Figure 2*.

Figure 2



Occupations with the Most Job Openings

The top 50 occupations with the most job openings are expected to generate 616,000 total jobs, accounting for 52 percent of all openings in California. Of these occupations, 36 have more openings due to replacement needs than job growth. The retirement of baby boomers and workers transitioning to new occupations are expected to continue to generate many jobs due to replacement needs.

Of these 50 occupations, 40 require a high school diploma or less and pay median hourly wages ranging from \$8.98 to \$27.53. Seven out of 10 occupations on this list also require some form of post-employment on-the-job training. Higher skilled occupations, requiring an associate degree or higher, earn median hourly wages ranging from \$32.74 to \$55.19.

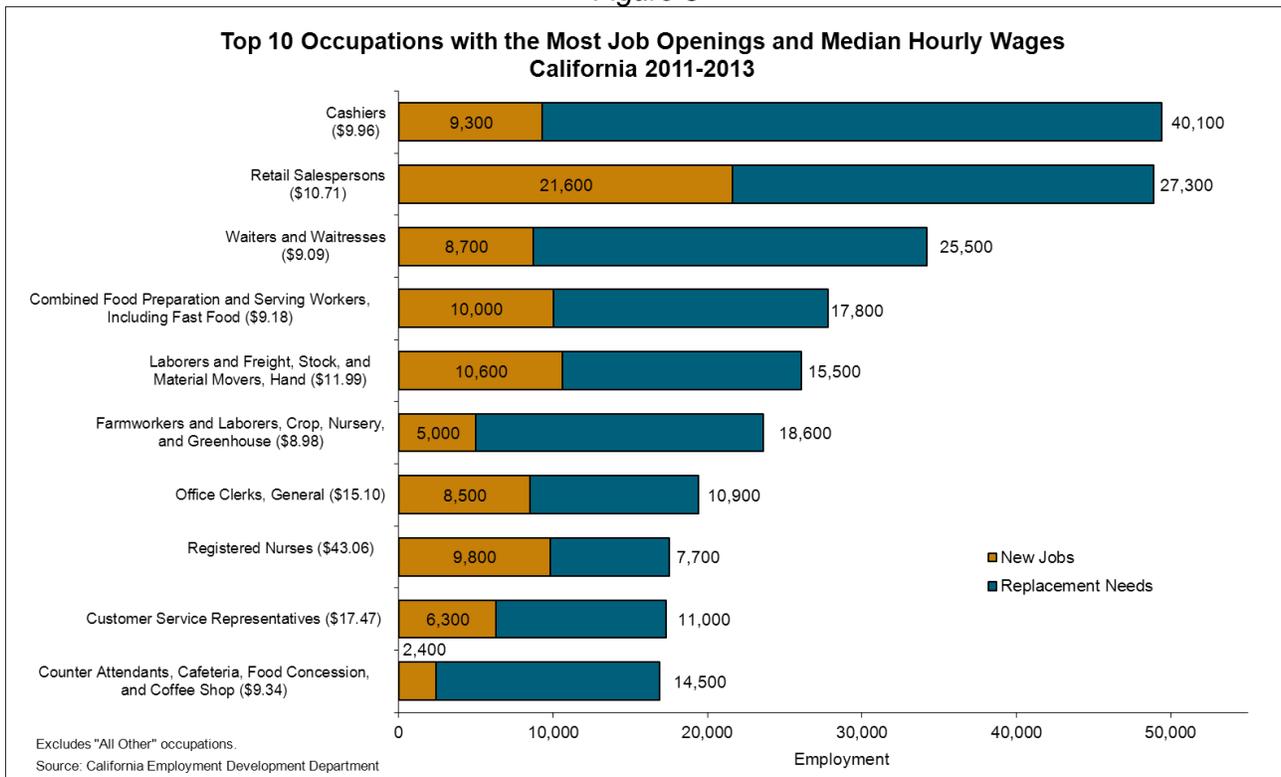
Food preparation and serving related occupations make up 2 of every 10 occupations on this list. Examples of these occupations include waiters and waitresses, combined food preparation and serving workers, dishwashers, and food preparation workers. These occupations are concentrated in

accommodation and food services, require a high school diploma or less, and earn median hourly wages ranging from \$9.00 to \$13.48.

Office and administrative support occupations, the next largest group on this list, cross all industries and require an entry level education of a high school diploma or less. Only first-line supervisors of office and administrative support workers and executive secretaries require previous work experience. These two occupations also pay the highest hourly median wages in this group, earning \$26.75 and \$24.25, respectively.

The top 10 occupations with the most job openings are shown in *Figure 3*. Paralleling the top 50 occupations with the most job openings, the food service and administrative occupations are the most common. The only occupation that is expected to have more openings due to growth than replacements is registered nurses.

Figure 3

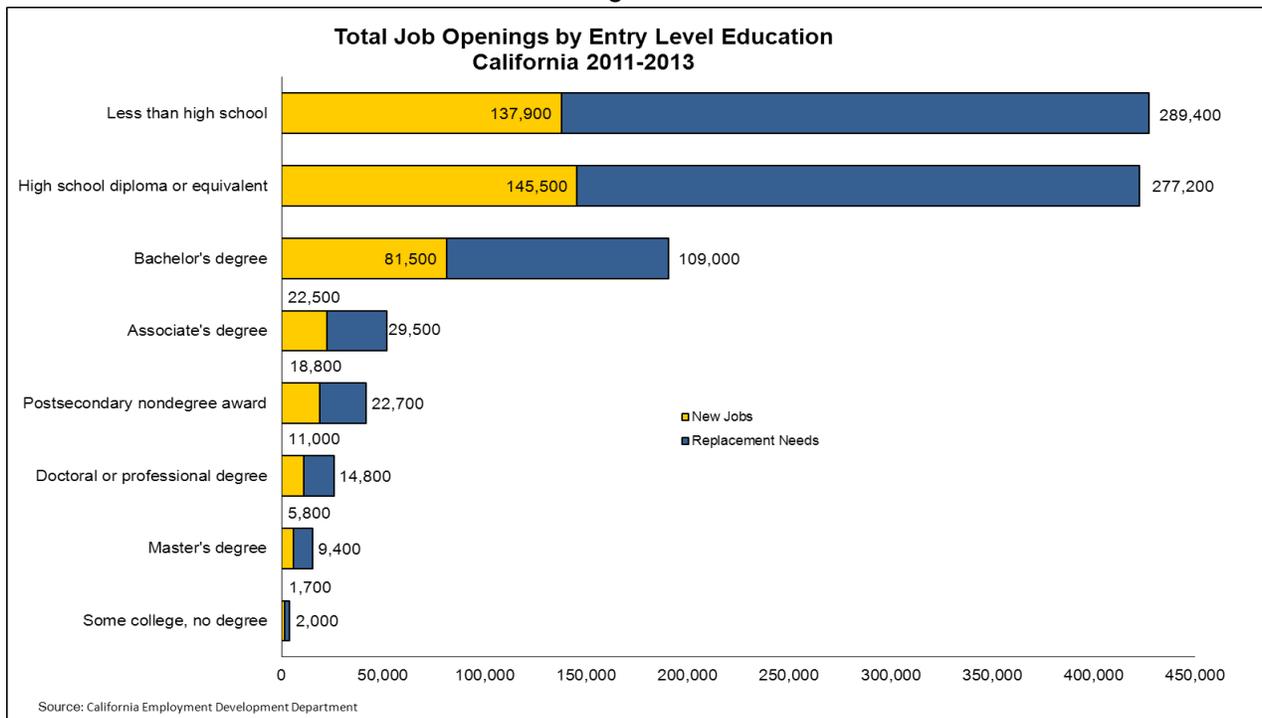


Education and Training Requirements

The United States Bureau of Labor Statistics recently introduced new education and training level assignments for each occupation. The new levels categorize the typically required education and training into three categories; entry level education, related work experience, and on-the-job training. Entry level education and related work experience are measures of pre-employment qualifications, where on-the-job training is offered later so that an employee can obtain competency in the occupation.

Figure 4 shows the projected total job openings by entry level education in California for 2011-2013. The "less than high school" and "high school diploma or equivalent" education levels have the most replacement needs. Entry level jobs generally have more replacement needs because workers move to other occupations for higher wages and upward mobility.

Figure 4



The entry level education classifications and their job requirements are:

- **Doctoral or professional degree** - Completion of this degree usually requires at least three years of full-time academic study beyond a bachelor's degree. Examples of occupations for which a professional degree is the typical form of entry-level education include lawyers, pharmacists, biochemists and biophysicists, and physical therapists. There are a large number of medical occupations that require high entry level education combined with internships or residencies. This group has the highest median hourly wage.
- **Master's degree** - Completion of this degree usually requires one or two years of full-time academic study beyond a bachelor's degree. Examples of occupations in this category include physician assistants, marriage and family therapists, and healthcare social workers. Most of the occupations requiring this degree are in education, health care, or social assistance fields.
- **Bachelor's degree** - Completion of this degree generally requires at least four years, but not more than five years, of full-time academic study beyond high school. Examples of occupations in this category include accountants and auditors; software developers, applications; and database administrators. The occupations requiring a bachelor's degree are varied and cross all industries, and many require additional work experience and on-the-job training.
- **Associate's degree** - Completion of this degree usually requires at least two years but not more than four years of full-time academic study beyond high school. Examples of occupations in this category include registered nurses, general and operations managers, and respiratory therapists.
- **Postsecondary non-degree award** - These programs lead to a certificate or other award, but not a degree. The certificate is awarded by the educational institution and is the result of completing formal postsecondary schooling. Certification, which is issued by a professional organization or certifying body, is not included here. Some postsecondary non-degree award programs last only a few weeks, while others may last one to two years. Examples of occupations in this category

include emergency medical technicians and paramedics, licensed practical and licensed vocational nurses, and firefighters.

- **Some college, no degree** - This category signifies the achievement of a high school diploma or equivalent plus the completion of one or more postsecondary courses that did not result in a degree or award. Examples of occupations in this category are computer support specialists, and private detectives and investigators.
- **High school diploma or equivalent** - This category signifies the completion of high school or an equivalent program resulting in the award of a high school diploma or an equivalent, such as the General Educational Development (GED) credential. Examples of occupations in this category include office clerks, general; customer service representatives; and pharmacy technicians.
- **Less than high school** - This category signifies the completion of any level of primary or secondary education that did not result in the award of a high school diploma or equivalent. Examples of occupations in this category include personal care aides, home health aides, retail salespersons, and cashiers.

For more information on the fastest and largest growing occupations by entry level education, please refer to the **Comparison of Growing Occupations by Entry Level Education in California 2011-2013** table on the next page.

The complete [2011-2013 California industry and occupational projections](#) are available online.

Produced by: Employment Development Department
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Comparison of Growing Occupations by Entry Level Education in California 2011-2013

Fastest Growing (New Jobs from Industry Growth)	Entry Level Education	Largest Growing (New Jobs and Replacement Needs)
Biochemists and Biophysicists (9.5% or 600 jobs) Medical Scientists, Except Epidemiologists (8.3% or 2,300 jobs) Computer and Information Research Scientists (6.3% or 400 jobs) Veterinarians (5.2% or 300 jobs) Pediatricians, General (4.9% or 300 jobs)	Doctoral or Professional Degree	Lawyers (4,100 jobs) Medical Scientists, Except Epidemiologists (2,500 jobs) Pharmacists (2,100 jobs) Clinical, Counseling, and School Psychologists (1,800 jobs) Dentists, General (1,200 jobs)
Marriage and Family Therapists (6.4% or 700 jobs) Healthcare Social Workers (5.5% or 700 jobs) Physician Assistants (4.8% or 400 jobs) Rehabilitation Counselors (3.8% or 400 jobs) Occupational Therapists (3.3% or 300 jobs)	Master's Degree	Educational, Guidance, School, and Vocational Counselors (1,600 jobs) Healthcare Social Workers (1,200 jobs) Marriage and Family Therapists (1,200 jobs) Education Administrators, Elementary and Secondary School (1,100 jobs) Instructional Coordinators (1,000 jobs)
Market Research Analysts and Marketing Specialists (8.8% or 4,900 jobs) Software Developers, Applications (7.8% or 7,200 jobs) Software Developers, Systems Software (7.8% or 6,100 jobs) Database Administrators (7.0% or 800 jobs) Credit Analysts (6.6% or 400 jobs)	Bachelor's Degree	Accountants and Auditors (10,100 jobs) Software Developers, Applications (8,700 jobs) Market Research Analysts and Marketing Specialists (7,800 jobs) Software Developers, Systems Software (7,500 jobs) Management Analysts (5,800 jobs)
Veterinary Technologists and Technicians (8.3% or 700 jobs) Diagnostic Medical Sonographers (7.5% or 400 jobs) Respiratory Therapists (4.9% or 700 jobs) Broadcast Technicians (4.8% or 300 jobs) Radiologic Technologists and Technicians (4.6% or 800 jobs)	Associate's Degree	Registered Nurses (17,500 jobs) General and Operations Managers (10,300 jobs) Preschool Teachers, Except Special Education (2,800 jobs) Construction Managers (2,300 jobs) Paralegals and Legal Assistants (1,700 jobs)
Emergency Medical Technicians and Paramedics (8.9% or 1,500 jobs) Skincare Specialists (6.1% or 400 jobs) Manicurists and Pedicurists (5.8% or 1,300 jobs) Hairdressers, Hairstylists, and Cosmetologists (5.5% or 2,300 jobs) Licensed Practical and Licensed Vocational Nurses (4.4% or 2,900 jobs)	Postsecondary Non-degree Award	Nursing Aides, Orderlies, and Attendants (6,600 jobs) Licensed Practical and Licensed Vocational Nurses (6,300 jobs) Hairdressers, Hairstylists, and Cosmetologists (3,800 jobs) Dental Assistants (2,700 jobs) Emergency Medical Technicians and Paramedics (2,100 jobs)
Computer Support Specialists (4.7% or 3,300 jobs)	Some College, No Degree	Computer Support Specialists (6,700 jobs)
Demonstrators and Product Promoters (6.4% or 1,300 jobs) Physical Therapist Aides (6.3% or 400 jobs) Loan Officers (5.9% or 1,700 jobs) Pest Control Workers (5.6% or 500 jobs) Pharmacy Technicians (5.5% or 1,600 jobs)	High School Diploma or Equivalent	Office Clerks, General (9,700 jobs) Customer Service Representatives (17,300 jobs) First-Line Supervisors of Office and Administrative Support Workers (12,900 jobs) First-Line Supervisors of Retail Sales Workers (11,600 jobs) Heavy and Tractor-Trailer Truck Drivers (10,300 jobs)
Home Health Aides (8.5% or 5,400 jobs) Nonfarm Animal Caretakers (5.0% or 1,000 jobs) Retail Salespersons (4.9% or 21,600 jobs) Construction Laborers (4.6% or 5,200 jobs) Refuse and Recyclable Material Collectors (5.4% or 700 jobs)	Less than High School	Cashiers (49,400 jobs) Retail Salespersons (48,900 jobs) Waiters and Waitresses (34,200 jobs) Combined Food Preparation and Serving Workers, Including Fast Food (27,900 jobs) Laborers and Freight, Stock, and Material Movers, Hand (26,100 jobs)

Excludes "All Other" occupations and those with employment less than 5,000 in 2011.
 Source: California, Employment Development Department

Visit www.labormarketinfo.edd.ca.gov for more projections information.