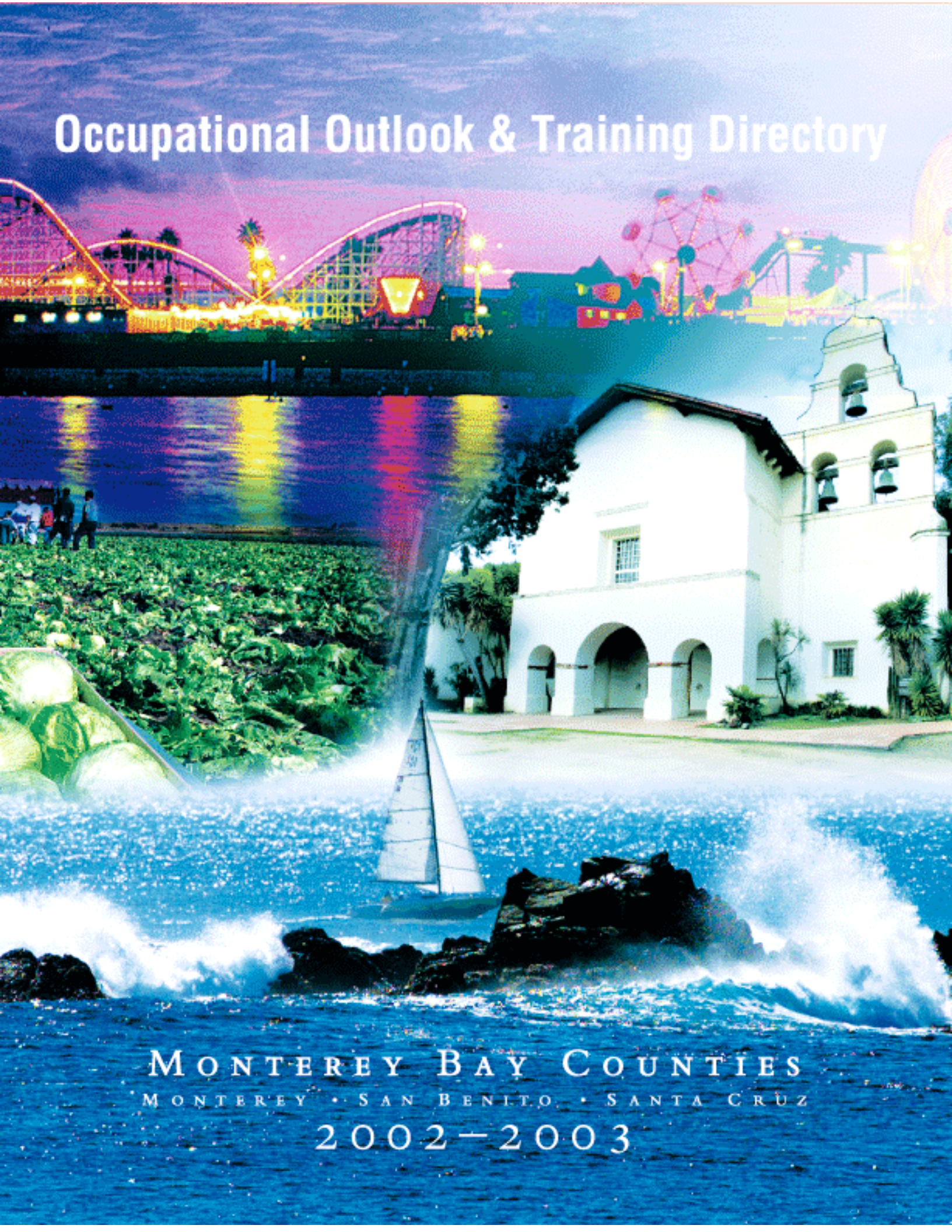
Occupational Outlook & Training Directory



Monterey Bay Counties

Monterey • San Benito • Santa Cruz

2002–2003

Occupational Outlook & Training Directory

Monterey Bay Counties
(Monterey, San Benito, and Santa Cruz Counties)
2002-2003

This publication is a product of the California Cooperative Occupational Information System (CCOIS) and is sponsored by the counties of Monterey, San Benito, and Santa Cruz. The CCOIS program is administered by the State of California Employment Development Department, Labor Market Information Division in cooperation with the California Resources Network (CalCRN).

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For information regarding the availability of this publication, please contact the Monterey, San Benito, or Santa Cruz partner in your area, or call Joseph Werner at (831) 796-3313.

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Introduction

Welcome to the 2002-2003 Occupational Outlook and Training Directory for the Monterey Bay Counties (Monterey, San Benito, and Santa Cruz). This annually updated publication is a product of the California Cooperative Occupational Information System (CCOIS), which is administered locally by the Monterey County Office for Employment Training.

The CCOIS is a statewide program that produces local labor market information. The local specificity of the information is what makes the CCOIS program both unique and valuable.

At the state level, the program is administered by the California Employment Development Department's Labor Market Information Division (LMID) and is sponsored by the California Occupational Information Coordinating Committee (COICC) and its nine state agency members.

This publication consists of two parts. The first part is a series of occupational profiles organized by year, 2001 then 2002 profiles. The second part is a directory of the tri-country education and training providers.

Common Questions

How do I get my own copy of this book?

Please contact the partner agency in your area (see the acknowledgements page), or call Lorraine McDonald at 831-796-3303 or Amy Smith at 831-796-3384.

Where can I find out about this type of publication in other labor market areas?

To find out who produces *CCOIS Occupational Outlook* publications in any specific California County, contact the EDD Labor Market Information Division at 916-262-2353 or see the CCOIS website at http://www.calmis.cahwnet.gov/htmlfile/ccois/intro.htm

Where can I find out about other occupation, training, and career resources?

See the *Guide to Labor Market Information* on the Skill Matrix Network website at http://www.skillmatrixnetwork.com/, the Occupational Informational Network at www.onetcenter.org and the American Career Infonet at www.acinet.org/

Where can I find local demographic or other economic data?

See the EDD Labor Market Information Division website at http://www.calmis.cahwnet.gov/
See also *California County Profiles* produced by the California Department of Finance at http://www.dof.ca.gov/html/fs_data/profiles/pf_home.htm

About the Occupational Profiles

The occupational profiles in this resource directory are summaries of descriptive and statistical occupational information primarily based on data collected through confidential surveys with local employers. The occupational profiles are in alphabetical order by occupation organized by the years 2001 and 2002. Each profile follows a consistent format for presenting more than 50 data elements for each occupation, as well as information on additional related occupations. Information includes: occupation title and definition; wages and benefits; employer requirements; employment trends; career path; important knowledge, skills and abilities; and occupations with similar skills. The last page includes a "career dialogue" –a summary of an interview with an individual who works in the subject career field and enjoys his/her job.

The occupations profiled in this directory were selected for study based on a variety of criteria, including the needs and interests of local career and workforce development professionals. Therefore, these profiles do not constitute a list of "hot jobs" or "demand occupations." However, this publication can be used to identify occupations that meet certain criteria, including median wages, level of education, outlook for job seekers, number of existing jobs, number of projected new jobs, growth rates, and career path.

Each occupational profile has a date that indicates the year in which the data was collected, the number of employers who participated in the survey, and the total number of workers they employ in the survey occupation. Typically, about 15 surveys are completed per occupation. Nevertheless, as with all survey-based information, users should note that labor market information reflects a "snapshot in time." As a general rule, we find that the information in an occupational profile is fairly reliable for 3-5 years. However, what may be accurate today may or may not be accurate in four weeks or four years, depending on the unexpected changes and trends affecting the occupation, its workers, and its employing industries. Please read the section, *Using the Occupational Profile*s, which includes a description of CCOIS research methodology, as well as tips on how to use and interpret the occupational information presented in this directory.

About the Regional Training Directory

The purpose of the regional training directory is to provide basic information about education and training providers that have programs designed to prepare persons for entry into one or more specific occupations. This includes certificate and degree programs offered through adult education schools, apprenticeship programs, community colleges, private schools and colleges, regional occupational programs, and public universities.

The training directory is organized by provider name. Included in the profile for each provider is location and contact information, accreditation, information on services provided, and a listing of degrees/programs offered.

To find the information you need in the training directory, simply look up the occupation that interests you. Then under the "Training" section, you will see a list of education and/or training providers. Now you may turn to the Training Directory to find basic information regarding those organizations such as telephone number and website address.

A reasonable attempt is made to completely update the training directory each year due to the constantly changing nature of the education, training, and workforce development community and the programs they offer. Although the training directory is comprehensive, it is not designed to include information on all sources of training, education, or social services, nor is it intended to replace the catalogs that may be available from the providers themselves.

The following offers a brief description of each of the six major training sectors that, together, provide almost all of the certificate and degree programs designed to prepare a person for entry into a new occupation or career:

Adult Education Schools are public schools for adults that generally offer a variety of basic education classes, literacy programs, continuing education classes, as well as vocational/technical training. Most also offer a General Education Diploma, or GED (the equivalent of a high school diploma) -an important credential for job seekers who did not graduate from high school and who don't have any postsecondary education or training. Vocational/technical certificate programs are generally very affordable and rarely more than one year in length. The short duration of some vocational training programs, however, sometimes leads to a need for more advanced training offered through a formal apprenticeship, a community college program, or a private vocational school.

Apprenticeships are formal on-the-job training programs typically funded and administered by labor and/or business organizations and are regulated by the Department of Industrial Relations, Division of Apprenticeship Standards. The DAS administers California apprenticeship laws and enforces standards for wages, hours, working conditions, and the specific skills required for state certification as a journey-level worker in an occupation. Apprentices earn a training wage while learning their trade, generally through a combination of on-the-job training and formal classroom instruction.

Community Colleges are public colleges for adults that generally offer remedial, basic, and advanced college-level courses, continuing education courses, vocational/technical certificate programs, and associate degrees. California has the largest system of community colleges in the world, serving about 1.4 million students. Community colleges offer an important opportunity for students planning to transfer to four-year colleges after they have completed up to two years of community college work towards a bachelor's degree. Approximately 56 percent of community college students are women, and almost 80 percent work and attend classes at the same time. For those who work during the day, community colleges usually offer a broad range of evening classes. Increasingly, community colleges are offering accelerated programs to serve those individuals whose primary interest is to quickly develop or upgrade their job skills. California residents pay $11 per unit, plus the cost of books and supplies.

Private Schools, Colleges and Universities are education and training providers that come in all shapes and sizes. Some are small, some are large, some are for-profit, and some are non-profit. Some offer advanced degrees – law schools, for example – and some offer short-term certificate training for occupations like janitor, cashier, and child care worker. Some offer continuing education courses, skills upgrade training, and hobby/personal interest classes. Some offer no certificates or degrees at all –e.g., license prep, exam prep, job search prep, or ESL. Private schools included in this directory are those that offer certificate or degree programs that prepare persons for entry into one or more specific occupations. These providers are regulated in California by the Bureau for Private Postsecondary and Vocational Education. BPPVE, however, does not have the resources to verify all the job placement rates sometimes used to market the programs offered by private schools. Since these placement rates are often not reliable – or comparable with those reported by public schools – it is a good idea not to rely too heavily on them in the career planning/decision-making process.

Credit or units obtained through a private institution may or may not be transferable to a public college or university. Therefore, if you plan to eventually attend or transfer to a public college or university, you should consult a college or university counselor to discuss your plan and the issue of transferability. The cost of attending a private school program is almost always higher than a comparable program through a public school. However, private schools compete by offering programs that are in demand, or that can be completed in a shorter period of time.

Regional Occupational Programs are vocational and technical training programs offered by public schools to high school students (16 or older) and adults. High school students are usually given the first opportunity for enrollment. However, if openings exist, adults may enroll on a first-come, first- served basis. Certificate programs offered through ROP are generally very affordable and rarely more than one year in length. The short duration of some vocational training programs, however, sometimes leads to a need for more advanced training offered through a formal apprenticeship, a community college program, or a private vocational school.

Universities are public educational institutions, including those of the California State University and University of California systems. Both types of institutions offer a variety of undergraduate and/or graduate degrees, and certificate programs that are usually offered through their extended/continuing education programs. Graduate degrees at UC institutions include a variety of doctoral degrees, including law and medical schools. The cost of attending varies depending on the college or university attended.

Please note that the organizations responsible for the production of this directory do not necessarily endorse or recommend any particular training providers or programs.

Using the Occupational Profiles

The information in an occupational profile is based largely on a summary of survey data collected from local employers through the California Cooperative Occupational Information System (CCOIS). The data is summarized for three reasons: one, to make the information as easy to use as possible; two, to make the information more reliable (than anecdotal information); and three, to protect the confidentiality of the information provided by employers. The summarized survey information is typically listed in descending order of importance or frequency, using key terms. For example, if survey data indicates that 75 percent of employers provide medical insurance, and 60 percent provide a paid vacation, the information would be presented as: *Most employers provide medical insurance and a paid vacation.* However, if only 50 percent provide a paid vacation, the information would be presented as: *Most employers provide medical insurance. Many provide a paid vacation.*

> *Note:*
> *• Familiarize yourself with the "key terms" listed below. These terms are used throughout the occupational profiles to describe the summarized survey information (e.g. Most employers this... many employers that... some...).*
> *Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)*

Occupation Titles and Definitions

Unless otherwise noted, occupation titles and definitions at the top of each profile are based on a CCOIS version of the Occupational Employment Statistics (OES) classification system developed originally by the U.S. Department of Labor. This classification system groups all jobs in the labor market into approximately 700 occupations and is closely matched to other sources of occupational data at the state and national levels. However, like any occupational classification system, some occupation titles and definitions are out-of-date, archaic, or, at the very least, confusing. For example, a profile of Forklift Operators (a common job title) would be titled Industrial Truck and Tractor Operators according to the OES classification system. And a profile of Computer Service Technicians (a common job title) would be titled Data Processing Equipment Repairers. Part of the challenge in using occupational information is being able to find the **occupation title** when one is thinking in terms of a **job title**.

While the use of a standardized classification system has its limitations, it also provides some significant advantages over using Ad-Hoc occupational definitions that may appear to be more cutting-edge. For one, the data is more comparable from region to region and from occupation to occupation. Another advantage is that the data can be aggregated (or disaggregated) and data from other standardized sources can be used to supplement or validate the local survey data.

Occupational definitions not identified with a 6-digit OES code usually reflect an attempt to survey an occupation that the OES classification system either does not identify or does not define adequately. Because of the lack of directly comparable data from other sources (such as employment projections), these "Non-OES" occupational surveys sometimes lack the reliability and/or the comprehensive quality of a standard OES occupational survey.

Wages and Benefits

Wages included in this report are those paid by the local employers participating in the survey for employees at three levels of experience. The report does not include extreme wages. Although wages are shown to the nearest cent for ease of comparison, the reader should not interpret this as an indication of precision. The wage information is presented as a tool for evaluating and comparing the potential earnings of one occupation with another, and is not intended to represent official prevailing wages.

A summary of the weekly hours worked by most employees in the occupation is included based on the local employers surveyed.

Benefit information indicates the extent to which surveyed employers make available medical insurance and other benefits to full-time employees. A statement pertaining to benefits for part-time employees is included if part-time employment is significant.

Training, Experience, and Other Requirements

The information in this section of the profile includes: license or certification requirements (if any); formal education levels required by employers; prior experience requirements; training requirements or preferences; and other important skills, if any, reported by the surveyed employers.

> *Note:*
> *• Employer educational requirements are shown as the employers have reported them. These educational levels are not always essential for the performance of job duties.*
> *• Employer experience requirements are often flexible, with many employers willing to substitute training for experience. Small employers, in particular, are often willing to waive requirements if they believe they have the "right" applicant.*

Supply/Demand Assessment

Indicates the degree of difficulty employers have in finding applicants who meet their qualifications and, in turn, the employment outlook for job seekers. Employer responses to the supply-demand question are weighted by the number of employees in the occupation for each employer. Note that the supply-demand assessment does not take into account other employment opportunity indicators, such as potential wages or occupational size, growth, and separations. Also included in the supply and demand statement for 2001 is an estimate of the annual turnover due to worker replacement needs and promotions.

> *Note:*
> *• Although high turnover does not necessarily indicate a good outlook for job seekers, it does suggest a greater degree of hiring activity. Occupations with high turnover, however, are often those that do not provide long-term or satisfying employment.*

Size of Occupation

Four terms (small, medium, large, and very large) are used to describe the relative size of each occupation within the local survey area. The sizes that these terms represent vary from area to area and from year to year as the size of the overall labor force changes. A numeric range is also provided to give a more specific estimate of the employment in the occupation. Also included is the approximate percentage of female or male employment in the occupation based on surveys with local employers, in addition to the approximate percentage of union jobs (if applicable.)

Employment Trends

Indicates the estimated growth rate for each occupation relative to the annual average rate of growth for all occupations (based on the most recent employment projections available at the time of the survey). Also included is the projected number of annual job openings due to a net increase in occupation size and due to labor force separations (workers retiring or leaving the occupation). The growth rate terms are defined as:

- Much Faster than Average = 1.5 times the average or more
- Faster than Average = 1.10 to 1.49 times the average
- Average = .90 to 1.09 times the average
- Slower than Average = .01 to .89 times the average

> *Note:*
> *• Projections of Size, Growth and Separations are statistical "estimates" prepared by the Employment Development Department's Labor Market Information Division using occupational staffing and industry forecast data. Over the years, we have found that most occupational employment projections are reasonably accurate. However, they can also be far from accurate on occasion. We welcome input from informed users regarding industry trends that may contribute to the development of more reliable projections in the future.*

Employment trends also include a nationwide outlook statement based on an analysis by the U.S. Department of Labor.

Other Information

Where the Jobs Are: Describes the major employing industries for the occupation. Also included is an estimate of self-employment in the occupation (2001 profiles).

Methods Used to Fill Job Openings: Indicates the most successful recruitment or hiring methods, based on surveys with local employers.

Important Knowledge, Skills, and Abilities: Indicates the skills and other qualifications that are important to perform the duties for a given occupation. Unless otherwise noted, the source of this information is the America Career Infonet (www.acinet.org) and is based on data from O*NET (the Occupational information Network). O*NET is an occupational classification system and qualifications database developed by the U.S. Department of Labor as a replacement for the Dictionary of Occupational Titles (DOT).

Tasks and Tools: Indicates the common tasks and tools that are important to perform the duties for a given occupation. The source of this information is the Skill Matrix Network (www.skillmatrixnetwork.com) and is based on a refinement of occupation-specific task data from O*NET (the Occupational information Network).

Career Path

Describes one or more possible career paths for workers in the occupation who acquire the necessary skills and education to be promoted to higher-level occupations, or to positions of greater responsibility. Sources for the career path information include local CCOIS surveys and various sources from the U.S. Department of Labor, including the Occupational Outlook Handbook.

Occupations with Similar Skills

This listing of occupations reflects those occupations that most closely match the important knowledge, skills, and abilities of the subject occupation. The data source used for this comparison is the O*NET Database which measures over 400 knowledge, skills, abilities, and other characteristics across 900 occupations for comparison purposes. Wage data published by the U.S. Department of Labor, Bureau of Labor Statistics are used to provide the wage information, and the education level information comes from the Skill Matrix Network (http://www.skillmatrixnetwork.com). One often-used acronym is “OJT,” which stands for “on-the-job training.” OJT is typically hands-on training that occurs at the worksite and is provided by the employer as part of “learning the job.”

Career Dialogue

Includes a summary of an interview with an individual who works in the subject career field and enjoys his/her job. Career dialogue material is provided as “interesting” supplemental information only, and is not intended to be representative or statistically valid.

CCOIS Program Description/Methodology

The California Cooperative Occupational Information System (CCOIS) is a statewide program with over 30 local projects to conduct local occupational research and to publish annual Occupational Outlook publications. EDD's Labor Market Information Division administers the program at the state level. LMID then contracts with "Local Partners" to operate the individual projects. LP's are typically local workforce investment boards.

LMID determines the research methods and standards, provides technical support, allocates a majority of the funding required to operate the programs, and monitors the work performed by the LP's. The LP's select the occupations to be studied, conduct the research, process and analyze the data, and produce and distribute the annual publication.

The following is an outline of the CCOIS occupational survey process.

CCOIS Program Cycle

- LMID develops occupational employment projections.
- Occupations are proposed and selected for study.
- Survey samples are developed and refined (samples are stratified by industry and employer size).
- Survey questionnaires are prepared for each occupation.
- Confidential surveys are conducted with local employers.
- Survey data is reviewed, clarified (when necessary), and entered into a secure computer database.
- Data is tabulated, analyzed, summarized, and reviewed.
- Annual *Occupational Outlook* publications are produced and distributed.

Occupation Selection and Definition

There are a variety of criteria used to help select the occupations to be surveyed each year. However, the primary objective is to survey occupations that are of most interest to the users in the local community within the limitations of a standardized research program. As a result, CCOIS occupational studies tend to focus on larger or commonly known occupations, rather than on smaller or highly specialized occupations. The following criteria is used by the LPs to help prioritize possible survey occupations:

- The occupation should be adequately defined by the OES classification system used in the CCOIS program.
- The occupation should have a substantial employment base.
- There should be a substantial number of projected job openings.
- The potential salary level should be adequate so as to avoid the need for public assistance.
- The occupation should be of interest to local program planners or training providers.
- The occupations should vary enough so that certain employers won't be overburdened with survey requests.

Survey Sample Design

After the occupations are selected for study, a survey sample of local employers is developed for each occupation. Since LPs don't usually survey all possible employers in the local "universe," a considerable amount of time is invested to ensure that the survey samples are representative of the overall employment for the occupation. For each occupation studied, a sample of 30-40 employers is designed to include all major employing industries for each survey occupation. In addition, the number of employees for each employer is considered to ensure that the sample represents the employers most likely to provide future employment. For most occupations, the largest employers will be surveyed more often than the smaller employers. However, for some occupations, smaller employers may be more appropriate. Initially, the samples are developed by LMID staff using detailed databases on employers and information on occupational employment within industries. The draft sample of employers for each of the survey occupations is then carefully reviewed and edited by the LP.

Employers are added and deleted, as appropriate, to maintain the sample size of 30-40 employers per occupation. For those occupations with less than 30 local employers, the LP will survey the universe (all possible survey participants).

Questionnaire Development

A three-page employer survey questionnaire with a list of standardized questions is prepared for each survey occupation. See the sample CCOIS questionnaire in the appendix of this report.

Employer Survey Procedures

Employer representatives are identified and contacted by the LP by telephone and are asked to participate in the survey, either by phone, fax, or mail. To encourage participation from the highest possible percentage of employers, they are assured that any information they provide will be kept strictly confidential and that any information published will be prepared in summary form and will not identify any specific employers who participate in the survey. The appropriate survey respondent is generally a person responsible for the hiring of personnel in the survey occupation. Completed and/or returned questionnaires are reviewed and checked for consistency and completeness. Unclear or inconsistent responses are clarified through follow-up phone calls to the survey respondents. In a standard employer sample of 30-40 potential respondents, the LP's response goal is to collect at least 15 fully completed questionnaires. The smaller the sample size, the greater the

response rate required. The LP must also meet or exceed industry representation goals to ensure that the summarized data will represent all major employing industries.

Data Entry, Tabulation, and Summary

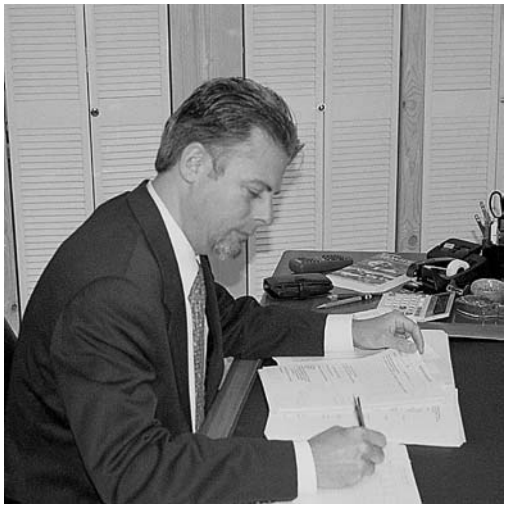
Reviewed and clarified survey responses are entered into the secure CCOIS computer database and survey response tabulations are prepared to be used in the data analysis process. From those tabulations, the LPs analyze the data and draft occupational profiles are prepared. LMID analysts then review the draft profiles and other report materials. Following the review and editing process, an Occupational Outlook Report publication is produced and distributed to key organizations in the local area -e.g. schools, career centers, libraries, employment and training agencies, participating employers, training providers, etc.

Occupational Profiles 2001

Accountants and Auditors

Also know as Staff Accountants and Controllers. Includes Certified Public Accountants.

Accountants and Auditors examine, analyze, and interpret accounting records for the purpose of giving advice or preparing statements and installing or advising on systems of recording costs or other financial and budgetary data (OES 211140).



Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$8.00 - $17.26/hr	$16.78/hr
New Hires/Exp'd:	$10.93 - $25.00/hr	$18.94/hr
Exp'd/After 3 Years:	$14.38 - $41.47/hr	$23.82/hr

Hours: Almost all jobs are 36-45 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■■	—	□	—	□	—
Dental Insurance	■■■■	—	□	—	□	—
Vision Insurance	■■■	—	□	—	□	—
Life Insurance	■■	—	□	—	□	—
Sick Leave	■■■■	—	□	—	□	—
Vacation	■■■■■	—	□	—	□	—
Retirement	■	—	■■	—	□	—
Child Care	■	—	■	—	□	—

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required, except for individuals who want to be licensed as certified public accountants (CPA's). Contact the State Board of Accountancy at 916-263-3680 for licensing information.

Education: Most employers require a bachelor degree for job entry. Some are willing to accept an associate degree.

Experience: Most employers require or prefer 1-5 years of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Almost all employers report that spreadsheet and word processing skills are important. Becoming a certified public accountant may enhance one's employment opportunities. Refer to Accountants and Auditors in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find applicants who meet their hiring standards. This indicates a **good outlook** for qualified job seekers. Annual turnover is estimated to be low (10-19%).

Size of Occupation

Large. There are approximately 1,105 - 1,350 accountants and auditors currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 70% are female. Few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 16 employers surveyed representing 128 employees in this occupation.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. About 15-20 job openings are projected per year due to a net increase in occupation size. About 15-20 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of accountants and auditors is expected to grow about as fast as the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: In a wide variety of industries, with about 20% employed by accounting, auditing, and bookkeeping firms. Nationally, about 10% of all accountants and auditors are self-employed.

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements. Many also fill openings by hiring employee referrals and/or colleges and universities. Some fill openings through word of mouth and/or recruit applicants through Internet job listings. A few fill openings by hiring referrals from schools and training programs.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (5.00)
- Knowledge of economic and accounting principles and practices, the financial markets, banking, and the analysis and reporting of financial data (5.00)
- Knowledge of principles and processes involved in business and organizational planning, coordination, and execution. This includes strategic planning, resource allocation, manpower modeling, leadership techniques, and production methods (3.83)

Skills:
- Using mathematics to solve problems (5.00)
Determining how money will be spent to get the work done, and accounting for these expenditures (4.83)
- Weighing the relative costs and benefits of a potential action (4.83)
- Complex problem solving is used in identifying complex problems and reviewing related information so that options may be developed and evaluated, and solutions may be put into action. (4.83)

Abilities:
- The ability to add, subtract, multiply, or divide quickly and correctly (4.00)
- The ability to see details of objects at a close range (within a few feet of the observer) (3.80)
- The ability to understand and organize a problem and then to select a mathematical method or formula to solve the problem (3.80)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Analyzes operations, trends, costs, revenues, financial commitments, and obligations incurred, to project future revenues and expenses, using computer.
- Predicts revenues and expenditures, and submits reports to management.
- Surveys establishment operations to ascertain accounting needs.
- Computes taxes owed, ensures compliance with tax payment, reporting, and other tax requirements, and represents establishment before taxing authority.
- Directs activities of workers performing accounting and bookkeeping tasks.
- Adapts accounting and record keeping functions to current technology of computerized accounting systems.
- Appraises, evaluates, and inventories real property and equipment, and records description, value, location, and other information.
- Prepares forms and manuals for workers performing accounting and bookkeeping tasks.
- Audits contracts, and prepares reports to substantiate transactions prior to settlement.
- Establishes table of accounts, and assigns entries to proper accounts.
- Develops, implements, modifies, and documents budgeting, cost, general, property, and tax accounting systems.
- Develops, maintains, and analyzes budgets, and prepares periodic reports comparing budgeted costs to actual costs.
- Analyzes records of financial transactions to determine accuracy and completeness of entries, using computer.
- Reports finances of establishment to management, and advises management about resource utilization, tax strategies, and assumptions underlying budget forecasts.
- Prepares balance sheet, profit and loss statement, amortization and depreciation schedules, and other financial reports, using calculator or computer.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path: Accountants and Auditors

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Account Clerk Bookkeeping, Accounting, and Auditing Clerks Moderate-term OJT $15.31/hr	**Accountant** Bachelor degree $25.71/hr	**Certified Public Accountant**	**Partner**
Bookkeeper	**Auditor** Bachelor degree $25.71/hr	**Accounting/Financial Manager** Financial Managers, Branch or Dept. Bachelor + work exp $39.50/hr	

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Executive Secretaries and Administrative Assistants	Work experience	$18.05
Industrial Engineering Technicians	Associate degree	$23.62
Title Examiners and Abstractors	Moderate-term OJT	$23.85
Accountants	Bachelor degree	$25.71
Auditors	Bachelor degree	$25.71
Budget Analysts	Bachelor degree	$27.25
Technical Writers	Bachelor degree	$28.66
Statisticians	Bachelor degree	$32.57
Operations Research Analysts	Masters degree	$35.32
Sales Agents, Securities and Commodities	Bachelor degree	$35.79
Actuaries	Bachelor degree	$39.21

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Manny Carbahal

What is your job title?
I'm a Certified Public Accountant.

What kind of work do you do?
I am in charge of managing the firm and I also deal with tax issues for clients.

What are the things that attracted you to this type of work?
I was going to college when we were in the middle of a recession. Originally, I went to school to become an engineer. I was talking to a few friends in the engineering field but they were saying that it was kind of soft. Other people were saying, "Well, you know, accountants always have a job!" So to be honest, I took an accounting course, did very well, and decided to pursue that as a profession.

What kind of things do you do at work (skills)?
I do a lot of different things. I'm a partner with the firm, so I have to have strong interpersonal skills to work with employees as well as when I deal with clients. I'm pretty much a number cruncher and a tax expert. I consult with clients on tax compliance issues as well as tax planning to try to minimize the tax impact of the business and personal decisions that clients make.

If you were starting over to be an Accountant, knowing what you know now, how would you better prepare yourself?
I think that if I were starting off in the profession now, I would maybe split my emphasis between financial planning, income tax, and state tax. Those are probably the three areas that would have the most growth potential and are also areas where you can really help people.

What keeps you wanting to do this type of work?
I like my clients, so I truly enjoy working with them. The financial rewards are good, too. I can't think of anything else I'd rather do.

What qualities make an exceptional Accountant?
Believe it or not, a dynamic personality actually helps because the stereotypical accountant is basically a nerd. I think it really helps being able to work and communicate with people as well as having an in-depth knowledge of your subject area as well. Personality helps in this profession. It separates you from the "bean counters".

Auto Body and Related Repairers

Also known as Body Technicians.

Automotive Body and Related Repairers repair, repaint, and refinish automotive bodies, straighten vehicle frames, and replace damaged vehicle glass (OES 853050).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.00 - $10.00/hr	$10.00/hr
New Hires/Exp'd:	$7.00 - $20.00/hr	$14.00/hr
Exp'd/After 3 Years:	$12.00 - $25.00/hr	$20.00/hr

Hours: Almost all jobs are 40 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■	—	■■	—	□	—
Dental Insurance	■■■	—	■■	—	■	—
Vision Insurance	■■■	—	□	—	□	—
Life Insurance	■■	—	■	—	□	—
Sick Leave	■■■	—	□	—	□	—
Vacation	■■■■■■	—	□	—	□	—
Retirement	■	—	■■	—	■	—
Child Care	□	—	□	—	□	—

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Most employers are willing to accept less than a high school level education for job entry. Some require a high school diploma or equivalent.

Experience: Almost all employers require or prefer 1-5 years of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Some employers require I-CAR certification. Training programs are available for this occupation, but do not necessarily eliminate the need for apprenticeship or on-the-job training. Refer to Automotive Body Repairers in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is very difficult to find applicants who meet their hiring standards. This indicates a **very good outlook** for qualified job seekers. Annual turnover is estimated to be moderate (20-29%).

Size of Occupation

Small. There are approximately 290 - 355 automotive body repairers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 5% are female. Few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 110 employees in this occupation.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. Less than 10 job openings are projected per year due to a net increase in occupation size. About 5-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of automotive body repairers is expected to increase about as fast as the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Auto body repair shops and automotive dealerships (with body shops). Nationally, about 13% of all automotive body repairers are self-employed.

Methods Used to Fill Job Openings: Most employers fill openings by hiring employee referrals and/or by hiring unsolicited applicants. Many also recruit applicants through newspaper advertisements. Some fill openings through in-house promotion or transfer.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (3.60)
- Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (3.00)

Skills:
- Repairing machines or systems using the needed tools (4.83)
- People use quality control analysis skills to conduct tests and inspections. This skill may be applied to products, services, and processes so that a company can evaluate quality or performance level. (4.83)
- Installing equipment, machines, wiring, or programs to meet specifications (4.66)

Abilities:
- The ability to quickly make coordinated movements of one hand, a hand together with its arm, or two hands to grasp, manipulate, or assemble objects (4.00)
- The ability to coordinate movements of two or more limbs together (for example, two arms, two legs, or one leg and one arm) while sitting, standing, or lying down. It does not involve performing the activities while the body is in motion (3.80)
- The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged (3.80)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Positions dolly block against surface of dented area and
- beats opposite surface to remove dents, using hammer.
- Straightens bent automobile or other vehicle frames, using pneumatic frame-straightening machine.
- Fills depressions with body filler and files, grinds, and sands repaired surfaces, using power tools and hand tools.
- Paints and sands repaired surface, using paint spray gun and motorized sander.
- Measures and marks vinyl material and cuts material to size for roof installation, using rule, straightedge, and hand shears.
- Soaks fiberglass matting in resin mixture and applies layers matting over repair area to specified thickness.
- Peels separating film from repair area and washes repaired surface with water.
- Cuts and tapes plastic separating film to outside repair area to avoid damaging surrounding surfaces during repair procedure.
- Reads specifications or confers with customer to determine custom modifications to alter appearance of vehicle.
- Removes upholstery, accessories, electrical window-and-seat-operating equipment, and trim to gain access to vehicle body and fenders.
- Cleans work area, using air hose to remove damaged material and to remove discarded fiberglass strips used in repair procedures.
- Adjusts or aligns headlights, wheels, and brake system.
- Examines vehicle to determine extent and type of damage.
- Mixes polyester resin and hardener to be used in restoring damaged area.
- Cuts away damaged fiberglass from automobile body, using air grinder.
- Removes damaged fenders and panels, using wrenches and cutting torch, and installs replacement parts, using wrenches or welding equipment.
- Fits and secures windows, vinyl roof, and metal trim to vehicle body, using caulking gun, adhesive brush, and mallet.
- Cuts opening in vehicle body for installation of customized windows, using templates, and power shears
- or chisel.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Auto Body and Related Repairers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Apprentice/Helper Helpers--Installation, Maintenance, and Repair Workers Short-term OJT $11.57/hr	**Auto Body Technician** Automotive Body and Related Repairers Long-term OJT $16.79/hr	**Foreman or Supervisor** First-Line Supervisors/Managers of Mechanics, Installers, and Repairers Work experience $25.88/hr	**Shop Manager or Owner**
Detailer Cleaners of Vehicles and Equipment Short-term OJT $8.14/hr	**Painter** Painters, Transportation Equipment Long-term OJT $18.35/hr	**Service Writer**	**Appraisers** Insurance Appraisers, Auto Damage Moderate-term OJT $22.31/hr
Paint-Prep Worker Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons Short-term OJT $11.04/hr			

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Press and Press Brake Machine Setters and Set-Up Operators, Metal and Plastic	Moderate-term OJT	$11.82
Combination Machine Tool Setters and Set-Up Operators, Metal and Plastic	Moderate-term OJT	$11.88
Engine and Other Machine Assemblers	Work experience	$12.79
Farm Equipment Mechanics	Long-term OJT	$14.41
Terrazzo Workers and Finishers	Long-term OJT	$15.63
Cement Masons and Concrete Finishers	Long-term OJT	$16.22
Automotive Body and Related Repairers	Long-term OJT	$16.79
Mechanical Door Repairers	Long-term OJT	$17.30
Riggers	Long-term OJT	$18.78
Electric Motor and Switch Assemblers and Repairers	Post-secondary training	$20.00
Electric Meter Installers and Repairers	Long-term OJT	$22.41

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Oscar Llamas

What are some of the job titles you've held previously in this career field?
I have worked in vehicle preparation, which included cleaning, masking, and taping. I have also painted and done panel repair; pretty much anything to do with repairing a vehicle body.

What kind of work do you do in your current job and what do you do in a typical day?
I am the owner of my shop so I pretty much do it all. Specifically, I order parts and supplies, prepare written estimates, manage my crews and set their priorities, speak with customers, inspect the finished work before delivery, and make sure the customer is happy with our work.

What was it that attracted you to this work?
When I was in high school I was in an auto accident. I was responsible for paying for the damage. When I saw how much it would cost to repair some minor damage I figured this was a good job to make some money. I was able to acquire some solid skills at a vocational school while working for a shop. And now, I own my own shop.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
Someone needs to have a real desire to do this kind of work. They need to be willing to put in the effort to get good at what they do. Reliability is important, not only in terms of quality of work, but also to know that person is going to be on-the-job when they are supposed to. Communications is important in the respect of knowing what the customer's expectation is. A person should also have a good aptitude to work with a variety of tools.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Some high schools have some basic classes, and this would be a good starting point to help a person decide if they like to work with cars. There are some very good vocational schools that focus on auto body repair. They usually have some sort of job placement for the top students. The program that I went through had me in class in the morning, and then working in an actual shop in the afternoon. I really think that you need to have discipline and commitment in order to succeed in these programs. The same goes for on-the-job. To be good, you need to be reliable, disciplined and be committed to your work.

What is it that keeps you wanting to do this kind of work?
I really enjoy working on cars, especially when I get into custom work. It is kind of like being an artist in some regards. There is some creativity in the custom work. I take a lot of pride in taking a car that is a mangled mess and restoring it back to factory like condition.

What qualities make for an exceptional Auto Body Repairer?
I can't stress enough how much effort and desire is needed. You can develop the skills with experience, but you really need to be committed to do quality work. Attention to detail is key, and you must be reliable.

Billing, Cost, and Rate Clerks

Billing, Cost and Rate Clerks compile data, compute fees and charges, and prepare invoices for billing purposes. Their duties also include computing costs and calculating rates for goods, services, and shipment of goods; posting data and keeping other relevant records. Their work may involve the use of typing, adding, calculating, and bookkeeping machines. Does not include workers whose primary duty is operation of special office machines such as billing, posting, and calculating machines. Also, does not include workers who calculate charges for passenger transportation (OES 553440).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$6.71 - $17.74/hr	$12.50/hr
Exp'd/After 3 Years:	$12.00 - $25.00/hr	$15.00/hr

Some billing, cost and rate clerks may also receive bonuses.

Hours: Almost all jobs are 40 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■	—	□	—	□	—
Dental Insurance	■■■	—	□	—	□	—
Vision Insurance	■■■	—	■	—	□	—
Life Insurance	■■■	—	□	—	□	—
Sick Leave	■■■■	—	□	—	□	—
Vacation	■■■■■	—	□	—	□	—
Retirement	■■	—	■	—	□	—
Child Care	□	—	□	—	□	—

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Almost all employers require a high school diploma for job entry.

Experience: Almost all employers require or prefer 6-24 months of prior experience. A few employers are willing to accept training as a substitute for experience.

Training: Almost all employers report that word processing skills are important. Most report that spreadsheet skills are also important. Employers generally provide on-the-job training for this occupation, although related training programs are available. Refer to Billing Clerks in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find inexperienced but qualified applicants, and very difficult to find qualified applicants with prior experience. This indicates a **good outlook** for job seekers without prior experience, and a **very good outlook** for those who are fully experienced. Annual turnover is estimated to be low (10-19%).

Size of Occupation

Medium. There are approximately 400 - 490 billing clerks currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 90% are female. Few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 28 employees in this occupation.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. Less than 10 job openings are projected per year due to a net increase in occupation size. About 5-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of billing clerks is expected to grow about as fast as the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: In a wide variety of industries, with more than half employed by health care providers and organizations. Nationally, less than 1% of all billing clerks are self-employed.

Methods Used to Fill Job Openings: Almost all employers recruit applicants through newspaper advertisements and/or fill openings by hiring employee referrals. Some also fill openings by hiring referrals from colleges and universities, through word of mouth, and/or through in-house promotion or transfer.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of administrative and clerical procedures and systems such as word processing systems, filing and records management systems, stenography and transcription, forms design principles, and other office procedures and terminology (4.66)
- Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (4.16)
- Knowledge of economic and accounting principles and practices, the financial markets, banking, and the analysis and reporting of financial data (4.16)

Skills:
- Using mathematics to solve problems (4.50)
- Understanding written sentences and paragraphs in work related documents (4.00)
- Complex problem solving is used in identifying complex problems and reviewing related information so that options may be developed and evaluated, and solutions may be put into action. (3.83)

Abilities:
- The ability to add, subtract, multiply, or divide quickly and correctly (5.00)
- The ability to understand and organize a problem and then to select a mathematical method or formula to solve the problem (4.83)
- The ability to communicate information and ideas in writing so others will understand (4.66)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Utilizes word processing software such as Microsoft Word or Word Perfect at a basic/introductory level.
- Utilizes spreadsheet software such as Microsoft Excel or Lotus 1-2-3 at a basic/introductory level.
- Utilizes contact management software such as Microsoft Outlook, ACT! or Goldmine for e-mail, address book, calendar, and task management.
- Computes amounts due from such documents as purchase orders, sales tickets, and charge slips.
- Updates manuals when rates, rules, or regulations are amended.
- Estimates market value of product or services.
- Answers mail and telephone inquiries regarding rates, routing, and procedures.
- Consults manuals which include rates, rules, regulations, and government tax and tariff information.
- Compiles cost factor reports, such as labor, production, storage, and equipment.
- Verifies compiled data from vendor invoices to ensure accuracy and revises billing data when errors are found.
- Resolves discrepancies on accounting records.
- Types billing documents, shipping labels, credit memorandums, and credit forms, using typewriter or computer.
- Keeps records of invoices and support documents.
- Compiles and computes credit terms, discounts, and purchase prices for billing documents.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Billing, Cost, and Rate Clerks

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
File Clerk File Clerks Short-term OJT $10.74/hr	**Billing Clerk** Billing, Cost, and Rate Clerks Moderate-term OJT $14.04/hr	**Supervisor or Office Manager** First-Line Supervisors, Administrative Support Work experience $21.85/hr	**Billing Services Company Owner**
General Office Clerk Office Clerks, General Post-secondary training $12.18/hr	**Secretary** Secretaries, Except Legal, Medical, and Executive Post-secondary training $14.34/hr	**Bookkeeper** Bookkeeping, Accounting, and Auditing Clerks Moderate-term OJT $15.31/hr	
Receptionist Receptionists and Information Clerks Short-term OJT $11.31/hr	**Insurance Clerks** Insurance Policy Processing Clerks Moderate-term OJT $18.85/hr	**Accountant** Accountants Bachelor degree $25.71/hr	

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Tellers	Moderate-term OJT	$10.52
Data Entry Keyers	Post-secondary training	$11.85
Office Clerks, General	Post-secondary training	$12.18
Statement Clerks	Moderate-term OJT	$14.04
Billing, Cost, and Rate Clerks	Moderate-term OJT	$14.04
Bill and Account Collectors	Moderate-term OJT	$14.57
Bookkeeping, Accounting, and Auditing Clerks	Moderate-term OJT	$15.31
Loan Interviewers and Clerks	Short-term OJT	$15.74
Brokerage Clerks	Moderate-term OJT	$17.76
Insurance Claims Clerks	Moderate-term OJT	$18.85
Insurance Policy Processing Clerks	Moderate-term OJT	$18.85

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Casey Spranger

What are some of the job titles you've held previously in this career field?
I am currently the owner of my business. In the past I have been a data entry clerk, and a manager.

What kind of work do you do in your current job and what do you do in a typical day?
My current job consists of medical billing for a variety of doctors in a variety of specialties. The billing consists of data entry, paper and electronic submission of claims, and follow-up. The follow-up is derived from an Accounts Receivable report also called an aging report, which lists outstanding claims. A typical day is spent conducting data entry including new charges and payments and posting them against a patient account. I also have patient contact via the telephone to answer questions about their bill.

What was it that attracted you to this work?
I started when I was in high school as a part-time file clerk for a medical billing office. I then progressed through the ranks as positions became available. I found that I really liked the work, and that I was good at it.

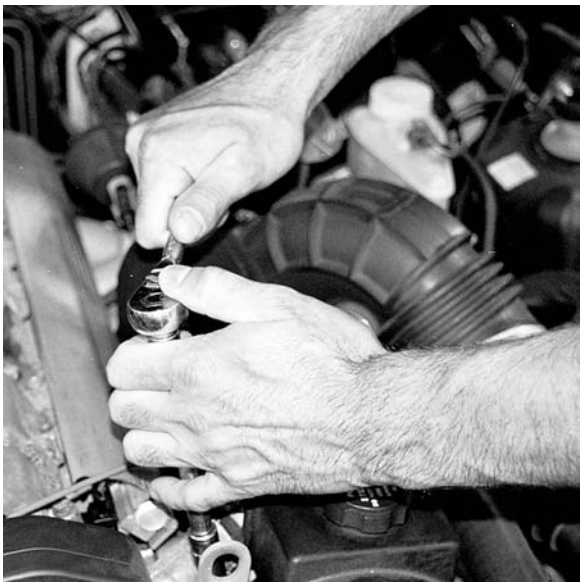
In your opinion, what knowledge, skills, and abilities are important in this kind of work?
Someone would need some basic skills such as typing since there is a lot of data entry, phone etiquette since you have a lot of patient contact, and attention to detail. It is really important that proper coding be used when entering the billing. Another key skill is the ability to use a 10 key. If someone goes into this particular field then experience and knowledge of medical terminology would be very helpful.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I think that the best way to learn this job is to get in and do it. For this reason I think someone should try and get an entry-level job working for a billing agency. There are also college courses that teach medical billing, but it is pretty general.

What is it that keeps you wanting to do this kind of work?
I find that the work is very challenging and always evolving. There are always new policies and regulations in medical billing that a person needs to stay on top of. I like that it is always a little bit different.

What qualities make for an exceptional Billing Clerk?
I think someone who pays close attention to detail, can handle repetitive tasks, has good customer service skills, and likes delving into government regulations would be a good fit for this occupation.

Bus and Truck Mechanics and Diesel Engine Specialists



Bus and Truck Mechanics and diesel engine specialists repair and maintain the operating condition of trucks, buses, and all types of diesel engines. Includes mechanics working primarily with automobile diesel engines (OES 853110).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.75 - $15.50/hr	$9.00/hr
New Hires/Exp'd:	$7.00 - $19.18/hr	$13.00/hr
Exp'd/After 3 Years:	$10.00 - $25.00/hr	$20.00/hr

Hours: Of the employers surveyed, all report that jobs are 40-45 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■	—	■■	—	■	—
Dental Insurance	■■	—	■■	—	■	—
Vision Insurance	■■	—	■■	—	■	—
Life Insurance	■■	—	■	—	■	—
Sick Leave	■■■	—	□	—	□	—
Vacation	■■■■■	—	□	—	■	—
Retirement	■■	—	■■	—	■	—
Child Care	□	—	□	—	□	—

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Almost all employers require a high school diploma or equivalent for job entry. A few are willing to accept less than a high school level education.

Experience: Almost all employers require or prefer 1-3 years of prior experience. Many employers are willing to accept training as a substitute for experience. Some employers do not require prior experience.

Training: Some employers report that word processing skills are important. Refer to Heavy Equipment Repair Specialists in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is very difficult to find applicants who meet their hiring standards. This indicates a **very good outlook** for qualified job seekers. Annual turnover is estimated to be moderate (20-29%).

Size of Occupation

Medium. There are approximately 340 – 415 diesel mechanics currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate less than 5% are female. A few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 70 employees in this occupation.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. Less than 10 job openings are projected per year due to a net increase in occupation size. About 5-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of diesel mechanics and service technicians is expected to increase about as fast as the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Local government agencies, trucking companies, school districts, diesel and truck repair shops, truck rental and leasing companies, and wholesalers of industrial machinery and equipment. Nationally, about 4% of all diesel mechanics are self-employed.

Methods Used to Fill Job Openings: Many employers fill openings by hiring employee referrals, by hiring unsolicited applicants, and/or by hiring referrals from public and private schools. Some also recruit applicants through newspaper advertisements, fill openings through in-house promotion or transfer, through Internet job listings, and/or through word of mouth.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (4.83)
- Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (3.00)

Skills:
- Repairing machines or systems using the needed tools (4.66)
- Determining what is causing an operating error and deciding what to do about it (4.33)
- Performing routine maintenance and determining when and what kind of maintenance is needed (4.33)

Abilities:
- The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem. (4.20)
- The ability to detect or tell the difference between sounds that vary over broad ranges of pitch and loudness (3.60)
- The ability to read and understand information and ideas presented in writing (3.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Inspects defective equipment and diagnoses malfunctions, using test instruments, such as motor analyzers, chassis charts, and pressure gauges.
- Reconditions and replaces parts, pistons, bearings, gears, and valves.
- Attaches test instruments to equipment and reads dials and gauges to diagnose malfunctions.
- Changes oil, checks batteries, repairs tires and tubes, and lubricates equipment and machinery.
- Adjusts brakes, aligns wheels, tightens bolts and screws, and reassembles equipment.
- Examines and adjusts protective guards, loose bolts, and specified safety devices.
- Operates valve-grinding machine to grind and reset valves.
- Reads job orders and observes and listens to operating equipment to ensure conformance to specifications or to determine malfunctions.
- Disassembles and overhauls internal combustion engines, pumps, generators, transmissions, clutches, and rear ends.
- Inspects and verifies dimensions and clearances of parts to ensure conformance to factory specifications.
- Inspects, repairs, and maintains automotive and mechanical equipment and machinery, such as pumps and compressors.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path: Bus and Truck Mechanics and Diesel Engine Specialists

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Helper Helpers--Installation, Maintenance, and Repair Workers Short-term OJT $11.57/hr	**Mechanic – Journey Level** Bus and Truck Mechanics and Diesel Engine Specialists Long-term OJT $18.69/hr	**Head or Lead Mechanic**	**Service Manager**
Apprentice		**Foreman or Supervisor** First-Line Supervisors/Managers of Mechanics, Installers, and Repairers Work experience $25.88/hr	**Repair Shop Owner**

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Extruding and Drawing Machine Setters, Operators, and Tenders, Metal and Plastic	Moderate-term OJT	$10.53
Extruding, Forming, Pressing, and Compacting Machine Setters and Set-Up Operators	Moderate-term OJT	$11.27
Outdoor Power Equipment and Other Small Engine Mechanics	Long-term OJT	$13.49
Welding Machine Setters and Set-Up Operators	Moderate-term OJT	$14.33
Motorcycle Mechanics	Long-term OJT	$15.70
Motorboat Mechanics	Long-term OJT	$15.78
Bus and Truck Mechanics and Diesel Engine Specialists	Long-term OJT	$18.69
Keyboard Instrument Repairers and Tuners	Post-secondary training	$18.94
Central Office and PBX Installers and Repairers	Post-secondary training	$21.09
Station Installers and Repairers, Telephone	Post-secondary training	$21.09
Auxiliary Equipment Operators, Power	Long-term OJT	$24.32

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Michael Rexroad

What are some of the job titles you've held previously in this career field?
Well I've worked for four major companies, all supervisory capacity. I stayed for 11 years at the company I started with. I started out as working in one of the granaries, which is how I got my class A license. I drove some, welded, worked on equipment- whatever it took to keep the company going. As time came and went I went to work driving for them, which was my main forte. I drove for 8 years solid. After I got out of the truck they asked me if I would like to come in and start running operations and so I wound up back in the grain mill again where I had originally started. But this time I was in charge of 2 granaries, and eventually they asked me to take on the truck shop. As head of the shop, I was the Safety Manager and had grown into the number 3 spot in the company.

What kind of work do you do in your current job and what do you do in a typical day?
I am the owner of Mike's truck repair. At the age I am at, my job is mostly to oversee the people I have working for me, and to see to it that the jobs are done correctly without complications from customers. I go out and promote, bring in new work and have basically become what you would call the professional of this type of work. I still have to be able to diagnose problems with equipment and to let the customer know what it's gonna take to repair it. I still do the nuts and bolts thing; I still get my hands dirty. That's my choice, but I am not doing the real heavy work anymore. Most of my duties now revolve around paperwork in the day and age we're in.

What was it that attracted you to this type of work?
I've always been involved with the mechanical. Ever since I was a little kid I tore things apart and put them back together. When I was very young I had an uncle who was a heavy equipment mechanic and taught me a lot. As life came and went, that's what I became. To me it was interesting to tear stuff apart and put it back together.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
It has changed from what it used to be. It's more electronic but the basic skills are still needed. You still have to be able to understand the components of diesel engines and how they work together but you also have to understand and accept the way the electronics are used in a modern engine. You should also be able to listen to people who can teach you what they know; everyone that you deal with in this field has something to offer and a lot of people don't realize that.

If you are going to start out, you need to go to a tech school
They will give you basic fundamentals they will not make you a diesel mechanic.. It takes a lot to become, you have to basically sleep breath and eat that for a couple of years while you are young so you get the knowledge and listen to people that are a lot older than you, don't be afraid to listen to what they have to say.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
You have the schools down in Arizona and you have the schools in Colorado. If you go into the trade school and take the courses you should find yourself a company that you can get in with. You want to get in with a company that has a big fleet of trucks so you can maneuver and have different variations of motors to learn on and understand what is going on in this business. They will throw you to the wolves and they will actually put you in a hands-on working situation. All the books in the world can show you, but if you don't put your hands on it and do it, you are not going to retain it.

What is it that keeps you wanting to do this kind of work?
I actually make pretty good money at it and always have. It's a hard life; I mean it can beat you up. But you can make it what you want it to be. If you want to make it hard on yourself you can, if you want to make it easy on yourself you can. It just depends on what part of the field you want to go into. You want to specialize in engines, transmissions, rear ends; you have more than one field in here; 8 or 10 to be specific. I've been lucky in that respect because I was able to get in all aspects of it. I can practically rebuild an entire (diesel) truck.

What qualities make for an exceptional Diesel Mechanic?
Honesty is one. If they lie on their application I wouldn't even talk to them after that. The funny thing about applications is they don't give you a whole lot of information, which is why we have 60-90 day trials. So basically attitude, perseverance, honesty, and integrity go a long way. You have to be able to be honest with your boss and say, "I made a mistake". Bosses understand, we are humans we are subject to that so you are looking for 4/5 different things here. Someone who was willing to sleep, breathe, and eat diesel engine work for a couple of years while they were young also makes great mechanics. When they are coming straight out of school it's a great time to grab them because they are really pumped up and ready to go to work. They should have not only the fundamentals down but the application down as well. The most common thing that you find out with people is if you show them and give them the chance to learn they will go a long way in their lifetime.

Cabinetmakers and Bench Carpenters

Cabinetmakers and Bench Carpenters cut, shape, and assemble wooden articles, such as store fixtures, office equipment, cabinets, and high-grade furniture. They set up and operate a variety of machines, such as power saws, jointers, mortisers, tenoners, molders, and shapers to cut and shape parts from wood stock (OES 893110).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.50 - $10.00/hr	$8.33/hr
New Hires/Exp'd:	$8.00 - $20.00/hr	$12.00/hr
Exp'd/After 3 Years:	$14.00 - $25.00/hr	$18.00/hr

A few cabinetmakers may also receive bonuses.

Hours: Almost all jobs are 40-45 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■	—	■■	—	■	—
Dental Insurance	■	—	■	—	■	—
Vision Insurance	■	—	■	—	■	—
Life Insurance	■	—	■	—	□	—
Sick Leave	■■	—	□	—	■	—
Vacation	■■■■	—	□	—	■	—
Retirement	■	—	■	—	□	—
Child Care	□	—	□	—	□	—

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Most employers are willing to accept less than a high school level education for job entry. Some require a high school diploma or equivalent.

Experience: Most employers require 1-4 years of prior experience. Some employers are willing to accept training as a substitute for experience. Some employers do not require prior experience.

Training: Training programs are available for this occupation, but do not necessarily eliminate the need for apprenticeship or on-the-job training. Refer to Cabinetmakers in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is very difficult to find applicants who meet their hiring standards. This indicates a **very good outlook** for qualified job seekers. Annual turnover is estimated to be moderate (20-29%).

Size of Occupation

Small. There are approximately 170 - 210 cabinetmakers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 5% are female. A few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 16 employers surveyed representing 77 employees in this occupation.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. Less than 10 job openings are projected per year due to a net increase in occupation size. Less than 10 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of woodworkers is expected to decline through the year 2008.

Other Information

Where the Jobs Are: Cabinet-making firms and manufacturers of wood furniture and fixtures. Nationally, about 11% of all cabinetmakers are self-employed.

Methods Used to Fill Job Openings: Most employers fill openings by hiring employee referrals and/or by hiring unsolicited applicants. Some also recruit applicants through newspaper advertisements and/or fill openings through word of mouth.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of materials, methods, and the appropriate tools to construct objects, structures, and buildings (4.83)
- Knowledge of design techniques, principles, tools and instruments involved in the production and use of precision technical plans, blueprints, drawings, and models (3.33)
- Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (3.33)

Skills:
- Controlling operations of equipment or systems (4.16)
- Determining the kind of tools and equipment needed to do a job (4.00)
- Installing equipment, machines, wiring, or programs to meet specifications (3.83)

Abilities:
- The ability to read and understand information and ideas presented in writing (3.60)
- The ability to quickly make coordinated movements of one hand, a hand together with its arm, or two hands to grasp, manipulate, or assemble objects (3.40)
- The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged (3.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Sets up and operates machines, including power saws, jointers, mortisers, tenoners, molders, and shapers, to cut and shape woodstock.
- Sands and scrapes surfaces and joints of articles to prepare articles for finishing.
- Dips, brushes, or sprays assembled articles with protective or decorative materials, such as stain, varnish, or lacquer.
- Studies blueprints, drawings, and written specifications of articles to be constructed or repaired and plans sequence of performing such operations.
- Installs hardware, such as hinges, catches, and drawer pulls, using hand tools.
- Marks dimensions of parts on paper or lumber stock, following blueprints, and matches lumber for color, grain, and texture.
- Trims component parts of joints to ensure snug fit, using hand tools, such as planes, chisels, or wood files.
- Glues, fits, and clamps parts and subassemblies together to form complete unit.
- Bores holes for insertion of screws or dowel by hand or using boring machine.
- Drives nails or other fasteners to joints of articles to prepare articles for finishing.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Cabinetmakers and Bench Carpenters

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Apprentice	**Cabinetmaker** Cabinetmakers and Bench Carpenters Long-term OJT $11.18/hr	**Foreman or Supervisor** First-Line Supervisors and Manager/Supervisors-Construction Trades Workers Work experience $27.53/hr	**Shop Manager or Owner**
Helper Helpers--Carpenters Short-term OJT $12.08/hr		**Designer** Commercial and Industrial Designers Bachelor degree $27.66/hr	

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Cutters and Trimmers, Hand	Short-term OJT	$8.43
Painting, Coating, and Decorating Workers	Short-term OJT	$9.90
Electrolytic Plating and Coating Machine Setters and Set-Up Operators, Metal and Plastic	Moderate-term OJT	$10.93
Cabinetmakers and Bench Carpenters	Long-term OJT	$11.18
Model Makers, Wood	Long-term OJT	$12.64
Patternmakers, Wood	Long-term OJT	$13.65
Brazers	Short-term OJT	$14.34
Roof Bolters, Mining	Long-term OJT	$20.07
Tile and Marble Setters	Long-term OJT	$20.28
Rough Carpenters	Long-term OJT	$20.30
Drywall Installers	Long-term OJT	$20.31

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Victor Craig

What are some of the job titles you've held previously in this career field?
I have been an owner, a supervisor, and a foreman.

What kind of work do you do in your current job and what do you do in a typical day?
I build custom designed coffee tables and end tables for clientele that are comfortable with paying thousands of dollars for unique furniture. A typical day is reviewing design specifications, and constructing the furniture accordingly. I use a variety of wood working tools including power and hand tools.

What was it that attracted you to this work?
I have been doing this type of work for over 35 years. I started in my dad's shop as a kid doing clean up and such. He taught me a lot of the skills that I have now.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
A person would need a basic understanding of wood working tools. Knowledge of safety is probably the most important, especially when dealing with the various power tools in this environment. Someone should also be comfortable with reading a tape measure. It seems simple enough, but it is important to recognize the various markings on the tape. Someone should also be very comfortable working around hand and power tools designed for woodworking.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
A person could get a good foundation from high school or vocational school woodworking classes. Getting on with someone as an apprentice and getting some OJT (on-the-job training) would also be beneficial. The best thing is to try to get an entry-level position and learn the trade from those with the experience.

What is it that keeps you wanting to do this kind of work?
Basically, I love it. I get a great deal of satisfaction in seeing how please the customer is with the finished result of my work.

What qualities make for an exceptional Cabinetmaker?
The person would need a degree of awareness of their surroundings; especially since the power tools are noisy and can create a dangerous environment. Attention to detail is important especially when crafting fine furniture.

Combined Food Preparation and Service Workers

Combined Food Preparation and Service Workers do both food preparation and food service. Does not include workers who spend more than 80% of their time in only one of these two areas (OES 650410).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.25 - $7.00/hr	$6.38/hr
New Hires/Exp'd:	$6.25 - $9.00/hr	$7.00/hr
Exp'd/After 3 Years:	$6.25 - $12.00/hr	$9.00/hr

These wages do not include tips.

Hours: Many jobs are 35-45 hours per week. Many other jobs are 20-30 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■	■	■	□	■	■
Dental Insurance	■	■	■	□	■	■
Vision Insurance	□	□	■	□	□	□
Life Insurance	□	□	■	□	■	■
Sick Leave	■	■	□	□	□	□
Vacation	■■	■■	□	□	□	□
Retirement	□	□	■	■	□	□
Child Care	□	□	□	□	□	□

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Most employers are willing to accept less than a high school level education for job entry. Some require a high school diploma or equivalent.

Experience: Many employers do not require prior experience. Many others require or prefer 1-12 months of prior experience.

Training: Employers generally provide on-the-job training for this occupation.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find applicants who meet their hiring standards. This indicates a **good outlook** for qualified job seekers. Annual turnover is estimated to be very high (40% or more).

Size of Occupation

Very Large. There are approximately 2,870 – 3,510 combined food prep and service workers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 60% are female. Few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 170 employees in this occupation.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. About 35-45 job openings are projected per year due to a net increase in occupation size. About 160-195 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of food and beverage service occupations is expected to grow about as fast as the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Fast food restaurants, grocery stores, delicatessens, sandwich shops, school districts, and other businesses in which workers do both serving and food preparation. Nationally, less than 1% of all combined food prep and service workers are self-employed.

Methods Used to Fill Job Openings: Almost all employers fill openings by hiring unsolicited applicants. Most also fill openings by hiring employee referrals. Many fill openings by hiring referrals from public and private schools. Some recruit applicants through newspaper advertisements.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques (4.50)
- Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (3.33)
- Knowledge of principles and methods involved in showing, promoting, and selling products or services. This includes marketing strategies and tactics, product demonstration and sales techniques, and sales control systems (3.16)

Skills:
- Actively looking for ways to help people (4.50)
- Listening to what other people are saying and asking questions as appropriate (4.33)
- Talking to others to effectively convey information (4.00)

Abilities:
- The ability to make fast, simple, repeated movements of the fingers, hands, and wrists (3.83)
- The ability to quickly make coordinated movements of one hand, a hand together with its arm, or two hands to grasp, manipulate, or assemble objects (3.66)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (3.50)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Selects food items from serving or storage areas and places food and beverage items on serving tray or in takeout bag.
- Cooks or re-heats food items, such as french fries.
- Receives payment.
- Notifies kitchen personnel of shortages or special orders.
- Requests and records customer order and computes bill.
- Makes and serves hot and cold beverages or desserts.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Combined Food Preparation and Service Workers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Busperson Dining Room and Cafeteria Attendants and Bartender Helpers Short-term OJT $6.80/hr	**Food Prep and Service Worker** Combined Food Preparation and Serving Workers, Including Fast Food Short-term OJT $7.26/hr + tips	**Cook – Restaurant** Cooks, Restaurant Moderate-term OJT $10.04/hr	**Restaurant Manager** Food Service Managers Work experience $19.89/hr
Dishwasher Short-term OJT $6.88/hr	**Food Prep Worker** Food Preparation Workers Short-term OJT $8.36/hr	**Cook – Cafeteria** Cooks, Institution and Cafeteria Moderate-term OJT $10.84/hr	**Restaurant Owner**
Host/Cashier Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop Short-term OJT $7.52/hr	**Food Server** Waiters and Waitresses Short-term OJT $7.19/hr + tips	**Lead or Head Cook** Chefs and Head Cooks Work experience $16.06/hr	

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Waiters and Waitresses	Short-term OJT	$7.19
Combined Food Preparation and Serving Workers, Including Fast Food	Short-term OJT	$7.26
Gaming and Sports Book Writers and Runners	Short-term OJT	$7.57
Food Preparation Workers	Short-term OJT	$8.36
Bartenders	Short-term OJT	$8.43
Cashiers	Short-term OJT	$9.08
Slaughterers and Meat Packers	Moderate-term OJT	$9.58
Gaming Dealers	Short-term OJT	$9.65
Counter and Rental Clerks	Short-term OJT	$9.73
Tellers	Moderate-term OJT	$10.52
Word Processors and Typists	Post-secondary training	$14.35

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Cheryl Steele

What are some of the job titles you've held previously in this career field?
I was a manager for Subway, which is very similar to this, but paced a little faster. I have held the shift manager position for a Del Taco restaurant. I was a waitress in a restaurant when I first moved here. I've pretty much kept the jobs I have had for awhile; I haven't changed jobs too often.

What kind of work do you do in your current job and what do you do in a typical day?
I start out with a lot of prep in the morning, a lot of prep. We have a lot of catering orders we have to get out in the morning, so you have to do everything to get those together and get them out in a timely fashion. I deal with a lot of clients in the morning, tending to their needs, and getting the store ready for the day. I make sure everything is ready for lunch…that it's presentable and tastes right, that kind of good stuff. As far as the catering aspect of it goes, it is very hands on. If you actually are working the catering, you're involved in setting up and serving. You have to make sure that everything looks nice, that your utensils match everything, etc. Personality, quality, and attitude all come into play.

What was it that attracted you to this work?
I like the social aspect of it. You get to meet a lot of people, especially when you do the catering. We cater for a lot of people, so it is a good way to meet other people and perhaps get your foot into the door for something better or on the side.

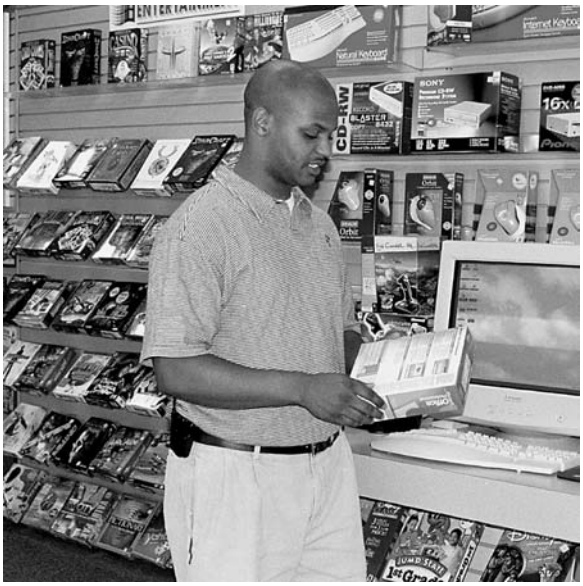
In your opinion, what knowledge, skills, and abilities are important in this kind of work?
You have to be very organized and self-motivated. You need to be very people oriented and have a good personality. You have to have the ability to work under pressure. There are times when it gets very hectic, especially during the holidays when we have a lot of catering going out. You have to learn to deal with the temper sometimes. Especially working with this Italian family (laughs). You have to be able to stay focused and concentrate on what you need to get done. I think the main thing is you just need to be self-motivated. It is a very hands-on job and a lot of it is common sense. You will learn cook things you have never cooked before. You have to have an open mind as far as taste goes. Before working here I had never eaten a marinated anything! Customer service is a must. You have to be very attentive to the customers. As far as the catering is concerned, you need to be very neat and pay close attention to detail. There is a lot of money to be made in catering, but you have to take pride in your work. When you cater a wedding, the people are going to remember that day forever. If you do a good job and they're impressed, you will get many recommendations from them, as well as the people who attended the wedding. You have to have good customer service first of all; even just getting experience with this in the fast food industry is great. You should work some place where you can get customer service experience. Sometimes it is hard; you have to bit your tongue. There are days you don't feel good, and you don't want to be here. So if you are not a people person this is a hard job to do. People come in here because they are hungry, they do not care if you are having a bad day. It helps to get to know your customers personally. The same people come in here, and they really like it when you know automatically know what they want.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Some of the culinary schools offer programs that could be helpful if you were going into catering. Catering is a huge field. Getting a job in a small catering business or deli offers great experience. Here you get the hands on experience and knowledge. It would be very possible to take the experience from here and open a business of your own. You meet a lot of people and gain a lot of good business techniques from working in a small establishment.

What is it that keeps you wanting to do this kind of work?
I like the people I work for, the family. They make me feel comfortable; it is not just a job for me. It is like a typical family, some days we get a long and some days we don't. Plus our customers are really nice. Just like with my other jobs, you get to know the customer base, and then when you are gone, you miss them. It's actually really neat when one of them will come in here getting all excited because the have found you again and saying "Oh my gosh, where have you been?". You develop these personal relationships that are nice.

What qualities make for an exceptional Food Prep and Service Worker?
Enthusiasm for learning new things, for learning new projects. Being able to use your imagination in putting things together. You have to be able to put your personal touches on things. Especially like Tony does; he has been doing this for so long that he can just make phenomenal things out of food. Like those gorgeous watermelon baskets. You have to have confidence. It is your taste and your opinions that you are using to present this food that ultimately is representing you and your business. Your work is representing the whole company to a certain degree, and so you have to have confidence. When people see your food at a function, if it is impressive, later on they will recall it. You have to be able to take pride in your work; you can't just slop it together. You have to be able to ask yourself "Would you want to eat this?" and then answer that honestly. You have to take your time when working and have high standards. You need to be able to pay close attention to details. You have to be willing to watch and learn.

Computer and Software Support Technicians



Computer and Software Support Technicians assist in monitoring operations of computers and peripheral equipment. They have knowledge of a variety of word processing, spreadsheet, and database applications. They assist and provide training in the operation of computers, peripheral equipment, and software; enter commands to help computer operators identify and correct errors; revise input data and programs; recommend changes in programs, in routines, and in quality control standards to improve computer operating efficiency (Modified DOT 213.132-999).

Wages and Benefits

NON-UNION	Range	Median
New Hires/Inexp'd:	$7.00 - $23.97/hr	$18.34/hr
New Hires/Exp'd:	$8.00 - $38.36/hr	$17.26/hr
Exp'd/After 3 Years:	$12.00 - $38.36/hr	$24.27/hr

UNION	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$13.44 - $20.46/hr	$14.45/hr
Exp'd/After 3 Years:	$15.50 - $22.70/hr	$17.42/hr

Hours: Almost all jobs are 40 hours per week. A few jobs are 20-30 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■	■	■■	■	□	□
Dental Insurance	■■■	■	■■	■	□	□
Vision Insurance	■■■	□	■■	■	□	□
Life Insurance	■■■	□	■	■	□	□
Sick Leave	■■■■	■	■	■	□	□
Vacation	■■■■	■	■	■	□	□
Retirement	■■	□	■	■	■	□
Child Care	■	□	□	□	□	□

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Many employers require an associate degree for job entry. Some are willing to accept a high school diploma or equivalent. Some others are willing to accept less than a high school level education.

Experience: Almost all employers require or prefer 6-36 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Almost all employers report that word processing and spreadsheet skills are important. Most also report that database skills are important. Some report that desktop publishing and PhotoShop skills are important. Refer to Computer Support Specialists in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find applicants who meet their hiring standards. This indicates a **good outlook** for qualified job seekers. Annual turnover is estimated to be low (10-19%).

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 78 employees in this occupation.

Size of Occupation

Small. There are approximately 250 – 350 computer and software support technicians currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 25% are female. A few jobs are union.

Employment Trends

Insufficient data; however, most employers surveyed expect their employment for this occupation to remain stable. Insufficient data to estimate separations (workers retiring or leaving the occupation). Nationwide, within the computer and data processing services industry projected growth varies by sector. Among the fastest growing sectors should be client-server applications, consulting and integration services, prepackaged software, and end-user support. Advances in software technology and expanding Internet usage will increase the need for software support and services.

Other Information

Where the Jobs Are: In a variety of industries, including computer hardware and software manufacturers, computer and data processing services, educational institutions, government agencies, and manufacturers/retailers of computer equipment.

Methods Used to Fill Job Openings: Many employers recruit applicants through Internet job listings and/or through newspaper advertisements. Many also fill openings by hiring employee referrals and/or by hiring unsolicited applicants. Some fill openings through word of mouth and/or through in-house promotion or transfer.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (4.20)
- Knowledge of instructional methods and training techniques including curriculum design principles, learning theory, group and individual teaching techniques, design of individual development plans, and test design principles (3.00)

Skills:
- Determining what is causing an operating error and deciding what to do about it (4.83)
- People use quality control analysis skills to conduct tests and inspections. This skill may be applied to products, services, and processes so that a company can evaluate quality or performance level. (4.83)
- Analyzing needs and product requirements to create a design (4.83)

Abilities:
- The ability to read and understand information and ideas presented in writing (4.40)
- The ability to communicate information and ideas in speaking so others will understand (4.40)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Troubleshoots, analyzes problem and researches solutions.
- Isolates problem causes and the information needed to diagnose the problem.
- Conducts risk analysis of problems solutions.
- Queries databases using proper keywords.
- Identifies, tests and implements solutions that match actual use conditions.
- Documents clear and accurate hardware and software problems and resolutions.
- Enters commands and observes system functioning to verify correct operations and detect errors.
- Listens to user/customer and asks appropriate, clear questions to gather needed information.
- Organizes, summarizes and analyzes user's statement of the problem.
- Walks users through the steps required to solve a problem over the telephone or via local or network server.
- Manages demands from multiple users to serve them in a timely manner.
- Follows data security procedures in solving customer problem.
- Develops working relationships with customers.
- Solicits customer feedback and uses the information to improve quality of service.
- Documents and communicates customer feedback and requests and tells management what customers want and what gives customers the most trouble.
- Tailors training to customer need and presents training to customers.
- Works with hardware installation and configuration to resolve hardware operation and application problems.
- Works with software installation and configuration to resolve software operation and application problems.
- Utilizes computer application flow charts.
- Utilizes diagnostic software.
- Utilizes search engines and online tools.
- Utilizes word processing software such as Microsoft Word or Word Perfect at an intermediate level.
- Utilizes spreadsheet software such as Microsoft Excel or Lotus 1-2-3 at an intermediate level.
- Utilizes database software such as Microsoft Access or FileMaker Pro at an intermediate level.
- Utilizes contact management software such as Microsoft Outlook, ACT! or Goldmine at an advanced level for e-mail, address book, calendar, and task management.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Computer and Software Support Technicians

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Technician Computer Support Specialists Bachelor degree $22.49/hr	**Supervisor**	**Help Desk Manager** Computer/Information Systems Managers Bachelor degree + work exp $44.34/hr	**Engineer** Computer Software Engineers, Applications Bachelor degree $39.47/hr
		Programmer Computer Programmers Bachelor degree $32.96/hr	

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Computer Network Technicians	Post-secondary training	—
Computer Support Specialists	Work experience	$22.49
First-Line Supervisors/Managers of Mechanics, Installers, and Repairers	Work experience	$25.88
Marine Engineers	Bachelor degree	$27.49
Surveyors	Bachelor degree	$27.57
Network and Computer Systems Administrators	Bachelor degree	$28.65
Network Systems and Data Communications Analysts	Bachelor degree	$32.52
Chemical Engineers	Bachelor degree	$34.69
Computer Software Engineers, Systems Software	Bachelor degree	$38.93
Computer Software Engineers, Applications	Bachelor degree	$39.47
Computer Hardware Engineers	Bachelor degree	$39.67

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Mary Eva Laner

What are some of the job titles you've held previously in this career field?
Well, none. I was previously an accountant. I was a senior accountant and then a manager of accounting, then I became a systems analyst. We were upgrading our software and they wanted a representative from each division to work on the team to make sure that their requirements were incorporated into the design of the software. I represented our division and liked it so much that I just took on a job as an analyst. You needed accounting experience and I developed the computer skills while I was working on the team.

What kind of work do you do in your current job and what do you do in a typical day?
I support the software. Specifically I support the accounts payable and accounts receivable modules, and then peripherally, the general ledgers. If someone has a new functionality that they want, I research that. I write specs for and work with the programmers, and am a liaison between the programmer and the end user. When we have big tasks like upgrades I perform all the testing. We have some companies that are not using the system, and so we introduce those. I will work with the end users to make sure that all their business requirements are going to be configured in the systems when we add on a new company. I have been given projects for this year, so I have been writing interfaces.

What was it that attracted you to this type of work?
That it was not strictly accounting and was not the same thing every month. That it is always something different, and that I have gotten to develop a lot of computer skills. It is just a barrage of tasks that I am assigned to, not just accounting, doing a monthly close, and performing an audit every year.

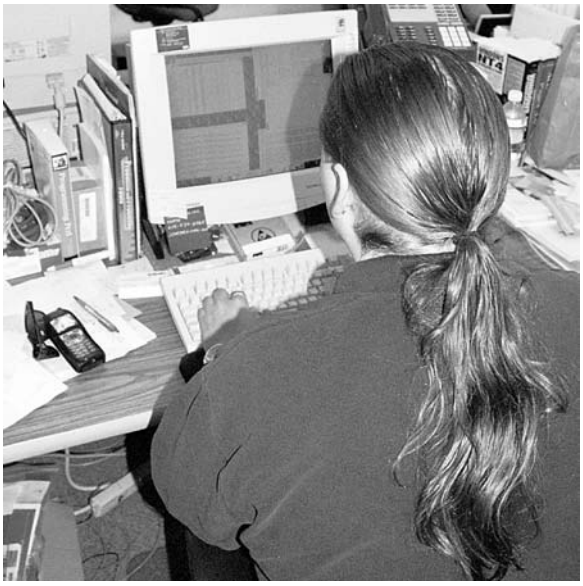
In your opinion, what knowledge, skills, and abilities are important in this kind of work?
Because a Computer Specialist or Systems Analyst, or whatever your title is, is such a broad position, you do need both (computer) systems knowledge, which most of the people have. But you need accounting know how to be in my position. You have to be able to interpret what the operators want and then translate the requests to the programmer. The programmer would not be able to work directly with the end user because they would not speak the same language, and so you need both. You need to be resourceful, you need to not be afraid to go into the system and hunt around. A lot of times you do not know exactly what you're looking for, you're just hunting around, but with somewhat of an educated eye. You can't be afraid of doing trial and error.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Formal education would be wise- a degree in MIS (Management Information Systems) with a minor in finance. Then on-the-job training, and good communication skills; written skills especially because we do do a lot of technical writing. Take some public speaking classes to get over that because you will be asked to train and to give presentations.

What is it that keeps you wanting to do this kind of work?
The pay. You make a very good living, so that is the practical aspect of it. I work with a lot of professional people and there is not one slacker on our team. The only complaint I would have is that some of them just work too hard. They are all very driven, and very bright. It is nice to be in that type of climate. I have learned a lot, although I have not had my background in MIS. Like I said my background is in accounting, but it is interesting to learn how interfaces work or how performance works and so forth.

What qualities make for an exceptional Computer and Software Support Technician?
I think you need good analytical skills, and then of course your formal training. But the ability to communicate it makes a great Tech. It is certainly more common to find someone who knows his or her stuff, but can't necessarily communicate it. When you have both, you have an exceptional person.

Computer Network Technicians



Computer Network Technicians install and maintain personal computers and connect them to local and/or wide area networks (LANs/WANs). Technicians perform troubleshooting, diagnosis, and repair of computers and peripheral equipment; they also work on network related hardware and software problems. They may assign passwords, use manuals, maintain a variety of logs and communicate with network managers or others about specific system problems. In addition, they may provide training and education to other staff on network operations, applications, and usage (Modified DOT 033.162-996).

Wages and Benefits

NON-UNION	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$9.00 - $38.36/hr	$19.18/hr
Exp'd/After 3 Years:	$12.00 - $40.75/hr	$23.01/hr

UNION	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$19.37 - $28.08/hr	$24.17/hr
Exp'd/After 3 Years:	$22.70 - $29.50/hr	$27.33/hr

Hours: Most jobs are 40 hours per week. Some jobs are 20-25 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■	■	■	□	□	□
Dental Insurance	■■■■	■	■	□	□	□
Vision Insurance	■■■■	■	■	□	□	□
Life Insurance	■■■	□	■	□	□	□
Sick Leave	■■■■	□	■	□	□	□
Vacation	■■■■	□	■	□	□	□
Retirement	■■■	□	□	□	□	□
Child Care	■	□	□	□	□	□

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Many employers require a high school diploma or equivalent for job entry. Some require an associate degree. Some others require a bachelor degree.

Experience: Almost all require 1-5 years of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Almost all employers report that word processing skills are important. Most also report that spreadsheet and database skills are important. Some employers require technical or vocational training prior to employment. Refer to Computer Network Technicians in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find applicants who meet their hiring standards. This indicates a **good outlook** for qualified job seekers. Annual turnover is estimated to be low (10-19%).

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 29 employees in this occupation.

Size of Occupation

Small. There are approximately 75-150 computer network technicians currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 15% are female. Some jobs are union.

Employment Trends

Insufficient data; however, many employers surveyed expect their employment for this occupation to grow. Insufficient data to estimate separations (workers retiring or leaving the occupation). Nationwide, employment of computing professionals is expected to increase much faster than average for all occupations through the year 2008.

Other Information

Where the Jobs Are: In a wide variety of organizations that have computer network systems, including computer and data processing services, educational institutions, hospitals, and government agencies.

Methods Used to Fill Job Openings: Most employers fill openings by hiring employee referrals. Many recruit applicants through Internet job listings. Many also recruit applicants through newspaper advertisements and/or fill openings through word of mouth.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (4.92)
- Knowledge of transmission, broadcasting, switching, control, and operation of telecommunications systems (3.33)
- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (3.25)

Skills:
- Determining what is causing an operating error and deciding what to do about it (4.67)
- Installing equipment, machines, wiring, or programs to meet specifications (4.58)
- Systems analysis skills are important in determining how a system should work. This skill is also used to figure out how changes in conditions, operations, and the environment will affect outcomes. (4.50)

Abilities:
- The ability to apply general rules to specific problems to come up with logical answers. It involves deciding if an answer makes sense. (3.83)
- The ability to efficiently shift back and forth between two or more activities or sources of information (such as speech, sounds, touch, or other sources) (3.67)
- The ability to read and understand information and ideas presented in writing (3.67)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Installs and maintains personal computers and connects them to local and wide area networks.
- Troubleshoots, diagnoses, and repairs computers and peripheral equipment.
- Identifies, documents, diagnoses and resolves network related hardware and software problems.
- Provides user log-on access to computer files, printers, applications and databases appropriate to job level.
- Assigns user passwords, making sure they have access to files and network-connected equipment needed, while maintaining security and confidentiality of other files and data.
- Maintains staffing and changing password records to ensure security and confidentiality.
- Communicates with network managers and users about specific system problems.
- Trains users on network operations, applications, and usage.
- Monitors operating network to make sure it is working properly and that users get the information they need when they need it.
- Keeps current with advances made in convergence, bandwidth, speed of data transmission, operating systems, and application servers.
- Recommends improvements and upgrades based on user needs.
- Keeps measurements on network performance, charts network usage and downtime to help plan future needs.
- Performs and documents network configuration and prepares backup plans and procedures.
- Performs workstation configuration, software loading, and network upgrades.
- Assists in development and implementation of security procedures.
- Defines and documents network testing specifications.
- Develops network testing plan and procedures.
- Schedules and performs network testing and documents, interprets and reports test results.
- Schedules and coordinates network maintenance, upgrades and process changes.
- Coordinates, communicates and documents upgrades and process changes.
- Backs up computer files daily to ensure the safety of stored data and restores data if network crashes.
- Manages inventory.
- Utilizes computer diagnostic software.
- Utilizes electronic calibration devices.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Computer Network Technicians

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Computer Network Technician Post-secondary training	**Network Administrator** Bachelor degree	**IT Manager or Director** Computer and Information Systems Managers Bachelor + work exp $44.34/hr	**Executive Management**
Computer Service Tech Data Processing Equipment Repairers Post-secondary training $16.89/hr	**Systems Analyst** Computer Systems Analysts Bachelor degree $31.76/hr	**Computer Engineer** Computer Software Engineers, Systems Software Bachelor degree $38.93/hr	
Customer Service Rep or Help Desk Tech Computer Support Specialists Work experience $22.49/hr	**Computer Programmer** Computer Programmers Bachelor degree $32.96/hr		

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Computer Network Technicians	Post-secondary training	—
Chemical Equipment Controllers and Operators	Moderate-term OJT	$14.74
Electronic Home Entertainment Equipment Installers and Repairers	Post-secondary training	$15.00
Broadcast Technicians	Post-secondary training	$19.65
Electrical and Electronics Repairers, Commercial and Industrial Equipment	Post-secondary training	$19.73
Computer Support Specialists	Work experience	$22.49
Aviation Inspectors	Work experience	$25.75
Railroad Inspectors	Work experience	$25.75
Orthotists and Prosthetists	Post-secondary training	$27.84
Network and Computer Systems Administrators	Bachelor degree	$28.65
Electrical Engineers	Bachelor degree	$35.33

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Jerome Palompo

What are some of the job titles you've held previously in this career field?
I am currently a systems administrator. Previous experience includes documentation specialist, MIS technician, senior MIS technician, and software support.

What kind of work do you do in your current job and what do you do in a typical day?
I trouble shoot the network, deal with people issues, assign priorities to my team, and design and implement projects. I start my day by checking voicemail and email for issues, or problems that need immediate attention. I review the status of projects in the works, address trouble shooting issues. My day can also include personnel functions such as interviewing candidates for job openings, and training.

What was it that attracted you to this work?
I like to play with "toys". I like to get my hands on the latest technology. I have been intrigued ever since I was a child with trying to figure out how computers work and how technology in general works. It continues to this day with the advancement in electronic security, communications, and the Internet.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
I think that a person should have a dynamic mind and heart. What I mean by that is that you can't be set in your ways. Technology is always changing, and you need to be able to adapt easily to change. They should not be afraid to work under pressure. They should have the desire to figure out new technology. They need to be tolerant of personnel behavior, machine behavior. A great deal of patience is required as well as the ability to think logically.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I would definitely recommend college. You need to learn how to learn. Take your core classes and identify your passion. Once you recognize your passion you need to run with it.

What is it that keeps you wanting to do this kind of work?
I love the dynamic nature of technology. It is interesting to me to see the different levels of user tolerance as they embrace or reject new technology, and how effective I am in that process. I also like to be on the leading edge of technology.

What qualities make for an exceptional Computer Network Technician?
A person should have a no-limits attitude. They should be able to think outside the box, be open-minded and have an open attitude when figuring out solutions. They should also have some courage to try new things.

Correction Officers and Jailers

Correction Officers and Jailers guard inmates in penal or rehabilitative institutions in accordance with established regulations and procedures. They may guard prisoners in transit between jail, courtroom, prison, or other point, traveling by automobile or public transportation, and may be designated deputy guard. Includes Deputy Sheriffs who spend the majority of their time guarding prisoners in county correctional institutions (OES 630170).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$14.37 - $19.38/hr	$16.16/hr
New Hires/Exp'd:	$14.37 - $21.50/hr	$16.16/hr
Exp'd/After 3 Years:	$16.74 - $24.22/hr	$23.39/hr

Hours: Almost all jobs are 40-45 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■	—	■■■■■	—	□	—
Dental Insurance	■■	—	■■■■■	—	□	—
Vision Insurance	■■■	—	■■■	—	□	—
Life Insurance	■■■■	—	■■	—	□	—
Sick Leave	■■■■■■	—	□	—	□	—
Vacation	■■■■■■	—	□	—	□	—
Retirement	■■	—	■■■■■	—	□	—
Child Care	■■	—	□	—	□	—

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: Criminal record clearance, including fingerprinting.

Education: Of the employers surveyed, all report that they require a high school diploma or equivalent for job entry.

Experience: Almost all employers do not require prior experience.

Training: Employers generally provide on-the-job training for this occupation, although related training programs are available Refer to Correction Officers and Jailers in the Occupation-Training Index for information on education and training providers with related training programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find applicants who meet their hiring standards. This indicates a **good outlook** for qualified job seekers. Annual turnover is estimated to be very low (less than 10%).

Size of Occupation

Very Large. There are approximately 1,585 - 1,940 correction officers and jailers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 25% are female. All jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 5 employers surveyed representing 1,727 employees in this occupation.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. About 40-50 job openings are projected per year due to a net increase in occupation size. About 45-55 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of correctional officers is expected to increase much faster than the average for all occupations through 2008, as additional officers are hired to supervise and control a growing inmate population.

Other Information

Where the Jobs Are: State and local government agencies. Nationwide, less than 4% of all correctional officers work in federal facilities. Nationally, less than 1% of all correction officers and jailers are self-employed.

Methods Used to Fill Job Openings: Most employers recruit applicants through Internet job listings. Many also recruit applicants through newspaper advertisements. Some fill openings by hiring referrals from colleges and universities, by hiring employee referrals, and/or by hiring unsolicited applicants.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of weaponry, public safety, and security operations, rules, regulations, precautions, prevention, and the protection of people, data, and property (4.20)

Skills:
- Being aware of others' reactions and understanding why they react the way they do (3.80)
- Talking to others to effectively convey information (3.40)
- Complex problem solving is used in identifying complex problems and reviewing related information so that options may be developed and evaluated, and solutions may be put into action. (3.00)

Abilities:
- The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem. (4.40)
- The ability to use short bursts of muscle force to propel oneself (as in jumping or sprinting), or to throw an object (4.00)
- The ability to concentrate and not be distracted while performing a task over a period of time (3.80)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Monitors conduct of prisoners, according to established policies, regulations, and procedures, to prevent escape or violence.
- Records information, such as prisoner identification, charges, and incidences of inmate disturbance.
- Guards facility entrance to screen visitors.
- Serves meals and distributes commissary items to prisoners.
- Takes prisoner into custody and escorts to locations within and outside of facility, such as visiting room, courtroom, or airport.
- Inspects locks, window bars, grills, doors, and gates at correctional facility, to prevent escape.
- Uses weapons, handcuffs, and physical force to maintain discipline and order among prisoners.
- Searches prisoners, cells, and vehicles for weapons, valuables, or drugs.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Correction Officers and Jailers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Deputy or Correctional Officer Correctional Officers and Jailers Long-term OJT $22.90/hr	**Sergeant**	**Lieutenant**	**Captain**
			Associate Warden

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Flight Attendants	Short-term OJT	—
Crossing Guards	Short-term OJT	$8.81
Security Guards	Short-term OJT	$9.30
Ambulance Drivers and Attendants, Except Emergency Medical Technicians	Short-term OJT	$12.49
Bill and Account Collectors	Moderate-term OJT	$14.57
Bailiffs	Moderate-term OJT	$15.58
Police, Fire, and Ambulance Dispatchers	Moderate-term OJT	$18.50
Correctional Officers and Jailers	Moderate-term OJT	$22.90
Motor Vehicle Inspectors	Work experience	$25.75
Sheriffs and Deputy Sheriffs	Moderate-term OJT	$25.82
Child Support, Missing Persons, and Unemployment Insurance Fraud Investigators	Bachelor degree	$29.09

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Mike Anderson

What are some of the job titles you've held previously in this career field?
Well, I have been a correctional officer for 11 years. As a correctional officer I've worked housing units as a tier officer, I have been a disciplinary officer, and I am currently assigned to the inmate assignment office. I was actually working retail in the grocery business prior to this and had some customers that were correctional officers and one friend that was a correctional officer. They all seemed to agree that I had a personality that might do well in this field, so I went for it.

What kind of work do you do in your current job and what do you do in a typical day?
I place inmates into job assignments. In the department of corrections every able-bodied inmate has to work. So I am responsible for finding jobs within the prison for them to do. What we do is bring in a vacancy report that comes up everyday that shows who's in or out; you know we have inmates that go out for various reasons. They might go out for medical reasons or they are out of the institution for a while, they get transferred to other prisons, they parole, or due to assault they may be placed in the hospital. That would provide a vacancy for another inmate, who is waiting for a job to work. So we bring up these reports that show where the vacancies are. In our computer systems we're able to find inmates that aren't working and look at work qualifiers that they have. For example, if they have food handling clearance then they can work in the kitchen, and if they have gate clearance they can work in other parts of the prison. We place them appropriately in those jobs based on those work factors in order of which they get to the institution.

What was it that attracted you to this work?
I was always interested in law enforcement and I felt that corrections offered an interesting and challenging career with the stability of a state job.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
Some knowledge of how the criminal justice system works. Good communications skills are vital and the ability to react calmly in very stressful situations.

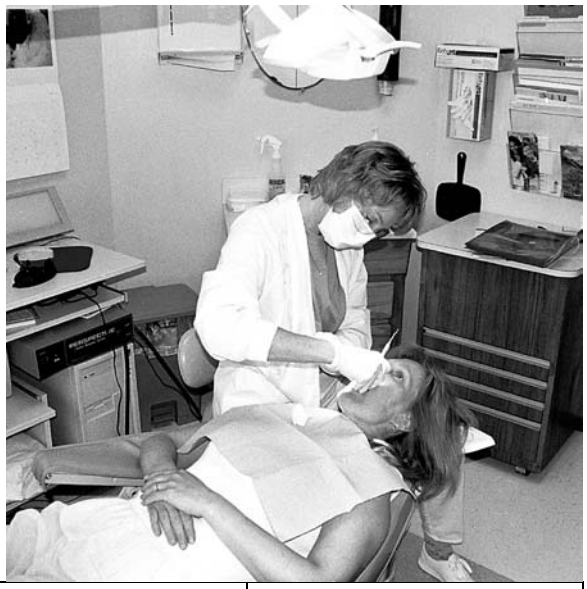
What would you recommend as the best preparation for someone who wants to enter into this occupation?
I believe a criminal justice degree, or courses in criminal justice would be very helpful. Then some sort of experience dealing with different types of personalities. That is very valuable. Myself, coming from the grocery business and dealing with people on a daily basis gave me skills that have been very beneficial behind the walls here. When you come to work in a prison you realize that the people here are just an image of what is out in the public. Not to say that everybody in the public is committing crimes, but you run across people that have been involved in every kind of work. You've got everything from people running businesses and corporations to school teachers, professors, lawyers, police officers, that have all made some poor decisions and ended up incarcerated. So you do deal with all types of personalities in here. I didn't realize how important it was to have experience dealing with people like that, how important that is in here.

What is it that keeps you wanting to do this kind of work?
I would say the everyday personal challenges that being a correctional officer offers. Walking into an environment that can be as calm as possible, and then at the drop of a dime it changes. There is an intensity level that comes with the job that is exciting.

What qualities make for an exceptional Correctional Officer?
Somebody with high morals and values, combined with an even temperament, and the ability to be firm, fair, and consistent with the different types of personalities that you come across.

Dental Hygienists

Dental Hygienists perform dental prophylactic treatments and instruct groups and individuals in the care of the teeth and mouth (OES 329080).



Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$34.52 - $37.50/hr	$37.00/hr
New Hires/Exp'd:	$25.17 - $46.88/hr	$35.96/hr
Exp'd/After 3 Years:	$28.05 - $46.88/hr	$40.00/hr

Hours: Most jobs are 8-32 hours per week. Some jobs are 32-40 hours per week

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■	■	□	□	□	□
Dental Insurance	■■	■■	□	□	□	□
Vision Insurance	■	□	□	□	□	□
Life Insurance	■	□	□	□	□	□
Sick Leave	■■	■	□	□	□	□
Vacation	■■■	■■	□	□	□	□
Retirement	■■	□	■	□	□	□
Child Care	□	□	□	□	□	□

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: Required for this occupation; contact the State Board of Dental Examiners at 916-263-2595 for licensing information.

Education: Almost all employers require an associate degree for job entry.

Experience: Many employers require 6-60 months of prior experience. Many others do not require prior experience.

Training: Refer to Dental Hygienists in the Occupation-Training Index for information on education and training providers with related training programs.

Supply/Demand Assessment

Employers generally report that it is very difficult to find applicants who meet their hiring standards. This indicates a **very good outlook** for qualified job seekers. Annual turnover is estimated to be low (10-19%).

Size of Occupation

Medium. There are approximately 405 - 495 dental hygienists currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate that 100% are female. Few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 37 employees in this occupation.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. About 5-15 job openings are projected per year due to a net increase in occupation size. About 5-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of dental hygienists is expected to grow much faster than the average for all occupations through 2008.

Other Information

Where the Jobs Are: Dental offices and clinics. Nationally, about 1% of all dental hygienists are self-employed.

Methods Used to Fill Job Openings: Almost all employers fill openings by hiring employee referrals. Most also fill openings by hiring referrals from public and private schools. Many fill openings through word of mouth. Some recruit applicants through newspaper advertisements.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of the information and techniques needed to diagnose and treat injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures (4.50)
- Knowledge of instructional methods and training techniques including curriculum design principles, learning theory, group and individual teaching techniques, design of individual development plans, and test design principles (3.16)
- Knowledge of plant and animal living tissue, cells, organisms, and entities, including their functions, interdependencies, and interactions with each other and the environment (3.16)

Skills:
- Complex problem solving is used in identifying complex problems and reviewing related information so that options may be developed and evaluated, and solutions may be put into action. (3.50)
- Understanding written sentences and paragraphs in work related documents (3.50)
- Determining the kind of tools and equipment needed to do a job (3.33)

Abilities:
- The ability to keep the hand and arm steady while making an arm movement or while holding the arm and hand in one position (4.00)
- The ability to communicate information and ideas in speaking so others will understand (3.60)
- The ability to correctly follow a given rule or set of rules in order to arrange things or actions in a certain order. The things or actions can include numbers, letters, words, pictures, procedures, sentences, and mathematical or logical operations. (3.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Cleans calcareous deposits, accretions, and stains from teeth and beneath margins of gums, using dental instruments.
- Provides clinical services and health education to improve and maintain oral health of school children.
- Removes excess cement from coronal surfaces of teeth.
- Places and removes rubber dams, matrices, and temporary restorations.
- Feels lymph nodes under patients chin to detect swelling or tenderness that could indicate presence of oral cancer.
- Examines gums, using probes, to locate periodontal recessed gums and signs of gum disease.
- Administers local anesthetic agents.
- Exposes and develops x-ray film.
- Removes sutures and dressings.
- Makes impressions for study casts.
- Places, carves, and finishes amalgam restorations.
- Feels and visually examines gums for sores and signs of disease.
- Charts conditions of decay and disease for diagnosis and treatment by dentist.
- Conducts dental health clinics for community groups to augment services of dentist.
- Applies fluorides and other cavity preventing agents to arrest dental decay.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Dental Hygienists

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Dental Hygienist - Inexperienced Associate degree $31.31/hr	**Dental Hygienist - Experienced**	**Senior Hygienist**	**Dental Hygiene School Instructor**
Dental Assistant Post-secondary training $15.11/hr		**Office Manager** First-Line Supervisors, Administrative Support Work experience $21.85/hr	**Dentist or Related Specialist** Dentists, General Professional degree
Receptionist – Dental Receptionists and Information Clerks Short-term OJT $11.31/hr			

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Dentists, General	Professional degree	—
Oral and Maxillofacial Surgeons	Professional degree	—
Prosthodontists	Professional degree	—
Manicurists and Pedicurists	Post-secondary training	$7.28
Barbers	Post-secondary training	$8.72
Dental Assistants	Post-secondary training	$15.11
Pharmacy Technicians	Moderate-term OJT	$15.19
Opticians, Dispensing	Long-term OJT	$15.52
Surgical Technologists	Associate degree	$16.18
Radiologic Technologists	Associate degree	$22.13
Dental Hygienists	Associate degree	$31.31

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Ellen Tobin

What are some of the job titles you've held previously in this career field?
I have been a Dental Hygienist since 1971.

What kind of work do you do in your current job and what do you do in a typical day?
I see approximately eight patients a day, each with an hour exam including cleaning, x-ray, provide oral hygiene instruction, check for decay, oral cancer, exam, periodontal screening, periodontal scaling and root planning.

What was it that attracted you to this work?
It is a great job! There is a good demand for this work and the pay is good.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
The basic knowledge of dentistry, including anatomy and physiology are essential. You also need good people skills and good "chair-side" manner. It is important to be organized and efficient so that you can see your patients in the time allotted.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I think a good way to prepare is to get a job while you are in high school in a dentist office, doing filing, lab work, and getting some exposure handling insurance matters. Some dentist offices are willing to train, but most require formal training.

What is it that keeps you wanting to do this kind of work?
I think I am good at what I do. The pay is good and I like working with people and patients. The job is pretty stress free and I can go home and feel good about my work.

What qualities make for an exceptional Dental Hygienist?
To be an exceptional Dental Hygienist you need to be compassionate, caring and sensitive to patients needs. You need to be tuned into your patient and gentle.

Drafters

Also know as CAD Operators.

Drafters prepare clear, complete, and accurate working plans and detail drawings from rough or detailed sketches or notes for engineering or manufacturing purposes according to specified dimensions. They utilize knowledge of various machines, engineering practices, mathematics, building materials, and other physical sciences to complete drawings (OES 225140).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$8.00 - $18.00/hr	$11.00/hr
New Hires/Exp'd:	$12.00 - $20.00/hr	$15.00/hr
Exp'd/After 3 Years:	$15.00 - $30.00/hr	$22.50/hr

Hours: Almost all jobs are 40 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■	—	■	—	□	—
Dental Insurance	■■■	—	■	—	□	—
Vision Insurance	■■■	—	■	—	□	—
Life Insurance	■	—	□	—	□	—
Sick Leave	■■■■	—	■	—	□	—
Vacation	■■■■	—	■	—	□	—
Retirement	■■	—	■	—	■	—
Child Care	□	—	□	—	□	—

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Most employers require a high school diploma or equivalent for job entry. A few require an associate degree. A few others require a bachelor degree.

Experience: Almost all employers require 6-48 months of prior experience. Most employers are willing to accept training as a substitute for experience. A few employers do not require prior experience.

Training: Almost all employers report that AutoCAD skills are important. Many report that word processing skills are important. Some also report that spreadsheet skills are important. Some employers require technical or vocational training prior to employment. Refer to Drafters/CAD Operators in the Occupation-Training Index for information on education and training providers with related training programs.

Supply/Demand Assessment

Employers generally report that it is very difficult to find inexperienced but qualified applicants, and moderately difficult to find qualified applicants with prior experience. This indicates a **very good outlook** for job seekers without prior experience, and a **good outlook** for those who are fully experienced. Annual turnover is estimated to be high (30-39%).

Size of Occupation

Small. There are approximately 255 - 310 drafters/CAD operators currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 15% are female. Few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 16 employers surveyed representing 45 employees in this occupation.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. Less than 10 job openings are projected per year due to a net increase in occupation size. Less than 10 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of drafters is expected to grow more slowly than the average for all occupations through 2008.

Other Information

Where the Jobs Are: Construction related organizations and engineering/architectural firms. Nationally, about 3% of all drafters/CAD operators are self-employed.

Methods Used to Fill Job Openings: Most employers fill openings by hiring employee referrals. Many also recruit applicants through newspaper advertisements and/or fill openings by hiring unsolicited applicants. Some recruit applicants through Internet job listings and/or fill openings by hiring referrals from colleges and universities.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of design techniques, principles, tools and instruments involved in the production and use of precision technical plans, blueprints, drawings, and models (5.00)
- Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (3.80)
- Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (3.40)

Skills:
- Using mathematics to solve problems (4.40)
- Systems analysis skills are important in determining how a system should work. This skill is also used to figure out how changes in conditions, operations, and the environment will affect outcomes. (3.80)
- Writing computer programs for various purposes (3.80)

Abilities:
- The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged (4.60)
- The ability to keep the hand and arm steady while making an arm movement or while holding the arm and hand in one position (4.40)
- The ability to read and understand information and ideas presented in writing (4.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Traces copies of plans and drawings, using transparent paper or cloth, ink, pencil, and standard drafting instruments for reproduction purposes.
- Builds landscape models, using data provided by landscape architect.
- Calculates heat loss and gain of buildings and structures to determine required equipment specifications, following standard procedures.
- Develops diagrams for construction, fabrication, and installation of equipment, structures, components, and systems, using field documents and specifications.
- Prepares colored drawings of landscape and interior designs for presentation to client.
- Lays out and plans interior room arrangements for commercial buildings, and draws charts, forms, and records, using computer assisted equipment.
- Draws rough and detailed scale plans, to scale, for foundations, buildings, and structures, according to specifications.
- Lays out schematics and wiring diagrams used to erect, install, and repair establishment cable and electrical systems, using computer equipment.
- Drafts and corrects topographical maps to represent geological stratigraphy, mineral deposits, and pipeline systems, using survey data and aerial photographs.
- Utilizes word processing software such as Microsoft Word or Word Perfect at a basic/introductory level.
- Utilizes spreadsheet software such as Microsoft Excel or Lotus 1-2-3 at an intermediate level.
- Utilizes database software such as Microsoft Access or FileMaker Pro at a basic/introductory level.
- Utilizes contact management software such as Microsoft Outlook, ACT! or Goldmine for e-mail, address book, calendar, and task management.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Drafters

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Architectural Drafter – Junior Level Post-secondary training $21.26/hr	**Drafter – Experienced**	**Senior Drafter**	**Architect** Architects, Except Landscape and Naval Bachelor degree $29.20/hr
Civil Drafter – Junior Level Post-secondary training $21.26/hr	**Engineering Technician** Civil Engineering Technicians Associate degree $22.60/hr	**Office Manager** First-Line Supervisors, Administrative Support Work experience $21.85/hr	**Engineer** Civil Engineers Bachelor degree $31.15/hr
Mechanical Drafter – Junior Level Post-secondary training $21.26/hr			

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Engravers/Carvers	Long-term OJT	$10.98
Pewter Casters and Finishers	Long-term OJT	$11.28
Optical Instrument Assemblers	Moderate-term OJT	$12.65
Chemical Technicians	Associate degree	$17.84
Fabric and Apparel Patternmakers	Long-term OJT	$18.55
Makeup Artists, Theatrical and Performance	Post-secondary training	$19.58
Mechanical Drafters	Post-secondary training	$21.23
Civil Drafters	Post-secondary training	$21.26
Architectural Drafters	Post-secondary training	$21.26
Mapping Technicians	Post-secondary training	$22.97
Biochemists	Doctoral degree	$28.98

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Dexter Johnson

What are some of the job titles you've held previously in this career field?
I have worked in architectural drafting, Auto Computer Aided Design (CAD), and I have been an architectural assistant.

What kind of work do you do in your current job and what do you do in a typical day?
We do commercial and residential remodels using CAD. We basically take someone's conceptual ideas and turn them into working drawings that something can be constructed from. My typical day consists of working with a computer to create drawings based on design specifications and I talk to clients about their particular project.

What was it that attracted you to this work?
I remember when I was about 7 years old, my mom and dad would take my brother and me in the car to go look at Christmas lights. I remember going to certain neighborhoods where they had custom homes and I liked the way the houses looked. I said to my mom that I wanted to build those houses when I grew up. She told me that if that is what I wanted to do, that I should go after it. And I did.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
You need to be good at math, be computer literate, and even more so you need to be familiar with the functions of the computer especially when using CAD software. You need to pay close attention to detail. The tiniest mistake can cost thousands of dollars because of the ramifications it can have in design and construction. You also need to be reliable, determined, and consistent.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
If you are still at the High School level you should take some drafting classes. Make sure this is something you want to do. You need to be really sharp in math, so work hard at the different math classes. You could also try a tech or vocational school. This will give you some good hands-on training. Summer internships are also a good place to get your feet wet. You will see a lot of the different activities, running blue prints, working on the computer. It will give you a good idea of what is required to be successful in this occupation.

What is it that keeps you wanting to do this kind of work?
I like to keep busy and work with my hands. I am not necessarily a people person in that I don't necessarily need a lot of interaction with people. This job allows me to concentrate on the project at hand. The most important thing about what keeps me in this job is that I look at it as more of a hobby rather than a job. I just love doing this. This has been my dream since I was seven years old, and I am doing it.

What qualities make for an exceptional Drafter?
You need to be very accurate, consistent, and proficient.

Duplicating Machine Operators

Duplicating Machine Operators operate one or a variety of office machines such as photocopying, photographic, mimeograph, and duplicating machines to make copies of data. Does not include workers who primarily operate blueprinting or offset printing machines and presses (OES 560050).

Wages and Benefits

NON-UNION	Range	Median
New Hires/Inexp'd:	$6.25 - $10.00/hr	$8.00/hr
New Hires/Exp'd:	$8.00 - $12.00/hr	$10.00/hr
Exp'd/After 3 Years:	$10.00 - $15.00/hr	$11.25/hr

UNION	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$11.24 - $14.54/hr	$14.00/hr
Exp'd/After 3 Years:	$12.39 - $16.00/hr	$14.54/hr

Hours: Almost all jobs are 40 hours per week. A few jobs are 15-32 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■	□	■■	□	□	□
Dental Insurance	■■	□	■	□	□	□
Vision Insurance	■■	□	■	□	□	□
Life Insurance	■■	□	■	□	□	□
Sick Leave	■■■■■	□	□	□	□	□
Vacation	■■■■■	□	□	□	□	□
Retirement	■■	□	■■	□	■	□
Child Care	□	□	□	□	□	□

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Most employers require a high school diploma or equivalent for job entry. Some employers are willing to accept less than a high school level education.

Experience: Most employers do not require prior experience. Some employers require or prefer 6-48 months of prior experience.

Training: Most employers report that word processing skills are important. Some also report that desktop publishing skills are important. Employers generally provide on-the-job training for this occupation.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find inexperienced but qualified applicants, and very difficult to find qualified applicants with prior experience. This indicates a **good outlook** for job seekers without prior experience, and a **very good outlook** for those who are fully experienced. Annual turnover is estimated to be moderate (20-29%).

Size of Occupation

Small. There are approximately 130 – 155 duplicating machine operators currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 65% are female. A few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 42 employees in this occupation.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2006. Less than 10 job openings are projected per year due to a net increase in occupation size. Less than 10 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, a slow decline is projected for office machine operators.

Other Information

Where the Jobs Are: In a variety of industries, including print shops, mailing and reproduction services, and financial institutions. Nationally, less than 1% of all duplicating machine operators are self-employed.

Methods Used to Fill Job Openings: Most employers fill openings by hiring employee referrals and/or recruit applicants through newspaper advertisements. Many also fill openings through word of mouth. Some fill openings by hiring unsolicited applicants.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (3.20)
- Knowledge of administrative and clerical procedures and systems such as word processing systems, filing and records management systems, stenography and transcription, forms design principles, and other office procedures and terminology (3.20)

Skills:
- Controlling operations of equipment or systems (4.60)
- Performing routine maintenance and determining when and what kind of maintenance is needed (3.00)
- Determining the kind of tools and equipment needed to do a job (3.00)

Abilities:
- The ability to see details of objects at a close range (within a few feet of the observer) (3.20)
- The ability to match or detect differences between colors, including shades of color and brightness (3.00)
- The ability to quickly and repeatedly make precise adjustments in moving the controls of a machine or vehicle to exact positions (3.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Sets controls for number of copies and presses buttons to start machine.
- Records number of copies made.
- Cleans and oils machine and printing plate.
- Cuts copies apart and writes identifying information on copies.
- Moves heat unit and clamping frame over screen bed to form Braille impression on page.
- Loads machine with blank paper or film and places paper roll in holding tray or rack of machine.
- Selects type, embossed plate, or paper stock according to size, color, thickness, and quantity specified.
- Adjusts machine to regulate ink flow, speed, paper size, focus, exposure, and camera distance from document.
- Places original copy in feed tray, feeds originals into feed rolls, or positions originals on table beneath camera lens.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Duplicating Machine Operators

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Duplicating Machine Operator Short-term OJT $11.55/hr	**Press Operator** Printing Press Machine Operators and Tenders Long-term OJT $14.60/hr	**Master Press Operator**	**Print Shop Manager**
Bindery Worker Bindery Machine Setters and Set-Up Operators Moderate-term OJT $10.63/hr	**Customer Service Rep** Order Clerks Short-term OJT $13.48/hr	**Production Manager** Industrial Production Managers Bachelor + work exp $35.76/hr	**Print Shop Owner**
Delivery Driver/Worker Truck Drivers, Light or Delivery Services Short-term OJT $12.24/hr			

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Shoe Machine Operators and Tenders	Moderate-term OJT	$7.69
Cementing and Gluing Machine Operators and Tenders	Moderate-term OJT	$10.03
Mail Machine Operators, Preparation and Handling	Short-term OJT	$10.67
Cleaning, Washing, and Metal Pickling Equipment Operators and Tenders	Moderate-term OJT	$10.68
File Clerks	Short-term OJT	$10.74
Motion Picture Projectionists	Short-term OJT	$11.44
Duplicating Machine Operators	Short-term OJT	$11.55
Shop and Alteration Tailors	Work experience	$13.74
Typesetting and Composing Machine Operators and Tenders	Moderate-term OJT	$14.60
Marking and Identification Printing Machine Setters and Set-Up Operators	Long-term OJT	$14.60
Photoengravers	Long-term OJT	$16.96

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Nate Bontrager

What are some of the job titles you've held previously in this career field?
I think Bindery Technician is about it. I wasn't an actual key operator because you start out as a trainee and I started working with Xerox, who actually makes the machines. Xerox starts you out as a pre key operator and then you get certified. They actually had a technician come out and certify me. From there you are a level one key operator, and then as time goes on you become Docutech certified, which makes you a level 2 key operator. But I haven't made it that far yet.

What kind of work do you do in your current job and what do you do in a typical day?
We have job jackets that we hold all of our work orders, so I start from there. Duplicating customer print demands; we get jobs in that I have to set up on the machine. Some graphics half tones, light techs, things like that. I set up on the machine, send proofs out to the customer to make sure they get what they want, they send em' back, and if it's ok I run em'. Any of the longer jobs- the ones that take more set up and are more complicated are the ones I work with. I scan them in if they are not already digitally sent to the machine, and I go through the work orders to see how the customer would like the job set up. I work with photos, image shifts, manipulating pages; I take care of those kind of things from the beginning to the very end of every book. And then I print them. That's what my day usually consists of.

What was it that attracted you to this type of work?
Well, before I started in this industry, what…I was 18. My whole family is in it, so I started as a bindery technician. That's a fancy word for somebody who runs a binder or a shrink-wrap machine. I was coming into work and I would be a shrink-wrapping book all day and it just got monotonous. I was working over on the other side of the warehouse (actually it's a print shop in a warehouse) and I would see all these people hanging out around these machines. It looked like something I might be interested in, at least because I definitely was not interested in what I was doing. I asked around and talked to a few of the right people and worked my way up from there, almost falling into the spot. Some guy was let go and they knew I was interested so they gave me a shot. They liked my work ethic and how I handled myself and stayed on task. So like I said, they brought somebody out and had them train me completely on the machine and get me certified. I have been doing it ever since.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
Attention to detail and more attention to detail. But at the some time you also have to be fast. Not so fast that you are making big mistakes, but you have to stay on top of things because it's easy to fall behind. Everything I work with has deadlines. I always have a deadline and if we don't make the deadline we could loose the customer, which is money lost. But if you make the deadline and the work is wrong because you weren't paying attention to detail, well that's another problem.

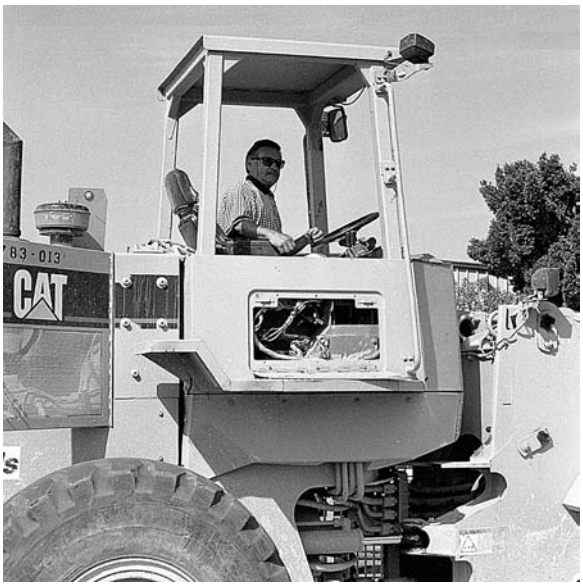
What would you recommend as the best preparation for someone who wants to enter into this occupation?
Preparation as in entering the field? It's actually kind of a field that you don't really hear too much about. Even if you are looking in the papers for a job, if they were running an ad for this position you really wouldn't understand what it would consist of. So my suggestion would be that if you're interested in the print industry, start there. Then if it's something you're interested in from there, you work toward it. But to actually just jump right in to being a Docutech operator, I have never really heard of that honestly. It's something you have to work your way into. You won't just wake up one morning and think to yourself, "Ah, I think I want to run a big copy machine" That would be my advice to someone if they're interested in working in the print industry. If they are able to work well under pressure, then it could be something they want to look into.

What is it that keeps you wanting to do this kind of work?
I get a lot of the same stuff, but a lot of it is different and there are challenges. Things come in that I have never seen before and I have to figure out a way to get it set up right so the customer is happy. And I like it.

Grader, Dozer, and Scraper Operators

Also known as Heavy Equipment Operators.

Grader, Dozer, and Scraper Operators operate power vehicles equipped with blades to remove, distribute, level, or grade earth. Does not include workers who operate paving, surfacing, and tamping equipment (OES 979380).



Wages and Benefits

	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$8.00 - $25.00/hr	$16.78/hr
Exp'd/After 3 Years:	$12.00 - $33.56/hr	$20.50/hr

Hours: Almost all jobs are 40-60 hours per week. A few jobs are seasonal.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■	—	■■	—	□	—
Dental Insurance	■■■	—	■■	—	□	—
Vision Insurance	■■■	—	■	—	□	—
Life Insurance	■■	—	■	—	□	—
Sick Leave	■■	—	■	—	■	—
Vacation	■■■■	—	■	—	■	—
Retirement	■■	—	■■	—	■	—
Child Care	■	—	□	—	□	—

■■■■■ = All (100%) ■■■■ = Almost All (80-99%) ■■■ = Most (60-79%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Many employers are willing to accept less than a high school level education. Many others require a high school diploma or equivalent.

Experience: Almost all employers require or prefer 6-36 months of prior experience. Many employers are willing to accept training as a substitute for experience.

Training: No local training programs were identified for this occupation.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find applicants who meet their hiring standards. This indicates a **good outlook** for qualified job seekers. Annual turnover is estimated to be moderate (20-29%). This turnover rate does not include seasonal employment.

Size of Occupation

Small. There are approximately 115 – 140 heavy equipment operators currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate less than 5% are female. A few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 133 employees in this occupation.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. Less than 10 job openings are projected per year due to a net increase in occupation size. Less than 10 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of material moving equipment operators will increase slower than the average for all occupations through 2008.

Other Information

Where the Jobs Are: Highway and heavy construction contractors, local government agencies, and concrete companies. Nationally, about 6 % of all heavy equipment operators are self-employed.

Methods Used to Fill Job Openings: Many employers fill openings by hiring employee referrals, by hiring unsolicited applicants, and/or recruit applicants through newspaper advertisements. Some also fill openings through word of mouth.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (4.20)

Skills:
- Controlling operations of equipment or systems (4.00)
- Determining the kind of tools and equipment needed to do a job (3.40)

Abilities:
- The ability to quickly and repeatedly make precise adjustments in moving the controls of a machine or vehicle to exact positions (4.40)
- The ability to quickly make coordinated movements of one hand, a hand together with its arm, or two hands to grasp, manipulate, or assemble objects (3.60)
- The ability to use one's abdominal and lower back muscles to support part of the body repeatedly or continuously over time without 'giving out' or fatiguing (3.60)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Starts engine, moves throttle, switches, and levers, and depresses pedals to operate machines, equipment, and attachments.
- Drives equipment in successive passes over working area to achieve specified result, such as grade terrain or remove, dump, or spread earth and rock.
- Fastens bulldozer blade or other attachment to tractor, using hitches.
- Greases, oils, and performs minor repairs on tractor, using grease gun, oilcans, and hand tools.
- Signals operator to guide movement of tractor-drawn machine.
- Connects hydraulic hoses, belts, mechanical linkage, or power takeoff shaft to tractor.
- Aligns machine, cutterhead, or depth gauge marker with reference stakes and guidelines on ground or positions equipment following hand signals of assistant.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Grader, Dozer, and Scraper Operators

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Helper or Laborer Construction Laborers Moderate-term OJT $16.16/hr	**Equipment Operator** Grader, Bulldozer, and Scraper Operators Long-term OJT $25.67/hr	**Foreman or Lead Operator** First-Line Supervisors and Manager/Supervisors-Extractive Workers Work experience $27.53/hr	**Superintendent** Construction Managers Bachelor degree $36.22/hr
	Operating Engineer Long-term OJT $25.67/hr		**Special Trade Contractor**

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Coil Winders, Tapers, and Finishers	Short-term OJT	$9.65
Casting Machine Set-Up Operators	Moderate-term OJT	$9.87
Plastic Molding and Casting Machine Operators and Tenders	Moderate-term OJT	$9.87
Machine Feeders and Offbearers	Short-term OJT	$9.98
Buffing and Polishing Set-Up Operators	Moderate-term OJT	$10.98
Welders, Production	Post-secondary training	$14.34
Floor Sanders and Finishers	Moderate-term OJT	$19.53
Paving, Surfacing, and Tamping Equipment Operators	Moderate-term OJT	$20.89
Crane and Tower Operators	Moderate-term OJT	$23.96
Boiler Operators and Tenders, Low Pressure	Moderate-term OJT	$24.45
Grader, Bulldozer, and Scraper Operators	Long-term OJT	$25.67

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Dave Branaugh

What are some of the job titles you've held previously in this career field?
I have operated various pieces of equipment. What we do primarily is build roads, house pads, warehouse pads, and other things of that nature. I have operated scrapers, dozers, compactors, graders, rollers, loaders, and backhoes.

What kind of work do you do in your current job and what do you do in a typical day?
I work in an open mine gravel pit, and we strip the topsoil and clay off until we reach the rock product. That rock product is then processed into various sizes and shapes, and distributed to where it is needed for the various products that we make. What I do mostly is run a compactor. What we are doing is stripping away the clay from the rock to expose the useful product. We are then building a levee which goes between the pit and pit guards (holes in the ground that are developed by striping the rock out). What they do is bring material to me in scrapers, and I place it and compact it.

What was it that attracted you to this type of work?
Well, I have been in it all my life, which is about 31 years. I have always had the desire to do this, ever since I was a little kid. I wanted to play with trucks and tractors, things of that nature. Just the excitement of running large equipment basically.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
Math helps because you have to add and subtract when you are putting in fills or making cuts. To have a good eye as far as being able to look out and see what needs to be filled or what needs to be cut. Basically that is what we do: cut and fill. You cut down a mountain and fill a valley. It is not really something you need a big education for as far as operating the equipment. But if you wanted to get into different aspects of the field like a grade setter or a foreman or a supervisor, something like that you would have to have more schooling than what is required to be an operator.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
That depends if you are going to be a union operator or a non-union operator. If you are going to be a union operator you have to contact the operating engineers. Get into their apprentice program if you are a young man, as far as the older guys it is just something that you would have to have someone hire you and teach you to do.

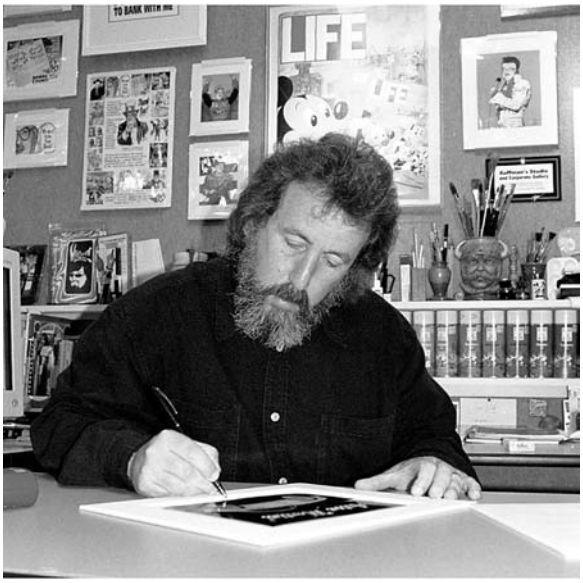
What is it that keeps you wanting to do this kind of work?
Well what keeps me wanting to do this type of work is the fact that by being a Union Operator I have good benefits and a good retirement, plus having done it for 31 years helps.

What qualities make for an exceptional Grader, Scraper and Dozer Operator?
Experience would be the number one thing. If you get into the apprentice program you get trained through the union and on the job site. As far as individual qualities the main thing to look for is how long they have operated and how much real experience they have.

Graphic Designers

Also known as Graphic or Production Artists.

Graphic Designers create original artwork using computer layout and design to visually enhance a product, concept, or message. Graphic Designers work closely with project managers in advertising and marketing departments (Modified DOT 141.061-998).



Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$8.00 - $10.00/hr	$10.00/hr
New Hires/Exp'd:	$8.00 - $20.00/hr	$13.00/hr
Exp'd/After 3 Years:	$10.00 - $25.00/hr	$17.00/hr

Hours: Most jobs are 35-40 hours per week. Some jobs are 20-30 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■	□	■■■	■	□	□
Dental Insurance	■■	□	■■	□	□	□
Vision Insurance	■	□	■■	□	□	□
Life Insurance	■■	□	■■	□	□	□
Sick Leave	■■■■	■	□	■	□	□
Vacation	■■■■	■	□	■	□	□
Retirement	■	□	■■	■	■	□
Child Care	□	□	□	□	□	□

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Most employers require a high school diploma for job entry. Some require an associate degree.

Experience: Most employers require 6-48 months of prior experience. Many employers are willing to accept training as a substitute for experience. Some employers do not require prior experience.

Training: Most employers report that desktop publishing and QuarkExpress skills are important. Many also report that PhotoShop skills are important. Some report that word processing and Adobe Illustrator skills are important. Some employers require technical or vocational training prior to employment. Refer to Graphic Designers in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find applicants who meet their hiring standards. This indicates a **good outlook** for qualified job seekers. Annual turnover is estimated to be moderate (20-29%).

Size of Occupation

Small. There are approximately 200 – 300 graphic designers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 55% are female. Few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 53 employees in this occupation.

Employment Trends

Insufficient data; however, many employers surveyed expect their employment for this occupation to remain stable. Insufficient data to estimate separations (workers retiring or leaving the occupation). Nationwide, employment of visual artists is expected to grow faster than the average for all occupations through the year 2008. Because the visual arts attract many talented people with creative ability, the number of aspiring visual artists continues to grow.

Other Information

Where the Jobs Are: Advertising agencies, graphics design studios, newspapers and publishing companies, large retailers, other large employers and associations, schools and government agencies, television stations, and large or specialized film production companies. Nationally, about 26% of all graphic designers are self-employed.

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements. Many also fill openings by hiring employee referrals and/or by hiring referrals from public and private schools. Some fill openings by hiring unsolicited applicants and/or recruit applicants through Internet job listings.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of theory and techniques required to produce, compose, and perform works of music, dance, visual arts, drama, and sculpture (5.00)
- Knowledge of media production, communication, and dissemination techniques and methods including alternative ways to inform and entertain via written, oral, and visual media (4.33)
- Knowledge of design techniques, principles, tools and instruments involved in the production and use of precision technical plans, blueprints, drawings, and models (4.16)

Skills:
- Controlling operations of equipment or systems (3.83)
- Complex problem solving is used in identifying complex problems and reviewing related information so that options may be developed and evaluated, and solutions may be put into action. (3.66)
- People use quality control analysis skills to conduct tests and inspections. This skill may be applied to products, services, and processes so that a company can evaluate quality or performance level. (3.50)

Abilities:
- The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem (4.60)
- The ability to come up with a number of ideas about a given topic. It concerns the number of ideas produced and not the quality, correctness, or creativity of the ideas. (4.00)
- The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged (3.80)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Utilizes word processing software such as Microsoft Word or Word Perfect at an advanced level.
- Utilizes spreadsheet software such as Microsoft Excel or Lotus 1-2-3 at a basic/introductory level.
- Utilizes database software such as Microsoft Access or FileMaker Pro at a basic/introductory level.
- Utilizes professional desktop publishing software such as Adobe PageMaker or Quark XPress at an advanced level.
- Utilizes contact management software such as Microsoft Outlook, ACT! or Goldmine for e-mail, address book, calendar, and task management.
- Draws sample of finished layout and presents sample to art director for approval.
- Produces still and animated graphic formats for on-air and taped portions of television news broadcasts, using electronic video equipment.
- Prepares illustrations or rough sketches of material according to instructions of client or supervisor.
- Develops negatives and prints, using negative and print developing equipment and tools and work aids to produce layout photographs.
- Prepares notes and instructions for workers who assemble and prepare final layouts for printing.
- Photographs layouts, using camera, to make layout prints for supervisor or client.
- Confers with client regarding layout design.
- Prepares series of drawings to illustrate sequence and timing of story development for television production.
- Reviews final layout and suggests improvements as needed.
- Studies illustrations and photographs to plan presentation of material, product, or service.
- Draws and prints charts, graphs, illustrations, and other artwork, using computer.
- Marks up, pastes, and assembles final layouts to prepare layouts for printer.
- Keys information into computer equipment to create layouts for client or supervisor.
- Determines size and arrangement of illustrative material and copy, and selects style and size of type.
- Arranges layout based upon available space, knowledge of layout principles, and esthetic design concepts.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Graphic Designers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Layout/Production Artist Paste-Up Workers Long-term OJT $16.96/hr	**Graphic Designer** Bachelor degree + work experience $21.19/hr	**Senior Graphic Designer**	**Art Director** Bachelor degree $34.29/hr
Desktop Publisher Long-term OJT $18.19/hr			**Creative Director**

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Music Arrangers and Orchestrators	Bachelor degree	—
Proofreaders and Copy Markers	Short-term OJT	$12.60
Correspondence Clerks	Moderate-term OJT	$13.73
Medical Secretaries	Post-secondary training	$14.34
Pharmacy Technicians	Moderate-term OJT	$15.19
Cartoonists	Bachelor degree	$20.51
Graphic Designers	Bachelor + work exp	$21.19
Radiologic Technologists	Associate degree	$22.13
Petroleum Pump System Operators	Long-term OJT	$24.61
Food Scientists and Technologists	Bachelor degree	$25.12
Copy Writers	Bachelor degree	$31.81

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Bob Dahlquist

What are some of the job titles you've previously held in this career field?
Designer and Art Director.

What kind of work do you do in your current job and what do you do in a typical day?
I mainly do identity work for small businesses and individuals. That means establishing a look for my clients. This usually involves creating a logotype, a palette of colors, and some kind of usage guidelines and standards that will identify their business, product, or service. I do book covers and other things that involve working with type. I also do photography, but most of my work is for printed matter. There isn't really a typical day, but a day of mine might involve a meeting or two, a presentation, and a press check. Quality control is an important part of a designer's day. I spend time on what I call ideation, or thinking about ideas or how to implement them visually. Most projects involve setting up computer files that I can hand over to a client, a printer, vendor, or collaborator.

What was it that attracted you to this work?
The ability to create and give ideas to life, to interpret ideas visually, and ultimately, to make things better. I think design is about improving a situation.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
A knowledge of how the eye perceives and judges things…a visual literacy so to speak, and how to get these visual ideas to translate into printed matter. You should also be able to communicate these ideas to the client and put them through print or screen graphics. Mostly you should know how to get the effect and impression across to clients in a convincing way.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
From an early age, I loved to draw. This was my training ground for learning to communicate visually. Observing pop culture may help, and even a knowledge of computer games, depending on the audience or client you are trying to reach. But mainly, being able to get a message across visually, and having the technical abilities to implement that message is the most important thing.

What is it that keeps you wanting to do this type of work?
A designer's job can vary a lot. Things change- clients, projects, audiences, technology, etc. There's a lot of discovery going on and a lot of re-discovery as well. Sometimes it wears you down, but the variety is more refreshing than anything else.

What qualities make for an exceptional Graphic Designer?
Graphic design is about being a visual communicator but it's also important to be able to verbally explain your solution and justify your approach. Organizational skills are important, as design is largely about engaging in a process.

Guards and Watch Guards

Also known as Security Officers.

Guards and Watch Guards stand guard at entrance gates or walk about premises of business or industrial establishments or private residences to prevent theft, violence, or infractions of rules; they guard property against fire, theft, vandalism, and illegal entry; they direct patrons or employees and answer questions relative to services of establishments. They control traffic to and from buildings and grounds (OES 630470).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.00 - $9.00/hr	$7.25/hr
New Hires/Exp'd:	$7.00 - $13.50/hr	$8.50/hr
Exp'd/After 3 Years:	$8.00 - $15.63/hr	$10.50/hr

Hours: Most jobs are 36-41 hours per week. Some jobs are 10-30 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■	■	■	□	□	□
Dental Insurance	■	■	■	□	□	□
Vision Insurance	■	■	■	□	□	□
Life Insurance	■■	■	□	□	□	□
Sick Leave	■■	■	□	□	□	□
Vacation	■■■	■	□	□	□	□
Retirement	■	□	■	□	□	□
Child Care	□	□	□	□	□	□

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: Required for those who carry firearms or batons; contact the Bureau of Security and Investigative Services at 916-322-4000 for licensing information.

Education: Most employers require a high school diploma or equivalent for job entry. A few are willing to accept less than a high school level education.

Experience: Many employers do not require prior experience. Many others require 3-24 months of prior experience. Many employers are willing to accept training as a substitute for experience.

Training: Employers generally provide on-the-job training for this occupation, although related training programs are available. Refer to Guards and Watch Guards in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is very difficult to find applicants who meet their hiring standards. This indicates a **very good outlook** for qualified job seekers. Annual turnover is estimated to be low (10-19%).

Size of Occupation

Very Large. There are approximately 2,315 – 2,825 security officers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 35% are female. Few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 16 employers surveyed representing 993 employees in this occupation.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2006. About 70-90 job openings are projected per year due to a net increase in occupation size. About 60-75 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of guards is expected to grow faster than the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Private security firms and large organizations with in-house security personnel. Nationally, less than 1% of all security officers are self-employed.

Methods Used to Fill Job Openings: Almost all employers recruit applicants through newspaper advertisements. Many also fill openings by hiring employee referrals and/or by hiring unsolicited applicants. Some fill openings through word of mouth. A few recruit applicants through Internet job listings and/or fill openings by hiring referrals from private employment agencies.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of weaponry, public safety, and security operations, rules, regulations, precautions, prevention, and the protection of people, data, and property (4.66)
- Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process (3.50)
- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (3.33)

Skills:
- Complex problem solving is used in identifying complex problems and reviewing related information so that options may be developed and evaluated, and solutions may be put into action. (4.16)
- Being aware of others' reactions and understanding why they react the way they do (3.83)
- Talking to others to effectively convey information (3.83)

Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.50)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.33)
- The ability to efficiently shift back and forth between two or more activities or sources of information (such as speech, sounds, touch, or other sources) (4.16)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Answers alarms and investigates disturbances.
- Monitors and authorizes entrance and departure of employees, visitors, and other persons to guard against theft and maintain security of premises.
- Inspects and adjusts security systems, equipment, and machinery to ensure operational use and to detect evidence of tampering.
- Patrols industrial and commercial premises to prevent and detect signs of intrusion and ensure security of doors, windows, and gates.
- Warns persons of rule infractions or violations, and apprehends or evicts violators from premises, using force when necessary.
- Calls police or fire departments in cases of emergency, such as fire or presence of unauthorized persons.
- Operates detecting devices to screen individuals and prevent passage of prohibited articles into restricted areas.
- Answers telephone calls to take messages, answer questions, and provide information during non- business hours or when switchboard is closed.
- Escorts or drives motor vehicle to transport individuals to specified locations and to provide personal protection.
- Monitors and adjusts controls that regulate building systems, such as air conditioning, furnace, or boiler.
- Writes reports of daily activities and irregularities, such as equipment or property damage, theft, presence of unauthorized persons, or unusual occurrences.
- Drives and guards armored vehicle to transport money and valuables to prevent theft and ensure safe delivery.
- Circulates among visitors, patrons, and employees to preserve order and protect property.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Guards and Watch Guards

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Guard - Inexperienced Security Guards Short-term OJT $9.30/hr	**Guard – Experienced**	**Supervisor or Lead Guard** First-Line Supervisors/Managers, Protective Service Workers Work experience $18.36/hr	**Law Enforcement Officer – e.g., Police Officer or Deputy Sheriff**
Receptionist Receptionists and Information Clerks Short-term OJT $11.31/hr			**Correctional Officer** Correctional Officers and Jailers Long-term OJT $22.90/hr

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Umpires, Referees, and Other Sports Officials	Long-term OJT	—
Security Guards	Short-term OJT	$9.30
Psychiatric Aides	Post-secondary training	$11.21
Ambulance Drivers and Attendants, Except Emergency Medical Technicians	Short-term OJT	$12.49
Transportation Attendants, Except Flight Attendants and Baggage Porters	Short-term OJT	$12.67
Tractor-Trailer Truck Drivers	Moderate-term OJT	$16.74
Transit and Railroad Police	Moderate-term OJT	$18.27
Railroad Conductors and Yardmasters	Work experience	$21.03
Licensing Examiners and Inspectors	Work experience	$22.28
Correctional Officers and Jailers	Moderate-term OJT	$22.90
Police Patrol Officers	Moderate-term OJT	$25.82

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Clifton Lee James

What are some of the job titles you've held previously in this career field?
I joined the military in 1980 and was in for 20 years as an aircraft mechanic. Now I am a security guard.

What kind of work do you do in your current job and what do you do in a typical day?
I work in the ER and I am the buffer between the doctors and nurses and the visitors. Not necessarily the patients, but the visitors. Sometimes working in the ER you have patients who get a little impatient or rowdy, so I do crowd control. I patrol the ER section to make sure that the people who are not supposed to be there are not there. I also have to help nurses with the patients who get out of control. I am there to show the visitors back, because the ER is a secured area and the whole place is locked up. I get to work and sign in, find out who my triage nurse is, and keep people from getting to her. Then I check the alarms on the ER doors, check with the registration desk and see what is going on with them to make sure everything is ok. I check exits and staff, (and) I monitor the visitors. If they have friends or family in the back, I make sure they visit without disrupting patients. If they have a trauma come in I have to be present to escort the EMT personnel to the trauma room, get the name of the trauma patient, and then go back out front and wait for the family to get there. I try to make the family comfortable and a lot of times I have to console them. So you have to be a diplomat of sorts. If they want the chaplain I make sure he comes down. I have to make sure the social worker is there to greet the family. In between all that, I also have to do my patrols. I am constantly on my feet. I have to be alert without upsetting the doctors and nurses. You walk a thin line because you always have to take into consideration what other people are feeling, not what you are feeling. You have to constantly push your feelings back, and if you're having a bad day, you can't let other people know.

What was it that attracted you to this type of work?
Well I did it when I was in the military, but not to this extent. Being a security guard does not pay a lot of money. But when I was in the military I had been constantly on the go all the time, constantly under pressure. There was always that pressure that you would get called off in a minute and not know where you were going. I just wanted to get away from that for a little while. With this job I wanted to take some time to not be under pressure. I wanted time for my family and to get to know my kids again, to relax. This isn't too complicated, other than having to have some diplomatic skills.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
You have to be alert all the time. For what I do, I have to have what they call EMT skills, which means I have to know the Heimlich maneuver and CPR. They like you to have military experience; a lot of places want security guards with that type of background because the military gives you a wide range of knowledge. With some jobs you need a gun permit, but I don't have to. You also need the ability to be on your feet for a long time and you definitely have to have writing skills to produce clear and understandable reports. You almost have to make it idiot proof.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
You have to learn all the nuances of the security business. The security business is a big money business if you want to make it a career. I would get as much background as I could in law enforcement, weapons training, and self-defense. You can enter any self-defense course in schools, and then there are courses at junior colleges to get EMT training. To get a weapons license, you can go through any law enforcement agency. If a security company requires this, some of them will help qualify you. I would get computer training because even this job is really starting to use computers. A lot of it has to do with surveillance, and that is what a lot of policemen do when they retire. You have to be a self entertained person because a lot of it is very tedious; sometimes you are sitting long hours, especially if they put you in a place like a lumberyard. It is very easy to get bored and let something slip by you.

What is it that keeps you wanting to do this kind of work?
I get to help a lot of people. The job is not boring to me, as far as this particular assignment. When I started working for this company, I told them specifically I am not going to a lumberyard. I am beyond that. I needed a job with purpose to it, so they sent me down to the hospital. I get to help patients. I get to interact with a lot of the people that are in the ER. You get to know them. There have been times when I am out and someone sees me and says, "Hey, you're that guy down at Mercy San Juan. You really helped me out."

What qualities make for an exceptional Security Guard?
You have to have self-confidence. You have to be an outgoing person. You have to be good with first impressions because that is what a person is going to focus on. If you screw that up then when they come back the next time, regardless of what you do, they will assume that first impression. You need to be diplomatic. You have to be alert enough to look at a scene, focus on a scene and know if something is not right. You have to be alert enough to look at a person and know if that person is calm, or whether that person is on edge; you have to learn mannerisms of people. You learn that with time.

Hairdressers, Hairstylists, and Cosmetologists

Hairdressers, Hairstylists, and Cosmetologists provide beauty services for customers such as suggesting hairstyles, cutting and styling hair, treating the scalp, applying make-up, and dressing wigs. Does not include Shampooers, Manicurists, and Beauty School Instructors (OES 680050).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.50 - $10.00/hr	$8.00/hr
New Hires/Exp'd:	$6.50 - $17.26/hr	$10.00/hr
Exp'd/After 3 Years:	$6.50 - $35.00/hr	$15.00/hr

These wages do not include tips. Many hairstylists may work on a commission basis.

Hours: Most jobs are 35-50 hours per week. Some jobs are 12-30 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■	☐	■	☐	☐	■
Dental Insurance	■	☐	☐	☐	☐	☐
Vision Insurance	■	☐	☐	☐	☐	☐
Life Insurance	■	☐	☐	☐	☐	☐
Sick Leave	■■	☐	☐	☐	☐	☐
Vacation	■■	☐	☐	☐	☐	☐
Retirement	☐	☐	■	☐	☐	☐
Child Care	☐	☐	☐	☐	☐	☐

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) ☐ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: Required for this occupation; contact the State Board of Cosmetology at 916-445-7061 for licensing information.

Education: Almost all employers require a high school diploma or equivalent for job entry. Some are willing to accept less than a high school level education.

Experience: Many employers require or prefer 6-72 months of prior experience. Some employers are willing to accept training as a substitute for experience. Many other employers do not require prior experience.

Training: Completion of a cosmetology training program is required. Refer to Hairstylists/Cosmetologists in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is very difficult to find applicants who meet their hiring standards. This indicates a **very good outlook** for qualified job seekers. Annual turnover is estimated to be high (30-39%).

Size of Occupation

Medium. There are approximately 395 – 485 hairstylists currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 90% are female. A few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 149 employees in this occupation.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. About 5-15 job openings are projected per year due to a net increase in occupation size. About 5-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of barbers and cosmetologists is projected to grow about as fast as the average for all occupations through 2008.

Other Information

Where the Jobs Are: Beauty and hairstyling shops, and department stores with hair salons. Nationally, about 46% of all hairstylists are self-employed.

Methods Used to Fill Job Openings: Almost all employers fill openings by hiring employee referrals. Most also fill openings by hiring unsolicited applicants. Many fill openings by hiring referrals from schools and training programs and/or recruit applicants through newspaper advertisements.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques (4.60)

Skills:
- Actively looking for ways to help people (4.20)
- Listening to what other people are saying and asking questions as appropriate (3.40)
- Talking to others to effectively convey information (3.40)

Abilities:
- The ability to quickly make coordinated movements of one hand, a hand together with its arm, or two hands to grasp, manipulate, or assemble objects (4.60)
- The ability to keep the hand and arm steady while making an arm movement or while holding the arm and hand in one position (4.40)
- The ability to communicate information and ideas in speaking so others will understand (4.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Cuts, trims and shapes hair or hairpieces, using clippers, scissors, trimmers and razors.
- Attaches wig or hairpiece to model head and dresses wigs and hairpieces according to instructions, samples, sketches or photographs.
- Massages and treats scalp for hygienic and remedial purposes, using hands, fingers, or vibrating equipment.
- Analyzes patrons' hair and other physical features or reads makeup instructions to determine and recommend beauty treatment.
- Updates and maintains customer information records, such as beauty services provided.
- Cleans, shapes, and polishes fingernails and toenails, using files and nail polish.
- Shapes and colors eyebrows or eyelashes and removes facial hair, using depilatory cream and tweezers.
- Recommends and applies cosmetics, lotions, and creams to patron to soften and lubricate skin and enhance and restore natural appearance.
- Administers therapeutic medication and advises patron to seek medical treatment for chronic or contagious scalp conditions.
- Combs, brushes, and sprays hair or wigs to set style.
- Shampoos, rinses, and dries hair and scalp or hair pieces with water, liquid soap, or other solutions.
- Bleaches, dyes, or tints hair, using applicator or brush.
- Applies water, setting or waving solutions to hair and winds hair on curlers or rollers.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Hairdressers, Hairstylists, and Cosmetologists

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Junior Hair Stylist Hairdressers, Hairstylists, and Cosmetologists Post-secondary training $9.44/hr	**Hair Stylist - Experienced**	**Shift Manager** First-Line Supervisors/Managers of Personal Service Workers Work experience $16.38/hr	**Salon Manager**
		Master Stylist	**Salon Owner**

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Athletic Trainers	Bachelor degree	—
Locker Room, Coatroom, and Dressing Room Attendants	Short-term OJT	$8.82
Production Helpers	Short-term OJT	$9.12
Hairdressers, Hairstylists, and Cosmetologists	Post-secondary training	$9.44
Bindery Machine Setters and Set-Up Operators	Moderate-term OJT	$10.63
Etchers, Hand	Short-term OJT	$10.98
Pewter Casters and Finishers	Long-term OJT	$11.28
Fabric Menders, Except Garment	Long-term OJT	$13.76
Fabric and Apparel Patternmakers	Long-term OJT	$18.55
Makeup Artists, Theatrical and Performance	Post-secondary training	$19.58
Boat Builders and Shipwrights	Long-term OJT	$20.30

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Kara Krischano

What are some of the job titles you've held previously in this career field?
Manager and Hairstylist.

What kind of work do you do in your current job and what do you do in a typical day?
I do various activities as it relates to hairdressing. I work on clients, which usually averages 7 - 14 people per day. I do haircuts, styling, coloring, and perms. I also work on formal occasions such as brides and wedding parties.

What was it that attracted you to this work?
I find this work to be interesting. It allows me to express myself artistically. It is a fun job, a lot of times it doesn't feel like work. I have wanted to do this since I was 10 years old.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
Communication skills are very important. You need to be able to listen to your client, and understand what they want done with their hair. You need to know basic math. This will come into play as you are calculating color formulas. You will also need technical skills, which includes hair-cutting techniques. Continuing education is required so that you stay current on all the latest technology and procedures.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Typically you will go to a beauty school to prepare for your state license exam. Once you obtain your license you are technically ready to work. However, I would recommend that someone become an assistant first, work with someone who has been doing it for ten or fifteen years. Find someone who can really show you step by step and really train you what it is like to work in the Salon business.

What is it that keeps you wanting to do this kind of work?
Again, this doesn't feel like a job to me. It is more like you get to hang out, and play with people's hair. I have a lot of freedom in setting my schedule. Another thing that is rewarding is that I get that instant gratification of seeing the finished product of my efforts.

What qualities make for an exceptional Hairdresser?
I believe you need to be friendly, sincere, and develop your own style. You definitely need to be dedicated to your profession and be a hard worker. You need to stay on the leading edge of new techniques and styles. I also think that having a fashion sense is very important.

Hazardous Materials Removal Workers

Hazardous Materials Removal Workers remove, pack, transport, and/or dispose of hazardous materials including asbestos, waste, fuel, contaminated soil, etc. Specialized training and certification in hazardous materials handling and/or a confined entry permit are generally required (OES 878030).

Wages and Benefits

NON-UNION	Range	Median
New Hires/Inexp'd:	$6.25 - $14.00/hr	$13.00/hr
New Hires/Exp'd:	$6.25 - $25.00/hr	$15.00/hr
Exp'd/After 3 Years:	$6.25 - $40.00/hr	$20.00/hr

UNION	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$11.75 - $21.50/hr	$14.96/hr
Exp'd/After 3 Years:	$16.50 - $21.50/hr	$16.68/hr

Hours: Most jobs are 35-42 hours per week. Some jobs are part-time or on-call, ranging from 10-15 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■	□	■■	□	□	□
Dental Insurance	■■	□	■■	□	□	□
Vision Insurance	■■	□	■■	□	□	□
Life Insurance	■■■	□	■	□	□	□
Sick Leave	■■■■	□	□	□	□	□
Vacation	■■■■	□	□	□	□	□
Retirement	■■	□	■■	□	□	□
Child Care	□	□	■	□	■	□

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required, except for individuals who transport hazardous materials, which requires a commercial driver's license; contact the Department of Motor Vehicles Commercial Driving License Office at 916-657-5771 and the Department of Toxic Substances Control at 916-255-3545 for licensing information.

Education: Some employers require a high school diploma or equivalent for job entry. Some others are willing to accept less than a high school level education.

Experience: Most employers require or prefer 6-36 months of prior experience. Almost all employers are willing to accept training as a substitute for experience. Some employers do not require prior experience.

Training: Some employers report that word processing and spreadsheet skills are important. Many employers require technical or vocational training prior to employment. Refer to Hazardous Materials Related Occupations in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is very difficult to find applicants who meet their hiring standards. This indicates a **very good outlook** for qualified job seekers. Annual turnover is estimated to be low (10-19%).

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 8 employers surveyed representing 84 employees in this occupation.

Size of Occupation

Small. Published projections for this occupation estimate the number of workers at 50 - 60. However, local surveys indicate approximately 100 - 150 hazardous materials removal workers currently employed in currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 5% are female. Many jobs are union.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2006. Less than 10 job openings are projected per year due to a net increase in occupation size. Less than 10 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of hazardous materials removal workers is expected to grow about as fast as the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Trucking companies, construction firms, petroleum products (wholesalers), circuit board manufacturers, local government, and refuse collection and disposal companies. Nationally, less than 1% of all hazardous materials removal workers are self-employed.

Methods Used to Fill Job Openings: Many employers fill openings by hiring employee referrals. Some also fill openings through in-house promotion or transfer, recruit applicants through newspaper advertisements, and/or fill openings through word of mouth.

Important Knowledge, Skills, and Abilities

Knowledge:	• Knowledge of materials, methods, and the appropriate tools to construct objects, structures, and buildings (5.00) • Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (4.16) • Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (3.33)
Skills:	• Determining the kind of tools and equipment needed to do a job (3.16)
Abilities:	• The ability to exert maximum muscle force to lift, push, pull, or carry objects (4.20) • The ability to use one's abdominal and lower back muscles to support part of the body repeatedly or continuously over time without 'giving out' or fatiguing (3.60) • The ability to use short bursts of muscle force to propel oneself (as in jumping or sprinting), or to throw an object (3.20)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Tends pumps, compressors, and generators to provide power for tools, machinery, and equipment or to heat and move materials such as asphalt.
- Positions, joins, aligns, and seals structural components, such as concrete wall sections and pipes.
- Digs ditches and levels earth to grade specifications, using pick and shovel.
- Signals equipment operators to facilitate alignment, movement, and adjustment of machinery, equipment, and materials.
- Builds and positions forms for pouring concrete and dismantles forms after use, using saws, hammers, nails, or bolts.
- Grinds, scrapes, sands, or polishes surfaces, such as concrete, marble, terrazzo, or wood flooring, using abrasive tools or machines.
- Erects and disassembles scaffolding, shoring, braces, and other temporary structures.
- Mixes concrete, using portable mixer.
- Loads and unloads trucks and hauls and hoists materials.
- Measures, marks, and records openings and distances to lay out area to be graded or to erect building structures.
- Smooth and finishes freshly poured cement or concrete, using float, trowel, screed, or powered cement finishing tool.
- Applies caulking compounds by hand or with caulking gun to seal crevices.
- Tends machine that pumps concrete, grout, cement, sand, plaster or stucco through spray gun for application to ceilings and walls.
- Lubricates, cleans, and repairs machinery, equipment, and tools.
- Sprays materials such as water, sand, steam, vinyl, paint, or stucco through hose to clean, coat, or seal surfaces.
- Razes buildings and salvages useful materials.
- Mixes ingredients to create compounds, used to cover or clean surfaces.
- Cleans construction site to eliminate possible hazards.
- Mops, brushes, or spreads paints, cleaning solutions or other compounds over surfaces to clean or provide protection.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Hazardous Materials Removal Workers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
HazMat Removal Worker Construction Laborers Moderate-term OJT $15.43/hr	**HazMat Technician** Environmental Science and Protection Technicians, Including Health Associate degree $20.60/hr	**Supervisor or Foreman** First-Line Supervisors and Manager/Supervisors-Extractive Workers Work experience $27.53/hr	**Scientist or Engineer** Environmental Scientists and Specialists, Including Health Doctoral degree $29.85/hr
		Inspector Environmental Compliance Inspectors Bachelor degree $22.28/hr	

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Grinding and Polishing Workers, Hand	Short-term OJT	$9.99
Freight, Stock, and Material Movers, Hand	Short-term OJT	$10.09
Tire Repairers and Changers	Short-term OJT	$10.97
Sawing Machine Setters and Set-Up Operators	Moderate-term OJT	$11.27
Helpers--Extraction Workers	Short-term OJT	$11.62
Heaters, Metal and Plastic	Moderate-term OJT	$12.16
Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	Moderate-term OJT	$12.42
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	Short-term OJT	$12.62
Construction Laborers	Moderate-term OJT	$16.16
Roofers	Long-term OJT	$17.39
Precision Pattern and Die Casters, Nonferrous Metals	Long-term OJT	$21.36

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Peter Shamberger

What are some of the job titles you've held previously in this career field?
The first title would be Field Chemist, second Field Supervisor, and then Project Manager.

What kind of work do you do in your current job and what do you do in a typical day?
My current job involves a number of things. Some of it is sales, some of it is field work- going out and actually handling drums and lab packing and bulking waste into drums. I also have a class B commercial license with a hazmat endorsement so I can actually drive a class B vehicle. Like I said doing sales calls, giving quotes, customer service type things. Primarily the packing and prep part. We have 16 drivers in this office, so when we are running short I can get in the truck and do it myself. Most of the time the drivers do it though.

What was it that attracted you to this type of work?
It's pretty varied and no day is ever the same as another. A lot of times you get to travel out and about. You go different places, so you're not stuck in the office all of the time. That is kind of what appealed to me most.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
Definitely people skills. Common sense comes in handy, and some type of science and math skills are beneficial.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I don't know if there are any internships that people do in this industry, probably not. But at least go on the Internet and research what kind of positions and different job tasks that exist for this line of work. That way you at least have an idea. This job is different on paper than when you actually work it. There are some pretty good environmental, hazmat and OSHA regulation classes in the community colleges and universities. Those are all very helpful because then your employer doesn't have to pay for you to go through the training. That's a plus of course.

What is it that keeps you wanting to do this kind of work?
It is actually very interesting. Like I said it's never…. Some of the things are the same but yet I always meet new people through new customers. I get to see all sorts of places most people never get to see. I get to take tours of facilities like IBM, Hewlett Packard and Lockheed Martin. So in that sense it is pretty interesting. You're always seeing and experiencing new things on a consistent basis.

What qualities make for an exceptional HazMat worker?
Good people skills and being able to get along with customers. A lot of times there are close interactions with customers. Having good analytical sense is important because you deal with numbers and chemicals. Being willing and able to put in long days every once in a while; some times you have some pretty long days when things really need to get done. You should be detail oriented. There are a lot of laws and regulations that govern what we do, so whether it's the EPA or the DOT or California Agencies they pretty well scrutinize everything from your paperwork to your training. You really have to dot your I's and cross your T's.

Helpers – All Other Construction Trades

Also known as Laborers.

All Other Construction Trade Workers' helpers assist workers in the construction trades such as Brick Masons, Carpenters, Electricians, Painters, Plumbers, and Surveyors. They perform duties of lesser skills such as furnishing tools, materials, and supplies to other workers, cleaning work areas, machines, and tools, and holding materials or tools for other workers. Does not include apprentice workers (Modified DOT 983.190-999).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.50 - $10.00/hr	$8.50/hr
New Hires/Exp'd:	$8.00 - $11.00/hr	$10.00/hr
Exp'd/After 3 Years:	$8.00 - $30.00/hr	$15.00/hr

Hours: Almost all jobs are 35-40 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■	—	■	—	□	—
Dental Insurance	■	—	■	—	□	—
Vision Insurance	■	—	■	—	□	—
Life Insurance	□	—	□	—	■	—
Sick Leave	■	—	□	—	■	—
Vacation	■■	—	□	—	■	—
Retirement	□	—	■	—	□	—
Child Care	□	—	□	—	□	—

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Most employers are willing to accept less than a high school level education for job entry. Some require a high school diploma or equivalent.

Experience: Most employers do not require prior experience. Many employers require or prefer 3-24 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Employers generally provide on-the-job training for this occupation.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find applicants who meet their hiring standards. This indicates a **good outlook** for qualified job seekers. Annual turnover is estimated to be very high (40% or more).

Size of Occupation

Small. There are approximately 300 – 400 construction helpers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate less than 5% are female. Some jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 53 employees in this occupation.

Employment Trends

Insufficient data; however, many employers surveyed expect their employment in this occupation to grow. Insufficient data to estimate separations (workers retiring or leaving the occupation). Nationwide, employment of handlers, equipment cleaners, helpers, and laborers is expected to grow about as fast as the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: General building and heavy construction contractors. Nationally, less than 1% of all construction helpers are self-employed.

Methods Used to Fill Job Openings: Almost all employers fill openings by hiring employee referrals and/or through word of mouth. Most also fill openings by hiring unsolicited applicants. Some recruit applicants through newspaper advertisements and/or fill openings by hiring union referrals.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (3.66)
- Knowledge of inputs, outputs, raw materials, waste, quality control, costs, and techniques for maximizing the manufacture and distribution of goods (3.16)
- Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (3.00)

Skills:
- Watching gauges, dials, or other indicators to make sure a machine is working properly (3.83)
- Performing routine maintenance and determining when and what kind of maintenance is needed (3.50)
- Controlling operations of equipment or systems (3.50)

Abilities:
- The ability to exert maximum muscle force to lift, push, pull, or carry objects (3.40)
- The ability to communicate information and ideas in speaking so others will understand (3.40)
- The ability to make fast, simple, repeated movements of the fingers, hands, and wrists (3.20)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Assists workers to extract geological materials, using hand tools and equipment.
- Unloads materials, devices and machine parts, using hand tools.
- Drives moving equipment to transport materials and parts to excavation site.
- Sets-up and adjusts equipment used to excavate geological materials.
- Organizes materials and prepares site for excavation or boring, using hand tools.
- Observes and monitors equipment operation during extraction process.
- Signals workers to start extraction or boring process of geological materials.
- Repairs and maintains automotive and drilling equipment, using hand tools.
- Examines and collects geological matter, using hand tools and testing devices.
- Dismantles extracting and boring equipment used for excavation, using hand tools.
- Loads materials into gas or well hole, or equipment, using hand tools.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Helpers – All Other Construction Trades

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Helper or Laborer Helpers—Carpenters Short-term OJT $12.08/hr	**Journeyman** Construction Carpenters Long-term OJT $20.30/hr	**Foreman**	**Manager** Construction Managers Bachelor degree $36.22/hr
Apprentice		**Superintendent**	**General Contractor**

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Dishwashers	Short-term OJT	$6.88
Meat, Poultry, and Fish Cutters and Trimmers	Short-term OJT	$9.14
Slaughterers and Meat Packers	Moderate-term OJT	$9.58
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Short-term OJT	$9.87
Helpers--Carpenters	Short-term OJT	$12.08
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters	Short-term OJT	$12.61
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	Short-term OJT	$12.96
Industrial Truck and Tractor Operators	Short-term OJT	$13.53
Paving, Surfacing, and Tamping Equipment Operators	Moderate-term OJT	$20.89
Structural Iron and Steel Workers	Long-term OJT	$22.63
Hoist and Winch Operators	Moderate-term OJT	$24.31

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Art Correa

What are some of the job titles you've held previously in this career field?
Apprentice carpenter, Journeyman. I started as a laborer doing general cleanup, sweeping up job sites and what not. From there I moved up to apprentice carpenter, where you do light duty under the wing of a journeyman. From there I moved up to a journeyman, and supervisor and superintendent to a general contractor.

What kind of work do you do in your current job and what do you do in a typical day?
Residential and commercial projects; new house construction from the excavation and foundation phase, all the way to roofing. Everything. As a helper you begin with what would be considered general grunt work…stocking and moving materials and what not. As an apprentice you are starting to use your tape measure, learning it. That is a big one. A lot of guys come in to work and they want to be a carpenter's helper, but they don't understand the tape measure yet. That makes it difficult. So, you set up, clean up…it's a "Go get this" kind of go-fer type of deal. A typical day really depends on the phase of a project. But a helper's duties would consist of getting tools ready for the journeyman, supplying materials as they are needed. Sometimes assembling different items- things that are basic and that the helper could understand. And you have to clean up after everybody else. It's basic labor.

What was it that attracted you to this type of work?
My father's input. He did stuff on the side, he had his regular job and then he did carpentry work to bring extra income in.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
The most important one is probably math. You just need a general understanding of the concepts. Math is a big one if you want to climb the ladder. As an apprentice you have to start learning plans, and even just learning how to read a very basic layout is helpful; where walls go, how plumbing works, and how electrical stuff lays out. You should also be able to asses how efficient a person works and how well they perform based on what they have going at that time. That way you can try to find ways to speed it up. And following directions is vital, as well as being a team player as well. You can't go out there and expect to know it all and throw your self around as if you did know it. Then you end up messing it up and causing headaches for somebody else who has to fix it.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Schooling. Even if it is just a community college, several offer basic carpentry and framing skills. You just need some very basic informational classes that will help you through.

What is it that keeps you wanting to do this kind of work?
Income. I mean as an apprentice laborer you are exposed to something new everyday. It's never the same thing and it's never repetitious unless you take to doing solely electrical or solely carpentry. You are never stuck in an office, and if it is repetitious it's only for a month or two and then you are doing some different project somewhere else and you're outdoors. There are endless possibilities of which direction you can take this job. You could go into finish work which is dealing with cabinets, baseboards, crowns, and installing certain doors. Or you could go into building the cabinetry. If you pick it all up you can end up being very, very skilled.

What qualities make for an exceptional Construction/Carpenter Helper?
Probably the most important is cleanliness. Somebody who is well organized is what I look for in a sense of how they perform the jobs. Like if we are working in somebody's home doing a remodel, and they are cutting something. If they clean up as soon as they are done, then that's a good sign. I look at how organized they are with their own tools. How they conduct themselves is also very important.

Internet Web Site Designers/Developers (Webmasters)

Internet Web Site Designers/Developers (Webmasters) are responsible for managing the content of an organization's Internet web site. Usually using specialized software, they create, design and maintain web pages to communicate an organization's message to Internet users (Modified DOT 031.064-999).

Wages and Benefits

NON-UNION	Range	Median
New Hires/Inexp'd:	$7.00 - $40.00/hr	$15.00/hr
New Hires/Exp'd:	$9.59 - $40.00/hr	$19.18/hr
Exp'd/After 3 Years:	$10.00 - $53.33/hr	$28.77/hr

UNION	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$19.18 - $24.75/hr	$19.37/hr
Exp'd/After 3 Years:	$19.66 - $28.65/hr	$23.98/hr

Hours: Many jobs are 40 hours per week. Many other jobs are 15-30 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■	■	□	□	□	□
Dental Insurance	■■	■	□	□	□	□
Vision Insurance	■■	■	□	□	□	□
Life Insurance	■■	□	□	□	□	□
Sick Leave	■■■	■	□	□	■	■
Vacation	■■■	■	□	□	■	■
Retirement	■	■	■	□	□	□
Child Care	■	□	□	□	□	□

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Many employers require a high school diploma or equivalent for job entry. A few require an associate degree. A few others require a bachelor degree.

Experience: Most employers require 6-48 months of prior experience. Many employers are willing to accept training as a substitute for experience. A few employers do not require prior experience.

Training: Most employers report that word processing skills are important. Many report that spreadsheet, desktop publishing, and database skills are important. Some also report that PhotoShop skills are important. A few report that Flash and Dream Weaver skills are important. Some employers require or prefer technical or vocational training prior to employment. Refer to Webmasters in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find applicants who meet their hiring standards. This indicates a **good outlook** for qualified job seekers. Annual turnover is estimated to be low (10-19%).

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 16 employers surveyed representing 36 employees in this occupation.

Size of Occupation

Small. There are approximately 150 - 250 webmasters currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 55% are female. A few jobs are union.

Employment Trends

Insufficient data; however, most employers surveyed expect their employment for this occupation to grow. Insufficient data to estimate separations (workers retiring or leaving the occupation). Nationwide, employment of computing professionals is expected to increase much faster than average for all occupations through the 2008.

Other Information

Where the Jobs Are: Internet Service Providers (ISPs) and a wide variety of other employers who use the Internet for communication and/or advertising.

Methods Used to Fill Job Openings: Many employers fill openings by hiring employee referrals, through word of mouth, and/or recruit applicants through Internet job listings. Some also fill openings by hiring unsolicited applicants and/or recruit applicants through newspaper advertisements.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (4.54)
- Knowledge of media production, communication, and dissemination techniques and methods including alternative ways to inform and entertain via written, oral, and visual media (4.31)
- Knowledge of design techniques, principles, tools and instruments involved in the production and use of precision technical plans, blueprints, drawings, and models (4.08)

Skills:
- Writing computer programs for various purposes (4.46)
- Determining what is causing an operating error and deciding what to do about it (4.31)
- Systems analysis skills are important in determining how a system should work. This skill is also used to figure out how changes in conditions, operations, and the environment will affect outcomes. (4.23)

Abilities:
- The ability to match or detect differences between colors, including shades of color and brightness (4.00)
- The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged (4.00)
- The ability to come up with unusual or clever ideas about a given topic or situation, or to develop creative ways to solve a problem (3.92)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Conduct research and develop effective website content.
- Conceive, design, and develop websites using HTML authoring software such as Microsoft FrontPage.
- Develops initial sketches, ideas, and graphics for the development team, making use of existing brochures, slides, print advertisements, and other documents.
- Develop the structure of the website and work closely with the website programmer(s) to make sure the site will operate as intended.
- Select hardware and software for the website to make it work properly.
- Design effective website navigation features.
- Develop special options such as internal chat rooms or message boards.
- Research and develop external hyperlinks that guide visitors to other websites.
- Utilize reporting tools and user data to analyze website traffic and what features are being used.
- Manage and support websites at the server end.
- Assess website security needs and implement security measures and protocols, including visitor access passwords.
- Utilize cookie technology.
- Utilize e-commerce software to enable electronic online monetary transactions.
- Participate in strategy meetings to plan the website and to set timelines for completion.
- Knowledge of Java.
- Knowledge of Cold Fusion.
- Knowledge of C++.
- Knowledge of PERL.
- Knowledge of HTML code.
- Develop and implement animated graphics and sound effects.
- Design professional graphics in gif or jpg formats using software such as Adobe Photoshop.
- Set up a style system or style sheet that manages a website's basic style, color and fonts.
- Assess what would make visitors want to come back to a website again.
- Develop marketing strategies to attract more users.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Internet Web Site Designers/Developers (Webmasters)

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Graphic Art Technician Paste-Up Workers Long-term OJT $16.96/hr	**Website Designer/Developer** Work experience	**Webmaster** Work experience	**Computer Programmer** Computer Programmers Bachelor degree $32.96/hr
Desktop Publishing Specialist Desktop Publishers Post-secondary training $18.19/hr	**Graphic Designer** Bachelor + work exp $21.19/hr	**Website Programmer**	**Computer Engineer** Computer Software Engineers, Applications (15-1031.00) Bachelor degree $39.47/hr

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Webmasters	Work experience	—
Health Educators	Bachelor degree	$19.93
Electronic Drafters	Post-secondary training	$22.01
Food Scientists and Technologists	Bachelor degree	$25.12
Chemists	Bachelor degree	$25.12
Product Safety Engineers	Bachelor degree	$26.35
Computer Security Specialists	Bachelor degree	$28.65
Technical Writers	Bachelor degree	$28.66
Copy Writers	Bachelor degree	$31.81
Management Analysts	Bachelor + work exp	$31.89
Industrial Engineers	Bachelor degree	$32.90

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Terry Mulgannon

What are some of the job titles you've held previously in this career field?
I have held positions as an on-line manager, and editor, and a project manager.

What kind of work do you do in your current job and what do you do in a typical day?
I am responsible for making sure the relevant portions of the local newspaper are on-line. I also ensure the functionality of the on-line directory and the automated links. My day consists of a review of the web site checking each section to ensure that it is operating correctly. I also do long range planning for future development of the web site. I have a group of interns that work under my direction, which affords me the opportunity to delegate less complex issues to them.

What was it that attracted you to this work?
I had a long career in print publishing. Given all of the new technology this seemed like a natural transition.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
I think you need to have a self-starter attitude and have a strong interest in the Internet. You should be dedicated to your work and pay close attention to detail. You need to be organized and a good time manager. I think you need to have refined problem-solving skills, which would include the ability to prioritize problems based on their scope. You should know basic HTML and fundamentals of computer coding.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
To be successful I think you need to thoroughly learn HTML. I also think you need to be proficient at basic computer coding. I can't emphasize enough that you need to know HTML code. Just using an HTML editor is not enough. My strongest recommendation would be to go on the Internet and look at code. Take anything you find interesting and try and manipulate it to do something you want using only code. I would strongly suggest that you avoid editor software or any kind of web publishing software. Learn to code.

What is it that keeps you wanting to do this kind of work?
Coming from the print media world I like the sense of immediacy that the Internet and its related technology provide. It affords me the opportunity to be creative and I get instant results for my efforts. There are a lot more opportunities and possibilities in this occupation than there are in print media.

What qualities make for an exceptional Website Designer?
I think someone needs technical and creative skills, and can take those skills and bring to bear a practical vision that is executable in a timely manner.

Laborers, Landscaping and Groundskeeping

Includes Greenskeepers.

Landscaping and Groundskeeping Laborers landscape and/or maintain grounds of property using hand or power tools or equipment. May work in nursery facility or at customer location. Workers typically perform a variety of tasks, which may include any combination of the following; sod laying, mowing, trimming, planting, watering, fertilizing, digging, raking, and sprinkler installation. Workers may help Brick and Stone Masons (OES 790410).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.25 - $9.00/hr	$8.00/hr
New Hires/Exp'd:	$7.00 - $12.00/hr	$9.00/hr
Exp'd/After 3 Years:	$8.15 - $15.00/hr	$11.00/hr

Some landscaping and groundskeeping laborers may also receive bonuses.

Hours: Almost all jobs are 40-45 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■	—	■■	—	□	—
Dental Insurance	■■■	—	■	—	■	—
Vision Insurance	■■	—	■	—	■	—
Life Insurance	■■■	—	■	—	■	—
Sick Leave	■■■■	—	□	—	□	—
Vacation	■■■■■	—	□	—	□	—
Retirement	■■■	—	■■	—	□	—
Child Care	□	—	□	—	□	—

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Many employers are willing to accept less than a high school level education for job entry. Many others require a high school diploma or equivalent.

Experience: Most employers do not require prior experience. Many employers require or prefer 6-24 months of prior experience.

Training: Employers generally provide on-the-job training for this occupation, although related training programs are available. Refer to Landscaping/Groundskeeping/Nursery Occupations in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find applicants who meet their hiring standards. This indicates a **good outlook** for qualified job seekers. Annual turnover is estimated to be low (10-19%).

Size of Occupation

Very Large. There are approximately 2,800 – 3,420 landscaping and groundskeeping laborers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate less than 5% are female. A few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 210 employees in this occupation.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. About 70-85 job openings are projected per year due to a net increase in occupation size. About 85-105 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of landscaping, groundskeeping, nursery, greenhouse, and lawn service workers is expected to grow about as fast as the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Landscape and horticultural services, Lawn and garden services, golf courses, retail nurseries, and garden stores. Nationally, about 10% of all landscaping and groundskeeping laborers are self-employed.

Methods Used to Fill Job Openings: Almost all employers fill openings by hiring employee referrals. Most also fill openings by hiring unsolicited applicants. Many recruit applicants through newspaper advertisements. Some fill openings through word of mouth.

Important Knowledge, Skills, and Abilities

Knowledge:	• Knowledge of the composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods (3.00) • Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (3.00)
Skills:	• Determining the kind of tools and equipment needed to do a job (3.00)
Abilities:	• The ability to quickly make coordinated movements of one hand, a hand together with its arm, or two hands to grasp, manipulate, or assemble objects (4.00) • The ability to exert one's self physically over long periods of time without getting winded or out of breath (3.80) • The ability to exert maximum muscle force to lift, push, pull, or carry objects (3.80)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Mows lawns, using power mower.
- Digs holes for plants, mixes fertilizer or lime with dirt in holes, inserts plants, and fills holes with dirt.
- Trims and picks flowers and cleans flowerbeds.
- Hauls or spreads topsoil, and spreads straw over seeded soil to hold soil in place.
- Decorates garden with stones and plants.
- Attaches wires from planted trees to support stakes.
- Maintains tools and equipment.
- Seeds and fertilizes lawns.
- Shovels snow from walks and driveways.
- Builds forms and mixes and pours cement to form garden borders.
- Applies herbicides, fungicides, fertilizers, and pesticides, using spreaders or spray equipment.
- Waters lawns, trees, and plants, using portable sprinkler system, hose, or watering can.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Laborers, Landscaping and Groundskeeping

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Lawn Maintenance Worker Landscaping and Groundskeeping Workers Short-term OJT $10.36/hr	**Crew Leader**	**Grounds Manager** Lawn Service Managers Work experience $17.21/hr	**Lawn/Groundskeeping Services Company Owner**
Landscape Construction Laborer/Worker	**Landscaper – Journey Level**	**Supervisor or Foreman** First-Line Supervisors/Managers of Landscaping, Lawn Service, and Groundskeeping Workers Work experience $17.21/hr	**Landscape Construction Contractor**
			Landscape Architect Bachelor degree $26.58/hr

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Cleaners of Vehicles and Equipment	Short-term OJT	$8.14
Machine Feeders and Offbearers	Short-term OJT	$9.98
Landscaping and Groundskeeping Workers	Short-term OJT	$10.36
Etchers	Long-term OJT	$10.98
Buffing and Polishing Set-Up Operators	Moderate-term OJT	$11.51
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	Short-term OJT	$12.96
Pesticide Handlers, Sprayers, and Applicators, Vegetation	Post-secondary training	$13.09
Tree Trimmers and Pruners	Short-term OJT	$13.11
Welders, Production	Post-secondary training	$14.34
Roofers	Long-term OJT	$17.39
Stonemasons	Long-term OJT	$17.88

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Greg Gordon

What are some of the job titles you've held previously in this career field?
I have worked in this field for 37 years. I started working as a private gardener for a home with nine acres. After that I went into business for myself and have done that for the last 25 years.

What kind of work do you do in your current job and what do you do in a typical day?
I get up early, somewhere around 5am. I prepare the day by figuring out where the crew goes. We work on projects, so there is a lot of time keeping up with the cost summary figuring out job is going, where the hours and materials compared to the estimate. By the time we get to the job we are organized in what we are going to do. A day can be anywhere from concrete laying to general landscape and yard maintenance. In the wintertime, the regular landscaping is more frequent, where the summer months we do more of the labor/construction type work.

What was it that attracted you to this work?
I think it was the idea of being outside - I love to be outdoors. When I first entered this field, as a live in gardener, I found that it was both fun and overwhelming.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
It is important to have common sense, and the ability to keep things organized. You have to know what you are doing and the precision to put things together. It takes time to develop skills to be a landscaper/laborer, it is not something you can just walk on the job and know. You also must have physical strength and be able to tolerate the elements (heat, cold) and the long hours. You must have plant knowledge and the ability to learn about gardening.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
It would be best to get on-the-job experience or work as an apprentice. A person must realize that this is hard work and have the tolerance for the demand. Formal training is always helpful, but on-the-job experience is the best preparation.

What is it that keeps you wanting to do this kind of work?
I love being outdoors. Everything I do is outside. I can't imagine being inside an office all day long.

What qualities make for an exceptional Landscaper/Laborer?
An exceptional Landscaper/Laborer is very organized; when you leave a shop, making sure you have the appropriate tools is critical in order to work efficiently and effectively. You also must be clean and keep your job site clean. You must know measurement and construction. Landscaping is extremely diversified so you must have the ability to know many things about the work. The plant knowledge is also extremely important, the more you know, the better you are.

Lodging Managers

Lodging Managers plan, organize, direct, control, or coordinate activities of an organization or department that provides lodging such as hotels, motels, or tourist courts (OES 150262).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.90 - $14.38/hr	$13.22/hr
New Hires/Exp'd:	$6.90 - $35.96/hr	$14.38/hr
Exp'd/After 3 Years:	$6.90 - $71.92/hr	$21.31/hr

Wages for lodging primarily depend on the type of facility and are typically paid on an annual basis. For inexperienced new hires, salaries range from $14,500 to $55,000. For experienced new hires, salaries range from $14,500 to $125,000. For experienced employees after 3 years, salaries range from $14,500 to $180,000.

Some lodging managers may also receive bonuses.

Hours: Of the employers surveyed, all report that jobs are 40-50 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■	—	■■	—	□	—
Dental Insurance	■■	—	■■	—	■	—
Vision Insurance	■■	—	■	—	■	—
Life Insurance	■■■	—	■	—	□	—
Sick Leave	■■■	—	□	—	□	—
Vacation	■■■■■	—	□	—	□	—
Retirement	■■	—	■■	—	□	—
Child Care	□	—	□	—	□	—

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Most employers require a high school diploma or equivalent for job entry. Some require a bachelor degree.

Experience: Almost all employers require or prefer 1-7 years of prior experience. Some employers do not require prior experience.

Training: Most employers report that word processing skills are important. Some also report that spreadsheet skills are important. Refer to Managerial Occupations and/or Business Related Occupations in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find inexperienced but qualified applicants, and very difficult to find qualified applicants with prior experience. This indicates a **good outlook** for job seekers without prior experience, and a **very good outlook** for those who are fully experienced. Annual turnover is estimated to be low (10-19%).

Size of Occupation

Large. There are approximately 750 – 915 lodging managers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 40% are female. Few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 34 employees in this occupation.

Employment Trends

The growth rate is projected to be the same as the average for all occupations through the year 2006. About 10-20 job openings are projected per year due to a net increase in occupation size. About 10-20 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of lodging managers is expected to grow more slowly than the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Hotels and motels. Nationally, about 49% of all lodging managers are self-employed.

Methods Used to Fill Job Openings: Almost all employers recruit applicants through newspaper advertisements. Many also fill openings by hiring employee referrals and/or through in-house promotion. Some fill openings through word of mouth, by hiring referrals from public and private schools, and/or recruit applicants through Internet job listings.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of principles and processes involved in business and organizational planning, coordination, and execution. This includes strategic planning, resource allocation, manpower modeling, leadership techniques, and production methods (5.00)
- Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques (4.83)
- Knowledge of policies and practices involved in personnel/human resource functions. This includes recruitment, selection, training, and promotion regulations and procedures; compensation and benefits packages; labor relations and negotiation strategies; (4.16)

Skills:
- Actively looking for ways to help people (4.50)
- Talking to others to effectively convey information (4.33)
- Adjusting actions in relation to others' actions (4.16)

Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.16)
- The ability to speak clearly so that it is understandable to a listener (4.00)
- The ability to add, subtract, multiply, or divide quickly and correctly (4.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Coordinates front-office activities of hotel or motel and resolves problems.
- Manages and maintains temporary or permanent lodging facilities.
- Answers inquiries pertaining to hotel policies and services and resolves occupants' complaints.
- Interviews and hires applicants.
- Purchases supplies and arranges for outside services, such as deliveries, laundry, maintenance and repair, and trash collection.
- Assigns duties to workers and schedules shifts.
- Inspects guest rooms, public areas, and grounds for cleanliness and appearance.
- Observes and monitors performance to ensure efficient operations and adherence to facilities policies and procedures.
- Arranges telephone-answering service, delivers mail and packages, and answers questions regarding locations for eating and entertainment.
- Greets and registers guests.
- Collects payment and records data pertaining to funds and expenditures.
- Shows, rents, or assigns accommodations.
- Receives and processes advance registration payments, sends out letters of confirmation, and returns checks when registration cannot be accepted.
- Confers and cooperates with other department heads to ensure coordination of hotel activities.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Lodging Managers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Housekeeping Maids and Housekeeping Cleaners Short-term OJT $8.25/hr	**Hotel, Motel, and Resort Desk Clerks** Short-term OJT $9.28/hr	**Front Desk Supervisor or Manager Trainee**	**Hotel and Lodging Managers** Work Experience $19.56/hr
Bell Staff		**Assistant Manager**	

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Locker Room, Coatroom, and Dressing Room Attendants	Short-term OJT	$8.82
Recreation Workers	Bachelor degree	$9.87
Tour Guides and Escorts	Work experience	$11.34
First-Line Supervisors/Managers of Food Preparation and Serving Workers	Work experience	$12.94
Medical Assistants	Post-secondary training	$13.26
First-Line Supervisors and Manager/Supervisors - Landscaping Workers	Work experience	$17.21
Lodging Managers	Work experience	$19.56
Travel Guides	Work experience	$22.10
Sheriffs and Deputy Sheriffs	Moderate-term OJT	$25.82
Fire Investigators	Work experience	$29.53
Industrial Production Managers	Bachelor + work exp	$35.76

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Fernando Morgadinho

What are some of the job titles you've held previously in this career field?
I have been a front desk clerk, a night auditor, food and beverage cashier, I have been a lobby porter and a director of sales, and I've been a general manager and a front office manager.

What kind of work do you do in your current job and what do you do in a typical day?
Now I am the front office manager, which means I am responsible for the overall operation of the front desk, our bell hosts, our PDX operators, and our concierges department. Primarily coordinating the operation and efforts of all the front departments, I make sure that the guest service we provide is at the highest possible level. That's essentially the main purpose of my job.

What was it that attracted you to this type of work?
I think I've always had a pretty out going personality, so I enjoy dealing with the public very very much. I think I derive a tremendous amount of pleasure in being able to assist people whether it is with information, or solving a problem that they may have. In any way shape or form, assist the guest and making a difference in the quality of their stay is enjoyable to me. I think I have always had that desire in me and I think I have also been able to pass that on to many of the people I have worked with.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
For my position, I think it is important that you have good organizational skills. It is important that you have the ability to lead people and to lead by example which very often is not the case. But I think people have a tendency to follow your instructions a lot better and without reservation if you show them how you would do it if you had to be the person doing the job. Those are some of the skills that I think are important in my job. Also, the ability to deal with the public is paramount, because that is what we do day in and day out, out there facing the guest and trying to constantly provide a good quality stay for our guests, and sometimes with limited resources.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I think that obviously it is very difficult or almost impossible to come directly into the hospitality industry and get my position. Obviously, more often that not, you will have to take an entry-level position, learn the business from the ground up until you get to a management position or so. That is, unless you spend quite a bit of time in hotel school where you are going to be trained specifically for the job. So if you are just entering this industry, I think that some of the more important qualities to have that employers are looking for is politeness, pleasantness, good manners and appearances. So that is a good basic core to start with and then by training and teaching you can mold the people to eventually turn them into the professionals that you want and need. That would probably be the best way to get a good product in the industry. Very often we look for the finished product out there and it is not there. Our industry is not known for paying the highest salaries, so it is difficult to attract people to this industry. Hopefully you can get someone that is very green or has very little work experience but does have some very good core qualities you can build upon.

What is it that keeps you wanting to do this kind of work?
I don't think I have hit the lottery yet, so that would be one of the reasons. I don't know.. I think that the idea of me being behind a desk for 8 hours a day, it is frightening. So the desire to be out there dealing with people constantly and making a difference is probably what has kept me in this industry for as many years as I have been.

What qualities make for an exceptional Lodging Manager?
I think I have mentioned some of them already. In this day and age where financial responsibility is so important, obviously having a good accounting background is very important, as well as having a good understanding of budgets. A strong understanding of the cost involved in operating a resort is very important. It's also very important that you are a good-hearted person. Very often we find managers that are quick with numbers and finances, but they lack the ability to relate to their employees.

Maids and Housekeeping Cleaners

Also known as Room Attendants.

Maids and Housekeeping Cleaners perform any combination of tasks to maintain rooms in commercial establishments, such as hotels, restaurants and hospitals, in a clean and orderly condition. Their duties include making beds, replenishing linens, cleaning rooms and halls, and arranging furniture (OES 670020).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.50 - $8.20/hr	$7.00/hr
New Hires/Exp'd:	$6.75 - $9.20/hr	$8.00/hr
Exp'd/After 3 Years:	$7.28 - $10.50/hr	$8.88/hr

Hours: Many jobs are 38-45 hours per week. Many other jobs are 20-32 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■	■	■	■	□	□
Dental Insurance	■■	■	■	■	□	□
Vision Insurance	■	■	■	□	■	□
Life Insurance	■■	■	□	□	□	□
Sick Leave	■■■	■	□	□	□	□
Vacation	■■■	■	□	□	□	□
Retirement	■	■	■	■	■	□
Child Care	□	□	□	□	□	□

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Most employers are willing to accept less than a high school level education for job entry. Some require a high school diploma or equivalent.

Experience: Many employers do not require prior experience. Many others require or prefer 2-24 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Employers generally provide on-the job training for this occupation.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find applicants who meet their hiring standards. This indicates a **good outlook** for qualified job seekers. Annual turnover is estimated to be low (10-19%).

Size of Occupation

Very Large. There are approximately 2,555 – 3,125 maids and housekeeping cleaners currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 90% are female. A few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 16 employers surveyed representing 304 employees in this occupation.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. About 55-70 job openings are projected per year due to a net increase in occupation size. About 50-60 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of janitors and cleaners, including maids, and institutional cleaning supervisors is expected to grow about as fast as average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Private households, hotels, motels, building maintenance services, residential care facilities, skilled nursing facilities, and hospitals. Nationally, about 4% of all maids and housekeeping cleaners are self-employed.

Methods Used to Fill Job Openings: Almost all employers fill openings by hiring employee referrals. Many also fill openings by hiring unsolicited applicants. Some recruit applicants through newspaper advertisements and/or fill openings through word of mouth.

Important Knowledge, Skills, and Abilities

Knowledge:	• Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques (3.83)
Skills:	N/A
Abilities:	• The ability to use one's abdominal and lower back muscles to support part of the body repeatedly or continuously over time without 'giving out' or fatiguing (3.40) • The ability to make fast, simple, repeated movements of the fingers, hands, and wrists (3.20) • The ability to quickly make coordinated movements of one hand, a hand together with its arm, or two hands to grasp, manipulate, or assemble objects (3.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Cleans rooms, hallways, lobbies, lounges, restrooms, corridors, elevators, stairways, and locker rooms and other work areas.
- Cleans rugs, carpets, upholstered furniture, and draperies, using vacuum cleaner.
- Dusts furniture and equipment.
- Empties wastebaskets, and empties and cleans ashtrays.
- Collects soiled linens for laundering, and receives and stores linen supplies in linen closet.
- Washes walls, ceiling, and woodwork.
- Polishes metalwork, such as fixtures and fittings.
- Prepares sample rooms for sales meetings.
- Cleans and removes debris from driveway and garage areas.
- Arranges decorations, apparatus, or furniture for banquets and social functions.
- Replaces light bulbs.
- Washes beds and mattresses, and remakes beds after dismissal of hospital patients.
- Moves and arranges furniture, turns mattresses, hangs draperies, dusts venetian blinds, and polishes metalwork to ready hotel facilities for occupancy.
- Replenishes supplies, such as drinking glasses, writing supplies, and bathroom items.
- Transports trash and waste to disposal area.
- Cleans swimming pool with vacuum.
- Delivers television sets, ironing boards, baby cribs, and rollaway beds to guests' rooms.
- Washes windows, door panels, and sills.
- Sweeps, scrubs, waxes, and polishes floors, using brooms and mops and powered scrubbing and waxing machines.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Maids and Housekeeping Cleaners

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Maid Maids and Housekeeping Cleaners Short-term OJT $8.25/hr	**Housekeeping Inspector** Housekeeping Supervisors Work experience $15.45/hr	**Supervisor** First-Line Supervisors/Managers of Housekeeping and Janitorial Workers Work experience $15.45/hr	**Innkeeper or Lodging Manager** Lodging Managers Work experience $19.56/hr
Janitor/Cleaner Janitors and Cleaners, Except Maids and Housekeeping Cleaners Short-term OJT $9.87/hr	**Lead Janitor**	**Self-Employed Janitor/Housekeeper**	**Janitorial/Maid Services Company Owner**
Front Desk Clerk Hotel, Motel, and Resort Desk Clerks Short-term OJT $9.28/hr			

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Dining Room and Cafeteria Attendants and Bartender Helpers	Short-term OJT	$6.80
Maids and Housekeeping Cleaners	Short-term OJT	$8.25
Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons	Short-term OJT	$11.04
Bakers, Bread and Pastry	Long-term OJT	$11.35
Tree Trimmers and Pruners	Short-term OJT	$13.11
Derrick Operators, Oil and Gas	Moderate-term OJT	$14.22
Wellhead Pumpers	Long-term OJT	$15.57
Refuse and Recyclable Material Collectors	Short-term OJT	$16.04
Roofers	Long-term OJT	$17.39
Floor Layers, Except Carpet, Wood, and Hard Tiles	Long-term OJT	$19.19
Paperhangers	Long-term OJT	$20.56

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Kathy Downing

What are some of the job titles you've held previously in this career field?
I started my hospitality career in an entry-level housekeeping position out of high school. I then worked as a secretary and then went into a management program and became an executive housekeeper.

What kind of work do you do in your current job and what do you do in a typical day?
On a typical day as a housekeeper, you receive your assignment, gather up what you need to do your days work. You look at your assignment to see how much time you can allot to each individual room because cleaning a sleep over room is quicker then cleaning a check out room, which is a more exact job. You chart your day by your assignments and complete the tasks that are given. When you enter the room you just start cleaning; it is a heavy job and it is very difficult. Housekeepers have to make judgment and decision calls all the time. They are cheerleaders for the hotel, they are front line people, they talk to guests all the time, and they must be smart and creative.

What was it that attracted you to this work?
I was attracted to the work because it was an entry- level position and I didn't have qualifications for anything else. The hospitality industry is exciting and fun, you work hard, but it is rewarding. Working in this department is enjoyable because it is instant gratification: from dirty to clean. You get positive feedback immediately.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
The ability to speak English is very helpful because you need to be able to communicate with everyone. You must be able to get along with other people since you work so closely with the other staff and guests. You have to be logical, methodical and have attention to detail. You also must have good cleaning abilities. You must be healthy, since the job is physically demanding and requires stamina.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
You must have the motivation to do the work. The job is very demanding and physically challenging; learning to stay motivated and to have a positive attitude is really the best way to prepare.

What is it that keeps you wanting to do this kind of work?
The hospitality industry is exciting and fun. There are so many things to do, such a variety of tasks it is changing constantly.

What qualities make for an exceptional Maid or Housekeeper?
To be an exceptional Maid or Housekeeper, you must have the ability to get along with your co-workers, have good presentation with guests, and you must have good cleaning abilities. Attitude is also important, you can train anyone to clean, but having a good attitude is extremely valuable. Enthusiasm and the ability to get people to do the work is also a critical asset. Discipline also is a quality that makes for an exceptional Maid and Housekeeper.

Physical Therapists

Physical Therapists apply techniques and treatments that help relieve pain, increase the patient's strength, and decrease or prevent deformity and crippling (OES 323080).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$10.36 - $31.19/hr	$25.00/hr
New Hires/Exp'd:	$11.09 - $40.00/hr	$30.00/hr
Exp'd/After 3 Years:	$15.34 - $49.86/hr	$32.75/hr

Hours: Many jobs are 19-32 hours per week. Many other jobs are 40 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■	■	■	■	□	□
Dental Insurance	■■■	■	■	■	□	□
Vision Insurance	■■	■	■	□	□	□
Life Insurance	■■■	■	■	□	□	□
Sick Leave	■■■■■	■	□	□	□	□
Vacation	■■■■■	■■	□	□	□	□
Retirement	■■	■	■■■	□	□	□
Child Care	□	□	■	□	□	□

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: Required for this occupation; contact the State Department of Consumer Affairs, Physical Therapy Board of California at 916-263-2550 for licensing information.

Education: Most employers require a bachelor degree for job entry. A few require a graduate degree.

Experience: Most employers require or prefer 1-2 years of prior experience. Some employers do not require prior experience.

Training: Some employers report that word processing skills are important. A few also report that spreadsheet skills are important. No local training programs were identified for this occupation.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find applicants who meet their hiring standards. This indicates a **good outlook** for qualified job seekers. Annual turnover is estimated to be low (10-19%).

Size of Occupation

Small. There are approximately 180 – 220 physical therapists currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 65% are female. A few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 17 employers surveyed representing 89 employees in this occupation.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. Less than 10 job openings are projected per year due to a net increase in occupation size. Less than 10 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of physical therapists is expected to grow faster than the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Offices of physical therapists and hospitals. Nationally, about 7% of all physical therapists are self-employed.

Methods Used to Fill Job Openings: Most employers fill openings through word of mouth and/or fill openings by hiring employee referrals. Many also recruit applicants through newspaper advertisements and/or fill openings by hiring referrals from public and private schools.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of information and techniques needed to rehabilitate physical and mental ailments and to provide career guidance including alternative treatments, rehabilitation equipment and its proper use, and methods to evaluate treatment effects (4.33)
- Knowledge of the information and techniques needed to diagnose and treat injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures (3.83)
- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (3.66)

Skills:
- Understanding written sentences and paragraphs in work related documents (4.16)
- Weighing the relative costs and benefits of a potential action (4.16)
- Using logic and analysis to identify the strengths and weaknesses of different approaches (4.00)

Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.40)
- The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem. (3.80)
- The ability to communicate information and ideas in writing so others will understand (3.60)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Administers manual exercises to improve and maintain function.
- Administers massage, applying knowledge of massage techniques and body physiology.
- Instructs, motivates, and assists patient to perform various physical activities and use supportive devices, such as crutches, canes, and prostheses.
- Administers traction to relieve pain, using traction equipment.
- Records treatment, response, and progress in patients chart or enters information into computer.
- Confers with medical practitioners to obtain additional information, suggest revisions in treatment, and integrate physical therapy into patients care.
- Evaluates, fits, and adjusts prosthetic and orthotic devices and recommends modification to orthotist.
- Instructs patient and family in treatment procedures to be continued at home.
- Plans and prepares written treatment program based on evaluation of patient data.
- Reviews physicians referral and patients condition and medical records to determine physical therapy treatment required.
- Tests and measures patients' strength, motor development, sensory perception, functional capacity, and respiratory and circulatory efficiency and records data.
- Evaluates effects of treatment at various stages and adjusts treatments to achieve maximum benefit.
- Administers treatment involving application of physical agents, using equipment, moist packs, ultraviolet and infrared lamps, and ultrasound machines.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Physical Therapists

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Physical Therapy Aide Moderate-term OJT $11.09/hr	**Intern**	**Physical Therapist** Bachelor degree $31.68/hr	**Clinical Supervisor**
Physical Therapy Assistant Associate degree $20.16	**Office Manager - Physical Therapy Office or Clinic**		**Clinic Director**

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Special Education Teachers, Preschool, Kindergarten, and Elementary School	Masters degree	—
Special Education Teachers, Middle School	Masters degree	—
Special Education Teachers, Secondary School	Masters degree	—
Athletic Trainers	Bachelor degree	—
Oral and Maxillofacial Surgeons	Professional degree	—
Dentists, General	Professional degree	—
Shipping, Receiving, and Traffic Clerks	Short-term OJT	$11.58
Occupational Therapist Aides	Moderate-term OJT	$13.63
Occupational Therapist Assistants	Associate degree	$18.89
Dental Hygienists	Associate degree	$31.31
Physical Therapists	Masters degree	$31.68

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Anna Lewellen

What are some of the job titles you've held previously in this career field?
Physical Therapy Aide, and then I did a bunch of general office work too. I was a billing clerk and I was a medical records clerk. But as related to physical therapy, the aide is all I really was.

What kind of work do you do in your current job and what do you do in a typical day?
I own a physical therapy practice and I do physical therapy. I evaluate and set up treatment plans. A patient usually sees their doctor first and gets a prescription for physical therapy. They bring it to us and if required, we get authorization. Next, we set them up for an initial visit. I see them for that initial visit, evaluate their condition, and determine what is an appropriate treatment plan. I have staff who help follow through with that. I often see patients repeatedly, but my staff will also help with the treatments. Occasionally, I will re-evaluate a patients' position and see if we need to modify things, discharge them, or what ever is appropriate. There is no typical day; they are all a little different. Being that I am the owner of the business, I do a lot of business management in addition to treating the patients. I have a schedule; I see patients hourly and my staff sees them every 45 minutes, so there is a constant flow of people through here. I am always checking in on the other patients as they come in even if they are not on my schedule, so it's pretty hectic just dealing with people. When I do have down time I'll do the bookkeeping and the billing.

What was it that attracted you to this type of work?
In high school I had a – What do you call it- I guess it was a test to see what my abilities were as part of some job education stuff. They had us do a research project on what kind of careers we would want to go into, and I happened to be in physical therapy for a broken ankle. So I said, "Oh lets look into physical therapy" and the more I learned about it the more I liked it. From that point on I set it as my goal. All of my high school classes were geared toward this and in college I went straight for a university that had a program. I was very motivated and career driven. Owning your own physical therapy business is rare. A lot of physical therapists do not go the avenue I went. It is just I had an opportunity in the community I live in and I jumped at it. It is not a highly sought out position for what I am doing. It is very risky and there is a lot of competition, and corporate takeover stuff has been prevalent with the health care changes in the last 10-15 years. But I have done well because it was an open market in my community. I just kind of jumped at it and did well.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
You obviously have to have the degree to get the license. You have to take the state board exam to get a license for that. The education is very specific and personal skills are important because you have to be able to deal with people. You also have to like people and have some empathy and caring. There are a lot of my peers that lack that and I don't think that they are very successful therapists as far as getting the desired outcomes with people. They may make a lot of money, but they don't necessarily get the results in healing people, which I think is our purpose.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Starting out as soon as possible. Do background work and research where the programs are, and what the prerequisites are. If someone is going to a junior college, and thinks they want to do this, look into it while they are still at the JC or even earlier, in high school. Do the legwork ahead of time. You'll have to do some volunteer work; it is required by most universities to have at least 100 hours of volunteer work to confirm that you want to actually do this kind of work. There's a wide spectrum of facilities where you can do that. You can do it in hospitals, convalescent hospitals, or clinics like the one I work in. Find out what the best game plan is and follow that game plan. When you don't have a plan you get confused because the study for this occupation takes a long time.

What is it that keeps you wanting to do this kind of work?
People. It is the reward of helping people, making changes and educating. I mean, the financial rewards are wonderful but I would do this even if I were paid next to nothing. It's seeing the change in people and effecting people's lives in a positive way. I get that daily. People are always saying, "You have made such a difference." It is constant ego feedback I guess (laughs).

What qualities make for an exceptional Physical Therapist?
You have to be sympathetic, empathetic, and able to listen. That means you have to be a good listener. If you don't genuinely pay attention to the patient their goals are not going to be met, and your goals are not going to be met. I generally look at everybody as a puzzle whose pieces I have to put together. If I don't listen to the patient, I can't get all the pieces. Listening and empathy are huge.

Physicians' Assistants

Physicians' Assistants provide patient services under the direct supervision and responsibility of a doctor of medicine or osteopathy. They elicit detailed patient histories and do complete physical examinations, reach tentative diagnosis, and order appropriate laboratory tests. This occupation requires certification by the National Commission on Certification of Physicians' Assistants and the California State Board of Medical Quality Assurance. Does not include nurses or ambulance attendants whose training is limited to the application of first-aid (OES 325110).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$13.15 - $40.00/hr	$26.89/hr
New Hires/Exp'd:	$9.00 - $40.00/hr	$29.89/hr
Exp'd/After 3 Years:	$13.00 - $46.00/hr	$35.00/hr

Hours: Most jobs are 35-40 hours per week. Many jobs are 8-32 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■	■	■■	□	□	□
Dental Insurance	■■■	■	■■	□	□	□
Vision Insurance	■■	■	■■	□	□	□
Life Insurance	■■■	■	■■	□	□	□
Sick Leave	■■■■■	■	■	□	□	□
Vacation	■■■■■	■	■	□	□	□
Retirement	■■	■	■■	□	■	□
Child Care	□	□	□	□	■	□

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: Required for this occupation; contact the Physician Assistant Examining Committee at 916-263-2670 for licensing information.

Education: Most employers require a bachelor degree for job entry. Some are willing to accept an associate degree.

Experience: Most employers require or prefer 6-36 months of prior experience. Some employers do not require experience.

Training: Some employers report that word processing and spreadsheet skills are important. Many employers require technical or vocational training prior to employment. However, no local training programs were identified for this occupation.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find applicants who meet their hiring standards. This indicates a **good outlook** for qualified job seekers. Annual turnover is estimated to be low (10-19%).

Size of Occupation

Small. There are approximately 90 – 110 physicians' assistants currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 65% are female. A few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 55 employees in this occupation.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2006. Less than 10 job openings are projected per year due to a net increase in occupation size. Less than 10 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of physicians' assistants is expected to grow much faster than the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Hospitals, clinics, and physicians offices, including doctors of osteopathy. Nationally, less than 1% of all physicians' assistants are self-employed.

Methods Used to Fill Job Openings: Most employers fill openings by hiring employee referrals. Many also recruit applicants through newspaper advertisements and/or fill openings through word of mouth. Some fill openings by hiring referrals from colleges and universities.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of the information and techniques needed to diagnose and treat injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures (4.66)
- Knowledge of plant and animal living tissue, cells, organisms, and entities, including their functions, interdependencies, and interactions with each other and the environment (4.33)
- Knowledge of the composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods (4.00)

Skills:
- Listening to what other people are saying and asking questions as appropriate (4.50)
- Complex problem solving is used in identifying complex problems and reviewing related information so that options may be developed and evaluated, and solutions may be put into action. (4.50)
- Talking to others to effectively convey information (4.16)

Abilities:
- The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem. (4.40)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.20)
- The ability to communicate information and ideas in speaking so others will understand (4.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Examines patient.
- Compiles patient medical data, including health history and results of physical examination.
- Counsels patients regarding prescribed therapeutic regimens, normal growth and development, family planning, emotional problems of daily living, and health maintenance.
- Performs therapeutic procedures, such as injections, immunizations, suturing and wound care, and managing infection.
- Interprets diagnostic test results for deviations from normal.
- Administers or orders diagnostic tests, such as x-ray, electrocardiogram, and laboratory tests.
- Develops and implements patient management plans, records progress notes, and assists in provision of continuity of care.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Physicians' Assistants

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Receptionist/Medical Assistant – Front Office Medical Assistants Post-secondary training $13.26	**Physician Assistant** Bachelor degree $34.04/hr	**Office or Clinic Manager** Medical and Health Services Managers Bachelor degree + work exp $35.81/hr	**Nurse Practitioner**
Medical Assistant – Back Office	**Registered Nurse** Registered Nurses Associate degree $27.82/hr		**Physician** Family and General Practitioners Professional degree $38.16/hr

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Health Specialties Teachers, Postsecondary	Doctoral degree	—
Special Education Teachers, Preschool, Kindergarten, and Elementary School	Masters degree	—
Special Education Teachers, Middle School	Masters degree	—
Special Education Teachers, Secondary School	Masters degree	—
Anesthesiologists	Professional degree	—
Child, Family, and School Social Workers	Masters degree	$17.90
Educational, Vocational, and School Counselors	Masters degree	$22.60
Chemists	Bachelor degree	$25.12
Probation Officers and Correctional Treatment Specialists	Bachelor degree	$26.64
Physician Assistants	Bachelor degree	$34.04
Optometrists	Professional degree	$43.03

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Elidia Rojas

What are some of the job titles you've held previously in this career field?
I started off as training as a part time chiropractic assistant. It was mostly front office work, and after that they trained me to do the therapies and assist the doctor in the back with interpreting x-ray.

What kind of work do you do in your current job and what do you do in a typical day?
I take care of managing the office for the doctor, making sure that as patients come in they get to going where they need to be. I make sure that everybody gets the therapy they need and fill out any forms they need to. If I have to do ice treatments before the doctor sees them, I see to that. Also I prepare them for examinations for the x-rays, explain to them about chiropractic measures and educate them a little about what's going on. I sometimes do a little bit of soft tissue work on the patients who need it.

What was it that attracted you to this type of work?
It is very rewarding because I always wanted to work in a field where I was helping people. It is always different, and there is just so much to do that time goes by really fast. Whenever they are in pain you are comforting them and letting them know that they came to the right office that they are going to be taken care of. It feels really good being able to do this with patients and to know that you are helping them in their healing process.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
You know, when we are looking to hire someone here, the main thing that we look for is the person's attitude, the way they are; if they are a caring person. If they can have all the skills as far as office and billing goes that's great, but if they don't have the type of caring to go the extra mile for people they're not going to fit in. You have to be a people person. That is what we look for, because anything else we feel that you can be trained in.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I would think that the best preparation would be, to know if they feel like they want to help people. There are a lot of classes you can take for physicians' assistants. It's also helpful having the knowledge of how to run an office and make sure everything is taken care of. It is really helpful to know if they can work under stress and be able to act professionally. There is so much going on and you need to be able to prioritize things. I went to seminars on how to manage your time wisely, on prioritizing your tasks, so everything gets done.

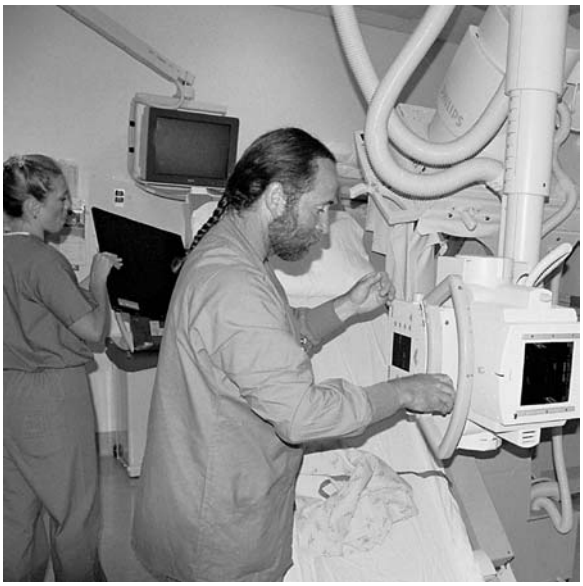
What is it that keeps you wanting to do this kind of work?
The people are so grateful when they walk in, and they are always telling me "This office is so different, and it feels like it is not just a job for you. It feels like you really do care, you're really sincere." When people bring you gifts, send you cards then bring you food to just show you their gratitude, I feel like I am being recognized for what comes out of my heart. But mostly it's the reward of just seeing the people, seeing the response and seeing them healing.

What qualities make for an exceptional Physician Assistant?
Excellent communication skills. To know how to work under stress, to be a people person, and to be able to prioritize your job duties. You should also know how to work independently. It is very important that you're able to work independently, and not have somebody saying, " No you need to do this, and you need to do that." They have to be able to know their job well and be able to do it all within the time that they are here; that is why the time management and prioritizing are so important.

Radiologic Technologists

Also known as X-Ray Techs. Includes Certified Radiologic Technologists (CRTs).

Radiologic Technologists take X-rays and CAT scans or administer non-radioactive materials into a patient's bloodstream for diagnostic purposes. Includes technologists who specialize in other modalities such as computed tomography, ultrasound, and magnetic resonance. Includes workers whose primary duties are to demonstrate portions of the human body on X-ray film or fluoroscopic screen (OES 329190).



Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$15.00 - $21.46/hr	$18.60/hr
New Hires/Exp'd:	$ 9.59 - $27.00/hr	$20.00/hr
Exp'd/After 3 Years:	$11.99 - $31.00/hr	$22.00/hr

Hours: Most jobs are 35-42 hours per week. Some jobs are 19-25 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■	■■	■	■	□	□
Dental Insurance	■■■■	■■	■	■	□	□
Vision Insurance	■■■	■■	■	■	□	□
Life Insurance	■■■■	■■	■	□	□	□
Sick Leave	■■■■	■■■	□	□	□	□
Vacation	■■■■	■■■	□	□	□	□
Retirement	■■■	■■	■■	■	□	□
Child Care	□	□	□	□	□	□

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: Required for this occupation; contact the State Department of Health Services, Food, Drug, and Radiation Safety Division at 916-445-0931 for information.

Education: Most employers require a high school diploma or equivalent for job entry. Some require an associate degree.

Experience: Most employers require or prefer 3-24 months of prior experience. Some employers do not require prior experience.

Training: Some employers report that word processing skills are important. Of the employers surveyed, all report that they require technical or vocational training prior to employment. Refer to Radiologic Technologists in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find inexperienced but qualified applicants, and very difficult to find qualified applicants with prior experience. This indicates a **good outlook** for job seekers without prior experience, and a **very good outlook** for those who are fully experienced. Annual turnover is estimated to be low (10-19%).

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 162 employees in this occupation.

Size of Occupation

Small. There are approximately 275 – 340 radiologic technologists currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 80% are female. A few jobs are union.

Employment Trends

The growth rate is projected to be the same as the average for all occupations through the year 2006. Less than 10 job openings are projected per year due to a net increase in occupation size. Less than 10 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of radiologic technologists is expected to grow about as fast as the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Hospitals, clinics, medical groups, and laboratories with radiology services. Nationally, less than 1% of all radiologic technologists are self-employed.

Methods Used to Fill Job Openings: Almost all employers recruit applicants through newspaper advertisements. Most also fill openings by hiring referrals from colleges and universities. Many fill openings by hiring employee referrals. Some fill openings by hiring referrals from schools and training programs, by hiring unsolicited applicants, and/or through in-house promotion or transfer.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of the information and techniques needed to diagnose and treat injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures (4.50)
- Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (3.83)
- Knowledge of plant and animal living tissue, cells, organisms, and entities, including their functions, interdependencies, and interactions with each other and the environment (3.16)

Skills:
- Controlling operations of equipment or systems (4.66)
- Watching gauges, dials, or other indicators to make sure a machine is working properly (4.33)
- Understanding written sentences and paragraphs in work related documents (3.50)

Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.40)
- The ability to quickly and repeatedly make precise adjustments in moving the controls of a machine or vehicle to exact positions (3.60)
- The ability to speak clearly so that it is understandable to a listener (3.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Operates or oversees operation of radiologic and magnetic imaging equipment to produce photographs of the body for diagnostic purposes.
- Operates fluoroscope to aid physician to view and guide wire or catheter through blood vessels to area of interest.
- Administers oral or injected contrast media to patients.
- Positions imaging equipment and adjusts controls to set exposure time and distance, according to specification of examination.
- Monitors video display of area being scanned and adjusts density or contrast to improve picture quality.
- Positions and immobilizes patient on examining table.
- Explains procedures and observes patients to ensure safety and comfort during scan.
- Assigns duties to radiologic staff to maintain patient flows and achieve production goals.
- Demonstrates new equipment, procedures, and techniques and provides technical assistance to staff.
- Develops departmental operating budget and coordinates purchase of supplies and equipment.
- Reviews and evaluates developed x-rays, videotape, or computer generated information for technical quality.
- Monitors use of radiation safety measures to comply with government regulations and to ensure safety of patients and staff.
- Keys commands and data into computer to document and specify scan sequences, adjust transmitters and receivers, or photograph certain images.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Radiologic Technologists

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
X-Ray or Diagnostic Radiologic Technician Radiologic Technicians Post-secondary training $22.13/hr	**Radiologic Technologist** Associate degree $22.13/hr	**Chief Radiologic Technologist**	**Radiology Department Director** Medical and Health Services Managers Bachelor degree + work exp $35.81/hr
	Radiologic Specialist – e.g., CT Scanning, Angiography, Magnetic Resonance Imaging	**Radiation Therapist** Associate degree $26.98/hr	**Radiologist**

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Nonfarm Animal Caretakers	Short-term OJT	$9.42
Heaters, Metal and Plastic	Moderate-term OJT	$12.16
Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	Moderate-term OJT	$12.42
Pesticide Handlers, Sprayers, and Applicators, Vegetation	Post-secondary training	$13.09
Brazers	Short-term OJT	$14.34
Wellhead Pumpers	Long-term OJT	$15.57
Locksmiths and Safe Repairers	Moderate-term OJT	$15.99
Gas Pumping Station Operators	Moderate-term OJT	$21.19
Radiologic Technologists	Associate degree	$22.13
Radiologic Technicians	Post-secondary training	$22.13
Radiation Therapists	Associate degree	$26.98

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Kami Mowbray

What are some of the job titles you've held previously in this career field?
Angiography Tech and Staff Diagnostic Tech. Those are my two personal specialties, but there are many in the field.

What kind of work do you do in your current job and what do you do in a typical day?
I take the x-rays that are ordered for the day. Since it's a small clinic there are other duties that I can fulfill or help out with. So I also do all the ordering of medical and office supplies, help the nurses, room the patients, set up trays, and clean up. If the nurses are sick or on vacation, the x-ray techs are fully trained to cover them. We also take care of the halter-monitor patients; we apply the halter-monitors, set up treadmills, EKG's and all the other extra tests that we do here. We're a family practice clinic, so experience is broad. It's in small offices where you are really cross-trained. My job is a little bit different, because other x-ray techs mainly support nurses and make a lot of phone calls. , But soon I will also be looking over the vaccines; keeping record, and taking a weekly inventory of all the vaccines that we give out. We are a travel center where people can come for travel immunizations and there are only two in the county. And, there are always x-rays that need to be mailed out, and I have called a few prescriptions in. The nurses and the x-ray techs also order and prescription requests to the local pharmacies.

What was it that attracted you to this type of work?
You are never bored. It's exciting and fun, that is what drew me into it. Originally, I liked the medical field. I chose x-ray because it was more technically oriented as far as working with machines and taking pictures. It's like a combination of photography and medicine. You deal with the patients, but many different kids of patients. You aren't like a nurse on the floor dealing with a specific patient or in a specific department; X-ray has a very broad range. You can end up in surgery, you can work in the emergency room, or you can do special procedures. Working with the radiologist you have a lot more patient contact. Now there's ultrasound, CT, MRI…so even since I've started it has become a broader field. There's always something different and new and when exciting technology comes around you are right on the cutting edge.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
In x-ray especially there is math and science. You go over a lot of physics, a lot of anatomy and physiology, and a lot of math according to the type of x-rays being taken. But it's not difficult and it shouldn't scare a person. So you should be willing to know that you are dealing with that pretty much on a daily basis. Knowledge as far as the medical background you need pretty much comes with the training. It's usually only a two-year course, so you don't have to be scared off when trying to get your foot into the door, because you'll learn all you need to know in those two years. You should also be prepared to learn aggressively. If you don't go into it with some tenacity, wanting to learn and to be there, you can miss a lot of information. Of course, people skills are important…being able to understand patients and that they are ill and sick. You should also have a tolerance for seeing disease or people that are sick and who look bad.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
There are two different types of schools really. I would focus on getting into the largest program possible to get the most experience possible. Try to get training in the largest hospital you can. As soon as you get out of school you are really pumped up and have all your knowledge tested and eventually it's at your fingertips. It is not advisable to go out of school and into a clinical setting where not many patients and doctors are around. When you are first out, you want to gain as much experience as possible, so go to the biggest center possible.

What is it that keeps you wanting to do this kind of work?
I like the medical field and it is always changing. You are always learning something. The patients will come in and no one is ever the same. As far as x-ray goes, you are providing a service and you can take good pictures so there is a little bit of pride in your work. There is a varied approach to this job with all different kinds of studies, patients, and knowledge coming together. It's always new.

What qualities make for an exceptional Radiologic Technologist?
Someone who is not afraid to ask questions. The more you can ask, the more you can do yourself, the more confident you will become, and the better tech you will be. The more experience you can gain early on or anytime, the more of a help you are going to be to the doctor who can trust and rely on your judgment. Sometimes physicians or nurses may assess something too quickly, where as if you pay attention you can bring the overlooked back to the physician. You do play an important role in the care of a patient. It is a team, and you have to be willing to work with other people, and under people.

Teachers - Special Education

Also known as Special Day Class Teachers and Resource Specialists.

Special Education Teachers teach elementary and secondary school subjects to educationally and physically handicapped students. Includes teachers who specialize and work with audibly and visually handicapped students and those who teach basic academic and life processes skills to the mentally retarded (OES 313110).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$11.60 - $20.23/hr	$16.42/hr
New Hires/Exp'd:	$14.27 - $24.93/hr	$17.14/hr
Exp'd/After 3 Years:	$15.61 - $28.26/hr	$19.01/hr

Wages for teachers are typically paid on an annual basis. For inexperienced new hires, salaries range from $26,000 to $39,000. For experienced new hires, salaries range from $30,000 to $56,500. For experienced employees after 3 years, salaries range from $34,000 to $61,000.

A few special education teachers may also receive bonuses.

Hours: Almost all jobs are 35-43 hours per week. A few jobs are 15-30 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■■	□	■	■	□	□
Dental Insurance	■■■■■	□	■	■	□	□
Vision Insurance	■■■■■	□	■	■	□	□
Life Insurance	■■■	□	■	■	□	□
Sick Leave	■■■■■	■	■	■	□	□
Vacation	■■	□	□	□	■■	■
Retirement	■■	■	■■■	□	□	□
Child Care	□	□	■	■	□	□

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: Requirements vary, depending on the type of school. For public schools, contact the State Commission on Teacher Credentialing at 916-445-7254 for licensing information.

Education: Almost all employers require a bachelor degree for job entry.

Experience: Most employers require or prefer 9-36 months of prior experience. Some employers do not require prior experience.

Training: Refer to Teachers – Special Education in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is very difficult to find applicants who meet their hiring standards. This indicates a **very good outlook** for qualified job seekers. Annual turnover is estimated to be low (10-19%).

Size of Occupation

Large. There are approximately 945 – 1,155 special education teachers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 90% are female. Almost all jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 16 employers surveyed representing 185 employees in this occupation.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2006. About 40-45 job openings are projected per year due to a net increase in occupation size. About 5-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of special education teachers is expected to increase faster than the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Public school districts and private schools. Nationally, less than 1% of all special education teachers are self-employed.

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements and/or fill openings by hiring referrals from colleges and universities. Many also recruit applicants through Internet job listings. Some fill openings through word of mouth and/or by hiring unsolicited applicants.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of instructional methods and training techniques including curriculum design principles, learning theory, group and individual teaching techniques, design of individual development plans, and test design principles (5.00)
- Knowledge of information and techniques needed to rehabilitate physical and mental ailments and to provide career guidance including alternative treatments, rehabilitation equipment and its proper use, and methods to evaluate treatment effects (4.16)
- Knowledge of human behavior and performance, mental processes, psychological research methods, and the assessment and treatment of behavioral and affective disorders (4.16)

Skills:
- Teaching others how to do something (4.83)
- Using multiple approaches when learning or teaching new things (4.66)
- Talking to others to effectively convey information (4.50)

Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.40)
- The ability to read and understand information and ideas presented in writing (4.00)
- The ability to speak clearly so that it is understandable to a listener (3.80)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Teaches socially acceptable behavior, employing techniques such as behavior modification and positive reinforcement.
- Administers and interprets results of ability and achievement tests.
- Selects and teaches reading material and math problems related to everyday life of individual student.
- Meets with parents to provide support, guidance in using community resources, and skills in dealing with students learning impairment.
- Observes, evaluates, and prepares reports on progress of students.
- Provides consistent reinforcement to learning, and continuous feedback to student.
- Works with students to increase motivation.
- Confers with other staff members to plan programs designed to promote educational, physical, and social development of students.
- Confers with parents, administrators, testing specialists, social workers and others to develop individual educational plan for student.
- Instructs students, using special educational strategies and techniques to improve sensory-motor and perceptual-motor development, memory, language, and cognition.
- Instructs students in academic subjects, utilizing various teaching techniques, such as phonetics, multisensory learning, and repetition, to reinforce learning.
- Instructs students in daily living skills required for independent maintenance and economic self- sufficiency, such as hygiene, safety, and food preparation.
- Plans curriculum and other instructional materials to meet students' needs, considering such factors as physical, emotional, and educational abilities.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Teachers - Special Education

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Instructional Aide Teacher Assistants Short-term OJT $8.22/hr	**Student Teacher**	**Teacher – Special Ed** Bachelor's Degree + Teaching Credential $51,283/yr	**Instructional Coordinator** Master's Degree $25.81/hr
		Teacher - Elementary Bachelor's Degree + Teaching Credential $48,150/yr	**Vice Principal or Principal** Education Administrator Graduate Degree + work exp $82,301/yr
		Teacher - Secondary Bachelor degree + Teaching Credential $51,736/yr	**Superintendent**

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Middle School Teachers, Except Special and Vocational Education	Masters degree	—
Secondary School Teachers, Except Special and Vocational Education	Masters degree	—
Special Education Teachers, Preschool, Kindergarten, and Elementary School	Masters degree	—
Special Education Teachers, Middle School	Masters degree	—
Special Education Teachers, Secondary School	Masters degree	—
Vocational Education Teachers, Middle School	Bachelor degree	—
Vocational Education Teachers, Secondary School	Bachelor degree	—
Directors, Religious Activities and Education	Bachelor degree	$14.82
Educational, Vocational, and School Counselors	Masters degree	$22.60
Vocational Education Teachers, Postsecondary	Bachelor + work exp	$24.20
Clinical Psychologists	Doctoral degree	$27.65

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Cathy Cranson

What are some of the job titles you've held previously in this career field?
I have been a special day class teacher; a long time ago it was called the EMR now it is called LH (learning handicapped). I have been a resources specialist up until last year, then I was an administrative intern as an assistant to the principal/resource specialist. Up until yesterday I was a resource specialist and I have just got a new job, so I am going to be the enrolment center coordinator. In fact I'm not even 100% sure what this title is.

What kind of work do you do in your current job and what do you do in a typical day?
Primarily I'm instructing kids who have learning problems. Mainly I work in the language arts but more and more I have been seeing kids for math assistance, too. I also collaborate with the regular classroom teachers on ways to modify their instruction so that students are successful in the classroom when they are not actually in the resource room. I do the assessments of all the potential students entering the program. Every year I need to do annual assessments to check progress of students who are in the program. I also do ongoing informal assessments in the classroom and then report that information three times a year with the students' report card. I also coordinate and take the minutes for all the student success team meetings or SST's; in our particular school that is one full day every month, and then one or two meetings every week on top of that. That's what a resource specialist does, and I meet with parents for their IEP's. After I have done the assessments for the initials, we hold the meetings and I write all the IEP's for students who will be placed in the program and then for the children who are already in the program. It's like two full time jobs, but you have to do it all at once. As a resource specialist, it is critical to be one of those people who can juggle and have several different things going on at once. There are people who focus only on one thing at a time and they can do it. But it is really tough if you are kind of that "I can only deal with one thing at a time person." You have to be able to multi-task. As a special day class teacher, it is not quite so critical. You are doing a lot of similar things but your caseload is much smaller. You are also dealing with more subject areas.

What was it that attracted you to this type of work?
Several years ago there were no teaching positions available but I really wanted to feel like I was making a difference. I have really enjoyed working with kids who learn differently than others. What do you do when you have the same kids for 2 or 3 years working on the same type of skills because it takes them longer to learn? I like the challenge of figuring out how can I do it in a new and unique way so they're not saying, "oh, I have done this before". I really enjoy that, and working on curriculum order to access the best way they learn.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
As a resource specialist it is critical to be one of those people who can juggle and kind of have several different things going on at once. I also think it's really helpful to finish your teaching credential. There have been plenty who have come in and haven't and I think that makes it even harder. Learn about how to take what the regular Ed kids are doing and you can modify and change it for these kids. You have to be a constant learner. I think you also have to be a real team player because I work with 15 other teachers whose students come to me during different times of the day. If you build positive relationships with the regular Ed staff they will help you all they possibly can. If you don't have that relationship they get very territorial and then you have a lot of adversarial situations.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Getting your credential. I think you should really have the background coming in. Be interested in working in special ed by either coming in and volunteering or visiting various programs so you kind of see what the kids are all about. They can be very different from the average population. Try to keep that flexible kind of personality. Try not to get frustrated, although there are some days you just do, no matter how patient you are.

What is it that keeps you wanting to do this kind of work?
I think it is the challenge of trying to do new things all the time. It is never a stagnate job. I really enjoy the challenge and the kids are usually really wonderful. It is so satisfying when you see them understand something because they have had to struggle so hard. Most learning does not come easy for them in any area, so when they get it's just incredible. And you know that you've had a hand in it

What qualities make for an exceptional Special Education Teacher?
Creativity, flexibility, a person who can build relationships quickly with teachers and parents. Never being satisfied and always wanting to do better and willing to take that extra step and make that extra effort to make it more successful for everyone involved.

Truck Drivers – Heavy or Tractor Trailer

Heavy or Tractor Trailer Truck Drivers drive tractor-trailer combinations or trucks with a capacity of more than three tons to transport and deliver goods, livestock, or materials in liquid, loose, or packaged from. The may be required to unload trucks (OES 971020).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$10.00 - $15.00/hr	$13.00/hr
New Hires/Exp'd:	$10.00 - $15.50/hr	$12.00/hr
Exp'd/After 3 Years:	$11.00 - $20.00/hr	$15.00/hr

Some heavy or tractor-trailer truck drivers may also receive bonuses.

Hours: Almost all jobs are 40-70 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■	—	■■	—	■	—
Dental Insurance	■■	—	■	—	■	—
Vision Insurance	■	—	□	—	■	—
Life Insurance	■	—	■	—	■	—
Sick Leave	■■	—	□	—	■	—
Vacation	■■■■	—	□	—	■	—
Retirement	■	—	□	—	■	—
Child Care	□	—	□	—	□	—

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: A commercial driver's license is required for this occupation, although some employers provide the necessary training and preparation to acquire the license; contact the Department of Motor Vehicles Commercial Driving License Office at 916-657-5771 for licensing information.

Education: Most employers require a high school diploma or equivalent for job entry. Many are willing to accept less than a high school level education.

Experience: Almost all employers require or prefer 6-72 months of prior experience. A few employers are willing to accept training as a substitute for experience.

Training: Many employers require technical or vocational training prior to employment. Refer to Truck Drivers – Heavy/Tractor Trailer in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is very difficult to find applicants who meet their hiring standards. This indicates a **very good outlook** for qualified job seekers. Annual turnover is estimated to be high (30-39%).

Size of Occupation

Very Large. There are approximately 1,790 – 2,190 heavy or tractor-trailer truck drivers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate less than 5% are female. A few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 188 employees in this occupation.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. About 35-45 job openings are projected per year due to a net increase in occupation size. About 25-30 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of truck drivers is expected to increase about as fast as the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Trucking firms, wholesalers, and food/beverage distributors. Nationally, about 8% of all heavy or tractor-trailer truck drivers are self-employed.

Methods Used to Fill Job Openings: Almost all employers fill openings by hiring employee referrals. Many also recruit applicants through newspaper advertisements and/or fill openings through word of mouth. Some fill openings by hiring unsolicited applicants and/or through in-house promotion or transfer.

Important Knowledge, Skills, and Abilities

Knowledge:	• Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including their relative costs, advantages, and limitations (4.66) • Knowledge of various methods for describing the location and distribution of land, sea, and air masses including their physical locations, relationships, and characteristics (3.83) • Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (3.16)
Skills:	• Controlling operations of equipment or systems (3.33)
Abilities:	• The ability to exert maximum muscle force to lift, push, pull, or carry objects (4.33) • The ability to quickly respond (with the hand, finger, or foot) to one signal (sound, light, picture, etc.) when it appears (4.16) • The ability to know one's location in relation to the environment, or to know where other objects are in relation to one's self (4.16)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Drives truck with capacity of more than 3 tons to transport and deliver cargo, materials, or damaged vehicle.
- Maintains radio or telephone contact with base or supervisor to receive instructions or be dispatched to new location.
- Maintains truck log according to state and federal regulations.
- Keeps record of materials and products transported.
- Position blocks and ties rope around items to secure cargo for transport.
- Cleans, inspects, and services vehicle.
- Operates equipment on vehicle to load, unload, or disperse cargo or materials.
- Obtains customer signature or collects payment for goods delivered and delivery charges.
- Assists in loading and unloading truck manually.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Truck Drivers – Heavy or Tractor Trailer

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Helper or Laborer Freight, Stock, and Material Movers, Hand Short-term OJT $10.09/hr	**Truck Driver** Truck Drivers, Heavy Moderate-term OJT $16.74/hr	**Dispatcher or Operations Manager**	**Self-Employed Trucker**
Delivery Driver Truck Drivers, Light or Delivery Services Short-term OJT $12.24/hr	**Tractor-Trailer Truck Driver** Moderate-term OJT $16.74/hr	**Supervisor** First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators Work experience $23.64/hr	**Manager** Transportation Managers Work experience $30.30/hr

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Laundry and Drycleaning Machine Operators and Tenders, Except Pressing	Moderate-term OJT	$8.43
Production Helpers	Short-term OJT	$9.12
Woodworking Machine Setters and Set-Up Operators, Except Sawing	Moderate-term OJT	$9.96
Truck Drivers, Light or Delivery Services	Short-term OJT	$12.24
Rail Yard Engineers, Dinkey Operators, and Hostlers	Work experience	$15.74
Tractor-Trailer Truck Drivers	Moderate-term OJT	$16.74
Truck Drivers, Heavy	Moderate-term OJT	$16.74
Tank Car, Truck, and Ship Loaders	Moderate-term OJT	$17.02
Ordinary Seamen and Marine Oilers	Short-term OJT	$17.29
Construction Drillers	Moderate-term OJT	$18.50
Structural Iron and Steel Workers	Long-term OJT	$22.63

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Glenn Cofran

What are some of the job titles you've held previously in this career field?
I have been a hod carrier/mason laborer and a construction worker.

What kind of work do you do in your current job and what do you do in a typical day?
All drivers show up first thing in the morning and the person with the most seniority starts with the first truck, which means that you get off work the earliest. I am the number one man on seniority list. I do heavy equipment operations, deliver to different construction sites, unload the materials, and work with the contractors or crew. Heavy truck driving also consists of off road driving, which is tricky and sometimes dangerous.

What was it that attracted you to this work?
To be honest, I was working in Chicago on a construction site and noticed the trucks had heaters. I thought that it might be easier than construction work, since it wasn't as physically demanding. I also liked the fact that heavy truck drivers made good money and had more responsibility than the average construction worker. The work is challenging and sometimes even dangerous, which makes it more interesting.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
I think you need an easy-going temperament and you need to be safety conscious.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
You need to know construction practices and procedures, and labor practices. You can become specialized depending on the type of trucking you do.

What is it that keeps you wanting to do this kind of work?
I like the equipment, and that I have become an expert in my work. I like that I can sleep at home at night, and the hours are good. Since I have been working in the industry for so long, I can retire at an early age.

What qualities make for an exceptional Heavy Truck Driver?
To be an exceptional Heavy Truck Driver, you need to be on time or early since others are dependent on you. You also need to be able to work well with the crew and have good communication skills. Also you need to be safety conscious and deliberate your actions.

Veterinary Assistants

Also known as Veterinary Technicians.

Veterinary Assistants examine animals for a veterinarian. They prepare animals for surgery, perform post-operational medical treatment as needed, and give medications to animals. They usually work directly under the supervision of a veterinarian. They receive extensive training on the job and may also have some post secondary education such as trade school or junior college (OES 798060).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.50 - $12.00/hr	$8.00/hr
New Hires/Exp'd:	$7.19 - $12.00/hr	$10.00/hr
Exp'd/After 3 Years:	$8.50 - $20.00/hr	$14.00/hr

Some veterinary assistants may also receive bonuses.

Hours: Many jobs are 35-40 hours per week. Many other jobs are 18-34 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■	■	■	□	□	□
Dental Insurance	■■	■	□	□	□	□
Vision Insurance	■■	■	□	□	□	□
Life Insurance	■■	□	□	□	□	□
Sick Leave	■■■	■	□	□	□	□
Vacation	■■■■	■■	□	□	□	□
Retirement	■■	□	■	■	□	□
Child Care	□	□	□	□	□	□

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Many employers require a high school diploma or equivalent for job entry. Some require an associate's degree. Some others are willing to accept less than a high school level education.

Experience: Almost all employers require or prefer 1-24 months of prior experience. Most employers are willing to accept training as a substitute for experience.

Training: Many employers report that word processing skills are important. Some also report that spreadsheet skills are important. Employers generally provide on-the-job training for this occupation, although related training programs are available. Refer to Veterinary Assistants in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is very difficult to find applicants who meet their hiring standards. This indicates a **very good outlook** for qualified job seekers. Annual turnover is estimated to be very high (40% or more).

Size of Occupation

Small. There are approximately 155 – 190 veterinary assistants currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate about 95% are female. Few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 55 employees in this occupation.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. Less than 10 job openings are projected per year due to a net increase in occupation size. Less than 10 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of veterinary assistants is expected to grow faster than the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Offices of veterinarians and veterinary clinics. Nationally, about 2% of all veterinary assistants are self-employed.

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements and/or fill openings by hiring referrals from public and private schools. Many also fill openings through word of mouth and/or by hiring unsolicited applicants. Some fill openings by hiring employee referrals and/or recruit applicants through Internet job listings.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of plant and animal living tissue, cells, organisms, and entities, including their functions, interdependencies, and interactions with each other and the environment (4.16)
- Knowledge of the information and techniques needed to diagnose and treat injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures (3.33)

Skills:
- Using scientific methods to solve problems (4.16)
- Listening to what other people are saying and asking questions as appropriate (3.83)
- Determining the kind of tools and equipment needed to do a job (3.83)

Abilities:
- The ability to make fast, simple, repeated movements of the fingers, hands, and wrists (3.60)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (3.60)
- The ability to quickly make coordinated movements of one hand, a hand together with its arm, or two hands to grasp, manipulate, or assemble objects (3.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Assists veterinarian in variety of animal health care duties, including injections, venipunctures, and wound dressings.
- Completes routine laboratory tests and cares for and feeds laboratory animals.
- Inspects products or carcasses to ensure compliance with health standards, when employed in food processing plant.
- Assists professional personnel with research projects in commercial, public health, or research laboratories.
- Assists veterinarian during surgical procedures, passing instruments and materials in accordance with oral instructions.
- Prepares examination or treatment room, and holds or restrains animal during procedures.
- Prepares patient, medications, equipment, and instruments for surgical procedures, using specialized knowledge.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Veterinary Assistants

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Kennel Worker Non-farm Animal Caretakers Short-term OJT $9.42/hr	**Veterinary Assistant** Veterinary Assistants and Laboratory Animal Caretakers Short-term OJT $8.98/hr	**Veterinary Technician**	**Veterinarian** Veterinarians Professional degree $39.55/hr
Receptionist Receptionists and Information Clerks Short-term OJT $11.31/hr	**Animal Control Worker** Short-term OJT $12.46/hr	**Veterinary Office/Clinic Manager** First-Line Supervisors and Manager/Supervisors - Animal Care Workers, Except Livestock Work experience $17.03/hr	**Animal Trainer** Long-term OJT $11.60/hr
			Animal Breeder Short-term OJT $8.92/hr

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Athletic Trainers	Bachelor degree	—
Locker Room, Coatroom, and Dressing Room Attendants	Short-term OJT	$8.82
Veterinary Assistants and Laboratory Animal Caretakers	Short-term OJT	$8.98
Hairdressers, Hairstylists, and Cosmetologists	Post-secondary training	$9.44
Bindery Machine Setters and Set-Up Operators	Moderate-term OJT	$10.63
Ambulance Drivers and Attendants, Except Emergency Medical Technicians	Short-term OJT	$12.49
Surgical Technologists	Associate degree	$16.80
Zoologists and Wildlife Biologists	Doctoral degree	$19.74
Gaugers	Long-term OJT	$24.61
Boilermakers	Long-term OJT	$25.00
Radiation Therapists	Associate degree	$26.98

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Lyn Solomon-Linville

What are some of the job titles you've held previously in this career field?
Registered Veterinary Technician

What kind of work do you do in your current job and what do you do in a typical day?
I do a variety of tasks related to animal health. Treatment can be administering medication, I.V. fluids, clean cages, make sure all the animals are secure in their designated area, and prep and assist with surgeries. We also have office hours to see animals for various ailments. A typical day consists of all of the functions I have mentioned.

What was it that attracted you to this work?
I love animals. I also liked the science that is involved in this line of work.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
You need to have a good understanding of general medicine. You need to have empathy for the animals, and you need to have good people skills. Most of your encounters are with the owners of the animals, and their emotions are usually very high. You should also have good reflexes. Most of the animals are scared when you work on them, so you never know when they might bite or scratch. You need to have good communications skills to work with the doctors and be able to anticipate their needs.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I think volunteer work is an excellent way to get a feel for this occupation. You should look at different pet hospitals so you get a feel of how the different doctors work. This will also give you the opportunity to see if this is really the job for you. You should also enroll in certified course work at a community college. In order to be certified you need to take the State exam, and the course work prepares you for that.

What is it that keeps you wanting to do this kind of work?
I have seen a change in attitude, and I see a lot more respect for the Veterinarian Technician. And again I love the animals, and I love taking care of them.

What qualities make for an exceptional Veterinary Technician?
You need to make the hospital that you work at a part of you. You should work at it like you own it. You need to have fortitude and patience. Good interpersonal and communications skills are key.

Welders and Cutters

Also known as Fabricators.

Welders and Cutters use flamecutting, hand, arc, and gas welding equipment, and gas torches, to weld together metal components of such products as pipelines, automobiles, boilers, and ships, or join together components of fabricated sheet metal assemblies, or cut, trim, or scarf metal objects to dimensions as specified by layout, work orders, or blueprints (OES 939140).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.25 - $10.00/hr	$8.75/hr
New Hires/Exp'd:	$8.00 - $15.00/hr	$12.00/hr
Exp'd/After 3 Years:	$12.00 - $20.00/hr	$15.00/hr

Some welders may also receive bonuses.

Hours: Almost all jobs are 40 hours per week. A few jobs are 16-35 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■	■	■	□	□	□
Dental Insurance	■■■	■	■■	□	□	□
Vision Insurance	■■	■	■■	□	□	□
Life Insurance	■■	■	■	□	□	□
Sick Leave	■■■	■	□	□	□	□
Vacation	■■■■	■	□	□	□	□
Retirement	■■	■	■	■	□	□
Child Care	■	□	□	□	□	□

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%) □ = None — = Insufficient Data

Training, Experience, and Other Requirements

License: None

Education: Many employers are willing to accept less than a high school level education for job entry. Many others require a high school diploma or equivalent.

Experience: Almost all employers require or prefer 6-36 months of prior experience. Many employers are willing to accept training as a substitute for experience.

Training: Training programs are available, but do not necessarily eliminate the need for apprenticeship or on-the-job training. Refer to Welders and Cutters in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find inexperienced but qualified applicants, and very difficult to find qualified applicants with prior experience. This indicates a **good outlook** for job seekers without prior experience, and a **very good outlook** for those who are fully experienced. Annual turnover is estimated to be high (30-39%).

Size of Occupation

Small. There are approximately 310 – 380 welders currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate less than 5% are female. A few jobs are union.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2001: 15 employers surveyed representing 130 employees in this occupation.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. About 5-15 job openings are projected per year due to a net increase in occupation size. About 5-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of welders, cutters, and welding machine operators is expected to grow more slowly than the average for all occupations through 2008.

Other Information

Where the Jobs Are: Welding repair shops and manufacturers of fabricated metal products. Nationally, about 5% of all welders are self-employed.

Methods Used to Fill Job Openings: Almost all employers fill openings by hiring employee referrals. Most also fill openings by hiring unsolicited applicants. Some recruit applicants through newspaper advertisements and/or fill openings through word of mouth.

Important Knowledge, Skills, and Abilities

Knowledge:
- Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (4.20)
- Knowledge of materials, methods, and the appropriate tools to construct objects, structures, and buildings (4.20)
- Knowledge of inputs, outputs, raw materials, waste, quality control, costs, and techniques for maximizing the manufacture and distribution of goods (3.20)

Skills:
- People use quality control analysis skills to conduct tests and inspections. This skill may be applied to products, services, and processes so that a company can evaluate quality or performance level. (4.20)
- Performing routine maintenance and determining when and what kind of maintenance is needed (3.60)
- Controlling operations of equipment or systems (3.60)

Abilities:
- The ability to keep the hand and arm steady while making an arm movement or while holding the arm and hand in one position (4.40)
- The ability to quickly and repeatedly make precise adjustments in moving the controls of a machine or vehicle to exact positions (4.00)
- The ability to quickly make coordinated movements of one hand, a hand together with its arm, or two hands to grasp, manipulate, or assemble objects (4.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important

Tasks and Tools

- Welds metal parts or components together, using brazing, gas, or arc welding equipment.
- Guides electrodes or torch along weld line at specified speed and angle to weld, melt, cut, or trim metal.
- Reviews layouts, blueprints, diagrams, or work orders in preparation for welding or cutting metal components.
- Selects and installs torch, torch tip, filler rod, and flux, according to welding chart specifications or type and thickness of metal.
- Ignites torch or starts power supply and strikes arc.
- Preheats workpiece, using hand torch or heating furnace.
- Positions workpieces and clamps together or assembles in jigs or fixtures.
- Inspects finished workpiece for conformance to specifications.
- Chips or grinds off excess weld, slag, or spatter, using hand scraper or power chipper, portable grinder, or arc-cutting equipment.
- Cleans or degreases parts, using wire brush, portable grinder, or chemical bath.
- Welds in flat, horizontal, vertical, or overhead position.
- Repairs broken or cracked parts, fills holes and increases size of metal parts, using welding equipment.
- Connects and turns regulator valves to activate and adjust gas flow and pressure to obtain desired flame.
- Selects and inserts electrode or gas nozzle into holder and connects hoses and cables to obtain gas or specified amperage, voltage, or polarity.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Welders and Cutters

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Helper or Apprentice Production Helpers Short-term OJT $9.12/hr	**Welder** Welders and Cutters Post-secondary training $14.34/hr	**Lead Person**	**Production Manager** Industrial Production Managers Bachelor + work exp $35.76/hr
	Assembler/Production Welder Welders, Production Post-secondary training $14.34/hr	**Supervisor** First-Line Supervisors/Managers of Production and Operating Workers Work experience $22.55/hr	**Shop Owner**

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Coil Winders, Tapers, and Finishers	Short-term OJT	$9.65
Metal Molding, Core Making, and Casting Machine Setters and Set-Up Operators	Moderate-term OJT	$9.87
Coating, Painting, and Spraying Machine Setters and Set-Up Operators	Moderate-term OJT	$10.88
Glass Cutting Machine Setters and Set-Up Operators	Moderate-term OJT	$10.97
Sawing Machine Operators and Tenders	Moderate-term OJT	$11.27
Sawing Machine Tool Setters and Set-Up Operators, Metal and Plastic	Moderate-term OJT	$11.82
Combination Machine Tool Operators and Tenders, Metal and Plastic	Moderate-term OJT	$11.88
Electromechanical Equipment Assemblers	Post-secondary training	$12.34
Welders, Production	Post-secondary training	$14.34
Welders and Cutters	Post-secondary training	$14.34
Aircraft Rigging Assemblers	Work experience	$22.70

Sources:
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)

Career Dialogue with Mike Jones

What are some of the job titles you've held previously in this career field?
I am currently a Welding Production Lead. I have been a General Welder, which has three levels..

What kind of work do you do in your current job and what do you do in a typical day?
Currently I supervise jobs, which involves assigning jobs to other welders. I manage materials, making sure that each welder has the proper materials to work with. I also make sure that all of the welders work in a safe manner. A typical day starts with reviewing job orders and assigning them as necessary. I then monitor progress to make sure work is getting done as scheduled. I am available to troubleshoot whenever a problem weld is encountered.

What was it that attracted you to this work?
It was always a personal interest. I took classes in high school that involved working with metal, and welding, and my interest continued to develop from there. I then got a job as an apprentice, and found that I really liked the work.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
It would be important for someone to have basic welding knowledge. They should have a degree of manual dexterity, good hand-eye coordination, and a good aptitude towards this kind of work. A person should also have some artistic ability and take a lot of pride in their work.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Learn the basic skills in a high school or vocational setting. Get experience with machine tools; develop hand skills, attention to detail. They should also have a mechanical aptitude and good communication skills.

What is it that keeps you wanting to do this kind of work?
I really enjoy welding, and now that I supervise I find the challenges even more rewarding. I work for a good employer and there is room for growth. I also like the challenge of learning new technology in welding as it is developed.

What qualities make for an exceptional Welder?
Again, I would say that someone should have artistic values, be manually dexterous, LIKE welding, and take a lot of pride in their work.

Occupational Profiles 2002

Adjustment Clerks

Also known as Customer Service Representatives.

Adjustment Clerks investigate and resolve customer complaints concerning merchandise, service, billing or credit rating. They examine pertinent information to determine the accuracy of customer complaints and responsibility for errors and notify customer and appropriate personnel of findings, adjustments and recommendations such as exchange of merchandise, refund of money, credit to customer's account or the adjustment of the customer's bill. (OES 531230)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.75 - $12.00/hr	$10.00/hr
New Hires/Exp'd:	$6.75 - $15.00/hr	$10.00/hr
Exp'd/After 3 Years:	$6.75 - $16.00/hr	$12.00/hr

Hours: Most jobs are 40 hours per week. Some jobs are 20-28 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■		■■■■	■		
Dental Insurance	■■		■■■	■		
Vision Insurance	■■		■■	■		
Life Insurance	■■		■■	■		
Sick Leave	■■■		■■■	■		
Vacation	■■■		■■■■	■		
Retirement	■■		■■■■	■		
Child Care						

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: Many employers are willing to accept less than a high school diploma or equivalent for job entry.

Experience: Many employers require or prefer 6-24 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Of firms responding to this question, all require spreadsheet skills. Most require word processing. Many require database skills. Refer to Adjustment Clerks in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers report that it is moderately difficult to find both inexperienced and experienced applicants. This indicates a **very good outlook** for job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%) CCOIS survey data collected in 2002: 15 employers surveyed representing *85 employees in this occupation.*

Size of Occupation

Medium. There are approximately 444 – 542 Adjustment Clerks currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 51% are female. None of the jobs are union.

Employment Trends

The growth rate is projected to be much faster than average for all occupations through the year 2006. Approximately 17 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment is expected to increase faster than the average for all occupations through the year 2010.

Other Information

Where the Jobs Are: Commercial banks; Telephone communications; Business services; Insurance agents; Personnel supply services; Wholesale trade; Computer and data processing services; Medical service and health insurance.

Methods Used to Fill Job Openings: Many employers fill openings by placing newspaper advertisements and/or hiring walk-in applicants. Some employers recruit applicants through word-of-mouth.

Career Path: Promotions may lead to credit supervisory or accounts receivable positions.

Important Knowledge, Skills, and Abilities

Knowledge:
English Language: Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
Mathematics: Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications.
Customer and Personal Service: Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques.

Skills:
Complex Problem Solving: Complex problem solving is used in identifying complex problems and reviewing related information so that options may be developed and evaluated, and solutions may be put into action.
Active Listening: Listening to what other people are saying and asking questions as appropriate.
Writing: Communicating effectively with others in writing as indicated by the needs of the audience.

Abilities:
Oral Expression: The ability to communicate information and ideas in speaking so others will understand.
Written Comprehension: The ability to read and understand information and ideas presented in writing.
Oral Comprehension: The ability to listen to and understand information and ideas presented through spoken words and sentences.

Tasks and Tools

- Reviews claims adjustments with dealer, examines parts claimed to be defective and approves or disapproves of dealers claim.
- Notifies customer and designated personnel of findings and recommendations, such as exchanging merchandise or refunding money, or adjustment of bill.
- Examines weather conditions, number of days in billing period, and reviews meter accounts for errors which might explain high utility charges.
- Orders tests to detect product malfunction and determines if defect resulted from faulty construction.
- Trains dealers or service personnel in construction of products, service operations, and customer service.
- Compares merchandise with original requisition and information on invoice and prepares invoice for returned goods.
- Prepares reports showing volume, types, and disposition of claims handled.
- Writes work order.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Interviewers, Except Eligibility and Loan	Short-term OJT	$13.10
Customer Service Representatives, Utilities	Moderate-term OJT	$13.23
Welfare Eligibility Workers and Interviewers	Moderate-term OJT	$13.32
Bill and Account Collectors	Short-term OJT	$13.56
Opticians, Dispensing	Long-term OJT	$14.58
Insurance Policy Processing Clerks	Moderate-term OJT	$15.91
Insurance Appraisers, Auto Damage	Long-term OJT	$20.84
Purchasing Agents, Except Wholesale, Retail and Farm	Bachelor's degree	$21.54

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue With Leslie Jones

What are some of the job titles you've held previously in this career field?
I have worked as a Bank Teller and a Teller for the branch vaults. I am currently a Teller Services Phone Representative.

What kinds of work do you do in your current job and what do you do in a typical day?
I do everything a teller does except for handling the cash. I make deposits in people's accounts, answer loan questions, transfer money, answer real estate questions, trouble shoot questions and transfer calls to appropriate people.

What was it that attracted you to this type of work?
I wanted to work in another aspect of banking, be behind the scenes but still interact with customers. I wanted to find out how the credit union worked from the inside out rather than the other way around.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
I highly recommend some banking experience or at least cash handling and customer service experience to give you the communication skills you will need. Lots of patience and the ability to communicate your thoughts clearly and precisely to the customer are important to possess. Working in this field, general math and computer skills are needed as well as the ability to be honest.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Cash handling and experience in customer service are great ways to prepare for this field.

What is it that keeps you wanting to do this kind of work?
I enjoy the community and what I do, this job allows me to interact with people and respond to their questions attentively. I like the fact that you have to take the initiative to move up in this field but there is always room for growth.

What qualities make for an exceptional employee in your field?
You must also be someone who interacts well with other people and implement patience in your daily routine at work.

Automotive Mechanics

Also known as Automotive Technicians.

Automotive Mechanics adjust, repair and overhaul automotive vehicles. They may be designated according to specialties such as Brake Repairers, Transmission Mechanics or Front-End Mechanics. Auto Body Repairers, Bus and Truck Mechanics, Diesel Engine Specialists, and Electrical Systems Specialists are not included. (OES 853020)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.00 - $10.00/hr	$8.50/hr
New Hires/Exp'd:	$8.00 - $25.50/hr	$15.00/hr
Exp'd/After 3 Years:	$16.00 - $35.00/hr	$25.00/hr

Hours: All jobs are 40 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■■		■■			
Dental Insurance	■■■		■■			
Vision Insurance	■		■			
Life Insurance	■		■			
Sick Leave	■■■					
Vacation	■■■■■■					
Retirement	■■■■					
Child Care						

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: Many employers are willing to accept less than a high school diploma or equivalent for job entry. Many others require a high school diploma or equivalent.

Experience: Almost all employers require or prefer 12-72 months of prior experience. No responding employers accept training in lieu of experience. Most employers require or prefer vocational training.

Training: Many dealerships offer on-the-job training from the manufacturer. Refer to Automotive Mechanics in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers report that it is very difficult to find inexperienced but qualified applicants, and moderately to very difficult to find qualified applicants with prior experience. This indicates a **very good outlook** for all job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%) CCOIS survey data collected in 2002: 15 employers surveyed representing 85 employees in this occupation.

Size of Occupation

Large. There are approximately 1,268 –1,550 Automotive Mechanics currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate less than 5% are female.

Employment Trends

The growth rate is projected to be faster than average for all occupations through the year 2006. Approximately 69 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Automotive Mechanics is expected to increase about as fast as the average through the year 2010.

Other Information

Where the Jobs Are: Automotive repair shops; Retail and wholesale automotive dealers; Self-employed; Automotive and home supply stores.

Methods Used to Fill Job Openings: Many employers recruit applicants through newspaper advertisements, word of mouth/employee referrals, and walk-in applicants.

Career Path: Promotions may lead to master's technician or service consultant positions.

Important Knowledge, Skills, and Abilities

Knowledge:
Mechanical: Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance.
Computers and Electronics: Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming.
Engineering and Technology: Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications.

Skills:
Repairing: Repairing machines or systems using the needed tools.
Troubleshooting: Determining what is causing an operating error and deciding what to do about it.
Complex Problem Solving: Complex problem solving is used in identifying complex problems and reviewing related information so that options may be developed and evaluated, and solutions may be put into action.
Equipment Maintenance: Performing routine maintenance and determining when and what kind of maintenance is needed.

Abilities:
Information Ordering: The ability to correctly follow a given rule or set of rules in order to arrange things or actions in a certain order. The things or actions can include numbers, letters, words, pictures, procedures, sentences, and mathematical or logical operations.
Problem Sensitivity: The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.
Manual Dexterity: The ability to quickly make coordinated movements of one hand, a hand together with its arm, or two hands to grasp, manipulate, or assemble objects.

Tasks and Tools

- Repairs and overhauls defective automotive units, such as engines, transmissions, or differentials.
- Repairs or replaces parts, such as pistons, rods, gears, valves, and bearings.
- Overhauls or replaces carburetors, blowers, generators, distributors, starts, and pumps.
- Repairs manual and automatic transmissions.
- Installs and repairs accessories, such as radios, heaters, mirrors, and windshield wipers.
- Replaces and adjusts headlights.
- Aligns front end.
- Repairs damaged automobile bodies.
- Rebuilds parts, such as crankshafts and cylinder blocks. Examines vehicles and discusses extent of damage or malfunction with customer.
- Repairs radiator leaks.
- Repairs or replaces shock absorbers.
- Rewires ignition system, lights, and instrument panel.
- Repairs, relines, replaces, and adjusts brakes.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Mechanical Inspectors	Moderate-term OJT	$11.57
Engine and Other Machine Assemblers	Long-term OJT	$12.27
Farm Equipment Mechanics	Postsecondary	$13.61
Automotive Specialty Technicians	Postsecondary	$13.71
Airframe-and-Power-Plant Mechanics	Postsecondary	$19.57
Aircraft Engine Specialists	Postsecondary	$19.57
Industrial Machinery Mechanics	Postsecondary	$20.84

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Glenn Choate

What are some of the job titles you've held previously in this career field?
Master's Auto Tech, Service Supervisor, Advanced Smog Tech, ASE Re-Certified Master's Tech with L1 Certification. I went to work for my shop teacher and then worked at a filling station doing tune-ups. I had auto shop and training from my father as well.

What kinds of work do you do in your current job and what do you do in a typical day?
I do all aspects of automotive repair on nearly every type of car that comes in the door and predominately drivability related repairs, on-board computer diagnostics and repairs, electrical work, routine maintenance (things like brakes, alignments and smog checks). Occasionally I will do a transmission.

What was it that attracted you to this type of work?
When I was eight-years-old I decided what I wanted to do and by watching my father, who was mechanically incline. From a really young age I was able to determine that I wanted to be better than the average person in my field, not just as good as the next guy because this was what I wanted to do for a living.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
Critical to this field is reasoning ability, honesty, reading comprehension, math, and the ability to apply head knowledge to the actual hands on work. What we find often times are the people who are really good in class cannot translate the head knowledge to being able to fix anything on a car. Very important is a willingness to keep learning and to be willing to sacrifice time for training and money for tools. Without friendly cooperation from your co-workers you won't have teamwork, and the job could become very unfulfilling. You should at least like puzzles because much of the diagnostics field is just that. You are collecting puzzle pieces to come to a conclusion for a repair.

What qualities make for an exceptional employee in your field?
Anyone whom you deal with from the customer to the shop supervisor must be able to trust what you say and what you do. You must have very good knowledge of everything involved with fixing a car like electrical work, welding, working in an auto shop setting etc. Any extra training in a specialty field is great, too, such as on-board computers or transmissions.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I would say basic auto shop would be a minimum requirement. Taking a welding or electrical class so that you can begin to understand electrical workings of an automobile would be beneficial. On-board computers now control most cars on the road; taking a related class is very important. I would strongly recommend taking a lower- level job at a shop to verify that you really want to carry out an automotive career. Once you've established that the automotive field is what you want to

do, then set your sights on advanced training courses such as going to trade school or dealership training. Dealership training is very productive and efficient and sometimes is available by computer or satellite-based classes right there in the dealership so you don't have to drive far to get the training.

What is it that keeps you wanting to do this kind of work?
I love this work! I get the gratification of helping someone resolve a difficulty that they can't resolve on their own with something that has become nearly essential, and that is their car. I didn't have the opportunity to become a doctor, but I am still able to help people with something that is very important to them in an efficient way.

What qualities make for an exceptional employee in your field?
Honesty, knowledge, ability, being a team player, a non-abrasive personality and work habits, someone who chooses this field as opposed to someone who uses it as a back-up job when his/her primary job fails. Women often excel in this field because of their drive and desire to prove themselves or to be better than everyone else; that is an admirable quality to emulate.

Bill and Account Collectors

Bill and Account Collectors locate and notify customers of delinquent accounts by mail, telephone or personal visit to solicit payment. Their duties include receiving payment and posting amounts to customer's account, sending statements to the credit department if the customer fails to respond, initiating repossession proceedings or service disconnection and keeping records of collection and status of accounts. (OES 535080)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.75 - $10.00/hr	$8.00/hr
New Hires/Exp'd:	$6.75 - $16.00/hr	$9.00/hr
Exp'd/After 3 Years:	$7.50 - $25.00/hr	$15.00/hr

Hours: Almost all jobs are 40 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■		■■			
Dental Insurance	■■		■			
Vision Insurance	■		■			
Life Insurance	■		■			
Sick Leave	■■		■■			
Vacation	■■■		■■			
Retirement	■		■■			
Child Care	■					

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: Almost all employers require a high school diploma or equivalent for job entry.

Experience: Most employers require or prefer 3-24 months of prior experience. Most employers are willing to accept training as a substitute for experience.

Training: Of firms responding to this question, most require word processing. Many require spreadsheet skills and accounting software. Refer to Bill and Account Collectors in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers report that it is moderately difficult to find both inexperienced and experienced applicants. This indicates a **good outlook** for job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 16 employers surveyed representing 36 employees in this occupation.

Size of Occupation

Medium. There are approximately 375 – 459 Bill and Account Collectors currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 72% are female.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2006. Approximately 27 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Bill and Account Collectors is expected to increase faster than the average through the year 2010.

Other Information

Where the Jobs Are: Credit reporting and collection agencies; Commercial banks and savings institutions; Hospitals. Nationally, hospitals and physician's offices are two of the fastest growing areas requiring collectors.

Methods Used to Fill Job Openings: Most employers fill openings through newspaper advertisements. A few employers fill openings through employee referrals and in-house promotions/transfers.

Career Path: Promotions may lead to accounts payable or insurance claims clerk positions.

Important Knowledge, Skills, and Abilities

Knowledge:
Mathematics: Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications.
Clerical: Knowledge of administrative and clerical procedures and systems such as word processing systems, filing and records management systems, stenography and transcription, forms design principles, and other office procedures and terminology.
Economics and Accounting: Knowledge of economic and accounting principles and practices, the financial markets, banking, and the analysis and reporting of financial data.

Skills:
Speaking: Talking to others to effectively convey information.
Complex Problem Solving: Complex problem solving is used in identifying complex problems and reviewing related information so that options may be developed and evaluated, and solutions may be put into action.
Social Perceptiveness: Being aware of others' reactions and understanding why they react the way they do.

Abilities:
Number Facility: The ability to add, subtract, multiply, or divide quickly and correctly.
Speech Clarity: The ability to speak clearly so that it is understandable to a listener.
Oral Expression: The ability to communicate information and ideas in speaking so others will understand.

Tasks and Tools

- Mails form letters to customers to encourage payment of delinquent accounts.
- Notifies credit department, orders merchandise repossession or service disconnection, or turns over account to attorney if customer fails to respond.
- Persuades customer to pay amount due on credit account, damage claim, or nonpayable check, or negotiates extension of credit.
- Confers with customer by telephone or in person to determine reason for overdue payment and review terms of sales, service, or credit contract.
- Drives vehicle to visit customer, return merchandise to creditor, or deliver bills.
- Sorts and files correspondence, and performs miscellaneous clerical duties.
- Traces delinquent customer to new address by inquiring at post office or questioning neighbors.
- Records information about financial status of customer and status of collection efforts.
- Receives payments and posts amount paid to customer account, using computer or paper records.
- Utilizes word processing software such as Microsoft Word or Word Perfect at a basic/introductory level.
- Utilizes spreadsheet software such as Microsoft Excel or Lotus 1-2-3 at a basic/introductory level.
- Utilizes database software such as Microsoft Access or FileMaker Pro at a basic/introductory level.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Credit Checkers	Short-term OJT	$12.32
Order Clerks	Short-term OJT	$12.35
Adjustment Clerks	Moderate-term OJT	$13.23
Welfare Eligibility Workers and Interviewers	Moderate-term OJT	$13.32
Licensing Examiners and Inspectors	Long-term OJT	$19.60
Purchasing Agents, Except Wholesale, Retail and Farm Products	Bachelor's degree	$21.54
Insurance Adjusters, Examiners and Investigators	Long-term OJT	$21.89

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Patricia A. Carter

What are some of the job titles you've held previously in this career field?
I have had clerical and data entry jobs previously, however, no medical billing experience. I had always desired to work in this field, but it always seemed unobtainable.

What kinds of work do you do in your current job and what do you do in a typical day?
My job consists of patient billing and posting charges and payments for multiple doctors. I also handle billing records requests for various attorneys and customers. I obtain reports for workers compensation claims and complete daily updates.

What was it that attracted you to this type of work?
I've always had an attraction to the medical field but on the administrative side. For me this field is mentally challenging and rewarding. I am not only able to help others but am more knowledgeable for my own personal billing needs. It's not as confusing as some people think.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
Understanding medical billing can be a little complex, but I have found that I learned better when I could be hands-on. This, in my opinion, can't be taught from a book only, but needs to be applied while learning. Clerical and organizational skills are most necessary!

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Really wanting to enter this field, loving billing and being willing to handle customers of all personalities pleasantly is the most important! Being able to handle multiple tasks and meet deadlines is absolutely a plus. If you love it, you'll master's it!

What is it that keeps you wanting to do this kind of work?
Honestly, I have been fortunate with my employers and co-workers. They have made this job fun and are always teaching me. I learn just by watching and listening to them. They show grace and extend assistance to us constantly.

What qualities make for an exceptional Bill and Account Collector?
Being you is the ultimate quality needed. However, if loving people, patience and basic office skills are a part of that, then you're in! Everything else is just more knowledge. You will make a great account collector.

Carpenters

Carpenters perform the carpentry duties necessary to make or repair wooden structures, structural members, and fixtures and equipment using carpentry tools and woodworking machines. Does not include Cabinetmakers and Bench Carpenters.
(OES 871020)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$8.00-$30.00/hr	$15.00/hr
New Hires/Exp'd:	$8.00-$27.00/hr	$16.00/hr
Exp'd/After 3 Years:	$15.00-$50.00/hr	$25.00/hr

Hours: All jobs are 40 hours a week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■		■■		■	
Dental Insurance	■■		■■			
Vision Insurance	■■		■			
Life Insurance	■		■			
Sick Leave	■		■		■	
Vacation	■■		■		■	
Retirement	■		■			
Child Care						

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License Not required. If interested in licensing as a general building or specialty contractor, contact the Contractors State License Board at (800) 321-2752. For further information via the Internet go to: Associated Builders and Contractors [http://www.abc.org], Associated General Contractors of America, Inc. [http://www.agc.org] or United Brotherhood of Carpenter and Joiners of America [http://www.necarpenters.org/ubc.htm].

Education Many employers are willing to accept less than a high school level education for job entry. Most others require a high school diploma or equivalent.

Experience Most employers require or prefer 12-36 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training Refer to Carpenters in the Occupation-Training Index for information on education and training providers with related programs. (Note: training does not necessarily eliminate the need for apprenticeship or on-the-job training).

Supply/Demand Assessment

Employers generally report that it is very difficult to find inexperienced but qualified applicants, and moderately difficult to find qualified applicants with prior experience. This indicates a **very good outlook** for job seekers without prior experience, and a **good outlook** for those who are fully experienced.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing 240 employees in this occupation.

Size of Occupation

Very large. There are approximately 1,974 – 2,412 Carpenters currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate less than 5% are female. A few jobs are union.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. Approximately 114 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Carpenters is expected to increase more slowly than the average through the year 2010.

Other Information

Where the Jobs Are: Self-employment; Residential building construction; Nonresidential building construction; Carpentering and floor work; Masonry, stonework, and plastering; Heavy construction; Concrete work.

Methods Used to Fill Job Openings: Almost all employers fill openings by hiring through word of mouth and/or employee referrals. Many fill openings by hiring walk-in applicants.

Career Path: Promotions may lead to foreman or supervisory and managerial positions.

Important Knowledge, Skills, and Abilities

Knowledge:	**Building and Construction:** Knowledge of materials, methods, and the appropriate tools to construct objects, structures, and buildings. **Design:** Knowledge of design techniques, principles, tools and instruments involved in the production and use of precision technical plans, blueprints, drawings, and models.
Skills:	**Installation:** Installing equipment, machines, wiring, or programs to meet specifications. **Quality Control Analysis:** Using quality control analysis skills to conduct tests and inspections. This skill may be applied to products, services, and processes so that a company can evaluate quality or performance level. **Repairing:** Repairing machines or systems using the needed tools.
Abilities:	**Visualization:** The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged. **Manual Dexterity:** The ability to quickly make coordinated movements of one hand, a hand together with its arm, or two hands to grasp, manipulate, or assemble objects. **Extent Flexibility:** The ability to bend, stretch, twist, or reach out with the body, arms, and/or legs.

Tasks and Tools

- Shapes or cuts materials to specified measurements, using hand tools, machines, or power saw.
- Assembles and fastens materials, using hand tools and wood screws, nails, dowel pins, or glue, to make framework or props.
- Installs structures and fixtures, such as windows, frames, floorings, and trim, or hardware, using carpenter's hand and power tools.
- Builds or repairs cabinets, doors, frameworks, floors, and other wooden fixtures used in buildings, using woodworking machines, carpenters hand tools, and power tools.
- Fills cracks and other defects in plaster or plasterboard and sands patch, using patching plaster, trowel, and sanding tool.
- Finishes surfaces of woodworking or wallboard in houses and buildings, using paint, hand tools, and paneling.
- Removes damaged or defective parts or sections of structure and repairs or replaces, using hand tools.
- Verifies trueness of structure, using plumb bob and level.
- Prepares layout according to blueprint or oral instructions, using rule, framing square, and calipers.
- Estimates amount and kind of lumber or other materials required, and selects and orders them.
- Inspects ceiling or floor tile, wall coverings, siding, glass, or woodwork to detect broken or damaged structures.
- Studies specifications in blueprints, sketches, or building plans to determine materials required and dimensions of structure to be fabricated.
- Measures and marks cutting lines on materials, using ruler, pencil, chalk, and marking gauge.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Helpers—Carpenters	Short-term OJT	$11.56
Welders and Cutters	Postsecondary	$12.69
Plumbers	Long-term OJT	$19.20
Boat Builders and Shipwrights	Long-term OJT	$19.34
Carpenter Assemblers and Repairers	Long-term OJT	$19.34
Rough Carpenters	Long-term OJT	$19.34
Brickmasons and Blockmasons	Long-term OJT	$20.16

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Mark Harris

What are some of the job titles you've held previously in this career field?
I started out as an entry-level laborer and then worked my way up through different types of construction. The majority of the construction that I do now is residential and light commercial buildings. Various types of carpentry brought me to the skill level I am at now. I had two years of drawing experience. When I started in construction the only apprenticeship programs were through the union, and I never worked for union people. Therefore, I never went through an apprenticeship program like most people do now. Through the different jobs I held, I really started to learn the trade well. I had the luxury of working on homes, and since residential construction generally takes longer than a small project, I really got to see the start and finish of a particular assignment.

What kinds of work do you do in your current job and what do you do in a typical day?
I like to work with the tools and physically do the work, but the majority of the things I do now are coordinating all of the sub-contractors, ordering materials, correcting problems, and working on lining up new projects and preparing for them. I meet with architects, designers, and homeowners as well.

What was it that attracted you to this type of work?
I like working with my hands and creating things; I also enjoy working in the trades where everyday is different, and I never know what to expect. Being able to see a product from beginning to end is also a very satisfying feeling.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
A lot more organization and office sense are involved with this business than people think. You must be organized in order to complete a job correctly. Math is important in addition to written and verbal communication.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Construction classes through college can be a good place to begin your training. Being on a job, learning the right skills, and working your way up is always the best way to learn the construction trade. Knowing your basics like math and writing are important too.

What is it that keeps you wanting to do this kind of work?
I enjoy doing my job, and when you get pretty good at something, it makes things more interesting and lucrative.

What qualities make for an exceptional Carpenter?
The same qualities as any other job are important; being a prompt employee; being attentive and presentable when you go to work because even if you are on a construction site, you are still representing a business in someone's home.

Child Care Workers

Child Care Workers attend children at school, businesses and institutions, performing a variety of tasks such as dressing, feeding, bathing and overseeing play. (OES 680380)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.75 - $14.38/hr	$7.72/hr
New Hires/Exp'd:	$6.75 - $12.00/hr	$9.00/hr
Exp'd/After 3 Years:	$6.75 - $14.00/hr	$11.50/hr

Surveys indicate the union wages were typically at the top of the range.

Hours: Most jobs are 40 hours per week. Some jobs average 25 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■	■	■■■	■		
Dental Insurance	■	■	■■			
Vision Insurance	■		■			
Life Insurance	■	■	■	■		
Sick Leave	■■	■	■			
Vacation	■■	■	■			
Retirement	■	■	■	■		
Child Care	■	■	■	■		

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: Criminal record clearance, including fingerprinting. For additional information via the Internet, go to the National Association for the Education of Young Children [http://www.naeyc.org].

Education: Most employers require a high school diploma or equivalent for job entry. A few will accept less than a high school education.

Experience: All employers require or prefer an average of 3 - 24 months of prior experience. Most employers are willing to accept training as a substitute for experience.

Training: Employers usually provide on-the-job training. Refer to Child Care Workers in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is very difficult to find both inexperienced and fully experienced applicants. This indicates a **very good outlook** for job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 16 employers surveyed representing 313 employees in this occupation.

Size of Occupation

Large. There are approximately 892 – 1,090 Child Care Workers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 8% are male. A few jobs are union.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. About 39 job openings are projected per year due to growth or separations (workers retiring or leaving the occupation). Nationwide, employment of Child Care Workers is expected to grow 42% through 2010.

Other Information

Where the Jobs Are: Self-employment; Private households; Child day care services; Educational services.

Methods Used to Fill Job Openings: Almost all employers recruit applicants through newspaper advertisements. Many fill openings by hiring employee referrals and walk-in applicants.

Career Path: Promotions may lead to preschool teacher, teacher, and day care director positions.

Important Knowledge, Skills, and Abilities

Knowledge: **Customer and Personal Service:** Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques.
Psychology: Knowledge of human behavior and performance, mental processes, psychological research methods, and the assessment and treatment of behavioral and affective disorders.
Education and Training: Knowledge of instructional methods and training techniques including curriculum design principles, learning theory, group and individual teaching techniques, design of individual development plans, and test design principles.

Skills: **Social Perceptiveness:** Being aware of others' reactions and understanding why they react the way they do.
Speaking: Talking to others to effectively convey information.
Service Orientation: Actively looking for ways to help people.

Abilities: **Oral Expression:** The ability to communicate information and ideas in speaking so others will understand.
Oral Comprehension: The ability to listen to and understand information and ideas presented through spoken words and sentences.
Problem Sensitivity: The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.

Tasks and Tools

- Cares for children in institutional setting, such as group homes, nursery schools, private businesses, or schools for the handicapped.
- Disciplines children and recommends or initiates other measures to control behavior, such as caring for own clothing and picking up toys and books.
- Assists in preparing food for children and serves meals and refreshments to children and regulates rest periods.
- Wheels handicapped children to classes or other areas of facility, secure in equipment, such as chairs and slings.
- Monitors children on life-support equipment to detect malfunctioning of equipment and calls for medical assistance when needed.
- Instructs children regarding desirable health and personal habits, such as eating, resting, and toilet habits.
- Places or hoists children into baths or pools.
- Organizes and participates in recreational activities, such as games.
- Reads to children, and teaches them simple painting, drawing, handwork, and songs.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Personal and Home Care Aides	Short-term OJT	$7.64
Home Health Aides	Short-term OJT	$8.82
Physical Therapy Aides	Moderate-term OJT	$12.02
Licensed Practical and Licensed Vocational Nurses	Post-secondary training	$13.48

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Rachel Culverwell

What are some of the job titles you've held previously in this career field?
Previously I was a Recreation Leader where I ran an after school program, I worked at a summer camp and taught second and third grades. Now I supervise the youth programs in which I once worked.

What kinds of work do you do in your current job and what do you do in a typical day?
I oversee three after school recreation programs during the school year as well as a preschool program. In the summer I oversee various camps. I am responsible for hiring and training of recreation staff. I run staff meetings, proof paperwork, keep track of the budget for programs, monitor enrollment and maintain safety and respect as well as fun in the programs.

What was it that attracted you to this type of work?
I love kids, and a recreational setting is a great way to build a young person's self esteem. I've found that you really can connect with children and build trust.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
Good attitude and high energy while working with a children's program is key. Dedication and commitment are also important because this typically isn't a profession that is supported financially. You need to have a caring heart. Creativity is also important, being able to think quickly on your feet and problem solve. You also need a great deal of patience and kindness.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Working in the programs themselves and being a recreation leader, even an entry-level position would be beneficial because you would be working with children. Even working as a volunteer, getting involved and getting experience with children. Many people have started at the bottom and moved up. Some people will go to school for a teaching credential or take child development courses. It's really helpful to just get involved and work in the field.

What is it that keeps you wanting to do this kind of work?
The kids, of course, keep me wanting to do this kind of work, just knowing that I'm helping out families and our community. I can communicate with families and know that I am providing much needed care for their kids. It's a very gratifying profession and that's what keeps me going; knowing that we are very valuable to the community at large.

What qualities make for an exceptional Childcare Worker?
A caring heart, commitment, good organizational skills, a positive attitude and patience are all good qualities to have. The ability to be a good problem solver and think on your feet is also important. Working with children, you are taking in so much information very quickly and you need to be able to take a moment and make a decision. Childcare is a very exhausting, yet rewarding profession.

Computer Engineers

Computer Engineers analyze data processing requirements to plan EDP systems to provide system capabilities required for projected workloads. They plan layout and installation of new systems or modification of existing systems. They may set up and control analog or hybrid computer systems to solve scientific and engineering problems.
(OES 221270)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.75 - $16.78/hr	$12.00/hr
New Hires/Exp'd:	$6.75 - $40.75/hr	$16.78/hr
Exp'd/After 3 Years:	$15.00 - $70.00/hr	$30.00/hr

Hours: Almost all jobs are 40 hours per week. A few jobs are 20-30 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■		■■	■	■	
Dental Insurance	■■		■	■	■	
Vision Insurance	■■		■		■	
Life Insurance	■■		■	■		
Sick Leave	■■■		■		■	
Vacation	■■■		■■		■	
Retirement	■■		■	■		
Child Care	■					

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: Some employers require a high school diploma or equivalent for job entry. Some others require an associate or bachelor degree.

Experience: Almost all employers require or prefer 12-60 months of prior experience. A few employers are willing to accept training as a substitute for experience.

Training: Of firms responding to this question, most employers require word processing and spreadsheet skills. Many employers require database skills. Refer to Computer Engineers in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is very difficult to find inexperienced but qualified applicants, and moderately difficult to find qualified applicants with prior experience. This indicates a **very good outlook** for job seekers without prior experience, and a **good outlook** for those who are fully experienced.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing 71 employees in this occupation.

Size of Occupation

Large. There are approximately 671– 821 computer engineers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 25% are female.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2006. Approximately 53 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment is expected to increase faster than the average through 2010. Consulting opportunities are expected to increase, as businesses need help managing, upgrading, and customizing increasingly complex systems.

Other Information

Where the Jobs Are: Computer and data processing services; Computer and office equipment; Electronic components and accessories; Communications equipment; Telephone communications; Measuring and controlling devices; Federal government; Wholesale trade; Search and navigation equipment.

Methods Used to Fill Job Openings: Most employers fill openings by hiring unsolicited applicants. Many others fill openings by hiring employee referrals and via the Internet.

Career Path: Promotions may lead to consultant or managerial positions.

Important Knowledge, Skills, and Abilities

Knowledge:	**Computers and Electronics:** Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming. **Mathematics:** Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications. **Engineering and Technology:** Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications.
Skills:	**Operations Analysis:** Analyzing needs and product requirements to create a design. **Mathematics:** Using mathematics to solve problems. **Complex Problem Solving:** Complex problem solving is used in identifying complex problems and reviewing related information so that options may be developed and evaluated, and solutions may be put into action.
Abilities:	**Written Comprehension:** The ability to read and understand information and ideas presented in writing. **Inductive Reasoning:** The ability to combine separate pieces of information, or specific answers to problems, to form general rules or conclusions. It includes coming up with a logical explanation for why a series of seemingly unrelated events occur together. **Oral Comprehension:** The ability to listen to and understand information and ideas presented through spoken words and sentences.

Tasks and Tools

- Analyzes hardware requirements to determine feasibility of design within time and cost constraints.
- Evaluates factors such as reporting formats required, cost and time constraints, and need for security restrictions to determine hardware configuration.
- Evaluates computer system user requirements.
- Estimates time, cost and materials needed for project.
- Formulates and designs hardware systems, using scientific analysis and mathematical models to predict and measure outcome and consequences of design.
- Monitors equipment functions to ensure that system operates in conformance with specifications.
- Specifies power supply requirements and configuration.
- Recommends purchase of equipment to control dust, temperature, and humidity in area of system installation.
- Trains customers to use new or modified equipment.
- Enters data into computer terminal to store, retrieve, and manipulate data for analysis of system capabilities and requirements.
- Designs and develops electronic equipment.
- Designs and develops transmission equipment.
- Designs and tests engineered systems and documents results and discoveries.
- Designs computer hardware and software interface.
- Determines computer hardware production factors.
- Leads and/or coordinates teams.
- Utilizes analog and digital electronics in measuring and controlling devices.
- Utilizes assembly language programming.
- Utilizes precision test equipment and precision measuring devices and tools.
- Utilizes analog and digital measuring and controlling devices.
- Utilizes word processing software such as Microsoft Word or Word Perfect at an intermediate level.
- Analyzes information to determine, recommend, and plan layout for type of computers and peripheral equipment modifications to existing systems.
- Consults with engineering staff to evaluate interface between hardware and software, and determine operational and performance requirements of overall system.
- Writes performance requirements for product development and engineering projects.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Data Processing Equipment Repairers	Postsecondary degree	$15.39
Mathematical Technicians	Master's degree	$17.46
Electrical and Electronics Repairers, Commercial and Industrial Equipment	Postsecondary degree	$18.77
Electronic Drafters	Postsecondary degree	$20.25
Numerical Tool and Process Control Programmers	Long-term OJT	$20.27
Computer Support Specialists	Associate degree	$20.40
Aerospace Engineering and Operations Technicians	Associate degree	$25.43
Computer Science Teachers, Postsecondary	Doctoral degree	$28.90

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue With Rendell Requiro

What are some of the job titles you've held previously in this career field?
I have held positions as a Programmer, Programmer Analyst, Systems Engineer and a Training Specialist.

What kinds of work do you do in your current job and what do you do in a typical day?
Primarily two areas; I handle phone support for users of agricultural business management software. I also perform system design and programming services for agricultural customers.

What was it that attracted you to this type of work?
The ability to be an expert in a particular vertical market and to better understand and contribute to the agricultural economy in California, in particular, Monterey County.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
The capability to understand the issues and needs of a business and describe these business needs to technical staff. The aptitude to listen and coax information from people who may or may not fully understand the problems they are trying to address. Ability to be thorough and diligent to create software programs and packages that address true business needs, not just technological features. Ability to be resourceful and find the technical support that is needed to solve business problems without necessarily having those technical skills yourself.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Rather than focusing solely on the technical programming or hardware skills (which are important), focus on understanding the business in which you are working in. What are the problems faced by like businesses and how do others solve similar problems? Identify what the key factors are for success in this business or industry and how your systems can address and complement these success factors.

What is it that keeps you wanting to do this kind of work?
The financial compensation is sometimes good. The satisfaction of doing the job well is expressed in the gratitude of those who use the systems you build. While it is not as concrete as building a house or other type of physical structure, this job can create the same sort of "pride of ownership" of the finished product.

What qualities make for an exceptional Computer Engineer?
Qualities that are important to posses are a quick and analytical mind; you must be curious and technically competent. One also should be interested in how the business can be successful and committed to designing tools and programs to reach those business objectives.

Cooks, Restaurant

Restaurant Cooks prepare, season and cook soups, meats, vegetables, desserts and other foodstuffs in restaurants. They may order supplies, keep records and accounts, price items on a menu or plan the menu. (OES 650260)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.50 - $8.50/hr	$8.00/hr
New Hires/Exp'd:	$8.00 - $13.00/hr	$10.00/hr
Exp'd/After 3 Years:	$9.00 - $15.00/hr	$13.00/hr

Hours: Most jobs are 40 hours per week. Some jobs average 22 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■	■	■■■			
Dental Insurance	■	■	■■■			
Vision Insurance	■	■	■■			
Life Insurance	■		■■			
Sick Leave	■■	■	■			
Vacation	■■	■	■■			
Retirement	■		■			
Child Care						

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few

Training, Experience, and Other Requirements

License: None

Education: Most employers are willing to accept less than a high school level education for job entry. Some others require a high school diploma or equivalent.

Experience: Almost all employers require or prefer 3-24 months of prior experience. Most employers are willing to accept training as a substitute for experience.

Training: Employers usually provide on-the-job training for this occupation. Refer to Cooks and Chefs in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers report that it is moderately difficult to find both inexperienced and experienced applicants. This indicates a **good outlook** for job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 16 employers surveyed representing 176 employees in this occupation.

Size of Occupation

Very Large. There are approximately 1,936 – 2,366 Cooks currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 7% are female. A few jobs are union.

Employment Trends

The growth rate is projected to be the average for all occupations through the year 2006. Approximately 96 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Cooks is expected to increase about as fast as the average for all occupations through 2010. Openings are expected to be plentiful through 2010 due to high turnover.

Other Information

Where the Jobs Are: Eating and drinking places; Hotels and motels; Amusement and recreation services; Self-employment.

Methods Used to Fill Job Openings: Almost all employers fill openings by hiring employee referrals. Many recruit applicants through newspaper advertisements, in-house promotion/transfer, and walk-in applicants.

Career Path: Promotions may lead to sous-chef or executive chef and managerial positions.

Important Knowledge, Skills, and Abilities

Knowledge:	**Customer and Personal Service:** Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques. **Mathematics:** Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications.
Skills:	**Quality Control Analysis:** People use quality control analysis skills to conduct tests and inspections. This skill may be applied to products, services, and processes so that a company can evaluate quality or performance level. **Equipment Selection:** Determining the kind of tools and equipment needed to do a job. **Monitoring:** Assessing how well one is doing when learning or doing something.
Abilities:	**Information Ordering:** The ability to correctly follow a given rule or set of rules in order to arrange things or actions in a certain order. The things or actions can include numbers, letters, words, pictures, procedures, sentences, and mathematical or logical operations. **Memorization:** The ability to remember information such as words, numbers, pictures, and procedures. **Written Comprehension:** The ability to read and understand information and ideas presented in writing.

Tasks and Tools

- Weighs, measures, and mixes ingredients according to recipe or personal judgment, using various kitchen utensils and equipment.
- Seasons and cooks food according to recipes or personal judgment and experience.
- Regulates temperature of ovens, broilers, grills, and roasters.
- Observes and tests food to determine that it is cooked, by tasting, smelling, or piercing, and turns or stirs food if necessary.
- Bakes, roasts, broils, and steams meats, fish, vegetables, and other foods.
- Bakes bread, rolls, cakes, and pastry.
- Washes, peels, cuts, and seeds fruits and vegetables to prepare fruits and vegetables for use.
- Inspects food preparation and serving areas to ensure observance of safe, sanitary food-handling practices.
- Estimates food consumption and requisitions or purchases supplies, or procures food from storage.
- Butchers and dresses animals, fowl or shellfish, or cuts and bones meat prior to cooking.
- Carves and trims meats, such as beef, veal, ham, pork, and lamb for hot or cold service, or for sandwiches.
- Plans items on menu.
- Portions, arranges, and garnishes food, and serves food to waiter or patron.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Cashiers	Short-term OJT	$7.73
Hairdressers, Hairstylists and Cosmetologists	Post secondary/ Vocational	$7.83
Food Preparation Workers	Short-term OJT	$7.84
Residential Advisors	Moderate-term OJT	$7.96
Counter and Rental Clerks	Short-term OJT	$8.45
Recreation Workers	Bachelor degree	$8.58
First-Line Supervisors/Managers of Food Preparation and Serving Workers	Work experience in related field	$11.78
Dietetic Technicians	Moderate-term OJT	$12.48
First-Line Supervisors, Administrative Support	Work experience in related field	$19.87

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue With Aristeo Perez

What are some of the job titles you've held previously in this career field?
I held positions as dishwasher in the restaurant field, helped with cooking in the kitchen, cleaning, preparation work and I have also worked in the pantry where I restocked items and dealt with inventory. I have been at my current place of business for around 20 years.

What kinds of work do you do in your current job and what do you do in a typical day?

I make soups and sauces, work at banquets and on the line in the kitchen. I work in all different areas of the kitchen. When you work in the kitchen you must be able to do many different things. Each season is different but on a typical day I will prepare all of the kitchen tools for my shift and also for the following days, start to prepare the food for the menu of the day and begin the cooking. Cleaning is an important part of my job and goes along with the cooking aspect.

What was it that attracted you to this type of work?
This job allowed me to learn in a very fast paced environment where I did learn a lot in a short amount of time. I knew I would learn something new on each level of work and also that I would make more money the better that I got. If you like what you do and want to learn new things, you will do a good job. Working in the restaurant business brought enjoyment to me.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
You must be able to communicate and speak good English. Learning fast and learning well enough to perform on my own was important. You must know how to cut, slice, and prepare foods. Being a good support to the rest of your staff is also important because it makes things run smoothly.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Most people have to start at the bottom and work their way up. You must learn as much as you can and talk to your fellow kitchen staff. Cooks that were above me were a great resource for learning all the skills I needed for this job.

What is it that keeps you wanting to do this kind of work?
I really enjoy my job and like the stability and benefits that come with it. Supporting my family is very important to me and this job allows me to do that. Cooking makes me happy, and like I said, I enjoy it. That keeps me wanting to continue as well.

What qualities make for an exceptional Cook?
Wanting to learn as much as possible and having a great attitude in addition to enjoying what you do are all qualities in an employee that are key. Always be flexible and open to learning the new skills you might come across on a daily basis.

Data Base Administrators

Data Base Administrators coordinate physical changes to computer databases and code, test and implement the database applying knowledge of data base management systems. May design logical and physical databases and coordinate data base developments as part of a project team. (OES 251030)

Wages and Benefits

NON-UNION	Range	Median
New Hires/Inexp'd:	$8.00 - $13.65/hr	$10.83/hr
New Hires/Exp'd:	$9.00 - $31.16/hr	$19.18/hr
Exp'd/After 3 Years:	$10.00 - $37.11/hr	$25.00/hr

UNION	Range	Median
New Hires/Inexp'd:	Not Applicable	Not Applicable
New Hires/Exp'd:	$19.22 - $32.31/hr	$25.36/hr
Exp'd/After 3 Years:	$20.60 - $41.24/hr	$29.35/hr

Hours: Almost all jobs are 40 hours per week. A few jobs are 25 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■		■■■		■	
Dental Insurance	■■■		■■■		■	
Vision Insurance	■■■		■■		■	
Life Insurance	■■■		■■■		■	
Sick Leave	■■■		■■		■	
Vacation	■■■		■■		■	
Retirement	■■		■■■		■	
Child Care						

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: Many employers require a bachelor degree in computer science, information science or management information systems (MIS) for job entry. Some others will accept an associate degree. A few will accept a high school education or equivalent.

Experience: Almost all employers require or prefer 3-60 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Of responding employers, almost all employers require knowledge of database software. Most require word processing and spreadsheet programs. Refer to Database Administrators in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find both inexperienced and experienced qualified applicants. This indicates a **good outlook** for job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 16 employers surveyed representing 37 employees in this occupation.

Size of Occupation

Small. There are approximately 129 – 157 Database Administrators currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 35% are female. Some jobs are union.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2006. Approximately 7 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Database Administrators is expected to increase much faster than the average for all occupations through 2010.

Other Information

Where the Jobs Are: Computer and data processing services; Educational services; Wholesale trade; Telephone communications; Commercial banks, saving institutions, and credit unions; Federal government; Management and public relations.

Methods Used to Fill Job Openings: Almost all employers recruit applicants through newspaper advertisements. Most also recruit applicants through the Internet. A few fill openings employee referrals.

Career Path: Promotions may lead to senior database administrator and information technology managerial positions.

Important Knowledge, Skills, and Abilities

Knowledge:	**Computers and Electronics:** Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming. **Administration and Management:** Knowledge of principles and processes involved in business and organizational planning, coordination, and execution. This includes strategic planning, resource allocation, manpower modeling, leadership techniques, and production methods. **English Language:** Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
Skills:	**Programming:** Writing computer programs for various purposes. **Mathematics:** Using mathematics to solve problems. **Operations Analysis:** Analyzing needs and product requirements to create a design.
Abilities:	**Written Comprehension:** The ability to read and understand information and ideas presented in writing. **Oral Expression:** The ability to communicate information and ideas in speaking so others will understand. **Information Ordering:** The ability to correctly follow a given rule or set of rules in order to arrange things or actions in a certain order. The things or actions can include numbers, letters, words, pictures, procedures, sentences, and mathematical or logical operations.

Tasks and Tools

- Gathers data to determine user and system requirements.
- Gathers information to design reports and forms so users can create data queries and interpret the results.
- Determines needed changes to new systems or existing systems as they grow.
- Creates and refines conceptual and logical data models describing data elements and how they are used, and validates them with clients.
- Develops physical database features and user interface, and plans and manages physical resource requirements.
- Creates database objects and maintains their physical organization.
- Develops and validates database implementation plans, and deploys database and supports its population. .
- Maintains databases on multi-user computer systems (servers) and assures that multiple users can access database to store and retrieve documents.
- Manages data backup and recovery both on-site and off-site.
- Applies software upgrades and fixes.
- Monitors the database daily to see how it is responding and works on any problems that occur, such as adding new storage space (disk drives) when needed.
- Audits database systems and documents findings, discoveries, and work in progress.
- Creates security procedures and implements backup and recovery processes to keep data secure and protected from catastrophic events.
- Designs and documents security plans, and implements and enforces security requirements.
- Adapts existing database structure to new business environments.
- Produces business and technical documents.
- Plans and gives user training.
- Utilizes Structured Query Language (SQL) software application.
- Utilizes programming languages.
- Utilizes Oracle Systems software.
- Utilizes word processing software such as Microsoft Word or Word Perfect at an intermediate level.
- Utilizes spreadsheet software such as Microsoft Excel or Lotus 1-2-3 at an advanced level.
- Utilizes database software such as Microsoft
- Access or FileMaker Pro at an advanced level.

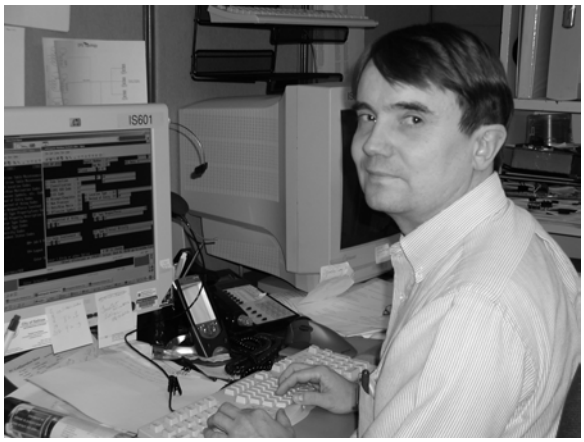
Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Computer Operators	Moderate-term OJT	$15.50
Mathematical Technicians	Master's degree	$17.46
Numerical Tool and Process Control Programmers	Long-term OJT	$20.27
Computer Support Specialists	Associate degree	$20.40
Computer Security Specialists	Bachelor degree	$26.55
Computer Systems Analysts	Bachelor degree	$29.70
Computer Programmers	Bachelor degree	$30.56
Computer and Information Systems Managers	Bachelor degree	$43.39

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue With Robert Ira Fisher



What are some of the job titles you've held previously in this career field?
Data Input Operator, Computer Operator, Systems Manager, Programmer/Analyst, Senior Programmer/Analyst, currently – Integration and Applications Administrator.

What kinds of work do you do in your current job and what do you do in a typical day?
I evaluate software, install, test and integrate the software with existing systems. I also design and program applications, scripts and tools to enable City users to get their jobs done in a more efficient manner. In addition, I troubleshoot problems with software, hardware, servers, workstations and the network – assisting other staff members as needed. I meet with departments as well as evaluate or design and write software applications.

A typical day involves checking and responding to email, evaluating software, writing code or meeting with project committees. Some days are mostly spent programming, but most days are a mix of everything including fighting "fires" all day long at times.

What was it that attracted you to this type of work?
Being able to provide something of use to make someone else's job more efficient. I enjoy the feeling of accomplishment when problems are solved. Things constantly change in the computer field. I enjoy the challenge of learning new things and finding better ways to solve problems.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
The most important thing in my opinion is the ability to think logically and be thorough. Systems design and programming requires logical thinking and attention to detail. The ability to communicate effectively with people is also a must. Knowledge of programming languages, practices and procedures is also necessary.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
First, get a good education. Take all the programming and logic classes you can. Don't expect, however, that once you've got a degree you're finished learning. In the computer field you must continually upgrade your skills to keep up. Decide on a specialty (just like a medical doctor) – because no one can cover every field. Get a job working in some aspect of the field, even before you graduate so you can see how you like it.

What is it that keeps you wanting to do this kind of work?
Wanting to be able to feed and clothe my family! Oh, besides that – well, there's a sense of fulfillment when you've helped make a person's job easier by providing them with automation tools to make them more efficient.

What qualities make for an exceptional Data Base Administrator?
Troubleshooting skills, the ability to think outside the box and approach a problem from all angles. You need to pay attention to detail and be methodical. A willingness to try new things and continue to learn is essential.

Dental Assistants

Dental Assistants assist the dentist at the chair by preparing patients and equipment, keeping records and performing related duties as required. (OES 660020)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.75 - $12.00/hr	$10.50/hr
New Hires/Exp'd:	$10.00 - $17.00/hr	$12.50/hr
Exp'd/After 3 Years:	$13.00 - $22.00/hr	$16.00/hr

Hours: Most jobs are 32-40 hours per week. Some jobs are 12-22 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■	■	■■	■		■
Dental Insurance	■■■■■	■■■	■			■
Vision Insurance	■■	■	■			
Life Insurance	■■				■	
Sick Leave	■■■■■	■■				
Vacation	■■■■■■	■■■				
Retirement	■■■	■■	■■	■■		
Child Care	■					

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: Not required. Contact State Board of Dental Examiners at 916-263-2595 or go to www.dbc.ca.gov for Registered Dental Assistant (RDA) licensing information.

Education: Almost all employers require a high school level education for job entry. A few employers will accept less than a high school education.

Experience: Almost all employers require 3-24 months of prior experience. Almost all are willing to accept training as a substitute for experience.

Training: Most employers require completion of a certificate. Some require RDA and X-Ray licenses. Spanish fluency and computer literacy are important. Refer to Dental Assistants in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find both inexperienced and experienced applicants with prior experience. This indicates a **good outlook** for job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing 131 employees in this occupation.

Size of Occupation

Medium. There are approximately 588 – 718 Dental Assistants currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 3% are male.

Employment Trends

The growth rate is projected to be faster than average for all occupations through the year 2006. Approximately 24 job openings are projected per year due to growth and separations. Nationwide, employment of Dental Assistants is expected to grow much faster than the average through the year 2010.

Other Information

Where the Jobs Are: Offices and clinics of dentists; Offices of physicians including osteopaths.

Methods Used to Fill Job Openings: Almost all employers fill openings by hiring employee referrals and/or through newspaper advertisements. Many employers fill openings through school/program referrals.

Career Path: Promotions may lead to office management, dental assisting instructor positions, and dental product sales representative positions. Further education may lead a career as a dental hygienist.

Important Knowledge, Skills, and Abilities

Knowledge:	**Medicine and Dentistry:** Knowledge of the information and techniques needed to diagnose and treat injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures. **Clerical:** Knowledge of administrative and clerical procedures and systems such as word processing systems, filing and records management systems, stenography and transcription, forms design principles, and other office procedures and terminology. **English Language:** Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
Skills:	**Coordination:** Adjusting actions in relation to others' actions. **Time Management:** Managing one's own time and the time of others. **Speaking:** Talking to others to effectively convey information.
Abilities:	**Arm-Hand Steadiness:** The ability to keep the hand and arm steady while making an arm movement or while holding the arm and hand in one position. **Near Vision:** The ability to see details of objects at a close range (within a few feet of the observer). **Control Precision:** The ability to quickly and repeatedly make precise adjustments in moving the controls of a machine or vehicle to exact positions.

Tasks and Tools

- Prepares patient, sterilizes and disinfects instruments, sets up instrument trays, prepares materials, and assists dentist during dental procedures.
- Takes and records medical and dental histories and vital signs of patients.
- Assists dentist in management of medical and dental emergencies.
- Records treatment information in patient records.
- Provides postoperative instructions prescribed by dentist.
- Pours, trims, and polishes study casts.
- Instructs patients in oral hygiene and plaque control programs.
- Cleans teeth, using dental instruments.
- Fabricates temporary restorations and custom impressions from preliminary impressions.
- Schedules appointments, prepares bills and receives payment for dental services, completes insurance forms, and maintains records, manually or using computer.
- Cleans and polishes removable appliances.
- Makes preliminary impressions for study casts and occlusal registrations for mounting study casts.
- Applies protective coating of fluoride to teeth.
- Exposes dental diagnostic x-rays.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Nonfarm Animal Caretakers	Short-term OJT	$8.07
Surgical Technologists	Postsecondary degree	$16.11
Radiologic Technicians	Associate degree	$20.99
Technologists	Associate degree	$20.99
Dental Hygienists	Associate degree	$32.75
Orthodontists	First Professional degree	$70.01
Prosthodontists	First Professional degree	$70.01

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Kim Carpenter

What are some of the job titles you've held previously in this career field?
I have been a Registered Dental Assistant (RDA), an office manager, an office consultant, and an RDA Instructor.

What kinds of work do you do in your current job and what do you do in a typical day?
As a Dental Assistant, I chair-side assist, greet patients, seat patients, prepare the room for the procedure, take X-rays and impressions, assist the doctor, dismiss the patient and go over post-operational procedures.

What was it that attracted you to this type of work?
I initially wanted to be a nurse but did not want to work unpredictable hours. I wanted more time for family and I did not want to work evenings, weekends or holidays.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
Knowledge of health science, math, and English are very important; this includes proper grammar necessary for chart documentation and letter writing. It is also important to be knowledgeable of the patient's drug prescriptions and how they will affect the dental procedure. The most important skills needed are the ability to help the patient feel at ease and to listen to the patient and their needs.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
The best preparation for this career is enrolling in a dental assisting course and observing a dental office. In-office exposure is obtained through internships and dental programs like ROP. To become a state licensed Registered Dental Assistant you must take and pass both a written and practical exam. An RDA has more responsibilities and has a higher pay scale.

What is it that keeps you wanting to do this kind of work?
Contact with people including working with a great staff and doctor makes me want to continue in this field.

What qualities make for an exceptional Dental Assistant?
An exceptional Dental Assistant must have personality, dedication and ability to multi-task.

Electricians

Also known as Journeyperson Electrician or Journeyperson Wireperson.

Electricians install, maintain and repair wiring, electrical equipment and fixtures. They insure that work is in accordance with relevant codes. They may read blueprints. Protective Signal Installers and Repairers and Street Light Servicers are included. (OES 872020)

Wages and Benefits

NON-UNION	Range	Median
New Hires/Inexp'd:	Not Applicable	Not Applicable
New Hires/Exp'd:	$10.00 - $27.00/hr	$15.00/hr
Exp'd/After 3 Years:	$18.00 - $32.00/hr	$27.00/hr

UNION	Range	Median
New Hires/Inexp'd:	Not Applicable	Not Applicable
New Hires/Exp'd:	$15.45 - $33.01/hr	$33.01/hr
Exp'd/After 3 Years:	$16.20 - $37.14/hr	$35.00/hr

Hours: All jobs are 40 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■		■		■	
Dental Insurance	■■■■				■	
Vision Insurance	■■■				■	
Life Insurance	■■■					
Sick Leave	■■					
Vacation	■■■					
Retirement	■■■		■		■	
Child Care						

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: Many employers are willing to accept less than a high school level education for job entry. Many others require a high school diploma or equivalent.

Experience: Almost all employers require or prefer 1-5 years of apprenticeship or on-the-job training.

Training: Contact the International Brotherhood of Electrical Workers (415) 587-2053 or the Joint Apprenticeship Training Center (408) 453-1022 for apprenticeship training information. Refer to Electricians in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers report that it is not very difficult to find inexperienced but qualified applicants and moderately difficult to find qualified applicants with prior experience. This indicates a **fair outlook** for job seekers without prior experience, and a **good outlook** for those who are fully experienced.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing 342 employees in this occupation.

Size of Occupation

Medium. There are approximately 586 – 716 Electricians currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 3% are female. Many jobs are union.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2006. Approximately 30 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Electricians is increase about as fast as the average for all occupations through 2010.

Other Information

Where the Jobs Are: Electrical work; Self-employment; Local government; Motor vehicles and equipment; Plumbing, heating and air-conditioning.

Methods Used to Fill Job Openings: Many employers fill openings by hiring walk-in applicants, newspaper advertisements applicants, and union hall referrals.

Career Path: Promotions may lead to supervisory and then superintendent positions. With sufficient financial resources, management skills and licensing, an electrician may start their own contracting business.

Important Knowledge, Skills, and Abilities

Knowledge:	**Design:** Knowledge of design techniques, principles, tools and instruments involved in the production and use of precision technical plans, blueprints, drawings, and models. **Engineering and Technology:** Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications. **Computers and Electronics:** Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming.
Skills:	**Repairing:** Repairing machines or systems using the needed tools. **Troubleshooting:** Determining what is causing an operating error and deciding what to do about it. **Installation:** Installing equipment, machines, wiring, or programs to meet specifications.
Abilities:	**Manual Dexterity:** The ability to quickly make coordinated movements of one hand, a hand together with its arm, or two hands to grasp, manipulate, or assemble objects. **Near Vision:** The ability to see details of objects at a close range (within a few feet of the observer. **Finger Dexterity:** The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects.

Tasks and Tools

- Installs electrical wiring, equipment, apparatus, and fixtures, using hand tools and power tools.
- Diagnoses malfunctioning systems, apparatus, and components, using test equipment and hand tools.
- Tests electrical systems and continuity of circuits in electrical wiring, equipment, and fixtures, using testing devices, such as ohmmeter, voltmeter, and oscilloscope.
- Drives vehicle, operates floodlights, and places flares during power failure or emergency.
- Directs and trains workers to install, maintain, or repair electrical wiring, equipment, and fixtures.
- Possesses electricians license or identification card to meet governmental regulations.
- Constructs and fabricates parts, using hand tools and specifications.
- Climbs ladder to install, maintain or repair electrical wiring, equipment and fixtures.
- Prepares sketches of location of wiring and equipment or follows blueprints to determine location of equipment and conformance to safety codes.
- Readies and assembles electrical wiring, equipment and fixtures, using specifications and hand tools.
- Maintains and repairs or replaces wiring, equipment and fixtures, using hand tools.
- Inspects systems and electrical parts to detect hazards, defects, and need for adjustments or repair.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Electrical and Electronic Equipment Assemblers	Short-term OJT	$10.65
Data Processing Equipment Repairers	Postsecondary degree	$15.39
Model Makers, Metal and Plastic	Moderate-term OJT	$17.38
Electrical and Electronics Repairers, Commercial and Industrial Equipment	Postsecondary degree	$18.77
Electronic Drafters	Postsecondary degree	$20.25
Electronics Engineering Technicians	Associate degree	$20.70

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with David Poandl

What are some of the job titles you've held previously in this career field?
I started working for an electrical contractor as a Material Handler when I was 22-years old and then started a four and a half - year apprenticeship program when I was 25-years old. After my apprenticeship I worked as a Journeyman Electrician in the construction industry and am currently working as a Journeyman Maintenance Electrician.

What kinds of work do you do in your current job and what do you do in a typical day?
I am the lead electrician, so my time is split between scheduling for the electric shop and doing electrical work that is split into two categories - preventative maintenance and installations. Preventative maintenance consists of making sure things are working properly on a scheduled basis and the installations are of new equipment.

What was it that attracted you to this type of work?
I like the fact that it is a combination of working with your hands and your head. I always liked being able to work on and control electricity. Also, I thought it would provide me with a good livelihood and retirement.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
Knowledge and skills are very important, and I learned my trade through the very rigorous apprenticeship. Through the program I worked under a journeyman electrician constantly for four and a half years while going to school at night and received extensive training. Abilities important to this job are high dexterity and the capability to manipulate tools well. It is not something you can do from a chair, you must be able to lift things and climb, etc.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
An apprenticeship through the Joint Apprenticeship Training Committee of the electrical industry, which is the IBEW (International Brotherhood of Electrical Workers), and NECA (National Electrical Contractors Association) is the best way to receive preparation. This is the way I learned my trade, and I highly recommend it.

What is it that keeps you wanting to do this kind of work?
Working with electricity is a skill that I've spent a lot of time acquiring and its fun to do things you are good at. There is a real need for this kind of work, and I enjoy being able to figure out how to fix things and solve problems, and, of course, receiving a paycheck.

What qualities make for an exceptional Electrician?
Punctuality is extremely important; showing up on time everyday. Attention to detail is very important because if you don't do something right you can put people and property in danger. People can get hurt or you can get hurt; you must be very careful in your work habits. Safety is paramount because working with ladders, power, tools, etc. can be very risky.

Enologists

Also known as a Winemaker.

Enologists direct and coordinate activities concerned with wine production. This involves crushing, fermentation, clarification, aging, blending and bottling. Working either in their own firm's vineyards or with viticulturists of other grape vineyards, Enologists examine grape samples to judge sweetness and acidity, to verify sound condition and lack of pesticide residue and to authenticate grape varieties. They decide when to start the harvest and ensure that grapes are trucked to the crusher quickly and safely. Enologists supervise workers in the crushing and fermentation process, following legal regulatory practices and record keeping requirements. In smaller operations, they may perform these processing duties themselves. (Non-OES 183161999)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$12.00 - $13.42/hr	$12.71/hr
New Hires/Exp'd:	$10.00 - $21.31/hr	$15.34/hr
Exp'd/After 3 Years:	$14.00 - $29.83/hr	$19.18/hr

Hours: Almost all jobs are 40-50 hours per week. A few jobs are 32 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■		■■			
Dental Insurance	■■		■■			
Vision Insurance	■■		■			
Life Insurance	■■		■■			
Sick Leave	■■■■		■			
Vacation	■■■■■		■			
Retirement	■■		■■			
Child Care						

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: Almost all employers require a bachelor of science degree or higher with a specialization in Enology. A few employers are willing to accept a high school diploma or equivalent. Coursework in business and public speaking are valuable for this occupation.

Experience: Almost all employers require or prefer 12-60 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Training programs are offered by: University of California, Davis (916) 752-0380 [http://wineserver.ucdavis.edu] and California State University, Fresno (559) 278-2089 [http://cast.scufresno.edu/ve/indes.htm]. For information regarding online programs, go to www.winespectatorschool.com. For industry information online, go to the Wine Institute website [http://www.wineinstitute.org].

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 13 employers surveyed representing 28 employees in this occupation.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find both inexperienced and experienced applicants. This indicates a **good outlook** for job seekers.

Size of Occupation

No local data available. There are approximately 25,470 – 26,060 Enologists employed in the State of California. This figure includes Wine Makers and Assistant Wine Makers.

Employment Trends

Insufficient data; however, some or many or most employers surveyed expect their employment in this occupation to grow or remain stable. Insufficient data to estimate separations- i.e., workers retiring and leaving the occupation.

Other Information

Where the Jobs Are: Vineyards and wineries.

Methods Used to Fill Job Openings: Many employers fill openings by hiring for new positions temporary or permanent. Some employers fill openings by hiring to fill positions of employees leaving. Most recruit new employees through trade journals and word of mouth. Some employers recruit through employee referrals.

Career Path: Promotions may lead to production manager, assistant winemaker or winemaker.

Important Knowledge, Skills, and Abilities

Knowledge:	Science of wine making. Awareness of chemical hazard and laboratory safety.
Skills:	Mental and emotional stability to handle responsibilities and make decisions for the long-term on an emergency basis. Supervision of workers.
Abilities:	Oral expression and public relations abilities. Keen sense of taste and smell. Good physical shape.

Tasks and Tools

- Directs and coordinates wine production activities (crushing, fermentation, clarification, aging, blending, and bottling).
- Examines grape samples to judge sweetness and acidity, to verify condition and lack of pesticide residue.
- Authenticates grape varieties.
- Decides when to begin harvest.
- Ensure the grapes are transported to the crusher safely and quickly.
- Blend wines according to formulas and knowledge and experience in wine making.
- May work in product improvement or new product development.
- May select new areas for additional plantings with the viticulturists.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: California Occupational Guide

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Food Service Managers	Work experience	$14.12
Production, Planning, and Expediting Clerks	Short-term OJT	$14.78
Medical and Clinical Laboratory Technologists	Bachelor degree	$18.36
First-Line Supervisors/Managers of Production and Operating Workers	Work experience	$18.75
Environmental Compliance Inspectors	Bachelor degree	$19.18
Industrial Production Managers	Bachelor + work exp	$27.79
Petroleum Engineers	Bachelor degree	$33.70
Natural Sciences Managers	Masters + work exp	$34.54
Computer and Information Systems Managers	Bachelor + work exp	$34.54

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Bill Anderson

What are some of the job titles you've held previously in this career field?
In the wine industry I previously held jobs as a Cellar Worker, Bottling Line Supervisor, Enologist, Winemaker, Wine Master and VP of Winemaking and Production.

What kinds of work do you do in your current job and what do you do in a typical day?
As Enologist, I analyze wines and juice for sugar content, PH, volatile acid, alcohol, fermentation in addition to heat and cold stability. I also work on blends and track the wines from grapes to finished product. There is also the coordination of production, sales and special events that I am involved in.

What was it that attracted you to this type of work?
Variability of tasks was attractive to me, never leaving a dull moment. Each wine and every year is unique, giving us many different possibilities of products. The variety of work is one reason I was attracted to this industry; there is always something new to do and challenging problems to solve.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
I think that a good background or knowledge of mathematics is important; listening; writing ability, and common sense are also important aspects of the job. Just like any profession, good reading skills are also essential. A book I would recommend is Conceptual Blockbusting by Professor Adams.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Basic chemistry is a minimum for this field as well as biology and mathematics to the calculus level. A college preparation of studies where one might have more than three projects occurring at the same time is also crucial. There are many different varieties and blends of wine being produced at once so you must have the skills and ability to work in a fast-paced environment. One of the valuable aspects of college is that it teaches you how to multi-task. You might have three or four different things going on at once and you need to be able to handle that kind of stress and responsibility.

What is it that keeps you wanting to do this kind of work?
The variability of my job and never having a dull moment allow me to enjoy what I do and want to continue in this field. The constant change, problem solving and being able to take raw product from the ground and develop it into an elegant finished product are all factors that keep things interesting.

What qualities make for an exceptional Enologist?
Caring, listening, logical thinking, truthfully and willingly sharing information, common sense, honesty, a sense of humor and understanding one's potential and limitations are all great qualities to possess.

Food Preparation Workers

Food Preparation Workers perform a variety of food preparation duties such as preparing cold foods and maintaining and cleaning kitchen work areas, equipment and utensils. They perform simple tasks such as preparing shellfish or slicing meat. They may brew coffee, tea or chocolate or prepare sandwiches. They work in such places as a restaurant kitchen or delicatessen. (OES 650380)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.75 - $8.00/hr	$7.50/hr
New Hires/Exp'd:	$6.75 - $10.00/hr	$7.50/hr
Exp'd/After 3 Years:	$7.25 - $12.00/hr	$10.00/hr

Hours: Most jobs are 40 hours per week. Some jobs are 20-32 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■	■	■■■	■	■	
Dental Insurance	■	■	■■■	■	■	
Vision Insurance	■	■	■■	■	■	
Life Insurance			■			
Sick Leave	■	■	■		■	
Vacation	■	■	■	■	■	
Retirement			■	■	■	
Child Care						

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: Almost all employers are willing to accept less than a high school level education for job entry.

Experience: Many employers require or prefer 3-24 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Employers usually provide on-the-job training. Refer to Food Preparation Worker in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find both inexperienced and experienced applicants. This indicates a **good outlook** for job seekers.

Size of Occupation

Very large. There are approximately 3,262 – 3,986 Food Preparation Workers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate less than 34% are female.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 16 employers surveyed representing 142 employees in this occupation.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. Approximately 244 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Food Preparation Workers is increase about as fast as the average for all occupations through 2010.

Other Information

Where the Jobs Are: Restaurants; Retail eating and drinking establishments; Schools; Universities; Hospitals; Nursing homes; Grocery stores; Hotels.

Methods Used to Fill Job Openings: Almost all employers fill openings by hiring employee referrals and/or word of mouth. Most also fill openings by hiring walk-in applicants. Some recruit applicants through newspaper advertisements.

Career Path: Promotions may lead to cook and kitchen management positions.

Important Knowledge, Skills, and Abilities

Knowledge:	**Customer and Personal Service:** Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques.
Skills:	**Service Orientation:** Actively looking for ways to help people. **Active Listening:** Listening to what other people are saying and asking questions as appropriate.
Abilities:	**Wrist-Finger Speed:** The ability to make fast, simple, repeated movements of the fingers, hands, and wrists. **Manual Dexterity:** The ability to quickly make coordinated movements of one hand, a hand together with its arm, or two hands to grasp, manipulate, or assemble objects. **Information Ordering:** The ability to correctly follow a given rule or set of rules in order to arrange things or actions in a certain order. The things or actions can include numbers, letters, words, pictures, procedures, sentences, and mathematical or logical operations.

Tasks and Tools

- Cleans and portions, and cuts or peels various foods to prepare for cooking or serving.
- Cleans, cuts, slices, or disjoints meats and poultry to prepare for cooking.
- Prepares and serves variety of beverages, such as coffee, tea, and soft drinks.
- Portions and arranges food on serving dishes, trays, carts, or conveyor belts.
- Prepares variety of foods according to customers' orders or instructions of superior, following approved procedures.
- Carries food supplies, equipment, and utensils to and from storage and work areas
- Distributes food to waiters and waitresses to serve to customers.
- Stores food in designated containers and storage areas to prevent spoilage.
- Butchers and cleans fowl, fish, poultry, and shellfish to prepare for cooking or serving.
- Requisitions, stores, and distributes food supplies, equipment, and utensils.
- Cleans and maintains work areas, equipment, and utensils.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Waiters and Waitresses	Short-term OJT	$6.49
Combined Food Preparation and Serving Workers, Including Fast Food	Short-term OJT	$6.66
Cooks, Fast Food	Short-term OJT	$6.94
Counter Attendants, Cafeteria, Food Concession and Coffee Shop	Short-term OJT	$7.26
Bartenders	Short-term OJT	$7.59
Cooks, Short Order	Short-term OJT	$8.54
Cooks, Institution and Cafeteria	Long-term OJT	$10.30

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Mark Doton

What are some of the job titles you've held previously in this career field?
I have held positions as a Pantry Cook, Rounds Cook, and Pastry Assistant.

What kinds of work do you do in your current job and what do you do in a typical day?
I cook large batches of items for take-out orders and supervise development of kitchen team members. I check inventory and supplies as well as maintain food quality and standard and develop new recipes.

What was it that attracted you to this type of work?
Being able to be creative and produce a product that hopefully makes people happy was attractive to me.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
Important aspects would be an eye for detail, an ability to handle many projects at once, and willingness to work as part of a team, a sense of humor and good listening skills as well as patience. Good sanitation standards are important also.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Ask questions of people in the field and get experience in the field (start as a dishwasher if you have to). Take some cooking classes but don't commit to a cooking school until you've worked in a restaurant.

What is it that keeps you wanting to do this kind of work?
The hands-on nature of the job makes me want to continue.

What qualities make for an exceptional Food Prep Worker?
Cleanliness, organization and a love of food and creativity make for an exceptional Food Prep Worker.

Hand Packers and Packagers

Also known as a Courtesy Clerk.

Hand Packagers and Packers pack or package by hand a wide variety of products and materials. Please do not include workers whose jobs require more than minimum training. (OES 989020)

Wages and Benefits

NON-UNION	Range	Median
New Hires/Inexp'd:	$6.75 - $8.09/hr	$7.00/hr
New Hires/Exp'd:	$6.75 - $10.00/hr	$7.18/hr
Exp'd/After 3 Years:	$7.00 - $12.00/hr	$8.30/hr

UNION	Range	Median
New Hires/Inexp'd:	$7.00 - $8.09/hr	$8.00/hr
New Hires/Exp'd:	$7.00 - $8.09/hr	$8.00/hr
Exp'd/After 3 Years:	$9.00 - $11.00/hr	$10.00/hr

Hours: Most jobs are seasonal. A few jobs are 32-50 hours a week. A few others are 20-28 hours per week. A few are temporary or on-call positions.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■	■■	■	■		■
Dental Insurance	■■■	■■	■	■		■
Vision Insurance	■■	■■	■	■		■
Life Insurance	■■	■■				
Sick Leave	■■	■■				
Vacation	■■■■	■■				
Retirement	■■	■■			■	
Child Care			■	■		

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: Almost all employers are willing to accept less than a high school level education for job entry. A few others require a high school diploma or equivalent.

Experience: Some employers require or prefer 3-24 months of prior experience. Almost all employers are willing to accept training as a substitute for experience.

Training: Employers usually provide on-the-job training for this occupation.

Supply/Demand Assessment

Employers generally report that it is not very difficult to find inexperienced but qualified applicants, and very difficult to find qualified applicants with prior experience. This indicates a **fair outlook** for job seekers without prior experience, and a **very good outlook** for those who are fully experienced.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing 945 employees in this occupation.

Size of Occupation

Very large. There are approximately 1,476 – 1,804 Hand Packers and Packagers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate less than 35% are female. Some jobs are union.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. Approximately 61 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Hand Packers and Packagers will increase about as fast as the average for all occupations through 2010.

Other Information

Where the Jobs Are: Grocery stores; Personnel supply services; Wholesale trade; Groceries and related products; Miscellaneous plastic products; Bakery products; Miscellaneous foods and kindred products; Miscellaneous business services; Meat products; Miscellaneous converted paper products.

Methods Used to Fill Job Openings: Most employers fill openings by hiring employee referrals and walk-in applicants. Some others recruit by word of mouth and newspaper advertisements.

Career Path: Promotions may lead to supervisory, managerial or quality assurance positions.

Important Knowledge, Skills, and Abilities

Knowledge:	**Production and Processing:** Knowledge of inputs, outputs, raw materials, waste, quality control, costs, and techniques for maximizing the manufacture and distribution of goods.
Skills:	**Quality Control Analysis:** People use quality control analysis skills to conduct tests and inspections. This skill may be applied to products, services, and processes so that a company can evaluate quality or performance level. **Operation and Control:** Controlling operations of equipment or systems.
Abilities:	**Manual Dexterity:** The ability to quickly make coordinated movements of one hand, a hand together with its arm, or two hands to grasp, manipulate, or assemble objects. **Information Ordering:** The ability to correctly follow a given rule or set of rules in order to arrange things or actions in a certain order. The things or actions can include numbers, letters, words, pictures, procedures, sentences, and mathematical or logical operations. **Near Vision:** The ability to see details of objects at a close range (within a few feet of the observer).

Tasks and Tools

- Fastens and wraps products and materials, using hand tools.
- Places or pours products or materials into containers, using hand tools and equipment.
- Marks and labels containers or products, using marking instruments.
- Loads materials and products into package processing equipment.
- Measures, weighs, and counts products and materials, using equipment.
- Tends packing machines and equipment that prepare and package materials and products.
- Cleans containers, materials, or work area, using cleaning solutions and hand tools.
- Removes and places completed or defective product or materials on moving equipment or specified area.
- Records product and packaging information on specified forms and records.
- Examines and inspects containers, materials, and products to ensure packaging process meets specifications.
- Obtains and sorts products, materials, and orders, using hand tools.
- Seals containers or materials, using glues, fasteners, and hand tools.
- Assembles and lines cartons, crates and containers, using hand tools.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Graders and Sorters, Agricultural Products	Work Experience	$6.57
Electrolytic Plating and Coating Machine Setters and Set-Up Operators, Metal and Plastic	Moderate-term OJT	$9.59
Mold Makers, Hand	Moderate-term OJT	$9.71
Molding and Casting Workers	Moderate-term OJT	$9.71
Embossing Machine Set-Up Operators	Moderate-term OJT	$12.81
Floor Layers, Except Carpet, Wood and Hard Tiles	Moderate-term OJT	$17.58

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Steven Casas

What are some of the job titles you've held previously in this career field?
Before my current job, I held jobs as a Plumber's Assistant and a Frame Shop Helper.

What kinds of work do you do in your current job and what do you do in a typical day?
I package boxes of residential and commercial goods for moving, and I operate a small truck and van. I am responsible for packaging certain loads of boxes for different trucks that are leaving for other destinations. I work in a storefront setting where each day is varied in tasks; I interact with a lot of different people during the course of my day, so I am usually kept pretty busy.

What was it that attracted you to this type of work?
I find enjoyment in the clean work environment and the opportunity to make friends.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
It is important to know how to operate small trucks or vans, have attention to detail with the dispatcher and customer, and also to have patience in everything you do. You must have good communication skills and interact well with many different types of people.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
A driver's license is required as well as your own transportation; it is very important to be on time for work and also take pride in the way you dress. You must also have a willingness to learn the trade as well as an open mind to learning.

What is it that keeps you wanting to do this kind of work?
A clean work environment, the occasional travel, and a great boss are all things that make me want to come to work.

What qualities make for an exceptional Hand Packager?
Things that you learn through experience that are all very important are, being a hard worker, again, having the willingness to learn and wanting to learn, and also taking pride in your job.

Home Health Aides

Includes Certified Home Health Aides. Also known as Personal Care Attendants and Resident Assistants.

Home Health Aides care for elderly, convalescent or handicapped person in the home of the patient. They perform duties for patients such as changing bed linen, preparing meals, assisting in and out of bed, bathing, dressing, grooming and assisting with medications under doctors' orders or direction of nurse. Nursing Aides and Homemakers are not included. (OES 660110)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.90 - $12.50/hr	$9.00/hr
New Hires/Exp'd:	$8.00 - $13.00/hr	$9.25/hr
Exp'd/After 3 Years:	$8.05 - $14.50/hr	$10.00/hr

Hours: Most jobs are 40-60 hours per week. A few jobs are 12-24 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■		■■	■		
Dental Insurance	■■		■	■		
Vision Insurance	■		■			
Life Insurance	■■		■			
Sick Leave	■■■		■	■		
Vacation	■■■■	■	■	■		
Retirement	■■	■	■	■	■	
Child Care						

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: Some jobs within this occupation require a Nursing Assistant Certification (CNA) and Home Health Aide Certification (HHA). Applicant must undergo a criminal background check. For further information, contact the Department of Health Services, Licensing and Certification at (916) 327-2445.

Education: Most employers are willing to accept less than a high school level education for job entry. Some others require a high school diploma or equivalent.

Experience: Many employers require or prefer 6-12 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Refer to Home Health Aides in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers report that it is moderately difficult to find both inexperienced and fully experienced applicants. This indicates a **good outlook** for job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 13 employers surveyed representing 425 employees in this occupation.

Size of Occupation

Medium. There are approximately 382 – 466 Home Health Aides currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 9% are male. A few jobs are union.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2006. About 17 job openings are projected per year due to growth or separations (workers retiring or leaving the occupation). Nationwide, employment of Home Health Aides is expected to grow faster than the average through 2010. This is due to a growing demand by the aging population for home healthcare, improved medical technologies for in-home treatment, and efforts to contain hospital and nursing facilities costs.

Other Information

Where the Jobs Are: Home health care services; Residential care; Individual and miscellaneous social services; Personnel supply services; Nursing and personal care facilities; Hospitals; Job training and related services; Self-employment; Private households; Local government.

Methods Used to Fill Job Openings: Almost all employers recruit applicants through employee referrals and/or by word of mouth. Most employers also recruit applicants through newspaper advertisements.

Career Path: Promotions may lead to personnel or agency management positions.

Important Knowledge, Skills, and Abilities

Knowledge:	**Customer and Personal Service:** Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques. **Medicine and Dentistry:** Knowledge of the information and techniques needed to diagnose and treat injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures. **Psychology:** Knowledge of human behavior and performance, mental processes, psychological research methods, and the assessment and treatment of behavioral and affective disorders.
Skills:	**Service Orientation:** Actively looking for ways to help people. **Social Perceptiveness:** Being aware of others' reactions and understanding why they react the way they do. **Active Listening:** Listening to what other people are saying and asking questions as appropriate.
Abilities:	**Oral Comprehension:** The ability to listen to and understand information and ideas presented through spoken words and sentences. **Oral Expression:** The ability to communicate information and ideas in speaking so others will understand. **Static Strength:** The ability to exert maximum muscle force to lift, push, pull, or carry objects.

Tasks and Tools

- Changes bed linens, washes and irons patients' laundry, and cleans patients quarters.
- Assists patients into and out of bed, automobiles, or wheelchair, to lavatory, and up and down stairs.
- Administers prescribed oral medication under written direction of physician or as directed by home care nurse and aide.
- Massages patient and applies preparations and treatment, such as liniment or alcohol rubs and heat-lamp stimulation.
- Performs variety of miscellaneous duties as requested, such as obtaining household supplies and running errands.
- Entertains patient, reads aloud, and plays cards and other games with patient.
- Maintains records of services performed and of apparent condition of patient.
- Purchases, prepares, and serves food for patient and other members of family, following special prescribed diets.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Personal and Home Care Aides	Short-term OJT	$7.64
Child Care Workers	Short-term OJT	$8.31
Nursing Aides, Orderlies and Attendants	Short-term OJT	$9.17
Flight Attendants	Long-term OJT	$20.20

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Julia Randle

What are some of the job titles you've held previously in this career field?
I held positions as a Nurses Aide and then was certified as a Nurses Assistant.

What kinds of work do you do in your current job and what do you do in a typical day?
I cook breakfast and lunch, bathe and shower patient's and take them to doctor's appointments. I also take patients for drives around the ocean and out to lunch.

What was it that attracted you to this type of work?
My love of senior citizens and the ability and chance to help someone feel better each and every day are things that attracted me to the home health profession. My mother and grandmother, who instilled in me strong work ethics, taught me to have love for everyone and to help those who could not help themselves. I believe that the influence from my family had a huge impact on my career choice. It is truly a good feeling.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
Important qualities such as patience, understanding, love, and a caring attitude keep me going the extra mile for my patients. I feel very appreciated by those I care for as well.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Learn all you can about the medical field by taking classes and going to school. I have always loved that I have the ability to be in the home health field because of my training and knowledge.

What is it that keeps you wanting to do this kind of work?
Knowing that I have assisted someone in feeling better and the fact that I know my job in life is to help others and to take care of those who cannot take care of themselves.

What qualities make for an exceptional Home Health Aide?
Being able to communicate under stressful situations and being capable of working independently are important qualities for a home health professional. Having a caring and loving attitude towards others and taking pride in your work are also important qualities to possess.

Human Service Workers

Human Service Workers assist Social Group Workers and Caseworkers with developing, organizing and conducting programs to prevent and resolve problems relevant to substance abuse and human relationships. They provide services to families and clients where the nature of the problem, or relationships involved, is less complex or serious by helping them obtain information on the use of social and community related services. They may also recommend additional services. (OES 273080)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.30 - $11.00/hr	$10.00/hr
New Hires/Exp'd:	$8.98 - $18.22/hr	$12.86/hr
Exp'd/After 3 Years:	$11.00 - $25.00/hr	$16.00/hr

Hours: Most jobs are 40 hours per week. Some jobs are 10-32 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■		■■	■		■
Dental Insurance	■■■		■	■	■	■
Vision Insurance	■■		■	■	■	■
Life Insurance	■■■		■	■		■
Sick Leave	■■■■	■■				■
Vacation	■■■■	■■	■			■
Retirement	■■■	■				
Child Care	■		■			

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: Some employers are willing to accept less than a high school level education for job entry. Some others require a high school diploma or a bachelor degree.

Experience: Almost all employers require or prefer 3-60 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Almost all responding employers require word processing skills. Many require spreadsheet skills. Some require database skills. Refer to Human Service Workers in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers report that it is moderately difficult to find inexperienced applicants and very difficult to find fully experienced applicants. This indicates a **good outlook** for inexperienced job seekers and a **very good outlook** for experienced applicants.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 17 employers surveyed representing 392 employees in this occupation.

Size of Occupation

Small. There are approximately 273 – 333 Human Service Workers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 39% are male.

Employment Trends

The growth rate is projected to be much faster than average for all occupations through the year 2006. Approximately 23 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Human Service Workers is projected to grow much faster than the average for all occupations through 2010, ranking among the most rapidly growing occupations.

Other Information

Where the Jobs Are: Social services; Local government; Residential care; State government; Job training; Hospitals.

Methods Used to Fill Job Openings: Almost all employers recruit applicants through newspaper advertisements. Some employers also fill openings through in-house promotion/transfer and by hiring employee referrals.

Career Path: Promotions may lead to caseworker or social worker positions, if additional education requirements are met.

Important Knowledge, Skills, and Abilities

Knowledge:	**Customer and Personal Service:** Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques. **Therapy and Counseling:** Knowledge of information and techniques needed to rehabilitate physical and mental ailments and to provide career guidance including alternative treatments, rehabilitation equipment and its proper use, and methods to evaluate treatment effects. **Education and Training:** Knowledge of instructional methods and training techniques including curriculum design principles, learning theory, group and individual teaching techniques, design of individual development plans, and test design principles.
Skills:	**Social Perceptiveness:** Being aware of others' reactions and understanding why they react the way they do. **Speaking:** Talking to others to effectively convey information. **Active Listening:** Listening to what other people are saying and asking questions as appropriate.
Abilities:	**Oral Expression:** The ability to communicate information and ideas in speaking so others will understand. **Oral Comprehension:** The ability to listen to and understand information and ideas presented through spoken words and sentences. **Written Expression:** The ability to communicate information and ideas in writing so others will understand.

Tasks and Tools

- Visits individuals in homes or attends group meetings to provide information on agency services, requirements and procedures.
- Interviews individuals and family members to compile information on social, educational, criminal, institutional, or drug history.
- Advises clients regarding food stamps, child care, food, money management, sanitation, and housekeeping.
- Provides information on and refers individuals to public or private agencies and community services for assistance.
- Assists in locating housing for displaced individuals.
- Monitors free, supplementary meal program to ensure cleanliness of facility and that eligibility guidelines are met for persons receiving meals.
- Observes clients food selections and recommends alternate economical and nutritional food choices.
- Meets with youth groups to acquaint them with consequences of delinquent acts.
- Keeps records and prepares reports for owner or management concerning visits with clients.
- Submits to and reviews reports and problems with superior.
- Informs tenants of facilities, such as laundries and playgrounds.
- Demonstrates use and care of equipment for tenant use.
- Explains rules established by owner or management, such as sanitation and maintenance requirements, and parking regulations.
- Transports and accompanies clients to shopping area and to appointments, using automobile.
- Oversees day-to-day group activities of residents in institution.
- Consults with supervisor concerning programs for individual families.
- Cares for children in clients home during client's appointments.
- Observes and discusses meal preparation and suggests alternate methods of food preparation.
- Assists in planning of food budget, utilizing charts and sample budgets.
- Assists clients with preparation of forms, such as tax or rent forms.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Personal and Home Care Aides	Short-term OJT	$7.64
Residential Advisors	Moderate-term OJT	$9.30
Child, Family and School Social Workers	Bachelor degree	$17.66
Occupational Therapists	Bachelor degree	$27.46

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Ely Aquino

What are some of the job titles you've held previously in this career field?
I have held jobs as a Departmental Data Processing Technician where I performed technical work to facilitate the maintenance of both multi-user computer systems and a PC Novell Network.

I also worked managing around 45 to 60 participants during the summer where I was responsible for providing assistance to youth ages 14-21.

What kind of work do you do in your current job and what do you do in a typical day?
In my current job, I interview individuals to determine eligibility for our programs, conduct objective assessment to develop program goals and services for youth participants; I plan, organize, develop, and conduct life skills workshops where youth benefit from planning for the future. I also conduct referral sessions to prepare youth for work experience and tutorial/academic enrichment, I also recruit participants.

As a Human Service Worker, I make sure that the participants under my care are provided for; I monitor worksites to ensure that activities are conducted in an appropriate manner. I meet with participants often to assess their progress and conduct counseling guidance concerning life, education, and career and take care of necessary problems or issues. I make sure that all participants receive the necessary supportive services, including work clothes, safety equipment, bus tickets, etc. I collect timesheets; I track participant's attendance and deliver paychecks in addition to making sure that safety and other regulations are being met. I provide participants and supervisors with orientation and maintain individual files by ensuring that all documents and requirements are in order. I document progress, problems, and other issues of each client on a daily basis as well.

On a typical day, I conduct adult life skills workshops in the morning, work with projects and necessary paperwork, as well as meet with staff and recruit out of school youth for the programs. I visit worksites and participants when I can; later in the day I conduct the life skills workshops for youth. There is a lot of planning that goes into my day!

What was it that attracted you to this work?
This is not a monotonous job, everyday is a challenge and in my job I must be very creative. I deal with people, emotions, planning, organization, writing composition; in addition, public speaking and decision-making come into play on a daily basis. I give my heart in every situation, and I learn new things each day.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
The majority of people I work with are considered high-risk youth. You must bear the qualities of a caring, patient, compassionate, loving and understanding person because you are dealing with human beings everyday who are seeking support and guidance from you.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
You must have compassion and a big heart. If an individual has a Master's Degree but does not have compassion, the degree is useless. Writing and other learned skills come secondary. Through experience you gain the knowledge that will allow you to work with people in a compassionate, yet helpful manner.

What is it that keeps you wanting to do this kind of work?
I enjoy working with, and helping people as well as the challenge and learning everyday.

What qualities make for an exceptional Human Service Worker? *Sharing your heart with others and working hard without complaint makes for an exceptional employee in this field.*

Janitors and Cleaners

Also known as Custodians.

Janitors and Cleaners, except Maids and Housekeeping Cleaners, keep buildings in clean and orderly condition. They perform heavy cleaning duties such as operating motor-driven cleaning equipment, mopping floors, washing walls and glass, and removing rubbish. They may have additional duties and responsibilities such as tending furnace and boiler, performing routine maintenance activities, notifying management of need for repairs and additions, and cleaning snow or debris from sidewalk. Maids and housekeepers are not included.
(OES 670050)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.75 - $8.50/hr	$7.50/hr
New Hires/Exp'd:	$6.75 - $11.15/hr	$8.00/hr
Exp'd/After 3 Years:	$8.00 - $12.50/hr	$10.00/hr

Hours: Almost all jobs are 40 hours per week. A few jobs average 3-25 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■	■	■■			
Dental Insurance	■■■	■	■			
Vision Insurance	■■■	■				
Life Insurance	■■		■			
Sick Leave	■■■	■	■■			
Vacation	■■■	■	■■			
Retirement	■■■	■	■■			
Child Care						

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: Most employers are willing to accept less than a high school level education for job entry. Many others require a high school diploma or equivalent.

Experience: Many employers require or prefer 6-12 months of prior experience. A few employers are willing to accept training as a substitute for experience.

Training: Employers usually provide training for this occupation. However, training programs are offered. Refer to Janitors and Cleaners in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find both inexperienced or fully experienced applicants. This indicates a **good outlook** for job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing 329 employees in this occupation.

Size of Occupation

Very large. There are approximately 3,144 – 3,842 Janitors and Cleaners currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate less than 23% are female. A few jobs are union.

Employment Trends

The growth rate is projected to be slower than average for all occupations through the year 2006. Approximately 131 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Janitors and Cleaners is projected to grow as fast as the average for all occupations through 2010.

Other Information

Where the Jobs Are: Services to buildings; Educational services; Religious organizations; Local government; Self-employment; Personnel supply services; Hotel and motels; Real estate operators; Hospitals.

Methods Used to Fill Job Openings: Almost all employers recruit applicants through newspaper advertisements. Many employers also fill openings through walk-in applicants and/or by hiring employee referrals.

Career Path: Promotions may lead to maintenance technicians, supervisor, and inspector positions.

Important Knowledge, Skills, and Abilities

Knowledge:	**Mechanical:** Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance. **Chemistry:** Knowledge of the composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods. **Customer and Personal Service:** Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques.
Skills:	**Equipment Maintenance:** Performing routine maintenance and determining when and what kind of maintenance is needed. **Repairing:** Repairing machines or systems using the needed tools. **Troubleshooting:** Determining what is causing an operating error and deciding what to do about it
Abilities:	**Static Strength:** The ability to exert maximum muscle force to lift, push, pull, or carry objects. **Stamina:** The ability to exert one's self physically over long periods of time without getting winded or out of breath. **Trunk Strength:** The ability to use one's abdominal and lower back muscles to support part of the body repeatedly or continuously over time without 'giving out' or fatiguing.

Tasks and Tools

- Sweeps, mops, scrubs, and vacuums floors of buildings, using cleaning solutions, tools and equipment.
- Gathers and empties trash.
- Cleans or polishes walls, ceilings, windows, plant equipment and building fixtures, using steam cleaning equipment, scrapers, brooms and variety of hand and power tools.
- Applies waxes or sealers to wood or concrete floors.
- Tends, cleans, adjusts and services furnaces, air conditioners, boilers and other building heating and cooling systems.
- Removes snow from sidewalks, driveways, and parking areas, using snowplow, snow blower, and snow shovel, and spreads snow melting chemicals.
- Notifies management personnel concerning need for major repairs or additions to building operating systems.
- Sprays insecticides and fumigants to prevent insect and rodent infestation.
- Cleans laboratory equipment, such as glassware and metal instruments, using solvents, brushes, rags, and power cleaning equipment.
- Mows and trims lawns and shrubbery, using mowers and hand and power trimmers, and clears debris from grounds.
- Mixes water and detergents or acids in container to prepare cleaning solutions, according to specifications.
- Drives vehicles, such as van, industrial truck or industrial vacuum cleaner.
- Cleans chimneys, flues, and connecting pipes, using power and hand tools.
- Cleans and restores building interiors damaged by fire, smoke, or water, using commercial cleaning equipment.
- Services and repairs cleaning and maintenance equipment and machinery and performs minor routine painting, plumbing, electrical, and related activities.
- Moves items between departments, manually or using hand truck.
- Sets up, arranges, and removes decorations, tables, chairs, ladders, and scaffolding, for events such as banquets and social functions.
- Requisitions supplies and equipment used in cleaning and maintenance duties.
- Dusts furniture, walls, machines, and equipment.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Landscaping and Groundskeeping Workers	Short-term OJT	$8.76
Foundry Mold and Coremakers	Moderate-term OJT	$9.68
Helpers—Installation, Maintenance and Repair Workers	Short-term OJT	$10.19
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	Short-term OJT	$11.56
Helpers—Pipelayers, Plumbers, Pipefitters and Steamfitters	Long-term OJT	$11.56
Automotive Glass Installers and Repairers	Long-term OJT	$13.15
Mechanical Door Repairers	Moderate-term OJT	$17.11
Refractory Materials Repairers, Except Brickmasons	Moderate-term OJT	$19.04

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Ruben Navacamacho

What are some of the job titles you've held previously in this career field?
Previously I held jobs working in the agricultural industry here in Salinas as a field worker and had some experience working as a Janitor.

What kind of work do you do in your current job and what do you do in a typical day?
On a typical day I fix electrical problems, move furniture, clean carpets, and do any number of maintenance jobs in addition to working as a Janitor. My position is generally called a Custodian, which, means I do a little bit of everything.

What was it that attracted you to this work?
After working in the fields, and being injured while on the job, I decided to go through training at CET (Center for Employment Training). At CET I learned job skills like filling out an application and going to an interview. I was then introduced to janitorial work again as a result of my studies at CET. I decided that I would combine the skills I already had with the new skills I had learned through my training program to get a good job.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
It is important to have good knowledge of chemicals and how to combine them for use. Also, it helps to be skilled at electricity or any type of maintenance specialty; you must be a hard worker and enjoy what you do.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I would recommend a program like the one I went through with CET for someone who has no experience in this field or who hasn't worked in an English-speaking environment. Even though the job sounds easy, you must always have a positive attitude and be open to learning new things.

What is it that keeps you wanting to do this kind of work?
The benefits of my job are good and I am able to support my family. I also enjoy being away from the elements of the outdoors; I take pride in my job.

What qualities make for an exceptional Janitor?
Always being punctual and at your job everyday are very important qualities. Being a hard worker and someone who takes pride in their job are also good qualities.

Maintenance Repairers – General Utility

Also known as Maintenance Technicians.

General Utility Maintenance Repairers perform work involving two or more maintenance skills to keep the machines, mechanical equipment and /or structure of an establishment in repair. This occupation is generally found in a small establishment where specialization is maintenance work is impractical. Their duties may involve pipefitting, boiler making, insulating, welding, machining, machine and equipment repairing, carpentry and electrical work as well as planning and laying out of work relating to repairs; repairing electrical and/or mechanical equipment; installing, aligning and balancing new equipment; and repairing buildings, floors or stairs. (OES 851320)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$9.00 - $14.50/hr	$11.75/hr
New Hires/Exp'd:	$7.00 - $14.69/hr	$10.00/hr
Exp'd/After 3 Years:	$9.00 - $25.00/hr	$13.00/hr

Hours: Almost all jobs are 40 hours per week. A few temporary/on-call jobs are 8-16 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■		■■			
Dental Insurance	■■		■■			
Vision Insurance	■■		■■			
Life Insurance	■■		■			
Sick Leave	■■		■■			
Vacation	■■		■■			
Retirement	■■		■■			
Child Care			■			

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: Some employers are willing to accept less than a high school level education for job entry. Most employers require a high school diploma or equivalent.

Experience: Almost all employers require or prefer 6-36 months of prior experience. Many employers are willing to accept training as a substitute for experience.

Training: Employers usually provide on-the-job training for this occupation. Refer to Maintenance Repairers in the Occupation-Training Index for information on education and training providers with related programs.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing 71 employees in this occupation.

Supply/Demand Assessment

Employers report that it is moderately difficult to find both inexperienced or experienced applicants. This indicates a **good outlook** for job seekers.

Size of Occupation

Very large. There are approximately 2,029 – 2,479 Maintenance Repairers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 6% are female. A few jobs are union.

Employment Trends

The growth rate is projected to be slower than average for all occupations through the year 2006. Approximately 83 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Maintenance Repairers is projected to grow more slowly than the average for all occupations through 2010.

Other Information

Where the Jobs Are: Real estate operators; Educational services; Telephone communications; Local government; Hotel and motels; Wholesale trade; Hospitals; Religious organizations.

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements. Many employers also fill openings through word of mouth. Some other employers hire walk-in applicants.

Career Path: Promotions may led to supervisory or management positions.

Important Knowledge, Skills, and Abilities

Knowledge:	**Building and Construction:** Knowledge of materials, methods, and the appropriate tools to construct objects, structures, and buildings. **Mechanical:** Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance. **Engineering and Technology:** Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications.
Skills:	**Installation:** Installing equipment, machines, wiring, or programs to meet specifications. **Repairing:** Repairing machines or systems using the needed tools. **Equipment Maintenance:** Performing routine maintenance and determining when and what kind of maintenance is needed.
Abilities:	**Visualization:** The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged. **Information Ordering:** The ability to correctly follow a given rule or set of rules in order to arrange things or actions in a certain order. The things or actions can include numbers, letters, words, pictures, procedures, sentences, and mathematical or logical operations. **Manual Dexterity:** The ability to quickly make coordinated movements of one hand, a hand together with its arm, or two hands to grasp, manipulate, or assemble objects.

Tasks and Tools

- Inspects and tests machinery and equipment to diagnose machine malfunctions.
- Dismantles and reassembles defective machines and equipment. Installs new or repaired parts.
- Installs and/or repairs wiring and electrical and electronic components.
- Installs machinery and equipment.
- Assembles, installs, and/or repairs pipe systems and hydraulic and pneumatic equipment.
- Estimates costs of repairs.
- Records repairs made and costs parts.
- Fabricates and repairs counters, benches, partitions, and other wooden structures, such as sheds and outbuildings.
- Operates cutting torch or welding equipment to cut or join metal parts.
- Sets up and operates machine tools to repair or fabricate machine parts, jigs and fixtures, and tools.
- Lays brick to repair and maintain physical structure of establishment.
- Paints and repairs woodwork and plaster.
- Assembles, installs, and/or repairs plumbing.
- Cleans and lubricates shafts, bearings, gears, and other parts of machinery.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Helpers—Carpenters	Short-term OJT	$11.56
Welders and Cutters	Post-secondary training	$12.69
Pipe Fitters	Long-term OJT	$19.20
Plumbers	Long-term OJT	$19.20
Aircraft Body and Bonded Structure Repairers	Post-secondary training	$19.56
Elevator Installers and Repairers	Long-term OJT	$22.22
Structural Iron and Steel Workers	Long-term OJT	$22.79
Boilermakers	Long-term OJT	$23.87

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Ron Aunchman

What are some of the job titles you've held previously in this career field?
I have held jobs primarily in the maintenance field. Now am I am a Building Maintenance Worker.

What kind of work do you do in your current job and what do you do in a typical day?
My typical day has to do with all building maintenance and facilities. I am part of a two-man team in charge of different buildings throughout different counties. We are doing preventative maintenance along with general building repairs. Normally we are called out on assignment through our call center where someone might have placed a call for a maintenance request. I also meet with contractors to facilitate coordination between the departments.

What was it that attracted you to this work?
I like being around people and communicating. In my current job I am able to work in many different locations on many different aspects of maintenance. I like having a job that gives me benefits and stability.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
I think being able to communicate with others is very important because if you don't have the ability to communicate with your clients or customers it is hard to find out what the problems are and solve them. Having a well-rounded customer service attitude to start out with is important; everything else will follow.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
If someone is interested in building maintenance, it is common to have a background in electrical work and know a lot of different things in this business. People that are entering this field have general knowledge of a lot of different inner workings of building maintenance including troubleshooting plumbing, heating and electrical. It is important to have knowledge of many different types of maintenance, you can then learn further through experience on the job. As long as you know the basics, there are always people who are willing to teach you and help to expand your knowledge in certain areas. This is a learning experience, even for people who know how to do almost everything.

What is it that keeps you wanting to do this kind of work?
The job is always changing and never boring. I like being able to take on any problem and solve it; this makes me enjoy coming to work everyday.

What qualities make for an exceptional Maintenance Technician?
I think the all around employee is a leader; someone who is not afraid to take the initiative to speak up and say what is right and execute decisions promptly. That is the person who will achieve their goals, get things done, and do it right.

Medical and Clinical Laboratory Assistants

Includes Phlebotomists.

Medical and Clinical Laboratory Assistants perform routine tasks in a medical laboratory. They may set up and operate automated equipment, which does not require interpretation or judgment to read the results. They may label, centrifuge and transfer specimens, transcribe results and prepare culture media and reagents. They may also perform venipuncture if certified to do so. They work under the supervision of a Medical Laboratory Technologist. (OES 329050)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$10.50 - $23.00/hr	$12.00/hr
New Hires/Exp'd:	$11.75 - $25.00/hr	$14.00/hr
Exp'd/After 3 Years:	$13.23 - $43.15/hr	$15.50/hr

Hours: Most jobs are 40 hours per week. Some jobs are 28-30 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■		■■■			
Dental Insurance	■■		■■			
Vision Insurance	■		■			
Life Insurance	■					
Sick Leave	■■■■	■	■			
Vacation	■■■■	■	■			
Retirement	■■■■		■■			
Child Care						

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None, except for Phlebotomists.

Education: Almost all employers require a high school level education or equivalent for job entry. A few others require a bachelor degree.

Experience: Most employers require or prefer 3-12 months of prior experience. All employers are willing to accept training as a substitute for experience.

Training: All responding employers require word processing and database skills. Most employers require spreadsheet skills. Refer to Medical and Clinical Laboratory Assistants in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers report that it is very difficult to find both inexperienced and experienced job applicants. This indicates a **very good outlook** for job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 7 employers surveyed representing 39 employees in this occupation.

Size of Occupation

Small. There are approximately 193 – 235 Medical and Clinical Laboratory Assistants currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate less than 74% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. Approximately 4 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Clinical Laboratory Workers is expected to grow about as fast as the average for all occupations through 2010.

Other Information

Where the Jobs Are: Hospitals; Offices of physicians; Medical and dental laboratories; Health and allied services; Educational services; Research and testing services.

Methods Used to Fill Job Openings: Many employers recruit applicants through newspaper advertisements, the Internet and/or by school/program referrals.

Career Path: Promotions and further education may lead to technologist, then supervisory and laboratory management positions.

Important Knowledge, Skills, and Abilities

Knowledge:	**Biology:** Knowledge of plant and animal living tissue, cells, organisms, and entities, including their functions, interdependencies, and interactions with each other and the environment. **Chemistry:** Knowledge of the composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods. **Medicine and Dentistry:** Knowledge of the information and techniques needed to diagnose and treat injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.
Skills:	**Science:** Using scientific methods to solve problems. **Quality Control Analysis:** People use quality control analysis skills to conduct tests and inspections. This skill may be applied to products, services, and processes so that a company can evaluate quality or performance level. **Complex Problem Solving:** Complex problem solving is used in identifying complex problems and reviewing related information so that options may be developed and evaluated, and solutions may be put into action.
Abilities:	**Information Ordering:** The ability to correctly follow a given rule or set of rules in order to arrange things or actions in a certain order. The things or actions can include numbers, letters, words, pictures, procedures, sentences, and mathematical or logical operations. **Visual Color Discrimination:** The ability to match or detect differences between colors, including shades of color and brightness. **Near Vision:** The ability to see details of objects at a close range (within a few feet of the observer).

Tasks and Tools

- Conducts quantitative and qualitative chemical analyses of body fluids, such as blood, urine, and spinal fluid.
- Conducts blood tests for transfusion purposes.
- Tests vaccines for sterility and virus inactivity.
- Draws blood from patient, observing principles of asepsis to obtain blood sample.
- Prepares standard volumetric solutions and reagents used in testing.
- Inoculates fertilized eggs, broths, or other bacteriological media with organisms.
- Incubates bacteria for specified period and prepares vaccines and serums by standard laboratory methods.
- Performs blood counts, using microscope.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Biological Technicians	Post-secondary training	$15.77
Coroners	Long-term OJT	$19.60
Microbiologists	Post-secondary training	$27.77
Anesthesiologists	Post-secondary training	$70.01

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Sonya Little

What are some of the job titles you've held previously in this career field?
Phlebotomist and Lab Assistant.

What kinds of work do you do in your current job and what do you do in a typical day?
My job has three major components; registering patients and putting in all pertinent, personal and medical information in the computer; assessing the patient generally to verbally put him/her at ease prior to blood draw. Also I process specimens accurately for future dispersal to varying labs and specialty sites for testing – this preparation is critical for accurate testing.

What was it that attracted you to this type of work?
Certainly the service-oriented type of work was what attracted me the most to this field. The one-on-one contact with each patient – you have to enjoy being with people and setting them at ease. The technical skill of knowing how to perform a medical procedure that truly gives meaningful information to the doctor for diagnosis was also attractive to me. I enjoyed helping with health maintenance as well, so it was a really good blend of technical and people oriented work that gave me a nice balance.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
Believe it or not, I place knowledge of self high on the requirement list. You are dealing with every conceivable condition of human vulnerability when it comes to their health. People react in all kinds of ways to medical stress. One needs to have the presence of mind to do an efficient, sensitive, mindfully present job realizing the tone you set can make a huge difference in obtaining the specimens desired. In depth knowledge of this field takes time. Willingness to learn, to keep learning and have a compassionate heart for others is very important.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Go to a hospital laboratory and ask if it could be arranged for you to have a tour and also observe the phlebotomist work. See if they would be willing to share with you their experience and ideas in this field.

What is it that keeps you wanting to do this kind of work?
The people; knowing I've gained an invaluable skill and performing it well means so much to people who have often not had the best experiences. The patient's continually teach me about myself, while I continue to grow and hopefully become a more loving and compassionate human being.

What qualities make for an exceptional Medical and Clinical Lab Assistant?
Willingness to learn and ask questions and enjoying being supportive as a team member are qualities that make up an exceptional employee in this field. Ability to receive constructive criticism is important as well as having patience with yourself and others. Compassion for others and a sense of loyalty to yourself in striving towards excellence for you and your company are also qualities that are important.

Medical Assistants

Medical Assistants perform various duties under the direction of physicians in the examination and treatment of patients. They prepare treatment room, inventory supplies and instruments and set up patients for attention of physician, handling instruments and materials to physician as directed. They may schedule appointments, keep medical records or perform other clerical duties.
(OES 660050)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$9.00 - $13.64/hr	$11.50/hr
New Hires/Exp'd:	$9.00 - $14.00/hr	$11.00/hr
Exp'd/After 3 Years:	$12.00 - $18.00/hr	$14.00/hr

Hours: Almost all jobs are 40 hours per week. A few jobs are 15-25 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■	■	■■■			
Dental Insurance	■■	■	■■			
Vision Insurance	■■	■	■■			
Life Insurance	■	■	■■		■	
Sick Leave	■■■	■				
Vacation	■■■	■				
Retirement	■	■	■■		■	
Child Care						

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None.

Education: All employers require a high school level education or equivalent for job entry.

Experience: Almost all employers require or prefer 1-24 months of prior experience. Most employers accept prior experience in other medical related positions. Many employers are willing to accept training as a substitute for experience.

Training: State of California requirements include ten hours of training and ten performances each of the three various injections (intradermal, subcutaneous and intramuscular), blood withdrawal and skin testing. Most employers report that word processing skills are important. Many employers state that medical software such as *Medical Manager* and *Medisoft* are important. Employers usually provide on-the job training although related training programs are offered. Refer to Medical Assistants in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find both inexperienced and fully experienced applicants. This indicates a **good outlook** for job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing 90 employees in this occupation.

Size of Occupation

Large. There are approximately 769 – 939 Medical Assistants currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 3% are male. A few jobs are union.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. About 43 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Medical Assistants is expected to grow much faster than the average for all occupations through 2010 with a large aging population and technological advances in medicine.

Other Information

Where the Jobs Are: Offices of physicians; Hospitals; Offices of other health practitioners; Health and allied services; Medical and dental laboratories; Self-employment.

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements. Many employers also fill openings by hiring employee and/or school/program referrals.

Career Path: Promotions may led to office management, administrative support or teaching positions.

Important Knowledge, Skills, and Abilities

Knowledge:
Medicine and Dentistry: Knowledge of the information and techniques needed to diagnose and treat injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.
Clerical: Knowledge of administrative and clerical procedures and systems such as word processing systems, filing and records management systems, stenography and transcription, forms design principles, and other office procedures and terminology.
English Language: Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

Skills:
Service Orientation: Actively looking for ways to help people.
Writing: Communicating effectively with others in writing as indicated by the needs of the audience.
Active Listening: Listening to what other people are saying and asking questions as appropriate.
Complex Problem Solving: Complex problem solving is used in identifying complex problems and reviewing related information so that options may be developed and evaluated, and solutions may be put into action.

Abilities:
Oral Comprehension: The ability to listen to and understand information and ideas presented through spoken words and sentences.
Arm-Hand Steadiness: The ability to keep the hand and arm steady while making an arm movement or while holding the arm and hand in one position.
Information Ordering: The ability to correctly follow a given rule or set of rules in order to arrange things or actions in a certain order. The things or actions can include numbers, letters, words, pictures, procedures, sentences, and mathematical or logical operations.

Tasks and Tools

- Prepares treatment rooms for examination of patients.
- Cleans and sterilizes instruments.
- Computes and mails monthly statements to patients and records transactions.
- Contacts medical facility or department to schedule patients for tests.
- Performs routine laboratory tests.
- Gives injections or treatments to patients.
- Receives payment for bills.
- Operates X ray, electrocardiograph (EKG), and other equipment to administer routine diagnostic tests.
- Gives physiotherapy treatments, such as diathermy, galvanics, and hydrotherapy.
- Completes insurance forms.
- Lifts and turns patients.
- Inventories and orders medical supplies and materials.
- Hands instruments and materials to physician.
- Schedules appointments.
- Interviews patients, measures vital signs, weight, and height, and records information.
- Maintains medical records.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Nursing Assistants	Short-term OJT	$9.17
Emergency Medical Technicians and Paramedics	Post-secondary training	$12.85
Dental Assistants	Moderate-term OJT	$14.64
Licensed Practical and Licensed Vocational Nurses	Post-secondary training	$16.42
Nuclear Medicine Technologists	Post-secondary training	$25.97
Registered Nurses	Post-secondary training	$26.50
Radiation Therapists	Post-secondary training	$26.58

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Virginia Castillo

What are some of the job titles you've held previously in this career field?
I have been in the medical field for about 20 years. I've been a Medical Assistant and I have worked as a CAN (Certified Medical Assistant).

What kinds of work do you do in your current job and what do you do in a typical day?
I am the Head Medical Assistant, where I oversee the medical assistants in my department; I also do chest x-rays and give injections. I carry out EKG's, do pulmonary function testing, assist with treadmills and assist with pap smears. I also complete refill requests on medication and take verbal reports from other offices. Each Medical Assistant is responsible for one patient per physician.

What was it that attracted you to this type of work?
I have always had an interest in the medical field, my mother was a Home Health Aide when I was growing up, and I have many memories of going to her office and seeing what she would do – this used to fascinate me. The influence of my mother and her work attracted me to the medical field.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
I think knowing about the medical world makes it easier, knowing medical terminology and body functions, all help you understand the field you are in. Being a Medical Assistant can help to expand your horizons, and you must be ready to move with the changing medical field.

I completed a CNA course and medical assistant program through ROP in high school. I was led to the medical field through the influence and knowledge I gained through the ROP program; it was a great resource for me.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I think the best thing for someone who is interested in the medical field is to get involved in a medical environment of some sort and see if it's something that they really want to do. Being in the medical field and going full force is just the best way to prepare you for this occupation. I was lucky because the ROP program was available and was great because they had a lot of programs for people who couldn't afford to pay for schooling but who wanted to get into a particular field. I came from a family of ten, so it was very hard for me to pay for school; the ROP program was a great alternative.

What is it that keeps you wanting to do this kind of work?
I think because the medical field is always changing, it keeps me excited about my job. There are always new things to learn. I also enjoy the patient relationships; the smiles and the thanks that I receive are a big plus.

What qualities make for an exceptional Medical Assistant?
Having patience in my job would be one of the biggest things. Being a Medical Assistant, you have a full plate, and you've got to know how to turn the plate as situations arise. Even though new things happen every day that may take you out of sequence, you need to be able to come back the next day and be ready. Knowing everything you can and wanting to learn as much as possible are also qualities that make up an exceptional Medical Assistant.

Medical Records Technicians

Also known as Medical Records Clerks.

Medical Records Technicians compile and maintain medical records of hospital and clinic patients. (OES 329110)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$9.00 - $12.00/hr	$10.99/hr
New Hires/Exp'd:	$9.50 - $16.00/hr	$12.00/hr
Exp'd/After 3 Years:	$11.08 - $20.00/hr	$15.00/hr

Hours: Most jobs are 40 hours per week. Some jobs are 24-30 hours per week.

Benefits:	Paid by:	Employer		Shared		Employee	
		Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance		■■	■	■■■			
Dental Insurance		■■	■	■■			
Vision Insurance		■■	■	■■			
Life Insurance		■■	■	■■			
Sick Leave		■■■	■	■■			
Vacation		■■■■	■	■■			
Retirement		■■		■■			
Child Care							

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: All employers require a high school level education or equivalent for job entry. Applicants can improve their chances of admission into a program by taking biology, chemistry, health and computer courses in high school.

Experience: Most employers require or prefer 3-36 months of prior experience. Many employers are willing to accept training as a substitute for experience.

Training: Of responding employers most require word processing. Many employers require spreadsheet skills. Some require *Medical Manager* and *Meditech*. Refer to Medical Records Technicians in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers report that it is moderately difficult to find inexperienced but qualified applicants, and not very difficult to find qualified applicants with prior experience. This indicates a **good outlook** for job seekers without prior experience, and a **fair outlook** for those who are fully experienced.

Size of Occupation

Small. There are approximately 186 – 228 Medical Records Technicians currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 5% are male.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing 39 employees in this occupation.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2006. Approximately 12 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Medical Records Technicians is expected to grow much faster than the average for all occupations through 2010.

Other Information

Where the Jobs Are: Hospitals; Offices of physicians; Nursing and personal care facilities; Health and allied services; Federal government; Home health care services.

Methods Used to Fill Job Openings: Almost all employers recruit applicants through newspaper advertisements. Many employers fill openings by hiring employee referrals. Some employers fill openings through in-house promotion/transfer and/or colleges and universities recruitment.

Career Path: Promotions may lead to senior technician, office manager, assistant director or department director positions.

Important Knowledge, Skills, and Abilities

Knowledge: **Clerical:** Knowledge of administrative and clerical procedures and systems such as word processing systems, filing and records management systems, stenography and transcription, forms design principles, and other office procedures and terminology.
Mathematics: Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications.
Computers and Electronics: Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming.

Skills: **Complex Problem Solving:** Complex problem solving is used in identifying complex problems and reviewing related information so that options may be developed and evaluated, and solutions may be put into action.
Reading Comprehension: Understanding written sentences and paragraphs in work related documents.
Writing: Communicating effectively with others in writing as indicated by the needs of the audience.

Abilities: **Written Comprehension:** The ability to read and understand information and ideas presented in writing.
Written Expression: The ability to communicate information and ideas in writing so others will understand.
Oral Comprehension: The ability to listen to and understand information and ideas presented through spoken words and sentences.

Tasks and Tools

- Compiles and maintains medical records of patients to document condition and treatment and to provide data for research studies.
- Maintains variety of health record indexes and storage and retrieval systems.
- Enters data, such as demographic characteristics, history and extent of disease, diagnostic procedures and treatment into computer.
- Prepares statistical reports, narrative reports and graphic presentations of tumor registry data for use by hospital staff, researchers, and other users.
- Contacts discharged patients, their families, and physicians to maintain registry with follow-up information, such as quality of life and length of survival of cancer patients.
- Assists in special studies or research, as needed.
- Reviews records for completeness and to abstract and code data, using standard classification systems, and to identify and compile patient data.
- Compiles medical care and census data for statistical reports on diseases treated, surgery performed, and use of hospital beds.
- Utilizes word processing software such as Microsoft Word or Word Perfect at an intermediate level.
- Utilizes spreadsheet software such as Microsoft Excel or Lotus 1-2-3 at a basic/introductory level.
- Utilizes contact management software such as Microsoft Outlook, ACT! or Goldmine for e-mail, address book, calendar, and task management.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Office Clerks, General	Short-term OJT	$11.40
Correspondence Clerks	Moderate-term OJT	$12.93
Pharmacy Technicians	Moderate-term OJT	$14.18
Procurement Clerks	Short-term OJT	$15.09
Payroll and Timekeeping Clerks	Short-term OJT	$15.10
Insurance Claims Clerks	Moderate-term OJT	$15.91
Insurance Policy Processing Clerks	Moderate-term OJT	$15.91

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Alma Rodriguez

What are some of the job titles you've held previously in this career field?
I have worked as a Medical Records Technician for about five years in a medical office setting.

What kind of work do you do in your current job and what do you do in a typical day?
In my current job I retrieve medical records at the doctor's request and make sure details in the files are correct for dealing with the insurance agencies. I also deal with medical releases and organize patient's files.

What was it that attracted you to this work?
I like that I am able to work independently and at my own pace. An opportunity to work in a medical setting but in a different area of the office was appealing as well as the organization of medical filing.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
Medical terminology is important to understand as well as medical laws and the ability to be very detail oriented and organized.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I would recommend someone learning medical terminology and CPT coding for a medical office. Also, I received my training through the Medical Records Technician Program at Heald College, and I would recommend this for anyone who is interested in the field.

What is it that keeps you wanting to do this kind of work?
Since I have worked in this occupation for about five years and am familiar with the job, it makes it easy for me to continue in the field. I enjoy the benefits and stability of my job.

What qualities make for an exceptional Medical Records Technician?
Being familiar with medical coding and terminology of the system is important, and it helps if someone has a good knowledge of reception and dealing with patients as well.

Medicine and Health Service Managers

Medicine and Health Service Managers plan, organize, direct, control or coordinate medicine and health services in establishments such as hospitals, clinics or similar organizations. (OES 150080)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	Not Applicable	Not Applicable
New Hires/Exp'd:	$10.00 - $34.00/hr	$16.39/hr
Exp'd/After 3 Years:	$14.00 - $40.00/hr	$19.59/hr

Hours: Almost all jobs are 40 hours per week. A few jobs are 32-35 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■	■	■■			
Dental Insurance	■■	■	■■			
Vision Insurance	■■		■■			
Life Insurance	■■	■	■			
Sick Leave	■■■■	■	■			
Vacation	■■■■	■	■			
Retirement	■■■■	■	■			
Child Care						

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: Most employers require a high school level education or equivalent for job entry. Some others require an associate degree. A few employers require a bachelor degree.

Experience: Almost all employers require or prefer 12-60 months of prior experience. A few employers are willing to accept training as a substitute for experience.

Training: Of responding employers most require word processing. Many employers require spreadsheet skills. Some require database skills. Refer to Medicine and Health Service Managers in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is very difficult to find both inexperienced and fully experienced applicants. This indicates a **very good outlook** for job seekers.

Size of Occupation

Medium. There are approximately 369 – 451 Medicine and Health Service Managers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 4% are male.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 154 employers surveyed representing 26 employees in this occupation.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2006. Approximately 17 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Medical and Health Service Managers is expected to grow faster than the average for all occupations through 2010.

Other Information

Where the Jobs Are: Hospitals; Offices of physicians; Nursing and personal care facilities; Self-employment; Federal government; Local government; Health and allied services; Home health care services; Residential care facilities.

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements. Many employers also fill openings by hiring through word of mouth and/or through employee referrals.

Career Path: Promotions may lead to assistant or associate administrator.

Important Knowledge, Skills, and Abilities

Knowledge:	**Administration and Management:** Knowledge of principles and processes involved in business and organizational planning, coordination, and execution. This includes strategic planning, resource allocation, manpower modeling, leadership techniques, and production methods. **Personnel and Human Resources:** Knowledge of policies and practices involved in personnel/human resource functions. This includes recruitment, selection, training, and promotion regulations and procedures; compensation and benefits packages; labor relations and negotiation strategies. **Education and Training:** Knowledge of instructional methods and training techniques including curriculum design principles, learning theory, group and individual teaching techniques, design of individual development plans, and test design principles.
Skills:	**Management of Personnel Resources:** Motivating, developing, and directing people as they work, identifying the best people for the job. **Judgment and Decision Making:** Weighing the relative costs and benefits of a potential action. **Management of Financial Resources:** Determining how money will be spent to get the work done, and accounting for these expenditures. **Coordination:** Adjusting actions in relation to others' actions.
Abilities:	**Oral Expression:** The ability to communicate information and ideas in speaking so others will understand. **Oral Comprehension:** The ability to listen to and understand information and ideas presented through spoken words and sentences. **Written Expression:** The ability to communicate information and ideas in writing so others will understand.

Tasks and Tools

- Administers fiscal operations, such as planning budgets, authorizing expenditures and coordinating financial reporting.
- Develops or expands medical programs or health services for research, rehabilitation, and community health promotion.
- Implements and administers programs and services for health care or medical facility.
- Prepares activity reports to inform management of the status and implementation plans of programs, services, and quality initiatives.
- Reviews and analyzes facility activities and data to aid planning and cash and risk management and to improve service utilization.
- Recruits, hires, and evaluates the performance of medical staff and auxiliary personnel.
- Develops and maintains computerized records management system to store or process personnel, activity, or personnel data.
- Develops organizational policies and procedures and establishes evaluative or operational criteria for facility or medical unit.
- Directs and coordinates activities of medical, nursing, technical, clerical, service, and maintenance personnel of health care facility or mobile unit.
- Utilizes word processing software such as Microsoft Word or Word Perfect at an intermediate level.
- Inspects facilities for emergency readiness and compliance of access, safety, and sanitation regulations and recommends building or equipment modifications.
- Develops instructional materials and conducts in-service and community-based educational programs.
- Consults with medical, business, and community groups to discuss service problems, coordinate activities and plans, and promote health programs.
- Establishes work schedules and assignments for staff, according to workload, space and equipment availability.
- Utilizes spreadsheet software such as Microsoft Excel or Lotus 1-2-3 at an intermediate level.
- Utilizes database software such as Microsoft Access or FileMaker Pro at an intermediate level.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
First-Line Supervisors, Customer Service	Work experience	$19.87
First-Line Supervisors, Administrative Support	Work experience	$19.87
Postmasters and Mail Superintendents	Bachelor + work exp	$22.28
Budget Analysts	Bachelor degree	$22.94
Industrial-Organizational Psychologists	Masters degree	$24.82
Compensation and Benefits Managers	Bachelor + work exp	$25.10
Management Analysts	Work experience	$29.16

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Maureen Whalen

What are some of the job titles you've held previously in this career field?
RDA – Registered Dental Assistant
Office Manager
Financial Coordinator

What kind of work do you do in your current job and what do you do in a typical day?
I mainly work on insurance, treatment planning, and financial arrangements, but a typical day for me involves many aspects of reception duties in a dental office. My day will start with reviewing charts for the following day; I check to confirm all information is current and make sure necessary laboratory work will be back on time for appointments. I will work on patient treatment plans which, involves checking with the patients insurance to see what their dental benefits are, so that when a patient comes in for a consultation I can discuss their options, their dental insurance coverage, and financial arrangements with them. Dental insurance comes with many problems and solving them can be time consuming but necessary. Making and confirming appointments is an important facet as is training staff when necessary.

What was it that attracted you to this time of work?
My first position as an RDA in the dental field allowed me to be in a profession where I could help people. It is important to have healthy teeth for our general health, but also most people like to have a beautiful smile. To know that I could be part of the process by helping people achieve beautiful smiles and healthy teeth is a great feeling. Working with our patients one-on-one allows me to help them achieve their dental goals by discussing their treatment options and coordinating and utilizing their dental insurance and arranging a financial plan.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
The knowledge of dental terminology is important, basic computer skills, and the ability to multi task.
Good communication and people skills are necessary as well as being a team player. Other important abilities are empathy and understanding of the patient.

What would you recommend as the best preparation for someone who wants to enter into this occupation.
I would recommend that you enjoy and have the desire to work with people in the community. That you have good work ethics and want to be part of a team, as any good office has a great team working together. It is very important to have good communication and computer skills and be willing to learn all aspects of your job.

What is it that keeps you wanting to do this job?
I enjoy my job and feel I can help people. Most people come to the dentist nervous and apprehensive; to know that I can help make their visit a little easier makes it worthwhile. Working with a great employer and supportive co-workers make my day enjoyable.

What qualities make for an exceptional Medical Health Service Manager?
An exceptional employee is a good team player who will go to any lengths to do a good job. They are knowledgeable of their job, have a good attitude and do the best they can. They are respectful of their employer, co-workers and most of all, the patient.

Nurse Aides

Includes Certified Nursing Assistants (CNAs).

Nurse Aides work under the direction of nursing or medical staff to provide auxiliary services in the care of patients. They perform duties such as answering patients' call bells, serving and collecting food trays and feeding patients. Nurse Aides may be called Assistants, Attendants or Orderlies. Orderlies are primarily concerned with the care of male patients, setting up equipment and relieving nurses of heavier work.
(OES 660080)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.50 - $10.50/hr	$9.30/hr
New Hires/Exp'd:	$8.00 - $11.00/hr	$10.00/hr
Exp'd/After 3 Years:	$8.50 - $12.50/hr	$11.50/hr

Hours: Many jobs are 32-40 hours per week. Some jobs are temporary or on-call. A few jobs are 18-25 hours per week..

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■	■	■■■	■		
Dental Insurance	■■	■	■■	■	■	
Vision Insurance	■■	■	■	■	■	
Life Insurance	■	■	■■	■		
Sick Leave	■■■■■	■	■	■		
Vacation	■■■■■	■	■	■		
Retirement	■	■	■■■	■		
Child Care						

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: Some jobs require licensing. Contact the Department of Health Services, Licensing and Certification, 1800 Third Street, Suite 210, P.O. Box 942732, Sacramento, CA 94234-7320; (916) 327-2445.

Education: Most employers require a high school diploma or equivalent. Many accept less than a high school education.

Experience: Some employers require or prefer 3-6 months of prior experience. All employers are willing to accept training as a substitute for experience.

Training: Employers usually provide on-the job training. Refer to Nurse Aides in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers report that it is moderately difficult to find inexperienced but qualified applicants, and very difficult to find qualified applicants with prior experience. This indicates a **good outlook** for job seekers without prior experience, and a **very good outlook** for those who are fully experienced.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing employees in this occupation.

Size of Occupation

Very Large. There are approximately 1,530 – 1,870 Nurse Aides currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 17% are male. A few jobs are union.

Employment Trends

The growth rate is projected to be average for all occupations through the year 2006. Approximately 54 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Nurse Aides is expected to grow faster than the average for all occupations through 2010.

Other Information

Where the Jobs Are: Nursing and personal care facilities; Hospitals; Residential care; Local government; Personnel supply services; Self-employment; Private households.

Methods Used to Fill Job Openings: Almost all employers fill openings through newspaper advertisements. Many others hire employee referrals and/or through word of mouth. Some recruit applicants through school/program referrals.

Career Path: Promotions may lead to medical records, supervisory or office management positions. With further training, a Nurse Aide may become a Licensed Vocational Nurse (LVN) or a Registered Nurse (RN).

Important Knowledge, Skills, and Abilities

Knowledge: **Customer and Personal Service:** Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques.
Medicine and Dentistry: Knowledge of the information and techniques needed to diagnose and treat injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.
Public Safety and Security: Knowledge of weaponry, public safety, and security operations, rules, regulations, precautions, prevention, and the protection of people, data, and property.

Skills: **Service Orientation:** Actively looking for ways to help people.
Social Perceptiveness: Being aware of others' reactions and understanding why they react the way they do.
Active Listening: Listening to what other people are saying and asking questions as appropriate.

Abilities: **Static Strength:** The ability to exert maximum muscle force to lift, push, pull, or carry objects.
Oral Comprehension: The ability to listen to and understand information and ideas presented through spoken words and sentences.
Oral Expression: The ability to communicate information and ideas in speaking so others will understand.

Tasks and Tools

- Feeds patients unable to feed themselves.
- Sets up equipment, such as oxygen tents, portable x-ray machines, and overhead irrigation bottles.
- Prepares food trays.
- Bathes, grooms, and dresses patients.
- Measures and records food and liquid intake and output.
- Measures and records vital signs.
- Administers medication as directed by physician or nurse.
- Cleans room and changes linen.
- Stores, prepares, and issues dressing packs, treatment trays, and other supplies.
- Administers catheterizations, bladder irrigations, enemas, and douches.
- Sterilizes equipment and supplies.
- Administers massages and alcohol rubs.
- Transports patient to areas, such as operating and x-ray rooms.
- Turns and re-positions bedfast patients, alone or with assistance, to prevent bedsores.
- Assists patient to walk.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Athletic Trainers	Post-secondary training	$8.56
Home Health Aides	Short-term OJT	$8.82
Ambulance Drivers and Attendants, Except Emergency Medical Technicians	Moderate-term OJT	$9.26
Psychiatric Aides	Short-term OJT	$10.76
Medical Assistants	Moderate-term OJT	$12.67
Emergency Medical Technicians and Paramedics	Post-secondary training	$12.85
Physical Therapists	Post-secondary training	$30.44

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Lolita Agpaoa

What are some of the job titles you've held previously in this career field?
I trained in school to be a Certified Nursing Assistant/Aide and have continued to enjoy my job in the field.

What kind of work do you do in your current job and what do you do in a typical day?
I ambulate residents, do range of motion, assist in the restorative dining program. I assist the nurses whenever possible and also as a CNA, I transfer residents to different places. I accompany residents to doctor appointments as well.

What was it that attracted you to this work?
I was going to school and taking prerequisite for the nursing program and needed to find a job. I found myself enjoying working with elderly patients, stayed in the field, and became a Nurse Aide.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
You must have patience, time management and communication skills, and be dependable and a caring person.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
You must enjoy what you are doing and have a good feeling and attitude about yourself in order to assist others.

What is it that keeps you wanting to do this kind of work?
I like helping others, and I feel that I give quality care to them.

What qualities make for an exceptional Nurse Aide?
A person has to have a good attitude, compassion, and a hard working mind-set, be dependable and responsible.

Paralegal Personnel

Also known as Paralegals and Legal Assistants.

Paralegal Personnel assist lawyers by doing research in the preparation of lawsuits and/or legal documents as a career professional, usually having either a four-year college degree or a degree from an institute specializing in the paralegal profession. They may gather research data for use as evidence to formulate defense or to initiate legal action.
(OES 283050)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$10.09 - $30.00/hr	$15.15/hr
New Hires/Exp'd:	$9.59 - $25.00/hr	$19.18/hr
Exp'd/After 3 Years:	$14.38 - $30.00/hr	$21.58/hr

Hours: Almost all jobs are 40 hours per week. A few jobs are 30 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■		■■			
Dental Insurance	■■		■■■			
Vision Insurance	■		■■			
Life Insurance	■■■■		■■			
Sick Leave	■■■■■		■			
Vacation	■■■■		■			
Retirement	■■■		■■			
Child Care	■					

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: Voluntary. Contact the National Association of Legal Assistants (http://www.nala.org) for information regarding becoming a Certified Legal Assistant (CLA) or the National Federation of Paralegal Associations (http://www.paralegals.org) regarding becoming a Registered Paralegal (RP).

Education: Most employers require a high school level education or equivalent for job entry. Some others require a bachelor's degree. A few others will accept an associate degree.

Experience: Almost all employers require or prefer 6-60 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Of responding employers all require word processing. Most employers require spreadsheet skills. Many require database skills and legal research software such as *Westlaw*, *Legal Solutions* and *Lexis-Nexis*. Refer to Paralegals in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers report that it is very difficult to find both inexperienced and fully experienced applicants. This indicates a **very good outlook** for job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing 67 employees in this occupation.

Size of Occupation

Small. There are approximately 237 – 289 Paralegal Personnel currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 13% are male.

Employment Trends

The growth rate is projected to be much faster than average for all occupations through the year 2006. Approximately 17 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Paralegal Personnel is expected to grow faster than the average for all occupations through 2010.

Other Information

Where the Jobs Are: Legal services; Local government; State government; Federal government; Self-employment.

Methods Used to Fill Job Openings: Most employers fill openings through newspaper advertisements. Many recruit applicants through colleges/universities or employee referrals.

Career Path: Promotions may lead to supervisory or managerial positions.

Important Knowledge, Skills, and Abilities

Knowledge:	**Law, Government and Jurisprudence:** Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process. **Clerical:** Knowledge of administrative and clerical procedures and systems such as word processing systems, filing and records management systems, stenography and transcription, forms design principles, and other office procedures and terminology. **English Language:** Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
Skills:	**Complex Problem Solving:** Complex problem solving is used in identifying complex problems and reviewing related information so that options may be developed and evaluated, and solutions may be put into action. **Writing:** Communicating effectively with others in writing as indicated by the needs of the audience. **Reading Comprehension:** Understanding written sentences and paragraphs in work related documents.
Abilities:	**Written Comprehension:** The ability to read and understand information and ideas presented in writing. **Written Expression:** The ability to communicate information and ideas in writing so others will understand. **Oral Comprehension:** The ability to listen to and understand information and ideas presented through spoken words and sentences.

Tasks and Tools

- Gathers and analyzes research data, such as statutes, decisions, and legal articles, codes, and documents.
- Prepares legal documents, including briefs, pleadings, appeals, wills, contracts, and real estate closing statements.
- Investigates facts and law of cases to determine causes of action and to prepare cases.
- Appraises and inventories real and personal property for estate planning.
- Calls upon witnesses to testify at hearing.
- Arbitrates disputes between parties and assists in real estate closing process.
- Presents arguments and evidence to support appeal at appeal hearing.
- Keeps and monitors legal volumes to ensure that law library is up-to-date.
- Directs and coordinates law office activity, including delivery of subpoenas.
- Answers questions regarding legal issues pertaining to civil service hearings.
- Prepares affidavits or other documents, maintains document file, and files pleadings with court clerk.
- Utilizes word processing software such as Microsoft Word or Word Perfect at an intermediate level.
- Utilizes spreadsheet software such as Microsoft Excel or Lotus 1-2-3 at a basic/introductory level.
- Utilizes database software such as Microsoft Access or File Maker Pro at a basic/introductory level.
- Utilizes contact management software such as Microsoft Outlook, ACT! or Goldmine for e-mail, address book, calendar, and task management.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Tax Preparers	Moderate-term OJT	$9.96
Loan Interviewers and Clerks	Short-term OJT	$14.44
Law Clerks	Post-secondary training	$14.60
Court Clerks	Short-term OJT	$15.51
Municipal Clerks	Short-term OJT	$15.51
Legal Secretaries	Post-secondary training	$19.68
Title Searchers	Moderate-term OJT	$21.33
Title Examiners and Abstractors	Moderate-term OJT	$21.33
Lawyers	Post-secondary training	$49.15

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with David R. Cortez

What are some of the job titles you've held previously in this career field?
I used to be a Computer Engineer, so that gave me a vast knowledge of personal computers. Being able to adjust to the changes in technology was something that came in handy, and that I'll always carry with me. I have been a Paralegal for about 14 years.

What kind of work do you do in your current job and what do you do in a typical day?
On a typical day I do a lot of preparation of documents for cases like divorce, civil, child support, revocable living trusts, unlawful detainers, power of attorney, claims and anything that might have to do with civil cases. There is a lot of preparation that goes into the job, I am primarily in the office or in the courthouse to file and retrieve my documents.

What was it that attracted you to this work?
The basic need for services for average people in this community was what was drawing me to this line of work.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
A person must be meticulous; you must be detail oriented and have great knowledge of software programs and operating systems as well. You must also have a mind for detail and be able to remember faces, dates, and different incidents very well.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
The best preparation for this occupation would be to know what you are getting into first; really understand the components of this line of work. You must have a good scope of what the job entails.

What is it that keeps you wanting to do this kind of work?
The income is adequate, but the challenge is what attracted me. There is always a variety of different cases that come into my office on a daily basis that keeps me interested and busy.

What qualities make for exceptional Paralegal Personnel?
You must be punctual; injury and sick free, and have reliable transportation. One must dress for success and be neat and again, meticulous. This is a great opportunity for someone who is bilingual because in today's economy and market this skill will add tremendous retention for employment.

Physical Therapy Aides

Physical Therapy Aides prepare patients and treatment area for physical therapy treatments and assist Physical Therapists with treatments such as gait training, hydrotherapy and exercise programs. They transport patients to and from treatment area and assemble and maintain equipment and supplies. They may perform routine clerical and related tasks. They work under continuous on-site supervision of a licensed/registered Physical Therapist.
(OES 660172)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.00 - $10.18/hr	$8.50/hr
New Hires/Exp'd:	$8.00 - $12.00/hr	$11.00/hr
Exp'd/After 3 Years:	$9.50 - $20.00/hr	$12.50/hr

Hours: Most jobs are 40 hours per week. Some jobs are 12-28 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■		■■	■		
Dental Insurance	■■■		■	■		
Vision Insurance	■■		■	■		
Life Insurance	■■■					
Sick Leave	■■■■			■		
Vacation	■■■■			■		
Retirement	■■■			■		
Child Care	■					

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: Almost all employers require a high school level education or equivalent for job entry. A few others will accept less than a high school diploma or equivalent.

Experience: Many employers require or prefer 3-6 months of prior experience. Many employers are willing to accept training as a substitute for experience.

Training: Of responding employers a few required word processing, spreadsheet and/or medical database knowledge. Refer to Physical Therapy Aides and Assistants in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers report that it is moderately difficult to find both inexperienced and experienced applicants. This indicates a **good outlook** for job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing 45 employees in this occupation.

Size of Occupation

Small. There are approximately 240 – 294 Physical Therapy Aides currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 29% are male.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. Approximately 13 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Physical Therapy Aides is expected to grow much faster than the average for all occupations through 2010.

Other Information

Where the Jobs Are: Offices of other health practitioners; Hospitals; Nursing and personal care facilities; Offices of physicians; Health and allied services.

Methods Used to Fill Job Openings: Most employers fill openings through newspaper advertisements. Many recruit applicants by word of mouth. Some others hire walk-in applicants or hire through the Internet.

Career Path: An Associate Degree in Physical Therapy may lead to a Physical Therapist Assistant position.

Important Knowledge, Skills, and Abilities

Knowledge:

Therapy and Counseling: Knowledge of information and techniques needed to rehabilitate physical and mental ailments and to provide career guidance including alternative treatments, rehabilitation equipment and its proper use, and methods to evaluate treatment effects.

Customer and Personal Service: Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques.

Education and Training: Knowledge of instructional methods and training techniques including curriculum design principles, learning theory, group and individual teaching techniques, design of individual development plans, and test design principles.

Skills:

Speaking: Talking to others to effectively convey information.

Instructing: Teaching others how to do something.

Social Perceptiveness: Being aware of others' reactions and understanding why they react the way they do.

Abilities:

Oral Expression: The ability to communicate information and ideas in speaking so others will understand.

Oral Comprehension: The ability to listen to and understand information and ideas presented through spoken words and sentences.

Problem Sensitivity: The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.

Tasks and Tools

- Observes patients during treatment and compiles and evaluates data on patient's responses to treatments and progress, and reports to physical therapist.
- Administers active and passive manual therapeutic exercises, therapeutic massage, and heat, light, sound, water, and electrical modality treatments, such as ultrasound.
- Administers traction to relieve neck and back pain, using intermittent and static traction equipment.
- Instructs, motivates, and assists patients to learn and improve functional activities, such as perambulation, transfer, ambulation, and daily-living activities.
- Safeguards, motivates, and assists patients practicing exercises and functional activities under direction of professional staff.
- Trains patients in use and care of orthopedic braces, prostheses, and supportive devices, such as crutches.
- Adjusts fit of supportive devices for patients, as instructed.
- Provides routine treatments, such as hydrotherapy, hot and cold packs, and paraffin bath.
- Performs clerical duties, such as taking inventory, ordering supplies, answering telephone, taking messages, and filling out forms.
- Cleans work area and equipment after treatment.
- Transports patients to and from treatment area.
- Fits patients for orthopedic braces, prostheses, and supportive devices, such as crutches.
- Records treatment given and equipment used.
- Assists patients to dress, undress, and put on and remove supportive devices, such as braces, splints, and slings.
- Measures patients' range-of-joint motion, body parts, and vital signs to determine effects of treatments or for patient evaluations.
- Confers with physical therapy staff and others to discuss and evaluate patient information for planning, modifying, and coordinating treatment.
- Secures patients into or onto therapy equipment.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Social and Human Service Assistants	Moderate-term OJT	$14.14
Athletic Trainers	Post-secondary training	$15.73
Recreational Therapists	Post-secondary training	$16.69
Child, Family, and School Social Workers	Post-secondary training	$17.66
Physical Therapists	Post-secondary training	$30.44

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Christine Campos

What are some of the job titles you've held previously in this career field?
I have worked doing insurance authorization, transcriptions for Physical Therapists, and have received my Massage TherapyLicense.

What kinds of work do you do in your current job and what do you do in a typical day?
I split my day between working in the front office and the back office. In the back office I work with patients and help the therapists by getting exercise programs together, help patients onto machines, do ultrasounds and training with new aides that come in. In the front office I work on transcriptions from the therapists and handle telephones and scheduling.

What was it that attracted you to this type of work?
Six years ago I was a patient of the office I work in now. I was really interested in the work they did and ended up becoming an employee. I received on-the-job training as I worked.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
One must have patience and flexibility because you never know how a patient will react to treatment. You must be a good listener and be hard working. This job can be overwhelming at first but becomes very rewarding after you see the patients improve.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Observing the job and asking questions can allow people to see if they would be right for this type of work. If I had been able to participate in this type of job shadowing before I started my training on site, I think I would have entered the field a lot sooner.

What is it that keeps you wanting to do this kind of work?
I love working with the patients and knowing that I'm helping them see the results they desire.

What qualities make for an exceptional Physical Therapy Aide?
Being reliable is very important; people that have done very well in this field have been easy going and good listeners too.

Physical Therapy Assistants

Physical Therapy Assistants administer and assist with physical therapy treatments as planned and directed by a Physical Therapist. They administer treatments such as exercise, gait training, massage, whirlpool and hot packs. They instruct, motivate and assist patients with learning and improving functional activities. They may record patient treatments and maintain patient records. (OES 660171)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$9.50 - $22.92/hr	$16.43/hr
New Hires/Exp'd:	$10.00 - $26.00/hr	$18.00/hr
Exp'd/After 3 Years:	$15.00 - $30.00/hr	$22.00/hr

Hours: Almost all jobs are 40 hours per week. A few jobs are 15-20 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■		■■			
Dental Insurance	■■■		■■			
Vision Insurance	■■■		■			
Life Insurance	■■■		■■		■	
Sick Leave	■■■■		■			
Vacation	■■■■		■			
Retirement	■■■		■■			
Child Care	■		■			

■■■■■ = All (100%) ■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: Required for this occupation; Contact the Physical Therapy Board of California at (916) 263-2550 or see www.ptb.ca.gov for licensing information.

Education: Many employers require a high school level education or equivalent for job entry. Many others require an associate degree. A few employers require a bachelor's degree.

Experience: Many employers require or prefer 6-24 months of prior experience. Many employers are willing to accept training as a substitute for experience.

Training: Of responding employers most require word processing. Some require spreadsheet and/or physical therapy specific software knowledge. Refer to Physical Therapy Aides and Assistants in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find both inexperienced and fully experienced applicants. This indicates a **good outlook** for job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing 21 employees in this occupation.

Size of Occupation

Small. There are approximately 240 – 294 Physical Therapy Assistants currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 57% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. Approximately 13 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Physical Therapy Assistants is expected to grow much faster than the average for all occupations through 2010.

Other Information

Where the Jobs Are: Hospitals; Offices of other health practitioners; Nursing and personal care facilities; Offices of physicians; Home health care services.

Methods Used to Fill Job Openings: Many employers fill openings through newspaper advertisement. Some others recruit via the Internet, through employee referrals and/or by word of mouth.

Career Path: A Master's Degree in Physical Therapy may lead to a Physical Therapist position.

Important Knowledge, Skills, and Abilities

Knowledge:	**Therapy and Counseling:** Knowledge of information and techniques needed to rehabilitate physical and mental ailments and to provide career guidance including alternative treatments, rehabilitation equipment and its proper use, and methods to evaluate treatment effects. **Customer and Personal Service:** Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques. **Education and Training:** Knowledge of instructional methods and training techniques including curriculum design principles, learning theory, group and individual teaching techniques, design of individual development plans, and test design principles.
Skills:	**Speaking:** Talking to others to effectively convey information. **Instructing:** Teaching others how to do something. **Social Perceptiveness:** Being aware of others' reactions and understanding why they react the way they do.
Abilities:	**Oral Expression:** The ability to communicate information and ideas in speaking so others will understand. **Oral Comprehension:** The ability to listen to and understand information and ideas presented through spoken words and sentences. **Problem Sensitivity:** The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.

Tasks and Tools

- Fits patients for orthopedic braces, prostheses, and supportive devices, such as crutches.
- Performs clerical duties, such as taking inventory, ordering supplies, answering telephone, taking messages, and filling out forms.
- Cleans work area and equipment after treatment.
- Transports patients to and from treatment area.
- Records treatment given and equipment used.
- Administers active and passive manual therapeutic exercises, therapeutic massage, and heat, light, sound, water, and electrical modality treatments, such as ultrasound.
- Administers traction to relieve neck and back pain, using intermittent and static traction equipment.
- Instructs, motivates, and assists patients to learn and improve functional activities, such as perambulation, transfer, ambulation, and daily-living activities.
- Safeguards, motivates, and assists patients practicing exercises and functional activities under direction of professional staff.
- Trains patients in use and care of orthopedic braces, prostheses, and supportive devices, such as crutches.
- Adjusts fit of supportive devices for patients, as instructed.
- Provides routine treatments, such as hydrotherapy, hot and cold packs, and paraffin bath.
- Confers with physical therapy staff and others to discuss and evaluate patient information for planning, modifying, and coordinating treatment.
- Secures patients into or onto therapy equipment.
- Observes patients during treatments and compiles and evaluates data on patients' responses to treatments and progress, and reports to physical therapist.
- Measures patients' range-of-joint motion, body parts, and vital signs to determine effects of treatments or for patient evaluations.
- Assists patients to dress, undress, and put on and remove supportive devices, such as braces, splints, and slings.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Social and Human Service Assistants	Moderate-term OJT	$12.14
Child, Family, and School Social Workers	Post-secondary training	$15.13
Athletic Trainers	Post-secondary training	$15.72
Recreational Therapists	Post-secondary training	$16.69
Physical Therapists	Post-secondary training	$30.44

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Stacey Schroeder

What are some of the job titles you've held previously in this career field?
I have held positions as Assistant and Head Athletic Trainer, Wilderness Emergency Medical Technician and Exercise Therapist.

What kinds of work do you do in your current job and what do you do in a typical day?
I am a Certified Athletic Trainer, educated in the prevention, emergency care, and rehabilitation of sports injuries. Responsibilities include orthopedic bracing and taping, wound management, and general musculoskeletal evaluation and treatment, among others. Both on and off the field an athletic trainer plays the role of counselor, educator and administrative organizer.

After 6 years of experience at a university and a junior college, I chose to move into a clinical position. My current job as an exercise therapist is very unique and quite different from the traditional setting. Each patient is seen by a physician then referred to an athletic trainer for exercise therapy. The therapist works one-on-one with the patient for about an hour, usually one or two times weekly, depending on the physician's orders. The exercise therapist has the responsibility of prescribing and facilitating a specific rehabilitation program and progressing the individual as they respond to each phase of movement. Detailed notes are recorded at the end of each patient's session, and intermittent progress reports are submitted to the over-seeing physician.

What was it that attracted you to this type of work?
I was attracted to the opportunity to empower people through exercise. It is very rewarding to play a significant role in the emotional and physical healing following an injury.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
A strong background in anatomy is the foundation for success as an athletic trainer. Along with knowledge of biomechanics and tissue healing, I have the confidence to treat injuries aggressively, without risking further injury. I am also continually aware of the psychological component of healing. Injury can be devastating, and recovery is physically demanding. Therefore, I use subtle humor and keep our sessions fun and constantly changing to avoid boredom.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Education at a four-year university with internships in a variety of settings is my minimum recommendation. I also chose to complete my Master's Degree in Kinesiology, with special training in backcountry emergency medical care. It is beneficial to observe different kinds of physicians and athletic trainers, both in their clinics and on the field. One should gain experience in communication with physicians, coaches, parents, and entire athletic teams.

What is it that keeps you wanting to do this kind of work?
The ever-changing field of medicine provides opportunities to apply new knowledge to physical rehabilitation. There is no "magic cure", and each person's body responds differently to various treatments. It is always a challenge to peel away the complex layers of an injury to determine the appropriate treatment protocol.

What qualities make for an exceptional Physical Therapy Assistant?
Three qualities that I am continually developing are patience, confidence, and humility. Armed with knowledge, an exceptional athletic trainer is able to make critical decisions under pressure without compromising care. They are a source of information and know when and how that information can be helpful.

Police Patrol Officers

Also known as Public Safety Officer, Deputy and Deputy Sheriff.

Police Patrol Officers maintain order, enforce laws and ordinances, and protect life and property in an assigned patrol district or beat by performing a combination of such duties as patrolling a specific area on foot or in a vehicle; directing traffic; issuing traffic summonses; investigating accidents; apprehending, arresting and processing prisoners; and giving evidence in court. (OES 630140)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$15.81 – 25.36/hr	$20.07/hr
New Hires/Exp'd:	$17.21 – 30.14/hr	$21.97hr
Exp'd/After 3 Years:	$20.93 – 28.77/hr	$23.80/hr

Hours: All jobs are 40-44 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■		■■			
Dental Insurance	■■■■		■■			
Vision Insurance	■■■■		■■			
Life Insurance	■■■■■		■			
Sick Leave	■■■■■■					
Vacation	■■■■■■					
Retirement	■■■■		■■		■	
Child Care					■	

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Many employers provide a uniform allowance.

Training, Experience, and Other Requirements

License: None. Candidates must be U.S. citizens, usually at least 20 years of age and must meet rigorous physical and personal qualifications. Physical examinations for entrance often include vision, hearing, and strength and agility tests. Eligibility for appointment depends on performance in competitive written examinations and previous education and experience.

Education: All employers require a high school level education or equivalent for job entry.

Experience: Some employers prefer 6-24 months of prior experience. Most employers are willing to accept training as a substitute for experience.

Training: Of responding employers all require word processing. Refer to Police Patrol Officers in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers report that it is very difficult to find inexperienced but qualified applicants. This indicates a **good outlook** for job seekers without prior experience.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing 752 employees in this occupation.

Size of Occupation

Large. There are approximately 909– 1,111 Police Patrol Officers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 9% are female. Most jobs are union.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2006. Approximately 67 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Police Patrol Officers is expected to increase faster than the average for all occupations through 2010.

Other Information

Where the Jobs Are: Local government; State government; Federal government; Educational services.

Methods Used to Fill Job Openings: Most employers fill openings by newspaper advertisements. Many others use the Internet. Some use a variety of recruitment methods: employee referrals, in-house promotions, trade journals, job fairs, radio, television, flyers, and word of mouth.

Career Path: Promotions may lead to senior officer or Sergeant. A bachelor's degree is needed to advance to Lieutenant and Captain.

Important Knowledge, Skills, and Abilities

Knowledge:	**Public Safety and Security:** Knowledge of weaponry, public safety, and security operations, rules, regulations, precautions, prevention, and the protection of people, data, and property. **Law, Government and Jurisprudence:** Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process. **English Language:** Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
Skills:	**Complex Problem Solving:** Complex problem solving is used in identifying complex problems and reviewing related information so that options may be developed and evaluated, and solutions may be put into action. **Social Perceptiveness:** Being aware of others' reactions and understanding why they react the way they do. **Critical Thinking:** Using logic and analysis to identify the strengths and weaknesses of different approaches.
Abilities:	**Oral Expression:** The ability to communicate information and ideas in speaking so others will understand. **Reaction Time:** The ability to quickly respond (with the hand, finger, or foot) to one signal (sound, light, picture, etc.) when it appears. **Inductive Reasoning:** The ability to combine separate pieces of information, or specific answers to problems, to form general rules or conclusions. It includes coming up with a logical explanation for why a series of seemingly unrelated events occur together.

Tasks and Tools

- Patrols specific area on foot, horseback, or motorized conveyance.
- Relays complaint and emergency-request information to appropriate agency dispatcher.
- Provides road information to assist motorists.
- Investigates traffic accidents and other accidents to determine causes and to determine if crime has been committed.
- Evaluates complaint and emergency-request information to determine response requirements.
- Reviews facts to determine if criminal act or statute violation is involved.
- Directs traffic flow and reroutes traffic in case of emergencies.
- Monitors traffic to ensure motorists observe traffic regulations and exhibit safe driving procedures.
- Arrests perpetrator of criminal act or submits citation or warning to violator of motor vehicle ordinance.
- Draws diagram of crime or accident scene.
- Photographs crime or accident scene.
- Interviews principal and eyewitnesses.
- Renders aid to accident victims and other persons requiring first aid for physical injuries.
- Records facts and prepares reports to document activities.
- Testifies in court to present evidence or act as witness in traffic and criminal cases.
- Expedites processing of prisoners, and prepares and maintains records of prisoner bookings and prisoner status during booking and pre-trial process.
- Maintains order, responds to emergencies, protects people and property, and enforces motor vehicle and criminal law.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Security Guards	Short-term OJT	$8.26
Private Detectives and Investigators	Long-term OJT	$13.04
Forest Fire Inspectors and Prevention Specialists	Moderate-term OJT	$15.45
Fish and Game Wardens	Long-term OJT	$22.37
Correctional Officers and Jailers	Moderate-term OJT	$22.87
Criminal Investigators and Special Agents	Long-term OJT	$23.38
Highway Patrol Pilots	Long-term OJT	$24.63
Sheriffs and Deputy Sheriffs	Long-term OJT	$24.63
Fire Inspectors	Post-secondary training	$28.21

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Ryan Pontecorvo

What are some of the job titles you've held previously in this career field?
I was in the U.S. Coast Guard for six years prior to my joining the police force as a Patrol Officer. After a year and a half, I became a Narcotics/ Vice Detective and now I am currently a Field Training Officer on patrol.

What kinds of work do you do in your current job and what do you do in a typical day?
As a Field Training Officer, I train all the new police recruits that have recently graduated from the Police Academy. I help the recruits use the knowledge they acquired in the Academy and help them apply it in every day patrol duties.
A typical day for me starts at 4:30 PM and ends at 2:30 AM. I train the new recruits assigned to me on how to operate a patrol car, use the lights and sirens and how to enforce criminal and traffic laws. I basically teach the recruits how to function as a solo patrol officer. New recruits stay with me for four weeks and then move on to another Field Training Officer.

What was it that attracted you to this type of work?
I have wanted to work in law enforcement since I was a kid. I grew up in Fresno next door to a police officer. I loved listening to all of his stories and seeing him in his uniform riding his police motorcycle. It was because of him that I wanted to become a police officer. He made the job look meaningful and fulfilling. Becoming a police officer is a very appealing line of work because it involves action and enables me to be out in the world dealing with all walks of life and situations. Police Officers enjoy the freedom of not being confined to an office all day.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
You need to be a" people person" and be able to adapt and overcome any situation even those you have not dealt with or experienced before. You must be a good mediator or an objective third party; not taking one side or the other, but listening to both sides and applying the law correctly. Good common sense is another skill that is very important as well as a broad knowledge of laws and the limitations those laws place upon what you can and cannot do as a police officer. It is also important to be in good physical shape so that you will be able to handle the physical demands this job will place on you.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Talk with a police officer. Find out what they like or don't like about law enforcement and what experience they needed to become a police officer. Get involved in your local police department by becoming an explorer or a cadet; take a citizen's academy class or criminal justice classes at a local junior college.

What is it that keeps you wanting to do this kind of work?
I love helping people. I feel this is my way of giving back to my community by protecting and serving.

What qualities make for an exceptional Police Patrol Officer?
Exceptional officers show good common sense. They are eager to learn, and willing to work long and hard to do what it takes to get the job done. They treat people the same way they would want to be treated in a similar situation. They use their own life experiences to help others with their problems. They are willing to sacrifice themselves if necessary to protect the public. Above all else, exceptional officers' display a high level of integrity through professionalism and courtesy, ensuring the continuing trust of the communities they serve.

Receptionist and Information Clerks

Receptionist and Information Clerks answer inquires and obtain information for the general public (customers, visitors and other interested parties) concerning activities conducted at an establishment such as the location of offices or persons within the firm, departments within the store, or services within the hotel. They may perform a variety of other clerical duties. (OES 553050)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.75 - $12.00/hr	$8.50/hr
New Hires/Exp'd:	$9.00 - $15.63/hr	$11.00/hr
Exp'd/After 3 Years:	$10.00 - $18.00/hr	$13.00/hr

Hours: Most jobs are 35-40 hours per week. A few jobs are 15-28 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■	■	■	■		
Dental Insurance	■■■	■	■			
Vision Insurance	■■■	■	■			
Life Insurance	■■	■	■			
Sick Leave	■■■■	■				
Vacation	■■■■■	■				
Retirement	■■■		■		■	■
Child Care			■		■	

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: Almost all employers require a high school level education or equivalent for job entry. A few others are willing to accept less than a high school diploma or equivalent.

Experience: Almost all employers require or prefer 6-36 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Of responding employers all require word processing. Almost all require spreadsheet skills. Some others require database software knowledge. Refer to Receptionists and Information Clerks in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers report that it is moderately difficult to find both inexperienced and fully experienced applicants. This indicates a **good outlook** for job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 16 employers surveyed representing 113 employees in this occupation.

Size of Occupation

Large. There are approximately 2,508– 3,066 Receptionists and Information Clerks currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 12% are male. A few jobs are union.

Employment Trends

The growth rate is projected to be average for all occupations through the year 2006. Approximately 100 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Receptionists and Information Clerks is expected to grow faster than the average for all occupations through 2010.

Other Information

Where the Jobs Are: Offices of physicians; Personnel supply services; Offices and clinics of dentists; Hospitals; Wholesale trade; Educational services; Beauty shops; Veterinary services; Miscellaneous amusement and recreation services; Real estate agents and managers.

Methods Used to Fill Job Openings: Most also recruit applicants through newspaper advertisements. Many employers fill openings by hiring employee referrals and/or word of mouth.

Career Path: Promotions may lead to administrative and office management positions.

Important Knowledge, Skills, and Abilities

Knowledge:	**Clerical:** Knowledge of administrative and clerical procedures and systems such as word processing systems, filing and records management systems, stenography and transcription, forms design principles, and other office procedures and terminology. **Customer and Personal Service:** Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques. **English Language:** Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.
Skills:	**Speaking:** Talking to others to effectively convey information. **Service Orientation:** Actively looking for ways to help people. **Active Listening:** Listening to what other people are saying and asking questions as appropriate.
Abilities:	**Speech Clarity:** The ability to speak clearly so that it is understandable to a listener. **Oral Expression:** The ability to communicate information and ideas in speaking so others will understand. **Oral Comprehension:** The ability to listen to and understand information and ideas presented through spoken words and sentences.

Tasks and Tools

- Greets persons entering establishment, determines nature and purpose of visit, and directs visitor to specific destination, or answers questions and provides information.
- Registers visitors of public facility, such as national park or military base, collects fees, explains regulations, and assigns sites.
- Analyzes data to determine answer to customer or public inquiry.
- Transmits information or documents to customer, using computer, mail, or facsimile.
- Operates telephone switchboard to receive incoming calls.
- Performs duties such as taking care of plants and straightening magazines to maintain lobby or reception area.
- Monitors facility to ensure compliance with regulations.
- Receives payment and records receipts for services.
- Conducts tours or delivers talks describing features of public facility, such as historic site or national park.
- Hears and resolves complaints from customers and public.
- Files and maintains records.
- Enrolls individuals to participate in programs, prepares lists, and notifies individuals of acceptance in programs, and arranges and schedules space and equipment for participants.
- Types memos, correspondence, travel vouchers, or other documents.
- Calculates and quotes rates for tours, stocks, insurance policies, and other products and services.
- Collects and distributes messages for employees of organization.
- Records, compiles, enters, and retrieves information, by hand or using computer.
- Provides information to public concerning available land leases, land classification, or mineral resources.
- Provides information to public regarding tours, classes, workshops, and other programs.
- Answers telephone to schedule future appointments, provide information, or forward call.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Cashiers	Short-term OJT	$7.73
Counter and Rental Clerks	Short-term OJT	$8.45
Hotel, Motel, and Resort Desk Clerks	Short-term OJT	$8.63
Switchboard Operators, Including Answering Service	Short-term OJT	$10.81
Office Clerks	Short-term OJT	$11.40
Order Clerks	Short-term OJT	$12.35
New Accounts Clerks	Moderate-term OJT	$12.71
Statement Clerks	Short-term OJT	$12.99
Insurance Claims Clerks	Moderate-term OJT	$15.91

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Elaine Ramos

What are some of the job titles you've held previously in this career field?
I have had a number of jobs that relate to this career field. I was self-employed as a Realtor for a number of years and also employed as an Assistant Department Head in the reservations department for a major hotel company. I was previously a Technical Office Assistant and then was promoted into the position of Administrative Assistant, which I now hold. I feel that I can significantly draw on all of my experience from previous positions and use it for my current job.

What kinds of work do you do in your current job and what do you do in a typical day?
My job is to coordinate all of the functions that go on within the office. I maintain all of the calendars of the Mayor and City Council, the City Manager, Assistant City Manager and Deputy City Manager and which, is a big job in itself. I plan any meetings that need to be organized, with people and departments outside as well as within the City. I maintain all correspondence and type letters as well as compose them at times. I arrange travel for all of these positions, which means what dates, times, airline tickets, rental cars, and hotels, etc. will be needed. I maintain the budget; I make sure all charges are correct and pay the invoices. I also plan the office fiscal budget for the year and forecast where we might need to increase or decrease in our spending which is really difficult to do.

What was it that attracted you to this type of work?
I was attracted by the structure of this job because coming from a self-employed background I felt that I needed the dependability of the hours, benefits, and pay of this type of job. I started thinking about my future and benefits sounded very attractive to me as well as knowing when I would have vacation time. I knew I could apply the skills I learned being self-employed like management and organization to this job.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
Skills that are important in this kind of work are management, good organizational skills, communication, and one must have a good command of clerical and computer skills in order to train and help others in the field. Being able to work under pressure with time-constraints and have the ability to work with multiple bosses and be multi-tasked is also important. You must be able to make independent decisions and also be able to work as a team player.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Get all the clerical and computer training that you can so that you have the basic knowledge. The other parts are learned through on-the-job-training. Hands on training will allow you to know how to deal with the public and how to direct their inquiry properly so they feel like they were heard; this only comes through experience.

What is it that keeps you wanting to do this kind of work?
I love it and enjoy learning every day about city government and how it affects the public and the budget. There are so many things involved with working in this position like personnel issues. Everything goes through my office, and it's very exciting.

What qualities make for an exceptional Receptionist?
One of the most important qualities is to have a controlled temperament, to be able to digest or interpret the situation and know how to handle it quickly and be able to calm the situation and know how to handle it. The ability to assess and prioritize assignments and to carry out the tasks are also important qualities and abilities.

Retail Salespersons

Also known as Sellers or Clerks.

Retail Salespersons, except Vehicle Sales, sell a variety of merchandise to the public. They assist the customer in making selections, obtain or receive the merchandise, total the bill, receive the payment in cash or by check or credit card, operate a cash register and make change for the customer. They may stock shelves and set up advertising displays. Workers who work primarily as cashiers are not included. (OES 490112)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.75 - $8.50/hr	$7.33/hr
New Hires/Exp'd:	$7.20 - $11.51/hr	$8.00/hr
Exp'd/After 3 Years:	$7.50 - $17.26/hr	$10.00/hr

Hours: Some jobs are 32-40 hours per week. Most jobs are 17-25 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■	■	■■■	■		
Dental Insurance	■■	■	■■■	■	■	
Vision Insurance	■		■■	■	■	
Life Insurance	■■	■	■■	■	■	
Sick Leave	■■	■	■■■	■		
Vacation	■■■	■■	■■	■■		
Retirement	■■	■	■■■	■		
Child Care			■	■	■	

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None

Education: Almost all employers are willing to accept less than a high school level education for job entry. A few others require a high school diploma or equivalent.

Experience: Many employers require or prefer 6-12 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Of responding employers many require word processing and/database software. Refer to Retail Salespersons in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers report that it is moderately difficult to find inexperienced applicants and very difficult to find fully experienced applicants. This indicates a **good outlook** for inexperienced job seekers and a **very good outlook** for experienced job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing 422 employees in this occupation.

Size of Occupation

Very Large. There are approximately 9,114 – 11,140 Retail Salespersons currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 25% are male.

Employment Trends

The growth rate is projected to be slower than average for all occupations through the year 2006. Approximately 487 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Retail Salespersons is expected to grow as fast as the average for all occupations through 2010, reflecting rising retail sales due to a growing population. Opportunities for part-time work should be ample as well as for temporary workers during peak selling times, such as holiday season.

Other Information

Where the Jobs Are: Department stores; Clothing and accessories stores; Miscellaneous shopping goods stores; Motor vehicle dealers; Used merchandise and retail stores; Lumber and other building materials; Furniture and home furnishings stores; Appliance, radio, TV, and music stores; Self-employment; Shoe stores.

Methods Used to Fill Job Openings: Many employers fill openings by hiring walk-in applicants or through newspaper advertisements. Some also fill openings through word of mouth, flyers and/or window signs.

Career Path: Promotions may lead to sales positions of greater responsibility or managerial positions.

Important Knowledge, Skills, and Abilities

Knowledge:	**Sales and Marketing:** Knowledge of principles and methods involved in showing, promoting, and selling products or services. This includes marketing strategies and tactics, product demonstration and sales techniques, and sales control systems. **Customer and Personal Service:** Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques. **Mathematics:** Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications.
Skills:	**Service Orientation:** Actively looking for ways to help people. **Speaking:** Talking to others to effectively convey information. **Social Perceptiveness:** Being aware of others' reactions and understanding why they react the way they do.
Abilities:	**Oral Expression:** The ability to communicate information and ideas in speaking so others will understand. **Oral Comprehension:** The ability to listen to and understand information and ideas presented through spoken words and sentences. **Speech Clarity:** The ability to speak clearly so that it is understandable to a listener.

Tasks and Tools

- Prepares sales slip or sales contract.
- Sells or arranges for delivery, insurance, financing, or service contracts for merchandise.
- Computes sales price of merchandise.
- Describes merchandise and explains use, operation, and care of merchandise to customers.
- Totals purchases, receives payment, makes change, or processes credit transaction.
- Demonstrates use or operation of merchandise.
- Recommends, selects, and obtains merchandise based on customer needs and desires.
- Cleans shelves, counters, and tables.
- Requisitions new stock.
- Inventories stock.
- Rents merchandise to customers.
- Wraps merchandise.
- Estimates cost of repair or alteration of merchandise.
- Estimates and quotes trade-in allowances.
- Maintains records related to sales.
- Tickets, arranges, and displays merchandise to promote sales.
- Estimates quantity and cost of merchandise required, such as paint or floor covering.
- Fits or assists customers in trying on merchandise.
- Greets customer.

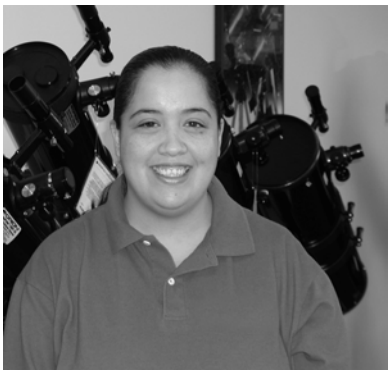
Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Counter and Rental Clerks	Short-term OJT	$7.77
Tellers	Moderate-term OJT	$8.49
Driver/Sales Workers	Short-term OJT	$10.06
Customer Service Representatives	Moderate-term OJT	$13.23
Sales Representatives, Agricultural	Moderate-term OJT	$28.98
Sales Representatives, Medical	Moderate-term OJT	$28.98

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Lisa Cudal



What are some of the job titles you've held previously in this career field?
I started off as a Customer Service Representative and then moved into profiling candidates for this position through phone interviews. After that I worked as an Operations Specialist supervising Customer Service Representatives and coaching them on their customer service skills.

What kinds of work do you do in your current job and what do you do in a typical day?
I currently manage a department of 18 Customer Service Representatives to ensure that they are providing exceptional customer service to both our internal and external customers. On a typical day I make sure all of our daily tasks are completed in a timely manner, make any scheduling changes as needed to ensure we are promptly servicing all of our calls and assist the reps with any type of customer service related problems as well as take escalated calls. A typical day for me is busy and challenging yet fun. I have the opportunity to do a variety of things as well as the opportunity to talk and interact with different types of people and make customers happy.

What was it that attracted you to this type of work?
I really like talking to customers; especially when I have a really good customer experience and can tell that the customer is satisfied with the service I have provided. I like knowing that I have a chance to make the customers experience a pleasant one and can make a difference on whether or not the customer will contact us again. You never know what to expect, and I think that makes it exciting. It's also a very universal type of career field since we experience customer interactions in almost everything we do.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
In my opinion, good listening skills and communication are key to working in the customer service field. In this type of field you deal with different types of customer concerns and it is necessary that as a Customer Service Representative you are able to understand what the customer is trying to say. You should be willing to deal with different types of customers, some more difficult than others and be able to communicate in a manner that customers will understand. All in all being able to put yourself in the customer's situation to understand how they feel and what you can do to be of assistance.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
The best preparation for someone interested in this field would be to take any type of communication and problem solving courses. I would focus on learning to communicate effectively both verbally and in writing as well as enhancing your thought process to help you analyze different situations and options available to help you resolve the problem at hand. This way you are learning to put these techniques into use on a day to day basis which is essential for providing good customer service skills to treat every daily interaction as if it were a customer; communicating effectively and being of service in any way possible. It's a fun and effective training exercise.

What is it that keeps you wanting to do this kind of work?
Making a difference, not knowing what to expect and especially the daily people interaction. I like working with others, sharing and teaching them the different things I have learned throughout the years. It is especially rewarding when you see your coaching efforts shinning through on a Customer Service Representative who is providing exceptional customer service.

What qualities make for an exceptional Retail Sales Employee?
I think someone who is enthusiastic, not only about what they do, but what they represent; someone who cares about what the customer's perception of the quality of, not only the product you are selling, but of the company as well.

Secondary School Teachers

Secondary School Teachers instruct students in public of private high schools in one or more subjects such as English, mathematics or social studies. Vocational high school teachers are included. Special education teachers are not included. (OES 313080)

Wages and Benefits

NON-UNION	Range	Median
New Hires/Inexp'd:	Not available	Not available
New Hires/Exp'd:	$14.28 - $14.86/hr	$14.57/hr
Exp'd/After 3 Years:	$15.34 - $18.17/hr	$16.76/hr

UNION	Range	Median
New Hires/Inexp'd:	$17.25 - $22.16/hr	$19.53/hr
New Hires/Exp'd:	$17.26 - $26.32/hr	$20.69/hr
Exp'd/After 3 Years:	$18.46 - $28.43/hr	$23.54/hr

Hours: Almost all jobs are 35-40 hours per week. A few jobs are 15-34 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■■	■	■■	■■		
Dental Insurance	■■■■■	■	■	■■		
Vision Insurance	■■■■	■	■	■■		
Life Insurance	■■■■■	■■		■		
Sick Leave	■■■■■■	■■■				
Vacation	■					
Retirement	■■■	■	■■■	■■		
Child Care			■		■	■

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Training, Experience, and Other Requirements

License: For further information contact:
California Commission on Teacher Credentialing at (888) 921-2682 [http://www.ctc.ca.gov]
and Calteach at (888) CAL-TEACH (225-8322) [http://calteach.com]

Education: All employers require a bachelor's degree.

Experience: Many employers require or prefer 10-36 months of prior experience.

Training: Almost all employers require vocational training. Of responding employers some require word processing. Refer to Teachers – Secondary in the Occupation-Training Index for information on education and training providers with related programs.

Supply/Demand Assessment

Employers report that it is moderately difficult to find both inexperienced and fully experienced applicants. This indicates a **good outlook** for job seekers.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing 1,985 employees in this occupation.

Size of Occupation

Very Large. There are approximately 2,025 – 2,475 Secondary School Teachers currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 51% are female. Almost all jobs are union.

Employment Trends

The growth rate is projected to be much faster than average for all occupations through the year 2006. Approximately 143 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Secondary School Teachers is expected to grow as fast as the average for all occupations through 2010. Job opportunities should be excellent due to the large number of teachers expected to retire by 2010.

Other Information

Where the Jobs Are: Educational services; Religious organizations; State government; Individual and miscellaneous social services; Local government.

Methods Used to Fill Job Openings: Almost all employers recruit applicants through the Internet. Many others use newspaper advertisements and/or job fairs to fill openings.

Career Path: Promotions may lead to department head, counselor or education administrator positions.

Important Knowledge, Skills, and Abilities

Knowledge:	**Education and Training:** Knowledge of instructional methods and training techniques including curriculum design principles, learning theory, group and individual teaching techniques, design of individual development plans, and test design principles. **English Language:** Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar. **Therapy and Counseling:** Knowledge of information and techniques needed to rehabilitate physical and mental ailments and to provide career guidance including alternative treatments, rehabilitation equipment and its proper use, and methods to evaluate treatment effects.
Skills:	**Speaking:** Talking to others to effectively convey information. **Instructing:** Teaching others how to do something. **Learning Strategies:** Using multiple approaches when learning or teaching new things.
Abilities:	**Oral Expression:** The ability to communicate information and ideas in speaking so others will understand. **Written Expression:** The ability to communicate information and ideas in writing so others will understand. **Written Comprehension:** The ability to read and understand information and ideas presented in writing.

Tasks and Tools

- Instructs students, using various teaching methods, such as lecture and demonstration.
- Performs advisory duties, such as sponsoring student organizations or clubs, helping students select courses, and counseling students with problems.
- Keeps attendance records.
- Selects, stores, orders, issues, and inventories classroom equipment, materials, and supplies.
- Participates in faculty and professional meetings, educational conferences, and teacher training workshops.
- Prepares course outlines and objectives according to curriculum guidelines or state and local requirements.
- Uses audiovisual aids and other materials to supplement presentations.
- Evaluates, records, and reports student progress.
- Maintains discipline in classroom.
- Confers with students, parents, and school counselors to resolve behavioral and academic problems.
- Develops and administers tests.
- Assigns lessons and corrects homework.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Teacher Assistants	Short-term OJT	$12.62
Graduate Teaching Assistants	Bachelor's degree	$16.39
Health Educators	Bachelor's degree	$16.42
Vocational Education Teachers, Postsecondary	Bachelor's degree	$20.42
Instructional Coordinators	Bachelor's degree	$25.19

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Paul Quiggle

What are some of the job titles you've held previously in this career field?
I am a National Board Certified Teacher, however, I have been involved as a Resource Teacher for different programs within the school as well.

What kind of work do you do in your current job and what do you do in a typical day?
I am a classroom teacher during most of my day but in class we do a variety of different things each day. I prepare for class each day and prepare for lab activities, teach class and then grade papers, etc. There is some collaboration with other teachers as well.

What was it that attracted you to this work?
I always liked science and working with people; I wanted to do something to help people, and I felt like teaching and education would be a good way to reach people.

In your opinion, what knowledge, skills, and abilities are important in this kind of work?
You must have a working knowledge of the subject you are teaching and be able to relate well with your students. Students have a strong sense of what it means to be fair, honest, and helpful. You must be very organized and keep up with things, constantly keeping knowledgeable of subjects is important.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Finding a good teacher preparation program after college as well as studying a specific subject is good preparation for this field.

What is it that keeps you wanting to do this kind of work?
Most of all, I enjoy the students who keep things interesting and fun.

What qualities make for an exceptional Secondary School Teacher?
Qualities that make for an exceptional person in this field would be the ability to want to make a difference in other people's lives, someone who presents things in ways that kids will understand.

Secretaries, except Legal and Medical

Also known as Administrative Assistants.

Secretaries, except Legal and Medical, relieve officials of clerical work and minor administrative and business detail by scheduling appointments, giving information to callers, taking dictation, composing and typing routine correspondence, reading and routing incoming mail and filing correspondence and other records. They may perform various other assigned clerical duties. (OES 551080)

Wages and Benefits

NON-UNION	Range	Median
New Hires/Inexp'd:	$9.00 - $11.00/hr	$10.00/hr
New Hires/Exp'd:	$10.00 - $15.28/hr	$12.00/hr
Exp'd/After 3 Years:	$13.00 - $17.69/hr	$14.19/hr

UNION	Range	Median
New Hires/Inexp'd:	$12.32 - $13.77/hr	$13.05/hr
New Hires/Exp'd:	$10.02 - $16.20/hr	$13.50/hr
Exp'd/After 3 Years:	$13.24 - $18.76/hr	$14.33/hr

Hours: Almost all jobs are 40 hours per week. A few jobs are 20-24 hours per week.

Benefits: Paid by:	Employer		Shared		Employee	
	Full Time	Part Time	Full Time	Part Time	Full Time	Part Time
Medical Insurance	■■■■		■	■	■	
Dental Insurance	■■■■		■	■	■	
Vision Insurance	■■■		■	■		
Life Insurance	■■■■				■	
Sick Leave	■■■■■	■				
Vacation	■■■■■	■				
Retirement	■■■■		■		■■	
Child Care					■	■

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)

Training, Experience, and Other Requirements

License: None required. However, testing and certification for entry-level office skills is available through the International Association of Administrative Professionals [www.iaap-hq.org]. Certifications include Certified Professional Secretary *(CPS)* and Certified Administrative Professional (CAP).

Education: Almost all employers require a high school diploma or equivalent. A few others are willing to accept less than a high school education.

Experience: Almost all employers require or prefer 6-36 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Of responding employers all employers require word processing. Almost all employers require spreadsheet knowledge. A few others require database knowledge. Refer to Secretaries/Administrative Support Occupations in the Occupation-Training Index for information on education and training providers with related programs.

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2002: 15 employers surveyed representing 108 employees in this occupation.

Supply/Demand Assessment

Employers generally report that it is moderately difficult to find both inexperienced and experienced applicants. This indicates a **good outlook** for job seekers.

Size of Occupation

Very large. There are approximately 3,308-4,044 Secretaries currently employed in Monterey, Santa Cruz, and San Benito counties. Local surveys indicate 1% are male. Many jobs are union.

Employment Trends

The growth rate is projected to be slower than average for all occupations through the year 2006. Approximately 89 job openings are projected per year due to growth and separations (workers retiring or leaving the occupation). Nationwide, employment of Secretaries is expected to grow more slowly than the average for all occupations through 2010.

Other Information

Where the Jobs Are: Educational services; Personnel supply services; Local government; Religious organizations; Hospitals; State government; Wholesale trade; Federal government; Insurance agencies; Self-employment.

Methods Used to Fill Job Openings: Almost all employers recruit applicants through newspaper advertisements. Some employers use the Internet and/or promote/transfer internally to fill openings.

Career Path: Promotions may lead to administrative assistant and office management positions.

Important Knowledge, Skills, and Abilities

Knowledge:	**Clerical:** Knowledge of administrative and clerical procedures and systems such as word processing systems, filing and records management systems, stenography and transcription, forms design principles, and other office procedures and terminology. **English Language:** Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar. **Computers and Electronics:** Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming.
Skills:	**Coordination:** Adjusting actions in relation to others' actions. **Active Listening:** Listening to what other people are saying and asking questions as appropriate. **Writing:** Communicating effectively with others in writing as indicated by the needs of the audience.
Abilities:	**Oral Expression:** The ability to communicate information and ideas in speaking so others will understand. **Oral Comprehension:** The ability to listen to and understand information and ideas presented through spoken words and sentences. **Written Comprehension:** The ability to read and understand information and ideas presented in writing.

Tasks and Tools

- Answers telephone and gives information to callers, takes messages, or transfers calls to appropriate individuals.
- Answers routine correspondence.
- Schedules appointments.
- Takes dictation in shorthand or by machine and transcribes information.
- Files correspondence and other records.
- Arranges travel schedules and reservations.
- Makes copies of correspondence and other printed matter.
- Provides customer services such as, order placement and account information.
- Collects and disburses funds from cash account and keeps records.
- Prepares and mails checks.
- Utilizes word processing software such as Microsoft Word or Word Perfect at an intermediate level.
- Utilizes database software such as Microsoft Access or FileMaker Pro at a basic/introductory level.
- Utilizes contact management software such as Microsoft Outlook, ACT! or Goldmine for e-mail, address book, calendar, and task management.
- Orders and dispenses supplies.
- Mails newsletters, promotional material and other information.
- Compiles and types statistical reports, using typewriter or computer.
- Records and types minutes of meetings, using typewriter or computer.
- Compiles and maintains lists and records, using typewriter or computer.
- Greets and welcomes visitors, determines nature of business, and conducts visitors to employer or appropriate person.
- Locates and attaches appropriate file to incoming correspondence requiring reply.
- Maintains calendar and coordinates conferences and meetings.
- Composes and distributes meeting notes, correspondence, and reports.
- Opens incoming mail and routes mail to appropriate individuals.

Source for Knowledge, Skills, and Abilities, and Tasks and Tools information: Skill Matrix Network (www.skillmatrixnetwork.com)

Occupations with Similar Skill Requirements

O*NET-SOC Occupation Title	Education/Training Level	Wage
Tellers	Short-term OJT	$9.82
Receptionists and Information Clerks	Short-term OJT	$10.48
Office Clerks, General	Short-term OJT	$11.40
Billing, Cost and Rate Clerks	Short-term OJT	$12.99
Word Processors and Typists	Moderate-term OJT	$13.13
Loan Interviewers and Clerks	Short-term OJT	$14.44
Municipal Clerks	Short-term OJT	$15.51
Insurance Claims Clerks	Moderate-term OJT	$15.91

Sources:
Occupational Information Network: www.onetcenter.org
Career Info Net: www.acinet.org (hourly wages for California)
Skill Matrix Network: www.skillmatrixnetwork.com (occupations with similar skills, education and training levels)
California Employment Development Department OES Program (hourly wages for California)
U.S. Bureau of Labor Statistics: www.bls.gov (national employment trends and industries using occupation)

Career Dialogue with Kathy Stewart

What are some of the job titles you've held previously in this career field?
I have held positions as a Stenographer (dictation), a Superintendent's Secretary, an Administrative Secretary and an Administrative Assistant.

What kinds of work do you do in your current job and what do you do in a typical day?
I oversee the smooth operation of the front office; attend meetings and take minutes. I typically respond to questions from the public, serve as the contact person for appointments, coordinate activities and details relating to meetings or conferences, develop and maintain office files and prepare correspondence and memoranda independently or from oral instructions.

At the beginning of my day, I review my "To Do" list and meet with my boss to prioritize and plan the tasks to be done. Tasks can include working with others to update, revise or complete lists or reports, compose letters and memoranda, take dictation, type and process purchase orders, type agendas for meetings, compose and type minutes of meetings, photo copy and distribute a wide variety of written documentation, and set up and maintain appropriate files for easy retrieval of information. I also spend a good deal of time working with the public, answering questions, researching information and referring them to agencies or individuals who can answer their questions or help resolve their problems.

What was it that attracted you to this type of work?
I had just graduated from high school and I could type and take shorthand. I thought these skills would be useful in an office setting. I enjoy working with people and thought, why not give it a try? What has kept me in this position was my belief that we, as individuals, should never stop learning and my employer's willingness to provide training and the opportunity for all employees to grow within the organization.

In your opinion, what knowledge, skills and abilities are important in this kind of work?
Anyone wanting to work in the secretarial field these days needs to have good typing skills, knowledge of modern office practices and equipment, computer skills, good communication skills, good English and grammar skills, be open to learning new things and have the ability to work cooperatively with others.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
A prospective secretary needs to have good oral communication and writing skills, good typing skills, knowledge about computers, including word processing, database, and spreadsheet, good organizational skills, and be willing to embrace change, especially in this age of changing technology. There are many computer-based tutorial programs that can be purchased, Internet training classes that may be available, or other excellent resources such as computer training videos or secretarial handbooks available through libraries or bookstores.

What is it that keeps you wanting to do this kind of work?
I truly enjoy the variety of the work; no two days are the same. One day I am on the computer all day long, other days I'm involved in meetings, and some days I spend lots of time on the telephone. I enjoy working through the challenges that present themselves as well as being part of a team working together toward a common goal.

What qualities make for an exceptional Secretary?
An exceptional secretary is one who is experienced and knowledgeable about the job; has excellent typing, computer, and telephone skills and outstanding work habits such as: punctuality, works well under pressure, can accept constructive criticism, works effectively with others, willingly accepts new responsibilities, is resourceful and dependable, uses proper grammar, spelling, and punctuation in written work, has great communications skills, welcomes opportunities for growth and takes pride in their work.

Special Study: Artists - 2001

Part One: Introduction
Part Two: Career Dialogues with a Selection of Artists
Part Three: Artistic Occupations

Part One: Introduction

When planning a career, earning a living, and developing a life around their work, becoming an artist isn't the first option most people consider. In fact, it's not usually the second or third choice either. More often, people choose careers that they think are responsible and stable, with jobs that will take them somewhere and provide them with the lifestyle they want. Another common way people choose their jobs is based on the area in which they consider themselves skilled. While artists have a wide variety of skills and abilities, many people conclude that since they can't paint, sing, or act, they should become an accountant, a cook, or an electrician. Even if they possess an artistic gift, most eventually conclude that a million others do it better, so why bother? In reality, most people have probably made the right occupational decision or are headed in the right direction. People commonly grow up and out of wanting to be artists, and this keeps certain generalizations alive about what it means to be an artist and making a living from art. Why do so many guitarists become hobbyists instead of professionals? Why do the pictures of so many painters and sketchers only hang in their own home? The reasons are more practical than tragic. Everyone knows how hard it is to make a living, especially when you're starting out. If you factor in a few responsibilities like children and bills, playing the blues for tips and free beer might seem like the long way around instead of going to school or getting on with a good organization.

Romanticizing art is also at the root of why art continues to not be considered a reasonable way of earning a living. Consider the general idea of a popular, successful artist: Paul McCartney, Steven Spielberg and Jennifer Lopez. These champions of the film and music industries have achieved such elevation in the public eye that to think you could do the same seems impossible. The number of artists who have the constant attention of our culture is limited to a select few. This has the affect of making many people mistakenly think that fame makes you a successful artist. Not many have the resources to achieve the level of attention they believe it takes to make a living from their art.

Thankfully, there are a lot of people who realize that profitable art isn't limited to pop albums and mainstream film, that other industries have a place for their artistry, and that, with some perseverance (like any other job), their creative skills and abilities will earn them a living. This section of our study focuses on those people.

Some economists argue that many sectors of the economy are driven by creativity. To illustrate this idea, a person only has to look at the expansion of copyright law to include what is called "intellectual property". This extends the legal power of copyright to include not only physical things, like engines or kitchen gadgets, but to creations that act on our intellect like songs, logos, and ad jingles. And consider the following statistics from the Pew Charitable Trusts: the artistic industry pumps $37 billion dollars into the economy yearly, generates over 5 billion dollars annually for federal, state, and local governments, and provides for more than 1.3 million full-time jobs. Artists even played a role in the recent technology sector boom. Engineers may develop the tools and toys we love, but it's the artists who convince us of how great the tools and toys are and make the finished product look attractive or appealing. And who says a creative engineer isn't an artist as well?

Monterey, Santa Cruz, and San Benito counties are famous for a long tradition of art playing a major role in the community. Because of the natural beauty of the Monterey Bay area and the friendly, receptive nature of the people there, artists of all types flock to the area to create their works. Setting up studios and shops in downtown areas has proven to be a profitable, successful way to make a living for many, and contractual work for businesses and individuals also provides income for many local artists. If you travel in this area, it is obvious that this segment of the workforce plays a vital financial and cultural role in the community. The producers of this publication recognize the role and the contribution of artists as a group, and have decided to study and profile a selection of local artists who make their living from their art.

The approach of this study of artists provides for a broad insight into what the life of an artist is like, what role the artist themselves feel they play in their communities, and how they came to specialize in their particular art form. It also describes the skills, tools, and methods that the various artists use to train, improve, and market their works of art. The following profiles of selected artists are an untraditional approach of studying an occupation. Many artists are self-employed, the definition of what makes an artist is subjective, and the length of jobs for artists can be either short or long-term. Interviews with the artists were done using a list of questions designed to capture what it's like, what it takes, and what it means to be a artist who makes a living from their art. On their own terms, these people have succeeded in doing what they love while making a living at the same time. This special study of artists concludes with a section on artistic occupations, including their typical education level and wages.

Part Two: Career Dialogues with a Selection of Artists

Career Dialogue with Cypress Morales, Art Therapist/Expressionistic

What do you say when someone asks you, "What do you do for a living?"
I artistically do therapy for a living. Counseling working with youth. A lot of times using art as a medium for reaching clientele. I work both in the schools and with homeless youths, kids on the streets. I work with all kinds of kids.

What are some of the jobs you've had throughout your career?
Actually I tried being a graphic artist while I was in art school, I did that for a little while. I was a financial planner, a lot of different things.

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
A long time a go I made a triptych. It was of a mother with her children, it is one of my favorite pieces. It was about 6 feet by 4 feet, three panels with different scenes on it.

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
I have made a living through expressionistic art. I use clay, paint and other art when working with children and adults, and I make a lot of money doing this. It allows people to express deeper sides of themselves. I believe we can combine our art skills and be creative in many different ways.

What are the advantages and disadvantages of being an artist?
The advantage is that who we are as artists is using creativeness in all areas of our lives. Being able to create the kind of careers that we want, which will bring us a lot of satisfaction in a creative way. However, the disadvantage for me was that I was really afraid to be a professional artist; I have a family and was worried about being able to support them. There are a lot of artists who have two jobs or more while doing their art.

Describe the tools you use for your job and why they are important? (Interviewer ref only: i.e.- hardware, software, hand tools, power tools, vehicles, equipment, etc.)
I have a different array of tools: stamps, drawings, pens and pencils with really large paper, as well as smaller paper. I have dry erase board; often the children do their art on that. Using these tools in art allows the children to draw the anger inside of them, and then we can talk about it.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
In my field it is very important to know therapy. You have to understand the conscious and unconscious minds and how they work together. You need to be familiar with dialoging and know the mediums of art and how to bring them together so that you can help facilitate healing.

Can a person be taught to be a good artist?
I think that once we relax and allow ourselves to get into the place where we feel comfortable we are all creative. I know I taught a children's art class and the kids were considered the dummies. They were the "D" kids. The kids told me that they were the dummies and they could not do anything. I told them that they all would get A's for their effort in Art; so all they wanted to do was Art, and they did a great job. They did great Art. So I think that it is about felling good about ourselves and realizing and knowing that we are all creative.

How do you promote yourself and your art?
I don't promote my art right now. I do promote Art Therapy and expressionistic art through marketing. I generally use the newspaper and word of mouth.

What attracted you to this type of work? What keeps you wanting to do it?
I love using my mind and healing people, I love creative work and using the tools to bring out the conscious. This is something I envisioned myself doing a long time ago and I just pursued it. This is a great medium for healing. I love helping people, and Art therapy definitely facilitates this. I believe the Art helps heal.

What role can art play in a community of people?
I personally believe that art can create a connection between people. People can relate to it. There is something within our souls that allows us all to relate to art.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
My preparation was first just setting my goals and envisioning what I wanted to do. Then it was a lot of hard work, chunking it all down so it did not seem overwhelming. Sometimes I think as artists we tend to see the whole picture, we see the vision and what we want to do. But the important thing is to be able to chunk it down, to be able to take things step-by-step, to take baby steps to get to the goal. The detail is sometimes the hardest part for an artist. You need to be able to make small goals, and see how all of it fits together. My advice is to learn from other artists and I would always suggest being responsible for ourselves. So as a struggling artist take the struggling out of it and create a place where there is income so you can relax while you are doing art. It is hard to struggle.

Career Dialogue with John Middelton, Fine Arts Restorer

What do you say when someone asks you, "What do you do for a living?"
I restore paintings. That means anything with a painted surface.

What are some of the jobs you've had throughout your career?
I've been a gallery director on cannery row, I've been an apprentice restorer in England and Los Angeles, and I've worked as a naval officer in St. Petersburg, Russia. But for the most part, I've just been a painting restorer.

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
The series of Richell paintings. The Monterey museum received a collection of his paintings from his widow in the 1970's, and decided to embark on a restoration project. Some were in bad shape, including his self-portrait. I was able to bring back the feeling of his land and seascape paintings.

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
I think so. One shouldn't expect to become fabulously rich or incredibly famous, but I think that if one has reasonable expectations about a career, it can be quite a good career. The nice thing about art restoration is that the older you become, the older the paintings become also, so there's a steady source of work.

What are the advantages and disadvantages of being an artist?
The disadvantage is not knowing if you're going to have a steady income. The advantage is that you have complete freedom with whatever you want to do with your life or career. You can either be a real go-getter and succeed tremendously, or you can just sort of take it easy and cruise by.

Describe the tools you use for your job and why they are important?
Most of the tools I use are basic artist's tools- brushes, paints, some media, and solvents for removing varnish. We also use dryers, vacuum tables, spatulas, and a number of surgical tools, needles, scalpels…you can end up using tools from a lot of different fields because of the minute nature of the work.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
A good knowledge of art history is essential. A working knowledge of chemistry is needed to know what solvents will do what to different paints and varnishes. I studied art history in college and then became an apprentice in England.

Can a person be taught to be a good artist?
Yes, definitely. A lot of people think it's some sort of God given talent but I don't think so. I think most people can be trained.

How do you promote yourself and your art?
In the beginning I did prints, cards, and brochures to explain what I did and what type of services were being offered. But after the first couple of years the most important thing was word of mouth and referrals.

What attracted you to this type of work? What keeps you wanting to do it?
When I graduated from college I was told that only 2% of the people involved in painting studies would be able to make it a career. And so I wanted to do something that would give me a consistent source of work rather than depending upon the art market. I was lucky enough to find a job in which I really feel like I am doing something for society. In preserving society's art, you're not creating it, but society depends on art to identify itself. So being able to preserve that aspect of society is just as important as medicine or science.

What role can art play in a community of people?
Like I said, Art is the means by which society identifies itself.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
Well, I was lucky in that I had this position offered to me. Other than that I didn't have to go through any specific preparation aside from college. That was 5 or 6 years, but if a person enjoys art it seems more like an application than a task. After I left college, I met another restorer who encouraged me to train for this position. It wasn't something I actively sought out. Because I think art restoration has to do with so many older paintings, I may have a viewpoint that may not be current. But my advice would be to study painting and techniques for as long as you can. Look at art with both a scientific and a craftsman's approach, not just an inspirational approach. Learn how it was created, why it was created, what the source of influences was for the painter to paint. When you have that appreciation, it reflects in your own expression that much more.

Career Dialogue with Mitsuko Gammon, Flower Artist

What do you say when someone asks you, "What do you do for a living?"
I like to say that I do flower arrangement and that sometimes I decorate houses too.

What are some of the jobs you've had throughout your career?
I had a job at a flower shop, but it was more of the dirty work, so I learned how to process flowers and how to keep flowers- all the tricks of a florist. I also studied in Japan for several years learning about Ichibana (Japanese flower arrangement).

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
Once for my company I did a huge wedding. I had never worked with such a large amount of flowers before and it was very challenging. But in the end it was also very, very beautiful.

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
It's not so easy doing flower arranging for money and profit. There is a lot of competition out there and you really have to be unique in some way to be successful. Making a living just doing the flower arrangement is not easy. You need a larger facility so that you can handle volume.

What are the advantages and disadvantages of being an artist?
I like being called a flower artist, and I love making flower arrangements, but I don't know that most people consider what I do as art. But it is. There is so much technique and creativity that goes in to what I do.

Describe the tools you use for your job and why they are important?
I use very sharp scissors and knives. Everything I use is very, very sharp and very clean. That way the stems are cut clean and bacteria has less of a chance of establishing itself in the flowers. I also use a lot of clean water. When I make large arrangements I use wire and foam to create a solid base.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
You have to always look out for new designs and varieties that come out in the different seasons. I go to a lot of flower shows and read magazines to see what's current, and I was taking courses at Monterey Peninsula College. It's important to stay knowledgeable about what's coming out. You should also be able to make arrangements that people are going to want. For example if it was fall, you would want to have an arrangement with some orange in it.

Can a person be taught to be a good artist?
I think so. But the uniqueness and creativity comes from the heart and that isn't taught. But you can learn technique and then the creativity can be encouraged.

How do you promote yourself and your art?
Well, I have my cards, but I don't do a lot of advertising. People tend to tell each other how nice the flowers are and that brings in more business. Also, the store I work in promotes itself and promotes my work. But really, I don't have to work very hard at promotion since people come here for flowers.

What attracted you to this type of work? What keeps you wanting to do it?
I have always loved the flowers- that is the biggest part. And it's always fun to have flower arrangements in your own home. It's kind of soothing to have flowers in the living room or in the kitchen. Flowers are important to have in the home because everyday life is so busy and they help to relax you.

What role can art play in a community of people?
If you don't have any art around you in a community, there is a lonely feeling. It enriches people's lives and educates young people.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
I'm still struggling. But you should always look ahead and try to think of new ideas. Watching your competitors is also a great way to get ideas. And like I said, I have educated myself both in Japan and at MPC. Educating and keeping up with new information is very important.

Career Dialogue with Alan Masoaka, Glass Artist

What do you say when someone asks you, "What do you do for a living?"
It depends. A lot of times I say I'm a businessperson. Sometimes I say I'm an artist, sometimes I say I'm a stained glass artist. I wear a lot of hats but it all ties back to the glass.

What are some of the jobs you've had throughout your career?
I've worked as a vista volunteer; I've worked as a counselor for the Marilyn County Mental Health Organization. And then I've been an artist in the glass field for the past 27 years.

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
Every piece I've worked on is a new challenge so there's always a goal to accomplish something new. The piece I am working on now and for the next year is a piece for the San Francisco Arts Commission. It's a 42 x 10-foot piece and is a map depicting the Hetch Hetchy Reservoir water system in stained glass. It will be installed in the control and communications building at the Hetch Hetchy Reservoir.

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
If one can commit to a dream like being an artist, it's extremely worthwhile. But you should get ready to not make a lot of money the first few years. It's tough. I kind of fell into what I do, and there aren't many people who do what I do, so I'm a little rare and in demand.

Describe the tools you use for your job and why they are important?
The tools are everything. The glasscutters, large tables, kilns. Every tool I have serves a distinct purpose. It is very important that they are of the highest quality.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
You really need business skills. I found out later that it's so important to be a businessperson. 70% of what I do is business and 30 % is art. You have to be able to communicate with your clients and the architects. I do all of that myself, I have no middleman for now. Right now, though, it seems to work fine. People tend to like to talk with the artist.

Can a person be taught to be a good artist?
I think you can be taught certain skills to complete your craft. But art is so much of how you are as a person. A person can evolve and develop as an artist, but to a large extent you are who you are.

How do you promote yourself and your art?
A lot of my art is sold and promoted by word of mouth, but I do a lot of direct mailing to architects and interior designers. The gallery helps me with enough walk in business to pay for my studio. I keep higher ticket items as well as more affordable things, too.

What attracted you to this type of work? What keeps you wanting to do it?
What attracted me was that I deal with a lot of architectural situations. It's not like I'm an architect, but I like to visualize what I see in a building and it's always challenging. Not only that, but the techniques of glass are constantly developing and I feel like I develop with it.

What role can art play in a community of people?
I do some public art. I think it's so important to view something new and different and be turned on to art because you see so little of it and young people aren't exposed to it.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
I feel like I was born to be an artist, born to be doing what I'm doing. My advice to struggling artists or anyone who wants to do anything in life is to find three teachers or mentors, like, a father figure, a teacher…people that are really important that you can learn from and grow with. Advice from other people is so important. And don't forget that if you're going to be a successful artist, the inspiration has to come from within.

Career Dialogue with Joelle Steele, Commercial/Graphic Artist

What do you say when someone asks you, "What do you do for a living?"
I usually tell them that I am an artist and a writer.

What are some of the jobs you've had throughout your career?
I've had a lot of jobs, actually. I worked in an advertising agency as an illustrator, as a model, I've owned a recording studio, I've been a VP of marketing twice, and I've been self-employed as a publisher. I've also been an interior and landscape designer, and I've done a lot of freelance writing and art.

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
One of the things that the most challenging things for me was doing a very small black and white pen and ink illustration for a magazine to illustrate an article about plants. It was about the different affects of stimuli on plants, and I had to find a way to show all of these different things and how they might affect a plant. It was an odd thing that I wasn't used to doing. I wanted to illustrate the content of the article and I think it did that.

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
Absolutely. Art is like any other job. You have to have the skills and the knowledge to do it. As far as what you expect, it has to do with what you put into it, just like anything else. You go to school, keep up on the latest things, have good people skills, and work on everything else you would normally do to be successful in other enterprises.

What are the advantages and disadvantages of being an artist?
That would be up to the individual. I don't see it as having any particular advantages or disadvantages. I think that the work style of every person is going to be a little different. I like to work at home, and so since most of my work is done at home, it works for me. Of course if you're not disciplined though, it could work against you. Also, if your job is a social center for you too, or if you want benefits and what not, being a self-employed, freelance artist may not be for you.

Describe the tools you use for your job and why they are important?
There are so many tools. I'm usually painting in watercolors and using pen and ink, or I'm doing pencil or charcoal. That means I tend to have a wide variety of writing implements, brushes, paper, sharpeners, mat cutters, light tables (tracing tables), and I even use a small hairdryer. And nowadays, in order to be able to transmit my art to whomever wants it at any given time, I have a scanner, a computer, and the necessary software so that I can transmit it by email to whoever wants it.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
To me, to succeed in any field requires the same thing. You have to be focused, disciplined, you have to know your craft, and you have to have good people skills. You cannot create art in a garret. That's a nonsensical, romantic notion. It's a business and especially so if you say you're freelancer. You're self-employed. You need to keep records and stay on top of things like that. You can't leave things like that to an agent or a representative to manage your business. You can have them help and guide you, but in the end you are the one who has to make all of the decisions about what that person does for you. So learning some basic business skills is important. You also have to be able to learn from your mistakes and to accept criticism from other people. You can't afford to go around and be hurt every time someone doesn't publish your work or wants you to change it. And you also have to be tactful in dealing with people. You have to have a lot of people skills to explain, interpret what they want, be able to say "No" if they're asking for too much…you have to able to take control but you have to do it in a kind way.

Can a person be taught to be a good artist?
I think every person who wants to be an artist does have to be taught to be a good artist. You might be born or nurtured with an aesthetic sense but to become an artist means that you have the training and techniques and the use of the materials of your choice to create your art. Otherwise you may have an aesthetic sense but it's never developed. You might become a historian or a collector, but not an artist.

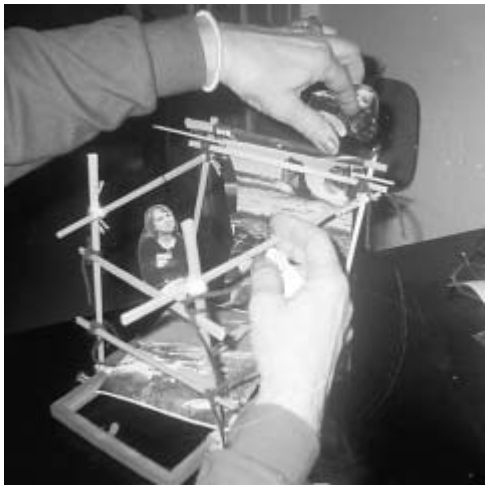
How do you promote yourself and your art?
Referrals, yellow pages, and about a third come from direct mail marking. I think flyers are tacky and people tend to throw them away.

What attracted you to this type of work? What keeps you wanting to do it?
It's not like there's anything that originally attracted me to it; I've been doing art since I was about 5. But I enjoy the materials themselves. I like feel of the paper, the movement of the brush, the creaminess of the paint, the scratching of the pen on the paper, and the way a pencil goes against the tooth of a piece of paper. And I love the aesthetics of art; I could look at art all day and not be bored.

What role can art play in a community of people?
Art will always reflect something intangible like the spirit of the people. It will show those things that are important to a group no matter what the group is. It's always going to reflect what they think and feel. It also brings people together. It's something that transcends all other things. It doesn't matter what socio-economic status you're at or what ethnic group you belong to, because art is appreciated by everybody in all of its forms. So, it forms a bond.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
I've had a lot of private instruction, college courses, workshops, and I read. I keep myself educated. The only magazines I subscribe to are art magazines. And I've been on a computer since 1983 so I've kept up on technology. The rest of it is practice. It's nice to have all the knowledge, but to really be prepared to do something you have to be constantly doing it and practicing. Art is like any other career. You learn things, you develop your skills, you practice, and you learn from your mistakes. I really resent anyone who says they are a struggling artist because it gives an unfair image to artists in general. People tend to think artists are struggling on their way to get somewhere. But I think if you have to struggle, there's something wrong because there's no reason to be struggling at art or any other creative endeavor. If you are, you need to figure out what's wrong so you can focus on what it is you really want to do. You can't create anything if you're not fit to do it.

Career Dialogu with Sally Higgins, Kinetic Sculptor/Art Curator



What do you say when someone asks you, "What do you do for a living?"
I tell them that I am an art curator in a local store. That means that I choose the art that gets hung on the walls.

What are some of the jobs you've had throughout your career?
I've been a cook at a bed and breakfast, a gardener for residences and businesses, and a happy mother.

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
It was a string theater I made out of an old picture frame and pictures of old friends that I have arranged in different scenes. I wanted it to accomplish frivolity and romance and fun, and it did. It succeeded for me.

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
I think it is if you are dedicated to promoting yourself and encouraging yourself to be serious about your art. I think it's difficult also to make a living from art unless you're going to go commercial. One should expect that, without representation, you will be devoting a lot of time promoting yourself…perhaps even more time than you spend on your art, at least initially.

What are the advantages and disadvantages of being an artist?
The advantages are that it's something from your soul. The muse comes and takes over and you can do anything that you want, and hopefully it will be lovely to you and to others. The disadvantage is that the muse will come to you and you'll make something and it will come from your heart but it'll be stupid. It's hard to be an artist. Everybody buys art…everyday you buy art when you buy a package or look at a magazine and all those people who put it together are all artists. It's a very busy world in which an artist makes a living.

Describe the tools you use for your job and why they are important?
The tools I use depend on what I am working on. It could be screwdrivers, nails, hammers, paint, glue...it just depends. I have cabinets of tools and supplies.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
In my field I think you just need to be open to using whatever materials are available. It's important to look at art books, talk with other artists, keep your mind open, and your creativities free from obligation.

Can a person be taught to be a good artist?
I think a person can be born with artistic talent and do nothing with it. A person can be born with some talent and be encouraged and become very good at it. But I think there are very few Michelangelo's and Dali's born in the world. You can be a good artist, but to be taught a very successful one is difficult. Keep in mind there are various degrees of good.

How do you promote yourself and your art?
I don't. My art is not for sale. It's for me personally and for my friends. As a curator, I do a lot of promotion through newspapers and ads, artists send me their bios, and collectors can send comments. Artists also bring me pieces of art promoting themselves. I don't go looking for them at all, they come to me, but they must come to me with a good representation of what they want to show.

What attracted you to this type of work? What keeps you wanting to do it?
My field of work is just fun. Kinetic sculpture moves (literally). I keep wanting to do it because there are all sorts of things waiting to be found and put together. My art isn't permanent either. It doesn't have to be put in a glass box; it can be thrown away.

What role can art play in a community of people?
It enriches their lives, it educates them, it enchants them, entertains them…art can be so many things for people...it doesn't limit them. Community art makes people come and work together. It can also show the history of the local community and its fun to see.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
As an art curator...I had been working for a non profit (the Pacific Grove Art Center) and I have been on the board there for 15 years. We have 5 galleries and every 6 weeks we change the artwork. I got involved in the selection committees and in running the center itself. So I've had a lot of exposure to a huge variety of art. That sort of made my feelings clear about what I liked or didn't like about certain types of art. There are a tremendous amount of different artists. A lot of people think that artists shouldn't struggle. But struggling in this case is good. You don't want it to be easy. If it was easy, everyone would be doing it and nothing would be original. I don't want it to be mean or hard for a person, but I think it needs to not be easy. Perhaps later on, but not initially. From the struggle you get ideas and try to implement them. During your attempts you may add or subtract, but the first idea is the kernel and the outcome is your struggle to succeed in making that kernel grow.

Career Dialogue with Karen Hildebrandt, Metal Artist

What do you say when someone asks you, "What do you do for a living?"
I usually say that I'm a jewelry designer and metal sculptor.

What are some of the jobs you've had throughout your career?
I've been fortunate enough to not have to work in the workforce too much, but I did manage a craft gallery in Sausalito, and I also worked in art supply stores (anything to stay in the art field). But I've been self-employed as an artist for 9 or 10 years now.

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
I think I did a conceptual piece for a show I was participating in at a community college. For me, art was always very aesthetic, so this piece was supposed to illicit emotion; not just aesthetic emotion but to really make you think. It was a time piece...4 time zones, and each time zone had a little egg timer that rotated around, and under each time zone it said "here, now, then, later," so it was kind of an abstract conceptual piece. It was a big project because it was wood and metal and mechanical and it ran on electricity. It was difficult for me though because it broke me out of the living room aesthetic art that was my prior conception of what art should be.

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
I definitely think it's feasible but I think you shouldn't expect to be a Thomas Kincaid. There are artists who reach stardom, but that shouldn't be an artist's goal; I just started by doing what I wanted to do. You should expect there to be great times and hard times; it goes all over the place. So you can make a living but it may not be the best living in the world.

What are the advantages and disadvantages of being an artist?
The advantage is that you're being true to who you are and doing exactly what you are meant or want to do, and you're happy because of that. But again, it is a tough road. There are a lot of artists out there and it's competitive and challenging and takes a lot of strength to motivate yourself and keep going.

Describe the tools you use for your job and why they are important?
I use lots of tools, but for jewelry I mostly use pliers and a file. For sculpture I use an arc welder and oxyacetylene to bend and heat things to make them pliable…I use chop saws, grinders, goggles, earplugs and other protective clothing. And don't wear synthetic clothes when you're welding- they're flammable.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
You have to be really confident. And you need to have some technique training. But what has really worked for me personally has been a desire to make things happen, my motivation, and not being afraid of being rejected. You could be the most amazingly skilled person, but if you don't have the people skills to get out there and sell your work, it's pretty hard to make a living. That's something a lot of artists have trouble with because many are very introverted.

Can a person be taught to be a good artist?
Yes.

How do you promote yourself and your art?
I do my own promotional things. I photograph my work, I cold call places and go around on foot and see if there's some place that may need a piece of art work that I've made. I don't do many craft shows. It's easier to do with jewelry, but with sculpture it can be quite a task to move it.

What attracted you to this type of work? What keeps you wanting to do it?
I love doing anything creative; that's when I'm happiest. But I've always loved metal, rusty metal, and junk. We used to live near an old metal smiths shop and we'd find all sorts of old things in them and collect them. My parents are both artists, so I was raised to be creative. We always went to craft fairs and all their friends were artists, so I've been exposed to it (art) my whole life. With jewelry, well, I've been doing that since high school and I really like wearing jewelry.

What role can art play in a community of people?
I think art is evocative. It's emotional and can make a lot of people happy. If it makes you smile…I love that part of creating, making people happy. And sculpture and public art is something that everyone can see together. I really think that the artist is undervalued in America.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
I prepared for this by taking lots of classes. I've taken every class possible in the art field but welding was the one that changed me. I knew I had to take that to get to where I wanted to be. Prior to that, I fastened things together with wire and screws. For new artists, I know that it can be hard to stick with it, but you'd be doing yourself such a disservice not to follow your heart and do what you love to do. Good things come from following through.

Career Dialogue with Dan Koffman, Mixed Media Computer Artist

What do you say when someone asks you, "What do you do for a living?"
I tell them that I'm an artist and that I have my own gallery.

What are some of the jobs you've had throughout your career?
I've been a technical illustrator for the government, an architectural designer, a comic book illustrator, a product designer, and a display fabricator. Every job I've ever had has dealt with art.

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
I would think that that would be the image of the flag of peace and freedom, which I created 16 years ago. What I hoped it would accomplish was to communicate a very simple message. The artistic imagery was of the sky and the sun and my goal was for it to communicate that we live under the same sky and are warmed by the same sun. That project continues and has been very successful. It was a real challenge.

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
Yes it is feasible. There are so many different degrees of the application of art in a career; even if art is applied to a minor degree it enhances any career. If it's taken as the career in itself, it's as flexible as anything can possibly be. It's like taking a blank canvas- you can truly create your own composition.

What are the advantages and disadvantages of being an artist?
The advantage is that it's magical and a challenge and fun. The disadvantages? There are none.

Describe the tools you use for your job and why they are important?
I use virtually every tool that both an artist uses and anybody that works with his or her hands would use. On a daily basis I use everything from a hammer and saw to paintbrushes and paints. The use of tools is one of my favorite aspects about the work that I do. I also use airbrushes, computers, felt pens, crayons…anything. Tools are great. The use of technology has absolutely changed the game. I call my style a marriage of impressionism and technology and so I call it impressionist-tech. To not use the archival tools and tools of reproduction would be to work with both hands tied behind your back.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
The first skill is patience. It gets easier with time. Knowledge? An openness to learning from whatever is in front of you. Abilities…being a good listener is exceptionally important. You should also have a sense of humor.

Can a person be taught to be a good artist?
A person can be taught to use tools and study techniques, but I think that you have to have a desire to be an artist and that is in your heart.

How do you promote yourself and your art?
Extensively. From many different angles. I'm a student of PT Barnum who was really the father of modern advertising. The lesson he teaches is to have something to sell and to tell people about it. If it's appropriate, I market myself at all times. Being shy related to promotion doesn't guarantee failure but it guarantees a lower profile. And unless the artist wants to do this as a hobby, shyness doesn't work.

What attracted you to this type of work? What keeps you wanting to do it?
The fact that it was pure creation from nothing. The fact that I could do whatever I wanted to do. What keeps me wanting to do it is that I marry those skills to fulfilling my client's vision. I am able to cater both to my client's vision and to my own. I like choosing things that are marketable…those are things that are my favorite because those are things that work in the marketplace. From a corporate perspective it's about helping someone else fulfill his or her vision. My business is split between my artistic images that I have for sale and the concepts that I can bring to life to help people fulfill their goals and desires.

What role can art play in a community of people?
Well in my case, because my work is primarily visual, it adds a visual layer that is stimulating and unexpected. It adds a layer of possibility to everything.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
I started drawing at about five. I knew my life was going to be a an artistic line, and that I was going to stay on that line like a track so that wherever I went or whatever school I was at I sought out different classes that appealed to me artistically. And they were broad…from technical illustration to working with wood. Then I sought out work that allowed me to use my skills. Even if it was only a minor part of my work I would throw myself into that and soon I was able to write my own ticket business wise when I was in the more general market as an employee. For the most part I have always employed my artistic abilities and married them to my business skills. I have disregarded what other artists have said about art and business, where they have not lived in the same room. I said "Bologna," they'll live in the same room where I'm at. I've studied business as much as I've studied art. Also, if you're struggling, stop it. If you're a struggling artist, you shouldn't be an artist. You can be a new artist, but don't struggle. Follow your artistic passion and don't get stuck in any one thing. Broaden yourself- the world is a big place and one style doesn't do it for everybody and everything. Do something artistic on a daily basis. That's what artists do. And if you do what they do, at some point, you will be an artist. I have not followed any guideline, but I've followed my nose and stayed on my line.

Career Dialogue with Brian Steeger, Musician/Craftsmen

What do you say when someone asks you, "What do you do for a living?"
I tell them I'm a professional musician, and I make musical instruments.

What are some of the jobs you've had throughout your career?
I have been a printer, marine biologist, common laborer, musician, an actor, and a woodworker. I have also done plant pathology in the labs, and painted eye dots on Mickey Mouse dolls.

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
The most interesting was doing reproduction of an antique woodwind using a special technique of metal in-lay that I'd seen examples of in museums but no one knew how it was done. I kind of rediscovered the techniques and it involved a great deal of almost science, I had to get samples of the type of alloy that they used in the 1720's and find a source and reproduce the technique carving in-lay. I actually took almost nine months of work. And, I gave the instrument to my teacher.

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
Of course it's feasible! If you do it sincerely and work hard and don't expect any reward. Do it without regrets and really without expectations, don't expect anything, just do it. I don't work for money; most of my living is made from music, not so much the instrument.

What are the advantages and disadvantages of being an artist?
Oh the advantages are, absolute balance with yourself, and knowing that your not doing any harm, and your doing a wonderful thing, and that people, even if they don't know who made the piece of art can feel the energy and the feeling that you put into it, this lasts way beyond. That's why people have nice, handcrafted things in their houses because it makes them feel good. The disadvantages are that you're often completely misunderstood; People, as all people do, think of this in their own terms and not the way you see it. Also, it's hard to make a living through art. But I'd rather starve on singing.

Describe the tools you use for your job and why they are important?
The tools I use are actually two different types. One tool is a musical instrument, my mainstay is the violin, I also play woodwinds, string instrument and those are tools, they are beautiful, and they're an extension of the artist. For the instrument making I use a combination of power tools, hand tools, imagination and concentration. . For example I used a wood turning blade, band saw, various knives, chisels, gouges, flea market stuff. I have no compulsion on going out and spending a lot of money on a good machine that I need because it's an investment and its better to have high quality things, high quality tools in this matter. Why are they important? They're an extension.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
You need to have patience. Attention to detail, and don't have any expectations the ability to take things as they are. You have to have a feeling for the materials; this will come with the experience of handling the materials and familiarity.

Can a person be taught to be a good artist?
I believe so, yes. If they have a certain predilection yes, I have seen it happen. I have taught people certain things; like if they have no rhythm sense, I have taught them how to keep time really well within an hour and a half. Often people can push beyond their natural abilities.

How do you promote yourself and your art?
I don't. I let other people do that. I am not comfortable with that. I have seen too many people that spend more time making themselves famous than working on what they should be working on. I leave this to other people.

What attracted you to this type of work? What keeps you wanting to do it?
The absolute beauty of a good musical instrument is unsurpassed. It involves visual stuff, acoustics, and a certain type of craftsmanship. Besides being a beautiful thing to look at a good musical instrument serves another purpose. It is not like a painting that just hangs there on a wall, it actually does something else, it goes beyond that. I continue to do this type of work because it is a passion I have.

What role can art play in a community of people?
It runs the gamut. From a great "striking them with lightning bolts of inspiration" to the extremely subtle part or art that we take completely for granted. The part that people don't even notice. Without art every plate we eat off of would look exactly alike. It is all-pervasive. People don't even think about it.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
It is kind of convocation of skills for what I do. Growing up my mother was a great singer and my father was an instrument maker and an engineer. It was there. I had to find out what I did not want to do before I found out what I did want to do. There is nothing like a horrible mind numbing job to make you want to do something creative. I sought out people that had what I wanted to know. Then I spent time with them, regardless of cost. My advice for new and struggling artists is: Straight ahead. No distractions, take the hurdles, flog through the mud and passion, passion, passion.

Career Dialogue with Patricia Hamilton, Photographer/Book Publisher

What do you say when someone asks you, "What do you do for a living?"
I tell them I take photographs and publish books.

What are some of the jobs you've had throughout your career?
Throughout my life, I've had only a few jobs. When I was 18 I was a telephone operator; that was my first real job. My next job was a controller in a large corporation, and then I got into publishing and photography about 20 years ago.

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
I would have to say a book that I did in 1999 called the Monterey County Guide. I published that book, but I also took most of the photographs in the book. I had just returned from living in Europe and people all over there knew about Monterey County, especially Carmel. And although I live here I didn't know that much about it myself, so I was a little embarrassed when people would ask me questions. I set about educating myself about where I live when I got home and I covered the entire county. I wanted to educate myself about where I live and the people in my life. Through my photos I wanted to show the essence of the county and its people. It did accomplish what I wanted to and I update it every other year.

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
For me, there isn't anything but being an artist. I have to. I can't not express my creativity. I've had a few dead end positions where I couldn't and I had to get out. So you might say I am obsessed with being who I am, whoever that is...it's just revealed to me as I go along. To pull it off, one should expect to not only make art, but to also figure out how to sell it without selling ones soul, because the art stops when that happens. Very few of us get patrons so your art must be sellable.

What are the advantages and disadvantages of being an artist?
The advantages are those that come with being who you are because we are all artists. If you go throughout life being who you are, then you are able to achieve an inner peace that isn't possible otherwise. If you're not being who you are or not being an artist, or if you're stuck in a job where you can't express yourself, then you'll shrivel up inside and it would be a terrible life. The disadvantage is that during your learning years you're not appreciated, so during that you have to hold down a job where you can't be creative. As long as you keep doing your art on the side, and keep perfecting yourself, eventually you'll be able to make a living off of it.

Describe the tools you use for your job and why they are important?
The tools I use in my job are pretty few. I have several different types of cameras I use for a variety of different jobs. I like to carry a small Nikon in my pocket when I'm out in nature so I don't have to carry something bulky if I'm hiking, but it takes a nice picture. And of course with the computers I'm using PhotoShop; I can always enhance my pictures if I have to. And there are different films for different types of jobs…and the tripod. The computer is essential to being a photographer these days especially with digital cameras and the different types of photo files. I'm working on a children's book now and the entire thing is being published on my computer.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
As a photographer, you have to have knowledge of your equipment with regard to the options and its abilities. You also have to know how to prepare a scene, how to shift the light source to the right spot, and make sure there's nothing in the background you don't want. The ability that is the most important to succeed is to watch the people or the light as it moves for the exact moment to press the shutter. That's where the artistry comes in. Anyone can push a button or make sure there are no dead leaves behind a person in a picture. But watching the people and knowing is the most important.

Can a person be taught to be a good artist?
You can learn the mechanical skills, go to classes, shadow other photographers, but the eye, not entirely...you can't be taught that. You have to surrender to the art which only comes after you have mastered the mechanical skills and feel confident enough to surrender.

How do you promote yourself and your art?
I promote myself through all of the avenues available…direct mail, press releases, talking to people, volunteer work, creating newsletters in exchange for an ad in for my services in the letter...Right now I'm doing the National Writers Association newsletter. They're paying me, but it's a pittance compared to my normal price. But, there are a lot of people in there who might want to publish a book.

What attracted you to this type of work? What keeps you wanting to do it?
It just seems like my whole life I've had a camera in my hand. I had an older sister who probably first influenced me a lot that way. She was always taking pictures at all the family get-togethers and I think I got it from her. I like seeing pictures of people smiling. It's a souvenir too. Every time you look at it you relive the moment. And, I'd like to take the great American picture…the challenge of doing something better and better just feels good. It's a way for me to share myself as well.

What role can art play in a community of people?
A good example of art in a community is the Monterey County murals. It's a county sponsored activity where troubled youths are organized and they paint murals on the sides building in the towns and communities where they live. The scenes are decided with the community and tend to revolve around local history and culture. It brings the community together to communicate and cooperate. Some of them are in bad parts of town, but not one has been defaced.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
I took lots of pictures, learned every piece of equipment I have (I'm self taught). I keep a camera with me at all times, and I analyze all the pictures I take. As for advice, well, I don't believe in giving advice, but here's my advice: all answers to questions a person can find within themselves. If they are struggling, if they can quiet their mind and meditate, the answer will come. Mostly we know anyway, we're just not listening.

Career Dialogue with Michael Thomas Kainer, Regional Painter

What do you say when someone asks you, "What do you do for a living?"
I'm an exhibit preparatory which means I install exhibitions that other people have done. I work for a museum and have been doing it for 14 years.

What are some of the jobs you've had throughout your career?
I've done work on auto bodies and spray painting of aircraft, welding, carpentry, foundry work (casting bronze sculpture), tile work, iron forge work, installed exhibits…I've been with the Monterey Museum of Art since 1988. I also do other exhibits for the aquarium, and I've done a wax museum.

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
Before being a plein air painter, I had a studio at the art center and was learning how to go from sculpture and photography into paint. I did a lot of abstract work in the studio which I call emotionalism. It was a learning process and I did a 4x8 canvass called "The Revealing".

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
It is, but you have to be many things other than creative. You have to be able to promote and manage yourself, and get the courage to create more. It's not the same as I believe it used to be. An artist almost has to be a renaissance person in many ways to be able to do that. I still don't think it's very easy. To try and make a living at it would be the wrong approach.

What are the advantages and disadvantages of being an artist?
The advantage would be having the time. The disadvantage is trying to create that time to be an artist. Being one is allowing those spaces of time to collide and work themselves out.

Describe the tools you use for your job and why they are important?
The tools I use for my particular job are more intuitive. I obviously use a hammer and nails, levels, tape measures, and paint; it's stuff a carpenter would use but when putting a show together, it has a lot to do with an integrity to make a show look as best it can. You're up on a ladder pointing a light at a piece at the last minute at times…you get to a point where the best tool is managing time.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
In my field, actually finding the job...there are few museums out there that are working this way. I wish now that I had more college behind me so that I could go into a curator's position. I wish I had more education so that I wouldn't have to always do the physical part of it. And being able to find or make the time becomes a talent for sure.

Can a person be taught to be a good artist?
You can be taught skills just as any child can be taught to read. If the child chooses to read, they will read many books. But then it becomes what art really is. You can be taught skills but art isn't a simple answer, I define the word art probably once a month, and to me art is the pre-science, the experiment before the facts. In other words, if you were in front of the canvas and knew the end product before you started, it would no longer be art. It's taking risks, yourself emerging; it's the trust of letting the piece tell you who you are.

How do you promote yourself and your art?
Again, a lot of artists are good self-promoters, I am not. You try to get into shows and galleries and a lot of it has to do with luck and where you are. Some artists have the time and personality to do that, but I myself would rather worry about painting my next piece.

What attracted you to this type of work? What keeps you wanting to do it?
It's the people. Since I do exhibitions, it's the artists themselves, the museum staff. And I wanted to surround myself with paintings. Probably at this time I've seen more paintings in the last 12 years than I had before in my life. I like being exposed and saturated by it. Then I can step back and look at my own work and see the personal signature it may have. I keep doing this because there is always something interesting down the road. And being a painter is about self-growth. The paintings are little time signatures of my life.

What role can art play in a community of people?
Art has many functions. It's very social and challenges the limits of our social abilities. We can choose to be surrounded by art, but there are often people who settle for things that pretend to be art.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
By working with my hands a lot I prepared myself for this type of work and it let me imagine doing other types of things with my hands (forging, painting, casting). Beginning artists should try to figure out why you're making art. If you're struggling, you should try to find out why it's not working. Remember that you work through artistic blocks and that you can't do art 24 hours a day. Also, a struggling artist is someone who can't afford the time to make art. You need to face up to the struggle and accept the struggle as part of being an artist. That's what life is, and art is a good example of life.

Career Dialogue with Susan Allison, Poet/Writer

What do you say when someone asks you, "What do you do for a living?"
I say that I'm a writer and a published author. I also teach writing.

What are some of the jobs you've had throughout your career?
I have been a teacher for many years at the high school and college levels. I have been a therapist, worked in a library, and I have been a writer probably my whole life, making a living as a nonfiction writer and a poet. I had a nonfiction book published by Random House this year called Conscious Divorce *and then my poetry book* Breathing Room *is a companion to that book.*

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
I've worked on individual poems that have been very challenging and interesting, but probably the book Breathing Room *was the most interesting piece. I really enjoyed the whole process. I started it about 7 years ago, I had to choose the poems and put them together, choose the font, and have an artist in Carmel do the cover. It was about the ending of a marriage, so the poetry was very emotional. Therefore, the book was not only creatively challenging but emotionally challenging as well. The poetry book goes along with a nonfiction book but it cuts to the heart of the issue; people can get right into their feelings and emotions when they read the poetry.*

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
It's very difficult in this country because the arts are not subsidized. We don't get any help from the government, as artists in other counties do. I made quite a bit of money on the nonfiction book; I did receive a $50,000.00 advance. But what happens, which writers should be aware of if they're considering being a writer, is they give you an advance in three parts. So you can't really live on the money. You have to take the money and maybe put it away somewhere, and get a job.

What are the advantages and disadvantages of being an artist?
The advantages, for me, are that I am doing what I love, I can express myself creatively, and I am able to write about what's going on inside of me, so it's partly therapy, and partly a creative art. The disadvantages are the financial ones. I don't feel that most people can live on their art, they can from time to time, but then they have to go back to a job.

Describe the tools you use for your job and why they are important?
The only tools that I use are my mind, and my computer. I have an IMAC, and it's really just a glorified typewriter. I write my poems mostly in long hand. And type them later.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
I'm not sure if its knowledge, or if it's allowing the creative spirit to come forward. Actually it's the opposite of knowledge, because I have to get out of my intellect and out of my own way, the creativity comes out of some inner voice, or inner spirit inside me. I have a background in writing. I wrote my first poem when I was in fourth or fifth grade. I think it's important to share your writing and get feedback from other writers. You need to be well-organized and self-disciplined.

Can a person be taught to be a good artist?
Yes. I taught creative writing for many years, and I think you can teach writing. You have to get people to be willing to let go of their judgment and let go of their intellect and write down their first thoughts and their first inspirations. This is sometimes hard if the people are too tight. You don't have to be well versed to write a novel. You can just write the story and have a good editor. Having an original idea is the best thing, once somebody has an original idea they can get help putting it together.

How do you promote yourself and your art?
I'm not as good at promoting as I am at writing, and I think that's because writers are fairly solitary people. I had two publicists from Random House for my first book.

What attracted you to this type of work? What keeps you wanting to do it?
I had to do it, being an artist is a passion. It wakes you up in the middle of the night, and you have to finish it, or you have to start it. It's almost like a hunger, as if I'm not in control. It's something that has to be done. I'm kept wanting to be a writer because I have more things to say, and more people to help.. All the things I write are really tied to self-growth, and helping people move on when they are going through a hard time.

What role can art play in a community of people?
I feel that it connects people. The subject connects people and they can relate, or they can cry or laugh. On an emotional level it connects us, as humans it connects us as one family. And I also feel that as artists in a community we can inspire one another, we can learn from one another in terms of our craft and we can support one another.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
I had a university background in psychology and English, and my mom was a librarian and brought a lot of books home. For struggling artists, I feel it does help to have a support group of people that they are working with. It's important to not give up, they need to get out whatever it is they need to say or paint or do. It can be discouraging, because it's not supported in our culture as much as in other cultures. It's definitely not being supported financially. So I guess, just encourage them to have a job on the side that they also love, to give them the means to write, or draw, or do whatever it is they truly love.

Career Dialogue with Leonard Epstein, Multimedia Artist

What do you say when someone asks you "what do you do for a living?"
I usually say "I'm doing me for a living" because I have the luxury of doing me because I am retired. I was a teacher for 36 years. So, I do me which means I am free to do what I want to do moment by moment. I consider the art of living the highest form of art, so I practice the art of living moment for moment and if it works, it works.

What are some of the jobs you've had throughout your career?
Well, I taught for 36 years. I began in SF state and taught at Kansas State University, then Stanford a few years during an advanced degree, then at Monterey Peninsula College teaching humanities...art literature, philosophy, music…it's a discipline which synthesizes the various aspects of culture and shows you how culture is created and what produces it.

What is the most interesting piece of art you've worked on?
Believe it or not, it's an object that began on the Monastery Beach of Carmel…a truly multimedia creation…it was an ash collector from an old Webber BBQ and I thought the shape of it was very beautiful. It had 3 cutouts for the legs and this slash of burn across the center of it. It was discarded and it had washed up. I was on my way down the coast on a hike and I found this and saw right away what I would do with it. What I did was take it home to my studio (I didn't go on the hike) and put slashes of variegated gold leaf- a rainbow of gold and different colors across it, mounted it black on black and called it "Phoenix". It was a demonstration of taking a discarded object that appeared to be just an old ash collector and making it very beautiful. And it is very beautiful; I wish I had it here to show you.

Is it feasible to consider art a ways of making a living and if so, why and what should one expect?
I think it's very feasible and I have friends that do make a living with their art. They're good, and all mostly single. It's very hard to support a family unless you have gone big. Normally, art is the very first thing to fall off when there is an economic decline. In any economic decline business is affected, but if you're a commercial artist, well that's a much safer way to go. If you want to go into art and be assured a salary, commercial art is the way to go. Of course, there's less freedom in commercial art.

What are the advantages and disadvantages of being an artist?
Mostly advantages I would say. The disadvantage is primarily an economic one. There are certain periods that are very difficult as a fine artist. If you're a graphic artist working for a firm, that doesn't really apply, but I'm talking about an artist who works in a studio and sells his work to a studio. A commercial artist will make a good salary and also have the chance to do something they love. But it's a limited activity because you work for someone else and you have to do what they want. If you're a studio artist, whether it's metal or paint or print, you work alone usually and you have the freedom to do and work when you want to. You are in control and there is a great joy there. It can be a very enriching experience as you explore you own creative unknown. Although commercial art is very important in our society, it's wonderful for one to have the opportunity to explore rather freely this mystery of art. It's awfully hard if you have a full time job to come home and start producing art because it takes time. It's a mindset and a way of being. You don't just go into the studio and start working- you feel your way in. There is much silence and inactivity in the process of creation. A lot of creation goes on like in winter- everything is dead but there's a lot going on under the earth. It's like that when you're creating. And if you're concerned with productivity, with making a product, well then that presents a problem doesn't it? Because time is money.

Describe the tools you use for your job and why they're important.
When I am printing I use the press. It was a 1200-dollar machine and it's about 4x9 feet. With the press I user brayers or rollers, and I roll the oil based paint (which is a disadvantage because it's toxic) out onto plexiglass sheets. Then I work the sheets, apply a piece of paper and roll it through the press. When I paint I use canvas; I either make them or buy them, I use oil or acrylic paint, and many brushes. Then I use solvents and adhesives. When I do collage, I use exotic papers, found objects, (like a squashed pepper I found on the streets of Hawaii). I find supplies all over in the natural and manmade world. My philosophy is that in the least of things we see the greatest of things. So I try to take things that are discarded that you wouldn't think it were beautiful and highlight it so that you can't deny its beauty.

What knowledge, skills and abilities do you think are important to succeed in your field?
An active imagination, essentially. The capacity to see beyond the obvious. A well-developed eye. Drawing is the basis of all fine art, so the knowledge of drawing and perspective are vital. It may surprise you, but knowledge of one's self is important. You should also have an exploratory attitude. Abilities are something else. I have always been drawn to celebrate beauty. This can be nurtured, but it helps if it's something you have by nature…it's mysterious and I seem to have been born with it.

Can a person be taught to be a good artist?
I think so, but it depends on what you mean by a good artist. One can be taught to copy art and do it expertly, and there are many art shops that sell that kind of art because the public doesn't really have much of an educated taste. So one can be taught and can make a lot of money, but that's a commercial form of art that doesn't probe the talents within, the creative unknown that makes art a living thing.

How do you promote yourself and your art?
I've had a studio called Rising Moon Studios and have promoted myself by bringing my work to various galleries. But for me, I don't have to sell my art for financial gain so I'm not too interested or driven by creating art for money. Nor do I have a special need for recognition. The work is satisfying. In that sense I'm not typical.

What attracted you to this type of work and what keeps you wanting to do it?
I seem to have just been drawn to it naturally. I like beginning with an unknown, with some canvas or a piece of paper. I've worked realistically and subjectively, but beginning in an open-ended way is like being an explorer.

What role can art play in a community of people?
It can transform a community. It can help children develop the capacity to see the natural world in such a way that they grow up to be adults who want to protect and save it. The soul thrives on beauty, and art provides us all with a way of appreciating beauty. If you look at a Rembrandt with a face that has been done with such intensity that you can't turn away, then you're looking at a face in a way that you never have in reality because you're in a hurry. The artist can make people see beyond what is immediately evident.

How did you prepare yourself for this occupation and what is your advice for new artists?
I've studied a lot and taken many, many courses. I've sat at the feet of artists, looked at many pieces of art and architecture, and I've traveled and experienced a lot of living. Copying is a way for many artists to develop their skills. Copying taught me a kind of craftsmanship that was really very valuable. See all experience as schooling; even the failures are an opportunity to learn. The art of living is the highest form of art. If you live consciously and are aware that life is a mixed bag, you can use that to move on and continue with your process. Don't let being discouraged ruin you, let it ennoble you. Use every experience.

Career Dialogue with John Chappell, Ceramic Artist

What do you say when someone asks you, "What do you do for a living?"
Depending on who they were and where they're coming from, I tell them I'm a tile setter.

What are some of the jobs you've had throughout your career?
I've worked in the trades for a long time. Anything from plumbing and painting up to the ceramic tile setting.

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
The most interesting piece is out under those trees waiting to be completed. It's sort of monolithic in size…about 7 or 8 feet high. I modeled it in ceramic, but I'm going to attempt to layer it in cement…like a concrete building. It's been there for a couple years because I kind of lost interest in it. I've not completed it yet but when I do it will be the most exciting piece.

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
My experience has been that I could not provide a living for myself. However after 20 years of tile setting and manufacturing ceramic lights, (lamps) there's a sign that maybe it could happen for me. I've been working on it for a while and the tough part of it is the merchandising and advertising. I wish I had gotten started earlier creating a market for this.

What are the advantages and disadvantages of being an artist?
The advantage is the joy that you can reap from producing things that have value to yourself and other people. On the downside, it takes a lot of time away from other pursuits that might help you forge your way and other important things you could be doing.

Describe the tools you use for your job and why they are important
The tools I use for my lamp business are the same ones I use for tile setting. The materials are the same, and so I've honed my skills from cutting shower stalls to making lamps.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
Pride in your workmanship is key. It's finish work and people are very concerned about the finished product. It becomes easily apparent whether or not it's a good job or not.

Can a person be taught to be a good artist?
I don't think so. In my case, it's been 20 years of tile work and that can be very mechanical...obviously there some aesthetic touches. But for me more than anything it's been a craft for me and I think there's always been a distinction between art and craft. I like to think I've become an artist, but I really think you're born with what it takes. Whether or not it comes out in your life or not is a function of what drives you.

How do you promote yourself and your art?
My promotional skills are my weak link. I rely on others to help me in that area. My marketing is very primitive right now…I'm working on a website, but I don't have an ad in the yellow pages and I don't do a lot of advertising.

What attracted you to this type of work? What keeps you wanting to do it?
I like the end products whether it's a shower stall or a nice table lamp. And I have a lot of fun putting them together. It's lengthy- you don't just snap your fingers and have a lamp.

What role can art play in a community of people?
It can certainly inspire people. You don't have to make something to appreciate it. If you see something that impresses you it might just jog you into doing something for yourself.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
My father prepared me for this occupation. I've always been a mechanic and he worked me pretty hard. I took what learned from him into the field. Ultimately I choose tile setting because it was unlike any other trade. Because of its aesthetic points, it fit me quite well. But you should realize what your strengths are and employ them as quickly as you can. At that point you begin to evolve into what may be meant to be. At the same time, there's a training period for techniques. Initially it might seem mechanical but depending on your vision it can twist and turn and become some form of art.

Career Dialogue with Anita Benson, Watercolor Painter

What do you say when someone asks you, "What do you do for a living?"
I say I'm an artist.

What are some of the jobs you've had throughout your career?
I started off as a playground supervisor. Once I got married I had part-time jobs as a bookkeeper and a window decorator. That was my only art related job until I finished college. Then I immediately started teaching art classes at the college level for 25 years.

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
I would say my mural painting is the most interesting, and there are 2 pieces. One was a mural for Homescapes in Pacific Grove to fill up the back room. It was a 360-degree view of Pacific Grove, including the ceiling. I wanted a feeling of my love for the town, a joyous feeling so people would want to spend time in the room. The second mural was one that I did with my friends who had gotten together for a food kitchen in Seaside. I assembled 7 different artists, drew lines on the wall, and we each took a section. It was very impromptu, but it all came together as a landscape of California. We did it to try to help the kitchen and spruce up the place.

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
I think the world of art, which is teaching, framing, museum work, gallery work, and art restoration…those things pay and are reliable. Selling art does happen but it's too erratic to count on, and I think it's very important to have many skills that relate to art. But you can't rely on your paintings or sculpture to make a living on. If you do, you'll have to prostitute your work and have to paint in order to sell, so you come up with things less creative.

What are the advantages and disadvantages of being an artist?
The advantage is that it feeds your addiction. If you're an artist you're addicted to creating. For me, I feel emotionally and physically uncomfortable if I'm not painting. So the advantage is the joy I get from doing it. The main disadvantage is not having a reliable income and having to seek out other ways to support my habit, which is painting.

Describe the tools you use for your job and why they are important?
The tools I use are basically brushes, paper and canvas. But my specific tools are different every time I work because I like to experiment with new materials. I sometimes work with sticks, my fingers, and I try different materials on canvas and on paper.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
As the old saying goes, creation is about 99% perspiration and 1% inspiration, and that's really true. The number one tool is discipline and number 2 would be tenacity. A knowledge of art history and contemporary art. If you're just going to become an artist without that background you're just going to repeat what's been done before and you won't add to the art form.

Can a person be taught to be a good artist?
I think you can teach a person discipline and how to think and how to research and you can teach art history. After that I think it's up to the artist. You can introduce them and inspire them, but the creativity has to come from inside. That comes from hours and years of developing your own personal style. It's almost like a meditation, a very personal occurrence.

How do you promote yourself and your art?
I make sure to submit publicity to the newspapers about my shows and after that it kind of takes care of itself. If I do get an interview it's because I've been asked. I don't go out and pound on the streets and galleries. I've been in my studio since 1982. It's open to the public sometimes, but I prefer not to be interrupted while I am working.

What attracted you to this type of work? What keeps you wanting to do it?
Well like I said, it's an addiction. Once you become an artist, you can't help but make art. I go into a depression if I don't make art for more than a month or so. And I've been that way since I was about 4 years old- I spent hours and hours alone in my room drawing and painting.

What role can art play in a community of people?
I think that art can express what people feel on a deeper level than words. Art is also the voice of the times. I think it also adds joy. I was in East Berlin before the wall came down and there was no art or color there; everything was gray. We don't notice how important color and shape are until you're not living with it.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
I worked seriously at my art throughout my childhood and college, and I went on and got a master's degree because I didn't expect to make a living from selling my paintings. I knew that teaching could provide a good living, and I got to be with students and encourage them. I think that we need artists and artists should be willing to dedicate their life to art, because it is such a demanding mistress, as they would say. You need to be in the studio almost all the time. If you just want to dabble, then you can't expect much in the way of progressing and having other people find interest in your work. I also keep up on current art trends through magazines and art shows.

Career Dialogue with Berta Jones, Fiber Artist/Weaver

What do you say when someone asks you, "What do you do for a living?"
I retired over 20 years ago. It isn't necessary anymore to make a living. My goals have always centered on pushing my handwork and knowledge further along an upward path. There are still a few challenges waiting.

What are some of the jobs you've had throughout your career?
I taught weaving at Monterey Peninsula College.

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
Pacific Grove has a "once a year put anything on the sidewalk for trash pick up," and while walking home from work one day I found the front of a very large television cabinet. It reminded me of the color disasters that came out in the early days. So I took it home and wove a mixture of colors into the screen. I wanted to make something that would replicate the early days of television and give me a chance to use weaving to do that. I was very successful at it.

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
You couldn't make a living as a weaver unless you can become established in a colony or in an atmosphere where other artists are also making their living. But it is a job of freedom for those trying to escape from basic jobs.

What are the advantages and disadvantages of being an artist?
The advantages are compatibility, conversations, and events shared with friends. The disadvantages are the uncertainty, the doubt, and thinking about when and what to do next.

Describe the tools you use for your job and why they are important?
The basic tool is a loom of some kind. And I use shuttles and winders and yarn counters. I use a great variety of materials for weaving. Whatever fiber that has been produced by man can be woven into something. Basic framework weaving and finger weaving has been done since caveman days.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
A studious background, deep and sincere honesty, careful planning, the knowledge of many techniques, and an original approach.

Can a person be taught to be a good artist?
No. they can be a good copyist but not a thinker. They can have technique but cannot be a designer.

How do you promote yourself and your art?
I don't attempt to promote myself. Word of mouth and more people that come back for the weaving. I do exhibit at conferences and I have had shows in several places and been published in a couple magazines.

What attracted you to this type of work? What keeps you wanting to do it?
I think a challenge of developing even an old standard pattern with the newer yarns that are offered now, and doing something that no one has ever tried before. Or reproducing something I was successful with and turns out to provide a little income too.

What role can art play in a community of people?
Art is just a 3-letter word. But in practice it has many faces and even more practitioners. It gives everyone the chance to consider a world to explore. Some communities respond to art, some don't. If you can locate a group in a community who show and are appreciated in a community, then it's worthwhile getting there. But most communities have so many variations of what is appealing that it's a small circle of artists who gather together.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
Look for exposure in galleries and exhibit every place you're asked to. Classrooms and museums? Study there. Libraries, slide shows, and competitions? Enter them. And compare yourself to commercial works. I'm still preparing for this occupation, still thinking about what I can do next and what I can do after that.

Career Dialogue with Charlie Abildgaard, Wood and Stone Sculptor

What do you say when someone asks you, "What do you do for a living?"
I tell them I'm retired but that I make sculptures.

What are some of the jobs you've had throughout your career?
Well, for 40 or more years I was a pediatric hematologist. I was a professor of pediatrics at UC Davis until I retired.

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
The most interesting one is a unique piece of buckeye about 8 feet tall. It was actually a log we found down along the creek near by here. Somebody had sawed part of it off and I brought it up thinking I could use it for firewood. I cut the bottom off with a chainsaw and it stood up and it was a very curvy figure, way too good for the fireplace. I've done a number of things with buckeye since then; it's an interesting wood to work with.

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
I think it is, but it's probably very difficult to totally make a living from it, except for those few individuals who get recognized and have a following. If you start out with that in mind, you may have to have other sources of support because you may not be able to live just on your art alone.

What are the advantages and disadvantages of being an artist?
The main advantage is that you're doing what you want to do. The disadvantage is that it may be very difficult to do that and only that.

Describe the tools you use for your job and why they are important?
I use mostly hand tools. I use some electric tools, but if I'm working with wood I use a hammer and chisel, rasps, and do sanding with some electric tools if it's a large piece. With stone tools it depends on the stone. You can use rasps, knives, and sanders. With alabaster you can use a chisel. You can use a diamond blade saw to cut granite. If I'm sawing or dry grinding, I wear masks, goggles, and ear protection.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
I think you have to have good knowledge and experience with the materials you're working with: what tools to use, how to use them, where to get them. The skills come from practice. My skills are mostly self-taught and so it's a matter of just doing it. I took a class about 40 years ago in Chicago. The things I learned were interesting, but I've never made use of them. Most of it had to do with making molds and statues in various parts.

Can a person be taught to be a good artist?
I think they can be taught the skills, but I think that some of it has to come from the individual and I don't know that you can teach that.

How do you promote yourself and your art?
Not very well. I'm in a number of cooperative galleries. I go to a few local art fares, I don't travel around much to do that because sculpture is hard to transport.

What attracted you to this type of work? What keeps you wanting to do it?
I started first about 45 years ago carving wood and have always like to do things with my hands. It was really a nice leisure activity throughout my medical career. This also keeps me busy during retirement. I just derive a lot of pleasure from all of this.

What role can art play in a community of people?
Art can express a lot of things. In that respect it can serve the community. It also benefits people because art allows people to participate. Not that they'd all become artists but a lot of people could do a lot more than they recognize. That's why teaching art is very beneficial.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
Well since it's not really a primary occupation, I've been mostly self-taught. See artwork and pay attention to the kind of things that stimulate your own work. I don't have any real answers for new or struggling artists except that they should do what they feel they want to do, do not do something just to produce something. Sticking with what they feel is right for them is the most important.

Career Dialogue with Lisa Morgan, Writer

What do you say when someone asks you, "What do you do for a living?"
I tell them that I write and create art.

What are some of the jobs you've had throughout your career?
Primarily, my career has been in marketing but prior to that I was a hairdresser. I taught color classes to various agencies and salons. I've been involved in art for most of my life in some way.

What's the most interesting piece of art you've worked on? What did you want it to accomplish?
The most interesting piece I've worked on is a painting of Asilomar beach that's evolved over time. I think that my muse resides there and so it's almost a portrait of my muse. As I look at it I can see the sunrise or set- it changes as the light changes and it really speaks to my soul. I did it for myself. I wanted to be able to go to the place that I loved the most on earth anytime I wanted to go, and have it look the way that it looked the day that I decided to do this.

Is it feasible to consider art as a way of making a living? If so, why and what should one expect?
Yes it is, but that's difficult since art is such a subjective thing. Particularly so for the collector, and that directly affects the artist. You need to learn the business side if you're going to succeed and you need to be good at interacting with people (which a lot of artists are not). You also need not to assume that you know what people like. You may be in love with your piece but no one else likes it. You need to know how to accept that. It takes a great deal of resilience to be an artist and be successful at it, because a lot of people will reject your work.

What are the advantages and disadvantages of being an artist?
The advantages are being able to express any emotion, any thought, any concept or place, artistically. You can show people a part of yourself in a way that other people don't have the ability to. There are few professions that give you that sort of freedom. The disadvantages are primarily financial. If you are an artist and you're committed, you'll probably choose to use the best quality materials. That comes at a great cost and you have to eat. If you're going to market yourself, that costs too. You need to think about all that and work it into your plan.

Describe the tools you use for your job and why they are important?
If I'm painting I'm using canvass and brushes and paint. When I'm doing stained glass I'm using lead and zinc and all kinds of horrible, awful chemicals. My workspace differs…I do a lot of sketching on site, but I do actual painting, production, and design work in the studio.

What knowledge, skills, and abilities do you believe are the most important to succeed as an artist in your field?
There are some basics in art that every artist should have and it doesn't depend on the medium. You need to understand color theory, balance, the use of light, and white and dark space. You should have a sense of different art forms- what they're good for expressing and what they're not good for expressing so if you break or bend the rules you know what you're doing.

Can a person be taught to be a good artist?
I think that people are born to be or not to be artists. I think that you can improve- if you weren't born to be an artist you can improve your skills but I doubt you'll ever make a huge mark on the world. But then I've met people who have never had a lesson and are very successful in commercial art.

How do you promote yourself and your art?
I tend to promote myself one on one. I'm not very shy. I have the ability to walk into a business, a gallery, a shop, and take a look at what they're doing to see if my stuff fits in. If I think it does I'll tell them why and if they're interested they'll pick it up. It's very successful. Sometimes you can create more demand that way.

What attracted you to this type of work? What keeps you wanting to do it?
I have never been happy sitting idle. I've always needed to feel like I was creating something. I've been that way since I was a child and I still am very much that way. I have a deep need to create.

What role can art play in a community of people?
It gets them talking about deeper issues than they might be discussing. It gets them talking about things that they may not usually talk about. Among artists, you get to talk shop in a way that you can't usually talk about art.

How did you prepare yourself for this occupation? What is your advice for new or struggling artists?
Practice, practice and more practice. I've taken up just about every art and craft that exists. I call myself the jack-of-all-trades and master of none, but that's only because there's always something new to learn. For new artists, get to know artists have made it or at least have some sort of visibility…someone who has weathered the road and can give some advice on what that's like. They will talk to you about the basics you need to know. It's also a good way to find out about the social aspects of being an artist. If you become a successful artist, galleries will show your work and people will want to interview you and talk to you. You will have to be able to do that and do it well, whether you like to or not.

Part Three: Artistic Occupations - 2001

	Education/Training Level	Hourly Wage
Actors	Bachelor degree	-
Architects, Except Landscape and Naval	Bachelor degree	$30.94
Architectural Drafters	Post-secondary training	$21.94
Art Directors	Bachelor + work exp	$35.56
Art, Drama, and Music Teachers, Postsecondary	Doctoral degree	-
Automotive Master Mechanics	Long-term OJT	$17.01
Automotive Specialty Technicians	Long-term OJT	$17.01
Boat Builders and Shipwrights	Long-term OJT	$20.63
Camera Operators, Television, Video, and Motion Picture	Post-secondary training	$23.26
Cartoonists	Bachelor degree	$25.43
Choreographers	Post-secondary training	$19.49
Commercial and Industrial Designers	Bachelor degree	$26.32
Composers	Bachelor degree	-
Construction Carpenters	Long-term OJT	$20.63
Dancers	Post-secondary training	$12.52
Desktop Publishers	Post-secondary training	$16.15
Directors- Stage, Motion Pictures, Television, and Radio	Bachelor + work exp	-
Electrical Power-Line Installers and Repairers	Long-term OJT	$26.42
Electromechanical Equipment Assemblers	Post-secondary training	$10.40
Electronic Drafters	Post-secondary training	$22.16
Engine and Other Machine Assemblers	Work experience	$12.23
Engravers/Carvers	Long-term OJT	$10.84
Exhibit Designers	Bachelor degree	$18.33
Fabric and Apparel Patternmakers	Long-term OJT	$16.64
Fashion Designers	Bachelor degree	$29.79
Film and Video Editors	Post-secondary training	$26.40
Graphic Designers	Bachelor + work exp	$20.49
Industrial Machinery Mechanics	Long-term OJT	$19.45
Interior Designers	Bachelor degree	$21.70
Landscape Architects	Bachelor degree	$26.34
Machinists	Long-term OJT	$15.70
Maintenance and Repair Workers, General	Work experience	$14.23
Makeup Artists, Theatrical and Performance	Post-secondary training	$17.96
Marine Architects	Bachelor degree	$28.61
Mechanical Drafters	Post-secondary training	$20.41
Mechanical Engineering Technicians	Associate degree	$20.87
Mechanical Engineers	Bachelor degree	$31.34
Millwrights	Long-term OJT	$20.78
Model Makers, Metal and Plastic	Long-term OJT	$18.18
Museum Technicians and Conservators	Bachelor degree	$18.95
Music Arrangers and Orchestrators	Bachelor degree	-
Music Directors	Bachelor degree	-
Musicians, Instrumental	Bachelor degree	-
Oral and Maxillofacial Surgeons	Professional degree	$57.27

Painters and Illustrators	Bachelor degree	$20.14
Photographers, Scientific	Bachelor degree	$15.31
Photographic Retouchers and Restorers	Moderate-term OJT	$14.19
Pipe Fitters	Long-term OJT	$20.60
Plumbers	Long-term OJT	$20.60
Poets and Lyricists	Bachelor degree	$28.50
Potters	Long-term OJT	$13.56
Press and Press Brake Machine Setters and Set-Up Operators, Metal and Plastic	Moderate-term OJT	$11.63
Producers	Work experience	-
Professional Photographers	Bachelor degree	$15.31
Rough Carpenters	Long-term OJT	$20.63
Sculptors	Bachelor degree	$20.14
Set Designers	Bachelor degree	$18.33
Ship Carpenters and Joiners	Long-term OJT	$20.63
Singers	Bachelor degree	-
Sketch Artists	Bachelor degree	$20.14
Structural Iron and Steel Workers	Long-term OJT	$21.12
Talent Directors	Work experience	-

Methodology

Using the O*NET occupational classification system and database, and using a two out of three criteria for artistic indicators, 62 occupations (out of a total of 900) were identified as 'artistic occupations.' The three indicators included:

a) artistic career interest area
b) visualization abilities
c) fine arts knowledge

Wage data published by the U.S. Department of Labor, Bureau of Labor Statistics, are used to provide the wage information, and the education level information comes from the Skill Matrix Network (http://www.skillmatrixnetwork.com).

Special Study: Top 200 (or so) Occupations in California - 2001

	Typical Education Level	Mean	Size	Rate	Annual Openings
Accountants and Auditors	Bachelor degree	$24.67	106,400 - 127,400	19.7	3910
Adjustment Clerks	Short-term OJT	$14.81	40,700 - 55,900	37.3	1830
Administrative Services Managers	Bachelor + work exp	$26.34	48,500 - 60,200	24.1	2120
Aeronautical and Astronautical Engineers	Bachelor degree	$34.55	12,800 - 14,300	11.7	370
Aircraft Mechanics	Post-secondary training	$21.31	14,800 - 17,800	20.3	630
Amusement and Recreation Attendants	Short-term OJT	$6.79	34,400 - 43,500	26.5	1620
Animal Caretakers-Except Farm	Short-term OJT	$9.07	10,200 - 13,500	32.4	500
Artists and Related Workers	Bachelor degree	$20.14	22,100 - 29,700	34.4	1290
Assemblers and Fabricators, Wood/Metal	Long-term OJT	$9.33	117,300-141,300	20.5	4710
Automotive Body and Related Repairers	Long-term OJT	$17.24	19,800 - 22,400	13.1	880
Automotive Mechanics	Long-term OJT	$17.01	70,200 - 85,400	21.7	3450
Bakers-Bread and Pastry	Long-term OJT	$10.49	21,100 - 24,000	13.7	880
Bartenders	Short-term OJT	$7.80	40,000 - 42,300	5.8	1990
Bill and Account Collectors	Moderate-term OJT	$13.56	31,400 - 44,800	42.7	2350
Billing, Cost, and Rate Clerks	Moderate-term OJT	$13.20	38,300 - 48,100	25.6	1840
Biological Scientists	Doctoral degree	$22.34	10,200 - 15,300	50	780
Bookkeeping and Accounting Clerks	Moderate-term OJT	$14.36	197,900 - 209,100	5.7	4920
Bus and Truck Mechanics	Long-term OJT	$17.82	20,100 - 23,500	16.9	820
Bus Drivers	Moderate-term OJT	$13.49	32,100 - 37,600	17.1	1170
Bus Drivers-School	Moderate-term OJT	$12.12	25,000 - 32,300	29.2	1240
Carpenters	Long-term OJT	$20.63	96,600 - 114,900	18.9	4660
Cashiers	Short-term OJT	$8.89	307,100 - 375,800	22.4	21750
Child Care Workers	Post-secondary training	$8.54	37,700 - 50,600	34.2	1720
Civil Engineers-Including Traffic	Bachelor degree	$30.37	25,200 - 30,200	19.8	1030
Combined Food Prep, Service Workers	Short-term OJT	$7.14	181,300 - 211,000	16.4	13780
Communication, Trans, Utilities Oper Mgrs	Work experience	$28.28	17,400 - 21,100	21.3	710
Compliance Officers, Enforcement Inspectors	Bachelor degree	$20.79	23,100 - 26,500	14.7	790
Computer Database Administrators	Bachelor degree	$28.23	12,300 - 20,500	66.7	1090
Computer Engineers	Bachelor degree	$36.36	53,700 - 94,700	76.4	4560
Computer Programmer Aides	Bachelor degree	$30.45	9,900 - 10,700	8.1	400
Computer Programmers	Bachelor degree	$30.45	74,600 - 86,700	16.2	3710
Computer Science Teachers, Postsecondary	Doctoral degree	$27.04	4,800 - 8,000	66.7	500
Computer Service Techs	Post-secondary training	$17.91	6,400 - 8,000	25	260
Computer Support Specialists	Work experience	$22.83	57,600 - 109,400	89.9	5700
Computer Systems Analysts	Bachelor degree	$30.44	59,400 - 113,000	90.2	5900
Concrete and Terrazzo Finishers	Long-term OJT	$15.58	16,600 - 19,000	14.5	450
Construction Managers	Work experience	$35.80	23,700 - 29,400	24.1	1040
Cooks-Institution or Cafeteria	Moderate-term OJT	$10.57	21,900 - 24,100	10	820
Cooks-Restaurant	Moderate-term OJT	$8.97	87,500 - 109,000	24.6	4720

	Typical Education Level	Mean	Size	Rate	Annual Openings
Cooks-Short Order	Short-term OJT	$8.32	12,800 - 15,800	23.4	670
Cooks-Specialty Fast Food	Short-term OJT	$6.76	53,600 - 66,500	24.1	2860
Correction Officers and Jailers	Moderate-term OJT	$24.97	30,800 - 42,900	39.3	2220
Cost Estimators	Bachelor + work exp	$25.31	16,600 - 20,000	20.5	560
Counter and Rental Clerks	Short-term OJT	$8.73	47,600 - 62,200	30.7	3840
Counter Attendants-Food	Short-term OJT	$7.53	32,600 - 37,500	15	3400
Crushing and Mixing Machine Operators	Moderate-term OJT	$13.13	11,600 - 13,200	13.8	450
Customer Service Reps-Utilities	Short-term OJT	$14.81	22,800 - 27,000	18.4	1010
Data Entry Keyers-Except Composing	Post-secondary training	$11.45	39,900 - 45,300	13.5	870
Demonstrators and Promoters	Short-term OJT	$10.68	20,300 - 30,500	50.2	1710
Dental Assistants	Post-secondary training	$13.90	32,900 - 47,100	43.2	2030
Dental Hygienists	Associate degree	$27.56	17,300 - 24,400	41	1180
Designers--Except Interior Designers	Bachelor + work exp	$29.79	22,800 - 31,100	36.4	1220
Dining Room Attendants and Bar Helpers	Short-term OJT	$6.81	50,300 - 53,300	6	1880
Dispatchers--Except Police, Fire, Ambulance	Moderate-term OJT	$15.34	18,500 - 22,800	23.2	770
Drafters	Post-secondary training	$21.96	28,400 - 31,800	12	1060
Driver/Sales Workers	Moderate-term OJT	$11.34	32,000 - 36,100	12.8	1090
Drywall Installers	Long-term OJT	$19.60	12,000 - 14,700	22.5	450
Duplicating Machine Operators	Short-term OJT	$11.35	9,300 - 12,000	29	580
Education Administrators	Masters + work exp	$19.80	38,700 - 48,600	25.6	2090
Electrical and Electronic Assemblers	Post-secondary training	$12.23	30,200 - 36,600	21.2	1240
Electrical and Electronic Engineering Techs	Associate degree	$21.14	51,100 - 62,000	21.3	2250
Electrical and Electronic Engineers	Bachelor degree	$31.92	59,200 - 77,400	30.7	3280
Electrical Equip Assemblers-Precision	Work experience	$21.07	38,600 - 43,600	13	1400
Electricians	Long-term OJT	$23.59	50,500 - 59,700	18.2	2050
Electronic Semiconductor Processors	Post-secondary training	$13.42	12,200 - 17,400	42.6	740
Emergency Medical Technicians	Post-secondary training	$13.51	12,600 - 16,800	33.3	780
English Language Teachers, Postsecondary	Doctoral degree	$28.22	7,600 - 10,400	36.8	530
File Clerks	Short-term OJT	$10.24	36,000 - 44,400	23.3	2240
Financial Analysts, Statistical	Bachelor degree	$31.56	7,300 - 10,600	45.2	470
Financial Managers	Bachelor + work exp	$36.03	79,200 - 95,700	20.8	3030
Fire Fighters	Long-term OJT	$22.57	33,300 - 36,000	8.1	1120
Fire Fighting and Prevention Supervisors	Work experience	$30.85	8,900 - 10,100	13.5	440
First-Line Supervisors/Mgrs-Construction	Work experience	$26.85	29,300 - 35,900	22.5	1530
First-Line Supervisors/Mgrs-Helpers/Laborers	Work experience	$25.04	15,700 - 19,300	22.9	830
First-Line Supervisors/Mgrs-Mechanical/Repair	Work experience	$25.04	38,900 - 46,400	19.3	2010
First-Line Supervisors/Mgrs-Production	Work experience	$21.49	51,600 - 60,100	16.5	2420
First-Line Supervisors/Mgrs-Transportation	Work experience	$21.40	11,900 - 14,300	20.2	580
Flight Attendants	Short-term OJT	$23.32	14,700 - 20,600	40.1	970
Food Preparation Workers	Short-term OJT	$8.04	135,400 - 155,100	14.5	9970

	Typical Education Level	Mean	Size	Rate	Annual Openings
Food Servers-Outside	Short-term OJT	$8.87	5,200 - 7,000	34.6	690
Food Service and Lodging Managers	Work experience	$19.02	30,100 - 36,200	20.3	1190
General Managers and Top Executives	Bachelor + work exp	$38.22	366,600 - 452,200	23.3	15730
General Office Clerks	Post-secondary training	$11.76	354,000 - 435,900	23.1	19130
Graduate Assistants, Teaching	Masters degree	$14.48	8,900 - 12,100	36	610
Guards and Watch Guards	Short-term OJT	$8.90	124,900 - 176,900	41.6	8960
Hairdressers and Hairstylists	Post-secondary training	$9.82	25,500 - 28,500	11.8	990
Hand Packers and Packagers	Short-term OJT	$8.01	99,000 - 133,100	34.4	6280
Heating, AC, and Refrigeration Mechanics	Long-term OJT	$19.34	17,400 - 22,100	27	830
Helpers-Carpenters and Related	Short-term OJT	$11.09	18,000 - 21,800	21.1	1300
Helpers-Painters and Related	Short-term OJT	$9.94	5,800 - 7,000	20.7	420
Helpers-Plumbers and Related	Short-term OJT	$11.34	7,000 - 7,900	12.9	430
Home Health Care Workers	Post-secondary training	$10.02	23,300 - 34,600	48.5	1530
Hosts and Hostesses-Restaurants	Short-term OJT	$7.13	32,700 - 40,800	24.8	1930
Hotel Desk Clerks	Short-term OJT	$8.76	16,300 - 19,000	16.6	950
Human Services Workers	Associate degree	$13.15	17,400 - 27,200	56.3	1560
Industrial Engineers-Except Safety	Bachelor degree	$32.40	14,100 - 16,400	16.3	450
Industrial Production Managers	Bachelor + work exp	$32.54	23,400 - 25,700	9.8	660
Industrial Truck and Tractor Operators	Short-term OJT	$12.74	40,400 - 49,100	21.5	1400
Info Tech, Engineering, Math, Nat Sci Mgrs	Bachelor + work exp	$39.39	47,200 - 68,600	45.3	3150
Inspectors, Testers, Graders-Precision	Work experience	$12.84	20,200 - 20,800	3	480
Instructional Coordinators	Bachelor degree	$18.02	9,700 - 13,700	41.2	520
Instructors and Coaches-Sports	Long-term OJT	$18.87	37,400 - 48,600	29.9	1570
Instructors, Non-Vocational Education	Work experience	$22.91	20,000 - 28,400	42	1090
Insurance Adjusters, Exam, Investigators	Bachelor degree	$23.58	16,900 - 21,900	29.6	820
Insurance Claims Clerks	Moderate-term OJT	$20.42	13,900 - 17,300	24.5	600
Insurance Policy Processing Clerks	Moderate-term OJT	$20.42	14,300 - 17,200	20.3	490
Interview Clerks-Exc Personnel, Welfare	Short-term OJT	$13.12	12,900 - 16,600	28.7	840
Janitors and Cleaners--Except Maids	Short-term OJT	$9.20	195,700 - 227,900	16.5	7820
Laborers, Landscaping/Groundskeeping	Short-term OJT	$10.14	128,600 - 169,900	32.1	8580
Laundry, Dry Clean Machine Operators	Moderate-term OJT	$7.97	13,700 - 16,500	20.4	650
Lawyers	Professional degree	$51.52	47,200 - 61,100	29.4	1980
Librarians-Professional	Masters degree	$24.17	11,000 - 12,700	15.5	470
Library Assistants, Bookmobile Drivers	Short-term OJT	$11.27	11,900 - 14,900	25.2	950
Licensed Vocational Nurses	Post-secondary training	$17.91	49,300 - 59,600	20.9	2200
Loan and Credit Clerks	Short-term OJT	$14.78	22,700 - 25,000	10.1	480
Loan Officers and Counselors	Bachelor degree	$21.07	22,900 - 27,300	19.2	990
Machine Forming Operators-Metal, Plastic	Moderate-term OJT	$10.73	11,500 - 13,300	15.7	490
Machinery Maintenance Mechanics	Long-term OJT	$19.45	23,000 - 27,400	19.1	1010
Machinists	Long-term OJT	$15.70	47,000 - 55,700	18.5	1890
Maids and Housekeeping Cleaners	Short-term OJT	$7.91	82,300 - 97,700	18.7	3220
Mail Clerks, Postal-Exc Mail Machine Ops	Short-term OJT	$10.26	12,000 - 14,500	20.8	560

	Typical Education Level	Mean	Size	Rate	Annual Openings
Maintenance Repairers, General Utility	Work experience	$14.23	115,400 - 134,900	16.9	4750
Management Analysts	Bachelor + work exp	$31.37	16,000 - 20,400	27.5	580
Marketing, Advertising, Public Relations Mgrs	Bachelor + work exp	$40.16	63,900 - 82,300	28.8	2860
Mechanical Engineers	Bachelor degree	$31.34	23,100 - 29,000	25.5	1090
Medical and Clinical Lab Assistants	Associate degree	$15.85	14,700 - 20,000	36.1	750
Medical and Clinical Lab Technologists	Bachelor degree	$24.74	13,500 - 17,000	25.9	540
Medical Assistants	Post-secondary training	$13.21	39,500 - 70,000	77.2	4400
Medical Records Technicians	Associate degree	$13.45	9,800 - 17,000	73.5	1050
Medicine and Health Services Managers	Bachelor + work exp	$33.38	19,300 - 28,200	46.1	1310
Messengers	Short-term OJT	$10.29	14,500 - 16,800	15.9	600
New Accounts Clerks	Work experience	$13.26	10,500 - 12,400	18.1	560
Numerical Machine Tool Ops-Metal, Plastic	Moderate-term OJT	$14.91	8,300 - 11,600	39.8	550
Nurse Aides, Orderlies, and Attendants	Post-secondary training	$9.04	88,500 - 107,900	21.9	3310
Operating Engineers	Long-term OJT	$24.65	13,500 - 15,600	15.6	470
Order Clerks-Materials, Service	Short-term OJT	$12.93	47,700 - 55,300	15.9	1990
Order Fillers-Wholesale and Retail Sales	Short-term OJT	$10.66	28,800 - 37,000	28.5	1610
Packaging and Filling Machine Operators	Moderate-term OJT	$10.00	43,300 - 54,100	24.9	2350
Painters and Paperhangers-Construction	Long-term OJT	$18.64	34,700 - 41,400	19.3	1640
Paralegal Personnel	Associate degree	$23.43	12,400 - 20,800	67.7	980
Parking Lot Attendants	Short-term OJT	$7.35	13,400 - 17,700	32.1	700
Payroll and Timekeeping Clerks	Moderate-term OJT	$15.38	18,600 - 19,000	2.2	410
Personal and Home Care Aides	Short-term OJT	$8.40	13,600 - 19,800	45.6	1060
Personnel Clerks-Except Payroll	Short-term OJT	$14.97	19,700 - 22,100	12.2	640
Personnel, Training, Labor Relations Mgrs	Bachelor + work exp	$30.23	26,100 - 33,300	27.6	1420
Pharmacists	Professional degree	$34.96	16,900 - 20,000	18.3	820
Pharmacy Technicians	Moderate-term OJT	$13.36	10,700 - 13,300	24.3	560
Physical Therapists	Masters degree	$32.93	11,000 - 14,800	34.5	570
Physical Therapy Assistants and Aides	Moderate-term OJT	$10.86	6,800 - 10,000	47.1	530
Physicians and Surgeons	Professional degree	$55.19	42,900 - 63,900	49	2930
Physician's Assistants	Bachelor degree	$27.09	5,700 - 9,600	68.4	520
Plasterers and Stucco Masons	Long-term OJT	$16.95	8,200 - 10,900	32.9	520
Plumbers, Pipefitters, and Steamfitters	Long-term OJT	$20.60	31,300 - 35,400	13.1	830
Police and Detective Supervisors	Work experience	$35.60	9,500 - 11,000	15.8	450
Police Patrol Officers	Moderate-term OJT	$25.42	48,200 - 65,800	36.5	3280
Printing Press Machine Operators	Long-term OJT	$14.67	12,400 - 14,600	17.7	510
Producers, Directors, and Actors	Post-secondary training	$43.48	41,000 - 55,300	34.9	2510
Production Inspectors, Testers, Graders	Work experience	$12.84	45,600 - 48,700	6.8	1380
Production, Planning, Expediting Clerks	Short-term OJT	$16.83	33,500 - 36,200	8.1	680
Property and Real Estate Managers	Bachelor degree	$27.39	18,500 - 24,000	29.7	840
Psychologists	Doctoral degree	$44.60	11,400 - 14,900	30.7	590
Public Relations Specialists, Publicity Writers	Bachelor degree	$22.58	10,200 - 13,600	33.3	650

	Typical Education Level	Mean	Size	Rate	Annual Openings
Purchasing Agents-Exc Wholesale, Retail	Bachelor degree	$23.08	27,300 - 33,000	20.9	1350
Purchasing Managers	Bachelor + work exp	$26.73	20,500 - 24,100	17.6	860
Radiologic Technologists	Post-secondary training	$21.73	12,800 - 17,400	35.9	670
Receptionists and Information Clerks	Short-term OJT	$10.83	159,800 - 211,400	32.3	8710
Recreation Workers	Bachelor degree	$9.79	36,900 - 44,500	20.6	1840
Registered Nurses	Associate degree	$27.09	172,100 - 221,200	28.5	8160
Reservation, Transportation Ticket Agents	Short-term OJT	$13.74	22,200 - 24,600	10.8	730
Residential Counselors	Work experience	$9.22	16,600 - 22,800	37.3	1070
Respiratory Care Practitioners	Associate degree	$21.22	8,100 - 12,800	58	630
Roofers	Long-term OJT	$15.77	14,100 - 15,200	7.8	610
Sales Agents and Placers-Insurance	Bachelor degree	$24.03	21,200 - 26,000	22.6	1020
Sales Agents-Advertising	Moderate-term OJT	$23.35	14,300 - 18,700	30.8	900
Sales Agents-Financial Services	Bachelor degree	$34.32	23,200 - 34,500	48.7	1350
Sales Reps, Non-Scientific-Except Retail	Moderate-term OJT	$22.74	122,600 - 145,600	18.8	5570
Sales Reps, Scientific-Except Retail	Moderate-term OJT	$28.12	55,900 - 69,500	24.3	2890
Salespersons, Retail	Short-term OJT	$9.91	423,100 - 500,900	18.4	23440
Salespersons-Parts	Moderate-term OJT	$14.23	34,300 - 38,200	11.4	1430
Secretaries, General	Work experience	$14.02	242,800 - 263,700	8.6	6220
Secretaries, Legal	Post-secondary training	$19.28	35,200 - 40,400	14.8	1140
Secretaries, Medical	Post-secondary training	$14.51	18,800 - 23,700	26.1	840
Sewing Machine Operators, Non-Garment	Moderate-term OJT	$7.26	16,300 - 19,200	17.8	530
Sewing Machine Operators-Garment	Moderate-term OJT	$7.26	77,200 - 84,100	8.9	1790
Sheet Metal Workers	Long-term OJT	$17.61	19,000 - 22,400	17.9	840
Social Workers-Exc Medical, Psychiatric	Masters degree	$16.90	27,700 - 37,200	34.3	1370
Social Workers-Medical and Psychiatric	Masters degree	$17.38	18,300 - 26,000	42.1	1060
Speech Pathologists and Audiologists	Masters degree	$27.52	8,200 - 12,700	54.9	610
Stock Clerks-Sales Floor	Short-term OJT	$10.66	137,900 - 142,900	3.6	2620
Stock Clerks-Stockroom, Warehouse	Short-term OJT	$9.98	99,000 - 122,100	23.3	3980
Surgical Technicians	Associate degree	$16.01	4,600 - 7,800	69.6	470
Taxi Drivers and Chauffeurs	Short-term OJT	$9.22	8,200 - 10,900	32.9	430
Teacher Aides, Educational Assts-Clerical	Work experience	$10.62	55,300 - 79,100	43	3150
Teacher Aides, Paraprofessional	Work experience	$10.62	90,900 - 136,500	50.2	5860
Teachers, Kindergarten	Masters degree	$21.62	18,600 - 23,500	26.3	940
Teachers, Preschool	Post-secondary training	$10.53	38,100 - 50,900	33.6	2230
Teachers-Elementary School	Masters degree	$23.59	176,200 - 220,900	25.4	9060
Teachers-Secondary School	Masters degree	$24.80	128,500 - 176,900	37.7	9720
Teachers-Special Education	Masters degree	$26.62	39,000 - 58,700	50.5	2380
Teachers-Vocational Education, Training	Bachelor degree	$21.19	34,700 - 43,700	25.9	1310
Telemarketers, Solicitors, Related Workers	Short-term OJT	$11.58	42,900 - 65,100	51.7	3610
Telephone and Cable TV Installers	Long-term OJT	$18.28	22,800 - 29,200	28.1	1490
Tire Repairers and Changers	Short-term OJT	$9.45	7,300 - 8,400	15.1	450
Traffic, Shipping, and Receiving Clerks	Short-term OJT	$11.13	129,800 - 140,900	8.6	3360

	Typical Education Level	Mean	Size	Rate	Annual Openings
Travel Agents	Post-secondary training	$13.87	14,100 - 14,600	3.5	350
Truck Drivers, Heavy	Moderate-term OJT	$16.41	105,900 - 133,200	25.8	4450
Truck Drivers, Light	Short-term OJT	$11.91	140,600 - 184,800	31.4	6760
Ushers and Lobby Attendants	Short-term OJT	$7.69	11,500 - 15,000	30.4	590
Vehicle Washers and Equipment Cleaners	Short-term OJT	$7.84	35,700 - 42,100	17.9	1870
Vocational and Educational Counselors	Masters degree	$22.75	19,500 - 26,100	33.8	1180
Waiters and Waitresses	Short-term OJT	$6.75	204,500 - 245,600	20.1	16510
Water Treatment Plant Operators	Long-term OJT	$21.51	11,600 - 13,600	17.2	490
Welders and Cutters	Post-secondary training	$13.62	25,900 - 31,000	19.7	1230
Writers and Editors	Bachelor degree	$28.50	14,300 - 18,200	27.3	820

Methodology: The occupations in this report were selected by taking the top 200 occupations in terms of a) most new jobs, b) fastest growing jobs, and c) separations with positive growth rates. (Separations are job openings that result from workers retiring or leaving the occupation.) Non-occupations, or catchall occupational categories, were removed from the list, as well as a handful of occupations for which no wage data was available. This process resulted in a list of 211 occupations.

Notes: For comparison purposes, the hourly wage information for non-hourly occupations (e.g., teachers) are based on annual wage data divided by a yearly estimate of 2,000 hours. A few occupations that are surely among the State's fastest growing are not on this list due to a lack of employment projections for those (newer) occupations. Missing occupations include Computer Network Techs, Computer Network Administrators, and Webmasters/Website Designers.

Sources: 'California Projections of Employment' and 'OES Program' wage data from EDD's LMI Division (www.calmis.ca.gov), and the Skill Matrix Network for typical education and training levels (www.skillmatrixnetwork.com).

Training Directory

Agri Trade School

Address: 16801 Blackie Road, Salinas, CA 93907-8808
Phone: 831-663-2727
Fax: 831-663-2349
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? No

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	No
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	No	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	No	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Automotive Repair and Painting

Air Trails/Del Monte Aviation

Address: 130 Olmstead Way, Suite A, Monterey, CA 93940
Phone: 831-373-3201
Fax: 831-373-2352
Website: www.flydelmonteaviation.com
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? Yes

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	No	Services for the Disabled:	No
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	Yes	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Professional Pilot Training

Bethany College of the Assemblies of God

Address: 800 Bethany Drive, Scotts Valley, CA 95066
Phone: 800-843-9410
Fax: 831-461-1533
Website: http://www.bethany.edu
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? No
Accreditation: Accrediting Commission for Senior Colleges and Universities, Western Assoc. of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	Yes
Child Care Services On-Site:	Yes	GED Assistance:	Yes
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	Yes
Vocational Evaluation Services:	Yes	Distance/Online Learning:	Yes
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Degree Program(s) Offered

Addiction Studies (Bachelor)
Applied Ministries (Bachelor)
Biblical and Theological Studies (Bachelor)
Business (Associate)
Business (Bachelor)
Church Leadership (Bachelor)
Church Ministries (Associate)
Church Ministries (Bachelor)
Early Child Development (Associate)
Early Child Development (Bachelor)
Education (Master)
English (Bachelor)
General Ministries (Associate)
General Ministries (Bachelor)
General Studies (Associate)
Interdisciplinary Studies (Bachelor)
Liberal Arts (Bachelor)
Liberal Studies (Bachelor)
Multicultural Studies (Bachelor)
Music (Bachelor)
Psychology (Bachelor)
Social Sciences (Bachelor)
Teacher Education (Credential)
Teacher Education (Master)
Theater (Associate)
Theater (Bachelor)

Certificate Program(s) Offered

Addiction Studies
Teacher Education Program (TEP)

Cabrillo College

Address: 6500 Soquel Drive, Aptos, CA 95003
Phone: 831-479-6201
Fax: 831-479-5092
Website: http://www.cabrillo.cc.ca.us
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes
Accreditation: Western Association of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	Yes
Child Care Services On-Site:	Yes	GED Assistance:	Yes
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	Yes
Vocational Evaluation Services:	Yes	Distance/Online Learning:	Yes
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Degree Program(s) Offered

Account Clerk
Accounting/Finance
Administrative Assistant
American Studies
Anthropology
Applied Living Arts/Family Life
Archaeological Technology
Art (Studio)
Art History
Asian Studies
Astronomy
Bilingual Bicultural Studies
Biology
Building Inspection
Business (General)
Chemisrty
Computer Information Systems
Computer Science
Construction & Energy Management
Corrections
Culinary Arts & Hospitality Management
Dance
Dental Hygiene
Digital Publishing
Early Childhood Education
Economics
Engineering
Engineering Technology
English
Fire Service Management
French
General & Crop Production
General Science
Geography
Geology
German
Health Science/Community Health
History
International Studies
Journalism
Landscape Horticulture
Law Enforcement
Liberal Arts (transfer)
Liberal Arts and Sciences
Mathematics (General)
Medical Assistant
Medical Insurance Specialist
Medical Transcription
Multimedia
Music
Nursing (Associate Degree)
Office Assistant

Philosophy
Physical Education
Physics
Political Science
Psychology
Radiologic Technology
Real Estate
Small Business
Sociology
Spanish
Speech Communications
Theatre Arts
Women's Studies

Certificate Program(s) Offered

Account Clerk
Accounting/Finance
Administrative Assistant
Archaeological Survey and Excavation
Archaeological Technology
Archaeological Technology: Laboratory and Archival Research
Architecture Drafting
Building Inspection
Business (General)
Civil Survey Drafting
Computer Aided Drafting
Computer Animation
Computer Information Systems
Computer Information Systems: A+ Preparation
Computer Information Systems: Cisco Certified Networking Associate
Computer Information Systems: Cisco Certified Networking Professional
Computer Information Systems: Database Application Development
Computer Information Systems: Microsoft Certified Professional
Construction & Energy Management
Culinary Arts and Hospitality Management
Digital Publishing
Early Childhood Education
ECommerce
EKG Technician
Engineering Technology
Engineering Technology: Manufacturing Specialist
Entry Level Bookkeeping
Fire Service Management
Greenhouse Design & Management
Journalism
Landscape Maintenance
Magnetic Resonance Imaging
MammographMedical Assistant
Medical Insurance Specialist
Medical Receptionist
Medical Transcription
Multimedia
Nursing (Vocational)
Office Assistant
Phlebotomy Technician
Real Estate
Small Business
Vocational Gardening
Web Development
Welding

Caduceus Institute of Classical Homeopathy

Address: 516 Caledonia St., Santa Cruz, CA 95062
Phone: 831-466-0516
Fax: 831-466-3516
Website: http://www.homeopathyhome.com/caduceus
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	No
Public Transit Nearby:	No	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	No	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	Yes
Academic Advising:	No	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Homeopathy for Health Professionals
Acupuncture

California State University, Monterey Bay (CSUMB)

Address: 100 Campus Center, Seaside, CA 93955-8001
Phone: 831-582-3518
Website: http://www.csumb.edu
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? No
Accreditation: Western Association of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	Yes
Child Care Services On-Site:	Yes	GED Assistance:	Yes
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	Yes
Vocational Evaluation Services:	No	Distance/Online Learning:	Yes
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Degree Program(s) Offered

Collaborative Human Services
Earth Systems Science and Policy
Education
Global Studies
Human Communication
Integrated Studies

Liberal Studies
Management and International Entrepreneurship
Marine Science
Music and Performing Arts
Social and Behaivoral Sciences
Telecommunications, Multimedia, and Applied Computing
Teledramatic Arts and Technology
Visual and Public Art
World Languages and Cultures

Certificate Program(s) Offered

CLAD/BCLAD Multiple Subject Teaching Credential

Call for information.

Center for Employment Training

Address: 10 Blanca Lane, Watsonville, CA 95076
Phone: 831-728-4551
Fax: 831-728-1659
Website: ww.cet2000.org
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? No
Accreditation: Western Association of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	Yes
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	Yes	Distance/Online Learning:	No
Academic Advising:	Yes	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Account Clerk Bookkeeper
Automated Office Skills
Automotive Maintenance Technician
Automotive Specialist
Building Maintenance
Building Maintenance Service Technician
Building Trades
Child Care Provider
Commercial Foods
Computerized Office Administration
Computer Office Occupations
Custodial Services
Customized Service/Data Entry
Data Entry
Electrical Repair Specialist
Electronic Assembly
Electronic Technology
Electronic Tester
Forklift Operator/Warehouse Specialist
HVAC Maintenance Repair
HVAC Installation & Service Technician
HVAC Specialist
Light Gauge Welding
Machine Setup Operator

Machine Tool Operator
Medical Administrative Assistant
Medical Assistant
Medical Clerk
Medical Insurance Billing
Printing and Graphics
Retail Specialist
Shipping and Receiving Warehouse Operator
Touch Up and Rework Specialist
Truck Driver
Vehicle Operator
Welding

Central Coast College

Address: 480 South Main Street, Salinas, CA 93901
Phone: 800-92-ACHIEVE (922-2443)
Fax: 831-753-6485
Website: http://www.cccbus.com
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? Yes
Accreditation: Accrediting Council for Continuing Education and Training

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	No
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	No
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Diploma Program Offered

Accounting: Payroll
Computer & Network Support Specialist
Computer Office Administration: Administrative Assistant
Computer Office Administration: Office Assistant
Computer Office Administration: Secretary/Bookkeeper
Computer Specialist: Accounting
Computer Specialist: Administrative and Clerical
General Accounting
Medical Administrative Assistant/Biller
Medical Assisting
Medical Office Administration: Medical Receptionist
Medical Biller-Coder
Medical Transcriptionist
Microsoft Office User Specialist (MOUS) Program

Chapman University

Address: 99 Pacific Street #375-B, Monterey, CA 93940
Phone: 831-373-0945
Fax: 831-648-1326
Website: http://www.chapman.edu
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes
Accreditation: Western Association of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	No	Services for the Disabled:	Yes
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	Yes
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Program(s) Offered

Degree Programs for Working Adults:

Liberal Studies (BA)
Organizational Leadership (BA)
Social Science (BA)
Education with Professional Teaching Standards Emphasis (MA)
Human Resources (MS)
Psychology with Marriage & Family Therapy Emphasis (MA)

Credential Programs:

Multiple Subjects/CLAD
Single Subject

Certificate:

Certificate – CLAD
Human Resources Certification

College of Botanical Healing Arts

Address: 1821 17th Ave, Santa Cruz, CA 95062
Phone: 831-462-1807, 877-321-7346 Toll-Free
Fax: 831-462-9307
Website: http://www.cobha.org
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? Yes

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	No
Public Transit Nearby:	No	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	No
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	Yes
Academic Advising:	Yes	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Aromatherapy

The college offers advanced courses in the history of medicine, chemistry, botany, physiology, business and ethics and clinical internship.

Computer Trainers

Address: 200 Washington Street, Suite 107, Santa Cruz, CA 95060
Other location: 21 Brennan Street, Suite 6, Watsonville, CA 95076
Phone: 831-457-8007
Fax: 831-457-8077
Website: http://www.computertrainers-ca.com
Continuing Education Classes/Seminars? No

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	No
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	No	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Computer Operations
Computerized Administration
Computerized Bookkeeping
Computerized General Office
Computerized Medical Reception
Microsoft Office

Elischer's Driving School

Address: 737 S. Main Street, Salinas, CA 93901
Phone: 831-757-2028; 800-700-8444 Toll-Free
Fax: 831-899-1651
Other location: 2115 N. Fremont Street, Suite C, Monterey, CA 93940
Phone: 831-373-3311
Website: http://www.elischerdriving.com
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? No

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	No
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	No	Veteran Assistance/Approved:	No

Program(s) Offered

Teenage Program – Drivers Education
Traffic School & Driver Improvement Programs
Special Training
Advanced Driving Techniques

Emergency Training Services

Address: 3050 Paul Sweet Road, Santa Cruz, CA 95065
Phone: 831-476-8813
Fax: 831-477-4914
Website: http://www.emergencytraining.com
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes
Accreditation: Western Association of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	No
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	No	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	Yes
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Certificate Program(s) Offered

CPR Healthcare Provider
Advanced EMT
CPR Healthcare Provider Recertification
Paramedic Continuing Education

Esalen Institute Massage School

Address: Highway 1, Big Sur, CA 93920-9616
Phone: 831-667-3000
Fax: 831-667-2724
Website: http://www.esalen.org
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? Yes
Accreditation: National Certification Board for Training in Massage and Bodywork

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	No
Public Transit Nearby:	No	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	No	Services for the Disabled:	Yes
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	No	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Massage Practitioner Certification Program

Five Branches Institute

Address: 200 7th Avenue, Santa Cruz, CA 95065
Phone: 831-838-6789
Fax: 831-476-8928
Website: http://www.fivebranches.edu
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? Yes
Accreditation: Accreditation Commision of Acupuncture and Oriental Medicine

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	No
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	No	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	Yes	Veteran Assistance/Approved:	No

Degree Program(s) Offered

Traditional Chinese Medicine (MA)

The Fourth R Computer Training Solutions

Address: 31 West Market Street, Salinas, CA 93901
Phone: 831-753-7777
Fax: 831-753-2972
Website: http://www.fourthR-salinas.com
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? Yes

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	No
Public Transit Nearby:	No	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	No	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	No	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Basic Windows and Keyboarding
Desktop Applications Specialist
Microsoft Fast Track Certification Plus
Microsoft Fast Track Certification/Extension
Microsoft Fast Track Certification: Access
Microsoft Fast Track Certification: Excel
Microsoft Fast Track Certification: Outlook 2000
Microsoft Fast Track Certification: PowerPoint 2000
Microsoft Fast Track Certification: Project 2000
Microsoft Fast Track Certification: Word 2000
Microsoft Front Page 2000
Microsoft Publisher 2000
Office Technology Specialist

Gavilan Community College

Address: 5055 Santa Teresa Boulevard, Gilroy, CA 95020
Phone: 408-847-1400
Fax: 408-848-4789
Website: www.gavilan.edu
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? No
Accreditation: Western Association of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	Yes
Child Care Services On-Site:	Yes	GED Assistance:	No
Job Placement Assistance:	No	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	Yes
Vocational Evaluation Services:	Yes	Distance/Online Learning:	Yes
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Program(s) Offered

Associate degree; Certificate of Completion (requiring more than 18 units); and Certificates of Achievement (requiring 3-17 units).

Administration of Justice
Art
Aviation
Biological Science
Business
Child Development
Computer Graphics & Design
Computer Science & Information Systems
Cosmotology
Engineering & Physical Science
Fine Arts
Health Science
Humanities
Humanities/Social Science
Industrial Technology
Interpersonal Communication
Language Arts
Liberal Arts
Mathematics
Media Arts
Music
Nursing
Physical Education
Social Science
Spanish
Theatre Arts

Certificate Programs:

Reserve Officer Training
South Bay Public Safety Training Consortium
Allied Health Careers
Aviation Maintenance Technology
Business
Child Development Permit Matrix
Computer Graphics & Design

Computer Science & Information Systems
Cosmetology
Fire Technology
Industrial Technology
Interpersonal Communication

Golden Gate University

Address: 500 8th Street Cut-Off, Marina, CA 93933
Phone: 831-884-0900
FAX: 831-884-0913
Website: http://www.ggu.edu
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes
Accreditation: Western Association of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	No
Public Transit Nearby:	No	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	Yes
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Degree Program(s) Offered

Accounting (BA)
Business Administration (BA)
Computer Information Systems (BA)
MBA - With Various Concentrations
Executive Master of Public Administration

Gonzales Adult Education

Address: 690 Main Street, Soledad, CA 93960
Phone: 831-678-1279
Fax: 831-678-0162
Website: http://missiontrailsrop.org
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? No

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	No
Public Transit Nearby:	No	ESL Course/Program:	Yes
Child Care Services On-Site:	Yes	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	Yes
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	Yes	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Call for information

H & R Block Tax School

Address: 1221South Main Street #104, Salinas, CA 93901
Phone: 831-422-8162
Fax: 831-771-0796
Website: http://www.hrblock.com
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? No

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	No
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	No	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	No	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Income Tax Course

Hartnell College

Address: 156 Homestead Avenue, Salinas, CA 93901
Phone: 831-755-6700
Fax: 831-755-6751
Website: http://www.hartnell.cc.ca.us
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? Yes
Accreditation: Western Association of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	Yes
Child Care Services On-Site:	Yes	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	Yes
Vocational Evaluation Services:	Yes	Distance/Online Learning:	Yes
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Degree Program(s) Offered

Agriculture/Business
Animal Health Technology
Auto Collsion Repair
Auto Engine Machining
Auto Shop Management
Bilingual Education
Business Office Technology/Information Processing
Computer and Information Science/Microcomputer Specialists
Computer and Information Science/Multimedia Technology
Computer and Information Science/Business
Computer Science
Construction Building Technology/Construction Management
Correctional Science
Criminal Justice
Drafting: Drafting Technology (CAD)
Early Childhood Education

Electronic Technology
Financial Institution Operations
General Auto Mechanics
General Business
Industrial Technology
Industrial Technology/Industrial Mechanics
Library Media Technician (Library Assistant)
Medical Laboratory Technology
Nursing and Health Services/Registered Nurses
Photography
Real Estate
Teacher/Instructional Aide
Welding Technology

Certificate Program(s) Offered

Accounting
Accounting, Bookkeeper, Payroll Clerk
Agricultural Business
Air Conditioning Mechanics
Auto Body and Fender Assistant
Auto Body Repairer
Auto Collision Repair
Auto Engine Machining
Auto Painter Assistant
Auto Shop Management
Automotive Electronics: Smog
Banking Teller
Bilingual Education
Brake and Alignment Technicians
CAD Operations
Carpentry
Carpentry Assistant
Certified Health Unit Coordinator
Certified Nurse's Aide
Child Care Aide/Assistant ECE Teacher
Child Care Provider
Child Care/Assistant Teacher
Clerks
Communications/Wire Installer
Computer and Information Sciences/Business
Computer Operator/Help Desk
Computer Science
Construction Building Technology
Construction Management
Correctional Science
Criminal Justice
Drafting Architecture
Early Childhood Education
Electrical Systems Mechanics
Electrician's Assistant
Electronic Assembler/Trainee
Electronic Assembly
Electronic Engineering Technicians
Electronic Technology
Eligibility Worker, Department of Social Services
Emergency Medical Technicians
Farm Equipment Mechanic
Financial Institutions Operations
Food Production/Packager
General Auto Mechanics
General Business
Health Unit Coordinator
Home Health Aide
Industrial Technology
Industrial Technology/Industrial Mechanics
Information Processing
Instructional Aid

Library Media Technology
Masonry Assistant
Mechanical Drafting and Drafting Technology (CAD)
Micro Computer Specialist
Micro-Computer Service Technician
Multimedia Technology
Nursing and Health Services/Certified Nurse Assistant
Nursing and Health Services/Vocational Nursing
Phlebotomy
Photography
Real Estate
Reception/Information
Security Guards
Systems Analyst
Tire Changer
Welding Technology
Word Processing

Heald School of Business

Address: 1450 North Main Street, Salinas, CA 93906
Phone: 831-443-1700; 800-755-3550 Toll-Free
Fax: 831-443-1050
Website: http://www.heald.edu
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? No
Accreditation: Western Association of Schools and College

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	No
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	Yes
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Degree Program(s) Offered

Accounting
Business Software Applications
Computer Business Administration
Computer Technology
Medical Office Administration

Certificate Program(s) Offered

Networking Technology, Microsoft Windows 2000

Institute for Educational Therapy

Address: 3912 Portola Drive, Suite 10, Santa Cruz, CA 95062
Phone: 831-457-1207
Fax: 831-475-7456
Website: http://www.iet.org
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	Yes
Academic Advising:	Yes	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Nutrition Consultant
Nutrition Educator
Natural Foods Chef

King City Adult Education

Address: 2015 El Camino Real, Greenfield, CA 93927
Phone: 831-674-3275
Website: http://missiontrailsrop.org/AdultSchool/KingCity/kingMaps.html
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? No

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	Yes
Child Care Services On-Site:	Yes	GED Assistance:	Yes
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	Yes
Vocational Evaluation Services:	Yes	Distance/Online Learning:	No
Academic Advising:	Yes	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Call for information.

Mission Trails Regional Occupational Program

Address: 867 East Laurel Drive, Salinas, CA 93905
Phone: 831-753-4209
Fax: 831-422-5115
Website: http://missiontrailsrop.org
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	Yes	GED Assistance:	Yes
Job Placement Assistance:	No	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	Yes	Distance/Online Learning:	No
Academic Advising:	Yes	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Agricultural Business Occupations
Autobody Repair
Banking Careers
Checker/Cashier
Child Care Careers
Computer Business Applications
Computer Networking
Computer Repair
Cosmetology
Dental Careers
Dental RDA
Dental X-Ray
Desktop Publishing
Fashion Merchandising
Fiber Optic Cabling
Floristry/Floriculture
Health Occupations
Industrial Welding
Mill Cabinet/Construction Technology
Network Cabling
Office Careers
Physical Therapy Aide
Restaurant Sales
Retail Sales
Tractor Maintenance
TV Productions
Web Page Design

Monterey College of Law

Address: 404 West Franklin Street, Monterey, CA 93940
Phone: 831-373-3301
Fax: 831-373-0143
Website: http://www.montereylaw.edu
Email: info@montereylaw.edu
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? Yes
Accreditation: State Bar of California, Committee of Bar Examiners

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	No
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Degree Program(s) Offered

Doctor of Jurisprudence (J.D.)
Bachelor of Law (L.L.B)

Monterey Institute of International Studies

Address: 460 Pierce Street, Monterey, CA 93940
Phone: 831-647-4123
Fax: 831-647-6405
Website: http://www.miis.edu
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? No
Accreditation: Western Association of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	Yes
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	Yes
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Degree Program(s) Offered

Administration in International Management
Commercial Diplomacy
Conference Interpretation
Entrepreneurial Management
Global Business Management
International Environmental Management
International Environmental Policy
International Finance and Economics
International Human Resources Management
International Marketing
International Policy Studies
International Studies
International Trade Management
Nonprofit and Public Management
Regional Business Environments
Teaching English to Speakers of Other Languages
Teaching Foreign Language
Translation
Translation and Interpretation

Certificate Program(s) Offered

California Single Subject Teaching Credential
Commercial Diplomacy

Computer Assisted Language Learning
Conflict Resolution
Environmental Policy
Gender and Development
Language Program Administration
Nonproliferation Studies
Public Administration
(TESOL) Teaching English to Speakers of Other Languages
Teaching Foreign Language

Monterey Institute of Touch

Address: 27820 Dorris Drive, Carmel, CA 93923
Phone: 831-624-1006
Website: http://www.montereyinstituteoftouch.com
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? No

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	No	Services for the Disabled:	No
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	Yes	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Continuing Education: Massage Practices for Nurses
Continuing Education: Various Massage Modalities
Massage Practitioner Program (CMP)
Massage Therapist (CMT)

Monterey Peninsula Adult Education

Address: 22 Casa Verde Way, Monterey, CA 93940
Seaside Campus: 295 La Salle Avenue, Seaside 93955
Phone: 831-373-4600
Website: mpusd.k12.ca.us/adultschool/
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	Yes
Child Care Services On-Site:	Yes	GED Assistance:	Yes
Job Placement Assistance:	Yes	Services for the Disabled:	No
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	Yes	Distance/Online Learning:	Yes
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Certificate Program(s) Offered

Automotive Mechanics
Basic Office Skills
Beginning/Intermediate Computers
Cosmetology
Keyboarding Skills
Television/VCR Repair

Monterey Peninsula College

Address: 980 Fremont Street, Monterey, CA 93940
Phone: 831-646-4000
Website: http://www.mpc.edu
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes
Accreditation: Western Association of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	Yes
Child Care Services On-Site:	Yes	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	Yes
Vocational Evaluation Services:	Yes	Distance/Online Learning:	Yes
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Degree Program(s) Offered

Accounting
Automotive Technology
Business
Child Development
Computer Information System Design
Computer Software Applications
Dental Assisting
Fashion Costuming
Fashion Design
Fashion Merchandising
Fashion Production
Fire Protection Technology
Fitness Instructor Training
Golf Management
Graphic Arts
Hospitality Operations
Human Services
Interior Design
International Business
Law Enforcement
Marine Science and Technology
Massage Therapy
Medical Assisting
Medical Coding Specialist
Medical Insurance Specialist
Medical Office Administration
Medical Office Procedures
Nursing
Office Technology
Ornamental Horticulture
Parks and Recreation
Photography
Physical Education Aide

Real Estate
Restaurant Management
Secretarial

Certificate Program(s) Offered

Accounting
Advanced Interior Design
Automotive Technology
Business: Entrepreneurship
Childhood Development
Computer Information Systems Design
Computer Software Applications
Computer Technology
Corrections
Dental Assisting
Family Child Care
Fashion Costuming
Fashion Design
Fashion Merchandising
Fashion Production
Fast Track: Automotive Brake Systems
Fast Track: Automotive Steering and Suspension
Fast Track: Automotive Transmissions
Fast Track: Baking and Pastry Arts
Fast Track: Cooking School
Fast Track: Entry-Level Office Worker
Fast Track: Family Development
Fast Track: Standard Transmissions
Fire Protection Technology
Fitness Instructor Training
Food Service Management
General Business
Golf Management
Graphic Arts
Hospitality Operations
Human Services
Interior Design
International Business
Law Enforcement: Option 1 General
Law Enforcement: Option 2 Basic Academy
Marine Science and Technology
Massage Therapy
Medical Assisting
Medical Office Administration
Medical Office Procedures: Option 1, Medical Reception
Medical Office Procedures: Option 2, Medical Coding Specialist
Medical Office Procedures: Option 3, Medical Insurance Specialists
Office Technology
Ornamental Horticulture
Parks and Recreation
Photography
Real Estate
Retail Management
Secretarial

Monterey/Santa Cruz Plumbers and Fitters

Address: 11445 Commercial Parkway, Castroville, CA 95012
Phone: 831-633-6091
Fax: 831-633-1613
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? Yes

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	No
Public Transit Nearby:	No	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	Yes
Academic Advising:	No	Veteran Assistance/Approved:	Yes

Apprenticeship Program(s) Offered

Plumbers and Steamfitters Local Union 62 Apprenticeship
Refrigeration

New Horizons Computer Learning Center

Address: 1414 Soquel Avenue, Suite 100, Santa Cruz, CA 95060;
1260 S. Main Street, Salinas, CA 93901
Phone: 800-290-6066
Email: contactus@nhscz.com
Website: http://www.newhorizonscentralcoast.com
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	No
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	Yes	Distance/Online Learning:	Yes
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Certificate Program(s) Offered

A+ PC Technician
Integrated Office Specialist
Integrated Office Specialist Plus
MCSE 2000
MCSE NT 4.0
MCSE NT 4.0 & A+
Microsoft Certified Systems Engineer
Microsoft Certified Systems Engineer & A+
Microsoft Office User Specialist
Network Support Specialist
Web Design Track
Web Design Track

Pacific Grove Adult Education

Address: 1025 Lighthouse Avenue, Pacific Grove, CA 93950
Phone: 831-646-6580
Fax: 831-646-5678
Website: http://www.pgusd.org/pgaehome.htm
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? No

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	Yes
Child Care Services On-Site:	Yes	GED Assistance:	Yes
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	Yes
Vocational Evaluation Services:	Yes	Distance/Online Learning:	No
Academic Advising:	Yes	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Adobe Illustrator
Beginning Photoshop
Certified Nursing Assistant
English As A Second Language (ESL)
Home Health Aide
Medical Terminology
Microsoft Publisher
MS Access
MS Excel
MS Word
Office Practice and Word Processing
Quark Xpress
QuickBooks
Quicken
Software for the Beginner
Software Individualized Projects
Software Internet WebPages
Software Office Practice and Computer Training
Word Processing

Salinas Adult School

Address: 20 Sherwood Place, Salinas, CA 93906
Phone: 831-753-4260
Fax: 831-753-4276
Website: http://www.salinasadultschool.com
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? No

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	Yes
Child Care Services On-Site:	Yes	GED Assistance:	Yes
Job Placement Assistance:	No	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	Yes
Vocational Evaluation Services:	Yes	Distance/Online Learning:	Yes
Academic Advising:	Yes (High School)	Veteran Assistance/Approved:	No

Business Certificate Program(s) Offered

Receptionist
Business Clerk
Certified Nursing Assistant
Computer Training
Basic Microsoft Applications
Advanced Microsoft Applications

Call (831) 753-4265 for more information.

Salinas Beauty College

Address: 916 South Main Street, Salinas, CA 93901
Phone: 831-422-1283
Fax: 831-753-0605
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? No

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	No
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	Yes
Job Placement Assistance:	Yes	Services for the Disabled:	No
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	Yes	Distance/Online Learning:	No
Academic Advising:	Yes	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Cosmetology
Manicuring

Santa Clara County Regional Occupational Program - South

Address: 700 West Sixth Street, Suite L, Gilroy, CA 95020
Phone: 408-842-0361
Fax: 408-842-0653
Website: http://www.sccoe.org
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? No

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	No
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	Yes
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	No	Veteran Assistance/Approved:	Yes

ROP Program(s) Offered

Cicsco Networking Academy
Home Health Aide
Medical Office Procedures
Clinical Medical Assisting
Computer Classes
Network Cabling
Nursing Assistant

Santa Cruz Adult School

Address: 2931 Mission Street, Santa Cruz, CA 95060
Phone: 831-429-3966
Fax: 831-429-3061
Website: http://www.adulted.santacruz.k12.ca.us
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes
Accreditation: Western Association of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	Yes
Child Care Services On-Site:	No	GED Assistance:	Yes
Job Placement Assistance:	No	Services for the Disabled:	Yes
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	Yes
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Certificate Program(s) Offered

Call for program information.

Santa Cruz County Regional Occupational Program

Address: 809-H Bay Avenue, Capitola, CA 95010
Phone: 831-479-5333
Fax: 831-462-6457
Website: http://www.rop.santacruz.k12.ca.us
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes
Accreditation: Western Association of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	No
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	No	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	Yes	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Administration of Justice
Ag Production
Agribusiness
Athletic Team Coach
Aviation Occupations
Business Management
Business Office Management
Business Office/Financial Occupations
Cabinetry
Careers with Children
CHP Explorer Program
Cisco Networking Academy Year 1
Cisco Networking Academy Year 2
Community Service Officer
Computer Accounting
Computer Applications/Operations
Computer Art in Video
Computer Graphics
Computer Repair
Computer Repair/Networking
Construction Technology
Cosmetology, Nail Care, and Cosmetician
Dental Assistant
Dental X-Ray
Desktop Publishing
DTP/Web Publishing
Emergency Medical Services
Engine Performance
Engine Repair
Fabrication/Metals
First Responder
Florist & Greenhouse Occupations
Graphic Arts
High School Police Academy
Landscape
Landscape Design/Management
Medical Assistant 1
Medical Assistant 2
Medical Occupations
Microsoft Office 2000

MOUS Certification
Nurse Assistant Pre-Certification
Photo Technology
Public Safety Academy
Public Safety Dispatcher
Quick Start Computer Training
Recreation Occupations
Retail Merchandising
Sports Related Occupations
Stage Craft
Veterinary Assistant
Video Broadcasting
Video Production
Web Design
Web Publishing

Sheet Metal Workers Local Union

Address: P.O. Box 940, Castroville, CA 95012
Phone: 831-633-6151
Fax: 831-633-9269
Website: www.smw104.org
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? No

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	No
Public Transit Nearby:	No	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	No	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	No	Veteran Assistance/Approved:	Yes

Apprenticeship Program(s) Offered

Sheet Metal Apprenticeship

Shoreline Occupational Services - Division of Goodwill Industries

Facility Locations:

350 Encinal Street, Santa Cruz, CA 95060
Phone: 831-429-6415
Fax: 831-423-8968

249 10th Street, Marina, CA 93933
Phone: (831) 883-3300
FAX: ((831) 883-2210

1252 N. Main Street, Salinas, CA 93906
Phone: (831) 443-5458

Website: http://www.scgoodwill.org
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes
Accreditation: Commission on Accreditation of Rehabilitation Facilities

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	No
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	Yes	Distance/Online Learning:	No
Academic Advising:	No	Veteran Assistance/Approved:	Yes

Certificate Program(s) Offered

Santa Cruz County::

Cosmetology
Medical Office/Medical Billing
Office Careers
Retail Occupations

Monterey County:

Computer Applications & Business Skills
Culinary Training
Office Careers
Retail Occupations

SST Networking

Address: 740 Front Street, Suite 265, Santa Cruz, CA 95060
Phone: 831-421-9056
Fax: 831-425-1150
Website: http://www.sstNetWorking.com
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? Yes

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	No
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	Yes	Distance/Online Learning:	Yes
Academic Advising:	No	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Administrative Assistant
CCNP - Cisco Certified Network Professional
Cisco - Router Expert
Computer Repair Technician
Linux +
MCA – Microsoft Certified Administrator
MCSE - Microsoft Certified Systems Engineer
Small Business Adminstration

The Spot! Computer Software Training Institute

Address: 595 Auto Center Drive, Watsonville, CA 95076
Phone: 831-768-1825
Fax: 831-768-1864
Website: http://www.thespotinc.com
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	No	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Business Administration Programs:

Office Applications I
Office Applications II

Spanish Programs:

General Office Proficiency
Advanced Applications

Accounting Programs:

Computerized Accounting

Technical Certification Programs:

Network + Programs
A+ Repair Technician
MCSE Training Program

Multi-Media Programs:

Desktop Publishing Program

Website Design Program

Short Courses:

Getting Started
Office Applications
Accounting Programs
Graphic Programs
Desktop Publishing
Web Design

Business Solutions:

Assessments
Accounting Solutions
Desktop Publishing Solutions
Web Solutions
Consulting and Special Projects
On-site Training Solutions
One-on-One Tutoring Solutions

Truck Driver Institute

Address: 1150 Main Street, Suite 8, Watsonville, CA 95076
Phone: 831-724-6100
Fax: 831-724-6294
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? No
Years in Operation: 6

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	No
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	No	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Semi/Tractor Trailer

United Flight Services

Address: 120 Aviation Way, Watsonville, CA 95076
Phone: 831-722-4155
Multiple Training Site Locations? No
Continuing Education Classes/Seminars? No

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	No
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	No	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	No	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Private Pilot - Airplane License
Private Pilot - Instrument Rating

University of California Extension, Santa Cruz - Monterey Bay Education, Science, and Technology (MBEST) Center

Address: 3180 Imjin Road, Marina, CA 93933
Phone: 831-582-1020
Fax: 831-582-1021
Website: http://www.ucmbest.org
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes
Accreditation: Western Association of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	No
Public Transit Nearby:	No	ESL Course/Program:	Yes
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	No	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	Yes
Academic Advising:	No	Veteran Assistance/Approved:	No

Classes Offered:

See website for current class information.

University of California, Santa Cruz

Address: 1156 High Street, Santa Cruz, CA 95064
Phone: 831-459-0111
Fax: 831-459-4452
Website: http://www.ucsc.edu
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? No
Accreditation: Western Association of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	Yes	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	Yes
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Degree Program(s) Offered

American Studies
Anthropology
Arabic
Art
Art History
Art Division
Astronomy and Astrophysics
Biochemistry and Molecular Biology
Biological Sciences

Chemistry and Biochemistry
Chinese
Classical Studies
Communications and Rhetoric
Community Studies
Earth Sciences
East Asian Studies
Economics
Education
Engineering (Bioinformatics, Computer Engineering, Computer Science, Dual-Degree Engineering, Electrical Engineering, and Information Systems Management)
Environmental Sciences and Policy
Environmental Studies
Environmental Toxicology
Ethic Studies
Film and Digital Media
French
German
German Studies
Hebrew
Hindi
Historical Studies
History
History of Conciousness
Humanities Division
Italian
Italian Studies
Japanese
Jewish Studies
Journalism
Language Program
Langauge Studies
Latin American and Latino Studies
Legal Studies
Linguistics
Literature
Marine Sciences
Mathematics
Medieval Studies
Music
Natural Sciences Division
Ocean Sciences
Philosophy
Physics
Politics
Psychology
Religious Studies
Russian
Russian Studies
Science Communication
Social Sciences Division
Sociology
South and Southeast Asian Studies
Spanish and Spanish for Spanish Speakers
Theater Arts
Western Civilization
Women's Studies
Writing Program

Certificate Program(s) Offered

Science Illustration
Science Writing
Theater Arts

University of California, Santa Cruz Extension

Address: University Town Center, 1101 Pacific Avenue, Suite 200, Santa Cruz, CA 95060
Phone: 831-234-5346

Other UC - Santa Cruz Entension Locations:

10420 Bubb Road, Cupertino, CA 95014 (408) 861-3700
1221 California Circle, Milpitas, CA 95035 (408) 752-1300
See information on the UC Extension MBEST Center.
Moffett Business Park, 1180 Bordeaux Drive, Sunnyvale, CA 94089 (408) 752-1300
Oxford Business Park, 3120 De la Cruz Boulevard, Santa Clara, CA 95054 (408)566-4500/4501

Website: http://www.ucsc-extension.edu
Continuing Education Classes/Seminars? Yes
Accreditation: Western Association of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	Yes	Tutorial Services:	No
Public Transit Nearby:	No	ESL Course/Program:	Yes
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	No	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	Yes
Academic Advising:	No	Veteran Assistance/Approved:	No

Program(s) Departments

Art & Design
Biotech/Biological and Natural Sciences
Business and Management
Computer and Information Technologies
Education/Human Development
English Language International
Environmental, Health and Safety Management
Humanities

Certificate Program(s) Offered

C Language Programming
Clinical Trials Design and Management
Cross Cultural Language and Academic Development
Database Systems and Concepts
Early Childhood Education
E-Business
E-Commerce Engineering
Environmental Safety and Health Management
Graphic Design and Visual Communication
Graphic Production
Hazardous Materials Management
Human Resource Management
Human Services in Counseling
Information Technology Management
Interior Design Assistant
Internet Programming
Managing the Development of Technical Information
Marketing

Network Engineering
Network Management
Object-Oriented Programming Using C++
Object-Oriented Programming Using Java
Occupational Safety and Health Management
Paralegal Studies
Personal Financial Planning
Project and Program Management
Router Configuration and Management
Software Engineering and Management
Teaching English as a Second Language
Technical Writing and Communication
Training and Human Resource Development
UNIX System Management and Administration
VLSI Design Engineering
Web and E-Commerce Security
Web and Interactive Media Design

Watsonville - Aptos Adult School

Address: 294 Green Valley Road, Watsonville, CA 95076
Phone: 831-786-2160
Fax: 831-786-2193
Website: http://www.watsonvilleaptosadultschool.edcruz.org
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes
Accreditation: Western Association of Schools and Colleges

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	Yes
Child Care Services On-Site:	Yes	GED Assistance:	Yes
Job Placement Assistance:	No	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	Yes	Veteran Assistance/Approved:	No

Certificate Program(s) Offered

Nurse Assistant I – CNA
Nurse Assistant II/Acute Care
Clinical Medical Assistant Training Program
Pharmacy Technician Training Program
Principles of Health Maintenance/Spanish Medical Terminology
First Aid/Standard
Child Health and Safety
Beginning Microsoft Word 2000
Intermediate Microsoft Word 2000
Beginning Microsoft Excel 2000
Intermediate Microsoft Excel 2000
Database Creation with Access
Creating PowerPoint Presentations
Using the Internet and Email
Web Page Design
PageMaker
Beginning QuickBooks 2002

Wayne's College of Beauty

Address: 189 Walnut Ave., Santa Cruz, CA 95060
Phone: 831-423-5806
Fax: 831-423-9176
Email: wesoc@ix.netcom.com
Website: www.waynesbeauty.com
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? No

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	No
Public Transit Nearby:	Yes	ESL Course/Program:	No
Child Care Services On-Site:	No	GED Assistance:	No
Job Placement Assistance:	Yes	Services for the Disabled:	No
Career Counseling/Development:	No	Learning Disabilities Program:	No
Vocational Evaluation Services:	No	Distance/Online Learning:	No
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Certificate Program(s) Offered

Cosmetology
Nail Care

Worldwide Educational Services

Address: 1986 Main Street, Watsonville, CA 95076
Phone: 831-722-9887
Fax: 831-722-9891
Email: wesoc@ix.netcom.com
Website: http://www.wesoc.com
Multiple Training Site Locations? Yes
Continuing Education Classes/Seminars? Yes

Are the following services provided?

Financial Aid/Assistance:	No	Tutorial Services:	Yes
Public Transit Nearby:	Yes	ESL Course/Program:	Yes
Child Care Services On-Site:	No	GED Assistance:	Yes
Job Placement Assistance:	Yes	Services for the Disabled:	Yes
Career Counseling/Development:	Yes	Learning Disabilities Program:	No
Vocational Evaluation Services:	Yes	Distance/Online Learning:	No
Academic Advising:	Yes	Veteran Assistance/Approved:	Yes

Certificate Program(s) Offered

Accounting/Bookkeeping I & II
Administrative Assistant/Office Manager I, II, & III
CATV/Broadband Installer and Technician
Computer Office Applications/Computer Terminal Operator
Computerized Accounting
Customer Service Representative
Customer Service – Warehousing/Inventory Control
Data Entry Clerk
Desktop Publishing (IBM and Mac Applications)

Electronics/Service Technician I & II
Electronics Assembly/Tester
FASTRACK Communications Electronics/Telecom Training Tutorial
FASTRACK Computer Skills
Graphics Design
Legal Secretary I & II
Management Trainee - Sales/Service/Hospitality
Medical Front Office/ Medical Secretary I & II
Mobile Electronics Component Installer
Network Administration I & II
Network Administration/A+ Certification Prep
Network Administration: Software/Hardware Integration
Professional Computer Applications
Property Management/Office Manager
Receptionist/ /Front Desk
Office Assistant/Secretary I & II
Telecommunications TechnicianWebsite Development and Maintenance I & II

Appendix

The California Cooperative CCOIS Occupational Information System

ALL RESPONSES ARE KEPT STRICTLY CONFIDENTIAL
Whom should we contact with any further questions?
Name: _____
Position: _____
Phone: _____ Fax: _____

Automotive Mechanics: Automotive Mechanics adjust, repair and overhaul automotive vehicles. They may be designated according to specialties such as Brake Repairers, Transmission Mechanics or Front-End Mechanics. Please do not include Auto Body Repairers, Bus and Truck Mechanics, Diesel Engine Specialists and Electrical Systems Specialists. (OES 853020)

Does your firm employ any individual performing the duties in the occupation described above? ☐ **Yes** ☐ **No**
If yes, please complete this survey for the occupation described.
If no, please return this questionnaire to the above address.
If your firm has multiple locations, please confine your answers to locations in Monterey, San Benito, and Santa Cruz Counties.

1. What job title(s) does your firm use for **these duties**? _____

2a. How many employees does your firm currently have **in this occupation**? _____

2b. **In this occupation**, how many are: Male? _____ Female? _____

2c. **In this occupation**, how many current employees are there, and, on average, how many weekly hours do they work?

Regular, Full Time:	_____	Average Weekly Hours Worked:	_____
Regular, Part Time:	_____	Average Weekly Hours Worked:	_____
Temporary/On Call:	_____	Average Weekly Hours Worked:	_____
Seasonal:	_____	Average Weekly Hours Worked:	_____

3. In your firm, what shifts are available for **this occupation**? (check all that apply)
☐ Day ☐ Swing ☐ Graveyard ☐ Other (Please specify): _____

4. Has your firm hired **in this occupation** within the last 12 months? ☐ Yes ☐ No
If yes,
How many were hired to fill vacancies resulting from promotions within your firm? _____
How many were hired to fill vacancies resulting from people in permanent positions leaving your firm? _____
How many were hired to fill new permanent positions resulting from growth? _____
How many were hired to fill temporary, on call, or seasonal positions? _____

5a. During the last 12 months, did your firm's employment **in this occupation**: (Check one)
☐ Decline ☐ Remain Stable ☐ Grow

5b. Over the next 24 months, do you expect your firm's employment **in this occupation** to: (Check one)
☐ Decline ☐ Remain Stable ☐ Grow

6a. When you hire applicants for **this occupation**, is prior experience in this occupation required? ☐ Yes ☐ No ☐ Not required, but preferred
If **yes** or **preferred**, how much experience **in this occupation** is required/preferred? _____ (months)

6b. Is experience in other occupations accepted? ☐ Yes ☐ No
If yes, please specify: Occupation: _____ _____ (months)

7. If prior experience is required when you hire applicants **for this occupation**, please indicate how difficult it is for your firm to find fully qualified applicants. (Circle one) Not Difficult = 1 2 3 4 = Difficult

8. If prior experience is not required when you hire applicants **for this occupation**, please indicate how difficult it is for your firm to find qualified applicants. (Circle one) Not Difficult = 1 2 3 4 = Difficult

9. Does your firm accept training as a substitute for experience **in this occupation**? ☐ Yes ☐ No
If yes, how many months of training can generally be substituted? _____ (months)

Automotive Mechanics

10. Is technical or vocational training required prior to employment **in this occupation**?

☐ Yes ☐ No ☐ Not required, but preferred

If yes or preferred, what kind of training is required/preferred? _____ _____ (months)

11. What is the minimum level of education your firm **requires** when hiring an applicant **in this occupation**? (Check one).

☐ Less than high school diploma ☐ High school diploma or equivalent ☐ Associate Degree (2 year) ☐ Bachelor Degree (4 year) ☐ Graduate Study

12a. What is the usual income earned by your firm's employees **in this occupation** at the following levels of skill and experience?

	Base Wage or Salary
• New hires, no experience (trained or untrained):	$_____
• New hires who are experienced:	$_____
• Experienced employees after 3 years:	$_____

Please check one: ☐ Hour ☐ Week ☐ Month ☐ Year

12b. For other compensation, if applicable, please indicate the average overall earnings and types(s) of compensation.

• New hires, no experience (trained or untrained):	$_____
• New hires who are experienced:	$_____
• Experienced employees after 3 years:	$_____

Please check one: ☐ Hour ☐ Week ☐ Month ☐ Year

Type of Compensation: ☐ Commission ☐ Tips ☐ Bonus ☐ Piece Rate ☐ Other (Please specify):

_____

13. Are the wages for employees **in this occupation** subject to a collective bargaining or union agreement?

☐ Yes ☐ No If yes, what is the name of the union or local number? _____

14. Please check which benefits your firm offers full-time **(FT)** and part-time **(PT)** employees **in this occupation** and which best describes who pays for them:

	Employer Pays All	Share Cost	Employee Pays All	Not Provided
	FT	FT	FT	FT
Medical Insurance	☐	☐	☐	☐
Dental Insurance	☐	☐	☐	☐
Vision Insurance	☐	☐	☐	☐
Life Insurance	☐	☐	☐	☐
Sick Leave	☐	☐	☐	☐
Vacation	☐	☐	☐	☐
Retirement Plan	☐	☐	☐	☐
Child Care	☐	☐	☐	☐
Other (Please Specify):	☐	☐	☐	☐

15. What computer software skills, if any, does your firm seek in applicants **for this occupation**? (Check all that apply)

☐ None ☐ Word Processing ☐ Spreadsheet ☐ Database ☐ Desktop Publishing ☐ Other (Please specify):

Specify software names: _____ _____ _____ _____ _____

16. What other new skills are needed to perform the duties of this occupation?

_____ _____

Automotive Body and Related Repairers

17. When your firm hires employees **for this occupation**, please select your **top three** most successful recruitment methods?

☐ In-house promotions or transfers ☐ Newspaper ads ☐ Internet
☐ EDD ☐ Walk-in applicants ☐ Colleges/Universities
☐ School/program referrals ☐ Union hall referrals ☐ Employee referrals
☐ Private employment agencies ☐ Trade journals ☐ Other (Please specify):

_____ _____

18. Does your firm ever promote employees into this occupation from **lower level** positions? ☐ Yes ☐ No

If yes, what is the typical career path that leads to this occupation?

_____ _____ _____

19a. Does your firm ever promote employees in this occupation to higher level positions? ☐ Yes ☐ No

If yes, what are the titles of the positions to which they may be promoted?

_____ _____ _____

19b. What skills are important for career advancement?

_____ _____ _____

20. Are you aware of any skill deficiencies within **this occupation** in regard to your recent hires or job applicants? ☐ Yes ☐ No

If yes, please describe those problematic skill areas.

_____ _____ _____

21. Are you aware of any skill deficiencies for any **other occupation(s)** within your organization? ☐ Yes ☐ No

If yes, please specify the occupation(s).

_____ _____ _____

22. For what occupations do you have the most difficulty finding qualified applicants?

Please specify the occupation(s).

_____ _____ _____

23. Are you aware of any new, changing, or emerging occupations in your industry? ☐ Yes ☐ No

If yes, please specify: _____

24. Do you have an employee in this occupation who would be a good role model for students interested in this career field? ☐ Yes ☐ No

(If yes, we will call you at a later date to discuss the possibility of a career information interview with your employee.)

25. Would you like to receive a complimentary copy of the survey results for this occupation? ☐ Yes ☐ No

Thank you for your participation in the CCOIS program!

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Biological, Agricultural, and Food Technicians
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Correction Officers and Jailers
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Mission Trails Regional Occupational Program

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Cabrillo College

Financial Managers
University of California, Santa Cruz Extension

Fire Fighters
Monterey Peninsula College

Fire Fighting Occupations
Cabrillo College

Fitness Instructors
Monterey Peninsula College

Floral Designers
Mission Trails Regional Occupational Program
Santa Cruz County Regional Occupational Program

Food Preparatory Workers
Monterey Peninsula College

Forklift/Industrial Truck Operators
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Graphic Art Technicians
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Santa Cruz County Regional Occupational Program
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Hairstylists/Cosmetologists
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Hartnell College

Machinists
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Cabrillo College

Maintenance Repairers - General Utility
Center for Employment Training

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Monterey Peninsula College

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Santa Cruz County Regional Occupational Program
Wayne's College of Beauty

Marketing, Advertising, and Public Relations Managers
Santa Clara County Regional Occupational Program - South
University of California, Santa Cruz Extension

Massage Therapists
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Monterey Institute of Touch
Monterey Peninsula College

Mediators and Negotiators
University of California, Santa Cruz Extension

Medical and Clinical Laboratory Assistants
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Hartnell College

Medical Assistants
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Medical Coding Specialists
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Medical Insurance Specialists
Monterey Peninsula College

Medical Records Technicians
Central Coast College

Medical Transcriptionists
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Medicine and Health Services Managers
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Metal Fabricators
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Office Managers
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Paramedics
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Physical Therapy Aides and Assistants
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Police Patrol Officers
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Project Managers
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Property Managers/Administrators
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Radiologic Technologists
Cabrillo College

Real Estate Agents
Cabrillo College
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Receptionists and Information Clerks
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Recreation Workers
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Registered Nurses
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Residential Counselors
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Sheet Metal Workers
Center for Employment Training
Santa Clara County Regional Occupational Program - South
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Shipping/Receiving Clerks
Center for Employment Training

Small Engine Repair Specialists
Center for Employment Training

Smog Technicians
Hartnell College

Social Workers
Bethany College of the Assemblies of God
Hartnell College
University of California, Santa Cruz

Surveying and Mapping Technicians
Cabrillo College

Tax Preparers
H & R Block Tax School

Teacher Aides
Hartnell College

Teachers - Elementary
Bethany College of the Assemblies of God
Chapman University
Hartnell College
Pacific Grove Adult Education
University of California, Santa Cruz Extension

Teachers - Preschool
Bethany College of the Assemblies of God
Cabrillo College
Chapman University
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Teachers - Secondary
Bethany College of the Assemblies of God
Chapman University
Hartnell College
Monterey Institute of International Studies
Monterey Peninsula College
Santa Cruz County Regional Occupational Program
California State University, Monterey Bay
University of California Extension, Santa Cruz
University of California, Santa Cruz Extension

Teachers - Special Education
Chapman University

Technical Writers and Editors
Santa Clara County Regional Occupational Program - South
University of California, Santa Cruz
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Hartnell College
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Truck Driver Institute

Truck Drivers - Light

Center for Employment Training

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Veterinary Assistants

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Webmasters

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Welders and Cutters

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Cabrillo College