NORTH BAY COUNTIES

OCCUPATIONAL OUTLOOK

Marin
Napa
Solano
Sonoma

2002
2003

Occupational Outlook: North Bay Counties

(Marin, Napa, Solano and Sonoma Counties)

2002-2003

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Introduction

Welcome to the 2002-2003 Occupational Outlook Report for the North Bay Counties (Marin, Napa, Solano, and Sonoma). This year's publication includes a total of 118 occupational profiles, representing a wide range of jobs and industries. Each profile is packed with useful information, including hiring requirements, wages, employment statistics, and a job market assessment. For reference, we've also included a listing of area training providers in the Appendix (see page 487) and an Occupation-Training Index (see page 506). *Please note that the organizations responsible for the production of this publication do not necessarily endorse or recommend any particular training providers or programs.*

Common Questions

How can I get a copy of this book?

Contact the NBEC Partner agency in your area (see the acknowledgements page), or call the NBEC office at 707-259-8764.

Who should I talk to if I have technical questions?

Contact the Workforce Information Group, 916-984-9615.

Is the information in this publication on the Internet?

Yes, there is a "pdf" version of this publication that you can have on your computer(s). See the North Bay Employment Connection website at http://www.northbayemployment.org/

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 local demographic or other economic data?

See the EDD Labor Market Information Division website at http://www.calmis.cahwnet.gov/
Also see *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 publication are summaries of descriptive and statistical occupational information primarily based on data collected through confidential surveys with local employers. The four-page occupational profiles are in alphabetical order by occupation title. Each profile follows a consistent format that includes more than 50 data elements for each occupation, as well as information on additional related occupations. Data elements include: occupation title and definition; wages and benefits; employer requirements; employment trends; important knowledge, skills and abilities, career path information, occupations with similar skill patterns, and a "career dialogue" interview with an individual who works in the subject career field.

The occupations profiled in this publication were selected for study based on a variety of criteria, including the needs and interests of local career and workforce development professionals. Therefore, it is important to note that 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 15-20 completed surveys are collected for each 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.

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 are summarized for three reasons:

1. to make the information as easy to use as possible
2. to make the information more reliable (than anecdotal information)
3. to protect employer confidentiality (so employers will be willing to give us sensitive information)

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.*

Tips!

• 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.

Non-OES Occupational Surveys: Occupational definitions identified with a 9-digit code reflect a survey of 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. Benefit information indicates the extent to which surveyed employers provide medical insurance and other benefits to their employees. (Benefit information for part-time employees is included when approximately 20% or more of the employers surveyed report having part-time workers.) A summary of the weekly hours worked by most employees in the occupation is included - based on the local employers surveyed.

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.

Tips!

- *Employer educational requirements are shown as the employers have reported them. Note that 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 is an estimate of the annual turnover due to worker replacement needs and promotions.

Tips!

- *A "Competitive Outlook" for job seekers is not necessarily a bad thing, especially if the applicant possesses the desired skills and is well prepared for the job search process. However, a "Very Competitive Outlook" suggests a significant oversupply of qualified job seekers.*
- *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 employment in the occupation based on surveys with local employers, in addition to the approximate percentage of union jobs (if applicable.)

Employment Trends

Projections indicate 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

Tips!

• Projections of Size, Growth and Separations are statistical "estimates" prepared by the Employment Development Department's Labor Market Information Division. Employment projections are developed using occupational staffing and industry forecast data, both of which can be occasionally off-the-mark for a given occupation. However, over the years we have found that most occupational employment projections are reasonably accurate.

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.

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 O*NET Database, version 3.0. O*NET (the Occupational information Network) is an occupational classification system and database developed by the U.S. Department of Labor as a replacement for the Dictionary of Occupational Titles (DOT). The importance level ratings for these occupational qualifications are based on O*NET's 1-5 sliding scale that reflects a survey response range of "Not Important" to "Extremely Important" - as rated by incumbent workers or subject matter experts. Users of O*NET OnLine (http://online.onetcenter.org/) should note that the O*NET website application converts the original 1-5 rating scale for *importance* and the 1-7 rating scale for *level* to a 1-100 range for consistent presentation purposes.

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. The types of jobs in each career path are defined using common job titles. When a job title also matches reasonably well with an occupation title, then an O*NET occupation title is also included, along with the typical education level and wage information. 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. Typical education levels are from the Skill Matrix Network (www.skillmatrixnetwork.com). California wage data published by the California Employment Development Department are used to provide the mean hourly wages, or, in the case of a few occupations (such as teachers), the mean annual wage.

The linear career path chart used for occupational profiles completed in 2000 was replaced in 2001 with a four-column table designed to– more accurately – resemble a career lattice. The first column is for the entry level occupation(s); the second column is for the mid-level occupation(s); the third column is for the advanced level occupation(s); and the fourth column is for other career options (such as executive management, self-employment, etc). The lattice implies what is often the case; namely, that people may start at an entry level job or occupation, but they don't always move in a straight line from left to right, or from bottom to top. The use of the terms "entry level," "mid-level," and "advanced level" should not be associated with any particular education levels; rather, they are used to indicate the general job-to-job progression within the career field.

Occupations with Similar Skill Patterns

This listing of occupations reflects those that most closely match the knowledge, skills, and abilities patterns of the subject occupation. The data source used for this comparison is the Skill Matrix Network database which measures knowledge, skills, and abilities (from the O*NET database) across 903 different occupations for comparison purposes. California wage data published by the California Employment Development Department are used to provide the mean hourly wage information. As with the Career Path information, the source for the typical education levels is the Skill Matrix Network. It is important to note that having similar skill patterns does not mean that the occupations have the same hiring qualifications or job requirements; rather, it means that they share some knowledge, skills or abilities in common.

Tips!

- *A For a few occupations, hourly wage information is not available; in those cases, an hourly wage was calculated by taking the mean annual wage and dividing it by 2000 annual work hours.*
- *One often-used acronym is "OJT," which stands for "on-the-job training." OJT is typically hands-on training that the employer provides 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.

Occupational Profiles

Accountants and Auditors

(Includes Certified Public Accountants or CPAs.)

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:	$11.51 - $16.78/hr	$14.50/hr
New Hires/Exp'd:	$10.50 - $25.23/hr	$15.34/hr
Exp'd/After 3 Years:	$12.00 - $33.84/hr	$18.22/hr

Hours: Most jobs are 38-60 hours per week. Some jobs are 6-34 hours per week.

Benefits: EMPLOYER PAID: Most employers provide medical insurance. Almost all provide a vacation and sick leave. Some also provide vision insurance, dental insurance, a retirement plan, life insurance, and child care benefits. SHARED COST: Some employers provide medical insurance. Many provide a retirement plan. Some also provide dental insurance. For part-time employees: Some employers provide medical insurance. Many provide a vacation. Some also provide sick leave, dental insurance, vision insurance, and a retirement plan.

Training, Experience, and Other Requirements

License: Not required, except for individuals who want to be licensed as Certified Public Accountants (CPAs); contact the State Board of Accountancy at 916-263-3680 for licensing information.

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

Experience: Most employers require 6-60 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Almost all employers report that spreadsheet software skills are important. Most also report that word processing skills are important. Some report that database skills are important as well.

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

Very large. There are approximately 2,810 - 3,430 Accountants and Auditors currently employed in the North Bay Counties. Local surveys indicate about 55% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. About 55-65 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 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 1 in 4 employed by accounting, auditing and bookkeeping firms, and government agencies. Nationally, about 10% are self-employed.

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

Important 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)
Important Skills:	• Using mathematics to solve problems (5.00) • Understanding written sentences and paragraphs in work related documents (4.83) • Determining how money will be spent to get the work done, and accounting for these expenditures (4.83)
Important Abilities:	• The ability to add, subtract, multiply, or divide quickly and correctly (4.00) • The ability to understand and organize a problem and then to select a mathematical method or formula to solve the problem (3.80) • The ability to see details of objects at a close range (within a few feet of the observer) (3.80)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 15 employers surveyed representing 80 employees in this occupation.

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 Bookkeeping, Accounting, and Auditing Clerks Moderate-term OJT $15.31/hr	**Auditor** Bachelor degree $25.71/hr	**Accounting/Financial Manager** Financial Managers, Branch or Dept. Bachelor + work exp $39.50/hr	**Chief Financial Officer**

Occupations with Similar Skill Patterns

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	$39.71

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."

Administrative Assistants

Administrative Assistants aid executives by coordinating, analyzing, and improving office services, such as personnel, budget, and operating practices. They analyze personnel requirements, study methods of improving performance standards, and analyze jobs for wage-and-salary adjustments and promotions. They analyze budgetary requirements and expenditures, and study methods to implement cost reduction. They analyze operating practices and create new systems or revise established procedures to simplify and improve reporting procedures, work flow, record keeping systems, forms control, office layout, or suggestion systems. They interpret operating policies, prepare reports with recommendations for solutions of administrative problems, and answer correspondence. They may direct services, such as maintenance, repair, supplies, and mail. (Non-OES 169167997)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$8.65 - $14.45/hr	$9.50/hr
New Hires/Exp'd:	$8.50 - $21.00/hr	$16.12/hr
Exp'd/After 3 Years:	$9.18 - $24.04/hr	$18.75/hr

Hours: Almost all jobs are 40 hours per week. A few jobs are 22-27 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Some employers report that they do not always require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 1-5 years. Some employers are willing to accept training as a substitute for experience.

Training: Administrative Assistants acquire skills in various ways. Training ranges from high school vocational education programs that teach office skills and keyboarding to 1-2 year programs in office administration offered by vocational and technical schools and community colleges. Almost all employers report that word processing, spreadsheet, and database software skills are important. Many also report that desktop publishing software skills are important.

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

Insufficient data to estimate the size of this occupation; however, there are approximately 7,430 – 9,080 Secretaries (including Administrative Assistants) currently employed in the North Bay Counties. Local surveys indicate about 90% are female. Some jobs are union.

Employment Trends

Insufficient data to estimate local employment trends; however, some of the employers surveyed expect their employment in this occupation to grow over the next two years. In addition, none of the employers surveyed expect their employment for this occupation to decline. Nationwide, employment of Executive Secretaries and Administrative Assistants is projected to grow about as fast as the average for all occupations. Fast growing industries—such as personnel supply, computer and data processing services, health and legal services, education, and engineering and management—will continue to generate most new job opportunities. However, a decline in employment is expected for General Secretaries.

Other Information

Where the Jobs Are: In a wide variety of industries, including educational services, government agencies, and temporary employment agencies. Nationally, about 4% are self-employed.

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

Important 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 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 (4.00) • Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (3.00)
Important Skills:	• Understanding written sentences and paragraphs in work related documents (4.40) • Adjusting actions in relation to others' actions (4.20) • Communicating effectively with others in writing as indicated by the needs of the audience (4.20)
Important Abilities:	• The ability to see details of objects at a close range (within a few feet of the observer) (4.00) • The ability to read and understand information and ideas presented in writing (4.00) • 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 (3.80)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

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: 19 employers surveyed representing 80 employees in this occupation.

Career Path for Administrative Assistants

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Receptionist Receptionists and Information Clerks Short-term OJT $11.31/hr	**Secretary** Secretaries, Except Legal, Medical, and Executive Post-secondary training $14.34/hr	**Administrative Assistant** Executive Secretaries and Administrative Assistants Work experience $18.05/hr	**Customer Service Manager** First-Line Supervisors, Customer Service Work experience $21.85/hr
Clerical Support Worker		**Supervisor or Office Manager** First-Line Supervisors, Administrative Support Work experience $21.85/hr	**Sales Rep** Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products Moderate-term OJT $24.07/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Graduate Teaching Assistants	Masters degree	—
Program Directors	Work experience	—
Travel Clerks	Short-term OJT	$13.08
Adjustment Clerks	Short-term OJT	$15.03
Law Clerks	Professional degree	$16.37
First-Line Supervisors/Managers of Personal Service Workers	Work experience	$16.38
Human Resources Assistants, Except Payroll and Timekeeping	Short-term OJT	$16.72
Executive Secretaries and Administrative Assistants	Work experience	$18.05
Paralegals and Legal Assistants	Associate degree	$22.41
Auditors	Bachelor degree	$25.71
Administrative Services Managers	Bachelor + work exp	$29.21

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 Elizabeth Walker

What are some of the job titles you've held previously?
I have been a Customer Service Representative and a Cashier.

What kind of work do you do in a typical day?
I sort the mail and code the bills with the date and amounts needed to be paid. I answer the phones and put together the customer folders. I make copies of all customer files. I do the filing and make the schedule for the shop personnel. I track all shipments to the customers, and I run the office errands.

What was it that attracted you to this type of work?
I enjoy working in a position where I can go home at the end of the day knowing that my job was done. I enjoy working in an office atmosphere, and this is a small office where we are sort of an extended family.

What knowledge, skills and abilities are important in this kind of work?
You need to be able to take orders from people and follow directions. You have to have good communications skills to deal with the customers and be a liaison between the office and the shop. You need to be able to multitask. You have to be organized and be a quick thinker. You should have some keyboarding and computer skills, and be familiar with basic office software.

What is the best preparation for someone who wants to go into this occupation?
It would be a good idea to take some computer courses.

What is it that keeps you wanting to do this kind of work?
I enjoy my job and the people I work with. I can go home at the end of the day satisfied that I did my job. I have a great office staff to work with, and a great bunch of customers.

What qualities make for an exceptional Administrative Assistant?
You need to be people oriented and able to follow directions. You need to be a self starter and able to work with little supervision. You have to enjoy working in an office atmosphere.

What are the next steps in your career path?
The company I work for is small, but we are growing. When the opportunity is available, I would like to move into the accounting portion of the company.

Adult and Child Day Care Center Directors

(Includes Preschool Directors and Directors of Adult Day Care Centers.)

Adult and Child Day Care Center Directors direct activities of child or adult day care center or other facility to provide instruction and care for children or adults. They maintain facility budget and purchase instructional materials or teaching aids and hire teaching and service staff. They review and evaluate facility activities to ensure conformance to state and local regulations. (Non-OES 092167999)

Wages and Benefits

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	—	—	—	—
New Hires/Exp'd:	$11.21 - $29.10/hr	$16.40/hr	$11.03 - $23.64/hr	$15.00/hr
Exp'd/After 3 Years:	$12.40 - $32.19/hr	$19.03/hr	$11.99 - $24.14/hr	$17.00/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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: At a minimum, the State requires that Preschool Directors must have criminal record clearance, including fingerprinting, and meet one of several combinations of education and experience requirements. Call the State Dept. of Social Services, Community Care Licensing, at 916-229-4500 for more information.

Education: Many employers require an associate degree for job entry. Some require a bachelor degree.

Experience: Most employers require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 1-3 years. Many employers are willing to accept training as a substitute for experience.

Training: Preschool Directors usually have held teaching positions before moving into administration. Preschool Teachers are generally required to complete 6-12 units of Early Childhood Education (ECE). Most employers report that word processing software skills are important. Many also report that spreadsheet skills are important.

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 336 employees in this occupation.

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

Insufficient data to estimate the size of this occupation. Local surveys indicate about 95% are female. A few jobs are union.

Employment Trends

Insufficient data to estimate local employment trends; however, almost all of the employers surveyed expect their employment in this occupation to grow over the next two years. In addition, none of the employers surveyed expect their employment for this occupation to decline. Nationwide, employment of Education Administrators, including Preschool Directors, is projected to grow about as fast as the average for all occupations through 2010. The U.S. Department of Education projects enrollment of preschool, elementary, and middle school students to be stable over the next 10 years. However, if mandatory preschool becomes more widespread, more preschool directors will be needed.

Other Information

Where the Jobs Are: Child care centers, nursery schools, preschools, and adult day care centers. Nationally, about 8% are self-employed.

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

Important 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 (4.83)
- 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 (4.50)
- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (4.25)

Important Skills:
- Adjusting actions in relation to others' actions (4.58)
- Talking to others to effectively convey information (4.50)
- Understanding written sentences and paragraphs in work related documents (4.33)
- Communicating effectively with others in writing as indicated by the needs of the audience (4.25)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.66)
- The ability to communicate information and ideas in writing so others will understand (4.66)
- The ability to read and understand information and ideas presented in writing (4.50)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.41)
- The ability to speak clearly so that it is understandable to a listener (4.25)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Adult and Child Day Care Center Directors

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Preschool Teacher Preschool Teachers, Except Special Education Post-secondary training $11.51/hr	**Lead or Head Teacher**	**Adult and Child Day Care Center Director** Education Administrators, Preschool and Child Care Center/Program Bachelor + work exp $20.92/hr	**Executive Director**
Teacher Aide or Assistant Child Care Workers Post-secondary training $9.18/hr	**Program Manager or Assistant Director**		**Day Care Center Owner**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Government Service Executives	Bachelor + work exp	—
Private Sector Executives	Bachelor + work exp	—
Education Administrators, Preschool and Child Care Center/Program	Bachelor + work exp	$20.92
Public Relations Specialists	Bachelor degree	$24.91
Personnel Recruiters	Work experience	$25.23
Advertising and Promotions Managers	Bachelor + work exp	$36.79
Industrial-Organizational Psychologists	Masters degree	$36.99
Education Administrators, Postsecondary	Masters + work exp	$37.05
Natural Sciences Managers	Masters + work exp	$40.15
Education Administrators, Elementary and Secondary School	Masters + work exp	$41.15
Computer and Information Systems Managers	Bachelor + work exp	$44.34

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 Peggy Carlson

What are some of the job titles you've held previously in this career field?
I have been a Preschool Teacher and a Teacher's Aide.

What kind of work do you do in a typical day?
I supervise the staff and make sure that the day's schedule runs smoothly for the children and the staff. I address the needs and concerns of the parents. Throughout the day, I answer the phone and take care of the office paperwork. I also deal with any maintenance issues and keep the owners of the center informed.

What was it that attracted you to this type of work?
When I was in high school, I taught young children in religion classes. I also worked with young children as a hospital volunteer. I have always enjoyed working with children.

What knowledge, skills, and abilities are important in this kind of work?
You need to successfully complete early childhood education courses. It's important to know what is developmentally appropriate for children. You need to have the ability to communicate with adults as well as with children. A Day Care Center Director needs to help provide an atmosphere which always promotes loving and quality childcare and keeps the staff working in a positive and self-motivated direction. You also need to be able to multi-task and to operate a center as mandated by state regulations.

What is the best preparation for someone who wants to go into this occupation?
It is very helpful to work as an Aide, or volunteer in a childcare setting. A Director can better direct the teachers when he or she has been in the teacher's shoes. So being a Teacher and working your way up to the Director's position is best.

What is it that keeps you wanting to do this kind of work?
I love seeing the joy in the children's faces as they successfully continue to mature physically, socially, emotionally, and academically in the loving environment that we provide for them.

What qualities make for an exceptional Day Care Center Director?
I think maturity and responsibility are very important. You need to be a person who can be flexible and have a sense of humor. A Director has to understand that each child is unique with his or her own unique family situation.

What are the next steps in your career path?
I continue to further my education by attending early childhood workshops.

Amusement and Recreation Attendants

Amusement and Recreation Attendants perform a variety of duties at amusement or recreation facilities. They schedule the use of recreation facilities and allocate equipment to participants of sporting events or recreational pursuits, collect fees for games played, set pins, prepare billiard tables, provide caddying and other services for golfers, and operate carnival rides and amusement concessions. (OES 680140)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.75 - $11.51/hr	$7.50/hr
New Hires/Exp'd:	$6.75 - $14.38/hr	$8.50/hr
Exp'd/After 3 Years:	$6.75 - $15.79/hr	$10.00/hr

Some employers report that their Attendants may also receive tips.

Hours: Many jobs are seasonal and range from 20-30 hours per week. Some jobs are regular part-time, ranging from 15-25 hours per week. A few jobs are 35-40 hours per week. Most employers report that swing shifts are common for this occupation.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Almost all employers report that they do not always require prior experience.

Training: Employers generally provide on-the-job training for this occupation. Some employers report that word processing and spreadsheet software skills are important.

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 223 employees in 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) due to the high percentage of seasonal jobs.

Size of Occupation

Medium. There are approximately 805-985 Amusement and Recreation Attendants currently employed in the North Bay Counties. Local surveys indicate about 45% are female.

Employment Trends

The growth rate is projected to be slower than 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 15-20 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Amusement and Recreation Attendants is expected to grow faster than the average for all occupations through 2010.

Other Information

Where the Jobs Are: Amusement and recreation facilities. Nationally, about 2% are self-employed.

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

Important 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 (4.66) • 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 (4.00) • Knowledge of weaponry, public safety, and security operations, rules, regulations, precautions, prevention, and the protection of people, data, and property (3.33)
Important Skills:	• Talking to others to effectively convey information (4.33) • Actively looking for ways to help people (4.16) • Obtaining and seeing to the appropriate use of equipment, facilities, and materials needed to do certain work (3.50)
Important Abilities:	• The ability to communicate information and ideas in speaking so others will understand (4.33) • The ability to speak clearly so that it is understandable to a listener (4.16) • The ability to time the adjustments of a movement or equipment control in anticipation of changes in the speed and/or direction of a continuously moving object or scene (3.66)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Amusement and Recreation Attendants

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Attendant Amusement and Recreation Attendants Short-term OJT $7.78/hr	**Supervisor**	**Manager** First-Line Supervisors/Managers of Personal Service Workers Work experience $16.38/hr	**Regional Manager**
			Facility Owner

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Amusement and Recreation Attendants	Short-term OJT	$7.78
Service Station Attendants	Short-term OJT	$8.47
Locker Room, Coatroom, and Dressing Room Attendants	Short-term OJT	$8.82
Truck Drivers, Light or Delivery Services	Short-term OJT	$12.24
Transportation Attendants, Except Flight Attendants and Baggage Porters	Short-term OJT	$12.67
Medical Assistants	Post-secondary training	$13.26
Rail Yard Engineers, Dinkey Operators, and Hostlers	Work experience	$15.74
Tractor-Trailer Truck Drivers	Moderate-term OJT	$16.74
Able Seamen	Short-term OJT	$17.29
Train Crew Members	Work experience	$19.83
Crane and Tower Operators	Moderate-term OJT	$23.96

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 Asia Halloran

What are some of the job titles you've held previously?
I have been Customer Service, and a Beer Tender, and now I am an Assistant Manager.

What kind of work do you do in a typical day?
I clean the equipment, I assign the pool tables, and I deal with the customers. I also serve beer, soda and food, and prep everything for the night shift.

What was it that attracted you to this type of work?
My dad was in the business and he offered me a position.

What knowledge, skills, and abilities are important in this kind of work?
You need to have good customer service skills and a lot of patience. This is a very customer service oriented business; you have to have the ability to deal with different types of people. And you have to know different ways to approach different people, as well as the ability to manage large groups of people.

What is the best preparation for someone who wants to go into this occupation?
You have to be willing to work. A lot of people come into this business thinking this job is a breeze, and you don't really have to do any work. But you have to be willing to handle and diffuse problems. There is alcohol served here. Sometimes people can get crazy, and you have to know how to deal with that. And you have to be willing to do the cleaning part of the job. It is not all about earning tips.

What is it that keeps you wanting to do this kind of work?
I love my job and I have a great time doing it.

What qualities make for an exceptional Amusement and Recreation Attendant?
You have to love working with people, and be very customer service oriented. You need to possess the ability to adapt to your environment and different types of people. It is also important to be open-minded.

What are the next steps in your career path?
I am not really sure, but if I stay in this business, I would consider owning a facility myself.

Animal Caretakers - Except Farm

(Includes Kennel Workers, Kennel Assistants, and Groomers.)

Animal Caretakers (except Farm) feed, water, groom, exercise, or otherwise care for small or large animals, fish, or birds in zoos, circuses, pounds, laboratories, animal hospitals, aquariums, kennels, or stables. They clean and repair cages, pens, or fish tanks. They administer tests to experimental animals or give treatments to sick or injured animals, and keep records of feedings, tests, and treatments, and of animals received and discharged. (OES 790170)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.90 - $11.00/hr	$7.00/hr
New Hires/Exp'd:	$6.90 - $12.00/hr	$8.50/hr
Exp'd/After 3 Years:	$8.63 - $15.75/hr	$13.00/hr

Hours: Many jobs are 35-45 hours per week. Some jobs are 8-30 hours per week. Many employers report that swing shifts are common for this occupation.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers report that they do not always require prior experience.

Training: Some training programs are available for specific types of Animal Caretakers, such as Pet Groomers, but formal training is usually not necessary for entry-level positions. However, while most Animal Caretakers are trained on the job, employers generally prefer to hire people with some experience with animals. Pet Groomers typically learn their trade by completing an informal apprenticeship, usually lasting 6-10 weeks. Prospective Pet Groomers may also attend one of the 50 State-licensed grooming schools throughout the country, with programs varying in length from 4-18 weeks. Some zoological parks require their Animal Caretakers to have a bachelor's degree in biology, animal science, or a related field.

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 87 employees in this occupation.

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

Small. There are approximately 525-645 Animal Caretakers currently employed in the North Bay Counties. Local surveys indicate about 70% are female.

Employment Trends

The growth rate is projected to be slower 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 Animal Caretakers is expected to grow faster than the average for all occupations through 2010. The pet population—which drives employment of animal caretakers in kennels, grooming shops, animal shelters, and veterinary clinics and hospitals—is expected to remain stable or slightly increase. Pets remain popular and pet owners—including a large number of baby boomers whose disposable income is expected to increase as they age—may increasingly take advantage of grooming services, daily and overnight boarding services, training services, and veterinary services, spurring employment growth for Animal Caretakers, Veterinary Assistants, and Animal Trainers.

Other Information

Where the Jobs Are: Animal services, including kennels, stables, pet grooming, and veterinary clinics and hospitals. Nationally, about 26% are self-employed.

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

Important Knowledge:	• Knowledge of plant and animal living tissue, cells, organisms, and entities, including their functions, interdependencies, and interactions with each other and the environment (4.20) • 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 (3.00)
Important 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. (3.00)
Important Abilities:	• The ability to communicate information and ideas in speaking so others will understand (3.80) • 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. (3.40) • The ability to listen to and understand information and ideas presented through spoken words and sentences (3.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Animal Caretakers - Except Farm

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Animal Caretaker Non-farm Animal Caretakers Short-term OJT $9.42/hr	**Veterinary Technician** Associate degree $12.15/hr	**Veterinary Office/Clinic Manager** First-Line Supervisors and Managers – Animal Care Workers, Except Livestock Work experience $17.03/hr	**Veterinarian** Veterinarians Professional degree $39.55/hr
Veterinary Assistant Veterinary Assistants and Laboratory Animal Caretakers Short-term OJT $8.98/hr			

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Cleaners of Vehicles and Equipment	Short-term OJT	$8.14
Animal Breeders	Short-term OJT	$8.92
Nonfarm Animal Caretakers	Short-term OJT	$9.42
Heating Equipment Setters and Set-Up Operators, Metal and Plastic	Moderate-term OJT	$12.16
Medical Equipment Preparers	Short-term OJT	$13.05
Photographic Processing Machine Operators	Short-term OJT	$13.79
Agricultural Technicians	Associate degree	$14.18
Chemical Equipment Tenders	Moderate-term OJT	$14.74
Wellhead Pumpers	Long-term OJT	$15.57
Biological Technicians	Associate degree	$17.37
Radiologic Technicians	Post-secondary training	$22.13

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 Allen Daley

What are some of the job titles you've held previously?
This is actually the first job I have had in this field.

What kind of work do you do in a typical day?
I let the dogs out in the morning, feed them, and do some basic grooming. I administer any medications that any of the animals need. A couple of our dogs are diabetics, so I give them insulin injections twice a day. Everyday we wash out some of the inside crates. At 12:30 we feed the puppies lunch. Then we go through every crate and clean them. If they soiled during the night, we re-paper it and give them a new blanket. If there is a dog going home, we give them a bath and totally groom it.

What was it that attracted you to this type of work?
I like dogs and I am good with dogs.

What knowledge, skills and abilities are important in this kind of work?
You need to have a basic knowledge of dogs; you need to be able to tell if they are sick or uncomfortable at all. You have to be real humane.

What is the best preparation for someone who wants to go into this occupation?
You can do volunteer work. Canine Companions, for example, is a good program. Basically the only prerequisite that you need for this job is a love for animals.

What is it that keeps you wanting to do this kind of work?
I love it. There is nothing else to it, I am happy doing this and I enjoy our clientele.

What qualities make for an exceptional Animal Caretaker?
A Kennel Worker basically just needs to be dedicated and want to work. This is not a job where you can just do it half way. If you don't do your job, a dog could get sick. I'm not saying you have to be a perfectionist, but you have to have a certain amount of those tendencies in you.

What are the next steps in your career path?
I am actually going back to Sydney (Australia) and going back to the University. I would like to do some marine biology.

Assemblers and Fabricators - Except Machine, Electrical, Electronic, and Precision

(Includes Production Workers and Production Welders.)

Assemblers and Fabricators (except Machine, Electrical, Electronic and Precision) in this category assemble and/or fit together parts to form complete units or subassemblies at a bench, conveyor line, or on the floor. Their work may involve the use of hand tools, power tools and special equipment in order to carry out fitting and assembly operations. Includes assemblers whose duties are of a nonprecision nature. Does not include electrical, electronic, machine and precision assemblers, and workers who perform specialized operations exclusively as a part of assembly operations, such as riveting, welding, soldering, machining, or sawing. (OES 939560)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.00 - $11.50/hr	$9.50/hr
New Hires/Exp'd:	$8.00 - $15.00/hr	$11.50/hr
Exp'd/After 3 Years:	$8.24 - $21.63/hr	$14.50/hr

Some Assemblers and Fabricators may also receive bonuses.

Hours: Many jobs are 40-42 hours per week. Some jobs are 45-50 hours per week. Some jobs are 36 hours per week. A few jobs are 16-32 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers report that they do not always require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 6-48 months. Many employers are willing to accept 1-12 months of training as a substitute for experience.

Training: Employers generally provide on-the-job training for this occupation. Specialized training may be required for some assembly jobs, including Electrical or Electronic Assembler jobs.

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 high (30-39%).

Size of Occupation

Very Large. There are approximately 3,300 – 4,035 Assemblers and Fabricators currently employed in the North Bay Counties. Local surveys indicate about 35% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. About 60-70 job openings are projected per year due to a net increase in occupation size. About 60-70 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Assemblers and Fabricators is expected to grow more slowly than the average for all occupations through the year 2010, reflecting increasing automation and the shift of assembly to countries with lower labor costs. As manufacturers strive for greater precision and productivity, automated machinery increasingly will be used to perform work more economically or more efficiently.

Other Information

Where the Jobs Are: Manufacturers and fabricators of metal, wood, glass, fiberglass, rubber, and plastic products. Nationally, about 2% 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 through in-house promotion or transfer. Some fill openings through word-of-mouth.

Important Knowledge:	• Knowledge of materials, methods, and the appropriate tools to construct objects, structures, and buildings (4.80)
Important Skills:	• Installing equipment, machines, wiring, or programs to meet specifications (4.00) • Repairing machines or systems using the needed tools (3.80) • 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. (3.40)
Important 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 (4.20) • The ability to exert maximum muscle force to lift, push, pull, or carry objects (4.00) • The ability to bend, stretch, twist, or reach out with the body, arms, and/or legs (3.80)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

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 703 employees in this occupation.

Career Path for Assemblers and Fabricators - Except Machine, Electrical, Electronic, and Precision

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Production Worker or Helper Helpers, Production Workers Short-term OJT $9.12/hr	**Assembler or Fabricator** Long-term OJT $9.72/hr	**Lead Person/Foreman** First-Line Supervisors/Managers of Production and Operating Workers Work experience $22.55/hr	**Production Manager**
	Machine Operator or Tender Machine Feeders and Offbearers Short-term OJT $9.98/hr	**Welder/Fabricator** Welders and Cutters Post-secondary training $14.34	**Owner**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Refractory Materials Repairers, Except Brickmasons	Moderate-term OJT	—
Cleaners of Vehicles and Equipment	Short-term OJT	$8.14
Production Helpers	Short-term OJT	$9.12
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
Welding Machine Operators and Tenders	Moderate-term OJT	$14.33
Construction Carpenters	Long-term OJT	$20.30
Rough Carpenters	Long-term OJT	$20.30
Carpenter Assemblers and Repairers	Long-term OJT	$20.30
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 Elva Solis

What are some of the job titles you've held previously?
I have done production, translating, and cannery work.

What kind of work do you do in a typical day?
I am a lead person. I check work orders to make sure that the right product is being made. I verify that the product is correctly assembled. If it has to ship that day I have to receive them in the system so that shipping knows that it is ok to ship it out.

What was it that attracted you to this type of work?
I was going to start as a label maker, and I know a little bit about computers so I thought it was a good place to start. Making labels is what attracted me to this particular shop.

What knowledge, skills, and abilities are important in this kind of work?
You have to be able to pay attention to details. You need to be able to identify each label, and how many per box, and make sure it has the right information on it.

What is the best preparation for someone who wants to go into this occupation?
You need to speak a little bit of English and have some confidence that you can do the job. We basically do all the training for the position, so there is little preparation you can do prior to getting the job.

What is it that keeps you wanting to do this kind of work?
My work keeps me motivated. There is variety in my job, and I am not here doing the same thing day in and day out. I could start up making labels or I could start up working on this machine. I find my job exciting.

What qualities make for an exceptional Assembler and Fabricator?
You need to be interested in learning how to do the job. You need to be punctual, neat, as well as a hard worker.

What are the next steps in your career path?
I really don't know right now. I am thinking about becoming an assistant manager.

Automotive Body and Related Repairers

(Includes Auto Body Technicians, Bodymen, and Painters.)

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

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$ 9.59 - $15.00/hr	$11.50/hr
New Hires/Exp'd:	$16.00 - $25.00/hr	$21.00/hr
Exp'd/After 3 Years:	$18.60 - $28.00/hr	$25.00/hr

Many Auto Body Repairers may also receive bonuses.

Hours: Almost all jobs are 40-43 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers require 1-5 years of prior experience. Some employers are willing to accept 1-2 years of training as a substitute for experience.

Training: Some employers may require ASE or I-CAR certification. Vocational training programs are available, but do not necessarily eliminate the need for apprenticeship or on-the-job training.

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 246 employees in this occupation.

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 965 - 1,180 Auto Body Repairers currently employed in the North Bay Counties. Local surveys indicate about 5% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. About 25-30 job openings are projected per year due to a net increase in occupation size. About 30-35 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Auto 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 auto dealerships with in-house body repair shops. Nationally, about 13% are self-employed.

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

Important 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) • Knowledge of materials, methods, and the appropriate tools to construct objects, structures, and buildings (2.80)
Important Skills:	• Repairing machines or systems using the needed tools (4.83) • Inspecting and evaluating the quality of products (4.83) • Installing equipment, machines, wiring, or programs to meet specifications (4.66)
Important 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 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 (3.80)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Automotive Body 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** Cost Estimators Bachelor + work exp $27.41/hr	**Appraiser** 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 Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Engine and Other Machine Assemblers	Work experience	$12.79
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
Farm Equipment Mechanics	Long-term OJT	$14.41
Cement Masons and Concrete Finishers	Long-term OJT	$16.22
Terrazzo Workers and Finishers	Long-term OJT	$15.63
Electric Motor and Switch Assemblers and Repairers	Post-secondary training	$20.00
Automotive Body and Related Repairers	Long-term OJT	$16.79
Riggers	Long-term OJT	$18.78
Mechanical Door Repairers	Long-term OJT	$17.30
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?
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.

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.

Automotive Mechanics

(Also known as Technicians. Includes Smog 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. Does not include Auto Body Repairers, Bus and Truck Mechanics, Diesel Engine Specialists, and Electrical Systems Specialists (OES 853020).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.00 - $12.50/hr	$10.00/hr
New Hires/Exp'd:	$10.00 - $22.00/hr	$15.00/hr
Exp'd/After 3 Years:	$15.00 - $31.16/hr	$25.00/hr

Hours: Almost all jobs are 40 hours per week.

Benefits: EMPLOYER PAID: Almost all employers provide medical insurance. Of the employers surveyed, all report that they provide vacation and dental insurance. Almost all provide sick leave. Many also provide vision insurance. Some provide life insurance and a retirement plan. SHARED COST: Some employers provide a retirement plan.

Training, Experience, and Other Requirements

License: Not required, except for individuals who want to be licensed as Smog Check Technicians or Brake/Lamp Adjusters; contact the Bureau of Automotive Repair at 800-952-5210 for licensing information.

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

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

Training: Apprenticeship training takes about 4 years to complete and to achieve journey-level status. Technicians may develop specialties such as smog, electronics, computer diagnostics, transmissions, or brakes. Employers often require various certifications such as ASE or smog specialist. Most employers report that basic computer skills are important.

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 low (less than 10%).

Size of Occupation

Large. There are approximately 2,580 - 3,155 Automotive Technicians currently employed in the North Bay Counties. Local surveys indicate less than 5% are female. Few jobs are union.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. About 75-90 job openings are projected per year due to a net increase in occupation size. About 70-85 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment opportunities for Automotive Technicians are expected to increase about as fast as the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Auto dealerships and auto repair shops. Nationally, about 16% are self-employed.

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

Important Knowledge:
- Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (5.00)
- Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (3.16)
- Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (3.00)

Important 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 (4.50)
- Performing routine maintenance and determining when and what kind of maintenance is needed (4.16)

Important Abilities:
- 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. (4.32)
- 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. (4.16)
- The ability to bend, stretch, twist, or reach out with the body, arms, and/or legs (4.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 16 employers surveyed representing 185 employees in this occupation.

Career Path: Automotive Mechanics

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Lube Technician	**Automotive Mechanic or Technician** Long-term OJT $15.53/hr	**Automotive Master Mechanic** Long-term OJT $15.53/hr	**Auto Repair Shop Owner**
Mechanic's Helper or Apprentice Helpers--Installation, Maintenance, and Repair Workers Short-term OJT $11.57/hr		**Service Writer** Cost Estimators Bachelor + work exp $27.41/hr	**Service Manager**
Detailer Cleaners of Vehicles and Equipment Short-term OJT $8.14/hr			

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Electronic Equipment Installers and Repairers, Motor Vehicles	Post-secondary training	$11.34
Helpers--Installation, Maintenance, and Repair Workers	Short-term OJT	$11.57
Welding Machine Setters and Set-Up Operators	Moderate-term OJT	$14.33
Automotive Master Mechanics	Long-term OJT	$15.53
Automotive Specialty Technicians	Long-term OJT	$15.53
Maintenance and Repair Workers, General	Work experience	$15.56
Data Processing Equipment Repairers	Post-secondary training	$16.89
Electrical and Electronics Installers and Repairers, Transportation Equipment	Post-secondary training	$19.13
Aircraft Body and Bonded Structure Repairers	Post-secondary training	$19.85
Industrial Machinery Mechanics	Long-term OJT	$20.89
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 Dave Wolfe

What is your job title?
I'm a Master Mechanic.

What kind of work do you do?
I do collision repair.

What are the things that attracted you to this type of work?
I like cars. I always liked figuring out how things worked. It intrigued me to take stuff apart, look at it and then put it back together so I didn't get caught taking it apart. As far as I remember, I've always been like that. When I started getting stuff of my own, bicycles and that sort of thing, it was like I was free to take them apart and put them together because they were mine. Must be part of my nature; I liked to mow the lawn because it had a motor on it.

What kind of things do you do at work (skills)?
I take broken things apart, put them back together, and fix them. As I'm putting them together, I diagnose and analyze why things are broken.

If you were starting over to be an Auto Mechanic, knowing what you know now, how would you better prepare yourself?
Go to school…automotive things, machine shops, welding, electronics; a trade school that's specific to the trade. And I'd recommend learning something about economics so you'll know what's worth repairing and what's not.

What keeps you wanting to do this type of work?
All my years of experience, I have the tools and the skills, and I still like doing it. This job lets you feel the rewards of your accomplishments and you're actually a part of the end product. Not to mention I don't ever have to pay a mechanic to fix my car.

What qualities make an exceptional Auto Mechanic?
Creativity. You must be able to visualize the end product and how you're going to get to that point. You have to be organized, patient, and you have to like to be outdoors without many creature comforts.

Bakers - Bread and Pastry

Bread and Pastry Bakers mix and bake ingredients according to recipes to produce breads, pastries, and other baked goods. They produce goods in smaller quantities for consumption on premises or for sale as specialty baked goods (OES 650210).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.25 - $10.07/hr	$7.50/hr
New Hires/Exp'd:	$6.25 - $13.00/hr	$8.75/hr
Exp'd/After 3 Years:	$7.25 - $12.00/hr	$11.50/hr

A few Bakers may also receive bonuses.

Hours: Most jobs are 35-40 hours per week. Some jobs are 16-30 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Many employers do not require prior experience.

Training: Employers generally provide on-the-job training for this occupation, although related training programs are available.

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 99 employees in 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 low (10-19%).

Size of Occupation

Medium. There are approximately 1,140 – 1,395 Bakers currently employed in the North Bay Counties. Local surveys indicate about 45% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 40-45 job openings are projected per year due to a net increase in occupation size. About 30-40 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Bakers is expected to increase about as fast as the average for all occupations through 2008.

Other Information

Where the Jobs Are: Grocery stores, retail bakeries, and eating and drinking establishments. Nationally, about 5% are self-employed.

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

Important Knowledge:	• Knowledge of techniques and equipment for planting, growing, and harvesting of food for consumption including crop rotation methods, animal husbandry, and food storage/handling techniques (3.00) • 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 (2.50) • Knowledge of inputs, outputs, raw materials, waste, quality control, costs, and techniques for maximizing the manufacture and distribution of goods (2.50)
Important Skills:	• Controlling operations of equipment or systems (3.16) • Inspecting and evaluating the quality of products (2.66) • Finding ways to structure or classify multiple pieces of information (2.66)
Important Abilities:	• 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. (3.20) • The ability to read and understand information and ideas presented in writing (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 *Source: O*NET Database version 3.0*

Career Path for Bakers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Bakery or Counter Clerk Counter Attendants, Cafeteria, Food Concession, and Coffee Shop Short-term OJT $8.05/hr	**Baker** Bakers, Bread and Pastry Long-term OJT $11.35/hr	**Pastry Chef** Chefs and Head Cooks Work experience $16.06/hr	**Bakery Owner**
Dishwasher or Helper Dishwashers Short-term OJT $6.88/hr		**Bakery Supervisor or Manager** Food Service Managers Work experience $19.89/hr	**Restaurant Manager**
			Restaurant Owner

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Cooks, Fast Food	Short-term OJT	$7.37
Maids and Housekeeping Cleaners	Short-term OJT	$8.25
Pressers, Hand	Short-term OJT	$8.39
Sewers, Hand	Short-term OJT	$8.57
Bakers, Bread and Pastry	Long-term OJT	$11.35
Bakers, Manufacturing	Moderate-term OJT	$11.35
Stone Cutters and Carvers	Long-term OJT	$11.87
Shop and Alteration Tailors	Work experience	$13.74
Insulation Workers, Floor, Ceiling, and Wall	Long-term OJT	$16.56
Insulation Workers, Mechanical	Moderate-term OJT	$16.56
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 Shannon Stapel

What are some of the job titles you've held previously?
I have been a Pastry Chef, Dessert Platter, Assistant Pastry Chef, and a Pastry Manager in training.

What kind of work do you do in your current job and what do you do in a typical day?
Most of my work consists of both management and baking. I do the morning bake, which includes pastry, muffins, and scones. I complete the ordering, assist up front and also assist with the cleaning. We have our standard recipes, but sometimes we use our creativity to come up with new ideas and baked goods.

What was it that attracted you to this work?
I baked at home as a young child. So I always knew that I wanted to bake and eventually own my own business. I enjoy my work so much. I couldn't imagine doing anything else.

What knowledge, skills, and abilities are important in this kind of work?
I think to do this type of work you must be efficient and use your time well. The work is physically demanding and you are on your feet for long periods of time, so you must have stamina. You need to have a feel for cooking, enjoy baking and have a passion for it. Good communication and creativity are also important as well as precision, since baking requires exact measurements.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I would recommend formal training to learn the rules and discipline of the baking industry. A lot of training programs require that you have had experience prior to admission.

What is it that keeps you wanting to do this kind of work?
I love what I do and it is a good creative outlet for me. I am also driven to own my own business, so this keeps me motivated to learn. I think baking is a job that is flexible, interesting and very different from sitting in an office all day.

What qualities make for an exceptional Baker?
You must have a passion for what you do. Common sense is also important, as well as experience and formal training. You must be organized, efficient, and have a strong desire to bake. Some other qualities are creativity, an ability to work well with others, and you must be easy-going.

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. Does not include collectors of money from coin boxes (OES 535080).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.36 - $19.18/hr	$10.00/hr
New Hires/Exp'd:	$8.00 - $19.18/hr	$12.00/hr
Exp'd/After 3 Years:	$10.00 - $23.97/hr	$16.00/hr

Hours: Almost all jobs are 38-40 hours per week.

Benefits: EMPLOYER PAID: Many employers provide medical insurance. Almost all provide a vacation. Most provide sick leave. Some also provide dental insurance, a retirement plan, vision insurance, and life insurance. SHARED COST: Many employers provide medical insurance and dental insurance. Some also provide life insurance, vision insurance, and a retirement plan.

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Many employers do not require prior experience. Many others require 6-36 months of prior experience. Many employers are willing to accept training as a substitute for experience.

Training: Many employers report that word processing and spreadsheet skills are important. Employers generally provide on-the-job training for this occupation.

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

Medium. There are approximately 905 - 1,105 Bill and Account Collectors currently employed in the North Bay Counties. Local surveys indicate about 65% are female.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2004. About 50-60 job openings are projected per year due to a net increase in occupation size. About 20-25 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment is expected to grow much faster than the average as the level of consumer debt rises and as more companies seek to improve their debt collection by contracting with third party collection agencies.

Other Information

Where the Jobs Are: In a variety of industries, with about 1 in 3 employed by collection services firms. Nationally, about 1% 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 unsolicited applicants. Some recruit applicants through internet job listings and/or fill openings through in-house promotion or transfer.

Important 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 (3.60) • Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (3.60) • Knowledge of economic and accounting principles and practices, the financial markets, banking, and the analysis and reporting of financial data (3.40)
Important Skills:	• Talking to others to effectively convey information (4.00) • Listening to what other people are saying and asking questions as appropriate (3.60) • Knowing how to find information and identifying essential information (3.60)
Important Abilities:	• The ability to add, subtract, multiply, or divide quickly and correctly (4.00) • The ability to communicate information and ideas in speaking so others will understand (3.60) • The ability to speak clearly so that it is understandable to a listener (3.60)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 15 employers surveyed representing 90 employees in this occupation.

Career Path: Bill and Account Collectors

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
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	**Collector** Bill and Account Collectors Moderate-term OJT $14.57/hr	**Collection Manager**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Hotel, Motel, and Resort Desk Clerks	Short-term OJT	$9.28
Order Clerks	Short-term OJT	$13.48
Credit Checkers	Short-term OJT	$13.72
Welfare Eligibility Workers and Interviewers	Moderate-term OJT	$14.13
Bill and Account Collectors	Moderate-term OJT	$14.57
Interviewers, Except Eligibility and Loan	Short-term OJT	$14.74
Tax Preparers	Bachelor degree	$15.58
Brokerage Clerks	Moderate-term OJT	$17.76
Insurance Claims Clerks	Moderate-term OJT	$18.85
Insurance Policy Processing Clerks	Moderate-term OJT	$18.85
Personal Financial Advisors	Bachelor degree	$36.44

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 Kesondra Ward

What is your job title?
Collections Customer Service Representative.

What kind of work do you do?
I receive payments, post payments, note accounts and collect on accounts that are over 60 days (past due).

What are the things that attracted you to this type of work?
I like cash handling and the challenge of customer service and collecting in the same spool.

What kind of things do you do at work (skills)?
If payments come in through the mail, I go ahead and open up the envelope, see how much it is, and see what invoice it's for. I search the invoice using AS/400, and then I note the account and whether that payment was or was not received. In the morning I come in and look at a 60-day printout sheet and do follow-ups according to my notes and payment arrangements. If someone has broken say, two to three payment arrangements, I request that the (storage) container, if they still have a container on rent, be repossessed.

If you were starting over to be a Bill Collector, knowing what you know now, how would you better prepare yourself?
I'd prepare myself mentally for the challenge. Verbally I would prepare so that I would know what to say and when to say it by having someone assist me in role playing. I would definitely role-play more. I'd probably take a course on accounting and collections procedures.

What keeps you wanting to do this type of work?
I want to be an Accountant. I figure this will give me good experience in dealing with different customers and situations. I want to sharpen my listening skills so that I can better understand the different accounting principals that are taught at the college level.

What qualities make an exceptional Bill Collector?
Being considerate. Understanding and still being able to come up with a good solution for the problem. There's teamwork involved there, so you've got to be a team player.

Billing, Cost, and Rate Clerks

(Also known as Billing 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:	$10.00 - $15.00/hr	$13.99/hr
New Hires/Exp'd:	$10.00 - $27.07/hr	$15.00/hr
Exp'd/After 3 Years:	$14.00 - $28.20/hr	$18.00/hr

Many Billing Clerks may also receive bonuses.

Hours: Most jobs are 32-40 hours per week. Some jobs are 10-20 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%) ■■ = Some (20-39%) ■ = Few (1-19%)
□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers require 1-2 years of prior experience.

Training: Employers often provide on-the-job training for this occupation. Some employers report that they require technical or vocational training prior to employment. Some employers report that word processing and spreadsheet software skills are important.

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 24 employees in 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

Medium. There are approximately 890 – 1,090 Billing Clerks currently employed in the North Bay Counties. Local surveys indicate about 90% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. About 20-25 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 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, including offices of physicians, accounting and bookkeeping firms, hospitals, offices of dentists, and wholesalers. Nationally, less than 1% are self-employed.

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements and/or fill openings by hiring employee referrals. Many fill openings by hiring referrals from employment agencies.

Important 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 economic and accounting principles and practices, the financial markets, banking, and the analysis and reporting of financial data (4.16) • Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (4.16)
Important Skills:	• Using mathematics to solve problems (4.50) • Understanding written sentences and paragraphs in work related documents (4.00) • Knowing how to find information and identifying essential information (3.83)
Important 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 read and understand information and ideas presented in writing (4.66)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

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 Clerk** Insurance Policy Processing Clerks Moderate-term OJT $18.85/hr	**Accountant** Accountants Bachelor degree $25.71/hr	

Occupations with Similar Skill Patterns

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
Billing, Cost, and Rate Clerks	Moderate-term OJT	$14.04
Statement 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?
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.

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, Cost and Rate 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.

Biotechnology Laboratory Assistants

(Also known as Laboratory Technicians.)

Biotechnology Laboratory Assistants prepare solutions and perform laboratory procedures under the direction of a research assistant or scientist. They may be responsible for a wide variety of research laboratory tasks and experiments. They may also be responsible for implementing analyses of raw materials, in-process inspections and quality control audits as well as the manufacture and packaging of products and the implementation of production procedures. (Non-OES 041061997)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.00 - $20.00/hr	$10.00/hr
New Hires/Exp'd:	$7.00 - $22.00/hr	$12.00/hr
Exp'd/After 3 Years:	$9.00 - $31.16 /hr	$16.00/hr

Hours: Almost all jobs are 38-50 hours per week.

Benefits: EMPLOYER PAID: Most employers provide medical insurance. Almost all provide a vacation. Most also provide sick leave and a retirement plan. Many provide dental, vision, and life insurance. SHARED COST: Some employers provide medical insurance and other benefits, including dental insurance, vision insurance, and a retirement plan.

Training, Experience, and Other Requirements

License: Not required.

Education: Some employers require an associate degree for job entry. Some others require a bachelor degree.

Experience: Most employers do not require 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 moderate (20-29%).

Size of Occupation

Small. There are approximately 75-150 Biotechnology Laboratory Technicians currently employed in the North Bay Counties. Local surveys indicate about 55% are female.

Employment Trends

Insufficient data; however, some employers surveyed expect their employment for this occupation to grow over the next two years. Nationwide, employment of Science Technicians, including Biotechnology Laboratory Assistants, is expected to increase more slowly than the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Research and testing laboratories and manufacturers of chemical and biological products.

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

Important Knowledge:	• Knowledge of plant and animal living tissue, cells, organisms, and entities, including their functions, interdependencies, and interactions with each other and the environment (4.83) • Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (3.33) • Knowledge of techniques and equipment for planting, growing, and harvesting of food for consumption including crop rotation methods, animal husbandry, and food storage/handling techniques (3.00)
Important Skills:	• Using scientific methods to solve problems (3.50) • Using mathematics to solve problems (3.33) • Identifying the nature of problems (3.16)
Important Abilities:	• The ability to listen to and understand information and ideas presented through spoken words and sentences (3.60) • The ability to produce many rules so that each rule tells how to group (or combine) a set of things in a different way. (3.00) • The ability to communicate information and ideas in writing so others will understand (3.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 11 employers surveyed representing 72 employees in this occupation.

Career Path: Biotechnology Laboratory Assistants

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Lab Technician Biological Technicians Associate Degree $17.37/hr	**Lab Supervisor**	**Scientist** Biochemists and Biophysicists Doctoral Degree $28.98/hr	**Lab Manager or Director** Natural Sciences Managers Masters + work exp $40.15/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Nonfarm Animal Caretakers	Short-term OJT	$9.42
Pewter Casters and Finishers	Long-term OJT	$11.28
Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders	Moderate-term OJT	$12.42
Photographic Hand Developers	Moderate-term OJT	$12.68
Semiconductor Processors	Post-secondary training	$12.94
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	Moderate-term OJT	$13.15
Photographic Processing Machine Operators	Short-term OJT	$13.79
Agricultural Technicians	Associate degree	$14.18
Printing Press Machine Operators and Tenders	Long-term OJT	$14.60
Surgical Technologists	Associate degree	$16.80
Biological Technicians	Associate degree	$17.37

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 Maggie O'Neill

What is your job title?
Research Technician II

What kind of work do you do?
I work with insects. I take care of the cages and all other aspects of their life. I work with the biology department and the medical students, some of which I train. We have investors walk through, so I do small tours in the insect room. It's interesting work.

What are the things that attracted you to this type of work?
Actually it was by circumstance that I got this job. I had quit a job and I realized that quitting a job when you have rent to pay isn't the right thing to do. There was an internship position available and while I was in college, I interned for about seven months. I really liked learning about life cycles of animals but I had never worked with bugs at all. Actually, I was kind of afraid of insects. But they had benefits, stock options, and good pay, so it's actually as good as going public (for work). This was completely new and it was something that I was fascinated with very much. I enjoy working with my colleagues, too. There are five very nice people who really create a great atmosphere. You also don't work a lot with the public, which I like. I just talk to people when I want to.

What kind of things do you do at work?
I do a lot of statistical analysis. And there's a lot of hands-on; there's a lot of colonies that are involved. I also work with the bio office, which makes for a lot of multi-tasking. There's a lot of organization, and a lot of people skills required because we are a very close-knit group. I also work with scientists from other organizations. This requires me to deal with confrontational situations, because they have their own points of view on many issues. I've learned more at this job in the last year than I probably learned in school.

If you were starting over to be a Research Technician, knowing what you know now, how would you better prepare yourself?
I'm not a very social person and I think that maybe being a little more socially adept helps to deal with some of the people you work closely with.

What keeps you wanting to do this type of work?
It's really flexible. I never liked working with people too much, but I do like the people I work with and it's a neat situation. The scientists are teaching me stuff, too and it doesn't feel like work. Another good thing about the job is that I don't have a lot of education, however, they are still willing to give me a lot of responsibility.

What qualities make an exceptional Research Technician?
Definitely somebody who's responsible, accountable, and organized. You have to really be interested in biology and the scientific aspect of things. Asking a lot of questions is good, too.

Bus and Truck Mechanics and Diesel Engine Specialists

(Also known as Diesel Mechanics.)

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

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	$10.87 - $30.60/hr	$18.39/hr	—	—
New Hires/Exp'd:	$11.00 - $30.60/hr	$21.78/hr	$14.00 - $23.00/hr	$18.00/hr
Exp'd/After 3 Years:	$16.97 - $33.42/hr	$25.00/hr	$18.00 - $28.00/hr	$25.00/hr

Hours: Most jobs are 40 hours per week. Some employers report that swing shifts are common for this occupation.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Some employers report that they do not always require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 1-4 years. 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. A few employers report that word processing software skills are important. A few employers report that computer diagnostics skills are becoming important for this occupation.

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 77 employees in 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 low (less than 10%).

Size of Occupation

Medium. There are approximately 850 – 1,035 Diesel Mechanics currently employed in the North Bay Counties. Local surveys indicate that less than 5% are female. Most jobs are union.

Employment Trends

The growth rate is projected to be slower than 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 15-25 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Diesel Service Technicians and Mechanics is expected to increase about as fast as the average for all occupations through the year 2010. Employment is expected to grow as freight transportation by truck increases. Besides openings resulting from employment growth, opportunities will be created by the need to replace workers who retire or transfer to other occupations.

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% are self-employed.

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

Important 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)
Important Skills:	• Repairing machines or systems using the needed tools (4.66) Troubleshooting: 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)
Important 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 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 (3.40) • 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 *Source: O*NET Database version 3.0*

Career Path for 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 Patterns

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?
I started out working in a granary, which is how I got my class A license. I drove some, welded, worked on equipment- eventually they asked me to take on the truck shop. As head of the shop, I was the Safety Manager.

What kind of work do you do in a typical day?
I am the owner of a truck repair shop. My job is mostly to oversee the people I have working for me. I go out and promote, and bring in new 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 and I still get my hands dirty. But 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?
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.

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.

What is the best preparation for someone who wants to go 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.

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. So basically attitude, perseverance, honesty, and integrity go a long way. 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.

Cabinetmakers and Bench Carpenters

(Also known as Builders.)

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:	$7.00 - $12.00/hr	$8.50/hr
New Hires/Exp'd:	$12.00 - $16.00/hr	$14.00/hr
Exp'd/After 3 Years:	$14.00 - $22.50/hr	$17.00/hr

Some Cabinetmakers 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers require 1-3 years of prior experience. Many others are willing to accept 4-36 months of training as a substitute for experience. Some will also accept 1-12 months of finish carpentry and/or woodworking experience.

Training: A few employers report that computer skills are becoming increasingly important. Training programs are available, but do not necessarily eliminate the need for apprenticeship or on-the-job training.

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 106 employees in this occupation.

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

Small. There are approximately 440-540 Cabinetmakers currently employed in the North Bay Counties. Local surveys indicate that less than 5% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 15-20 job openings are projected per year due to a net increase in occupation size. About 5-10 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Cabinetmakers is expected to decline through the year 2008.

Other Information

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

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

Important 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)
Important 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)
Important Abilities:	• The ability to read and understand information and ideas presented in writing (3.60) • The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged (3.40) • The ability to keep the hand and arm steady while making an arm movement or while holding the arm and hand in one position (3.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

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 Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Roof Bolters, Mining	Long-term OJT	—
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
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?
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.

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 pleased the customer is with the finished result of my work.

What qualities make for an exceptional Cabinet Maker?
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.

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:	$10.00 - $15.00/hr	$11.00/hr
New Hires/Exp'd:	$10.00 - $25.00/hr	$17.00/hr
Exp'd/After 3 Years:	$15.00 - $35.00/hr	$24.00/hr

The above wage information is based on surveys with North Bay County contractors, and do not reflect the higher "prevailing wages" paid by many out-of-area contractors for government construction projects in the North Bay region. Hourly wages for union Carpenters are $13.27 (housing) and $15.40 (commercial) for entry-level apprentices, and $24.12 (housing) and $28.00 (commercial) for journey-level. Source: Local 571

Hours: Almost all jobs are 38-40 hours per week.

Benefits: EMPLOYER PAID: Many employers provide medical insurance and a vacation. Some also provide dental insurance, a retirement plan, vision insurance, life insurance, and sick leave. SHARED COST: Some employers provide medical insurance.

Training, Experience, and Other Requirements

License: Not required, except for individuals who want to be licensed as General Building or Specialty Contractors; contact the Contractors State License Board at 916-255-3900 for licensing information.

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

Experience: Most employers require prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Apprenticeship training takes about 4 years to complete and to achieve journey-level status. Specialty areas include framing, finishing, and remodeling.

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 low (less than 10%).

Size of Occupation

Very large. There are approximately 3,200 - 3,910 Carpenters currently employed in the North Bay Counties. Local surveys indicate less than 5% 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 2004. About 85-105 job openings are projected per year due to a net increase in occupation size. About 75-90 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Carpenters is expected to increase more slowly than the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: General building and heavy construction contractors. Nationally, about 27% 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 and/or recruit applicants through newspaper advertisements. Some fill openings by hiring union referrals.

Important Knowledge:
- Knowledge of materials, methods, and the appropriate tools to construct objects, structures, and buildings (5.00)
- Knowledge of design techniques, principles, tools and instruments involved in the production and use of precision technical plans, blueprints, drawings, and models (3.00)
- Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (2.80)

Important Skills:
- Installing equipment, machines, wiring, or programs to meet specifications (3.80)
- Inspecting and evaluating the quality of products (3.40)
- Repairing machines or systems using the needed tools (3.20)

Important Abilities:
- The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged (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 (4.20)
- The ability to use short bursts of muscle force to propel oneself (as in jumping or sprinting), or to throw an object (4.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 15 employers surveyed representing 1,082 employees in this occupation.

Career Path: Carpenters

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 Work experience $36.22/hr
Apprentice		**Superintendent**	**General Contractor**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Refractory Materials Repairers, Except Brickmasons	Moderate-term OJT	—
Machine Feeders and Offbearers	Short-term OJT	$9.98
Helpers--Installation, Maintenance, and Repair Workers	Short-term OJT	$11.57
Welders, Production	Post-secondary training	$14.34
Glaziers	Long-term OJT	$18.78
Boat Builders and Shipwrights	Long-term OJT	$20.30
Carpenter Assemblers and Repairers	Long-term OJT	$20.30
Construction Carpenters	Long-term OJT	$20.30
Rough Carpenters	Long-term OJT	$20.30
Ship Carpenters and Joiners	Long-term OJT	$20.30
Aircraft Structure Assemblers, Precision	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 James Franklin

What is your job title?
My job title is General Contractor.

What kind of work do you do?
I renovate older homes.

What are the things that attracted you to this type of work?
I love taking a distressed house and turning it into a true home for someone.

What kind of things do you do at work (skills)?
Basically, I do everything that needs to be done to a house to make it both livable and beautiful. I handle the carpentry, the electrical system, the plumbing, and the tile work. I can also build decks and fences if that's what the client wants.

If you were starting over to be a carpenter, knowing what you know now, how would you better prepare yourself?
I would have gone to school and worked under someone to hone my skills. Being self-taught is great, but I have had to re-do some of my work throughout the learning process. This is time consuming and is a loss of profit as well.

What keeps you wanting to do this type of work?
It's the satisfaction of transforming an old home into something that I know people are going to enjoy for many years to come. It's something that, when you finish, you can look up at and say, "Hey- I did that!" and feel really proud.

What qualities make an exceptional Carpenter?
An exceptional Carpenter has a desire to create something that they can take pride in. They should also have a working knowledge of building and the tools you use to do a job. Math skills are also important and directly affect the quality of a job. But above all else, a good Carpenter will have that pride in his or her craftsmanship.

Cashiers

(Includes Grocery Checkers, Clerks, and Sales Associates.)

Cashiers receive and disburse cash payments, handle credit transactions, make change, issue receipts, and balance the tender drawer in a variety of establishments. Their work usually involves the use of adding machines, cash registers, and change makers (OES 490230).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.25 - $8.50/hr	$7.00/hr
New Hires/Exp'd:	$6.25 - $10.00/hr	$8.00/hr
Exp'd/After 3 Years:	$7.00 - $15.00/hr	$10.00/hr

Hours: Many jobs are 35-40 hours per week. Many other 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%)
□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Many employers do not require prior experience.

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

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 501 employees in this occupation.

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

Very large. There are approximately 13,710 – 16,755 Cashiers currently employed in the North Bay Counties. Local surveys indicate about 80% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 450-550 job openings are projected per year due to a net increase in occupation size. About 640-785 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Cashiers is expected to increase as fast as the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: In a wide variety of industries, including grocery stores, eating and drinking places, gasoline stations and mini-marts, liquor stores, and other retail establishments. Nationally, less than 1% are self-employed.

Methods Used to Fill Job Openings: Almost all employers fill openings by hiring employee referrals and/or by hiring unsolicited applicants. Almost all other employers recruit applicants through newspaper advertisements.

Important 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 (4.00) • 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 (3.66) • Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (3.66)
Important Skills:	• Using mathematics to solve problems (4.16) • Actively looking for ways to help people (3.83) • Talking to others to effectively convey information (3.66)
Important Abilities:	• The ability to communicate information and ideas in speaking so others will understand (4.50) • The ability to add, subtract, multiply, or divide quickly and correctly (4.33) • The ability to see details of objects at a close range (within a few feet of the observer) (4.16)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Cashiers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Cashier Short-term OJT $9.08/hr	**Supervisor** First-Line Supervisors/Managers of Retail Sales Workers Work experience $18.07/hr	**Store Manager**	**Regional Manager** Sales Managers Bachelor + work exp $41.45/hr
Stocker Stock Clerks, Sales Floor Short-term OJT $11.10/hr	**Grocery Checker**	**Buyer** Wholesale and Retail Buyers, Except Farm Products Bachelor degree $21.92/hr	**Store Owner**
Courtesy Clerk Packers and Packagers, Hand Short-term OJT $8.22/hr			

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
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
Cashiers	Short-term OJT	$9.08
Gaming Dealers	Short-term OJT	$9.65
Counter and Rental Clerks	Short-term OJT	$9.73
Tellers	Moderate-term OJT	$10.52
Receptionists and Information Clerks	Short-term OJT	$11.31
Office Clerks, General	Post-secondary training	$12.18
Word Processors and Typists	Post-secondary training	$14.35
Loan Interviewers and Clerks	Short-term OJT	$15.74
Insurance Claims 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 Linda Shaver

What are some of the job titles you've held previously?
I started by working as a Cashier in a boutique. Now I work in a video store as the Cashier Manager.

What kind of work do you do in your current job and what do you do in a typical day?
Some of my duties include checking in new releases, entering the movies into the computer, checking late lists for movies that haven't been returned. I conduct pre-interviews for potential employees, complete special orders, take customer complaints, oversee problems for the store and handle any maintenance issues. My duties specifically related to cashier include handling payments, credit transactions, making change, issuing receipts and deposits. We use a computer for the transactions, so all of the adding is computerized.

What was it that attracted you to this work?
I like movies a lot, I am an avid movie watcher, and being a cashier at a video store is interesting and enjoyable for me. The cashier aspect is challenging and a lot of responsibility, I enjoy handling money and working with people.

What knowledge, skills, and abilities are important in this kind of work?
You need to have good typing skills, computer skills, research skills, and an ability to receive and make change correctly. One also needs the ability to work independently and honestly when you are a cashier. You need to have good people skills, since the job requires working with customers and the ability to communicate well. As a cashier at a video store, knowledge of movies is also important.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I would recommend that someone interested in cashiering would take a business class in school. Other coursework I would recommend would be: typing, computers, English, and a specific course in cashiering would also be helpful. On the job training is valuable, but I would recommend that someone receive some basic skills before entering this occupation.

What is it that keeps you wanting to do this kind of work?
I feel pretty comfortable about the work; it is almost second nature to me. I also enjoy the movie aspect of my job it makes the cashiering interesting.

What qualities make for an exceptional Cashier?
An exceptional Cashier is conscientious, uses proper procedures when handling money, and makes eye contact so that customers know that you are honest. Good people skills and self-confidence are also important. Good business skills, including typing and computer skills, are vital to work efficiently and effectively. To be outstanding in this occupation, you need a sense of professionalism, including dressing appropriately, exuberance, and good hygiene.

Child Care Workers

(Also known as Child Care Aides.)

Child Care Workers attend children at school, businesses, and institutions performing a variety of tasks, such as dressing, feeding, bathing, and overseeing play. Does not include workers whose primary function is to teach in a structured setting (OES 680380).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.50 - $10.00/hr	$7.00/hr
New Hires/Exp'd:	$6.50 - $12.00/hr	$8.50/hr
Exp'd/After 3 Years:	$7.50 - $14.38/hr	$11.00/hr

Hours: Many jobs are 35-40 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%) ■■ = Some (20-39%) ■ = Few (1-19%)
□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: At a minimum, the State requires that child care workers (aides) must have criminal record clearance, including fingerprinting. However, if an aide is employed where there is a ratio of one teacher and one aide to 18 children, then the aide must have completed some units in an accredited Early Childhood Education or Child Development program. The minimum requirement is 6 units, or 2 units if they are currently enrolled in a program and are working toward the completion of the 6 units. Call the State Dept. of Social Services, Community Care Licensing, at 916-229-4500 for more licensing information.

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

Experience: Most employers report that prior experience is not required, although many prefer 6-12 months of prior experience.

Training: Employers generally provide on-the-job training for this occupation in addition to the Early Childhood Education (ECE) units required for this occupation.

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 232 employees in 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 high (30-39%).

Size of Occupation

Large. There are approximately 1,635 – 1,995 Child Care Aides currently employed in the North Bay Counties. Local surveys indicate about 60% are female. Some jobs are union.

Employment Trends

The growth rate is projected to be the same as the average for all occupations through the year 2004. About 50-60 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 Child Care Aides is projected to increase faster than the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Private households, child care centers, nursery schools, and preschools. Nationally, about 38% are self-employed.

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

Important 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 (4.66) • Knowledge of human behavior and performance, mental processes, psychological research methods, and the assessment and treatment of behavioral and affective disorders (3.50)
Important Skills:	• Being aware of others' reactions and understanding why they react the way they do (4.00) • Talking to others to effectively convey information (4.00) • Listening to what other people are saying and asking questions as appropriate (3.66)
Important Abilities:	• The ability to communicate information and ideas in speaking so others will understand (4.00) • The ability to listen to and understand information and ideas presented through spoken words and sentences (3.80) • 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. (3.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Child Care Workers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Teacher Aide or Assistant Child Care Workers Post-secondary training $9.18/hr	**Preschool Teacher** Preschool Teachers, Except Special Education Post-secondary training $11.51/hr	**Lead or Head Teacher**	**Director** Education Administrators, Preschool and Child Care Center/Program Bachelor + work exp $20.92/hr
		Program Manager or Assistant Director	

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Flight Attendants	Short-term OJT	—
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	Short-term OJT	$7.52
Child Care Workers	Post-secondary training	$9.18
Home Health Aides	Post-secondary training	$9.75
Physical Therapist Aides	Moderate-term OJT	$11.09
Adjustment Clerks	Short-term OJT	$15.03
Bailiffs	Moderate-term OJT	$15.58
License Clerks	Moderate-term OJT	$17.02
Psychiatric Technicians	Associate degree	$17.43
Licensed Practical and Licensed Vocational Nurses	Post-secondary training	$18.05
Physical Therapist Assistants	Associate degree	$20.16

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 Christina Burrell

What are some of the job titles you've held previously?
I have been an Assistant Teacher, a Teacher, a Head Teacher, Program Director, Preschool Director, and Executive Director.

What kind of work do you do in your current job and what do you do in a typical day?
I am currently the Executive Director. My responsibilities include program planning and supervision of staff teachers. My responsibilities also include being the primary contact for parents, bill paying, and general oversight. I also take care of the needs of the children, for example, if they get hurt, or if they are having a bad day, I try to be there for them to soothe them and make them feel better. I take care of safety issues and general custodial work as needed. In my typical day I answer phones, escort parents, sign children in and out, assist teachers, and do general plant operations.

What was it that attracted you to this work?
I think the bottom line for me is that I like to work with children in whatever capacity I can.

What knowledge, skills, and abilities are important in this kind of work?
You should have knowledge in child development. You need people skills and good communication skills. Since this job is like running a small business, you need to be a generalist knowing how to do budgeting, trouble-shooting, and general maintenance. You need to be resourceful in getting things done for the children.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I would strongly recommend that someone get a hands-on internship. I would also suggest that you volunteer at a school or day care. It is important to get classroom experience working with children. This job is not for everyone, and you need to recognize your ability and desire to work in this occupation early on.

What is it that keeps you wanting to do this kind of work?
Again, I like working with the children.

What qualities make for an exceptional Child Care Worker?
You need to be compassionate, like working with children, and have common sense. You need to be the type of person who is willing to make sacrifices, especially for the children, and you need to have good time management skills.

Civil Engineers

Civil Engineers perform a variety of engineering work in planning, designing, and overseeing construction and maintenance of structures and facilities, such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, powerplants, water and sewage systems, and waste disposal units. Includes Traffic Engineers who specialize in studying vehicular and pedestrian traffic conditions. (OES 221210)

Wages and Benefits

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	$18.88 - $31.75/hr	$23.00/hr	$15.00 - $25.00/hr	$18.93/hr
New Hires/Exp'd:	$24.31 - $31.75/hr	$30.43/hr	$14.38 - $31.16/hr	$21.42/hr
Exp'd/After 3 Years:	$26.74 - $42.50/hr	$33.59/hr	$22.00 - $30.00/hr	$28.77/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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Required for all Consulting Civil Engineers and those responsible for approving plans, specifications, and reports; contact the State Board of Professional Engineers and Land Surveyors at 916-263-2222 for licensing information.

Education: Almost all employers require a bachelor degree for job entry.

Experience: Many employers report that they do not always require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 6-60 months. A few employers are willing to accept training as a substitute for experience.

Training: Many employers require registration as a Civil Engineer in order to advance to a specific level such as an Associate Civil Engineer. Registration requires passing two exams and from 1-6 years of civil engineering work experience. Almost all employers report that word processing and spreadsheet software skills are important. Most report that CAD/AutoCAD skills are important. Many report that database skills are important.

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: 20 employers surveyed representing 345 employees in this occupation.

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 low (less than 10%).

Size of Occupation

Small. There are approximately 610-745 Civil Engineers currently employed in the North Bay Counties. Local surveys indicate that about 20% are female. Most jobs are union.

Employment Trends

The growth rate is projected to be slower 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 10-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Civil Engineers is expected to increase about as fast as the average for all occupations through 2010. Spurred by general population growth and an expanding economy, more Civil Engineers will be needed to design and construct higher capacity transportation, water supply, pollution control systems, and large buildings and building complexes. They also will be needed to repair or replace existing roads, bridges, and other public structures.

Other Information

Where the Jobs Are: Government agencies and engineering/architectural services firms. Nationally, about 5% are self-employed.

Methods Used to Fill Job Openings: Many employers recruit applicants through newspaper advertisements and/or through internet job listings. Some also fill openings by hiring referrals from colleges and universities and/or by hiring referrals from employees. Some fill openings through in-house promotion or transfer and/or through trade journal ads.

Important Knowledge:
- Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (5.00)
- Knowledge of design techniques, principles, tools and instruments involved in the production and use of precision technical plans, blueprints, drawings, and models (4.60)
- 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 (4.00)

Important Skills:
- Using mathematics to solve problems (4.60)
- Understanding written sentences and paragraphs in work related documents (4.40)
- 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 (4.40)

Important Abilities:
- The ability to apply general rules to specific problems to come up with logical answers. It involves deciding if an answer makes sense. (4.60)
- The ability to communicate information and ideas in speaking so others will understand (4.20)
- 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 (4.20)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Civil Engineers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Junior Engineer	**Civil Engineer** Bachelor degree $31.15/hr	**Senior Engineer**	**Project Manager** Engineering Managers Bachelor + work exp $47.63/hr
Engineering Technician Civil Engineering Technicians Associate degree $22.60/hr			**Consulting Engineer**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Industrial Engineering Technicians	Associate degree	$23.62
Industrial Safety and Health Engineers	Bachelor degree	$26.35
Marine Engineers	Bachelor degree	$27.49
Surveyors	Bachelor degree	$27.57
Civil Engineers	Bachelor degree	$31.15
Industrial Engineers	Bachelor degree	$32.90
Aerospace Engineers	Bachelor degree	$34.69
Petroleum Engineers	Bachelor degree	$38.65
Mining and Geological Engineers, Including Mining Safety Engineers	Bachelor degree	$39.55
Nuclear Engineers	Bachelor degree	$41.91
Computer and Information Systems Managers	Bachelor + work exp	$44.34

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 Olsen Morrow

What are some of the job titles you've held previously?
Staff Engineer, Project Engineer, and Project Manager.

What kind of work do you do in a typical day?
I attend meetings, direct other people with what to do, help younger staff with work, review other people's work, and interface with clients.

What was it that attracted you to this type of work?
That I could spend some of my time outside and that this would not always be an office job. I wanted to be able to go out to construction sites and have an opportunity to work outside.

What knowledge, skills and abilities are important in this kind of work?
First off, I think people skills are extremely important. You have to know how to get along with other people, and work in groups, and know how to communicate with people. Computer skills now are very important and, last but not least, you need good common sense.

What is the best preparation for someone who wants to go into this occupation?
A college education is necessary. But I think it would be smart to do an internship while you are in school to see if this is actually what you want to do. Or, be a Drafter or CAD Technician for a while. That way, you can get a sense of what the work is really like.

What is it that keeps you wanting to do this kind of work?
I enjoy my job; I get to work outside a lot, do a lot of different things, and work with a lot of different people. There is always something different; it is never the same, so there is always a new challenge.

What qualities make for an exceptional Civil Engineer?
Somebody who is technically astute and can also communicate with other team members and people in their groups and not have to be a perfectionist. Having the technical skills to know what is going on is a must, but I want to stress the fact that people skills are very important.

What are the next steps in your career path?
Retirement!

Computer Engineers

(Includes Software Engineers and Hardware 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:	$6.25 - $19.18/hr	$15.00/hr
New Hires/Exp'd:	$8.25 - $35.96/hr	$20.00/hr
Exp'd/After 3 Years:	$14.00 - $47.95/hr	$35.00/hr

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

Benefits: EMPLOYER PAID: Most employers provide medical insurance. Of the employers surveyed, all report that they provide a vacation. Almost all provide sick leave. Many also provide a retirement plan and dental insurance. Some provide life and vision insurance. SHARED COST: Some employers provide medical insurance and other benefits, including vision insurance, a retirement plan, and dental insurance.

Training, Experience, and Other Requirements

License: Not required.

Education: Many employers require a bachelor degree for job entry. Some are willing to accept a high school level education. Some others require an associate degree.

Experience: Many employers do not require prior experience. Many others require 6-36 months of prior experience. Many employers are willing to accept training as a substitute for experience.

Training: Most employers report that spreadsheet skills are important. Many also report that word processing and database software skills are important. Some report that C++ and Java programming skills are important.

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 1,870 - 2,290 Computer Engineers currently employed in the North Bay Counties**.** Local surveys indicate about 25% are female.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2004. About 90-110 job openings are projected per year due to a net increase in occupation size. About 10-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, Computer Engineers are expected to be the fastest growing occupations through 2008.

Other Information

Where the Jobs Are: Computer hardware and software manufacturers and computer programming services. Nationally, about 5% 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 recruit applicants through internet job listings. Some fill openings by hiring referrals from colleges and universities and/or through word-of-mouth.

Important Knowledge:	• Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (5.00) • Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (4.33) • Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (4.33)
Important Skills:	• Analyzing needs and product requirements to create a design (4.66) • Using mathematics to solve problems (4.50) • Writing computer programs for various purposes (4.33)
Important Abilities:	• The ability to read and understand information and ideas presented in writing (4.83) • The ability to listen to and understand information and ideas presented through spoken words and sentences (4.50) • 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. (4.50)

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

*Source: O*NET Database version 3.0 (Computer Software Engineers, Applications)*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 15 employers surveyed representing 146 employees in this occupation.

Career Path: Computer Engineers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Intern	**Programmer** Computer Programmers Bachelor degree $32.96/hr	**Senior Programmer**	**Project Manager** Computer and Information Systems Managers Bachelor + work exp $44.34/hr
		Software Engineer Computer Software Engineers, Applications Bachelor degree $39.47/hr	**Product Developer**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Computer Support Specialists	Work experience	$22.49
Industrial Safety and Health Engineers	Bachelor degree	$26.35
Network and Computer Systems Administrators	Bachelor degree	$28.65
Computer Systems Analysts	Bachelor degree	$31.76
Computer Programmers	Bachelor degree	$32.96
Electrical Engineers	Bachelor degree	$35.33
Physicists	Doctoral degree	$38.88
Computer Software Engineers, Systems Software	Bachelor degree	$38.93
Computer Software Engineers, Applications	Bachelor degree	$39.47
Computer Hardware Engineers	Bachelor degree	$39.67
Computer and Information Systems Managers	Bachelor + work exp	$44.34

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 Ron Anderson

What is your job title?
My title is Software Engineer/Programmer.

What kind of work do you do?
I hire out to people and get an idea for software or programming they'd like to see happen on their computer. They tell me what they want, and I sit down and design it for them. I'm also extensively involved in the programming and implementation of what's designed.

What are the things that attracted you to this type of work?
I've always had this creative ability to come up with ideas. Originally, I wanted to be a cinematographer, but that didn't quite work out. Then I just kind of stumbled across computers. My very first computer was a Commodore 64. I played on that for about a half an hour and I was hooked!

What kind of things do you do at work (skills)?
You want to be proficient in math for times when you're building functions. Know how to type: life goes a lot faster if you can. Reading's essential if you want to keep up on the latest and greatest; I read the trade magazines and programming books to keep my ideas current. You also need to know how to quickly get to the part of a book that holds answers to your programming questions. Analytical thought plays a major part in considering what the end users would like, what the computer is capable of doing, and making the two factors work together. A good sense of aesthetics is necessary in designing a user-friendly screen; if your interface is hard to use, the end user will think that your software is not very good. This is crucial as to whether software will be successful or not. Knowledge of hardware is important, because you'll need to consider if the client's hardware is going to be able to run the software.

If you were starting over to be a Software Engineer, knowing what you know now, how would you better prepare yourself?
If I ever got that opportunity, I'd start learning at a younger age. But for the most part, I'd probably do it about the same. I might look for somebody who's been doing it for a while and go through an apprenticeship process to get through the rough spots. Whether you have a degree or not, technology changes so rapidly that what you're doing today may not be not supported tomorrow.

What keeps you wanting to do this type of work?
I like the positive feedback from users. I take the negative too because that leads me to change things in the software for the better. I like to think that an idea I have can be turned into something tangible. A product that I finished and completed and that people are using gives me satisfaction.

What qualities make an exceptional Software Engineer?
Having a good sense of the end user, strong analytical ability, good taste when designing an interface, and a realization that you won't be able to please everyone.

Computer Network Administrators and Managers

Computer Network Administrators and Managers direct and oversee a firm's computer network and its related computing environments, including hardware, software, and all configurations. The network may be a Local Area Network (LAN) or a Wide Area Network (WAN) or both. They may make recommendations or make decisions regarding the purchase of equipment and report the fiscal impact to other company managers. They often plan and track projects, write proposals, and troubleshoot operating system software and hardware. They often manage a team of analysts and technicians, although in smaller companies they may work independently (Mod. DOT 031.262-999).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$14.92 - $36.44/hr	$24.76/hr
Exp'd/After 3 Years:	$19.18 - $35.77/hr	$28.00/hr

Hours: Most 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%) ■■ = Some (20-39%) ■ = Few (1-19%)
□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

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

Training: Most employers report that word processing software skills are important. Many also report that spreadsheet and database skills are important. Some report that desktop publishing is important.

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

Small. There are approximately 150-300 Computer Network Administrators currently employed in the North Bay Counties. Local surveys indicate about 10% 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, employment of Computer Network Administrators 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. Nationally, less than 1% are self-employed.

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements and/or fill openings by hiring employee referrals. Many also fill openings by hiring referrals from colleges and universities. Some fill openings through in-house promotion or transfer and/or by hiring referrals from employment agencies. Some also recruit applicants through internet job listings.

Important Knowledge:
- Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (4.58)
- 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 (3.50)
- Knowledge of transmission, broadcasting, switching, control, and operation of telecommunications systems (3.45)

Important Skills:
- 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. (4.67)
- Analyzing needs and product requirements to create a design (4.58)
- Systems evaluations skills are used in identifying the measures or indicators of system performance. It is also vital in deciding what actions are needed to improve or correct performance, relative to the goals of the system. (4.58)

Important Abilities:
- The ability to read and understand information and ideas presented in writing (4.00)
- 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 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. (3.75)

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

Source: Skill Matrix Network (www.skillmatrixnetwork.com)

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 22 employees in this occupation.

Career Path for Computer Network Administrators and Managers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Computer Network Technician Post-secondary training	**Network Administrator** Bachelor degree $28.65/hr	**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	
Help Desk Tech or Customer Service Rep Computer Support Specialists Work experience $22.49/hr	**Computer Programmer** Computer Programmers Bachelor degree $32.96/hr		

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Computer Network Technicians	Post-secondary training	—
Network and Computer Systems Administrators	Bachelor degree	$28.65
Computer Support Specialists	Work experience	$22.49
Industrial Engineering Technicians	Associate degree	$23.62
Medical and Clinical Laboratory Technologists	Bachelor degree	$26.12
Civil Engineers	Bachelor degree	$31.15
Computer Programmers	Bachelor degree	$32.96
Electrical Engineers	Bachelor degree	$35.33
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 Mitchell S. Ablove

What are some of the job titles you've held previously?
I have been working in this industry since 1982 and I have held many different titles. My first job was as a Peripheral Equipment Operator. Some other titles that I have held are: Vice-President for a small telephone company in the management and information systems division, and then I was a Systems Engineer for a vertical market software company. I spent many years providing software support and supporting end users. In 1993 I became an Office Automation Support Specialist.

What kind of work do you do in your current job and what do you do in a typical day?
We have 250 users which we are responsible for supporting. So, a typical day might include providing user support and assistance to people who can't sign on or need help with their passwords. I also configure printers, set up new users, and work with the e-mail exchange. As the supervisor, I coordinate the work of my staff and assist with prioritizing. Depending on the time of the year, I assist with the budgeting for PC's, printers, and network equipment and file servers. I analyze the computer needs for the company, and provide cost estimates and purchasing. I investigate new technologies as needed and do research on this industry.

What was it that attracted you to this work?
I knew that the computer industry was going to be the hot industry to work in for the future. I went with the evolution of the personal computers.

What knowledge, skills, and abilities are important in this kind of work?
The ability to not get frazzled, to multi-task, and to manage multiple things at once. You need to be able to think logically, explain things in non-technical terms, and have the ability to work with people, to be polite and relate well to people. You should be familiar with the PC and how they work and how the software works. You need to understand the concepts of the network and how the different pieces go together. You have to like computers and you have to like working with people.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Employers want to see that you have some type of current certification in the industry. They also like to see people who have actual experience doing the work.

What is it that keeps you wanting to do this kind of work?
I like doing this work and I like the people I work with. I like helping people and knowing that I have made a difference. This job also pays a lot of money and I have great benefits.

What qualities make for an exceptional Computer Network Administrator?
An exceptional Computer Network Administrator doesn't get frazzled. They are always polite in public, have the ability to take initiative and to stick around until the job gets done. You should have a flexible lifestyle since you often have to work late hours, weekend hours and during the evening. You cannot expect to get a lot of reinforcement; you must be able to work independently. You also must have good investigation skills and understand how to methodically pick apart a problem. You need excellent investigation and troubleshooting skills.

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. (Non-OES 033162996)

Wages and Benefits

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	—	—	—	—
New Hires/Exp'd:	$14.38 - $21.86/hr	$18.89/hr	$11.99 - $33.56/hr	$19.18/hr
Exp'd/After 3 Years:	$16.95 - $28.77/hr	$24.03/hr	$16.50 - $38.36/hr	$26.37/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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Almost all employers require 1-3 years 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. Almost all employers report that word processing, spreadsheet, and database software skills are important. Some also report that desktop publishing skills are important.

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 75 employees in 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 low (less than10%).

Size of Occupation

Small. There are approximately 250-400 Computer Network Technicians currently employed in the North Bay Counties. Local surveys indicate about 25% are female. Many jobs are union.

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 Computer Network Technicians 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.

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements and/or fill openings by hiring employee referrals. Many also fill openings by hiring referrals from colleges and universities and/or recruit applicants through internet job listings. Some fill openings through in-house promotion or transfer and/or by hiring referrals from schools and training programs.

Important 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)

Important 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)

Important 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

Source: 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 $28.65/hr	**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 Patterns

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 Jeremy Paul

What are some of the job titles you've held previously?
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 troubleshoot 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.

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.

Computer Programmers - Including Aides

(Includes Software Engineers.)

Computer Programmers, Including Aides, convert symbolic statements of administrative data, business, scientific, engineering, and other technical problem formulations into detailed logical flow charts for coding into computer language. They develop and write computer programs to store, locate, and retrieve specific documents, data, and information (OES 251051).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$17.26 - $40.75/hr	$29.73/hr
Exp'd/After 3 Years:	$18.00 - $59.93/hr	$35.10/hr

Hours: Almost all jobs are 40-55 hours per week.

Benefits: EMPLOYER PAID: Most employers provide medical insurance. Almost all provide a vacation and sick leave. Many also provide a retirement plan, dental, vision, and life insurance. SHARED COST: Some employers provide medical insurance and dental insurance. A few also provide vision insurance and a retirement plan.

Training, Experience, and Other Requirements

License: Not required.

Education: Many employers require a bachelor degree for job entry. Some are willing to accept a high school level education.

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

Training: Many employers report that word processing, spreadsheet, and database software skills are important. Some also report that C++ and Java programming skills are important. A few report that desktop publishing and Visual Basic skills are important.

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, particularly for those with prior experience. Annual turnover is estimated to be moderate (20-29%).

Size of Occupation

Large. There are approximately 1,670 - 2,040 Computer Programmers currently employed in the North Bay Counties. Local surveys indicate about 35% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. About 35-45 job openings are projected per year due to a net increase in occupation size. About 50-65 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Computer Programmers is expected to grow faster than the average for all occupations through 2008. Jobs for both Systems and Applications Programmers should be plentiful in data processing service firms, software houses, and computer consulting businesses.

Other Information

Where the Jobs Are: Companies involved in developing software or providing related services. Nationally, about 3% are self-employed.

Methods Used to Fill Job Openings: Most employers fill openings by hiring employee referrals and/or recruit applicants through internet job listings. Some also recruit applicants through newspaper advertisements and/or fill openings by hiring referrals from employment agencies.

Important Knowledge:
- Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (5.00)
- Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (4.33)
- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (3.83)

Important Skills:
- Writing computer programs for various purposes (4.83)
- Communicating effectively with others in writing as indicated by the needs of the audience (4.33)
- Understanding written sentences and paragraphs in work related documents (4.16)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.66)
- The ability to read and understand information and ideas presented in writing (4.50)
- The ability to communicate information and ideas in writing so others will understand (4.50)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 16 employers surveyed representing 160 employees in this occupation.

Career Path: Computer Programmers, Including Aides

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Intern	**Programmer** Computer Programmers Bachelor degree $32.96/hr	**Senior Programmer**	**Product Developer**
		Software Engineer Computer Software Engineers, Applications Bachelor degree $39.47/hr	
		Project Manager Computer and Information Systems Managers Bachelor + work exp $44.34/hr	

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
First-Line Supervisors, Customer Service	Work experience	$21.85
Electronic Drafters	Post-secondary training	$22.01
Chemists	Bachelor degree	$25.12
Medical and Clinical Laboratory Technologists	Bachelor degree	$26.12
Database Administrators	Bachelor degree	$29.97
Computer Systems Analysts	Bachelor degree	$31.76
Computer Programmers	Bachelor degree	$32.96
Computer Software Engineers, Systems Software	Bachelor degree	$38.93
Computer Software Engineers, Applications	Bachelor degree	$39.47
Computer Hardware Engineers	Bachelor degree	$39.67
Computer and Information Systems Managers	Bachelor + work exp	$44.34

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 Craig Nielsen

What is your job title?
I am a Programmer.

What kind of work do you do?
I design, repair, and create custom software for small businesses.

What are the things that attracted you to this type of work?
It's logical, you get to be a kind of hero, you solve people's problems, and they appreciate your work. There's also very little down time because you're doing popular work and people need what you do. I make their business more efficient.

What kind of things do you do at work (skills)?
I meet with the client(s) and get to know what it is that they're doing, where they'd like to be, and see if there's something that I can do. Usually, I can do more than they really expect, so, again it gets kind of surprising and you can be a hero in the end. I then give them some training, get them up and running, and then I'm done.

If you were starting over to be a Computer Programmer, knowing what you know now, how would you better prepare yourself?
I would have gone about it the same way that I did before. I worked a lot of off time hours and I am genuinely interested in my work. I worked on my own and tried a little programming; I got to know all the programs that were out there and what people liked about them. And I really came to understand how businesses use computers to integrate with people, and that the two are like oil and water sometimes.

What keeps you wanting to do this type of work?
The appreciation that I get from people. It pays well, but what's more is when you walk in, you're making something that people need and want. You're not doing some menial task that's going to get lost and forgotten soon. And you never have to be in a down line unless you're not doing your job.

What qualities make an exceptional Computer Programmer?
Analytical thinking, I would say, and the ability to take a human concept with emotion and translate that into a purely logical approach that won't violate the human side of the process. You need to genuinely be interested in it to put in the amount of time that it takes to be a good programmer. If you're not able to do that you will be fighting it all the way.

Computer Support Specialists

Computer Support Specialists provide technical assistance and training to computer system users. Investigate and resolve computer software and hardware problems of users. Answer clients' inquiries in person and via telephone concerning the use of computer hardware and software, including printing, word processing, programming languages, electronic mail, and operating systems (OES 251040).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$8.00 - $20.00/hr	$14.38/hr
New Hires/Exp'd:	$10.00 - $25.00/hr	$16.78/hr
Exp'd/After 3 Years:	$13.42 - $30.00/hr	$20.00/hr

Hours: Most jobs are 40-50 hours per week. Some jobs are part-time, temporary, or on-call, ranging from 10-25 hours per week.

Benefits: EMPLOYER PAID: Many employers provide medical insurance. Almost all provide a vacation. Most provide sick leave. Many also provide dental insurance, a retirement plan, and vision insurance. Some provide life insurance. SHARED COST: Many employers provide medical insurance. Some also provide dental and life insurance. A few provide vision insurance and a retirement plan. For part-time employees: A few employers provide benefits.

Training, Experience, and Other Requirements

License: Not required.

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

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

Training: Most employers report that word processing and spreadsheet skills are important. Many also report that database skills are important.

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 estimated to be high (30-39%). This turnover rate does not include temporary/on-call employment.

Size of Occupation

Large. There are approximately 1,335 - 1,630 Computer Support Specialists currently employed in the North Bay Counties. Local surveys indicate about 25% are female.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2004. About 75-95 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, 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. The demand for networking and the need to integrate new technologies will drive the demand for consulting and integration. 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 and data processing services, educational institutions, and manufacturers/retailers of computer equipment. Nationally, about 1% are self-employed.

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

Important 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) • Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (2.80)
Important Skills:	• Determining what is causing an operating error and deciding what to do about it (4.83) • Conducting tests to determine whether equipment, software, or procedures are operating as expected (4.83) • Analyzing needs and product requirements to create a design (4.83)
Important 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 *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 17 employers surveyed representing 71 employees in this occupation.

Career Path: Computer Support Specialists

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Technician Computer Support Specialists Work experience $22.49/hr	**Supervisor**	**Help Desk Manager** Computer and Information Systems Managers Bachelor + 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 Patterns

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 Judie Smith

What is your job title?
My job title is Associate Information Systems Analyst and System Administrator.

What kind of work do you do?
I do desktop computer support, which includes PCs and laptops. I also manage and am responsible for the support of about half of the sixteen servers that we have on-site. The servers serve up files for the end-users to access and one server is used as a gateway to our connection to the mainframe. We also have a Microsoft Exchange e-mail server, print server, and two remote access servers.

What are the things that attracted you to this type of work?
My aptitude for one and the logical way that computers work. I have a strong logical side that works real well troubleshooting. When something doesn't work being able to get it to work you really have a sense of accomplishment.

What kind of things do you do at work (skills)?
The skill that I use the most is my troubleshooting skills with regard to desktop support and laptop support. A lot of it is hardware support, like when a piece of equipment or a component in one of the computers dies then we do some diagnostics and determine what the problem is. We repair it on-site if we can. The other thing that we do, which is probably even more primary, is software support, which is usually end-user education. The end-user tries to do things and then the program doesn't work so they call us and we tell them to try this or try that.

If you were starting over to be a Computer Support Specialist, knowing what you know now, how would you better prepare yourself?
I sort of fell into this type of work and realized I had an aptitude and I liked it. I had the unusual opportunity to finish my degree after I was working in the field. I was already in the process of going to school and getting my general education requirement done. This became part of my workload at my last workplace. So, by knowing that it just sort of geared my major, but as far as better preparing for it I don't know that I would have done it differently.

What keeps you wanting to do this type of work?
Right now I'm what they call a generalist because I use a broad base of skills across a whole bunch of areas. There are times when I don't feel like I'm really good at any one thing. I would really like to specialize in a particular area, like maybe internet web design. Specialized work changes really frequently and I love the change but sometimes I also hate it. Once you learn something, it's obsolete in three months! It's kind of like a double edged sword but the work is very interesting and the people are great too. I really enjoy the variety, there's not much time to be bored.

What qualities make an exceptional Computer Support Specialist?
In this day and age you have to have really strong people skills. There is so much interaction with people and there's so much change in the industry. You also need to have strong logical ability for troubleshooting. Getting from point a to point b in the most succinct manner.

Cooks - Restaurant

(Includes Line Cooks and Chefs.)

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:	$7.00 - $8.00/hr	$7.00/hr
New Hires/Exp'd:	$6.75 - $14.00/hr	$8.50/hr
Exp'd/After 3 Years:	$9.00 - $17.50/hr	$11.00/hr

Hours: Most jobs are 35-50 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%) ■■ = Some (20-39%) ■ = Few (1-19%)
□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

Education: Almost all 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 require 6-24 months of prior experience, although some 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.

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 172 employees in this occupation.

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 3,985 - 4,870 Restaurant Cooks currently employed in the North Bay Counties. Local surveys indicate about 10% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 125-150 job openings are projected per year due to a net increase in occupation size. About 110-130 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Restaurant Cooks is expected to increase about as fast as the average for all occupations through 2008.

Other Information

Where the Jobs Are: Restaurants and hotels (with in-house restaurants), and other eating and drinking places. Nationally, about 1% are self-employed.

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

Important 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 (3.16)
- Knowledge of weaponry, public safety, and security operations, rules, regulations, precautions, prevention, and the protection of people, data, and property (2.83)

Important Skills:
- Determining the kind of tools and equipment needed to do a job (3.16)
- Inspecting and evaluating the quality of products (3.16)
- Assessing how well one is doing when learning or doing something (3.00)

Important Abilities:
- 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 (4.33)
- The ability to remember information such as words, numbers, pictures, and procedures (4.00)
- The ability to read and understand information and ideas presented in writing (3.83)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Cooks - Restaurant

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Dishwasher or Helper Dishwashers Short-term OJT $6.88/hr	**Line Cook** Cooks, Restaurant Moderate-term OJT $10.04/hr	**Lead Cook or Chef** Chefs and Head Cooks Work experience $16.06/hr	**Restaurant Manager** Food Service Managers Work experience $19.89/hr
Prep Cook Food Preparation Workers Short-term OJT $8.36/hr	**Food Server** Waiters and Waitresses Short-term OJT $7.19/hr (+ tips)		**Restaurant Owner**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Musicians, Instrumental	Bachelor degree	—
Hairdressers, Hairstylists, and Cosmetologists	Post-secondary training	$9.44
Cooks, Restaurant	Moderate-term OJT	$10.04
Food Batchmakers	Moderate-term OJT	$10.78
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	Short-term OJT	$13.21
Electrical and Electronic Inspectors and Testers	Work experience	$13.27
Materials Inspectors	Work experience	$13.27
Photographic Processing Machine Operators	Short-term OJT	$13.79
Printing Press Machine Operators and Tenders	Long-term OJT	$14.60
Automotive Master Mechanics	Long-term OJT	$15.53
Water and Liquid Waste Treatment Plant and System Operators	Long-term OJT	$21.58

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 Alan R. Montes

What are some of the job titles you've held previously?
I have been a Sous Chef and an Executive Chef. I started as a Line Cook and then moved into Pantry Chef. I have been in this industry since 1968.

What kind of work do you do in your current job and what do you do in a typical day?
I cook on a line, I do a lot of sauté, I cut fish, help in the pantry, I even wash dishes when necessary. I do anything that is asked of me. I also do the ordering for the restaurant.

What was it that attracted you to this work?
My uncle owned nine restaurants when I was a child; I was about eight and knew I wanted to be a chef in a restaurant. In junior high, we had a cooking class for the guys, and that was my first experience directly with cooking and I loved it.

What knowledge, skills, and abilities are important in this kind of work?
You need good communication skills; you must be able to reason with people. In the industry today, there is a lot of diversity; you must have the ability to communicate with many different types of people. You must have the ability to use the kitchen devices, including knives. It is also important to be creative and to have the skill to create a dish from scratch.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I would recommend going to culinary school because you are able to learn so much about the industry, you can also demand more money. You also need to have hands on experience or some type of on the job training. At my restaurant we like to see cooks come in with some experience doing this type of work and having some formal training is an added advantage.

What is it that keeps you wanting to do this kind of work?
My position is familiar to me and I have fun doing this work. I can eat anything I want or make anything I want. Sometimes my boss comes to me and asks me to make a special dish, and I love that. This restaurant is a good environment and has a positive atmosphere; the people I work with are terrific. I am able to try new things and experiment with food and wine; to me these are good benefits.

What qualities make for an exceptional Cook?
You need to have knowledge of many different culinary backgrounds including Seafood, Italian, and Steak House. You must have the ability to learn new things and to work quickly and efficiently. An exceptional Cook knows how to listen to others, and be a team player since so much of this work is a group effort.

Correction Officers and Jailers

(Also known as Correctional Officers.)

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:	$15.00 - $17.01/hr	$16.33/hr
New Hires/Exp'd:	$15.00 - $27.57/hr	$19.23/hr
Exp'd/After 3 Years:	$20.00 - $27.81/hr	$22.81/hr

Hours: Almost all jobs are 38-40 hours per week.

Benefits: EMPLOYER PAID: Many employers provide medical insurance. Of the employers surveyed, all report that they provide a vacation and sick leave. Almost all provide vision and life insurance. Most provide dental insurance. Many also provide a retirement plan. SHARE COST: Many employers provide medical insurance and a retirement plan. Some provide dental insurance.

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: Of the employers surveyed, all report that they do not require prior experience.

Training: Employers generally provide on-the-job training for this occupation, although related training programs are available.

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 low (less than 10%).

Size of Occupation

Large. There are approximately 1,770 - 2,160 Correctional Officers currently employed in the North Bay Counties. Local surveys indicate about 25% are female. Employers report that all jobs are union.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2004. About 65-80 job openings are projected per year due to a net increase in occupation size. About 40-50 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% are self-employed.

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements and/or through job fairs. Many also recruit applicants through internet job listings. Some fill openings by hiring referrals from the Employment Development Department.

Important Knowledge:
- Knowledge of weaponry, public safety, and security operations, rules, regulations, precautions, prevention, and the protection of people, data, and property (4.20)
- 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 (2.80)
- Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process (2.80)

Important 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)
- Knowing how to find information and identifying essential information (3.00)

Important 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 *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 6 employers surveyed representing 1965 employees in this occupation.

Career Path: Correction Officers and Jailers

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

Occupations with Similar Skill Patterns

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 Bruce Thompson

What is your job title?
Deputy Sheriff

What type of work do you do?
I supervise the custody of inmates. I also search them when they come in and look for contraband and weapons. There are times where I'm acting as sergeant, which means that I supervise and make sure that the books are correct upon release.

What are the things that attracted you to this type of work?
Partially, it's the pay. They have great benefits and I have always had a desire to want to help people.

What are the tasks that you perform at work?
You have to have the ability to be able to talk with people. If you don't have the ability, or can't at some point learn to have the ability to talk to people, you won't be successful in this line of work.

If you were starting over to be a Correctional Officer, knowing what you know now, how would you better prepare yourself?
Anything that would have sharpened my ability to communicate. Now though, I have an advantage as far as having the ability to talk to people because I have much more life experience than most.

What keeps you wanting to do this type of work?
I have a lot of fun. I work with a bunch of great people and it's a very team oriented atmosphere. We're always looking out for each other and have each other's back. It's like one big huge family.

What qualities, in your opinion, make a good Correctional Officer?
Maturity. You have to be mature in this line of work because you deal with people from the ages of eighteen to sixty on up. You can't take things personally here. I deal with many different types of criminals. But you can't take their crimes personally because if you do, it will cloud your judgment.

Counter and Rental Clerks

(Also known as Customer Service Representatives and Counter Persons.)

Counter and Rental Clerks receive articles and/or orders for services, such as rentals, repairs, dry-cleaning, and storage. They may compute cost and accept payment. (OES 490170)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.75 - $10.00/hr	$7.25/hr
New Hires/Exp'd:	$6.75 - $12.98/hr	$8.00/hr
Exp'd/After 3 Years:	$6.75 - $15.00/hr	$9.00/hr

Hours: Most jobs are 10-25 hours per week. Some jobs are 35-40 hours per week. Most employers report that swing shifts are common for this occupation.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Almost all employers report that they do not always require prior experience.

Training: Counter and Rental Clerks usually learn how to operate equipment and become familiar with the establishment's policies and procedures while under the observation and guidance of an experienced worker. They must become familiar with the different products and services rented or provided by their company in order to give customers the best possible service. Counter and Rental Clerks should enjoy working with people and have the ability to deal tactfully with difficult customers. They should be able to handle several tasks at once, while continuing to provide friendly service. In addition, good oral and written communication skills are essential.

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: 19 employers surveyed representing 328 employees in 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) due to the high percentage of seasonal jobs.

Size of Occupation

Large. There are approximately 2,145 – 2,625 Counter and Rental Clerks currently employed in the North Bay Counties. Local surveys indicate about 50% are female.

Employment Trends

The growth rate is projected to be the same as the average for all occupations through the year 2006. About 55-65 job openings are projected per year due to a net increase in occupation size. About 90-110 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Counter and Rental Clerks is expected to increase about as fast as the average for all occupations through the year 2010, as all types of businesses strive to improve customer service. In addition, some industries employing Counter and Rental Clerks are expected to grow rapidly, including equipment rental and leasing, and amusement and recreation services.

Other Information

Where the Jobs Are: Video rental stores, laundry/cleaning services, automotive rental companies, equipment rental and leasing companies, and recreation and amusement facilities. Nationally, about 2% 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 recruit applicants through internet job listings.

Important 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 (4.16)
- 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 (3.66)
- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (3.50)
- 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 (3.50)

Important Skills:
- Actively looking for ways to help people (4.16)
- Talking to others to effectively convey information (4.00)
- Using mathematics to solve problems (3.83)

Important Abilities:
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.33)
- The ability to communicate information and ideas in speaking so others will understand (3.83)
- The ability to add, subtract, multiply, or divide quickly and correctly (3.66)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Counter and Rental Clerks

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Counter or Rental Clerk Counter and Rental Clerks Short-term OJT $9.73/hr	**Shift Leader/Supervisor**	**Assistant Manager/ Manager** First-Line Supervisors/Managers of Non-Retail Sales Workers Work experience $30.57	**Regional Manager**
Cashier Cashiers Short-term OJT $9.08/hr		**Sales Manager** First-Line Supervisors/Managers of Retail Sales Workers Work experience $18.07	**Store Owner**
Retail Salesperson Retail Salespersons Short-term OJT $10.43/hr			

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Combined Food Preparation and Serving Workers, Including Fast Food	Short-term OJT	$7.26
Cashiers	Short-term OJT	$9.08
Counter and Rental Clerks	Short-term OJT	$9.73
Retail Salespersons	Short-term OJT	$10.43
Tellers	Moderate-term OJT	$10.52
Receptionists and Information Clerks	Short-term OJT	$11.31
Office Clerks, General	Post-secondary training	$12.18
Order Clerks	Short-term OJT	$13.48
Central Office Operators	Moderate-term OJT	$14.50
Loan Interviewers and Clerks	Short-term OJT	$15.74
Insurance Claims 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 Alma Mendoza

What are some of the job titles you've held previously?
I have been in customer service, and now I am the Assistant Manager.

What kind of work do you do in a typical day?
We have to first help the customers get their clothes. If there are items missing, I have to look for them. We package the items and enter descriptions of each item in the computer, as well as price the clothes.

What was it that attracted you to this type of work?
I needed a job and the pay was decent. I work here because I have to work and I need a job.

What knowledge, skills, and abilities are important in this kind of work?
You have to be very customer oriented, and detail oriented.

What is the best preparation for someone who wants to go into this occupation?
It is a very easy job and you don't need to know anything special. We do the training here.

What is it that keeps you wanting to do this kind of work?
I am familiar with my job, and know how to do most of the stuff. I am comfortable here and it is a very nice environment. Everybody I work with is nice and the money is OK.

What qualities make for an exceptional Counter and Rental Clerk?
You must have the right personality, you have to be customer service oriented, and you need to fit in with the people you work with. You also must be a fast learner.

What are the next steps in your career path?
I am not really sure. I am not sure if I will stay in this industry. I would like to go to college and study something else in the special education field.

Court Clerks

Court Clerks perform clerical duties in a court of law; prepare the docket of cases to be called; secure information for judges; and contact witnesses, attorneys, and litigants to obtain information for the court (OES 537020).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$15.58 - $19.77/hr	$16.26/hr
New Hires/Exp'd:	$15.74 - $19.77/hr	$17.27/hr
Exp'd/After 3 Years:	$18.70 - $23.62/hr	$19.47/hr

Hours: Almost all jobs are 38-40 hours per week.

Benefits: EMPLOYER PAID: Many employers provide medical insurance. Of the employers surveyed, all report that they provide sick leave and a vacation. Most provide dental insurance, vision insurance, and a retirement plan. Many also provide life insurance. SHARED COST: Many employers provide medical insurance and life insurance. Some also provide dental insurance, vision insurance, child care benefits, and a retirement plan.

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Of the employers surveyed, all report that they do not require prior experience.

Training: Of the employers surveyed, all report that word processing 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 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

Small. There are approximately 85-105 Court Clerks currently employed in the North Bay Counties. Local surveys indicate about 95% are female. Almost all jobs are union.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. 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, overall employment of Court Clerks is projected to grow about as fast as the average for all occupations through 2008.

Other Information

Where the Jobs Are: Government agencies. Nationally, less than 1% are self-employed.

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements, fill openings by hiring referrals from the Employment Development Department, and/or through in-house promotion or transfer. Some fill openings by hiring unsolicited applicants. Some also recruit applicants through internet job listings.

Important 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 (4.33)
- Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process (4.16)
- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (3.50)

Important Skills:
- Understanding written sentences and paragraphs in work related documents (3.83)
- Finding ways to structure or classify multiple pieces of information (3.83)
- Listening to what other people are saying and asking questions as appropriate (3.66)

Important Abilities:
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.00)
- The ability to make fast, simple, repeated movements of the fingers, hands, and wrists (4.00)
- The ability to communicate information and ideas in writing so others will understand (4.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 4 employers surveyed representing 88 employees in this occupation.

Career Path: Court Clerks

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Court Clerk Short-term OJT $17.02/hr	**Supervising Court Clerk**	**Law Clerk** Professional degree $16.37/hr	**Judge** Judges, Magistrate Judges, and Magistrates Professional degree $43.63/hr
File Clerk Short-term OJT $10.74/hr			**Lawyer** Professional Degree $50.42/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Hotel, Motel, and Resort Desk Clerks	Short-term OJT	$9.28
Travel Clerks	Short-term OJT	$13.08
Correspondence Clerks	Moderate-term OJT	$13.73
Medical Records and Health Information Technicians	Associate degree	$14.23
Medical Secretaries	Post-secondary training	$14.34
Tax Preparers	Bachelor degree	$15.38
Law Clerks	Professional degree	$16.37
Human Resources Assistants, Except Payroll and Timekeeping	Short-term OJT	$16.72
Court Clerks	Short-term OJT	$17.02
Municipal Clerks	Short-term OJT	$17.02
Tax Examiners, Collectors, and Revenue Agents	Bachelor degree	$24.65

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 Evelyn Pedroia

What is your job title?
I am a Senior Lead Clerk for the County Superior Court.

What kind of work do you do?
I take care of the minutes of the court proceedings, maintain complete and accurate records, maintain a calendar, data input- basically everything that's done in the courtroom. Then I go into a computer and record it there as well. I maintain the files, do jury trials, exhibits for jury trials, etc. I am a judge's right hand.

What are the things that attracted you to this type of work?
I started here 13 years ago and I was interested in law. So I started with the county and was fortunate enough to get a position as Legal Processor, which is different than Courtroom Clerk. After two years as a Legal Processor, I became Courtroom Clerk for the juvenile division.

What kind of things do you do at work (skills)?
I take down everything that happens in court. I answer questions relating to court procedures for the public over the phone. For instance, we get phone calls every day regarding 'when is my next court date?' 'where do I have to be? What department?' I also have Attorneys calling with various questions. I help maintain files for each individual for the courts. When we go in, we check for accuracy and make sure documents that are supposed to be in the files are present. That way when the judge gets up on the bench, everything's there for him/her. I have to be accurate, have good spelling, grammar, typing, computer skills, people skills, and vocation skills.

If you were starting over to be a Court Clerk, knowing what you know now, how would you better prepare yourself?
I don't think I would prepare…again, grammar, communication, basically secretarial skills; we throw that in because the process here is a matter of learning. If you have some legal background that's great. Legal verbiage is very different from any other verbiage. Be open to learning, asking questions, and accepting training.

What keeps you wanting to do this type of work?
I love my job. I love the people that I work with. The job that I do is very important. Literally, not so much me maybe, but the bench; you've got someone's life in your hands. And if your records aren't accurate, it can really mess up somebody's life. I like it because it's very organized. I'm a perfectionist and to me this is a great job.

What qualities make an exceptional Court Clerk?
Somebody who's very organized. Somebody who's personable and people-oriented. You deal with the public everyday. You need to be able to distinguish issues of confidentiality. You should be very conscious of doing everything that's supposed to be done in a timely manner and as accurately as possible. You should also be very community and people oriented.

Data Processing Equipment Repairers

(Also known as Computer Service Technicians.)

Data Processing Equipment Repairers repair, maintain, and install electronic computers (mainframes, minis, and micros), peripheral equipment, and word processing systems. Does not include non-data processing equipment repairers (OES 857050).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$8.00 - $23.97/hr	$14.86/hr
Exp'd/After 3 Years:	$13.00 - $33.56/hr	$20.00/hr

Some Computer Service Technicians may also receive bonuses or commissions.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers require 6-48 months of prior experience. A few employers are willing to accept training as a substitute for experience.

Training: Some employers require technical or vocational training prior to employment. Most employers report that word processing skills are important. Many also report that database skills are important. Some report that spreadsheet skills are important.

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: 13 employers surveyed representing 62 employees in 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 100-150 Computer Service Technicians currently employed in the North Bay Counties. Local surveys indicate about 15% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. Less than 5 job openings are projected per year due to a net increase in occupation size. Less than 5 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Computer Service Technicians is expected to grow much faster than the average for all occupations through 2008.

Other Information

Where the Jobs Are: Computer manufacturers, wholesalers, and retailers. Nationally, about 9% are self-employed.

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

Important Knowledge:	• Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (5.00) • Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (3.83) • Knowledge of transmission, broadcasting, switching, control, and operation of telecommunications systems (3.33)
Important Skills:	• Conducting tests to determine whether equipment, software, or procedures are operating as expected (4.66) • Repairing machines or systems using the needed tools (4.66) • Determining what is causing an operating error and deciding what to do about it (4.50)
Important Abilities:	• 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. (4.33) • The ability to see details of objects at a close range (within a few feet of the observer) (4.33) • 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. (4.33)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Data Processing Equipment Repairers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Intern, Helper or Assembler Electrical and Electronic Equipment Assemblers Post-secondary training $11.90/hr	**Computer Service Tech** Data Processing Equipment Repairers Post-secondary training $16.89/hr	**Computer Network Engineer**	**IT Manager or Director** Computer and Information Systems Managers Bachelor + work exp $44.34/hr
	Computer Network Technician Post-secondary training	**Network Administrator** Bachelor degree $28.65/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	**Systems Analyst** Computer Systems Analysts Bachelor degree $31.76/hr	

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Electrical and Electronic Inspectors and Testers	Work experience	$13.27
Materials Inspectors	Work experience	$13.27
Automotive Master Mechanics	Long-term OJT	$15.53
Machinists	Long-term OJT	$16.17
Data Processing Equipment Repairers	Post-secondary training	$16.89
Electro-Mechanical Technicians	Work experience	$19.15
Aircraft Engine Specialists	Post-secondary training	$19.22
Industrial Machinery Mechanics	Long-term OJT	$20.89
Avionics Technicians	Post-secondary training	$21.72
Electric Meter Installers and Repairers	Long-term OJT	$22.41
Electricians	Long-term OJT	$22.81

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 Mark Eggan

What are some of the job titles you've held previously?
I was an Intern with a Major League Baseball club for website development. I have also been an MIS Manager.

What kind of work do you do in your current job and what do you do in a typical day?
I staff the Help Desk phone where I get a variety of calls. The calls usually involve trouble-shooting systems such as NT4 and Windows 2000. I also trouble shoot problems with printers, networking configuration. Sometimes I am required to travel out in the field to fix these different issues.

What was it that attracted you to this work?
Well the money is good for one. I have a strong computer background, and I enjoy working on the various systems and machines. The environment is always changing so I don't get bored. It is interesting work.

What knowledge, skills, and abilities are important in this kind of work?
You need a computer background. Software and hardware knowledge is essential. It helps to get to know the specifics of hardware or a certain software application because this gives you fundamental skills to work with other configurations and applications. It is important to have knowledge of network infrastructure, and the ability to think on your feet. Trouble shooting and problem solving are also good skills to have.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Again, computer knowledge is mandatory. You should also get real hands on experience with a software application. Learn the internet. It is the worlds biggest "screw driver." Whenever I encounter a problem that I can't solve I throw it up in a chat room, or bulletin board and I get a number of possible solutions. It is key to know where to look for help on the Internet. You need to have good customer service skills since you deal with people all of the time. I would emphasize good written and oral communications skills too.

What is it that keeps you wanting to do this kind of work?
I like the variety of tasks that I do. There are always different challenges to overcome, and it is a dynamic atmosphere. I also get a lot of joy out of trouble shooting and fixing various problems.

What qualities make for an exceptional Data Processing Equipment Repairer?
Someone needs to posses the drive to learn software, hardware, and networking systems. Drive is the key since this can be complex, and always changing. You need to keep your skills current.

Database Administrators

(Includes Computer Network Administrators who are also responsible for managing database systems.)

Database Administrators coordinate physical changes to computer databases and code, test, and implement the database applying knowledge of database management systems. May design logical and physical databases and coordinate database development as part of a project team. (OES 251030)

Wages and Benefits

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	—	—	—	—
New Hires/Exp'd:	$19.62 - $29.83/hr	$24.78/hr	$16.00 - $43.15/hr	$29.10/hr
Exp'd/After 3 Years:	$21.63 - $32.17/hr	$31.96/hr	$18.00 - $61.85/hr	$40.76/hr

Many Database Administrators may also receive bonuses.

Hours: Most jobs are 38-40 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

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

Training: Many employers require or prefer completion of various technical training programs in addition to their formal education requirements. Knowledge of database software is essential, particularly Microsoft Access, Microsoft SQL Server, and Oracle Database. Almost all employers report that word processing and spreadsheet software skills are also important. Many report that desktop publishing skills are important as well.

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 40 employees in 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 low (less than 10%).

Size of Occupation

Small. There are approximately 350-430 Database Administrators currently employed in the North Bay Counties. Local surveys indicate that about 40% are female. 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 10-15 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 Database Administrators is expected to be the among the fastest growing occupations through 2010. Employment is expected to increase much faster than the average for all occupations as organizations continue to adopt and integrate increasingly sophisticated technologies.

Other Information

Where the Jobs Are: Computer and data processing services, government agencies, educational institutions, wholesalers, telecommunications companies, and banks. Nationally, about 1% are self-employed.

Methods Used to Fill Job Openings: Most employers recruit applicants through internet job listings. Many recruit applicants through newspaper advertisements and/or fill openings by hiring employee referrals. Many also fill openings through in-house promotion or transfer. Some fill openings by hiring referrals from colleges and universities and/or by hiring referrals from employment agencies.

Important Knowledge:
- Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (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 (3.60)
- Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (3.20)

Important Skills:
- Writing computer programs for various purposes (4.80)
- Using mathematics to solve problems (4.40)
- Analyzing needs and product requirements to create a design (4.20)

Important 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 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 (4.20)
- The ability to apply general rules to specific problems to come up with logical answers. It involves deciding if an answer makes sense (4.20)
- The ability to understand and organize a problem and then to select a mathematical method or formula to solve the problem (4.20)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Database Administrators

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Computer Programmer Bachelor degree $32.96/hr	**Database Administrator** Bachelor degree $29.97/hr	**Manager** Computer and Information System Managers Bachelor + work exp $44.34/hr	**Chief Technology Officer**
Computer Systems Analyst Bachelor degree $31.76/hr	**Network Administrator** Network and Computer Systems Administrators $28.65/hr		**Consultant**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
First-Line Supervisors and Manager/Supervisors - Fishery Workers	Work experience	$17.03
Computer Programmers	Bachelor degree	$32.96
First-Line Supervisors and Manager/Supervisors- Extractive Workers	Work experience	$27.53
Electronic Drafters	Post-secondary training	$22.01
Computer Security Specialists	Bachelor degree	$28.65
Database Administrators	Bachelor degree	$29.97
Industrial Safety and Health Engineers	Bachelor degree	$26.35
Computer Systems Analysts	Bachelor degree	$31.76
Electrical Engineers	Bachelor degree	$35.33
Computer Hardware Engineers	Bachelor degree	$39.67
Petroleum Engineers	Bachelor degree	$38.65

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 Mehdi Mirsadjadi

What are some of the job titles you've held previously?
I have been System Designer, Developer and Analyst.

What kind of work do you do in a typical day?
Because the unit that I am in is not a large shop, I am working as a Programmer and Database Administrator. I do technical support and some decision-making related to the database or the applications that we have.

What was it that attracted you to this type of work?
I majored in computer science, then I got involved in different projects. What interested me is the DBA (Database Administrator) job because it is a science, but it is also an art.

What knowledge, skills and abilities are important in this kind of work?
You need to have a strong background and experience in the system as far as programming, involvement and designing goes. You need to be able to envision the scope of the present and future of the enterprise that you are working on. You also have to have in mind the ever-changing environment in this field. What you develop now and what is feasible in the future - throughout the lifecycle of the system - it should be a flexible task. You should be very protective about guarding the integrity of the database. You also need to be able to communicate with different people with different backgrounds, adapting the terminology that they use and the terminology you use, and just be able to capture the view correctly.

What is the best preparation for someone who wants to go into this occupation?
Get a good solid starting background in college. Taking computer science would help a lot, and then gain experience along the way.

What is it that keeps you wanting to do this kind of work?
It is a challenging job, it is an art and a science. It is fun at times, yet it can also be frustrating, but if the original design is done right, there is less worry.

What qualities make for an exceptional Database Administrator?
Knowledge of the technology available out there and the future of it. Patience and a sense of humor and being able to communicate with the people you are dealing with who come from different backgrounds.

What are the next steps in your career path?
Retirement. Being a DBA is just part of what I am actually doing here in this organization. It is one of the tasks. Depending on the organization and availability, I might move on to do the same kind of stuff, but in a bigger and more advanced environment. But, basically, once you are in this field and you like it, you just enjoy it and do it.

Demonstrators and Promoters

Demonstrators and Promoters demonstrate merchandise and answers questions for the purpose of creating public interest in buying the product. May sell demonstrated merchandise. (OES 490340)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.00 - $12.00/hr	$8.45/hr
New Hires/Exp'd:	$7.00 - $12.00/hr	$8.40/hr
Exp'd/After 3 Years:	$7.75 - $12.00/hr	$10.00/hr

Hours: Almost all jobs are 15-27 hours per week. A few jobs are 35-40 hours per week. Some employers report that swing shifts are common for this occupation.

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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□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Almost all employers report that they do not always require prior experience.

Training: Demonstrators and product promoters usually receive on-the-job training, although the length of training varies with the complexity of the product. Training is primarily product-oriented because a demonstrator must be familiar with the product to demonstrate it properly. Employers look for demonstrators and product promoters with good communication skills and a pleasant appearance and personality. Demonstrators and Product Promoters must be comfortable with public speaking. They should be able to entertain an audience and use humor, spontaneity, and personal interest in the product as promotional tools. Foreign language skills are helpful.

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 420 employees in 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 410-500 Demonstrators and Promoters currently employed in the North Bay Counties. Local surveys indicate about 85% are female.

Employment Trends

The growth rate is projected to be faster than 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 10-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment is expected to grow faster than the average for all occupations through 2010. Job growth should be driven by increases in the number and size of trade shows and greater use of demonstrators and product promoters in department stores and various retail shops for in-store promotions.

Other Information

Where the Jobs Are: Demonstration and promotional services firms, department stores and various retail shops, and employment/temporary staffing agencies. Nationally, about 5% are self-employed.

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

Important Knowledge:	• 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 (4.83) • Knowledge of media production, communication, and dissemination techniques and methods including alternative ways to inform and entertain via written, oral, and visual media (3.33) • Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (3.33)
Important Skills:	• Persuading others to approach things differently (4.83) • Talking to others to effectively convey information (4.83) • Being aware of others' reactions and understanding why they react the way they do (4.33) • Listening to what other people are saying and asking questions as appropriate (4.33)
Important Abilities:	• The ability to speak clearly so that it is understandable to a listener (4.80) • The ability to communicate information and ideas in speaking so others will understand (4.20) • The ability to listen to and understand information and ideas presented through spoken words and sentences (3.60)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Demonstrators and Promoters

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Demonstrator Demonstrators and Product Promoters Short-term OJT $11.36/hr	**Lead Demonstrator**	**Supervisor** First-Line Supervisors/Managers of Retail Sales Workers Work experience $18.07/hr	**Manager**
			Shop Owner

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Graduate Teaching Assistants	Masters degree	—
Personal and Home Care Aides	Short-term OJT	$8.11
Demonstrators and Product Promoters	Short-term OJT	$11.36
Dietetic Technicians	Associate degree	$12.85
Travel Agents	Post-secondary training	$13.83
Sales Representatives, Mechanical Equipment and Supplies	Moderate-term OJT	$24.07
Sales Representatives, Electrical/Electronic	Moderate-term OJT	$24.07
Postmasters and Mail Superintendents	Bachelor + work exp	$25.73
Police Detectives	Work experience	$29.09
Sales Agents, Financial Services	Bachelor degree	$35.79
Advertising Sales Agents	Moderate-term OJT	$36.79

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 Marianne Pine

What are some of the job titles you've held previously?
I was originally hired as a Cashier.

What kind of work do you do in a typical day?
In a typical day I do scheduling for the workweek, evaluations, and interviews. My position is self-directed, so I get to provide member (customer) service out on the floor. I also provide services to our customers in regards to their memberships.

What was it that attracted you to this type of work?
The empty nest syndrome. My children were away from home and I am a people person; I needed to be out and amongst people.

What knowledge, skills and abilities are important in this kind of work?
A person with strong leadership skills, open-minded, flexible, and who is not judgmental. Someone who can separate business from pleasure. You have to be friendly, and be a salesperson. You have to be able to get out there and believe in the product you sell. You have to inform yourself and be open to selling the product. You have to be able to understand what you are promoting. Flexibility and availability are important, too, since this is a weekend job.

What is the best preparation for someone who wants to go into this occupation?
Know what a Demonstrator is really about. Maybe visit some Demonstrators and just get a feel for what it is that the job entails. Familiarize yourself with the position and its duties.

What is it that keeps you wanting to do this kind of work?
It is always a challenge. Everyday is a new challenge because a lot of times I am dealing with vendors and members (customers). Both the vendors and members have expectations, and we try and always exceed what they expect.

What qualities make for an exceptional Demonstrator or Promoter?
Someone with an outgoing personality that is professional at all times. Also, great hygiene is a must. You just need to enjoy being out there and speaking with people.

What are the next steps in your career path?
I am happy with what I am doing. There are other opportunities, and I could go into management if I chose, but I am happy with doing what I am doing.

Dental Assistants

(Includes Registered 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:	$7.50 - $15.00/hr	$10.00/hr
New Hires/Exp'd:	$10.00 - $20.00/hr	$15.00/hr
Exp'd/After 3 Years:	$14.00 - $25.00/hr	$18.00/hr

Some Dental Assistants may also receive bonuses.

Hours: Many jobs are 35-40 hours per week. Some jobs are 30-34 hours per week. A few 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	■	—	■	—	□	—
Uniforms	■■	—	□	—	□	—

■■■■■■ = All (100%) ■■■■■ = Almost All (80-99%) ■■■■ = Most (60-79%) ■■■ = Many (40-59%) ■■ = Some (20-39%) ■ = Few (1-19%)
□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required, except for individuals who want to be licensed as Registered Dental Assistants (RDAs), who can perform more complex work; contact the State Board of Dental Examiners at 916-263-2595 for licensing information.

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

Experience: Most employers report that they do not always require prior experience.

Training: Many employers provide on-the-job training. Many other employers require completion of a vocational training program. Some require certification as a Registered Dental Assistant (RDA). Many employers report that database software skills are important. Some also report that word processing skills are important.

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 82 employees in 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%).

Size of Occupation

Large. There are approximately 1,490 - 1,820 Dental Assistants currently employed in the North Bay Counties. Local surveys indicate about 98% are female.

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 20-30 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment is expected to grow much faster than the average for all occupations through the year 2010. Population growth and greater retention of natural teeth by middle-aged and older people will fuel demand for dental services. In addition, numerous job openings will occur due to the need to replace assistants who transfer to other occupations, retire, or leave the labor force for other reasons.

Other Information

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

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

Important 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 (4.16)
- 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 (3.33)

Important Skills:
- Adjusting actions in relation to others' actions (3.83)
- Managing one's own time and the time of others (3.33)
- Talking to others to effectively convey information (3.33)
- Listening to what other people are saying and asking questions as appropriate (3.33)

Important 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 (4.20)
- The ability to see details of objects at a close range (within a few feet of the observer) (3.80)
- The ability to quickly and repeatedly make precise adjustments in moving the controls of a machine or vehicle to exact positions (3.40)
- The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects (3.40)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (3.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Dental Assistants

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Dental Assistant Trainee	**Dental Assistant** Post-secondary training $15.11/hr	**Registered Dental Assistant**	**Dental Hygienist** Associate degree $31.31/hr
File Clerk Short-term OJT $10.74/hr			**Office Manager** First-Line Supervisors, Administrative Support Work experience $21.85/hr
Receptionist Receptionists and Information Clerks Short-term OJT $11.31/hr			**Dentist or Related Specialist** General professional degree

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Prosthodontists	Professional degree	—
Barbers	Post-secondary training	$8.72
Medical Secretaries	Post-secondary training	$14.34
Interviewers, Except Eligibility and Loan	Short-term OJT	$14.74
Adjustment Clerks	Short-term OJT	$15.03
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	$16.80
Dental Hygienists	Associate degree	$31.31
Sales Representatives, Instruments	Moderate-term OJT	$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 Tami Thompson

What are some of the job titles you've held previously?
I was a Dental Assistant, before I got my RDA (Registered Dental Assistant) license.

What kind of work do you do in a typical day?
I assist the doctor with surgical extractions, crowns, bridges, fillings, and root canals. I polish children's teeth and give them fluoride treatments; I file, help up front, and do sterilizations of the tools.

What was it that attracted you to this type of work?
I wanted something where I could get into a career fast and the time limit on college was something that worked for me. And the benefits.

What knowledge, skills and abilities are important in this kind of work?
Of course you need to have some dental knowledge, you have to be someone who likes to work with your hands. You need good manual dexterity. You have to be OK with things like saliva and blood.

What is the best preparation for someone who wants to go into this occupation?
To go in and watch a surgical extraction and a root canal. If you can handle seeing what you would do in this job and not get grossed out, then you will be able to handle the job. All of the hands-on skills come with time.

What is it that keeps you wanting to do this kind of work?
The pay is good, I like working with the patients, and I like the fact that when the day is over my work is done.

What qualities make for an exceptional Dental Assistant?
Someone who is clean, very responsible, and a people person. Someone who can control his or her emotions.

What are the next steps in your career path?
I am going to go back to school to become a Dental Hygienist.

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:	$11.20 - $53.12/hr	$32.00/hr
New Hires/Exp'd:	$29.92 - $53.12/hr	$39.38/hr
Exp'd/After 3 Years:	$29.92 - $53.12/hr	$40.00/hr

Some Dental Hygienists may also receive bonuses.

Hours: Most jobs are 8-26 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 (0) — = 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: Many employers require an associate degree for job entry. Some require a bachelor degree.

Experience: Many employers do not require prior experience. Many others require 6-36 months of prior experience.

Training: See the American Dental Association website at http://www.ada.org for a listing of dental hygiene education 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 2001: 15 employers surveyed representing 48 employees in this occupation.

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 1,205 - 1,470 Dental Hygienists currently employed in the North Bay Counties. Local surveys indicate about 90% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 40-45 job openings are projected per year due to a net increase in occupation size. About 30-35 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, less than 1% are self-employed.

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

Important 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 plant and animal living tissue, cells, organisms, and entities, including their functions, interdependencies, and interactions with each other and the environment (3.16)
- 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)

Important Skills:
- Identifying the nature of problems (3.50)
- Understanding written sentences and paragraphs in work related documents (3.50)
- Talking to others to effectively convey information (3.33)

Important 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 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 *Source: O*NET Database version 3.0*

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 - Inexperienced Post-secondary training $15.11/hr	**Dental Assistant - Experienced**	**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			**Dental Laboratory Technician**

Occupations with Similar Skill Patterns

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	$16.80
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?
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.

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.

Dining Room and Cafeteria Attendants and Bartender Helpers

(Includes Bussers and Food Service Assistants.)

Dining Room and Cafeteria Attendants, and Bartender Helpers perform any combination of duties to facilitate food service. They carry dirty dishes from the dining room to the kitchen, replace soiled table linens and set tables with silverware and glassware, and replenish supply of clean linens, silverware, glassware, and dishes. They supply services bar with food, such as soups, salads, and desserts, and serve ice water and butter to patrons. They may also serve coffee to patrons and wash tables. (OES 650140)

Wages and Benefits

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	$9.50 - $10.44/hr	$9.91/hr	$6.75 - $7.00/hr	$6.75/hr
New Hires/Exp'd:	$9.50 - $10.50/hr	$10.08/hr	$6.75 - $8.50/hr	$6.75/hr
Exp'd/After 3 Years:	$9.50 - $11.51/hr	$11.13/hr	$6.75 - $9.00/hr	$6.75/hr

Most employers report that tips provide an additional $1 - $10 per hour in earnings.

Hours: Many jobs are 10-32 hours per week. Some jobs are on-call, averaging from 8-15 hours per week. A few jobs are 35-40 hours per week. Most employers report that swing shifts are common for this occupation.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Almost all employers report that they do not always require prior experience.

Training: Employers generally provide on-the-job training for this occupation. Because maintaining a restaurant's image is important to its success, employers emphasize personal qualities. Workers in this occupation are in close contact with the public, so they should be well spoken and have a neat, clean appearance. They should enjoy dealing with all kinds of people and possess a pleasant disposition.

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 high (30-39%).

Size of Occupation

Large. There are approximately 1,770 - 2,160 Bussers and Food Service Assistants currently employed in the North Bay Counties. Local surveys indicate about 65% 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. About 5-15 job openings are projected per year due to a net increase in occupation size. About 60-70 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of these workers is expected to grow about as fast as the average for all occupations over the 2000-10 period, stemming from increases in population, personal incomes, and leisure time. While employment growth will produce many new jobs, the overwhelming majority of openings will arise from the need to replace the high proportion of workers who leave this occupation each year. There is substantial movement into and out of the occupation because education and training requirements are minimal, and the predominance of part-time jobs is attractive to people seeking a short-term source of income rather than a career. However, keen competition is expected for jobs in popular restaurants where potential earnings from tips are greatest.

Other Information

Where the Jobs Are: Eating and drinking establishments, hotels with restaurants, and educational institutions. Nationally, less than 1% are self-employed.

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

Important 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 (4.16)
Important Skills:	• Actively looking for ways to help people (3.83)
Important Abilities:	• The ability to make fast, simple, repeated movements of the fingers, hands, and wrists (3.20) • The ability to exert maximum muscle force to lift, push, pull, or carry objects (3.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

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 488 employees in this occupation.

Career Path for Dining Room and Cafeteria Attendants and Bartender Helpers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Busser/Food Service Assistant Dining Room and Cafeteria Attendants and Bartender Helpers Short-term OJT $6.80/hr	**Food Server** Waiters and Waitresses Short-term OJT $7.19/hr + tips	**Shift Leader/Supervisor** First-Line Supervisors/Managers of Food Preparation and Serving Workers Work experience $12.94/hr	**Restaurant Manager** Food Service Managers Work experience $19.89/hr
Dishwasher Short-term OJT $6.88/hr		**Bartender** Short-term OJT $8.43/hr + tips	

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Dining Room and Cafeteria Attendants and Bartender Helpers	Short-term OJT	$6.80
Dishwashers	Short-term OJT	$6.88
Cooks, Fast Food	Short-term OJT	$7.37
Parking Lot Attendants	Short-term OJT	$7.77
Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	Short-term OJT	$8.05
Maids and Housekeeping Cleaners	Short-term OJT	$8.25
Food Servers, Nonrestaurant	Short-term OJT	$8.84
Cooks, Short Order	Short-term OJT	$9.15
Baggage Porters and Bellhops	Short-term OJT	$9.22
Helpers-Painters, Paperhangers, Plasterers, and Stucco Masons	Short-term OJT	$11.04
Logging Tractor Operators	Short-term OJT	$15.42

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 Andrea Berdusco

What are some of the job titles you've held previously?
I used to be a Dishwasher.

What kind of work do you do in a typical day?
I clean tables and take dishes to the back. I make sure the condiments and dishes are stocked, trays are available, and the counters are clean. When the co2 or syrup is out on the soda, I change the lines. I also make coffee and tea all day.

What was it that attracted you to this type of work?
The pay is better than my last job, and I wanted to get experience in a restaurant, but not fast-food.

What knowledge, skills and abilities are important in this kind of work?
You need to be organized and clean. You get things ready to present to the customer and, if it is not appealing, it will turn them off and you will lose that customer. You have to be able to look around and see what needs to be done. You should have the ability to work well with different types of people.

What is the best preparation for someone who wants to go into this occupation?
This is a job that you learn by doing it. If this is what you want to do, then you should just apply. They will teach you everything you need to know when training you.

What is it that keeps you wanting to do this kind of work?
I am gaining experience, and I enjoy working with the public. I also like my current shift.

What qualities make for an exceptional Busser/Food Service Assistant?
Someone who is interested in people, and does not need constant supervision. Someone who is interested in keeping the dining room neat and the serving station clean.

What are the next steps in your career path?
I am applying for a waitressing position in another restaurant.

Dispatchers - Except Police, Fire, and Ambulance

Dispatchers - Except Police, Fire, and Ambulance schedule and dispatch workers, work crews, equipment, or service vehicles for conveyance of materials, freight, or passengers or for normal installation, service, or emergency repairs rendered outside the place of business. Their duties may include use of radio/telephone to transmit assignments and compile statistics and reports on the progress of work (OES 580050).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$5.75 - $14.30/hr	$8.95/hr
New Hires/Exp'd:	$8.00 - $17.00/hr	$10.00/hr
Exp'd/After 3 Years:	$9.21 - $21.58/hr	$14.00/hr

Hours: Almost all jobs are 40-50 hours per week.

Benefits: EMPLOYER PAID: Most employers provide medical insurance. Almost all provide a vacation. Most also provide sick leave. Many provide a retirement plan, dental insurance, and vision insurance. Some provide life insurance. SHARED COST: A few employers provide medical insurance. Some also provide dental and vision insurance.

Training, Experience, and Other Requirements

License: Not required.

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.

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 570-700 Dispatchers currently employed in the North Bay Counties. Local surveys indicate about 40% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 20-25 job openings are projected per year due to a net increase in occupation size. About 10-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, overall employment of Dispatchers is expected to grow about as fast as the average for all occupations through 2008. In addition to job growth, job openings will result from the need to replace those who transfer to other occupations or leave the labor force.

Other Information

Where the Jobs Are: In a wide variety of industries, including transportation, trucking, warehousing, communications, public utilities, and automotive services firms. Nationally, less than 1% are self-employed.

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

Important Knowledge:	• Knowledge of transmission, broadcasting, switching, control, and operation of telecommunications systems (4.33) • 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 (4.00) • Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including their relative costs, advantages, and limitations (4.00)
Important Skills:	• Listening to what other people are saying and asking questions as appropriate (4.00) • Talking to others to effectively convey information (3.83) • Communicating effectively with others in writing as indicated by the needs of the audience (3.33)
Important Abilities:	• The ability to communicate information and ideas in speaking so others will understand (3.80) • The ability to listen to and understand information and ideas presented through spoken words and sentences (3.80) • The ability to speak clearly so that it is understandable to a listener (3.60)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 16 employers surveyed representing 44 employees in this occupation.

Career Path: Dispatchers - Except Police, Fire, and Ambulance

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Driver Truck Drivers, Light or Delivery Services Short-term OJT $12.24/hr	**Truck Driver** Truck Drivers, Heavy Moderate-term OJT $16.74/hr	**Dispatcher** (Except Police, Fire, Ambulance Dispatchers) Moderate-term OJT $15.21/hr	**Dispatch Supervisor**
			Operations Manager

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Hotel, Motel, and Resort Desk Clerks	Short-term OJT	$9.28
New Accounts Clerks	Work experience	$13.35
Claims Takers, Unemployment Benefits	Moderate-term OJT	$14.13
Bill and Account Collectors	Moderate-term OJT	$14.57
Interviewers, Except Eligibility and Loan	Short-term OJT	$14.74
Adjustment Clerks	Short-term OJT	$15.03
Customer Service Representatives, Utilities	Short-term OJT	$15.03
Dispatchers, Except Police, Fire, and Ambulance	Moderate-term OJT	$15.21
Human Resources Assistants, Except Payroll and Timekeeping	Short-term OJT	$16.72
Brokerage Clerks	Moderate-term OJT	$17.76
Radio Operators	Post-secondary training	$20.69

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 Beth Lewis

What is your job title?
My job title is Communications Dispatcher.

What kind of work do you do?
I keep up with Drivers on the road and make sure they're running on time. If they have cancels, I have to radio them out to them (the Drivers) so they don't go to that address. I schedule their lunches and breaks, and if there are any accidents, I take care of those, too. When Drivers call in sick, I have to cover their routes by passing off all those people to different rides. On top of that we have busses breakdown and I have to take care of that.

What are the things that attracted you to this type of work?
I don't know, I just didn't know there was that many handicapped people in Sacramento when I started to work. It's rewarding because you get to help people who otherwise couldn't leave home for anything. We take people to doctor's appointments, hair appointments, dialysis…it's really rewarding.

What kind of things do you do at work (skills)?
We communicate with the highway patrol and any other agency that deals with handicapped people or has busses that could help us out of a jam. I talk with all of the passengers that we pick up because I have to verify their pick-up times will be and make sure the address is correct. When I get to work around 4:20 AM, people call in for their times. Sometimes I call taxis for people because the bus broke down, is running late, or we didn't have capacity for them on the regular bus.

If you were starting over to be a Dispatcher, knowing what you know now, how would you better prepare yourself?
I would get more computer skills. We also have what they call the MDCs inside the busses. These drivers don't have to call me on the radio. I just type in things to them and they can look on their MDCs. I can look on the MDC screen and see where they are. We only have them in 10 busses right now, but eventually they're going put them in all the busses. It's just amazing.

What keeps you wanting to do this type of work?
I'm old enough to retire because I'm 71, but there's nothing for me to do. My husband was killed in Vietnam and all of my children are grown. I don't want to just stop and sit at home or baby-sit my great-grandchildren when I can be helping others.

What qualities make an exceptional Dispatcher?
Dedication. You have to like people and be able to understand them. People are shut in sometimes. I have to try to get off the phone cause they want to talk, but they don't have anyone to talk to. You have to have a lot of patience, and you have to feel empathy for people. "What if I was in this situation?" "What if I had to go to dialysis and I couldn't get a ride?" You also have to reign in your emotions and try to be fair to everyone.

Drafters

(Also known 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:	—	—
New Hires/Exp'd:	$6.71 - $28.77/hr	$18.00/hr
Exp'd/After 3 Years:	$19.00 - $32.00/hr	$22.49/hr

Some CAD Operators 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers require 6-36 months of prior experience.

Training: Some employers require technical or vocational training prior to employment. Certificate and degree programs are available, but do not necessarily eliminate the need for on-the-job training. Some employers also report that word processing and spreadsheet software skills are important. Most employers report that AutoCAD skills are important for job entry.

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 52 employees in this occupation.

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 720-880 CAD Operators currently employed in the North Bay Counties. Local surveys indicate about 19% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. About 10-15 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 CAD Operators is expected to grow more slowly than the average for all occupations through 2008.

Other Information

Where the Jobs Are: Engineering services, architectural services, and employment/temporary staffing agencies. Nationally, less than 5% are self-employed.

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

Important 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)
Important Skills:	• Using mathematics to solve problems (4.40) • Developing an image of how a system should work under ideal conditions (3.80) • Writing computer programs for various purposes (3.80)
Important 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 read and understand information and ideas presented in writing (4.40) • 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)

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

*Source: O*NET Database version 3.0 (Architectural Drafters)*

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 $21.23/hr			

Occupations with Similar Skill Patterns

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
Architectural Drafters	Post-secondary training	$21.26
Civil 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?
I have worked as an Architectural Drafter, Auto Computer Aided Design (CAD) Operator, and 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.

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.

Drywall Installers

(Also known as Drywallers. Includes Hangers, Tapers, and Texturers.)

Drywall Installers apply plasterboard or other wallboard to ceiling and interior walls of buildings. (OES 871080)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$8.00 - $17.85/hr	$10.00/hr
New Hires/Exp'd:	$9.00 - $23.80/hr	$16.00/hr
Exp'd/After 3 Years:	$15.00 - $29.75/hr	$22.00/hr

Many employers report that their Drywallers may also receive bonuses or piece-rate income.

Hours: Almost all jobs are 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%)
□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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: Most employers report that they do not always require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 6-36 months. Many employers are willing to accept training and/or apprenticeship training as a substitute for experience.

Training: Apprenticeship training takes 2-3 years to complete and to achieve journey-level status. Most Drywallers start as Helpers and learn their skills on the job. Helpers start by carrying materials, lifting and holding panels, and cleaning up debris. Within a few weeks, they learn to measure, cut, and install materials. Eventually, they become fully experienced workers. Apprentices begin by taping joints and touching up nail holes, scrapes, and other imperfections. They soon learn to install corner guards and to conceal openings around pipes. At the end of their training, Drywallers learn to estimate the cost of installing and finishing drywall.

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 571 employees in 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 high (30-39%).

Size of Occupation

Small. There are approximately 560-680 Drywallers currently employed in the North Bay Counties. Local surveys indicate about 1% 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. About 15-20 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 is expected to grow more slowly than the average for all occupations over the 2000-10 period. However, in addition to traditional interior work, the growing acceptance of insulated exterior wall systems will provide additional jobs for Drywallers.

Other Information

Where the Jobs Are: General building contractors and drywall contractors. Nationally, about 20% are self-employed.

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

Important Knowledge:
- Knowledge of materials, methods, and the appropriate tools to construct objects, structures, and buildings (4.83)
- Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (3.16)
- Knowledge of design techniques, principles, tools and instruments involved in the production and use of precision technical plans, blueprints, drawings, and models (3.16)

Important Skills:
- Installing equipment, machines, wiring, or programs to meet specifications (4.33)
- Determining the kind of tools and equipment needed to do a job (4.00)
- 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 (3.00)
- Controlling operations of equipment or systems (3.00)
- Understanding written sentences and paragraphs in work related documents (3.00)

Important Abilities:
- The ability to use short bursts of muscle force to propel oneself (as in jumping or sprinting), or to throw an object (3.20)
- The ability to exert maximum muscle force to lift, push, pull, or carry objects (3.20)
- 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 (3.20)
- The ability to read and understand information and ideas presented in writing (3.20)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Drywall Installers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Apprentice	**Drywall Installer** Long-term OJT $20.31/hr	**Foreman/Supervisor** First-Line Supervisors and Manager/Supervisors-Construction Trades Workers Work experience $27.53/hr	**Contractor/Owner**
Helper/Laborer Construction Laborers Moderate-term OJT $16.16/hr	**Taper** Short-term OJT $20.19/hr	**Estimator** Cost Estimators Bachelor degree + work exp $27.41/hr	

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Roof Bolters, Mining	Long-term OJT	—
Cutters and Trimmers, Hand	Short-term OJT	$8.43
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
Brattice Builders	Long-term OJT	$16.91
Rough Carpenters	Long-term OJT	$16.91
Roofers	Long-term OJT	$17.39
Sheet Metal Workers	Long-term OJT	$18.60
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 Jeff Thompson

What are some of the job titles you've held previously?
I have been a Journeyman Taper and Drywall Installer.

What kind of work do you do in a typical day?
I go in and sheetrock the house. That takes putting up all the wallboard and green board in the bathrooms. I cover the ceiling and then do the walls, and then I put up the corner metal. Then comes the tape and texture.

What was it that attracted you to this type of work?
I was young and just sort of fell into it. I was in the Job Corps and had to choose what type of trade I wanted to be in. By choosing drywall, I could stay in my current assignments, so the drywall trade just sort of fit better into my plans.

What knowledge, skills and abilities are important in this kind of work?
You have to be familiar with using a tape measure. You need to be able to work in a fast paced environment, and have a strong back.

What is the best preparation for someone who wants to go into this occupation?
There is no real best preparation. You just have to have a strong mind and be willing to get the job done. Drywall is pretty easy to get into. You can go into a trade school for some formal training, but it is not necessary.

What is it that keeps you wanting to do this kind of work?
There is good money in drywall. If you can get in there and get the job done quickly, you can make a lot of money.

What qualities make for an exceptional Drywall Installer?
A person with a strong back, and who is willing to hustle. You have to really be willing to work hard; Drywall can be hard physical labor at times.

What are the next steps in your career path?
I have done a bit of tape and texturing, and I enjoy that more, so I think I am heading in that direction.

Duplicating Machine Operators

(Also known as Key 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

	Range	Median
New Hires/Inexp'd:	$7.00 - $10.00/hr	$10.00/hr
New Hires/Exp'd:	$8.00 - $12.00/hr	$10.00/hr
Exp'd/After 3 Years:	$12.00 - $20.00/hr	$15.00/hr

Hours: Almost all jobs are 40 hours per week. Many employers report that swing shifts are common for this occupation.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: All employers surveyed report that they do not always require prior experience.

Training: Employers generally provide on-the-job training for this occupation. Many employers report that word processing (Word) and desktop publishing (PageMaker and Freehand) software skills are important.

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 130 employees in 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%).

Size of Occupation

Small. There are approximately 300–360 Duplicating Machine Operators currently employed in the North Bay Counties. Local surveys indicate about 35% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. About 5-10 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 Office Machine Operators is expected to decline through the year 2010.

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% are self-employed.

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

Important 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)

Important 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)

Important 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)
- 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)
- The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged (3.00)
- The ability to read and understand information and ideas presented in writing (3.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Duplicating Machine Operators

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

Occupations with Similar Skill Patterns

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 Dennis Allen

What are some of the job titles you've held previously?
Bindery Technician and then at Xerox they start you out as a Pre-Key Operator and then you get certified. From there you are a Level One Key Operator, and then as time goes on you become Docutech certified, which makes you a Level Two Key Operator.

What kind of work 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, and if it's ok I run em'. 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.

What was it that attracted you to this type of work?
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 working over on the other side of the warehouse and I would see all these people hanging out around these machines. It looked like something I might be interested in, because I definitely was not interested in what I was doing. Some guy was let go and they knew I was interested so they gave me a shot.

What knowledge, skills, and abilities are important in this kind of work?
Attention to detail and more attention to detail. But at the same 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. 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 is the best preparation for someone who wants to go into this occupation?
It's actually kind of a field that you don't really hear too much about. So my suggestion would be that if you're interested in the print industry, start there. It's something you have to work your way 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.

Electrical and Electronic Engineering Technicians and Technologists

(Also known as Electrical Technicians and Electronic Technicians.)

Electrical and Electronic Engineering Technicians and Technologists apply electrical and electronic theory and related knowledge to design, build, test, repair, and modify developmental, experimental, or production electrical equipment in industrial or commercial plants for subsequent use by engineering personnel in making engineering design and evaluation decisions. Does not include workers who only repair electronic equipment (OES 225050).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.19 - $19.18/hr	$15.00/hr
New Hires/Exp'd:	$5.75 - $31.16/hr	$13.58/hr
Exp'd/After 3 Years:	$8.63 - $31.16/hr	$19.59/hr

Hours: Of the employers surveyed, all report that jobs are 40-60 hours per week.

Benefits: EMPLOYER PAID: Many employers provide a vacation. Some also provide sick leave and a retirement plan. SHARED COST: Some employers provide medical insurance and dental insurance.

Training, Experience, and Other Requirements

License: Not required.

Education: Almost all employers require a high school diploma or equivalent for job entry. A few require an associate degree.

Experience: Many employers do not require prior experience. Many others require 1-3 years of prior experience.

Training: Many employers report that spreadsheet skills are important.

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 835 - 1,025 Electrical and Electronic Engineering Technicians and Technologists currently employed in the North Bay Counties. Local surveys indicate about 5% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. About 20-25 job openings are projected per year due to a net increase in occupation size. About 20-25 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, overall employment of Engineering Technicians is expected to increase about as fast as the average for all occupations through 2008. As production of technical products continues to grow, competitive pressures will force companies to improve and update manufacturing facilities and product designs more rapidly than in the past.

Other Information

Where the Jobs Are: Manufacturers and designers of electrical/electronic equipment and parts. Nationally, about 3% are self-employed.

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

Important Knowledge:	• Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (4.83) • Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (4.66) • Knowledge of design techniques, principles, tools and instruments involved in the production and use of precision technical plans, blueprints, drawings, and models (4.50)
Important Skills:	• Determining what is causing an operating error and deciding what to do about it (4.50) • Using mathematics to solve problems (4.00) • Conducting tests to determine whether equipment, software, or procedures are operating as expected (4.00)
Important Abilities:	• The ability to read and understand information and ideas presented in writing (4.20) • The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged (4.20) • The ability to listen to and understand information and ideas presented through spoken words and sentences (3.60)

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

*Source: O*NET Database version 3.0 (Electronics Engineering Technicians)*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 6 employers surveyed representing 22 employees in this occupation.

Career Path: Electrical and Electronic Engineering Technicians and Technologists

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Technician - Electronic Electronics Engineering Technicians Associate Degree $22.19/hr	**Technician/Specialist**	**Supervisor**	**Electrical Engineer** Bachelor degree $35.33/hr
Technician - Electrical Electrical Engineering Technicians Associate Degree $22.19/hr			**Electronic Engineer** Electronics Engineers, Except Computer Bachelor degree $35.19/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Prosthodontists	Professional degree	—
Timing Device Assemblers, Adjusters, and Calibrators	Work experience	$11.57
Food Science Technicians	Associate degree	$14.18
Chemical Technicians	Associate degree	$17.84
Mathematical Technicians	Associate degree	$18.18
Civil Drafters	Post-secondary training	$21.26
Electrical Engineering Technicians	Associate degree	$22.19
Calibration and Instrumentation Technicians	Associate degree	$24.61
Petroleum Pump System Operators	Long-term OJT	$24.61
Cost Estimators	Bachelor + work exp	$27.41
Geologists	Bachelor degree	$29.36

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 Dominique Centrezs

What is your job title?
My job title is System Engineer Technician.

What kind of work do you do?
It varies. I do many things like security systems, lock safety systems, fixing TVs, data communications, and computers.

What are the things that attracted you to this type of work?
My mother was a Computer Scientist. I looked into that field but I really didn't care for computer science, so I looked into electrical engineering and that was something I enjoyed. My father was an engineer.

What kind of things do you do at work (skills)?
Sometimes I design, sometimes I troubleshoot. Other times I just go over the process of what needs to be done to maintain a system with a client. I have to remember and know all about different types of electrical systems. Like a 7200- that's a light safety system. I have to know what its capabilities are and what problems typically occur with it. If there's a problem, I have to be able to go and troubleshoot it and locate where we're having a grid problem. I also have to know how to install these systems.

If you were starting over to be an Engineering Technician, knowing what you know now, how would you better prepare yourself?
I wouldn't have spent a year and a half in the office. It's too cluttered. You can't get anything done because there's too much paperwork.

What keeps you wanting to do this type of work?
Because the electronics industry will continue to change, day in and day out. You don't ever work on the same system, and I never go to the same place. I always get to go to different locations. There may be days when I'm at Cisco systems; there might be another day where I'm at Intel or Microsoft. I don't have to be confined to one office.

What qualities make an exceptional Engineering Technician?
Being able to get along with the clients, knowing your equipment, and being able to repair anything. You also need to love your job and have the ability to make decisions and think quickly on your feet. A good engineering tech will also be constantly learning. Most of what you learn in this field doesn't come from reading books in a class. It comes from experiencing different situations while you're on the job.

Electricians

Electricians install, maintain, and repair wiring, electrical equipment, and fixtures. They insure that work is in accordance with relevant codes. They may read blueprints. Includes protective signal installers and repairers and street light servicers (OES 872020).

Wages and Benefits

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	—	—	—	—
New Hires/Exp'd:	$11.80 - $29.10/hr	$23.97/hr	$10.00 - $22.00/hr	$19.36/hr
Exp'd/After 3 Years:	$23.97 - $31.00/hr	$29.75/hr	$15.00 - $28.77/hr	$23.50/hr

Hourly wages for union Electricians are $10.41 (Inside Wireman) for entry-level Apprentices, and $29.75 (Inside Wireman) for Journey-level Electricians. Source: Local 180

Hours: Almost all jobs are 40 hours per week.

Benefits: EMPLOYER PAID: Most employers provide medical insurance and other benefits, including a vacation and vision insurance. Many also provide dental insurance and sick leave. Some provide a retirement plan. SHARED COST: Some employers provide a retirement plan.

Training, Experience, and Other Requirements

License: Not required, except for individuals who want to be licensed as electrical contractors; contact the Contractors State License Board at 916-255-3900 for licensing information.

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

Experience: Almost all employers require 6-72 months of prior experience. Some are willing to accept training as a substitute for experience.

Training: Some employers report that word processing and spreadsheet skills are important. Apprenticeship training takes about 4-5 years to complete and to achieve journey-level status.

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

Large. There are approximately 2,290 - 2,795 Electricians currently employed in the North Bay Counties. Local surveys indicate less than 5% are female. Many jobs are union.

Employment Trends

The growth rate is projected to be the same as the average for all occupations through the year 2004. About 70-85 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 Electricians is expected to increase about as fast as the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Electrical contractors and large organizations. Nationally, about 7% are self-employed.

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

Important Knowledge:
- Knowledge of design techniques, principles, tools and instruments involved in the production and use of precision technical plans, blueprints, drawings, and models (4.80)
- Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (4.80)
- Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (4.60)

Important Skills:
- Installing equipment, machines, wiring, or programs to meet specifications (4.00)
- Determining what is causing an operating error and deciding what to do about it (4.00)
- Repairing machines or systems using the needed tools (4.00)

Important 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 (4.20)
- The ability to see details of objects at a close range (within a few feet of the observer) (4.00)
- The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects (4.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 15 employers surveyed representing 194 employees in this occupation.

Career Path: Electricians

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Helper or Laborer Helpers—Electricians Short-term OJT $12.10/hr	**Journeyman** Electricians Long-term OJT $22.81/hr	**Foreman**	**Superintendent or Manager** Construction Managers Bachelor + work exp $36.22/hr
Apprentice			**Electrical/General Contractor**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Electronic Equipment Installers and Repairers, Motor Vehicles	Post-secondary training	$11.34
Precision Lens Grinders and Polishers	Moderate-term OJT	$12.65
Production Inspectors, Testers, Graders, Sorters, Samplers, Weighers	Work experience	$13.27
Electrical and Electronics Installers and Repairers, Transportation Equipment	Post-secondary training	$19.13
Electro-Mechanical Technicians	Work experience	$19.15
Aircraft Body and Bonded Structure Repairers	Post-secondary training	$19.85
Water and Liquid Waste Treatment Plant and System Operators	Long-term OJT	$21.58
Avionics Technicians	Post-secondary training	$21.72
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	Long-term OJT	$22.67
Aircraft Rigging Assemblers	Work experience	$22.70
Electricians	Long-term OJT	$22.81

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 Cal Mason

What is your job title?
I'm a Journeyman Electrician.

What kind of work do you do?
It's considered commercial or light industrial work. I'm involved in the wiring of industrial and commercial buildings.

What are the things that attracted you to this type of work?
I've always been intrigued with making things work, whether it's a machine or to light a light of some sort. Electricians do most of that type of work, so it's always been a passion of mine.

What kind of things do you do at work (skills)?
The tasks I perform are primarily done with the hands. I bend conduits, provide conduit support, pull the wiring, connect various equipment including lighting, panel boards, transformers, and that sort of thing. We do a lot of remodeling work, or what's considered "new construction."

If you were starting over to be an Electrician, knowing what you know now, how would you better prepare yourself?
Actually to prepare yourself I feel that you need a strong background in math. Early on I probably could have pursued that a little more, but for the most part, my preparation took place in my apprenticeship courses that I enrolled in. They stress technique, but not math.

What keeps you wanting to do this type of work?
As most of us would say, it's that we do something different every day. I'm constantly learning things as technology changes and it's very exciting. Just the feeling of being able to accomplish projects from start to finish has been a reward to me, and that keeps me coming back.

What qualities make an exceptional Electrician?
I think a good electrician first and foremost takes pride in his work. Through in and throughout, even the menial tasks of some jobs will be done and done well by a good electrician. I mean, in our trade, everything is done for a purpose and it needs to be done right. You've got to be agile, too, and good with your hands. I've seen a lot of guys come through the program that are not the best mechanics, but with their skills, they've been able to overcome that. Always take pride in your job and work hard. And obviously, as a tradesman, you've got to be able to work with the other trades. You need to be able to converse and interact, to give or take with the other tradesmen, to be very thorough, very careful, and to double check everything. And you should never be afraid to ask; even I could run across a problem I've never seen, and I've been doing this for 15 years now. We're constantly in training.

Engineering, Mathematical, and Natural Sciences Managers

(Includes Engineering Managers, Project Managers, and Science Managers.)

Engineering, Mathematical, and Natural Sciences Managers plan, organize, direct or coordinate activities in such fields as architecture, electronic data processing, engineering, life sciences, physical sciences, statistics and systems analysis. These persons spend the greatest portion of their time in managerial work for which a background consistent with that described for engineers, mathematicians or natural scientists is required. (OES 130170)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$19.23 - $43.71/hr	$31.27/hr
Exp'd/After 3 Years:	$21.10 - $52.88/hr	$34.09/hr

Many employers report that their Managers may also receive bonuses and/or profit sharing income.

Hours: Most jobs are 40 hours per week. Some jobs are 50-55 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

Education: Almost all employers require a bachelor degree for job entry. A few require graduate study.

Experience: Almost all employers require 3-10 years of prior experience. Few employers are willing to accept training as a substitute for experience.

Training: Most Engineering Managers begin their careers as Engineers after completing a bachelor's degree in their field. Science Managers usually begin their careers as Scientists, such as Chemists, Biologists, Geologists, or Mathematicians. For management positions, employers seek individuals with administrative and communications skills in addition to technical knowledge in their field of study. Almost all employers report that word processing and spreadsheet skills are important.

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 63 employees in this occupation.

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 low (less than 10%).

Size of Occupation

Medium. There are approximately 1,005 – 1,230 Engineering, Mathematical, and Natural Sciences Managers currently employed in the North Bay Counties. Local surveys indicate about 25% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. About 30-40 job openings are projected per year due to a net increase in occupation size. About 15-25 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Engineering and Natural Sciences Managers is expected to increase more slowly than the average for all occupations through the year 2010 - in line with projected employment growth in engineering and most sciences.

Other Information

Where the Jobs Are: Engineering and management services, manufacturers of instruments and related products, computer and data processing services, manufacturers of industrial machinery and equipment, and manufacturers of electronic and other electric equipment. Nationally, about 12% are self-employed.

Methods Used to Fill Job Openings: Many employers recruit applicants through newspaper advertisements. Many recruit applicants through internet job listings. Some fill openings by hiring employee referrals and/or through in-house promotion or transfer. Some fill job openings by hiring referrals from colleges or universities.

Important Knowledge:
- Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (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 (4.83)

Important 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 (4.83)
- Adjusting actions in relation to others' actions (4.83)
- Analyzing needs and product requirements to create a design (4.33)

Important Abilities:
- The ability to listen to and understand information and ideas presented through spoken words and sentences (5.00)
- The ability to read and understand information and ideas presented in writing (4.83)
- The ability to communicate information and ideas in speaking so others will understand (4.83)
- The ability to communicate information and ideas in writing so others will understand (4.83)

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

*Source: O*NET Database version 3.0 (Engineering Managers)*

Career Path for Engineering, Mathematical, and Natural Sciences Managers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Engineering Technician (Civil, Electrical, Electronic, Mechanical) Associate degree $22.19 - $23.85/hr	**Engineer** (Civil, Electrical, Electronic, Mechanical) Bachelor degree $31.15 - $35.33/hr	**Engineering/Project Manager** Engineering Managers Bachelor degree + work exp $47.63/hr	**Consultant**
Science Technician (Chemistry, Environmental Science, Food Science) Associate degree $14.18 - $34.76/hr	**Scientist** (Biologist, Chemist, Food Science, Natural Science) Masters/doctoral degree $19.74 - $38.88/hr	**Science Manager** Natural Sciences Managers Masters + work exp $40.15/hr	**Vice President/ President/CEO**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Private Sector Executives	Bachelor + work exp	—
Architects, Except Landscape and Naval	Bachelor degree	$29.20
Civil Engineers	Bachelor degree	$31.15
Chemical Engineers	Bachelor degree	$34.69
Advertising and Promotions Managers	Bachelor + work exp	$36.79
Education Administrators, Postsecondary	Masters + work exp	$37.05
Financial Managers, Branch or Department	Bachelor + work exp	$39.50
Natural Sciences Managers	Masters + work exp	$40.15
Sales Managers	Bachelor + work exp	$41.45
Computer and Information Systems Managers	Bachelor + work exp	$44.34
Engineering Managers	Bachelor + work exp	$47.63

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 Sean Regan

What are some of the job titles you've held previously?
I have been a Drafter, a Design Engineer, a Senior Design Engineer, and a Project Engineer.

What kind of work do you do in a typical day?
We are a manufacturing company, so we translate our customer specifications into the product. Basically, we translate what they need into a modification of our product, or we design something new for them if the product we already have cannot be modified to meet their needs. I have a group of people who work for me: I have two CAD Operators, some CAD Operator-Designers, and some Engineers that help me accomplish the job. We review the customer spec or customer contracts, and we communicate with the customer if there is something not clear or if there are discrepancies between one spec and another spec. We carry this whole review and approval and re-approval process over a number of days or even weeks and, when it is finalized, we can start our design process. Basically, it is the process of making all documents necessary to manufacture the product.

What was it that attracted you to this type of work?
I had some interest in the mechanical engineering field from my early days. As for working in a manufacturing company as opposed to doing consulting work, I think it has just been a matter of opportunity.

What knowledge, skills and abilities are important in this kind of work?
You need a degree in engineering, and having prior experience in a manufacturing environment is going to be helpful. You have to be capable of making quick decisions, and have a strong background in engineering.

What is the best preparation for someone who wants to go into this occupation?
You need a college education and some prior experience working in manufacturing. This will help you in the management position with how to make a decision or recommendation on how to solve the daily problems.

What is it that keeps you wanting to do this kind of work?
I have been with this company already for 15 years, so there is stability and familiarity. I also enjoy the field that I'm in, and the industry that we serve is one of the fastest growing, so the prospects are good.

What qualities make for an exceptional Engineering or Science Manager?
You have to be a leader, but, more importantly, you need to be a person that can create teamwork. There are many different departments that have to work together to create a successful product, and you have to be able to coordinate and facilitate it. You have to be a quick thinker.

What are the next steps in your career path?
Retirement from this industry. Then I may possibly look for a part time job in another field.

Enologists

(Also known as Winemakers.)

Enologists direct and coordinate activities concerned with wine production. This involves crushing, fermentation, clarification, aging blending, and bottling. Working in their own firm's vineyards, or with viticulturists of other grape supplying 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 and 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:	—	—
New Hires/Exp'd:	$9.59 - $26.37/hr	$14.38/hr
Exp'd/After 3 Years:	$13.00 - $31.16/hr	$19.18/hr

Many Enologists may also receive bonuses.

Hours: Almost all jobs are 40-60 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Almost all employers require 1-3 years of prior experience. Some employers are willing to accept 6-24 months of training as a substitute for experience.

Training: Most employers report that spreadsheet software skills are important. Many also report that word processing skills are important. Some report that database skills are important.

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 high (30-39%).

Size of Occupation

There are approximately 350-550 Enologists currently employed in the North Bay Counties. Local surveys indicate about 35% are female.

Employment Trends

Insufficient data; however statewide growth is projected at 2% annually for this occupation. Most of the employers surveyed expect their employment in this occupation to remain stable. Some expect their employment to grow. Nationwide, employment of Agricultural Scientists, including Enologists, is expected to grow about as fast as the average for all occupations through 2008.

Other Information

Where the Jobs Are: Wineries.

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 in-house promotion or transfer. Many fill openings by hiring referrals from colleges and universities.

Important Knowledge:
- Knowledge of inputs, outputs, raw materials, waste, quality control, costs, and techniques for maximizing the manufacture and distribution of goods (4.50)
- Knowledge of techniques and equipment for planting, growing, and harvesting of food for consumption including crop rotation methods, animal husbandry, and food storage/handling techniques (4.33)
- Knowledge of plant and animal living tissue, cells, organisms, and entities, including their functions, interdependencies, and interactions with each other and the environment (4.00)

Important Skills:
- Using scientific methods to solve problems (5.00)
- Working with new material or information to grasp its implications (4.16)
- Inspecting and evaluating the quality of products (4.16)

Important Abilities:
- The ability to read and understand information and ideas presented in writing (4.40)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.00)
- The ability to apply general rules to specific problems to come up with logical answers. It involves deciding if an answer makes sense. (3.40)

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

*Source: O*NET Database version 3.0 (Food Scientists and Technologists)*

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 23 employees in this occupation.

Career Path for Enologists

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Lab Tech or Cellar Worker	**Assistant Winemaker** Bachelor + work exp	**Master Winemaker** Bachelor + work exp	**General Manager**
Enologist Food Scientists and Technologists Bachelor degree $25.12/hr	**Associate Winemaker** Bachelor + work exp		**Winery Owner or Partner**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Food Science Technicians	Associate degree	$14.18
Biologists	Doctoral degree	$19.74
Animal Scientists	Bachelor degree	$25.12
Chemists	Bachelor degree	$25.12
Food Scientists and Technologists	Bachelor degree	$25.12
Plant Scientists	Bachelor degree	$25.12
Soil Scientists	Bachelor degree	$25.12
Materials Scientists	Bachelor degree	$28.82
Environmental Scientists and Specialists, Including Health	Doctoral degree	$29.85
Hydrologists	Bachelor degree	$35.13
Mathematicians	Doctoral degree	$37.15

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 Marc Lang

What are some of the job titles you've held previously?
Enologist is a broad term for the occupation. You can be a junior or senior enologist, a field worker, a vineyard worker, or a cellar worker. You can also be a wine maker or an assistant wine maker.

What kind of work do you do in your current job and what do you do in a typical day?
I have the overall responsibility for wine making and grape growing. I make decisions regarding contracting, purchasing, personnel, and things related to the harvest. My responsibilities also include the crushing of the grapes, the fermenting process, and barreling. I do a lot of data gathering in order to make these decisions as sound as possible. This occupation is very seasonal in that something happens a little different at various times of the year.

What was it that attracted you to this work?
I was attracted to the agrarian nature of this work. I was compelled towards farming with an emphasis on the agricultural aspects. I like the seasonality that comes with this job. There are variations in activities based on the time of the year. I also get a degree of satisfaction of turning the fruit into something that can be as highly regarded as wine.

What knowledge, skills, and abilities are important in this kind of work?
Basically you need common sense, a good work ethic, and a sense of intelligence. Enologists typically have a four-year degree in a Food Science & Technology discipline. Obviously you need the basic core work for whatever discipline you go with. There are sub-specialties for Viticulture, Enology and Brewing Science.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
You need the education. You can also look for an internship. This is typically seasonal work that occurs in the fall. Some of the interns will take the fall semester off so that they can work a harvest and get a real feel for it. I think this is a good way for them to see if this is indeed what they would like to do. You should also be prepared to work in an environment that is both physically and mentally demanding.

What is it that keeps you wanting to do this kind of work?
There is a sense of excitement in this job. I am afforded an opportunity to be creative, and there are always new challenges. The interesting part of this occupation is that each season, each year offers challenges and opportunities.

What qualities make for an exceptional Enologist?
You need to be motivated to succeed and have a desire to make the best wine that you can. You need to demonstrate attention to detail. There are so many details in the wine making process, each one of them important to the outcome of the wine. You need to be able to take a Global Approach and see the whole picture. And you need a strong and determined work ethic.

Farm Equipment Mechanics

Farm Equipment Mechanics maintain, repair, and overhaul farm machinery and vehicles, such as tractors, harvesters, and irrigation systems. They may repair dairy equipment. Does not include Bus and Truck Mechanics and Diesel Engine Specialists (OES 853210).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$8.00 - $25.00/hr	$14.00/hr
Exp'd/After 3 Years:	$10.00 - $30.00/hr	$19.00/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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Almost all employers require 2-5 years of prior experience. Many 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.

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: 13 employers surveyed representing 36 employees in this occupation.

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 50-65 Farm Equipment Mechanics currently employed in the North Bay Counties. Local surveys indicate that less than 5% are female.

Employment Trends

The growth rate is projected to be the same the average for all occupations through the year 2004. Less than 5 job openings are projected per year due to a net increase in occupation size. Less than 5 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Farm Equipment Mechanics is expected to decline through the year 2008.

Other Information

Where the Jobs Are: Farm equipment dealers, equipment rental services, and food manufacturing and processing companies. Nationally, about 3% are self-employed.

Methods Used to Fill Job Openings: Most employers fill openings by hiring employee referrals. Many also recruit applicants through newspaper advertisements.

Important Knowledge:
- Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (4.20)
- Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (2.80)
- Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including their relative costs, advantages, and limitations (2.40)

Important Skills:
- Repairing machines or systems using the needed tools (4.83)
- Performing routine maintenance and determining when and what kind of maintenance is needed (4.83)
- Installing equipment, machines, wiring, or programs to meet specifications (4.83)

Important Abilities:
- 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 (4.40)
- 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 detect or tell the difference between sounds that vary over broad ranges of pitch and loudness (4.20)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Farm Equipment Mechanics

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Apprentice Mechanic or Trainee	**Mechanic – Journey Level** Farm Equipment Mechanics Long-term OJT $14.41/hr	**Foreman or Lead Mechanic** First-Line Supervisors/Managers of Mechanics, Installers, and Repairers Work experience $25.88/hr	**Equipment Dealer Manager** First-Line Supervisors/Managers of Retail Sales Workers Work experience $18.07/hr
		Service Manager or Repair Shop Manager	**Farm Equipment Manufacturer Representative** Sales Representatives, Agricultural Moderate-term OJT $31.81/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Helpers--Installation, Maintenance, and Repair Workers	Short-term OJT	$11.57
Engine and Other Machine Assemblers	Work experience	$12.79
Food and Tobacco Roasting, Baking, and Drying Machine Operators and Tenders	Moderate-term OJT	$14.15
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
Glaziers	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
Electrical Power-Line Installers and Repairers	Long-term OJT	$25.09

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 Matt Zurschmiede

What are some of the job titles you've held previously?
I started as a Shop Mechanic, then I became a Field Mechanic, then a Service Manager and finally a Shop Foreman.

What kind of work do you do in your current job and what do you do in a typical day?
The work I do includes talking with customers, scheduling work, estimates, quote writing to establish parts and labor, hand out work to the mechanics, trouble shoot, I give diagnosis over the phone, schedule field work, and do some part ordering. My job requires me to be extremely versatile.

What was it that attracted you to this work?
Since I was a child, I have always been fascinated by mechanics. I am mechanically inclined, so the work came naturally to me. I grew up in a rural area so I was exposed to farm equipment, so it was a natural choice for me.

What knowledge, skills, and abilities are important in this kind of work?
I recommend reading, writing and math skills as basics for this type of work. I think a background in agricultural engineering is also important. You need to have good communication skills and definitely an interest in mechanics or a mechanical aptitude.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Agricultural engineering schooling is the best form of preparation or some type of trade school, or vocational school. Coursework in diesel engine and/or hydraulics to become familiar theory as well as hands on training or apprenticeship are also good ways to prepare yourself of this occupation.

What is it that keeps you wanting to do this kind of work?
The work is fascinating. I love the ability to take something that doesn't work and have the gratified feeling of being able to fix it and to make it work. I also like the troubleshooting and diagnosis aspect of this work.

What qualities make for an exceptional Farm Equipment Mechanic?
To be exceptional, you need to have a good attitude, and ability to work with others. You also need to be flexible, be interested in both learning and teaching.

Financial Managers

(Includes Chief Financial Officers, Controllers, Account Managers, and Finance Directors.)

Financial Managers plan, organize, direct, control, or coordinate the financial activities of an organization. Includes managers in banks or similar financial institutions who advise on credit and investment policy or negotiate general policy with financial or other institutions. (OES 130020)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$13.85 - $48.08/hr	$29.97/hr
Exp'd/After 3 Years:	$19.18 - $60.10/hr	$39.81/hr

Hours: Almost all 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%) ■■ = Some (20-39%) ■ = Few (1-19%)
□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required, except for individuals who want to be licensed as Certified Public Accountants (CPAs); contact the State Board of Accountancy at 916-263-3680 for licensing information.

Education: Most employers require a bachelor degree for job entry. Some require an associate degree. A few require graduate study.

Experience: Almost all employers require 3-7 years of prior experience.

Training: A bachelor's degree in finance, accounting, economics, or business administration is the minimum academic preparation for Financial Managers. However, many employers increasingly seek graduates with a master's degree, preferably in business administration, economics, finance, or risk management. These programs develop analytical skills and provide knowledge of the latest financial analysis methods and technology. Continuing education is also vital, reflecting the growing complexity of global trade, shifting Federal and State laws and regulations, and a proliferation of new and complex financial instruments. Almost all employers report that word processing and spreadsheet software skills are important. Most report that database skills are also important.

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 2,420 – 2,960 Financial Managers currently employed in the North Bay Counties. Local surveys indicate about 55% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. About 30-35 job openings are projected per year due to a net increase in occupation size. About 35-45 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Financial Managers is expected to grow about as fast as the average for all occupations through 2010. While mergers, acquisitions, and corporate downsizing will continue to adversely affect employment of financial managers, growth of the economy and the need for financial expertise will ensure job growth.

Other Information

Where the Jobs Are: Banks, financial institutions, and large employers. Nationally, about 6% are self-employed.

Methods Used to Fill Job Openings: Most employers recruit applicants through internet job listings and/or fill openings through in-house promotion or transfer. Many recruit applicants through newspaper advertisements. Some fill openings by hiring employee referrals. Some others recruit applicants through trade journal ads.

Important Knowledge:	• Knowledge of economic and accounting principles and practices, the financial markets, banking, and the analysis and reporting of financial data (4.83) • 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 (4.66) • Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (4.50)
Important Skills:	• Weighing the relative costs and benefits of a potential action (4.50) • Using logic and analysis to identify the strengths and weaknesses of different approaches (4.50)
Important Abilities:	• The ability to communicate information and ideas in writing so others will understand (5.00) • The ability to read and understand information and ideas presented in writing (4.83) • 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 listen to and understand information and ideas presented through spoken words and sentences (4.83)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

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: 19 employers surveyed representing 23 employees in this occupation.

Career Path for Financial Managers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
New Accounts Clerk Work experience $13.35/hr	**Financial or Loan Officer** Loan Officers Bachelor degree $26.65/hr	**Financial or Branch Manager** Financial Managers, Branch or Department Bachelor degree + work exp $39.50/hr	**Regional Manager**
Bookkeeper or Account Clerk Bookkeeping, Accounting, and Auditing Clerks Moderate-term OJT $15.31/hr	**Accountant or Auditor** Bachelor degree $25.71/hr	**Controller or Treasurer**	**Chief Financial Officer**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Government Service Executives	Bachelor + work exp	—
Private Sector Executives	Bachelor + work exp	—
Education Administrators, Postsecondary	Masters + work exp	$22.55
Compensation and Benefits Managers	Bachelor + work exp	$25.11
Human Resources Managers	Bachelor + work exp	$33.33
Advertising and Promotions Managers	Bachelor + work exp	$36.79
Treasurers, Controllers, and Chief Financial Officers	Bachelor + work exp	$39.50
Financial Managers, Branch or Department	Bachelor + work exp	$39.50
Natural Sciences Managers	Masters + work exp	$40.15
Sales Managers	Bachelor + work exp	$41.45
Computer and Information Systems Managers	Bachelor + work exp	$44.34

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 Shanna Kelley

What are some of the job titles you've held previously?
I have been an Office Manager and a Business Manager for a few different companies.

What kind of work do you do in a typical day?
Anywhere from paying bills, doing taxes, budgeting, planning for the future, and correspondence between different customers as well as vendors. Also ordering supplies. I am responsible for making the financial plans and going to different lenders and getting funding. I do the financial marketing and the business plan.

What was it that attracted you to this type of work?
I enjoy the excitement of getting everything done at the end of the day. I have always taken responsibility well and met all challenges, so I sort of fell into this type of work.

What knowledge, skills and abilities are important in this kind of work?
You have to be a quick thinker and a problem solver. You need to maintain composure in stressful situations. You should be knowledgeable in basic office software programs, as well as equipment use. Planning tools and organization are the keys to this job. You need to be honest and have integrity.

What is the best preparation for someone who wants to go into this occupation?
Taking classes in business and having plenty of computer experience. Life experience is also helpful in this position, such as having managed your own finances. People that have worked their way up the corporate ladder do very well in this position.

What is it that keeps you wanting to do this kind of work?
I think the satisfaction of getting the job done at the end of the day. The end reward is monetary, but the satisfaction of being good at my job supercedes all monetary rewards.

What qualities make for an exceptional Financial Manager?
Honesty, dedication and being trustworthy are all big ones.

What are the next steps in your career path?
I would like to finish getting my degree and then start another company.

Firefighters

Firefighters control and extinguish fires, protect life and property, and maintain equipment as paid volunteers or employees of city, township, State, or Federal government. (OES 630080)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.99 - $21.23/hr	$14.68/hr
New Hires/Exp'd:	$7.06 - $21.46/hr	$17.12/hr
Exp'd/After 3 Years:	$9.32 - $26.08/hr	$21.92/hr

Hours: Firefighters work rotating shifts that often consist of working 24 hours, followed by 24 or 48 hours off duty. Almost all shifts average 56 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required for Firefighters; however, fire departments increasingly are requiring their Firefighters to be cross-trained as Paramedics, which does require licensing; contact the Emergency Medical Services Authority at 707-565-6501 for licensing information.

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

Experience: Most employers surveyed report that they do not always require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 3-36 months. Many employers are willing to accept training as a substitute for experience.

Training: Hiring requirements for Firefighters are very strict, reflecting the critical nature of the job. They must be emotionally and physically fit and able to work under stressful and physically demanding situations. Applicants must pass a written test, an oral interview, a physical abilities test, a medical evaluation, and a background investigation. Those who get the highest scores have the best chances for a job. Job appointments are made on a probationary basis and become permanent after 6-12 months of satisfactory service. Residency in the local municipality is required for permanent employment in many fire departments. A good driving record may be necessary.

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 238 employees in 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

Medium. There are approximately 1,180 – 1,445 Firefighters currently employed in the North Bay Counties. Local surveys indicate about 5% are female. Almost all jobs are union.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. About 5-10 job openings are projected per year due to a net increase in occupation size. About 25-35 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Firefighters is expected to increase more slowly than the average for all occupations through 2010 as fire departments continue to compete with other public safety providers for funding. Most job growth will occur as volunteer firefighting positions are converted to paid positions. In addition to job growth, openings are expected to result from the need to replace Firefighters who retire, stop working for other reasons, or transfer to other occupations.

Other Information

Where the Jobs Are: City and county fire departments and fire protection districts. Nationally, less than 1% are self-employed.

Methods Used to Fill Job Openings: Most employers recruit applicants through internet job listings and/or fill openings by hiring employee referrals. Some recruit applicants through newspaper advertisements and/or trade journal ads.

Important Knowledge:
- Knowledge of weaponry, public safety, and security operations, rules, regulations, precautions, prevention, and the protection of people, data, and property (4.60)
- 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 (3.80)
- Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including their relative costs, advantages, and limitations (3.60)

Important Skills:
- Performing routine maintenance and determining when and what kind of maintenance is needed (4.66)
- Adjusting actions in relation to others' actions (4.66)
- Controlling operations of equipment or systems (4.50)
- Determining the kind of tools and equipment needed to do a job (4.50)

Important Abilities:
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.60)
- The ability to use short bursts of muscle force to propel oneself (as in jumping or sprinting), or to throw an object (4.40)
- The ability to exert muscle force repeatedly or continuously over time. This involves muscular endurance and resistance to muscle fatigue (4.40)
- The ability to exert one's self physically over long periods of time without getting winded or out of breath (4.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Firefighters

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Volunteer Firefighter	**Firefighter** Municipal Fire Fighters Long-term OJT $23.27/hr	**Lieutenant** Municipal Fire Fighting and Prevention Supervisors Work experience $32.93/hr	**Captain**
Emergency Medical Technician Post-secondary training $14.65/hr	**Paramedic**	**Engineer** Fire-Prevention and Protection Engineers Bachelor degree $26.35/hr	**Chief**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Airline Pilots, Copilots, and Flight Engineers	Bachelor degree	—
Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	Short-term OJT	—
Ambulance Drivers and Attendants, Except Emergency Medical Technicians	Short-term OJT	$12.49
Emergency Medical Technicians and Paramedics	Post-secondary training	$14.65
Train Crew Members	Work experience	$15.74
Forest Fire Inspectors and Prevention Specialists	Work experience	$19.38
Forest Fire Fighters	Long-term OJT	$23.27
Municipal Fire Fighters	Long-term OJT	$23.27
Commercial Pilots	Bachelor degree	$30.59
Forest Fire Fighting and Prevention Supervisors	Work experience	$32.93
Municipal Fire Fighting and Prevention Supervisors	Work experience	$32.93

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 Keith Book

What are some of the job titles you've held previously?
I went through the fire academy, I achieved my EMT and that basically put me at an entry-level firefighter level. I have also been a Resident Sleeper Firefighter, an Apparatus Operator and a Seasonal Firefighter with CDF (California Dept. of Forestry).

What kind of work do you do in a typical day?
We start off with station clean-up and getting things organized for the day. We get the crews together and figure out who is on what engine. We do the basic housekeeping at the station. Then we check out all the medical supplies and rigs. We would move on to some maintenance on the house or the firehouse. If we get a call in between we stop what we are doing and go to the call; when we get back we pick up where we left off. After lunch we do one to two hours of training. Then whoever is the officer that day does all the paperwork.

What was it that attracted you to this type of work?
My father, two of my uncles, and one of my cousins have all worked as Firefighters. You could say it was in my blood. I wanted to be a Firefighter, to be like this person that my dad was.

What knowledge, skills, and abilities are important in this kind of work?
You have to have common sense and a good head on your shoulders. You must be able to work under stressful situations and to be able to think collectively and safely. Being a team player is also one of the biggest things, as well as having a good work ethic and being able to work well with the public. After all, we are a public agency.

What is the best preparation for someone who wants to go into this occupation?
First get your Emergency Medical Technician certificate, get on a private ambulance and gain experience with patient contact. About 90% of our calls in the fire service are medical aides. Then you should go through a fire academy, which would put you as an entry-level Firefighter as an EMT. After you get some experience on the ambulance, go to Paramedic school, because right now Paramedics are the big thing in the fire service. You should be aware that this is one career where you never stop learning - this is a continuous education career.

What is it that keeps you wanting to do this kind of work?
Just constantly helping people and the camaraderie around the station. Working with the different agencies. I think it is just something I was born with - wanting to help people. A Firefighter is really a variety of careers thrown into one. It never gets boring.

What qualities make for an exceptional Firefighter?
Someone who enjoys working with other people. Not only working with the people inside the department, but working with the public. Having a good ability to adapt to the public. There is such a variety of neighborhoods in the cities these days, and you need to be able to adapt to all of them. You need be an honest and hardworking person, as well as having a good head on your shoulders.

What are the next steps in your career path?
I am currently enrolled in Paramedic school. When I am finished with the program, I am going to try and finish up my AA and then try and get my Fire Officers Certification and then from there just keep gaining experience doing the job I am doing. My goals are to hopefully go to a pretty decent sized department and continue to gain experience.

First Line Supervisors and Manager/Supervisors - Clerical and Administrative Support Occupations

(Includes Office Managers.)

First Line Clerical Manager/Supervisors directly supervise and coordinate activities of clerical and administrative support workers. They are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work. Some manager/supervisors may also engage, in part, in the same clerical work as the workers they supervise (OES 510020).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$10.00 - $25.15/hr	$16.89/hr
New Hires/Exp'd:	$10.00 - $23.97/hr	$15.00/hr
Exp'd/After 3 Years:	$10.00 - $27.98/hr	$20.00/hr

Many Clerical Supervisors and Office Managers may also receive bonuses.

Hours: Almost all jobs are 35-45 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers require 1-3 years of prior experience. Some are willing to accept 4-12 months of training as a substitute for experience.

Training: Almost all employers report that word processing skills are important. Many also report that spreadsheet skills are important.

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 33 employees in 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 low (less than 10%).

Size of Occupation

Very large. There are approximately 7,575 – 9,255 Clerical Supervisors and Office Managers currently employed in the North Bay Counties. Local surveys indicate about 90% are female.

Employment Trends

The growth rate is projected to be the same as the average for all occupations through the year 2004. About 240-290 job openings are projected per year due to a net increase in occupation size. About 100-120 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Clerical Supervisors and Office Managers is expected to grow about as fast as the average for all occupations through 2008.

Other Information

Where the Jobs Are: In a wide variety of industries, including government agencies, banks and financial institutions, insurance companies, and educational institutions. Nationally, less than 1% are self-employed.

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

Important 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 (4.33) • 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 (3.83)
Important Skills:	• Motivating, developing, and directing people as they work, identifying the best people for the job (4.33) • Managing one's own time and the time of others (4.16) • Talking to others to effectively convey information (4.16)
Important Abilities:	• The ability to communicate information and ideas in speaking so others will understand (5.00) • The ability to listen to and understand information and ideas presented through spoken words and sentences (4.66) • 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 *Source: O*NET Database version 3.0*

Career Path for First Line Supervisors and Manager/Supervisors - Clerical and Administrative Support Occupations

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Receptionist Receptionists and Information Clerks Short-term OJT $11.31/hr	**Secretary** Secretaries, Except Legal, Medical, and Executive Post-secondary training $14.34/hr	**Supervisor/Office Manager** First-Line Supervisors, Administrative Support Work experience $21.85/hr	**Manager** Administrative Services Managers Bachelor + work exp $29.21/hr
		Executive Secretary Executive Secretaries and Administrative Assistants Work experience $18.05/hr	**Bookkeeper** Bookkeeping, Accounting, and Auditing Clerks Moderate-term OJT $15.31/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Secretaries, Except Legal, Medical, and Executive	Post-secondary training	$14.34
First-Line Supervisors, Customer Service	Work experience	$18.07
Property, Real Estate, and Community Association Managers	Bachelor degree	$21.36
First-Line Supervisors, Administrative Support	Work experience	$21.85
Wholesale and Retail Buyers, Except Farm Products	Bachelor degree	$21.92
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	Moderate-term OJT	$24.07
Sheriffs and Deputy Sheriffs	Moderate-term OJT	$25.82
Medical and Clinical Laboratory Technologists	Bachelor degree	$26.12
Registered Nurses	Associate degree	$27.82
Administrative Services Managers	Bachelor + work exp	$29.21
Computer Programmers	Bachelor degree	$32.96

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 Lenee Connelly

What are some of the job titles you've held previously?
Some of the job titles I have held previously are Supervising Account Clerk, Customer Service Manager, Assistant Customer Service Manager, and Senior Teller.

What kind of work do you do in your current job and what do you do in a typical day?
I directly supervise and coordinate the activities of six staff. My supervisory duties include hiring, training, counseling and evaluating staff. On a typical day I balance accounts, prepare reports, make recommendations to management, resolve complex issues, and write correspondence. My job includes a lot of accounting and financial work.

What was it that attracted you to this work?
I like making a difference and I knew being in working in a supervisory capacity would be interesting. I enjoy training and mentoring other people, so a supervisory position is very rewarding to me. I take pleasure in starting a project, setting goals, knowing what needs to be done and accomplishing it.

What knowledge, skills, and abilities are important in this kind of work?
In my opinion, good people skills are critical in this type of work. You need to have the ability to handle all types of personalities and the ability to motivate people to work as a team. You need to have good leadership skills and management skills. In my job you also need to be good with numbers and like working with numbers since accounting is a main part of the work. I have to be able to work well under pressure, and work with many interruptions. Good organization skills and time management are also important, since you not only are responsible for yourself, but also your staff.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I would recommend some supervisory or management training or education. Depending on what area of work you specialize in, I would also recommend some education in that field. I also think experience in different industries is also a good way to prepare yourself, since it provides you with a diverse background to work in many different situations and with many different types of people.

What is it that keeps you wanting to do this kind of work?
I have a passion for what I do. I enjoy making a difference both in the work that I do and in the supervision of my staff, my work is meaningful and is fulfilling because of that.

What qualities make for an exceptional Clerical Supervisor or Office Manager?
Listening skills make for an exceptional Supervisor. Mentoring, the ability to teach and train others also makes for a good leader. An excellent supervisor is also well organized and efficient and can work well under pressure. You need to have the vision to see the big picture and how all of the components fit together and an understanding of the fundamentals for each of those components.

First Line Supervisors and Manager/Supervisors - Production and Operating Workers

(Also known as Supervisors and Team Leaders.)

First Line Supervisors and Manager/Supervisors of Production and Operating Workers directly supervise and coordinate activities of production and operating workers, such as testers, precision workers, machine setters and operators, assemblers, fabricators, or plant and system operators. Manager/Supervisors are generally found in smaller establishments where they perform both supervisory and management functions, such as accounting, marketing, and personnel work. In addition, Manager/Supervisors may also engage, in part, in the same production work as the workers they supervise. Does not include work leaders who spend 20% or more of their time at tasks similar to those of employees under their supervision and report them in the occupations which are most closely related to their specific work duties. (OES 810080)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$10.00 - $24.29/hr	$17.50/hr
Exp'd/After 3 Years:	$13.00 - $31.22/hr	$19.98/hr

Many Production Supervisors may also receive bonuses.

Hours: Almost all jobs are 40-50 hours per week. Some employers report that swing shifts and graveyard shifts are common for this occupation.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

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

Training: Most employers report that word processing and spreadsheet software skills are important. Some also report that database skills are important.

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 116 employees in 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 low (less than 10%).

Size of Occupation

Large. There are approximately 1,640 – 2,005 Production Supervisors currently employed in the North Bay Counties. Local surveys indicate about 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. About 30-40 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, little or no change is expected in the employment of Production Supervisors through 2008.

Other Information

Where the Jobs Are: In a wide variety of manufacturing related firms, including beverage products. Nationally, about 3% are self-employed.

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

Important Knowledge:
- Knowledge of inputs, outputs, raw materials, waste, quality control, costs, and techniques for maximizing the manufacture and distribution of goods (4.83)
- 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 (4.50)
- Knowledge of policies and practices involved in personnel/human resource functions.

Important Skills:
- Adjusting actions in relation to others' actions (4.00)
- 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 (3.83)
- 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 (3.83)
- Talking to others to effectively convey information (3.83)
- Managing one's own time and the time of others (3.83)
- Understanding written sentences and paragraphs in work related documents (3.83)
- Using logic and analysis to identify the strengths and weaknesses of different approaches (3.83)

Important 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 listen to and understand information and ideas presented through spoken words and sentences (4.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for First Line Supervisors and Manager/Supervisors - Production and Operating Workers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Production Worker or Helper Helpers, Production Workers Short-term OJT $9.12/hr	**Lead Person, Foreman or Supervisor** First-Line Supervisors/Managers of Production and Operating Workers Work experience $22.55/hr	**Production Manager** Industrial Production Managers Bachelor + work exp $35.76/hr	**General Manager**
Machine Operator or Tender Machine Feeders and Offbearers Short-term OJT $9.98/hr			**Owner**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Production, Planning, and Expediting Clerks	Short-term OJT	$16.63
Lawn Service Managers	Work experience	$17.21
First-Line Supervisors/Managers of Production and Operating Workers	Work experience	$22.55
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	Work experience	$23.64
Mechanical Engineering Technicians	Associate degree	$23.85
Occupational Health and Safety Specialists	Bachelor degree	$26.25
Nursery and Greenhouse Managers	Work experience	$27.21
Agricultural Crop Farm Managers	Work experience	$27.21
Administrative Services Managers	Bachelor + work exp	$29.21
Storage and Distribution Managers	Work experience	$30.30
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 Jason Branaugh

What are some of the job titles you've held previously?
I started out as a Crystal Grower, and then became a shift lead. I am now the Shift Supervisor.

What kind of work do you do in a typical day?
I come in and get a pass down from the previous shift. I see if there are any schedule changes and check the status of all furnaces. I give my employees a rundown on what needs to be done that day. I walk through the shop and monitor all the furnaces. If one of the guys is overloaded with work, I will help him out by either helping grow or clean the furnaces.

What was it that attracted you to this type of work?
I actually got this job through a friend of a friend. I had just gotten out of the Army and needed employment. It seemed to be a good company and a very interesting job. Growing silicon crystals is not some average run of the mill task.

What knowledge, skills and abilities are important in this kind of work?
You need to be very patient, and detail-oriented. You need to be able to adapt to change and have a good memory. Having an understanding of the laws of physics is important, since we are dealing with thermal physics here. Being able to accept responsibility for your actions is huge. If something goes wrong, you need to let someone know exactly what you did, so we can help fix the problem. You need to have the ability to follow directions and not be afraid to ask questions when you do not understand things. You also should have a good understanding of mathematical principals and be familiar with the metric system.

What is the best preparation for someone who wants to go into this occupation?
Growing silicon crystals is a very small industry. There isn't any place where you can go to get prepared for what we do here. It is all on-the-job training. It takes about three months to learn the basic operations of a furnace and then about two years before a grower is actually proficient at the job.

What is it that keeps you wanting to do this kind of work?
I find it very challenging. The orders we get for crystals is constantly changing. You have to try and figure out how to grow to each customer's needs. It is not just cut and dry. Each run in a furnace does not guarantee a clean product; therefore, it is always a challenge to grow the perfect product the first time.

What qualities make for an exceptional Production Supervisor?
Having pride in ones work. Being able to set a goal and work towards it. Staying focused on the big picture. Being able to work independently, yet with a team goal. Honesty. You also must be able to adapt to constantly changing conditions in the growing room. You must work well under pressure and take your job seriously. The silicon can be very volatile, so you must be constantly aware of what is happening with each of your furnaces.

What are the next steps in your career path?
I really enjoy what I do. There is enough change in the industry that we are constantly learning new things and having to adapt. My company is good to it's employees, so unless there is some dramatic change in the company, I am satisfied with my current position.

First Line Supervisors and Managers - Sales and Related Occupations

(Also known as Sales Managers.)

First Line Supervisors and Managers in Sales and Related Occupations directly supervise and coordinate activities of marketing, sales, and related workers. Working proprietors, in addition to their supervisory duties, may perform management functions, such as budgeting, accounting, marketing, and personnel work (OES 410020).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$8.00 - $40.75/hr	$10.46/hr
New Hires/Exp'd:	$9.00 - $38.36/hr	$14.38/hr
Exp'd/After 3 Years:	$11.00 - $57.53/hr	$18.50/hr

Some Sales Managers may also receive bonuses.

Hours: Almost all jobs are 40-60 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers require 6-36 months of prior experience.

Training: Some employers report that word processing, spreadsheet, and database skills may be important.

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 7,575 – 9,255 Sales Managers currently employed in the North Bay Counties. Local surveys indicate about 35% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 240-290 job openings are projected per year due to a net increase in occupation size. About 100-120 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Sales Managers is expected to grow more slowly than average for all occupations through the year 2008.

Other Information

Where the Jobs Are: In a wide variety of industries, such as grocery stores, department stores, auto dealerships, and other retailers and wholesalers. Nationally, less than 1% are self-employed.

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

Important 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 (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 (4.50)
- Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (4.33)

Important 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. (3.66)
- Talking to others to effectively convey information (3.66)
- Using logic and analysis to identify the strengths and weaknesses of different approaches (3.66)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.80)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.60)
- The ability to read and understand information and ideas presented in writing (4.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

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 46 employees in this occupation.

Career Path for First Line Supervisors and Managers - Sales

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Cashier Short-term OJT $9.08/hr	**Supervisor/Assistant Manager** First-Line Supervisors/Managers of Retail Sales Workers Work experience $18.07/hr	**Department Manager**	**Regional or District Manager** Sales Managers Bachelor + work exp $41.45/hr
Retail Salesperson Short-term OJT $10.43/hr	**Supervisor/Manager Trainee**	**Store Manager**	**Manufacturing Sales Manager** Sales Managers Bachelor + work exp $41.45/hr
			Finance Manager Bachelor + work exp $39.50/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
First-Line Supervisors/Managers of Retail Sales Workers	Work experience	$18.07
Gaming Supervisors	Work experience	$18.57
First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand	Work experience	$20.06
Purchasing Agents, Except Wholesale, Retail, and Farm Products	Bachelor degree	$23.18
Employment Interviewers, Private or Public Employment Service	Associate degree	$25.23
Insurance Sales Agents	Bachelor degree	$26.11
Administrative Services Managers	Bachelor + work exp	$29.21
Transportation Managers	Work experience	$30.30
First-Line Supervisors/Managers of Non-Retail Sales Workers	Work experience	$30.57
Purchasing Managers	Bachelor + work exp	$32.15
Medical and Health Services Managers	Bachelor + work exp	$35.81

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 Keith Howe

What are some of the job titles you've held previously?
Sales Person and used Car Sales Manager.

What kind of work do you do in your current job and what do you do in a typical day?
I am the manager of the sales and finance department. I don't have a typical day in that each is different than the last. I am mainly responsible for putting the advertising together for the newspaper, radio, and television. I also motivate the sales staff and ensure that they are reaching their goals. I work with the finance department to close hard to finance deals. I am pretty much involved in every step of the sale of the car in some capacity or another.

What was it that attracted you to this work?
I like the thought of working with and helping people. I also enjoy the challenge of seeing the dealership grow and succeed, and reflecting on my part in making that happen.

What knowledge, skills, and abilities are important in this kind of work?
By far the most important skills are people and communications skills. You need to like working with people and you need excellent communication skills with customers and co-workers. You need to be trustworthy, consistent and determined in your goals.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
You need to determine if you are a caring kind of person. You should also start out selling smaller items. For example I started out in shoe sales. As my experience grew I was able to take on bigger sales items. So any kind of retail sales experience would be helpful…or for that matter any kind of retail experience where you are in front of the customer. A business degree would be helpful, but is not necessary.

What is it that keeps you wanting to do this kind of work?
I like this job because every day brings a new challenge. I am goal oriented, and when I set and achieve a goal I get a level of excitement that brings me back for more the next day.

What qualities make for an exceptional Sales Manager?
I think you need to bring a level of sincerity. You need to have a love of sales, working with people, attention to detail, and you should be self and highly motivated.

Food Preparation Workers

(Also known as Prep Cooks.)

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 - $10.00/hr	$8.00/hr
New Hires/Exp'd:	$6.75 - $12.00/hr	$8.50/hr
Exp'd/After 3 Years:	$7.50 - $14.00/hr	$9.75/hr

A few Prep Cooks may also receive tips.

Hours: Some jobs are 35-40 hours per week. Some jobs are 30-32 hours per week. A few jobs are 16-24 hours per week. Most employers report that swing shifts are common for this occupation.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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 surveyed report that they do not always require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 1-24 months. Most employers are willing to accept training as a substitute for experience.

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

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 194 employees in 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 5,200 – 6,360 Prep Cooks currently employed in the North Bay Counties. Local surveys indicate about 30% are female. Few jobs are union.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. About 65-75 job openings are projected per year due to a net increase in occupation size. About 290-350 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Prep Cooks is expected to increase about as fast as the average for all occupations over the 2000-10 period. Employment growth will be spurred by increases in population, household income, and leisure time that will allow people to dine out and take vacations more often. In addition, growth in the number of two-income households will lead more families to opt for the convenience of dining out.

Other Information

Where the Jobs Are: Restaurants, school districts, and grocery stores. Nationally, less than 1% are self-employed.

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

Important 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 (4.33)
Important Skills:	• Actively looking for ways to help people (3.50) • Listening to what other people are saying and asking questions as appropriate (3.50)
Important Abilities:	• The ability to make fast, simple, repeated movements of the fingers, hands, and wrists (4.33) • 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 (4.16) • 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 (3.83)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Food Preparation Workers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Food Server Waiters and Waitresses Short-term OJT $7.19/hr	**Food Prep Worker** Food Preparation Workers Short-term OJT $8.36/hr	**Cook** Cooks, Restaurant Moderate-term OJT $9.15/hr	**Lead Cook or Chef** Chefs and Head Cooks Work experience $16.06/hr
Dishwasher Dishwashers Short-term OJT $6.88/hr	**Host or Hostess** Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop Short-term OJT $7.52/hr	**Supervisor** First-Line Supervisors/Managers of Food Preparation and Serving Workers Work experience $12.94/hr	**Restaurant Manager** Food Service Managers Work experience $12.94/hr
Bus Person Dining Room and Cafeteria Attendants and Bartender Helpers Short-term OJT $6.80/hr	**Combined Food Prep or Service Worker** Combined Food Preparation and Serving Workers, Including Fast Food Short-term OJT $7.26/hr	**Assistant Manager**	**Owner**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Dishwashers	Short-term OJT	$6.88
Nursery Workers	Short-term OJT	$6.96
Combined Food Preparation and Serving Workers, Including Fast Food	Short-term OJT	$7.26
Food Preparation Workers	Short-term OJT	$8.36
Bartenders	Short-term OJT	$8.43
Production Helpers	Short-term OJT	$9.12
Meat, Poultry, and Fish Cutters and Trimmers	Short-term OJT	$9.14
Slaughterers and Meat Packers		$9.58
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Short-term OJT	$9.87
Pourers and Casters, Metal	Short-term OJT	$11.76
Typesetting and Composing Machine Operators and Tenders		$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 Darren Allen

What are some of the job titles you've held previously?
I have been a Cashier, an Expeditor, and worked the broiler.

What kind of work do you do in a typical day?
I come in and get the produce ready for the day, slice meat, set up the display case, check the dates on the products, clean the stations, make trays for the catering customers, and set up the dining room.

What was it that attracted you to this type of work?
A friend of my family's is a part-owner in this business and I was offered better hours than what I was working in a fast-food restaurant.

What knowledge, skills and abilities are important in this kind of work?
You should be clean cut, able to follow directions, capable of standing for long periods of time, and know how to operate industrial kitchen appliances.

What is the best preparation for someone who wants to go into this occupation?
Working in any type of restaurant, deli or fast-food chain is good experience.

What is it that keeps you wanting to do this kind of work?
I really enjoy the crew here, the hours are great, and there is room for growth. We have a deli here and also a catering business, and there is potential to move more into the catering aspect of this particular job.

What qualities make for an exceptional Food Preparation Worker?
You need to always keep in mind that people eat things that are visually appealing to them, so you need to pay close attention to the produce and quality. You need to keep appeal in mind when setting up trays for the catering clients. You should be able to work under pressure, and be able to adapt when change is necessary. Sometimes clients call and change things at the last minute, drop an order, or change the sizes of trays. You have to be able to deal with this type of change without getting overly frustrated.

What are the next steps in your career path?
I would like to move more into the catering aspects of my job. I really enjoy being able to give the catering customers exactly what they are looking for. I see the catering as sort of an art; food is a necessity, but being able to make it visually appealing is an art form.

Food Service Managers

Food Service Managers plan, organize, direct, control, or coordinate activities of an organization or department that serves food and/or beverages. Includes Food and Beverage Directors (OES 150261).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$8.00 - $13.64/hr	$11.33/hr
New Hires/Exp'd:	$10.00 - $16.25/hr	$12.79/hr
Exp'd/After 3 Years:	$12.64 - $19.61/hr	$15.34/hr

Hours: Almost all jobs are 40-50 hours per week.

Benefits: EMPLOYER PAID: Many employers provide medical insurance. Almost all provide a vacation and sick leave. Many also provide dental and vision insurance. Some provide life insurance. SHARED COST: Many employers provide medical insurance and other benefits, including a retirement plan, and dental insurance. Some also provide vision and life insurance.

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Many employers do not require prior experience. Many others require 6-24 months of prior experience. Many employers are willing to accept training as a substitute for experience.

Training: Some employers report that spreadsheet skills are important.

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

Large. There are approximately 1,410 - 1,725 Food Service Managers currently employed in the North Bay Counties. Local surveys indicate about 35% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 50-65 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 Restaurant and Food Service Managers is expected to increase about as fast as the average for all occupations through 2008. In addition to employment growth, the need to replace managers who transfer to other occupations or stop working will create many job openings. Opportunities to fill these openings are expected to be best for those with a bachelor’s or associate degree in restaurant and institutional food service management.

Other Information

Where the Jobs Are: Restaurants and hotels (with in-house restaurants). Nationally, about 32% are self-employed.

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

Important 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 (4.16)
- Knowledge of economic and accounting principles and practices, the financial markets, banking, and the analysis and reporting of financial data (3.50)

Important Skills:
- Managing one's own time and the time of others (4.33)
- Adjusting actions in relation to others' actions (4.33)
- Motivating, developing, and directing people as they work, identifying the best people for the job (4.16)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.66)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.66)
- The ability to see details of objects at a close range (within a few feet of the observer) (4.16)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 17 employers surveyed representing 93 employees in this occupation.

Career Path: Food Service Managers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Food Prep Worker Short-term OJT $8.36/hr	**Cook** Cooks, Restaurant Moderate-term OJT $10.04/hr	**Assistant Manager**	**General Manager**
Bus Person Dining Room and Cafeteria Attendants and Bartender Helpers Short-term OJT $6.80/hr	**Head Cook/Chef** Chefs and Head Cooks $16.06/hr	**Manager** Food Service Managers Work Experience $19.89/hr	
Food Server Waiters and Waitresses Short-term OJT $7.19/hr + tips	**Bartender** Short-term OJT $8.43/hr		

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Recreation Workers	Bachelor degree	$9.87
First-Line Supervisors/Managers of Food Preparation and Serving Workers	Work experience	$12.94
First-Line Supervisors and Manager/Supervisors - Animal Care Workers, Except Livestock	Work experience	$17.03
Lodging Managers	Work experience	$19.56
Food Service Managers	Work experience	$19.89
First-Line Supervisors, Administrative Support	Work experience	$21.85
First-Line Supervisors, Customer Service	Work experience	$21.85
Wholesale and Retail Buyers, Except Farm Products	Bachelor degree	$21.92
Elementary School Teachers, Except Special Education	Masters degree	$24.08
Administrative Services Managers	Bachelor + work exp	$29.21
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 Paul Tichy

What is your job title?
I am the Owner and Manager.

What kind of work do you do?
I usually run the kitchen in the back…all the cooking, the hot specials, soups of the day. My wife works in the front assisting the customers. I do many other things, and basically manage the whole place.

What are the things that attracted you to this type of work?
Since I was 14 I wanted to be a chef, so I went to culinary school in Czechoslovakia. After I finished, I came here and started working for hotels and catering companies as a sous chef. However, I was getting sick of being laid off because many people want to hire you for a season, and they don't want to pay the money you're asking for because it's only a temporary position. My wife and I decided to start our own business and now we don't have to deal with that anymore.

What kind of things do you do at work (skills)?
I come here early in the morning to do prep and breakfast cooking. I set up all the soups and chilis, make mochas, and help customers. Then I disappear in the back and start making the soup of the day and the special of the day. If someone calls for catering, I take care of that, too. On Fridays, I place supply orders. I also have to supervise people and make sure they follow safety, portion control, and food control. It's my responsibility to make sure everything is safe, follows nutritional guidelines, and adheres to the health codes. Everything is by the book. You just have to be very careful about what you're choosing and everything has to be fresh.

If you were starting over to be a food service manager, knowing what you know now, how would you better prepare yourself?
As I said, I was in the business since I was a little boy and I know a lot about cooking. But business itself is something completely new. Not just the paperwork, but how to provide service and make things appealing. Service is really important if you have a business, and I didn't know as much about that as I could have. We try to greet the people and be social. I believe that comes back in the form of more customers. Basically there's more to this business than just food, and some training or prior experience would have been helpful. Eventually I took some management classes.

What keeps you wanting to do this type of work?
It's our source of income, but more than that, it's our business and you have to take care of it like a little baby. I like that challenge. It's tough, but it's good.

What qualities make an exceptional food service manager?
You have to have a good service. Take care of your customers and just go with the flow.

General Office Clerks

(Includes Office Assistants and Receptionist/Clerks.)

General Office Clerks perform a wide variety of tasks. Clerical duties may be assigned in accordance with the office procedures of individual establishments and may include a combination of bookkeeping, typing, stenography, office machine operation, and filing. Does not include workers whose duties are narrowly defined. (OES 553470)

Wages and Benefits

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	$9.88 - $16.06/hr	$10.70/hr	$7.00 - $14.00/hr	$9.00/hr
New Hires/Exp'd:	$9.88 - $18.17/hr	$12.55/hr	$9.00 - $14.00/hr	$10.00/hr
Exp'd/After 3 Years:	$10.90 - $18.59/hr	$13.91/hr	$10.00 - $18.00/hr	$13.50/hr

Hours: Most jobs are 40 hours per week. Some 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers report that they do not always require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 6-24 months. Most employers are willing to accept training as a substitute for experience.

Training: General Office Clerks acquire skills in various ways. Training ranges from high school vocational education programs that teach office skills and keyboarding to 1-2 year programs in office administration offered by vocational and technical schools and community colleges. Almost all employers report that word processing software skills are important. Most also report that spreadsheet skills are important. Some report that database skills are important as well.

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: 18 employers surveyed representing 169 employees in 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%).

Size of Occupation

Very large. There are approximately 10,900 – 13,320 General Office Clerks currently employed in the North Bay Counties. Local surveys indicate about 95% are female. Almost all jobs are union.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. About 175-210 job openings are projected per year due to a net increase in occupation size. About 300-370 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of General Office Clerks is expected to grow about as fast as the average for all occupations through the year 2010. Employment growth, the large size of the occupation, and high replacement needs should result in plentiful job opportunities in many industries. Growth in part-time and temporary clerical positions will also lead to a large number of job openings. Prospects should be best for those who have knowledge of basic computer applications and office machinery, such as fax machines and copiers. Job opportunities will also be most favorable for those with good writing and communication skills.

Other Information

Where the Jobs Are: In a wide variety of industries, with about one out of every three jobs provided by government agencies, educational institutions, and health care organizations. Nationally, less than 1% are self-employed.

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

Important 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 (5.00) • Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (3.66)
Important Skills:	• Understanding written sentences and paragraphs in work related documents (3.75) • Communicating effectively with others in writing as indicated by the needs of the audience (3.58)
Important Abilities:	• The ability to add, subtract, multiply, or divide quickly and correctly (3.83) • 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 (3.83) • The ability to communicate information and ideas in speaking so others will understand (3.83) • The ability to listen to and understand information and ideas presented through spoken words and sentences (3.83)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for General Office Clerks

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
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	**Executive Secretary or Administrative Assistant** Work experience $18.05/hr	**Office Manager/Supervisor** First-Line Supervisors/Managers, of Office and Administrative Support Workers Work experience $21.85/hr
Receptionist Receptionists and Information Clerks Short-term OJT $11.31/hr			**Bookkeeper or Accountant**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Cashiers	Short-term OJT	$9.08
Counter and Rental Clerks	Short-term OJT	$9.73
Tellers	Moderate-term OJT	$10.52
Receptionists and Information Clerks	Short-term OJT	$11.31
Office Clerks, General	Post-secondary training	$12.18
Reservation and Transportation Ticket Agents	Short-term OJT	$13.08
Secretaries, Except Legal, Medical, and Executive	Post-secondary training	$14.34
Word Processor and Typists	Post-secondary training	$14.35
Customer Service Representatives, Utilities	Short-term OJT	$15.03
Loan Interviewers and Clerks	Short-term OJT	$15.74
Brokerage Clerks	Moderate-term OJT	$17.76

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 Christina Smith

What are some of the job titles you've held previously?
Currently, I am an Elementary Registrar. I have also been an Office Assistant, Administrative Assistant, Front Desk Clerk, File Clerk and I have done some collections work.

What kind of work do you do in a typical day?
I answer questions about the programs we have, as well as answer questions about daily issues from families, parents and teachers. I also set up interviews. I take families on tour of our campus. I also keep the records for the children's emergency contact information. I am responsible for the attendance records and the cumulative records. I correspond through email with parents and teachers. I give general office support to the teachers and do a lot of data entry.

What was it that attracted you to this type of work?
Since I was very young I have always wanted to help other people. I enjoy interacting with people and I enjoy the continuity of this position.

What knowledge, skills and abilities are important in this kind of work?
You need to be a really good communicator. You have to be able to assess a situation and see what the true issue is, and then be able to help the students through that. You need to be detail-oriented and realize that even the littlest things are important.

What is the best preparation for someone who wants to go into this occupation?
Learning new things and keeping abreast of the information technologies. Taking communication courses.

What is it that keeps you wanting to do this kind of work?
I am blessed to be in a Christian environment, with Christian Administrators, staff and families that come in. I absolutely love my job every day. I like knowing that, at the end of the day, the things I have completed have affected and helped others. Even though it may seem like it is tedious work, it has helped others.

What qualities make for an exceptional General Office Clerk?
Flexibility is probably the most important quality. Also, possessing the ability to set things aside and be able to help someone. You also need to be self-motivated, to see a need and fill it.

What are the next steps in your career path?
I will probably be going back to school for some more training, but I really enjoy where I am at right now. I am happy here and I love my job. My daughter is here on campus, so I am not planning on leaving here anytime soon.

Graphic Art Technicians

(Includes Graphic Artists, Production Artists, Desktop Publishers, and Pre-Press Technicians.)

Graphic Art Technicians generally assist Designers in the technical aspects of graphic design and production. They may use desktop publishing skills to create and produce graphics that do not require the skills of a professional designer. (Non-OES 141061995)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$8.00 - $12.00/hr	$9.75/hr
New Hires/Exp'd:	$10.50 - $23.00/hr	$16.25/hr
Exp'd/After 3 Years:	$10.50 - $30.00/hr	$20.00/hr

Some employers report that their Graphic Art Technicians may also receive bonuses.

Hours: Almost all jobs are 35-45 hours per week. A few jobs are 18-20 hours per week. Some employers report that swing shifts are common for this occupation.

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 (0) ▬ = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 6-60 months. Some employers are willing to accept training as a substitute for experience.

Training: Although formal training is not always required, those with certification or degrees will have the best job opportunities. Most employers prefer to hire people who possess good communication skills a strong work ethic, and the ability to deal courteously with customers and/or clients. They also may add, subtract, multiply, divide, and compute ratios to estimate job costs. Prepress Technicians often train on-the-job. Almost all employers report that desktop publishing software skills (e.g., Photoshop, QuarkExpress, and Illustrator) are important.

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 114 employees in 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

Insufficient data to estimate the size of this occupation. Local surveys indicate about 35% are female.

Employment Trends

Insufficient data to estimate local employment trends; however, many of the employers surveyed expect their employment in this occupation to grow over the next two years. In addition, none of the employers surveyed expect their employment for this occupation to decline. Nationwide, employment of Graphic Art Technicians is expected to grow much faster than the average for all occupations through 2010, as more page layout and design work is performed in-house using computers and sophisticated publishing software. Desktop publishing is replacing much of the prepress work done by compositors and typesetters, enabling organizations to reduce costs while increasing production speeds. Many new jobs for Graphic Art Technicians are expected to emerge in commercial printing and publishing establishments. However, more companies also are turning to in-house Graphic Art Technicians, as computers with elaborate text and graphics capabilities have become common, and desktop publishing software has become cheaper and easier to use.

Other Information

Where the Jobs Are: Print shops, service bureaus, government agencies, and organizations that do in-house graphics for advertising, marketing, and other purposes. Nationally, about 3% 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 or transfer. Some recruit applicants through internet job listings and/or fill openings through word-of-mouth.

Important Knowledge:	• Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (4.66) • 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 (3.33)
Important Skills:	• Determining the kind of tools and equipment needed to do a job (3.83) • Understanding written sentences and paragraphs in work related documents (3.83) • Controlling operations of equipment or systems (3.66)
Important Abilities:	• The ability to see details of objects at a close range (within a few feet of the observer) (3.80) • The ability to make fast, simple, repeated movements of the fingers, hands, and wrists (3.60) • The ability to match or detect differences between colors, including shades of color and brightness (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 *Source: O*NET Database version 3.0*

Career Path for Graphic Art Technicians

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Desktop Publisher or Graphic Art Tech Desktop Publishers Post-secondary training $18.19/hr	**Graphic Designer** Bachelor degree + work exp $21.19/hr	**Senior Graphic Designer**	**Art Director** Bachelor degree + work exp $34.29/hr
Layout/Production Artist Paste-Up Workers or Prepress Technicians Long-term OJT $16.96/hr		**Production Supervisor or Manager** First-Line Supervisors/Managers of Production and Operating Workers Work experience $22.35/hr	**General Manager/Owner**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Painting, Coating, and Decorating Workers	Short-term OJT	$9.90
Grips and Set-Up Workers, Motion Picture Sets, Studios, and Stages	Short-term OJT	$10.09
Data Entry Keyers	Post-secondary training	$11.85
Bookbinders	Long-term OJT	$13.77
Photographic Retouchers and Restorers	Moderate-term OJT	$13.79
Job Printers	Long-term OJT	$16.85
Dot Etchers	Long-term OJT	$16.96
Scanner Operators	Long-term OJT	$16.96
Electronic Masking System Operators	Long-term OJT	$16.96
Paste-Up Workers	Long-term OJT	$16.96
Desktop Publishers	Post-secondary training	$18.19

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 Doug Fullmer

What are some of the job titles you've held previously?
I have been a Production Manager, Composer and Layout Artist.

What kind of work do you do in a typical day?
I do a lot of IT (Information Technology) work, I make sure all of our computers and networks are running properly. Our department is set up with Composers, and I am the Manager. The Composers basically make the ads. I also make some ads but not as much as I used to. I basically put it all together and electronically send it to the printer or newspaper.

What was it that attracted you to this type of work?
Actually, I went to school for printing in Rochester, and when I got out of school I just flipped over to the publishing side. I have always been interested in computers and graphics, so I became the printer's customer as opposed to the opposite.

What knowledge, skills and abilities are important in this kind of work?
You need to be well organized as far as finding mistakes and proofing. You need a technical background; computers, networks, and FTP (file transfer protocol). In my work you need to know color theory and everything that goes into printing. You obviously have to be good at dealing with clients.

What is the best preparation for someone who wants to go into this occupation?
I would recommend that someone go to school first and take some classes that teach computer skills and publishing software skills.

What is it that keeps you wanting to do this kind of work?
It is a challenge and I'm not doing the same thing every day; it is always diverse. Technology is always changing, so I am always learning. Also, I get quick gratification because my work is printed that week.

What qualities make for an exceptional Graphic Art Technician?
Software knowledge, printing knowledge, being well organized and having good customer service skills are all essential.

What are the next steps in your career path?
I would like to have my own business someday. Maybe a publishing business or my own magazine.

Graphic Designers

(Includes Graphic 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. (Non-OES 141061998)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.00 - $15.00/hr	$11.00/hr
New Hires/Exp'd:	$9.50 - $19.18/hr	$14.03/hr
Exp'd/After 3 Years:	$10.00 - $25.00/hr	$17.00/hr

Surveys indicated that union wages were typically near the mid-point of the range.

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

Benefits: EMPLOYER PAID: Many employers provide medical insurance. Almost all provide a vacation. Most provide sick leave. Many also provide dental and vision insurance. Some provide life insurance and a retirement plan. SHARED COST: Many employers provide medical and dental insurance. Some also provide vision insurance, a retirement plan, and life insurance.

Training, Experience, and Other Requirements

License: Not required.

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: Many employers do not require prior experience. Many others require 6-24 months of prior experience, although many employers are willing to accept training as a substitute for experience.

Training: Most employers report that knowledge of PageMaker, QuarkExpress, PhotoShop, and Adobe Illustrator is important. Related programs in graphic design/art and visual communications are available.

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 450-550 Graphic Designers currently employed in the North Bay Counties. Local surveys indicate about 55% are female. Some jobs are union.

Employment Trends

Insufficient data; however, many employers surveyed expect their employment for this occupation to grow over the next two years. 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% 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 recruit applicants through internet job listings. Some fill openings by hiring referrals from colleges and universities.

Important 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)
Important Skills:	• Finding ways to structure or classify multiple pieces of information (3.83) • Controlling operations of equipment or systems (3.83) • Generating a number of different approaches to problems (3.66)
Important 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 *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 17 employers surveyed representing 97 employees in this occupation.

Career Path: Graphic Designers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Layout/Production Artist Prepress Technicians and Workers Long-term OJT $16.96/hr	**Graphic Designer** Bachelor + work exp $21.19/hr	**Senior Graphic Designer**	**Art Director** Bachelor + work exp $34.29/hr
Desktop Publisher Post-secondary training $18.19/hr			**Creative Director**

Occupations with Similar Skill Patterns

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 held previously?
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.

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 Guards and 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:	$7.50 – $10.05/hr	$9.00/hr
New Hires/Exp'd:	$8.00 - $13.50/hr	$10.00/hr
Exp'd/After 3 Years:	$8.00 - $15.00/hr	$10.60/hr

Hours: Most jobs are 30-32 hours per week. A few jobs are 40-45 hours per week. A few other jobs are 15-25 hours per week. Almost all employers report that swing shifts and graveyard shifts are common for this occupation.

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

Experience: Almost all employers report that they do not always require prior experience.

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

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 3,431 employees in 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 2,815 – 3,442 Security Guards currently employed in the North Bay Counties. Local surveys indicate about 45% are female.

Employment Trends

The growth rate is projected to be the same as 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 60-70 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Security Guards is expected to grow faster than the average for all occupations through 2010 as concern about crime, vandalism, and terrorism continue to increase the need for security.

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: All employers surveyed report that they recruit applicants through newspaper advertisements. Most also fill openings by hiring employee referrals. Many fill openings by hiring unsolicited applicants.

Important 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)

Important 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)

Important 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 concentrate and not be distracted while performing a task over a period of time (4.16)
- 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 (4.16)
- 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)
- The ability to see under low light conditions (4.16)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

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/Sergeant** 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

Note: Report writing skills may be important for career advancement.

Occupations with Similar Skill Patterns

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?
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 a typical day?
I work in the ER and I am the buffer between the doctors and nurses and the visitors. Sometimes working in the ER you have patients who get a little impatient or rowdy, so I do crowd control. 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.

What was it that attracted you to this type of work?
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. I just wanted to get away from that for a little while. 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.

What knowledge, skills, and abilities are important in this kind of work?
You have to be alert all the time. 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. 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.

What is the best preparation for someone who wants to go into this occupation?
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. I would get computer training because even this job is really starting to use computers.

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.

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. 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.

Hairdressers, Hairstylists, and Cosmetologists

Hairdressers, Hairstylists, and Cosmetologists provide beauty services for customers, such as suggesting hair styles, 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:	$7.00 - $11.50/hr	$9.25/hr
New Hires/Exp'd:	$7.00 - $12.50/hr	$10.42/hr
Exp'd/After 3 Years:	$8.00 - $34.52/hr	$12.00/hr

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

Hours: Many 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 (0) ▬ = Insufficient Data

Training, Experience, and Other Requirements

License: Required for this occupation; contact the California Bureau of Barbering and Cosmetology at (800) 952-5210 or go to http://www.dca.ca.gov/barber/ for licensing information.

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

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

Training: Completion of a cosmetology training program is required.

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 1,075 – 1,310 Hairdressers, Hairstylists, and Cosmetologists currently employed in the North Bay Counties. Local surveys indicate about 95% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. About 25-30 job openings are projected per year due to a net increase in occupation size. About 30-35 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% are self-employed.

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

Important 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)
- 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 (2.80)
- 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 (2.20)

Important 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)

Important 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 *Source: O*NET Database version 3.0*

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 80 employees in this occupation.

Career Path for Hairdressers, Hairstylists, and Cosmetologists

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Hairstylist Hairdressers, Hairstylists, and Cosmetologists Post-secondary training $9.44/hr	**Hairstylist - 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 Patterns

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?
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.

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.

Hand Packers and Packagers

(Includes Courtesy Clerks.)

Hand Packers and Packagers pack or package by hand a wide variety of products and materials. Does not include workers whose jobs require more than minimum training (OES 989020).

Wages and Benefits

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	$7.00 - $10.00/hr	$7.50/hr	$5.75 - $8.25/hr	$7.00/hr
New Hires/Exp'd:	$7.00 - $10.00/hr	$7.75/hr	$5.75 - $9.00/hr	$7.50/hr
Exp'd/After 3 Years:	$7.50 - $10.00/hr	$9.00/hr	$5.75 - $12.00/hr	$8.50/hr

Hours: Many jobs are 15-33 hours per week. Many other jobs are 36-40 hours per week.

Benefits: EMPLOYER PAID: Almost all employers provide medical insurance. Of the employers surveyed, all report that they provide a vacation. Most also provide sick leave, a retirement plan, vision insurance, and dental insurance. Some provide life insurance. SHARED COST: Few employers provide benefits. For part-time employees: Many employers provide medical insurance and other benefits, including dental insurance, vision insurance, sick leave, a vacation, and a retirement plan. Some also provide life insurance.

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Almost all employers do not require 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 3,315-4,050 Hand Packers and Packagers currently employed in the North Bay Counties. Local surveys indicate about 55% 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 2004. About 155-190 job openings are projected per year due to a net increase in occupation size. About 85-100 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, driven largely by rapid growth in the industries in which they are most concentrated, faster-than-average growth is expected for Vehicle Washers and Equipment Cleaners, Hand Packers and Packagers, and Parking Lot Attendants.

Other Information

Where the Jobs Are: In a variety of industries, including grocery stores, beverage companies, and help supply/employment agencies. Nationally, less than 1% 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 and/or recruit applicants through newspaper advertisements.

Important Knowledge:	• Knowledge of inputs, outputs, raw materials, waste, quality control, costs, and techniques for maximizing the manufacture and distribution of goods (3.20)
Important Skills:	• Inspecting and evaluating the quality of products (3.00) • Controlling operations of equipment or systems (3.00)
Important 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 (4.40) • 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) • 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 (3.20)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 16 employers surveyed representing 261 employees in this occupation.

Career Path: Hand Packers and Packagers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Hand Packer or Courtesy Clerk Packers and Packagers, Hand Short-term OJT $8.22/hr	**Packaging or Filling Machine Operator** Moderate-term OJT $10.03/hr	**Supervisor**	**Manager**
	Cashier or Checker Cashiers Short-term OJT $9.08/hr (or higher for grocery checkers)		

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Cleaners of Vehicles and Equipment	Short-term OJT	$8.14
Packers and Packagers, Hand	Short-term OJT	$8.22
Cutters and Trimmers, Hand	Short-term OJT	$8.43
Painting, Coating, and Decorating Workers	Short-term OJT	$9.90
Conveyor Operators and Tenders	Moderate-term OJT	$10.20
Molding and Casting Workers	Short-term OJT	$11.87
Upholsterers	Long-term OJT	$12.56
Embossing Machine Set-Up Operators	Long-term OJT	$14.60
Electrotypers and Stereotypers	Long-term OJT	$16.96
Plate Finishers	Moderate-term OJT	$16.96
Hand and Portable Power Tool Repairers	Long-term OJT	$20.00

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 Jon Liberti

What is your job title?
Pre-pack or Packer.

What kind of work do you do?
I package almonds for shipment.

What are the things that attracted you to this type of work?
Well, I started off as a Sorter but didn't like sitting on the belt sorting. They had more physical work like pre-pack where I get to move around and package and handle goods, or sample and check out damaged goods.

What kind of things do you do at work (skills)?
I keep inventory on the packages that run through the line and I make sure that there's a correct count on all the material that runs through. I take out the defective packages and place them in a separate pile. We count those as damaged goods, put them back into the machine, etc. etc. We run this process all day, and then we tape them up and ship them out to other countries.

If you were starting over to be a Hand Packer, knowing what you know now, how would you better prepare yourself?
You can touch up on your math skills. The packages that we get are different every day; you might have plastic packages one day and cans the next. They go by inventory so if you're good at math, then pre-pack's for you. If you're not, maybe you would want to check into something else.

What keeps you wanting to do this type of work?
Well there's a lot to learn with these almonds. There are about 33 varieties so it's hard to learn them all in a week or so. It's learning about the nuts that keeps me going, because I'm always learning something new. I've learned about different damages that can occur, how to identify damage from different insects, different types of almond growth, different packing procedures, and how to work with different varieties of almonds.

What qualities make an exceptional Hand Packer?
I'd say being able to work with a lot of people and their attitudes, because people have different attitudes on different days. Going in there with a good attitude is what makes a good packer. You should also have a team-player mentality. See, the better the team's attitude is, the better we all work together and the more production we get. If everyone's "bumping heads" it doesn't look too pretty on the packing floor.

Heating, Air Conditioning and Refrigeration Mechanics and Installers

(Also known as HVAC Service Technicians.)

Heating, Air Conditioning, and Refrigeration Mechanics and Installers install and repair heating, air conditioning, and refrigeration systems. Their duties may include installation and repair of oil burners, hot-air furnaces, heating stoves, and similar equipment in homes and commercial establishments using hand and pipe threading tools. They may also install and repair cooling and central air conditioning systems. Does not include workers who do only plumbing and pipefitting work (OES 859020).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$8.00 - $10.59/hr	$9.30/hr
New Hires/Exp'd:	$8.00 - $20.00/hr	$13.50/hr
Exp'd/After 3 Years:	$13.00 - $25.00/hr	$20.00/hr

Surveys indicated that union wages were typically at the top end of the range.

Hours: Almost all jobs are 40-50 hours per week.

Benefits: EMPLOYER PAID: Most employers provide medical insurance and other benefits, including paid vacation. Many also provide dental insurance. Some provide sick leave. A few provide vision insurance. SHARED COST: A few employers provide medical insurance. Some also provide a retirement plan.

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers do not require prior experience.

Training: Employers generally provide on-the-job training for this occupation, although related training programs are available.

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

Small. There are approximately 325-395 HVAC Service Technicians currently employed in the North Bay Counties. Local surveys indicate less than 5% are female. Many jobs are union.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 10-15 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 Heating, Air-Conditioning, and Refrigeration Mechanics and Installers is expected to increase about as fast as the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Plumbing, heating, and air conditioning firms. Nationally, about 16% are self-employed.

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

Important Knowledge:
- Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (4.83)
- Knowledge of design techniques, principles, tools and instruments involved in the production and use of precision technical plans, blueprints, drawings, and models (3.66)
- Knowledge of materials, methods, and the appropriate tools to construct objects, structures, and buildings (3.50)

Important Skills:
- Determining what is causing an operating error and deciding what to do about it (4.66)
- Installing equipment, machines, wiring, or programs to meet specifications (4.66)
- Repairing machines or systems using the needed tools (4.50)

Important Abilities:
- The ability to apply general rules to specific problems to come up with logical answers**.** It involves deciding if an answer makes sense. (3.80)
- The ability to keep the hand and arm steady while making an arm movement or while holding the arm and hand in one position (3.40)
- 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 (3.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 16 employers surveyed representing 150 employees in this occupation.

Career Path: Heating, Air Conditioning, and Refrigeration Mechanics and Installers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Helper or Apprentice Helpers--Pipelayers, Plumbers, Pipefitters Short-term OJT $12.62/hr	**HVAC Technician (Installer)** Heating and Air Conditioning Mechanics Long-term OJT $18.82/hr	**HVAC Technician (Service/Repair)**	**Lead Tech/Foreman** First-Line Supervisors/Managers of Mechanics, Installers Work Experience $25.88/hr
Apprentice Sheet Metal Worker			**HVAC/General Contractor**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Manufactured Building and Mobile Home Installers	Long-term OJT	$10.75
Model Makers, Wood	Long-term OJT	$12.64
Outdoor Power Equipment and Other Small Engine Mechanics	Long-term OJT	$13.49
Patternmakers, Wood	Long-term OJT	$13.65
Rail Car Repairers	Long-term OJT	$14.28
Recreational Vehicle Service Technicians	Long-term OJT	$14.72
Motorcycle Mechanics	Long-term OJT	$15.70
Heating and Air Conditioning Mechanics	Long-term OJT	$18.82
Refrigeration Mechanics	Long-term OJT	$18.82
Telecommunications Line Installers and Repairers	Long-term OJT	$20.32
Frame Wirers, Central Office	Post-secondary training	$21.09

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 Andrew Josch

What is your job title?
I'm an HVAC Engineer.

What kind of work do you do?
I service heating and cooling equipment. I test it, make sure it works, and if there's any problem, I fix it.

What are the things that attracted you to this type of work?
I like engineering. I was a Heating Engineer for a long time until I switched sides of the company and became refrigeration. It just seemed more interesting. Heating and refrigeration are connected, but they're separate as well. Most Refrigeration Engineers don't do heating. They just do one or the other. However, there are a few of us that do both.

What kind of things do you do at work (skills)?
I fault find the equipment if it doesn't work. I'll strip down compressors, re-build them on-site, change filters if need be on the air-conditioning equipment, and do other general service tasks. I do a general check on all the system equipment, and make sure it's running. I also test the oil and make sure everything's tight. That's basically what I do.

If you were starting over to be an HVAC Mechanic, knowing what you know now, how would you better prepare yourself?
I would try and learn as much about mechanical things as possible. I would study more about pulling things apart, how they go together, and I'd learn basic electronics. There are an awful lot of electronics involved in HVAC.

What keeps you wanting to do this type of work?
I love the challenge; it's fun and always different. I like faultfinding because it's interesting and it keeps my brain going. The industry is also fast paced and there's always so much new equipment coming out on the market. There's also a lot of variety as far as the work goes; one minute you could be working in an office building on a little tiny split refrigeration unit, the next day you could be working in a warehouse on a ten-ton chiller. It's very different each day and I enjoy that challenge.

What qualities make an exceptional HVAC Mechanic?
Somebody who can fault find but not jump straight in; they consider the problem and think it through before actually pulling things apart; somebody who takes his or her time and doesn't rush it; somebody without the 'bull in a china shop' mentality. You just take your time and exercise temperance. That's basically what would make a good Engineer. And an exceptional Engineer would enjoy the challenge of it all!

Helpers, All Other Construction Trade Workers

(Also known as Laborers.)

Construction Trade 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. (OES 983190999)

Wages and Benefits

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	$6.75 - $21.39/hr	$21.17/hr	$7.00 - $12.00/hr	$9.50/hr
New Hires/Exp'd:	$7.50 - $22.34/hr	$22.34/hr	$9.00 - $15.00/hr	$13.00/hr
Exp'd/After 3 Years:	$7.87 - $25.69/hr	$23.34/hr	$12.00 - $20.00/hr	$16.50/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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: All employers surveyed report that they do not always require prior experience.

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

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 760 employees in this occupation.

Supply/Demand Assessment

Employers generally report that it is not difficult to find applicants who meet their hiring standards. This indicates a **very competitive outlook** for qualified job seekers. Annual turnover is estimated to be very low (less than 10%).

Size of Occupation

Small. There are approximately 355-435 Construction Laborers currently employed in the North Bay Counties. Local surveys indicate about 1% are female. Many jobs are union.

Employment Trends

The growth rate is projected to be slower 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 Construction Laborers is expected to grow about as fast as the average for all occupations through the year 2010. Opportunities will be best for well-trained workers who are willing to relocate to different worksites. Growth of Construction Laborer employment will be spurred by continuing emphasis on environmental remediation and on rebuilding infrastructure, including roads, airports, bridges, tunnels, and communications facilities.

Other Information

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

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

Important 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)
Important Skills:	• Determining the kind of tools and equipment needed to do a job (3.16)
Important 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) • 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 (3.20) • 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 (3.20)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Helpers, All Other Construction Trade Workers

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 Patterns

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?
I started as a Laborer doing general cleanup, sweeping up job sites and what not. From there I moved up to Apprentice Carpenter, to a Journeyman, and Supervisor and Superintendent to a General Contractor.

What kind of work 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. As a helper you begin with what would be considered general grunt work…stocking and moving materials and what not. 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.

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. 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. And following directions is vital, as well as being a team player as well.

What is the best preparation for someone who wants to go 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?
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.

What qualities make for an exceptional Construction Laborer?
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. I look at how organized they are with their own tools. How they conduct themselves is also very important.

Home Health Aides

Home Health Aides care for elderly, convalescent, or handicapped person in home of 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. Does not include Nursing Aides and Homemakers (OES 660110).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.25 - $10.90/hr	$8.25/hr
New Hires/Exp'd:	$6.75 - $12.10/hr	$9.00/hr
Exp'd/After 3 Years:	$7.75 - $15.00/hr	$10.00/hr

Hours: Some jobs are 35-55 hours per week. Some other jobs are 8-30 hours per week. Many of these jobs are on-call or temporary.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Licensing is required for this occupation; contact the State Department of Health Services at (916) 327-2445 or visit http://www.dhs.ca.gov/ for licensing information.

Education: Most 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 6-12 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, although related training programs are available.

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 394 employees in this occupation.

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 1,200 – 1,465 Home Health Aides currently employed in the North Bay Counties. Local surveys indicate about 85% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 45-55 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 Home Health and Personal Care Aides is expected to be one of the fastest growing occupations through the year 2008.

Other Information

Where the Jobs Are:, Hospitals, temporary staffing agencies, and home health care services. Nationally, about 3% are self-employed.

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

Important 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 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 (4.00) • Knowledge of human behavior and performance, mental processes, psychological research methods, and the assessment and treatment of behavioral and affective disorders (3.33)
Important Skills:	• Actively looking for ways to help people (4.33) • Being aware of others' reactions and understanding why they react the way they do (3.66) • Listening to what other people are saying and asking questions as appropriate (3.50)
Important Abilities:	• 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) • The ability to exert maximum muscle force to lift, push, pull, or carry objects (3.60)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Home Health Aides

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Home Health Aide - Inexperienced Post-secondary training $9.75/hr	**Home Health Aide – Experienced**	**Licensed Vocational Nurse** Licensed Practical and Licensed Vocational Nurses Post-secondary training $18.05/hr	**Health Care Professional** e.g., Physician, Surgeon, etc. Professional degree
Nurse Aide Nursing Aides, Orderlies, and Attendants Post-secondary training $9.76/hr	**Home Health Services Scheduler**	**Registered Nurse** Registered Nurses Associate degree $27.82/hr	**Health Care Services Administrator** Medical and Health Services Managers Bachelor + work exp $35.81/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Flight Attendants	Short-term OJT	—
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	Short-term OJT	$7.52
Personal and Home Care Aides	Short-term OJT	$8.11
Barbers	Post-secondary training	$8.72
Child Care Workers	Post-secondary training	$9.18
Hotel, Motel, and Resort Desk Clerks	Short-term OJT	$9.28
Hairdressers, Hairstylists, and Cosmetologists	Post-secondary training	$9.44
Home Health Aides	Post-secondary training	$9.75
Cooks, Institution and Cafeteria	Moderate-term OJT	$10.84
Psychiatric Technicians	Associate degree	$17.43
Licensed Practical and Licensed Vocational Nurses	Post-secondary training	$18.05

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 Dorothy M. Smith

What are some of the job titles you've held previously?
I started as a Chore Provider and worked in both private homes and for an adult service agency.

What kind of work do you do in your current job and what do you do in a typical day?
As a Home Health Aide I go into patients' homes and provide them with companionship, personal care, including bath, oral care, pedi-care and meal preparation. I also change bed linens, assist the patients in and out of bed, and assist them with grooming and dressing. When I arrive, I introduce myself and assess their needs. I try to make them as comfortable as possible.

What was it that attracted you to this work?
I love caring for people, especially people who cannot do for themselves. My passion for this work began when my sister and father were under hospice care. I was grateful for the care they were provided in their time of need and knew that I would also enjoy providing for people who needed assistance.

What knowledge, skills, and abilities are important in this kind of work?
I think you need to be compassionate. You also need to be a people person and have excellent communication skills. Of course it is important to know about healthcare and have medical training. You need patience and the ability to care for others and you need both emotional and physical strength.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
The best preparation is knowing that you have a passion for caring for others. You need experience with caring for others. You also need to have healthcare experience in either Home Health Aide or Certified Nursing Assistant Training.

What is it that keeps you wanting to do this kind of work?
The joy I get from caring for people. I love being able to give back.

What qualities make for an exceptional Home Health Aide?
To be exceptional as a Home Health Aide, you need to have a good personality, be outgoing, be warm and compassionate. You also need the ability to think quickly on your feet and to have medical training to respond appropriately to the needs of the patient.

Hosts, Hostesses - Restaurant, Lounge or Coffee Shop

Hosts and Hostesses-Restaurant, Lounge or Coffee Shop, welcome patrons, seat them at tables or in lounge, and insure quality of facilities and service. (OES 650020)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.75 - $10.00/hr	$7.00/hr
New Hires/Exp'd:	$6.75 - $10.00/hr	$7.50/hr
Exp'd/After 3 Years:	$6.75 - $13.00/hr	$8.00/hr

Most employers report that their Hosts and Hostesses also receive tips.

Hours: Almost all jobs are 10-33 hours per week. A few jobs are 35-40 hours per week. Hosts and Hostesses are expected to work nights, weekends, and holidays. Some work split shifts by working a few hours at mid-day, taking time off during the afternoon, then returning to work the evening shift. The wide range of hours available to restaurant workers creates a good opportunity for part-time work and makes this line of work particularly suitable for students.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Almost all employers report that they do not always require prior experience.

Training: Employers generally provide on-the-job training for this occupation. Because maintaining a restaurant's image is important to its success, employers emphasize personal qualities. Hosts and Hostesses are in close contact with the public, so they should be well spoken and have a neat and clean appearance. They should enjoy dealing with all kinds of people and possess a pleasant disposition.

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 99 employees in 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

Medium. There are approximately 1,175 – 1,435 Hosts and Hostesses currently employed in the North Bay Counties. Local surveys indicate about 80% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. About 180-220 job openings are projected per year due to a net increase in occupation size. About 250-310 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Hosts and Hostesses is expected to grow about as fast as the average for all occupations through 2010.

Other Information

Where the Jobs Are: Eating and drinking establishments. Nationally, about 7% 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 employers recruit applicants through newspaper advertisements.

Important 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 (4.16)
- 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 (3.66)
- Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (3.16)
- 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 (3.16)

Important Skills:
- Actively looking for ways to help people (4.33)
- Adjusting actions in relation to others' actions (3.83)
- Managing one's own time and the time of others (3.66)
- Using mathematics to solve problems (3.66)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.20)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (3.60)
- The ability to speak clearly so that it is understandable to a listener (3.40)
- The ability to add, subtract, multiply, or divide quickly and correctly (3.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Hosts, Hostesses - Restaurant, Lounge or Coffee Shop

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Food Server Waiters and Waitresses Short-term OJT $7.19/hr	**Host or Hostess** Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop Short-term OJT $7.52/hr	**Supervisor or Assistant Manager** First-Line Supervisors/Managers of Food Preparation and Serving Workers Work experience $12.94/hr	**Restaurant Manager** Food Service Managers Work experience $19.89/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Flight Attendants	Short-term OJT	—
City Planning Aides	Bachelor degree	—
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	Short-term OJT	$7.52
Hotel, Motel, and Resort Desk Clerks	Short-term OJT	$9.28
Travel Clerks	Short-term OJT	$13.08
New Accounts Clerks	Work experience	$13.35
Adjustment Clerks	Short-term OJT	$15.03
Housekeeping Supervisors	Work experience	$15.45
Human Resources Assistants, Except Payroll and Timekeeping	Short-term OJT	$16.72
Court Clerks	Short-term OJT	$17.02
License Clerks	Moderate-term OJT	$17.02

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 Sara Mitchel

What are some of the job titles you've held previously?
This was an entry-level position here. Before this I worked in a fast-food restaurant.

What kind of work do you do in a typical day?
When customers come in, I get seating arranged for them and take them to their tables. I take their drink orders and serve them their drinks. I make sure all the tables are clean and that the condiments are well stocked. I also serve as the Cashier, so I ring up the meals, print the bills, and take the payments.

What was it that attracted you to this type of work?
I really enjoy working with the public and I needed a job during the evening hours so I could go to school. This job allows me the flexibility I need for college. Every semester my class schedule changes a bit, and they have always been willing to adjust my work schedule to accommodate my classes.

What knowledge, skills and abilities are important in this kind of work?
First and foremost you have to be able to work well with the public. Some customers are difficult, and you have to be able to handle that. You have to be a self-starter, to see what needs to be done, and get it done. You have to be able to smile, even when you don't feel like smiling. And you need to be able to work in a very fast paced environment. Things get to be hopping around here pretty darn fast, and you have to be able to keep up.

What is the best preparation for someone who wants to go into this occupation?
Any job where you are working with the public. Is good experience for this.

What is it that keeps you wanting to do this kind of work?
I enjoy my job; I like the people I work with and the management here. They have been flexible with my changing schedule and, for right now, this job meets my needs.

What qualities make for an exceptional Host or Hostess?
Being friendly, outgoing, and personable. You only have a few minutes with each customer, and you have to take advantage of that time and make a positive impression.

What are the next steps in your career path?
As I mentioned, I am a college student. My next steps are to graduate and become an Elementary School teacher. I still have one year of school, and then my student teaching.

Hotel Desk Clerks

(Also known as Front Desk Agents and Guest Services Agents.)

Hotel Desk Clerks accommodate hotel patrons by registering and assigning rooms to guests, issuing room keys, transmitting and receiving messages, keeping records of rooms occupied and guests' accounts, making and confirming reservations, and presenting statements to and collecting payments from departing guests (OES 538080).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.00 - $11.00/hr	$8.00/hr
New Hires/Exp'd:	$6.00 - $12.00/hr	$9.00/hr
Exp'd/After 3 Years:	$8.00 - $15.00/hr	$11.00/hr

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

Benefits: EMPLOYER PAID: Some employers provide medical insurance. Of the employers surveyed, all report that they provide a vacation. Many provide sick leave. Some also provide life insurance, vision insurance, and dental insurance. SHARED COST: Most employers provide medical insurance and a retirement plan. Many also provide dental insurance and vision insurance. Some provide life insurance. For part-time employees: Few employers provide benefits.

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Almost all employers do not require prior experience.

Training: Some employers report that word processing skills are important. Employers generally provide on-the-job training for this occupation, although related training programs are available.

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 565-695 Hotel Desk Clerks currently employed in the North Bay Counties. Local surveys indicate about 70% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 20-25 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 Hotel, Motel, and Resort Desk Clerks is expected to grow about as fast as the average for all occupations through 2008, as more hotels, motels, and other lodging establishments are built and occupancy rates rise.

Other Information

Where the Jobs Are: Hotels and motels. Nationally, less than 1% are self-employed.

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

Important 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 (4.16) • 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 (3.50) • Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (3.16)
Important Skills:	• Actively looking for ways to help people (4.33) • Talking to others to effectively convey information (3.83) • Listening to what other people are saying and asking questions as appropriate (3.50)
Important Abilities:	• The ability to communicate information and ideas in speaking so others will understand (4.60) • The ability to listen to and understand information and ideas presented through spoken words and sentences (4.00) • The ability to speak clearly so that it is understandable to a listener (3.20)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 16 employers surveyed representing 126 employees in this occupation.

Career Path: Hotel Desk Clerks

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

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Hotel, Motel, and Resort Desk Clerks	Short-term OJT	$9.28
Travel Clerks	Short-term OJT	$13.08
New Accounts Clerks	Work experience	$13.35
Travel Agents	Post-secondary training	$13.83
Claims Takers, Unemployment Benefits	Moderate-term OJT	$14.13
Interviewers, Except Eligibility and Loan	Short-term OJT	$14.74
Adjustment Clerks	Short-term OJT	$15.03
Customer Service Representatives, Utilities	Short-term OJT	$15.03
Dispatchers, Except Police, Fire, and Ambulance	Moderate-term OJT	$15.21
Human Resources Assistants, Except Payroll and Timekeeping	Short-term OJT	$16.72
Court Clerks	Short-term OJT	$17.02

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 Aimee Jensen

What is your job title?
I am a Front Desk Clerk.

What type of work do you do?
I check guests in and out of the hotel. I answer telephones and take reservations. I'm also the night auditor, so I do the daily paper work. I also set up breakfasts and other accommodations.

What are the things that attracted you to this type of work?
Hotels are very nice and the shifts are very flexible as to when I could work.

If you were starting over to be a Hotel Desk Clerk, knowing what you know now, how would you better prepare yourself?
I don't think I would do anything different.

What keeps you wanting to do this type of work?
Well again, it's flexible and works around my school schedule. My superiors respect me and I get paid decently. I also get good hours.

What qualities make a good Hotel Desk Clerk?
I would say patience, being able to interact with the public, efficiency, and definitely being able to handle multiple tasks simultaneously.

Human Service Workers

(Includes Direct Care Staff and a variety of Social Service Assistants, Aides, and Specialists.)

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. Does not include Residential Counselors and Psychiatric Technicians (OES 273080).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.25 - $14.38/hr	$9.00/hr
New Hires/Exp'd:	$6.25 - $18.22/hr	$10.89/hr
Exp'd/After 3 Years:	$6.25 - $20.00/hr	$14.34/hr

Some Human Service Workers may also receive bonuses.

Hours: Most jobs are 35-50 hours per week. Some jobs are 13-30 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

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

Training: Some employers report that word processing skills are important.

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 125 employees in this occupation.

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 885 – 1,080 Human Service Workers currently employed in the North Bay Counties. Local surveys indicate about 75% are female.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2004. About 40-50 job openings are projected per year due to a net increase in occupation size. About 20-25 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Human Service Workers and Assistants is projected to grow much faster than the average for all occupations between 1998 and 2008.

Other Information

Where the Jobs Are:, Individual and family social services, residential care facilities, job training and vocational rehabilitation services, and other social service agencies. Nationally, less than 1% are self-employed.

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

Important 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 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)
Important Skills:	• Being aware of others' reactions and understanding why they react the way they do (4.16) • Talking to others to effectively convey information (4.16) • Listening to what other people are saying and asking questions as appropriate (3.83)
Important Abilities:	• The ability to communicate information and ideas in speaking so others will understand (4.80) • 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 writing so others will understand (3.60)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Human Service Workers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Human Service Worker - e.g., Assistant, Aide, and (Non-Professional) Counselor Social and Human Service Assistants Associate degree $13.50/hr	**Human Service Worker - e.g., Technician, Specialist, and (Non-Professional) Counselor**	**Supervisor** Social and Community Service Managers Bachelor + work exp $23.54/hr	**Administrator**
Clerical Support Worker Secretaries, Except Legal, Medical, and Executive Post-secondary training $14.34/hr		**Program Coordinator or Manager**	**Counselor** Child, Family, and School Social Workers Masters degree $17.90/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Personal and Home Care Aides	Short-term OJT	$8.11
Residential Advisors	Work experience	$9.91
Social and Human Service Assistants	Associate degree	$13.50
Travel Agents	Post-secondary training	$13.83
Procurement Clerks	Short-term OJT	$15.85
Child, Family, and School Social Workers	Masters degree	$17.90
Real Estate Sales Agents	Post-secondary training	$18.34
Clergy	Professional degree	$19.26
Paralegals and Legal Assistants	Associate degree	$22.41
Insurance Sales Agents	Bachelor degree	$26.11
Sales Representatives, Agricultural	Moderate-term OJT	$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 Katy VanZant

What are some of the job titles you've held previously?
In the past I have been a Companion, which means that I lived with someone with specific needs, which I took care of. I have also been an Instructional Assistant, and an Instructional Program Assistant. I am currently the Program Director.

What kind of work do you do in your current job and what do you do in a typical day?
Currently, I supervise and coordinate services for our clients. Typically I will pick up messages and deal with them as appropriate. I supervise 10 job coaches who currently work with about 30 clients. I coordinate all of the scheduling for client services, seek out other opportunities for our agency, and I perform client assessments. I perform daily business activities and I act as a resource for information about our programs.

What was it that attracted you to this work?
I had this philanthropic desire to help people. After I graduated from college I became a companion and realized that I wanted to contribute to help weave the fabric of society.

What knowledge, skills, and abilities are important in this kind of work?
The entry-level position requires a great deal of patience. You would also need writing skills, and be able to learn quickly. The one thing that I would emphasize is that this job requires someone to be a visionary to help our clients meet their full potential. You need common sense, and some physical ability.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
It would good for someone to have their associates degree in human services. We also have a substitute program where someone can come in, get paid, and see if they really want to do this kind of work. They most important thing is that you have to like people, all people.

What is it that keeps you wanting to do this kind of work?
I am good at it. I have been at this position for two years, and my goal was to get to a point where I could run a program, which I am realizing. I also like the daily challenges.

What qualities make for an exceptional Human Service Worker?
I think the most important skills are good communication, being able to empathize with someone, patience, and to have vision for your clients.

Industrial Production Managers

(Also known as Production Managers, Cellar Managers, Plant Managers, and Operations Managers.)

Industrial Production Managers plan, organize, direct, control, or coordinate the operational (line) activities and resources necessary for manufacturing products in accordance with cost, quality, and quantity specifications. (OES 150140)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$13.46 - $39.42/hr	$26.44/hr
Exp'd/After 3 Years:	$15.38 - $50.48/hr	$33.65/hr

Many employers report that their Production Managers also receive bonuses and/or profit sharing income.

Hours: Almost all jobs are 40-50 hours per week. A few employers report that swing shifts are common for this occupation.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers require 2-5 years of prior experience. Few employers are willing to accept training as a substitute for experience.

Training: Because of the diversity of manufacturing operations and job requirements, there is no standard preparation for this occupation. However, a college degree is usually required, even for those who have worked their way up the ranks. Many Production Managers have a college degree in business administration, management, industrial technology, or industrial engineering. Others have a master's degree in industrial management or business administration (MBA). Some are former Production-line Supervisors who have been promoted. Almost all employers report that word processing and spreadsheet software skills are important. Most also report that database skills are important.

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: 21 employers surveyed representing 33 employees in 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 low (less than 10%).

Size of Occupation

Medium. There are approximately 660-805 Production Managers currently employed in the North Bay Counties. Local surveys indicate about 15% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. About 55-65 job openings are projected per year due to a net increase in occupation size. About 80-100 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Production Managers is expected to grow more slowly than the average for all occupations through 2010. However, a number of job openings will stem from the need to replace workers who transfer to other occupations or leave the labor force. Employers are likely to seek candidates who have excellent communication skills and who are personable, flexible, and eager to enhance their knowledge and skills through ongoing training.

Other Information

Where the Jobs Are: In a wide variety of manufacturing industries, including food and beverage products, instruments and related products, industrial machinery and equipment, and electronic or electrical equipment. Nationally, about 17% are self-employed.

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

Important Knowledge:
- Knowledge of inputs, outputs, raw materials, waste, quality control, costs, and techniques for maximizing the manufacture and distribution of goods (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 (4.91)

Important Skills:
- Adjusting actions in relation to others' actions (4.50)
- 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 (4.25)
- Weighing the relative costs and benefits of a potential action (4.16)
- 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)

Important 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 (4.25)
- The ability to read and understand information and ideas presented in writing (4.08)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Industrial Production Managers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Production Worker or Helper Helpers, Production Workers Short-term OJT $9.12/hr	**Lead Person**	**Supervisor or Manager** First-Line Supervisors/Managers of Production and Operating Workers Work experience $22.55/hr	**Director of Operations** Industrial Production Managers Bachelor degree + work exp $35.76/hr
Machine Operator or Tender Machine Feeders and Offbearers Short-term OJT $9.98/hr			**Owner**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Production, Planning, and Expediting Clerks	Short-term OJT	$16.63
Food Service Managers	Work experience	$19.89
Environmental Compliance Inspectors	Bachelor degree	$22.28
Government Property Inspectors and Investigators	Work experience	$22.28
First-Line Supervisors/Managers of Production and Operating Workers	Work experience	$22.55
Medical and Clinical Laboratory Technologists	Bachelor degree	$26.12
Industrial Production Managers	Bachelor + work exp	$35.76
Petroleum Engineers	Bachelor degree	$38.65
Financial Managers, Branch or Department	Bachelor + work exp	$39.50
Natural Sciences Managers	Masters + work exp	$40.15
Computer and Information Systems Managers	Bachelor + work exp	$44.34

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 Matt Syreeng

What are some of the job titles you've held previously?
I started out as a Grower, and then a Lead Supervisor, and a Programmer. I went back to school and got my masters degree, and then applied with this company as the Production Engineer.

What kind of work do you do in a typical day?
My main job function is to oversee the general operation of the growing room and machine shop. I help troubleshoot problems with the furnaces and find solutions. I write and monitor the programming of each furnace before and during each run. I have at least two conference calls a day with customers, helping to troubleshoot issues as well as negotiate prices on the finished product. I manage the Lead Supervisors of the growing room and machine shop.

What was it that attracted you to this type of work?
I worked for a company that had a small growing room in Washington. I found the process of growing the crystals fascinating and unlike anything I had ever been involved in. When there was an opportunity to transfer into the silicon crystal growing aspects of the company, I took it.

What knowledge, skills and abilities are important in this kind of work?
You have to be able to maintain a good rapport with your employees. They need to know they can count on you. I won't ask my employees to do anything that I would not do, and they know this and respect me for it. You have to have more knowledge of the way the plant is run than your employees, so you can't just lock yourself up in an office. For our type of manufacturing, you have to know the silicon crystal industry, as well as what the customers are using the finished product for. There are many different types of industries we supply to; our customers range from the semiconductor industry to the coating industry and to the optical industries. So you have to be familiar with each customer and their needs.

What is the best preparation for someone who wants to go into this occupation?
My position requires a degree in engineering. So you need a college education and experience supervising other people. About 80% of my job is supervising the production of the crystals; that includes the staff, programs, and raw materials. The other 20% is customer contact and quality control.

What is it that keeps you wanting to do this kind of work?
I enjoy the challenge. There are several different variables that make up my job everyday. We supply a wide variety of crystals. Our resistivities range from .005 through > 30 ohm-cm. So there is always a challenge to grow the perfect crystal the first time, and the growers rely on my calculations and programming to do this.

What qualities make for an exceptional Industrial Production Manager?
Good communication, attention to detail, personable, and professional. You have to be able to multi-task as well as visualize the finished product.

What are the next steps in your career path?
I am trying to get more into the sales aspect of the company. I have the background knowledge of what we can produce, and I enjoy hammering out the details with the customers.

Industrial Truck and Tractor Operators

(Also known as Forklift Operators.)

Industrial Truck and Tractor Operators operate gasoline or electric powered industrial trucks or tractors equipped with forklift, elevated platform, or trailer hitch to move materials within an establishment, warehouse, storage yard, factory, or at a construction site. Does not include Logging Tractor Operators (OES 979470).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.00 - $10.00/hr	$9.25/hr
New Hires/Exp'd:	$7.25 - $12.00/hr	$11.00/hr
Exp'd/After 3 Years:	$8.00 - $19.00/hr	$14.00/hr

Hours: Almost all jobs are 40-55 hours per week.

Benefits: EMPLOYER PAID: Many employers provide medical insurance. Almost all provide a vacation. Most provide sick leave. Many also provide a retirement plan. Some provide dental, vision, and life insurance. SHARED COST: Many employers provide medical insurance. Most provide dental insurance. Many also provide a retirement plan, life insurance, and vision insurance.

Training, Experience, and Other Requirements

License: Not required.

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 do not require prior experience.

Training: Employers generally provide on-the-job training for this occupation, although related training programs are available.

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

Medium. There are approximately 780-950 Forklift Operators currently employed in the North Bay Counties. Local surveys indicate about 25% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 25-30 job openings are projected per year due to a net increase in occupation size. About 10-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Forklift Operators will increase slower than the average for all occupations through 2008. The expected growth stems from an expanding economy and increased spending on the Nation's infrastructure of highways, bridges, and dams. However, equipment improvements, including the growing automation of material handling in factories and warehouses, continue to raise productivity and moderate the demand for skilled operators.

Other Information

Where the Jobs Are: Wholesalers and manufacturers, trucking and warehousing, food processing, and personnel supply services. Nationally, less than 1% are self-employed.

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

Important Knowledge:	• Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including their relative costs, advantages, and limitations (4.00) • Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (3.50)
Important Skills:	• Controlling operations of equipment or systems (3.80) • Determining the kind of tools and equipment needed to do a job (3.60) • Performing routine maintenance and determining when and what kind of maintenance is needed (3.40)
Important Abilities:	• 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 (4.20) • The ability to quickly and repeatedly make precise adjustments in moving the controls of a machine or vehicle to exact positions (4.20) • The ability to exert maximum muscle force to lift, push, pull, or carry objects (3.60)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 15 employers surveyed representing 224 employees in this occupation.

Career Path: Industrial Truck and Tractor Operators

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Yard Worker or Stock Clerk Stock Clerks- Stockroom, Warehouse/Storage Yard Short-term OJT $11.10/hr	**Forklift Operator** Industrial Truck and Tractor Operators Short-term OJT $13.53/hr	**Foreman or Supervisor** First-Line Supervisors of Helpers, Laborers and Material Movers $20.06/hr	**Receiving or Dept. Manager** Storage and Distribution Managers Bachelor Degree + work exp $30.30/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Fishers and Related Fishing Workers	Short-term OJT	—
Cleaners of Vehicles and Equipment	Short-term OJT	$8.14
Production Helpers	Short-term OJT	$9.12
Plastic Molding and Casting Machine Operators and Tenders	Moderate-term OJT	$9.87
Machine Feeders and Offbearers	Short-term OJT	$9.98
Conveyor Operators and Tenders	Moderate-term OJT	$10.70
Pourers and Casters, Metal	Short-term OJT	$11.76
Industrial Truck and Tractor Operators	Short-term OJT	$13.53
Excavating and Loading Machine Operators	Moderate-term OJT	$20.78
Paving, Surfacing, and Tamping Equipment Operators	Moderate-term OJT	$20.89
Boiler Operators and Tenders, Low Pressure	Moderate-term OJT	$25.45

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 Ted Brice

What is your job title?
I am a Lumber Sales Representative.

What kind of work do you do?
I keep the lumber department stocked, assist customers with questions and getting lumber, I unload the shipments that come in, and help keep our department clean and safe.

What are the things that attracted you to this type of work?
I am a seasonal Firefighter and I am also going to school. I needed a good solid job for the winter and something that would work around my class schedule. I've used a forklift at my last job, so that was a plus.

What kind of things do you do at work (skills)?
There is a lot going on around here and there are a lot of people to help, so having a team attitude is a must and is also the most important skill, in my opinion. You also need to have good math skills for helping customers, and good motor skills so you don't wind up somewhere you don't need to be when you're driving the forklift.

If you were starting over to be a Forklift Operator, knowing what you know now, how would you better prepare yourself?
Well, there isn't much I could do. If you do this type of work, you have to have a license, which I do. Not only that, but each time you drive at a new place, they have you learn their own rules and regulations, and you can't really prepare for that.

What keeps you wanting to do this type of work?
I enjoy working with people and having a job where I am active. And since I work with other equipment as a Firefighter this is not too different from what I already know.

What qualities make an exceptional Forklift Operator?
Patience. You can't be in a hurry while you're moving around a load of lumber because someone could easily get hurt. You also have to be very alert because there are customers, workers, and merchandise all over the place. You have to be careful not to develop tunnel vision to where you are concentrating on just one thing. You need to be able to recognize things in your peripheral vision.

Instructional Aides

(Also known as Instructional Assistants and Teacher's Aides/Assistants.)

Instructional Aides work under the direct supervision of classroom teachers to assist the teacher in instructional tasks, and activities involving games, sports, arts and crafts. They also do routine clerical tasks such as record keeping, maintaining classroom supplies, and operating office equipment. They may assist teachers with the instruction of mentally or physically handicapped pupils (OES 315211).

Wages and Benefits

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	$7.00 - $11.88/hr	$9.48/hr	$7.50 - $11.00/hr	$8.75/hr
New Hires/Exp'd:	$7.00 - $11.88/hr	$9.73/hr	$7.50 - $13.50/hr	$8.44/hr
Exp'd/After 3 Years:	$8.00 - $14.00/hr	$10.72/hr	$7.75 - $14.00/hr	$11.45/hr

Hours: Almost all jobs are 15-30 hours per week. A few jobs are 35-40 hours per week.

Benefits: EMPLOYER PAID: Most employers provide medical insurance. Of the employers surveyed, all report that they provide sick leave and a vacation. Most also provide dental, vision, and life insurance. Many provide a retirement plan. SHARED COST: Many employers provide medical insurance and child care benefits. For part-time employees: Most employers provide medical insurance. Almost all provide sick leave. Most also provide dental insurance. Many provide vision insurance, a vacation, and a retirement plan. Some provide life insurance and child care benefits.

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Almost all employers do not require prior experience.

Training: Some employers report that word processing 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 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 4,495 - 5,490 Instructional Aides currently employed in the North Bay Counties. Local surveys indicate about 90% 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 2004. About 205-250 job openings are projected per year due to a net increase in occupation size. About 55-65 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Teacher Assistants is expected to grow faster than the average for all occupations through 2008. Student enrollments are expected to rise, spurring demand for Teacher Assistants to assist and monitor students and provide Teachers with clerical assistance.

Other Information

Where the Jobs Are: Public school districts and private educational facilities. Nationally, less than 1% are self-employed.

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

Important 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 (4.80)
- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (3.60)
- Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (3.00)

Important Skills:
- Teaching others how to do something (4.80)
- Talking to others to effectively convey information (4.60)
- Listening to what other people are saying and asking questions as appropriate (4.40)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.60)
- The ability to communicate information and ideas in writing so others will understand (4.20)
- The ability to speak clearly so that it is understandable to a listener (4.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 15 employers surveyed representing 482 employees in this occupation.

Career Path: Instructional Aides

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Teacher's Aide	**Instructional Aide** Teacher Assistants Work experience $21,775/yr	**Secretary** Secretaries, Except Legal, Medical, and Executive Post-secondary training $14.34/hr	**Teacher** Elementary School Teachers, Except Special Education Masters degree $48,150/yr
			Teacher Secondary School Teachers, Except Special and Vocational Education Masters degree $51,736/yr
			Education Administrator Elementary and Secondary School Masters + work exp $82,301/yr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Art, Drama, and Music Teachers, Postsecondary	Doctoral degree	—
English Language and Literature Teachers, Postsecondary	Doctoral degree	—
Foreign Language and Literature Teachers, Postsecondary	Doctoral degree	—
Graduate Teaching Assistants	Masters degree	—
Teacher Assistants	Work experience	$10.89
Welfare Eligibility Workers and Interviewers	Moderate-term OJT	$14.13
Self-Enrichment Education Teachers	Work experience	$16.83
Archivists	Masters degree	$20.25
Vocational Education Teachers, Postsecondary	Bachelor + work exp	$24.20
Adult Literacy, Remedial Education, and GED Teachers and Instructors	Bachelor degree	$27.73
Psychiatrists	Professional degree	$55.26

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 Jone Caswell

What is your job title?
Educational Assistant.

What type of work do you do?
I monitor kids during cafeteria, playground, and before and after school. If the children have projects going or if the Teacher needs me to work with the children, I do that as well. I also grade and correct papers.

What are the things that attracted you to this type of work?
Initially it was the hours, holidays off, and to work around my family's needs and schedules. The benefits also attracted me because my husband worked for himself. The other thing was to get a glimpse of what working in schools and being the Teacher's Assistant involves. I began working with a local educational program and then I understood how we could be instrumental in bringing a child's growth about.

What are the tasks you perform at work (skills)?
Within this school, every Educational Assistant does different things. But most of the time we help in preparing projects, correcting and running papers, helping in the classroom, and working one on one with students. We do assessment of children and sometimes help with the testing when it comes close to report card time. We also help with counting and motor skills. I work with special reading groups as well.

If you were starting over to be a Teacher Assistant, knowing what you know now, how would you better prepare yourself?
I wouldn't do anything different. I like the idea of going in as a volunteer. A lot of parents don't have any idea of what's involved in a day at school, but volunteering in schools is a good way to get an idea if this is something that you really want to do.

What keeps you wanting to do this type of work?
It's the growth that I see in the kids that makes me want to continue. I like working with them, seeing them grow, and meeting their needs. When you see things click and the light go on in their eyes it's just magical. That's what keeps me going.

What qualities, in your opinion, make a good Teacher Assistant?
You need to love children and should at least have one or two of your own so that you can have the experience first hand with their basic needs. You should know that all children are different; they all have needs, and want to learn. You need to be flexible and versatile because the job is always changing. You should feel committed to the children and getting an associate degree would be helpful if you're doing reading groups.

Internet Web Site Designers (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. (Non-OES 031064999)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.75 - $20.00/hr	$10.65/hr
New Hires/Exp'd:	$6.75 - $33.56/hr	$20.00/hr
Exp'd/After 3 Years:	$12.00 - $40.75/hr	$28.77/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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

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

Training: Most employers report that word processing skills are important. Many also report that database and spreadsheet skills are important. Many report that knowledge of graphics software and HTML programming/publishing skills are important.

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 36 employees in 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 100-200 Web Site Designers/Developers currently employed in the North Bay Counties. Local surveys indicate about 35% are female.

Employment Trends

Insufficient data; however, many of the employers surveyed expect their employment in this occupation to grow. 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. Self-employment is common.

Methods Used to Fill Job Openings: Most employers fill openings by hiring employee referrals and/or recruit applicants through internet job listings. Some also fill openings through in-house promotion or transfer and/or by hiring referrals from colleges or universities. Some fill openings by hiring referrals from employment agencies and/or by hiring unsolicited applicants.

Important 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)
Important 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)
Important 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 Source: Skill Matrix Network (www.skillmatrixnetwork.com)

Career Path for Internet Web Site Designers (Webmasters)

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Graphic Art Technician Prepress Technicians and 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 Bachelor degree $39.47/hr

Occupations with Similar Skill Patterns

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
Chemists	Bachelor degree	$25.12
Food Scientists and Technologists	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?
I have held positions as an On-Line Manager, 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.

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 Internet 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.

Janitors and Cleaners – Except Maids and Housekeeping 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. Does not include Maids and Housekeepers (OES 670050).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.50 - $11.73/hr	$8.00/hr
New Hires/Exp'd:	$6.25 - $12.32/hr	$10.00/hr
Exp'd/After 3 Years:	$8.00 - $15.00/hr	$11.51/hr

Hours: Many jobs are 35-40 hours per week. Many other 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%)
□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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.

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

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 216 employees in 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 6,295 – 7,695 janitors and cleaners currently employed in the North Bay Counties. Local surveys indicate about 40% are female.

Employment Trends

The growth rate is projected to be the same as the average for all occupations through the year 2004. About 180-225 job openings are projected per year due to a net increase in occupation size. About 130-160 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of janitors and cleaners 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: Schools and colleges and janitorial/maintenance companies. Nationally, about 3% are self-employed.

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

Important Knowledge:
- Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (4.00)
- 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 principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques (3.00)

Important Skills:
- Performing routine maintenance and determining when and what kind of maintenance is needed (3.83)
- Repairing machines or systems using the needed tools (3.50)
- Determining what is causing an operating error and deciding what to do about it (3.00)

Important Abilities:
- The ability to exert maximum muscle force to lift, push, pull, or carry objects (4.00)
- The ability to exert one's self physically over long periods of time without getting winded or out of breath (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 (3.83)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Janitors and Cleaners – Except Maids and Housekeeping Cleaners

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Janitor/Cleaner Janitors and Cleaners, Except Maids and Housekeeping Cleaners Short-term OJT $9.87/hr	**Janitor/Maintenance Worker**	**Supervisor or Manager** Janitorial Supervisors Work experience $15.45/hr	**Janitorial Services Company Owner**
Maid Maids and Housekeeping Cleaners Short-term OJT $8.25/hr	**Lead Janitor**	**Maintenance Repairer** Maintenance and Repair Workers, General Work experience $15.56/hr	**Construction Trades Worker (Skilled)**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Production Helpers	Short-term OJT	$9.12
Production Laborers	Short-term OJT	$9.12
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Short-term OJT	$9.87
Landscaping and Groundskeeping Workers	Short-term OJT	$10.36
Helpers--Installation, Maintenance, and Repair Workers	Short-term OJT	$11.57
Helpers--Carpenters	Short-term OJT	$12.08
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	Short-term OJT	$12.96
Industrial Truck and Tractor Operators	Short-term OJT	$13.53
Logging Tractor Operators	Short-term OJT	$15.42
Construction Drillers	Moderate-term OJT	$16.16
Ordinary Seamen and Marine Oilers	Short-term OJT	$17.29

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 Bruce Flynn

What are some of the job titles you've held previously?
Building Maintenance Technician and worker.

What kind of work do you do in your current job and what do you do in a typical day?
I do residential and commercial cleaning. I specialize in cleaning windows and frames in new construction right before the owner takes possession. I also clean cabinets or whatever needs to be cleaned after the completion of construction. I can also do some minor repairs and adjustments. I am kind of a jack-of-all-trades. In a typical day I arrive on the job site and assess what needs to be cleaned on that day. I then proceed to clean the buildings.

What was it that attracted you to this work?
It was kind of funny. I was a Park Ranger, and I picked up the paper one day. I saw an ad for a "Jack of all Trades". This appealed to me as I really enjoy the variety that this job provides.

What knowledge, skills, and abilities are important in this kind of work?
Someone should be proficient at window cleaning, which involves technique and skill to do it right. I would also say that someone should be a good team player, reliable, honest, and have a keen sense of attention to detail. Above all dependability is important. My employer has to be confident that I will be at the job site when I am supposed to be.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
On-the-job training is the best way to learn this job. Any handy-person skills are a plus. But the thing that I would recommend to someone is to start at the bottom and prove yourself a hard and disciplined worker. If you are reliable, hard worker, and you are willing learn new things, you will progress pretty quickly.

What is it that keeps you wanting to do this kind of work?
I like the variety. I like that I travel to different job sites all of the time. I like working with people who may be in different trades. This allows me to learn new things.

What qualities make for an exceptional Janitor?
A person needs to be trustworthy. You have to pay attention to detail, and most importantly you need to be reliable and dependable.

Laboratory Technicians - Winery

Laboratory Technicians, Winery, conduct and analyze laboratory/quality control tests as prescribed by company procedures and, when applicable, ensure compliance with State and Federal regulations. This is the entry level position. (Non-OES 029261999)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$8.00 - $14.06/hr	$11.75/hr
New Hires/Exp'd:	$12.00 - $15.50/hr	$14.38/hr
Exp'd/After 3 Years:	$12.00 - $20.00/hr	$15.10/hr

Hours: Almost all jobs are 40-50 hours per week. A few jobs are seasonal, ranging from 40-60 hours per week.

Benefits: EMPLOYER PAID: Most employers provide medical insurance. Of the employers surveyed, all report that they provide sick leave. Almost all provide a vacation and life insurance. Most also provide vision and dental insurance. Many provide a retirement plan. SHARED COST: Many employers provide medical insurance and a retirement plan. Some also provide dental insurance.

Training, Experience, and Other Requirements

License: Not required.

Education: Many employers require a high school diploma or equivalent for job entry. Some require a bachelor degree. A few are willing to accept an associate degree.

Experience: Almost all employers do not require prior experience.

Training: Most employers report that word processing and spreadsheet skills are important. Some also report that database skills are important.

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 estimated to be very high (40% or more). This turnover rate does not include seasonal employment.

Size of Occupation

Small. There are approximately 70-90 Winery Lab Technicians currently employed in the North Bay Counties. Local surveys indicate about 50% are female.

Employment Trends

Insufficient data; however, some employers surveyed expect their employment for this occupation to grow over the next two years.

Other Information

Where the Jobs Are: Wineries.

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements. Many fill openings by hiring referrals from colleges and universities, employee referrals, and/or through in-house promotion or transfer. Some recruit applicants through internet job listings and/or by hiring unsolicited applicants. Some also fill openings by hiring referrals from schools and training programs.

Important Knowledge, Skills, and Abilities
Information Not Available

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 15 employers surveyed representing 39 employees in this occupation.

Career Path: Lab Technicians – Winery

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Lab Tech or Cellar Worker	**Enologist** Food Scientists and Technologists Bachelor degree $25.12/hr	**Assistant Winemaker** Bachelor + work exp	**Master Winemaker** Bachelor + work exp
		Associate Winemaker Bachelor + work exp	

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Food Science Technicians	Associate degree	$14.18
Biologists	Doctoral degree	$19.74
Animal Scientists	Bachelor degree	$25.12
Chemists	Bachelor degree	$25.12
Food Scientists and Technologists	Bachelor degree	$25.12
Plant Scientists	Bachelor degree	$25.12
Soil Scientists	Bachelor degree	$25.12
Materials Scientists	Bachelor degree	$28.82
Environmental Scientists and Specialists, Including Health	Doctoral degree	$29.85
Hydrologists	Bachelor degree	$35.13
Mathematicians	Doctoral degree	$37.15

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 Jeff Meyers

What kind of work do you do?
As a Winemaker, I work on everything from how long it stays in fermentation to what type of yeast to use, to when to press it, to press it to what to where. As the General Manager, I also do a lot of supervisory and administrative work.

What are the things that attracted you to this type of work?
I wanted to major in a scientific field because I enjoy the scientific aspect of it all. In college, I made the brilliant move from biology to bacteriology, then I met a friend of mine who was in the enology field. I took a basic winemaking class, enjoyed it, and thought 'what an idea! Producing alcohol for a living!' Then I transferred into what's called fermentation science. There's a lot more money in beer, but you'd have to work in places like Schenectady, St. Louis…nice places…all, but not where I wanted to work. So I ended up going into winemaking in California.

What kind of things does a lab tech do at work (skills)?
For a Lab Tech, you have to have your basic winemaking knowledge. I would say that a good palate is not necessarily something you have to have from the start. I think you can develop a good palate. I was a beer drinker when I came into the business and I developed a palate for wine over the years. But to become a Winemaker, you do need to learn and understand winemaking from A to Z; the exact mechanisms and processes that go on during the whole growing phase to last detail of what happens during fermentation. You also need good math skills because you'll have to be able to deal with putting together blends and be able to figure how many gallons of each will make a tasteful wine. You have to have good understanding of the organic chemistries as well.

If you were starting over to be a Winemaker, knowing what you know now, how would you better prepare yourself?
I'm not sure I would do anything different. I think I've got good experience here, and there have been great opportunities for me all the way through. I would like an opportunity in my career to work with smaller lots. We haven't had the opportunity to work with small lots in the way that we want to handle wine.

What qualities make an exceptional Lab Tech?
No one comes out of school with an enology degree thinking, "you know, if I can only get a lab tech job. That'd be great. I'd be happy the rest of my life." The lab is a good place to start because you can learn about a lot of different things that go on in the winery from the lab, and a lot of things you need to know about wine, you need to know about from the lab's standpoint. But a good Lab Tech will understand the benefits of working in the lab, and the cellar, and in the fields. If they want to end up as a master winemaker, they'll know that what they learn in the trenches will help them reach the top.

Laborers, Landscaping and Groundskeeping

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 stonemasons (OES 790410).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.28 - $10.00/hr	$8.00/hr
New Hires/Exp'd:	$7.00 - $15.69/hr	$10.00/hr
Exp'd/After 3 Years:	$9.00 - $15.69/hr	$12.00/hr

Many Landscaping and Groundskeeping Laborers 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%) ■■ = Some (20-39%) ■ = Few (1-19%)
□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

Education: Many 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 require or prefer 6-12 months of prior experience. Many 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.

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 150 employees in this occupation.

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 5,630 – 6,880 Landscaping and Groundskeeping Laborers currently employed in the North Bay Counties. Local surveys indicate less than 5% are female.

Employment Trends

The growth rate is projected to be the same as the average for all occupations through the year 2004. About 150-180 job openings are projected per year due to a net increase in occupation size. About 160-200 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: Lawn and garden services, landscape and horticultural services, flowers and florists supplies, and retail nurseries and garden stores. Nationally, about 10% are self-employed.

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

Important 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)
Important Skills:	• Determining the kind of tools and equipment needed to do a job (3.00)
Important 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 *Source: O*NET Database version 3.0*

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 Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Cleaners of Vehicles and Equipment	Short-term OJT	$8.14
Etchers	Long-term OJT	$10.98
Welders, Production	Post-secondary training	$14.34
Landscaping and Groundskeeping Workers	Short-term OJT	$10.36
Machine Feeders and Offbearers	Short-term OJT	$9.98
Pesticide Handlers, Sprayers, and Applicators, Vegetation	Post-secondary training	$13.09
Tree Trimmers and Pruners	Short-term OJT	$13.11
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	Short-term OJT	$12.96
Buffing and Polishing Set-Up Operators	Moderate-term OJT	$11.51
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?
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 5 am. I prepare (for) the day by figuring out where the crew is going. We work on projects, so there is a lot of time spent keeping up with the cost summary, figuring out how the job is going, and where the hours and materials are 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 include anything from concrete laying to general landscape and yard maintenance. In the wintertime, the regular landscaping is more frequent, where in 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.

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.

Legal Secretaries

Legal Secretaries prepare legal papers and correspondence of a legal nature, such as summonses, complaints, motions, and subpoenas. They must be familiar with legal terminology, procedures and documents, as well as legal research, and may review law journals and other legal publications to identify court decisions pertinent to pending cases and submit articles to company officials (OES 551020).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$10.00 - $17.00/hr	$12.00/hr
New Hires/Exp'd:	$12.00 - $18.14/hr	$15.00/hr
Exp'd/After 3 Years:	$14.00 - $23.97/hr	$18.00/hr

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

Benefits: EMPLOYER PAID: Almost all employers provide medical insurance and other benefits, including a vacation and sick leave. Many also provide dental, vision, and life insurance. SHARED COST: Most employers provide a retirement plan. Some also provide dental insurance.

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Many employers do not require prior experience. Many others require 1-5 years of prior experience. Many employers are willing to accept training as a substitute for experience.

Training: Almost all employers report that word processing skills are important. Some report that knowledge of legal software is important. Some also report that spreadsheet skills are important.

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

Small. There are approximately 630-770 Legal Secretaries currently employed in the North Bay Counties. Local surveys indicate about 95% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. About 15-20 job openings are projected per year due to a net increase in occupation size. About 10-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, projected employment of Secretaries will vary by occupational specialty. Rapid growth in the health and legal services industries should lead to average growth for Medical and Legal Secretaries.

Other Information

Where the Jobs Are: Offices of attorneys and law firms. Nationally, less than 5% are self-employed.

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements. Many also fill openings by hiring referrals from professional associations. Some fill openings by hiring referrals from schools and training programs, employees, and/or employment agencies.

Important 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 (4.40)
- Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process (3.80)
- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (3.60)

Important Skills:
- Finding ways to structure or classify multiple pieces of information (4.83)
- Managing one's own time and the time of others (4.66)
- Adjusting actions in relation to others' actions (4.66)

Important Abilities:
- The ability to read and understand information and ideas presented in writing (4.40)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.40)
- The ability to communicate information and ideas in writing so others will understand (4.20)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 15 employers surveyed representing 73 employees in this occupation.

Career Path: Legal Secretaries

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Receptionist Receptionists and Information Clerks Short-term OJT $11.31/hr	**Legal Secretary** Post-secondary training $20.70/hr	**Paralegal** Paralegals and Legal Assistants Associate Degree/Apprentice $22.41/hr	**Lawyer** Professional Degree $50.42/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Health Specialties Teachers, Postsecondary	Doctoral degree	—
Mathematical Science Teachers, Postsecondary	Doctoral degree	—
Producers	Work experience	—
Program Directors	Work experience	—
Production, Planning, and Expediting Clerks	Short-term OJT	$16.63
Executive Secretaries and Administrative Assistants	Work experience	$18.05
Legal Secretaries	Post-secondary training	$20.70
Training and Development Managers	Bachelor + work exp	$23.99
Compensation, Benefits, and Job Analysis Specialists	Bachelor degree	$25.11
Personnel Recruiters	Work experience	$25.23
Market Research Analysts	Masters degree	$32.45

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 Deanna Summers

What is your job title?
I'm a Legal Secretary.

What kind of work do you do?
I do Administrative and Legal Assistant work for a partner (in a law firm).

What are the things that attracted you to this type of work?
I've always been amazed with the legal system, but disappointed at the same time. I thought maybe I could make a difference, and so I was inclined to go into this profession. I'm actually a Certified Paralegal and I want to become an Attorney. I have three kids, so it's one of many steps I'll have to take to get to where I want to be.

What kind of things do you do at work (skills)?
I do transcription, calendaring for our attorneys, I set up meetings, prep and schedule for trials, answer phones, and do whatever else comes up. Many times, if it's our client, we go ahead and do what we need to do for the Attorney. I also review mail for my Attorney. Other times I'm corresponding with clients or opposing council.

If you were starting over to be a legal secretary, knowing what you know now, how would you better prepare yourself?
I would say that if it's a particular type of law that you want to get into, take that type of class at your local junior college. This can help you understand what you're getting into and to see whether you like it or not. A typing class or a Word Perfect computer class at the J.C. would be excellent because most office duties involve MSWord, WordPerfect, or another Windows program. A public speaking class would be useful, too.

What keeps you wanting to do this type of work?
The first and most important reason is that I enjoy the people I work with. I am very task oriented, and the legal profession is exactly that. It's an attractive challenge to me. It's also a challenge to be able to balance files, calendars, and to deal with clients so the attorney doesn't have to. My Attorney gives me an opportunity to see how it is to be in that position so that I can get a better insight into the profession. Most Attorneys don't like their Secretaries to do that.

What qualities make an exceptional Legal Secretary?
You've got to be a great Typist, have excellent spelling, and be sharp with punctuation; that's a must and no Attorney is going to deal with anything less. Good listening skills are vital too, because you don't want to constantly interrupt whomever you're representing…and patience so that you listen to everything they say first before you try to resolve a situation. Like I said, you must be organized and able to understand what's a priority and what's not at any given moment. Those qualities would make you an exceptional Legal Secretary.

Licensed Vocational Nurses (LVNs)

Licensed Vocational Nurses care for ill, injured, convalescent, and handicapped persons in hospitals, clinics, private homes, sanitariums, and similar institutions (OES 325050).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$13.00 - $18.50/hr	$16.00/hr
New Hires/Exp'd:	$13.00 - $20.00/hr	$16.70/hr
Exp'd/After 3 Years:	$14.00 - $20.00/hr	$18.00/hr

Hours: Most jobs are 36-50 hours per week. Some jobs are 8-34 hours per week.

Benefits: EMPLOYER PAID: Many employers provide medical insurance. Almost all provide a vacation. Most provide sick leave. Many also provide a retirement plan. Some provide dental, vision, and life insurance. SHARED COST: Many employers proved medical insurance and other benefits, including dental and vision insurance. Some also provide life insurance. A few provide a retirement plan. For part-time employees: Some employers provide medical insurance and other benefits, including a vacation, dental insurance, vision insurance, sick leave, and a retirement plan. A few provide life insurance.

Training, Experience, and Other Requirements

License: Required for this occupation; contact the State Board of Vocational Nursing at 916-263-7800 for licensing information.

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

Experience: Many employers do not require prior experience. Many others require 6-30 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Some employers report that word processing skills are important. Completion of a certificate training program is a license requirement 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

Large. There are approximately 1,590 - 1,940 Licensed Vocational Nurses currently employed in the North Bay Counties. Local surveys indicate about 90% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. About 25-30 job openings are projected per year due to a net increase in occupation size. About 35-40 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Licensed Practical Nurses is expected to grow as fast as the average for all occupations through 2008.

Other Information

Where the Jobs Are: Clinics, skilled nursing facilities, and hospitals. Nationally, less than 1% 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. Many also fill openings by hiring unsolicited applicants. Some fill openings by hiring referrals from schools and training programs.

Important 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 principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques (4.33)
- Knowledge of plant and animal living tissue, cells, organisms, and entities, including their functions, interdependencies, and interactions with each other and the environment (4.00)

Important Skills:
- Listening to what other people are saying and asking questions as appropriate (4.00)
- Actively looking for ways to help people (4.00)
- Knowing how to find information and identifying essential information (3.83)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.00)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (3.80)
- 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. (3.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 19 employers surveyed representing 220 employees in this occupation.

Career Path: Licensed Vocational Nurses

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Nurse Aide Nursing Aides, Orderlies, and Attendants Post-secondary training $9.76/hr	**Licensed Vocational Nurse** Post-secondary training $18.05/hr	**Registered Nurse** Associate Degree $27.82/hr	**Director of Nursing**
			Medical and Health Services Managers Bachelor + work exp $35.81/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Anesthesiologists	Professional degree	—
Personal and Home Care Aides	Short-term OJT	$8.11
Child Care Workers	Post-secondary training	$9.18
Home Health Aides	Post-secondary training	$9.75
Physical Therapist Aides	Moderate-term OJT	$11.09
Psychiatric Technicians	Associate degree	$17.43
Licensed Practical and Licensed Vocational Nurses	Post-secondary training	$18.05
Cardiovascular Technologists and Technicians	Associate degree	$19.91
Physical Therapist Assistants	Associate degree	$20.16
Respiratory Therapists	Associate degree	$21.66
Radiologic Technologists	Associate degree	$22.13

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 Chris Hiller

What is your job title and what kind of work do you do?
Licensed Vocational Nurse. I work with immunology in children and adults. I also work with a pre-natal hepatitis B program, and a dietary section with anemia for children.

What are the things that attracted you to this type of work?
I wanted to help people. I started out going to school to become a Teacher and then my attention shifted to nursing. Originally I thought I would work in a hospital after I finished nursing school, but I decided that I didn't want to be in a hospital. I wanted to be where the people were, so I went into public health.

What kind of things do you do at work (skills)?
I do a lot of injections on children and adults for immunizations, so I think that the most important skill that I have is communication. If I can't communicate with them, I can't get the injection(s) done. I do a lot of phone calls at the doctors' offices for the hepatitis program. If I can't effectively communicate with them, there's no way I'm going to accomplish my work. Being open to the people so that they will respond to you and allow you to do your job is also very important.

If you were starting over to be a LVN, knowing what you know now, how would you better prepare yourself?
I would have taken more of the math classes and I would have thought a little harder about what I really wanted: the LVN or the RN certification. I didn't realize that when I started school, and at this point, years later, I wish I had pursued the RN status. I have a job in the field right now that exposes me to the information I need to finish the classes, and I think that is better than jumping straight into a nursing program fresh out of high school.

What keeps you wanting to do this type of work?
I enjoy the work and it's interesting. There's always something new. It's not the same thing over and over and over. And when it comes time for immunizations, each client is different than the last one, so there's a lot of variety there. I'm never bored.

What qualities make an exceptional LVN?
I think the greatest quality you can have is communications skills. That's the biggest one. You should also have a willingness to listen to people and actually hear what they're trying to say to you. In my job I work with people from many different ethnic backgrounds. I have to stop and listen to them very carefully before I begin, and be respectful of what their boundaries are before I can continue any further. I've started shots for a child who may need 3 or 4, but after the first one, Mom may decide 'I can't do this anymore with my child,' and so we need to stop. I don't push it. I'll wait and arrange for her to come back again when the child's calmer. At least we got one (shot). An exceptional Nurse does not push them and is able to give them their space. If you don't, then they may not come back! You have to have some feeling and compassion for other people and their wishes. You also have to figure out what your personality is and where you're going to fit into the nursing field. Public health was the right direction for me.

Machinery Maintenance Mechanics

(Also known as Maintenance Technicians.)

Machinery Maintenance Mechanics repair and maintain the operating condition of industrial production and processing machinery, printing machinery, and refinery and pipeline distribution systems. Their duties include repairing in accordance with diagrams, operating manuals, or manufacturer's specifications, machinery and mechanical equipment, such as pumps, conveyor systems, and motors. Does not include Millwrights and Mobile Heavy Equipment Mechanics, such as crane, bulldozer, grader, or conveyor mechanics (OES 851190).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$9.00 - $16.95/hr	$14.00/hr
New Hires/Exp'd:	$10.00 - $22.65/hr	$14.00/hr
Exp'd/After 3 Years:	$12.00 - $23.97/hr	$18.00/hr

Surveys indicated that union wages were typically at the top end of the range.

Hours: Almost all jobs are 40-50 hours per week.

Benefits: EMPLOYER PAID: Many employers provide medical insurance. Almost all provide a vacation. Most provide sick leave and life insurance. Many also provide a retirement plan, dental insurance, and vision insurance. SHARED COST: Many employers provide medical insurance and other benefits, including dental insurance and vision insurance. Some also provide a retirement plan.

Training, Experience, and Other Requirements

License: Not required.

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: Most employers require 12 to 72 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Some employers report that welding and PLC (programmable logic controller) 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 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

Small. Published projections for this occupation estimate the number of workers at 130-160. However, local surveys indicate approximately 175-215 Maintenance Mechanics currently employed in the North Bay Counties. Local surveys indicate less than 5% are female. Some jobs are union.

Employment Trends

The growth rate is projected to be the same as the average for all occupations through the year 2004. 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 Industrial Machinery Repairers is projected to grow more slowly than the average for all occupations through 2008. Nevertheless, applicants with broad skills in machine repair should have favorable job prospects.

Other Information

Where the Jobs Are: In a variety of manufacturing industries, including wine and liquor companies. Nationally, less than 1% are self-employed.

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

Important Knowledge:	• Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (4.83) • 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 (3.84) • Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (3.66)
Important Skills:	• Performing routine maintenance and determining when and what kind of maintenance is needed (4.16) • Determining what is causing an operating error and deciding what to do about it (4.00) • Repairing machines or systems using the needed tools (4.00)
Important 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 (3.80) • The ability to read and understand information and ideas presented in writing (3.60) • The ability to bend, stretch, twist, or reach out with the body, arms, and/or legs (3.60)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 15 employers surveyed representing 195 employees in this occupation.

Career Path: Machinery Maintenance Mechanics

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Machine Operator Packaging and Filling Machine Operators Moderate-term OJT $10.03/hr	**Maintenance Worker, Machinery** Long-term OJT $17.37/hr	**Machinery Maintenance Mechanic** Industrial Machinery Mechanics Long-term OJT $20.89/hr	**Maintenance Supervisor**
			Production Supervisor or Manager Industrial Production Managers Bachelor degree $35.76/hr
			Plant Manager

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Textile Knitting and Weaving Machine Setters, Operators, and Tenders	Moderate-term OJT	$7.51
Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	Moderate-term OJT	$8.34
Textile Cutting Machine Setters, Operators, and Tenders	Moderate-term OJT	$9.37
Automotive Master Mechanics	Long-term OJT	$15.53
Automotive Specialty Technicians	Long-term OJT	$15.53
Maintenance and Repair Workers, General	Work experience	$15.56
Electric Meter Installers and Repairers	Long-term OJT	$15.87
Data Processing Equipment Repairers	Post-secondary training	$16.89
Industrial Machinery Mechanics	Long-term OJT	$20.89
Valve and Regulator Repairers	Long-term OJT	$22.41
Electricians	Long-term OJT	$22.81

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 Jason Weltch

What is your job title and what kind of work do you do?
Information Technology Field Service Technician. In grocery stores, I repair the scales, the computer systems, the check stands, and the meat wrappers.

What are the things that attracted you to this type of work?
I started out with a company where I worked in the parts department. They offered me a position servicing, which was better because the parts department was boring. I took that job, got the skills and training, and then found a different job for more money. I liked being on the road, going to different stores all the time, and having different kinds of problems to figure out and repair. I'm mechanically inclined, so it's pretty fun. I'm also good with computers, so it all kind of comes together.

What kind of things do you do at work (skills)?
There's electrical, there's computer skills, and your basic mechanical skills. It all depends on what I'm working on. If I happen to be working on a wrapper, a whole lot of mechanical stuff will be involved, but with that there's a lot of electronics, too. When I'm working on the check stands and the computer systems in the stores, I mean obviously it's like networking, hardware, and that kind of thing. There's a lot of troubleshooting and problem identification involved as well.

If you were starting over, knowing what you know now, how would you better prepare yourself for your career field?
I would get more extensive computer training and certification. You also have to have that mechanical background from the beginning, and I build motorcycle engines as a hobby.

What keeps you wanting to do this type of work?
Frankly, the money. If I could find a job that paid more money doing the same thing, I'd go there. I have often considered going back to school and getting some training to do something else in my life, but at this point in time, I'm in cruise mode. I like being on the road by myself and having my own tools. It's like a rolling office. And, I don't always have to work with the same person and risk getting annoyed with them. I can take lunch whenever I want.

What qualities make an exceptional Machinery Maintenance Technician?
The ability to understand the mechanical aspects of some of the equipment that I work on, and the ability to understand how a computer operates. You should have basic electrical skills, too. We have some people that work in the group that I work with who don't even know how to use a ratchet or a socket wrench. That gets frustrating to me. I'll use myself as an example. I'm extremely meticulous. I'm always willing to take time to sit and watch the machine, see what it's doing, make repairs or adjustments, and then take the time to sit and watch the machine after I make those adjustments to ensure I've fixed the problem. If I see any more problems while I'm in there, I fix those while I'm there. Some mechanics put a band-aid on it and get out. That just means they're going back.

Machinists

Machinists set up and operate machine tools and fit and assemble parts to make or repair metal parts, mechanisms, tools or machines by applying their knowledge of mechanics, shop mathematics, metal properties, and layout machining procedures. They study specifications, such as blueprints, sketches, or descriptions of parts to be replaced, and they plan sequences of operations. (OES 891080)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$8.00 - $12.00/hr	$9.50/hr
New Hires/Exp'd:	$8.00 - $19.71/hr	$14.00/hr
Exp'd/After 3 Years:	$12.00 - $25.00/hr	$18.00/hr

Hours: Almost all jobs are 40 hours per week. Some employers report that swing shifts are common for this occupation.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 6-60 months. Many employers are willing to accept training as a substitute for experience.

Training: Machinists train in apprenticeship programs, informally on the job, and in high schools, vocational/technical schools, and community colleges. Persons interested in becoming Machinists need to be mechanically inclined, able to work independently, and able to do highly accurate work that requires concentration and physical effort. To boost the skill level of Machinists and to create a more uniform standard of competency, a number of training facilities and colleges have recently begun implementing curriculums incorporating national skills standards developed by the National Institute of Metalworking Skills (NIMS). A NIMS credential is provided after completing such a program and passing a performance requirement and a written exam.

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: 27 employers surveyed representing 159 employees in 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 low (10-19%).

Size of Occupation

Medium. There are approximately 1,055 – 1,280 Machinists currently employed in the North Bay Counties. Local surveys indicate about 5% are female. Few jobs are union.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. About 160-200 job openings are projected per year due to a net increase in occupation size. About 145-175 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Machinists is expected to grow more slowly than the average for all occupations over the 2000-10 period because of rising productivity among Machinists. Productivity gains are resulting from the expanded use of computer-controlled machine tools and new technologies, such as high-speed machining, which reduce the time required for machining operations. This allows fewer Machinists to accomplish the same amount of work previously performed by more workers.

Other Information

Where the Jobs Are: Machine shops, temporary employment agencies, and a wide variety of manufacturing industries, including industrial machinery and equipment, measuring and controlling devices, and beverage products. Nationally, about 1% 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.

Important Knowledge:
- Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (5.00)
- Knowledge of design techniques, principles, tools and instruments involved in the production and use of precision technical plans, blueprints, drawings, and models (4.25)
- Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (3.83)

Important 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 (4.41)
- Controlling operations of equipment or systems (4.08)
- Using mathematics to solve problems (4.00)

Important Abilities:
- The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged (4.58)
- The ability to quickly and repeatedly make precise adjustments in moving the controls of a machine or vehicle to exact positions (4.50)
- The ability to see details of objects at a close range (within a few feet of the observer) (4.25)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Machinists

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Helper or Apprentice Helpers, Production Workers Short-term OJT $9.12/hr	**Machinist** Machinists Long-term OJT $16.17	**Lead Person or Supervisor** First-Line Supervisors/Managers of Production and Operating Workers Work experience $22.55/hr	**Shop Manager or Owner**
Machine Operator Numerical Control Machine Tool Operators and Tenders, Metal and Plastic Moderate-term OJT $14.75/hr	**Computer-Control Programmer**		
Welder Welders and Cutters Post-secondary training $14.34/hr			

Occupations with Similar Skill Patterns

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
Mechanical Inspectors	Work experience	$13.27
Electrical and Electronic Inspectors and Testers	Work experience	$13.27
Materials Inspectors	Work experience	$13.27
Welding Machine Setters and Set-Up Operators	Moderate-term OJT	$14.33
Machinists	Long-term OJT	$16.17
Data Processing Equipment Repairers	Post-secondary training	$16.89
Model Makers, Metal and Plastic	Long-term OJT	$18.63
Aircraft Systems Assemblers, Precision	Work experience	$22.70
Mechanical Engineering Technicians	Associate degree	$23.85
Mechanical Engineers	Bachelor degree	$33.18

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 Mark Davis

What are some of the job titles you've held previously?
I have been a Production Control Assistant as well as a Journeyman Machinist.

What kind of work do you do in a typical day?
I take the ingots that the growing room creates, and that have been sliced and cored, and then I make the finished product that goes to the customer. I read the blueprints provided by the customers and I program the CNC (Computer Numeric Control) machine to cut and drill the silicon to the specs ordered. Basically, I am creating a part that will fit into the customer's machines.

What was it that attracted you to this type of work?
My family has a business in the aerospace industry, and I got some exposure to machining there when I was younger. I enjoyed the work and the challenge.

What knowledge, skills and abilities are important in this kind of work?
You need to have a good understanding of mathematical principles. You need to be able to read blueprints and make setups for production runs. You need to be precise in operating the CNC machine; you need to have some knowledge of AutoCAD since that is the program we use for the CNC machine. You need to have knowledge of the materials you are going to be working with as there are different techniques needed to cut different products. You need to have good problem solving skills.

What is the best preparation for someone who wants to go into this occupation?
Most companies require a high school diploma and some college. You should take some AutoCAD courses.

What is it that keeps you wanting to do this kind of work?
The challenge of being able to make the perfect finished product. Every customer has a different product that they order, and so every day there is some variety in what I do. And the money is pretty good.

What qualities make for an exceptional Machinist?
You have to take pride in your work and enjoy the challenge of designing special tools the customers need. You have to pay close attention to detail, and be a problem solver.

What are the next steps in your career path?
I would like to move into design and engineering.

Maids and Housekeeping Cleaners

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:	$6.25 - $8.50/hr	$7.50/hr
New Hires/Exp'd:	$6.25 - $8.50/hr	$8.00/hr
Exp'd/After 3 Years:	$6.25 - $14.00/hr	$9.00/hr

Some Maids and Housekeeping Cleaners may also receive bonuses.

Hours: Most jobs are 35-40 hours per week. Some 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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 do not require prior experience.

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

Supply/Demand Assessment

Employers generally report that it is not difficult to find applicants who meet their hiring standards. This indicates a **very competitive outlook** for qualified job seekers. Annual turnover is estimated to be very high (40% or more).

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 184 employees in this occupation.

Size of Occupation

Very large. There are approximately 2,895 – 3,535 Maids and Housekeeping Cleaners currently employed in the North Bay Counties. Local surveys indicate about 90% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. About 70-80 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: Of the employers surveyed, all report that they fill openings by hiring employee referrals. Almost all recruit applicants through newspaper advertisements and/or fill openings by hiring unsolicited applicants.

Important 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)
Important Skills:	**—**
Important 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 *Source: O*NET Database version 3.0*

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 Patterns

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?
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.

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 Maids 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 or Housekeeper.

Maintenance Repairers – General Utility

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 in maintenance work is impractical. Their duties may involve pipefitting, boilermaking, 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:	$6.25 - $8.00/hr	$8.00/hr
New Hires/Exp'd:	$7.48 - $17.84/hr	$12.00/hr
Exp'd/After 3 Years:	$10.00 - $21.15/hr	$16.14/hr

Hours: Almost all jobs are 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%) ■■ = Some (20-39%) ■ = Few (1-19%)
□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

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

Training: Most learn their skills informally on-the-job as helpers or through experience in various construction trades. It generally takes 1-4 years of training or experience to become fully qualified.

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 102 employees in 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%).

Size of Occupation

Very large. There are approximately 3,980 – 4,866 Maintenance Repairers currently employed in the North Bay Counties. Local surveys indicate about 15% 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 2004. About 95-115 job openings are projected per year due to a net increase in occupation size. About 80-100 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of General Maintenance Mechanics is expected to grow more slowly than the average for all occupations through 2008.

Other Information

Where the Jobs Are: Government agencies, property/real estate management services, and schools. Nationally, less than 1% are self-employed.

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

Important 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 (4.83) • Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (3.50)
Important Skills:	• Installing equipment, machines, wiring, or programs to meet specifications (4.66) • Repairing machines or systems using the needed tools (4.50) • Performing routine maintenance and determining when and what kind of maintenance is needed (4.33)
Important Abilities:	• 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 (4.50) • The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged (4.50) • The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects (4.33)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Maintenance Repairers – General Utility

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Helper, Laborer, or Apprentice Helpers--Installation, Maintenance, and Repair Workers Short-term OJT $11.57/hr	**Maintenance Repairer – Semi-Skilled** Maintenance and Repair Workers, General Work experience $15.56/hr	**Supervisor or Foreman** First-Line Supervisors and Manager/Supervisors-Construction Trades Workers Work experience $27.53/hr	**Construction Trades Worker – Skilled** e.g., Carpenter, Electrician, Painter, Plumber, etc.
Janitor/Cleaner Janitors and Cleaners, Except Maids and Housekeeping Cleaners Short-term OJT $9.87/hr	**Janitor/Maintenance Worker**	**Maintenance Mechanic** Industrial Machinery Mechanics Long-term OJT $20.89/hr	

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Textile Knitting and Weaving Machine Setters, Operators, and Tenders	Moderate-term OJT	$7.51
Textile Winding, Twisting, and Drawing Out Machine Setters, Operators, and Tenders	Moderate-term OJT	$8.34
Textile Cutting Machine Setters, Operators, and Tenders	Moderate-term OJT	$9.37
Electronic Equipment Installers and Repairers, Motor Vehicles	Post-secondary training	$11.34
Helpers--Installation, Maintenance, and Repair Workers	Short-term OJT	$11.57
Automotive Master Mechanics	Long-term OJT	$15.53
Maintenance and Repair Workers, General	Work experience	$15.56
Electric Meter Installers and Repairers	Long-term OJT	$15.87
Electrical and Electronics Installers and Repairers, Transportation Equipment	Post-secondary training	$19.13
Millwrights	Long-term OJT	$19.45
Industrial Machinery Mechanics	Long-term OJT	$20.89

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 Conrad Rossback

What are some of the job titles you've held previously?
I begun in this field by working as a self-employed Gardener then took a job with the County as a Grounds Maintenance Worker. After several years I moved into my current position as a Maintenance Repairer.

What kind of work do you do in your current job and what do you do in a typical day?
I do general maintenance repair. This can include moving new or surplus furniture, working on air conditioning units or heaters, troubleshooting, cleaning of sewers, maintenance on sinks and toilets. I do soldering, welding, change light bulbs, repair ballasts, and work on insulation, carpentry. Each day I am given a work order that helps me establish my work day and then I go from job to job to complete the necessary repairs.

What was it that attracted you to this work?
I like construction type work and the physical work involved in maintenance repair. I also like being outside and moving around from place to place.

What knowledge, skills, and abilities are important in this kind of work?
In my opinion you need to be mechanically inclined to do this type of work. You also need good people skills and the ability to get along with others. Being able to be a team player is also another skill that is important since much of your job requires working with other people in the maintenance department.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I think you need the overall skill of being able to do most anything, since maintenance requires a broad knowledge of many different types of things. You also need general knowledge of basic mechanical functions. Specializing, for example in HVAC repair can also be beneficial.

What is it that keeps you wanting to do this kind of work?
I enjoy manual labor and working out in the field. Sitting behind a desk wouldn't appeal to me. I also enjoy the mechanics and doing the actual repair work on the facilities. I also enjoy the people that I meet on the different jobs.

What qualities make for an exceptional Maintenance Repairer?
I think having good people skills makes for an exceptional Maintenance Repairer, as well as the ability to get along with other people. A good attitude is also important and the ability to get the work done also makes for an exceptional Maintenance Repairer.

Marketing, Advertising, and Public Relations Managers

Marketing, Advertising, and Public Relations Managers formulate marketing policies, direct sales activities, and plan, organize, and direct advertising and public relations activities for a department, an entire organization, or on an account basis. (OES 130110)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$11.51 - $14.38/hr	$14.38/hr
New Hires/Exp'd:	$13.95 - $30.68/hr	$21.62/hr
Exp'd/After 3 Years:	$14.38 - $45.66/hr	$23.49/hr

Some employers report that their Marketing, Advertising, and Public Relations Managers may also receive bonuses and/or commission income.

Hours: Almost all 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

Education: Almost all employers require a require a bachelor degree for job entry.

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

Training: For Marketing Managers, some employers prefer a bachelor or masters degree in business administration with an emphasis on marketing. In highly technical industries, such as computer and electronics manufacturing, employers prefer a bachelor's degree in engineering or science, combined with a master's degree in business administration. For Advertising Managers, some employers prefer a bachelor degree in advertising or journalism. For Public Relations Managers, some employers prefer a bachelor or masters degree in public relations or journalism. Almost all employers report that word processing and spreadsheet software skills are important.

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 40 employees in this occupation.

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

Large. There are approximately 1,790 – 2,185 Marketing, Advertising, and Public Relations Managers currently employed in the North Bay Counties. Local surveys indicate about 60% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. About 30-40 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 Marketing, Advertising, and Public Relations Managers is expected to increase faster than the average for all occupations through 2010. Increasingly intense domestic and global competition in products and services offered to consumers should require greater marketing, promotional, and public relations efforts by managers. The number of management and public relations firms may experience particularly rapid growth as businesses increasingly hire contractors for these services instead of additional full-time staff.

Other Information

Where the Jobs Are: Advertising and management/public relations services, computer and data processing services, retailers/department stores, automobile dealerships, high tech manufacturers, telecommunications companies, and government agencies. Nationally, about 2% 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 through word-of-mouth and/or by hiring employee referrals.

Important Knowledge:	• 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 (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 (4.66) • 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)
Important Skills:	• Talking to others to effectively convey information (4.83)
Important Abilities:	• The ability to communicate information and ideas in speaking so others will understand (5.00) • The ability to listen to and understand information and ideas presented through spoken words and sentences (5.00) • 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 (5.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Marketing, Advertising, and Public Relations Managers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Account Rep or Trainee	**Public Relations Specialist** Bachelor degree $24.91/hr	**Public Relations or Advertising Manager** Advertising and Promotions Managers Bachelor degree + work exp $36.79/hr	**Vice President or Chief Executive Officer**
Sales Rep Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products Moderate-term OJT $24.07/hr	**Supervisor** First-Line Supervisors/Managers of Non-Retail Sales Workers Work experience $30.57/hr	**Marketing or Sales Manager** Marketing Managers Bachelor degree + work exp $42.27/hr	**Owner**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Government Service Executives	Bachelor + work exp	—
Private Sector Executives	Bachelor + work exp	—
Education Administrators, Preschool and Child Care Center/Program	Bachelor + work exp	$20.92
First-Line Supervisors, Customer Service	Work experience	$21.85
Advertising and Promotions Managers	Bachelor + work exp	$36.79
Education Administrators, Postsecondary	Masters + work exp	$37.05
Financial Managers, Branch or Department	Bachelor + work exp	$39.50
Education Administrators, Elementary and Secondary School	Masters + work exp	$41.15
Sales Managers	Bachelor + work exp	$41.45
Marketing Managers	Bachelor + work exp	$42.27
Computer and Information Systems Managers	Bachelor + work exp	$44.34

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 Jami Jennings

What are some of the job titles you've held previously?
Creative Director, Accounts Supervisor, and Design Director.

What kind of work do you do in a typical day?
Account contacts and sales, recruiting new clients, and finding sponsors for the festivals that we produce.

What was it that attracted you to this type of work?
I had been in advertising and design. I started out in design school and photography - I used to do graphic design, and this is kind of a logical extension of that.

What knowledge, skills and abilities are important in this kind of work?
To be able to make a match between clients and the reasons they would want to participate in festivals and having special events that promote their products. Also doing cross marketing with other companies that are involved in the gourmet products and the wine industry. Having knowledge of wine and food fairing is particularly important in my job.

What is the best preparation for someone who wants to go into this occupation?
Intern with a company in an industry that you think you may be interested in. College is very good as it gives you exposure to other people who may be going into the same business.

What is it that keeps you wanting to do this kind of work?
I like the people in the gourmet food industry because they really enjoy what they are doing. It is part of a whole lifestyle.

What qualities make for an exceptional Marketing, Advertising, and Public Relations Manager?
Being able to brainstorm with your clients and other people in the company about new things that you could do, or being able to attract new clients. And being able to come up with new ideas to promote your existing clients.

What are the next steps in your career path?
At this point, we are focused on getting new clients and moving our business in to the spa and resort industry as well.

Massage Therapists

(Includes Certified Massage Therapists.)

Massage Therapists massage customers and administer other body conditioning treatments for hygienic or remedial purposes. They apply alcohol, lubricants, or other rubbing compounds. They massage the body, using such techniques as kneading, rubbing, and stroking the flesh. They administer steam or dry heat, ultraviolet or infrared, or water treatments. They may counsel clients in activities such as reducing or remedial exercises, and body conditioning or treatments. (Non-OES 334374999)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$5.75 - $24.50/hr	$12.00/hr
New Hires/Exp'd:	$6.33 - $40.00/hr	$21.00/hr
Exp'd/After 3 Years:	$6.90 - $40.00/hr	$21.00/hr

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

Benefits: EMPLOYER PAID: Some employers provide a vacation and a retirement plan. SHARED COSTS: Many employers provide medical insurance and vision insurance. For part-time employees: Few employers provide benefits.

Training, Experience, and Other Requirements

License: Not required.

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 6-48 months of prior experience. Some are willing to accept training as a substitute for experience.

Training: Almost all employers require completion of a vocational training program and possession of a massage therapy certificate prior to employment.

Supply/Demand Assessment

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

Size of Occupation

Small. There are approximately 500-750 Massage Therapists currently employed in the North Bay Counties. Local surveys indicate about 70% are female.

Employment Trends

Insufficient data; however, almost all employers surveyed expect their employment for this occupation to grow over the next two years.

Other Information

Where the Jobs Are: Spas, massage centers, and hospitals/clinics. Self-employment is common for this occupation.

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

Important 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 (4.67)
- 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 (4.33)
- 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 (3.50)

Important Skills:
- Talking to others to effectively convey information (3.83)
- Assessing how well one is doing when learning or doing something (3.50)
- Understanding written sentences and paragraphs in work related documents (3.50)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.20)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (3.80)
- 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. (3.20)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 16 employers surveyed representing 312 employees in this occupation.

Career Path: Massage Therapists

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Massage Therapy Aide	**Massage Therapist** $17.81/hr	**Certified Massage Therapist**	**Massage Coordinator or Manager**
			Massage Center Owner

Career Dialogue with Arlene Beard

What is your job title?
I am a Certified Massage Therapist.

What kind of work do you do?
I do massage therapy; different types on different people. Most of the time it's total body massage, which varies depending on what their needs are.

What are the things that attracted you to this type of work?
I was very intrigued by reflexology of the feet, so I taught myself the Ingram method. It was rewarding to see how it worked on people and their physical problems. But what was interesting was that it wasn't the feet that were injured, (they may have been sore) but that the soreness was causing problems throughout the entire body. I've also always enjoyed a good back massage myself, and my sister (an Esthetician) got me excited about the possibilities.

What kind of things do you do at work (skills)?
I teach people how to breathe and show them a few trigger points throughout the body that will help to relieve or prevent pain. There are stretching and exercise routines I teach people to include in their day-to-day activities, since that's really important before and after you use your muscles extensively. Releasing (tension) sometimes is very important before the actual massage, depending upon where they're hurting or what may be going on in their life. I may apply pressure with my fist to the bottom of their feet, touch the small of the back, or touch 2 or 3 spots around the shoulders and neck which can provide instant release. Afterwards, I begin the massage in the modality of their choice.

If you were starting over to be a massage therapist, knowing what you know now, how would you better prepare yourself?
I would've started doing massage at a younger age, and schooled myself in more techniques (modalities) than what I already know.

What keeps you wanting to do this type of work?
Mainly it's the response I get from the therapy that's involved, but it's also that I'm helping people, and that's my mission. I love people and I like to see the smiles on their faces. That's the reward.

What qualities make an exceptional Massage Therapist?
Well, first of all you really have to care about people, and you have to be a giving person of yourself and your time. I think it's also wanting to be a caregiver, because that's what massage therapy is: it's a caregiver job. But a good Massage Therapist will also remember that you won't be able to do everything for everybody and that your skill has its limitations. The Massage Therapist should always realize that what they do works miracles only sometimes.

Medical and Clinical Laboratory Technologists

(Also known as Clinical Lab Scientists.)

Medical and Clinical Laboratory Technologists perform a wide range of complex procedures in the general areas of the clinical laboratory or perform specialized procedures in such areas as cytology, histology, and microbiology. Their duties may include supervising and coordinating activities of workers engaged in laboratory testing. Includes workers who teach medical technology when teaching is not their primary activity. (OES 329020)

Wages and Benefits

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	$13.00 - $31.25/hr	$23.09/hr	$21.00 - $23.00/hr	$23.00/hr
New Hires/Exp'd:	$13.94 - $31.25/hr	$26.57/hr	$19.23 - $30.00/hr	$24.03/hr
Exp'd/After 3 Years:	$25.00 - $33.65/hr	$28.43/hr	$25.00 - $35.00/hr	$28.00/hr

Hours: Many jobs are 36-45 hours per week. Some jobs are 16-32 hours per week. A few jobs are temporary or on-call ranging from 8-25 hours per week. Almost all employers report that swing shifts are common for this occupation. Most report that graveyard/night shifts are also common.

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 (0) — = Insufficient Data

A few employers report that they also provide continuing education benefits.

Training, Experience, and Other Requirements

License: Required for this occupation; contact the State Department of Health Services, Laboratory Science Division at 510-873-6328 for licensing information.

Education: Almost all employers require a bachelor degree for job entry.

Experience: Many employers report that they do not always require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 1-2 years. Few employers are willing to accept training as a substitute for experience.

Training: High school students should take biology, chemistry and mathematics as preparation toward this career. Community college students who plan to transfer to a four year degree program in medical technology should obtain an associate degree in natural sciences. One year of clinical lab experience is required for this occupation in California. A bachelor of science degree in Medical Technology includes the one year of clinical lab experience. However, the one year of required clinical lab experience is in addition to a bachelor of arts degree with a major in Clinical Laboratory studies (or a closely related field).

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 660-810 Clinical Lab Scientists currently employed in the North Bay Counties. Local surveys indicate about 70% are female. Many jobs are union.

Employment Trends

The growth rate is projected to be slower 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 Clinical Lab Scientists is expected to grow about as fast as the average for all occupations through the year 2010, as the volume of laboratory tests increases with population growth and the development of new types of tests. Technological advances will continue to have two opposing effects on employment through 2010. New, increasingly powerful diagnostic tests will encourage additional testing and spur employment. On the other hand, research and development efforts targeted at simplifying routine testing procedures may enhance the ability of non-laboratory personnel (Physicians and patients) to perform tests now done in laboratories.

Other Information

Where the Jobs Are: Medical and clinical laboratories, hospitals, and clinics. Nationally, less than 1% are self-employed.

Methods Used to Fill Job Openings: Most fill openings by hiring employee referrals. Many also recruit applicants through newspaper advertisements.

Important Knowledge:
- Knowledge of plant and animal living tissue, cells, organisms, and entities, including their functions, interdependencies, and interactions with each other and the environment (4.83)
- 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)
- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (3.75)

Important Skills:
- Using scientific methods to solve problems (4.33)
- 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 (3.91)
- Understanding written sentences and paragraphs in work related documents (3.91)

Important Abilities:
- The ability to communicate information and ideas in writing so others will understand (4.50)
- 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 (4.50)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

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 361 employees in this occupation.

Career Path for Medical and Clinical Laboratory Technologists

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Lab Assistant Medical and Clinical Laboratory Technicians Associate degree $16.64/hr	**Lab Tech** Medical and Clinical Laboratory Technologists Bachelor degree $26.12/hr	**Lab Supervisor or Manager**	**Director**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Biologists	Doctoral degree	—
Agricultural Inspectors	Work experience	$13.12
Food Science Technicians	Associate degree	$14.18
Chemists	Bachelor degree	$25.12
Medical and Clinical Laboratory Technologists	Bachelor degree	$26.12
Occupational Health and Safety Specialists	Bachelor degree	$26.25
Nursing Instructors and Teachers, Postsecondary	Masters degree	$27.97
Administrative Services Managers	Bachelor + work exp	$29.21
Computer Programmers	Bachelor degree	$32.96
Physician Assistants	Bachelor degree	$34.04
Veterinarians	Professional degree	$39.55

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 Madison Allan

What are some of the job titles you've held previously?
In this field I have been a Forensic Toxicologist.

What kind of work do you do in a typical day?
I currently do analysis of urine specimens, mostly screening for illicit drugs and some prescription drugs. I also answer technical support phone calls. I do instrument maintenance, calibration, and quality control.

What was it that attracted you to this type of work?
As a teenager I knew I wanted to do some kind of forensic science. I love chemistry, but did not want to be a Chemist, or rather I did not want to be a Research Chemist.

What knowledge, skills and abilities are important in this kind of work?
You need to have an understanding of the basic laboratory practices, as far as extraction using certain types of equipment and various instruments. Understanding the difference of quantitative versus qualitative. Certain math skills help. I do have a degree in chemistry, which has probably come into play, although so much of what I have learned has been on-the-job. You need to pay attention to detail and be very precise when measuring and doing calculations.

What is the best preparation for someone who wants to go into this occupation?
There are programs specifically for Medical Technologists. I think having a concentration in science and making sure you are taking enough math is important. Specifically, as a Forensic Toxicologist, I know people who have a degree in chemistry and biology.

What is it that keeps you wanting to do this kind of work?
I find it interesting. Even after 15 years I am still learning things. I learn ways to improve what I am doing. Because what I am doing is drug analysis, I learn a lot about illicit drugs. I am constantly getting new information and procedures even on the drugs that have been around awhile. I don't feel stagnant.

What qualities make for an exceptional Clinical Lab Scientist?
Caring about being very accurate and knowing that the work you are doing has an impact on other people, even though you don't meet them.

What are the next steps in your career path?
You can get an advanced degree and possibly move up to Technical Director. But for me, personally, this is what I want to do.

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, handing 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:	$8.00 - $14.00/hr	$10.50/hr
New Hires/Exp'd:	$8.00 - $16.00/hr	$12.00/hr
Exp'd/After 3 Years:	$10.00 - $19.00/hr	$14.95/hr

Some Medical Assistants may also receive bonuses.

Hours: Most jobs are 35-40 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	□	□	□	□	□	□

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□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers require or prefer 1-2 years of prior experience. Some are willing to accept training as a substitute for experience. Some other employers do not require prior experience.

Training: Employers generally provide on-the-job training for this occupation, although related training programs are available.

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 60 employees in 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

Large. There are approximately 1,345 – 1,645 Medical Assistants currently employed in the North Bay Counties. Local surveys indicate about 90% are female.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2004. About 50-65 job openings are projected per year due to a net increase in occupation size. About 30-35 job openings are projected per year due to 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 the year 2008.

Other Information

Where the Jobs Are: Offices of physicians, medical groups, and clinics. Nationally, about 2% are self-employed.

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

Important 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 (4.83)
- 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 (4.16)

Important Skills:
- Actively looking for ways to help people (4.50)
- Communicating effectively with others in writing as indicated by the needs of the audience (4.16)
- Listening to what other people are saying and asking questions as appropriate (4.00)

Important Abilities:
- The ability to see details of objects at a close range (within a few feet of the observer) (4.66)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.50)
- 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 (4.33)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Medical Assistants

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Receptionist/Medical Assistant – Front Office Medical Assistants Post-secondary training $13.26/hr	**Medical Assistant – Back Office**	**Office Manager** First-Line Supervisors, Administrative Support Work experience $21.85/hr	**Registered Nurse** Registered Nurses Associate degree $27.82/hr
			Physician Assistant Bachelor degree $34.04/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Internists, General	Professional degree	—
Obstetricians and Gynecologists	Professional degree	—
Nursing Aides, Orderlies, and Attendants	Post-secondary training	$9.76
Medical Assistants	Post-secondary training	$13.26
Electrical and Electronic Inspectors and Testers	Work experience	$13.27
Mechanical Inspectors	Work experience	$13.27
Parts Salespersons	Moderate-term OJT	$13.85
Railroad Conductors and Yardmasters	Work experience	$21.03
Registered Nurses	Associate degree	$27.82
Family and General Practitioners	Professional degree	$38.16
Pediatricians, General	Professional degree	$48.34

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 Ada Morris

What are some of the job titles you've held previously?
Home Healthcare Administrator, Certified Nursing Assistant.

What kind of work do you do in your current job and what do you do in a typical day?
I assist a Physician in caring for his patients. This involves multiple tasks including preparing rooms for patients, preparing medical equipment for use by ensuring that it is sterile and is in good working order, retrieving phone messages from patients, communicating with patients and triaging their problems. I also perform specific lab tests for patients i.e. urinalysis. I am responsible for stocking the rooms with appropriate medical supplies and discussing patients with the Physician to ensure proper follow-up. My usual day can include all of these tasks in varying degrees depending on the number of patients that we encounter.

What was it that attracted you to this work?
When I was a teenager my grandmother came to live with my family. I ended up being her primary care giver, and I realized that I liked to take care of people.

What knowledge, skills, and abilities are important in this kind of work?
This occupation requires that you have compassion for other people, A number 1. You need to have common sense. Basic math, reading and writing skills are key. You need to develop excellent communication skills. It is important to be able to speak in terms that the patient will understand, and also understand the technical language spoken by the physician. You need to be responsible and committed to your work. You need exceptional interpersonal skills in order to function efficiently as a team with your coworkers and physicians.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
You need to get some experience working and taking care of people. I would recommend volunteer work in a place like a senior day care center, child day care center, or in the hospital. Babysitting will test your patience and compassion. If you decide this is the right career choice for you, then I would enroll in a nurse training course such as CNA, Medical Assisting, LVN, or whatever program you can get into. This will only give you the fundamental knowledge; you will get your real life experience when you are in a clinical setting.

What is it that keeps you wanting to do this kind of work?
I think it is the humanity angle, the opportunity to work with people, especially people who really need your help. I also take a lot of pride and enjoyment out of seeing a sick person get well again, and that I played a role in their recovery. It is a feeling that is difficult to describe.

What qualities make for an exceptional Medical Assistant?
I think the most important qualities are compassion, honesty, consistency, and reliability. You also need to be technically minded.

New Accounts Clerks

(Also known as Financial/Customer Services Representatives.)

New Accounts Clerks interview persons desiring to open banking accounts. They explain banking services available to prospective customers, and assist them in preparing an application form. (OES 531050)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$8.05 - $11.58/hr	$10.36/hr
New Hires/Exp'd:	$8.63 - $15.00/hr	$11.51/hr
Exp'd/After 3 Years:	$8.85 - $18.81/hr	$14.00/hr

Many employers report that their Financial/Customer Services Representatives may also receive bonuses.

Hours: Almost all jobs are 38-40 hours per week. A few jobs are 25-30 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers report that they do not always require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 6-36 months. Some employers are willing to accept training as a substitute for experience.

Training: Bank Tellers and other clerks usually need only a high school education. Most banks seek people who have good basic math and communication skills, enjoy public contact, and feel comfortable handling large amounts of money. Through a combination of formal classroom instruction and on-the-job training under the guidance of an experienced worker, Tellers learn the procedures, rules, and regulations that govern their jobs. Banks encourage upward mobility by providing access to higher education and other sources of additional training. Most employers report that word processing software skills are important. Many also report that spreadsheet skills are important.

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 173 employees in 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%).

Size of Occupation

Small. There are approximately 370-450 Financial/Customer Services Representatives currently employed in the North Bay Counties. Local surveys indicate about 90% are female.

Employment Trends

The growth rate is projected to be slower 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 10-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment in banking is projected to decline 2 percent between 2000 and 2010. The combined effects of technology, deregulation, mergers, and population growth will continue to affect total employment growth and the mix of occupations in the banking industry. Although a decline in employment is expected, job opportunities should be plentiful, particularly among Tellers and other administrative support staff, who make up a large proportion of bank employees and often transfer to other occupations or leave the labor force.

Other Information

Where the Jobs Are: Commercial banks, savings and loan institutions, and credit unions. Nationally, less than 1% are self-employed.

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

Important 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 (4.33)
- 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 (4.16)
- Knowledge of economic and accounting principles and practices, the financial markets, banking, and the analysis and reporting of financial data (4.00)

Important Skills:
- Talking to others to effectively convey information (4.33)
- Listening to what other people are saying and asking questions as appropriate (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)
- Using mathematics to solve problems (3.83)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.00)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (3.80)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for New Accounts Clerks

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Teller Moderate-term OJT $10.52/hr	**New Accounts Clerk** Work experience $13.35/hr	**Financial or Loan Officer** Loan Officers Bachelor degree $26.65/hr	**Financial or Branch Manager** Financial Managers, Branch or Department Bachelor degree + Work exp $39.50/hr
	Loan Clerk Loan Interviewers and Clerks Short-term OJT $15.74/hr	**Customer Service Representative** Sales Agents, Financial Services Bachelor degree $35.79/hr	**Regional Manager**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Hotel, Motel, and Resort Desk Clerks	Short-term OJT	$9.28
New Accounts Clerks	Work experience	$13.35
Medical Records and Health Information Technicians	Associate degree	$14.23
Customer Service Representatives, Utilities	Short-term OJT	$15.03
Adjustment Clerks	Short-term OJT	$15.03
Tax Preparers	Bachelor degree	$15.38
Human Resources Assistants, Except Payroll and Timekeeping	Short-term OJT	$16.72
Brokerage Clerks	Moderate-term OJT	$17.76
Loan Counselors	Bachelor degree	$22.13
Loan Officers	Bachelor degree	$26.65
Personal Financial Advisors	Bachelor degree	$36.44

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 Elizabeth Braun

What are some of the job titles you've held previously?
Previously, I did accounts payable and now I am a Banking Services Representative.

What kind of work do you do in a typical day?
I open new accounts as well as maintain accounts. I do some work with loans. Every day varies a bit.

What was it that attracted you to this type of work?
My mom is a Banker.

What knowledge, skills and abilities are important in this kind of work?
Computer skills, math skills, and customer service skills are all very important. You also need to be very knowledgeable about business in general.

What is the best preparation for someone who wants to go into this occupation?
You need to have a lot of computer skills; everything you do is on the computer. You need to be competent in programs such as Word and Excel. Generally, you need to be very familiar with operating a computer and you need to have good interviewing skills.

What is it that keeps you wanting to do this kind of work?
This job is constantly changing, so you are not doing the same thing all of the time and you are continually learning new things. There are very good incentives, as well as a lot of opportunity for growth in the bank.

What qualities make for an exceptional New Accounts Clerk?
I would say the most important thing is to have good people skills.

What are the next steps in your career path?
I would like to get some more college education and then possibly move into operations, or maybe become a Loan Officer.

Nurse Aides

(Includes Certified Nursing Assistants or 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. Does not include Psychiatric Aides and Home Health Aides (OES 660080).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$9.00 - $12.00/hr	$10.54/hr
New Hires/Exp'd:	$9.00 - $13.00/hr	$10.75/hr
Exp'd/After 3 Years:	$10.00 - $14.00/hr	$12.00/hr

Hours: Most jobs are 36-40 hours per week. A few 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Required for this occupation; contact the State Department of Health Services at 916-327-2445 for licensing information.

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

Experience: Almost all employers do not require prior experience.

Training: Training programs are widely available for this occupation. However, employers are often willing to provide on-the-job training during the first four months of employment, during which time the employee must complete the required training and pass the State's Certified Nursing Assistant exam.

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 512 employees in this occupation.

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

Very large. There are approximately 3,570 – 4,360 Medical Assistants currently employed in the North Bay Counties. Local surveys indicate about 75% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. About 75-90 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 Nursing Aides is expected to grow faster than the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Skilled nursing and personal care facilities, hospitals, and residential care facilities. Nationally, less than 5% are self-employed.

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

Important 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 (4.83) • 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)
Important Skills:	• Actively looking for ways to help people (4.50) • Being aware of others' reactions and understanding why they react the way they do (4.16) • Listening to what other people are saying and asking questions as appropriate (3.66)
Important Abilities:	• The ability to listen to and understand information and ideas presented through spoken words and sentences (4.50) • The ability to exert maximum muscle force to lift, push, pull, or carry objects (4.50) • The ability to communicate information and ideas in speaking so others will understand (4.33)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Nurse Aides

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Nurse Aide Nursing Aides, Orderlies, and Attendants Post-secondary training $9.76/hr	**Certified Nursing Assistant** Post-secondary training	**Licensed Vocational Nurse** Licensed Practical and Licensed Vocational Nurses Post-secondary training $18.05/hr	**Physician Assistant** Bachelor degree $34.04/hr
Home Health Aide Post-secondary training $9.75/hr		**Registered Nurse** Registered Nurses Associate degree $27.82/hr	**Health Care Services Administrator** Medical and Health Services Managers Bachelor + work exp $35.81/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Amusement and Recreation Attendants	Short-term OJT	$7.78
Hairdressers, Hairstylists, and Cosmetologists	Post-secondary training	$9.44
Nursing Aides, Orderlies, and Attendants	Post-secondary training	$9.76
Cooks, Restaurant	Moderate-term OJT	$10.04
Ambulance Drivers and Attendants, Except Emergency Medical Technicians	Short-term OJT	$12.49
Able Seamen	Short-term OJT	$17.29
Parts Salespersons	Moderate-term OJT	$13.85
Medical Assistants	Post-secondary training	$13.26
Valve and Regulator Repairers	Long-term OJT	$22.41
Sheriffs and Deputy Sheriffs	Moderate-term OJT	$25.82
Registered Nurses	Associate degree	$27.82

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 Susan Heffelfinger

What are some of the job titles you've held previously?
I am a Certified Nursing Assistant (CNA). Prior to that I was a Nurse Assistant and also worked as a volunteer in the healthcare industry.

What kind of work do you do in your current job and what do you do in a typical day?
The main focus of my work is to meet the needs of the patients in the hospital beds and the needs of their family. I help to serve patient meals, and provide any assistance with feeding. I also assist with patient bathing, which could be a shower, a bed bath or some variation of bathing. I also assist with dressing, grooming and assist with the patient's oral care. My other duties include collecting data for the patient's pulse, temperature, respiration and blood pressure.

What was it that attracted you to this work?
A good friend of mine did this work for a long time. I always admired that my friend had the power to make people feel better.

What knowledge, skills, and abilities are important in this kind of work?
One of the most important things is that you are good with people: that you are friendly, comforting and communicating appropriately. You must be compassionate and really care about the person who needs your help. You also need to have knowledge and understanding of the disease process and healthcare.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
The best preparation is to connect with the local junior college, nurse training, or the local Red Cross who provides appropriate training. I also think if your lifestyle supports volunteer work, this is good exposure to the healthcare industry.

What is it that keeps you wanting to do this kind of work?
I have a lot of skills that are within my scope of practice as a nursing aide that I can use to make people feel better. Sometimes what a patient's need is their position in the bed changed, and that relieves some kind of pressure in their body, and they are so thankful that I am able to do that. I think the way to a happy life is to find someone else who can use a hand up and extend a hand to them.

What qualities make for an exceptional Nurse Aide?
An exceptional Nurse Aide has those qualities of compassion and caring and excellent communication skills. They are culturally sensitive, so that they are not taking for granted that everyone in a hospital bed is the same as the person in the next room, taking in to account the individuality of each patient. They are skilled enough about the different medical conditions and the disease process. Since Nurse Aides are often in the role of being a patient advocate, the exceptional Nurse Aide works with the whole health care team: they work with the physician's, nurses, dietary department, etc.

Packaging and Filling Machine Operators and Tenders

(Also known as Production/Machine Operators and Bottlers.)

Packaging and Filling Machine Operators and Tenders operate or tend machines, such as filling machines, casing running machines, ham rolling machines, preservative filling machines, baling machines, wrapping machines, and stuffing machines, to prepare industrial or consumer products, such as gas cylinders, meat and other food products, tobacco, insulation, ammunition, stuffed toys and athletic equipment, and upholstered pads, as end products or for storage and shipment (OES 929740).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.00 - $10.00/hr	$8.50/hr
New Hires/Exp'd:	$7.25 - $12.00/hr	$10.00/hr
Exp'd/After 3 Years:	$9.00 - $21.58/hr	$12.00/hr

Union median wages are $14.92 for entry-level employees with no experience and $19.85 for experienced employees after 3 years on-the-job.

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

Benefits: EMPLOYER PAID: Many employers provide medical insurance. Of the employers surveyed, all report that they provide a vacation and sick leave. Most provide a retirement plan. Many also provide life and dental insurance. Some provide vision insurance. SHARED COST: Many employers provide medical insurance and dental insurance. Some also provide vision insurance and a retirement plan.

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers do not require 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 low (less than 10%).

Size of Occupation

Large. There are approximately 1,570 - 1,915 Packaging and Filling Machine Operators currently employed in the North Bay Counties. Local surveys indicate about 40% are female. Many jobs are union.

Employment Trends

The growth rate is projected to be the same as the average for all occupations through the year 2004. About 40-50 job openings are projected per year due to a net increase in occupation size. About 35-45 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Packaging and Filling Machine Operators and Tenders is expected to increase about as fast as the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Wine and liquor companies, beverage companies and processors of agricultural products. Nationally, less than 1% 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 and/or fill openings by hiring referrals from employment agencies. Some fill openings through in-house promotion or transfer.

Important Knowledge:
- Knowledge of inputs, outputs, raw materials, waste, quality control, costs, and techniques for maximizing the manufacture and distribution of goods (4.83)
- Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (4.16)
- Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (3.00)

Important Skills:
- Watching gauges, dials, or other indicators to make sure a machine is working properly (4.16)
- Controlling operations of equipment or systems (4.16)
- Inspecting and evaluating the quality of products (4.16)

Important 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 (4.33)
- 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. (4.16)
- The ability to quickly and accurately compare letters, numbers, objects, pictures, or patterns. The things to be compared may be presented at the same time or one after the other. This ability also includes comparing a presented object with a remembered object. (4.16)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 15 employers surveyed representing 334 employees in this occupation.

Career Path: Packaging and Filling Machine Operators and Tenders

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Retail Salesperson	**Bottling Worker/Machine Operator** Packaging and Filling Machine Operators Moderate-term OJT $10.03/hr	**Bottling Supervisor**	**Production Manager** Industrial Production Managers Bachelor + work exp $35.76/hr
Hand Packer Packers and Packagers, Hand Short-term OJT $8.22/hr			

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Farm-workers, Farm and Ranch Animals	Short-term OJT	$7.54
Meat, Poultry, and Fish Cutters and Trimmers	Short-term OJT	$9.14
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	Short-term OJT	$9.87
Packaging and Filling Machine Operators and Tenders	Moderate-term OJT	$10.03
Non-electrolytic Plating and Coating Machine Setters and Set-Up Operators, Metal and Plastic	Moderate-term OJT	$10.93
Electrolytic Plating and Coating Machine Operators and Tenders, Metal and Plastic	Moderate-term OJT	$10.93
Cutting and Slicing Machine Operators and Tenders	Moderate-term OJT	$10.97
Heating Equipment Setters and Set-Up Operators, Metal and Plastic	Moderate-term OJT	$12.16
Welding Machine Operators and Tenders	Moderate-term OJT	$14.33
Design Printing Machine Setters and Set-Up Operators	Long-term OJT	$14.60
Well and Core Drill Operators	Moderate-term OJT	$18.50

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 Barry Morgan

What is your job title?
Blancher Operator.

What kind of work do you do?
I operate the blancher. Almonds are put inside of it, and then the skins of the almonds are removed, or "blanched".

What are the things that attracted you to this type of work?
When I first started here, I was in the shipping and receiving area. I didn't want to leave this company, and I wanted a position that wasn't so physically oriented. I switched to this position because it requires less labor than shipping/receiving did, and my skills and experience were easily transferable.

What kind of things do you do at work (skills)?
Computer skills are important for this job and so is the ability to make heads and tails of the different production charts. Since it's a machine, of course, I have also developed a strong knowledge of machine operations and materials testing.

If you were starting over to be a Machine Operator, knowing what you know now, how would you better prepare yourself?
I definitely would have taken some computer classes so I could be more familiar with computers (which I use each day) and their applications. That would also have helped me learn to read the charts quicker.

What keeps you wanting to do this type of work?
One thing that keeps me here is the opportunity to learn new things. We have a production environment here, and there are many different machines and processes to learn about. I'm always getting involved with new equipment somehow. And then there's our product that I get to learn about. I'm constantly getting exposure to the trade of almond growing and processing. And after that, the pay isn't bad at all.

What qualities make an exceptional Machine Operator?
Someone who has computer training and/or experience would make a good operator. They should have good judgment, too. A firm grasp of math would also be beneficial.

Painters, Paperhangers – Construction and Maintenance

Painters paint walls, equipment, buildings, bridges, and other structural surfaces using brushes, rollers, and spray guns. They may mix colors or oils to obtain desired color or consistency. Paperhangers cover interior walls and ceilings of rooms with decorative wallpaper or fabric (OES 874020).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$9.00 - $10.00/hr	$10.00/hr
New Hires/Exp'd:	$12.00 - $16.00/hr	$15.00/hr
Exp'd/After 3 Years:	$16.00 - $23.00/hr	$20.00/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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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: Many employers do not require prior experience. Many others require or prefer 1-5 years of prior experience. Some employers are willing to accept training as a substitute for prior experience.

Training: Apprenticeship training usually takes about 4 years to complete, although on-the-job or informal apprenticeship training may also be available.

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 182 employees in this occupation.

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

Large. There are approximately 1,480 – 1,810 Painters and Paperhangers currently employed in the North Bay Counties. Local surveys indicate less than 5% are female.

Employment Trends

The growth rate is projected to be the same as the average for all occupations through the year 2004. About 40-50 job openings are projected per year due to a net increase in occupation size. About 35-45 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Painters and Paperhangers is expected to grow more slowly than the average for all occupations through the year 2008

Other Information

Where the Jobs Are: Painting and construction contractors. Nationally, about 44% are self-employed.

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

Important Knowledge:	• Knowledge of materials, methods, and the appropriate tools to construct objects, structures, and buildings (4.50)
Important Skills:	• Determining the kind of tools and equipment needed to do a job (3.33) • Controlling operations of equipment or systems (3.16)
Important Abilities:	• The ability to match or detect differences between colors, including shades of color and brightness (4.20) • The ability to exert muscle force repeatedly or continuously over time. This involves muscular endurance and resistance to muscle fatigue (3.60) • The ability to make fast, simple, repeated movements of the fingers, hands, and wrists (3.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Painters, Paperhangers – Construction and Maintenance

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Helper or Apprentice Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons Short-term OJT $11.04/hr	**Painter – Journey Level** Painters, Construction and Maintenance Long-term OJT $15.29/hr	**Supervisor or Foreman** First-Line Supervisors/Managers-Construction Trades Workers Work experience $27.53/hr	**Painting Contractor**
			Estimator Cost Estimator Bachelor + work exp $27.41/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Maids and Housekeeping Cleaners	Short-term OJT	$8.25
Painting, Coating, and Decorating Workers	Short-term OJT	$9.90
Stone Cutters and Carvers	Long-term OJT	$11.87
Painters, Construction and Maintenance	Long-term OJT	$15.29
Insulation Workers, Floor, Ceiling, and Wall	Long-term OJT	$16.56
Insulation Workers, Mechanical	Moderate-term OJT	$16.56
Photoengraving and Lithographing Machine Operators and Tenders	Moderate-term OJT	$16.96
Roofers	Long-term OJT	$17.39
Roof Bolters, Mining	Long-term OJT	$20.07
Rough Carpenters	Long-term OJT	$20.30
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 Dennis Jennings

What are some of the job titles you've held previously?
I have done a variety of jobs in this occupation including wood preserve, wall paper installation, wall texturing, cabinet installation, floor covering installation, and water proofing.

What kind of work do you do in your current job and what do you do in a typical day?
I perform a variety of paint related functions. It mostly consists of painting and repainting walls and ceilings of residential type buildings. I may use tools such as a roller, brush, or a sprayer depending on the application. For exterior applications I may need to power wash, sand and prime the surface to be painted. I don't have a typical day really. My day consists of all or some of the tasks that I have mentioned.

What was it that attracted you to this work?
I have always been a hands-on type of person. I enjoy physical labor and working with my hands. This job provides the ability to work with my hands, the physical demand of moving ladders, climbing ladders, carrying somewhat heavy objects. I also enjoy the actual skill demanded by painting.

What knowledge, skills, and abilities are important in this kind of work?
You need to be exceptional at estimating jobs. This requires knowledge of materials, how they are applied, and the time it takes to apply the material. Estimating requires some basic math skills, but mostly experience working with the materials. The physical abilities would include the ability to work at varying heights, manual dexterity, able to bend frequently. You should also be familiar with and comfortable using power tools such as sanders, power washers, and paint sprayers.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I think you can get a lot of relevant experience working in a retail paint store. You will learn a lot about the materials, tools and application techniques in this environment. You should also learn about colors, and how colors go together. Sometimes this job requires that you be a color consultant. I would also recommend that someone get some construction experience working with contractors. You need to learn the in's and out's of working with contractors. Finally, you will need the right tools and protective clothing for this work.

What is it that keeps you wanting to do this kind of work?
I make good money first of all; I get to travel to various job sites so there is always something different to work on. I meet a lot of interesting people. I also like the fact that I am my own boss, I make my own hours.

What qualities make for an exceptional Painter?
Attention to detail is big. You need to be proficient using the tools of the trade. You need to have the type of personality that people will trust. You are bidding and working in customer's homes. They need to be able to trust you. And most importantly you need to take pride in what you do. Your finished product is what will keep your business going and future business coming.

Paralegal Personnel

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:	$11.00 - $19.18/hr	$14.71/hr
New Hires/Exp'd:	$12.00 - $22.81/hr	$19.90/hr
Exp'd/After 3 Years:	$14.38 - $28.00/hr	$22.05/hr

Some Paralegal Personnel may also receive bonuses.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

Education: Many employers require an associate degree for job entry. Many others are willing to accept a high school level education.

Experience: Most employers require 1-5 years of prior experience.

Training: Of the employers surveyed, all report that word processing skills are important. Many report that spreadsheet skills are important. Many employers require or prefer completion of a certificate training program.

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 60 employees in 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 low (10-19%).

Size of Occupation

Small. There are approximately 345-420 Paralegals currently employed in the North Bay Counties. Local surveys indicate about 85% are female.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2004. About 15-20 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, Paralegals are projected to rank among the fastest growing occupations in the economy through 2008.

Other Information

Where the Jobs Are: Offices of attorneys and/or law firms. Nationally, about 3% are self-employed.

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

Important Knowledge:	• Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process (4.83) • 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 (4.50) • Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (4.33)
Important Skills:	• Knowing how to find information and identifying essential information (4.83) • Communicating effectively with others in writing as indicated by the needs of the audience (4.50) • Understanding written sentences and paragraphs in work related documents (4.50)
Important Abilities:	• The ability to read and understand information and ideas presented in writing (5.00) • The ability to listen to and understand information and ideas presented through spoken words and sentences (4.40) • The ability to communicate information and ideas in writing so others will understand (4.40)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Paralegal Personnel

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Legal Secretary Post-secondary training $20.70/hr	**Paralegal/Legal Assistant** Paralegals and Legal Assistants Associate degree $22.41/hr	**Law Office Manager** Administrative Services Managers Bachelor + work exp $29.21/hr	**Lawyer** Professional degree $50.42/hr
Receptionist Receptionists and Information Clerks Short-term OJT $11.31/hr			**Law Firm Partner**
			Judge Judges, Magistrate Judges, and Magistrates Professional degree $43.63/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Political Science Teachers, Postsecondary	Doctoral degree	—
Psychology Teachers, Postsecondary	Doctoral degree	—
Sociology Teachers, Postsecondary	Doctoral degree	—
History Teachers, Postsecondary	Doctoral degree	—
Mathematical Science Teachers, Postsecondary	Doctoral degree	—
Graduate Teaching Assistants	Masters degree	—
Law Clerks	Professional degree	$16.37
Paralegals and Legal Assistants	Associate degree	$22.41
Title Examiners and Abstractors	Moderate-term OJT	$23.85
Employment Interviewers, Private or Public Employment Service	Associate degree	$25.23
Insurance Sales Agents	Bachelor degree	$26.11

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 Kay Kasic

What are some of the job titles you've held previously?
I am currently a Paralegal. In the past I have been a Legal Assistant.

What kind of work do you do in your current job and what do you do in a typical day?
I am responsible for trust administration for my office. I complete legal documents, serve legal documents, file briefs, and complete many different legal transactions. About the only thing I don't do is practice law. A typical day varies depending on what the priorities for that day are.

What was it that attracted you to this work?
I started as a Legal Secretary some 40 plus years ago. It is what I know.

What knowledge, skills, and abilities are important in this kind of work?
You should obtain a Paralegal Certificate at one of the various schools and institutions that offers them. Typically at the community college, but I know they are also available at state and private schools. I would even recommend that someone go as far as obtaining a masters degree. You should be well rounded in legal ethics. Communication skills are most important.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Any way you can get law experience is helpful. You should definitely try to do an internship while working on your certificate. Some computer skills are necessary such as word processing, and other common applications.

What is it that keeps you wanting to do this kind of work?
I love the challenge. There is always something new and interesting to learn. Law is a dynamic profession and that is what intrigues me the most.

What qualities make for an exceptional Paralegal?
I think you need to have a sense of humor, just to keep everything in perspective. You need to think analytically. Oral and written communication skills are very important. You should be very proficient at time management.

Personal and Home Care Aides

(Also known as Caregivers.)

Personal and Home Care Aides perform a variety of tasks at places of residence. Their duties include keeping house; advising families having problems with such things as nutrition, health, cleanliness, and household utilities. Does not include Nurses' Aides and Home Health Care Workers (OES 680350).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$5.75 - $10.83/hr	$8.55/hr
New Hires/Exp'd:	$6.56 - $12.00/hr	$8.75/hr
Exp'd/After 3 Years:	$6.56 - $16.00/hr	11.50/hr

Hours: Most jobs are 10-32 hours per week. Some jobs are 40-46 hours per week.

Benefits: EMPLOYER PAID: Many employers provide medical insurance. Almost all employers provide a vacation. Many also provide sick leave. Some provide dental insurance. SHARED COST: Some employers provide medical insurance. For part-time employees: Many employers provide medical insurance. Some provide dental insurance, sick leave, a vacation, and a retirement plan. A few provide life insurance.

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers do not require prior experience.

Training: CPR and first-aid training may be required prior to employment. Employers generally provide on-the-job training for this occupation, although related training programs are available.

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 very high (40% or more).

Size of Occupation

Medium. There are approximately 690-845 Personal and Home Care Aides currently employed in the North Bay Counties. Local surveys indicate about 90% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 25-30 job openings are projected per year due to a net increase in occupation size. About 20-25 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, a large number of job openings are expected for Home Health and Personal Care Aides, due to substantial growth and very high turnover. Home Health and Personal Care Aides is expected to be one of the fastest growing occupations through the year 2008.

Other Information

Where the Jobs Are: Social service agencies, home health care services, and residential care facilities. Nationally, about 1% 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. Most also fill openings by hiring unsolicited applicants. A few recruit applicants through internet job listings.

Important 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 (4.66)
- 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 (3.83)
- 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)

Important Skills:
- Talking to others to effectively convey information (4.00)
- Being aware of others' reactions and understanding why they react the way they do (4.00)
- Actively looking for ways to help people (4.00)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.60)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.00)
- The ability to communicate information and ideas in writing so others will understand (3.20)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 16 employers surveyed representing 458 employees in this occupation.

Career Path: Personal and Home Care Aides

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Caregiver Personal and Home Care Aides Short-term OJT $8.11/hr	**Home Health Aide** Post-secondary training $9.75/hr	**Services Coordinator**	**Program Manager** Medical and Health Services Managers Bachelor + work exp $35.81/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Personal and Home Care Aides	Short-term OJT	$8.11
Home Health Aides	Post-secondary training	$9.75
Social and Human Service Assistants	Associate degree	$13.50
Travel Agents	Post-secondary training	$13.83
Psychiatric Technicians	Associate degree	$17.43
Child, Family, and School Social Workers	Masters degree	$17.90
Clergy	Professional degree	$19.26
Health Educators	Bachelor degree	$19.93
Paralegals and Legal Assistants	Associate degree	$22.41
Advertising Sales Agents	Moderate-term OJT	$27.85
Occupational Therapists	Bachelor degree	$28.51

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 Cecile Munslow

What is your job title?
In-Home Personal Provider.

What type of work do you do?
I help people who are elderly or disabled with the things they can't do for themselves, and I encourage my clients to do what they can on their own. Sometimes the job is as basic as helping someone stand up. My clients are approved through the Welfare Department for so many hours per month, and those hours of assistance are all we are allowed to provide. Sometimes it's full- time, but mostly part-time work.

What are the things that attracted you to this type of work?
We had my mother in the house for 7 years, so I was used to taking care of her and I knew what to do. It's a minimum wage job, but sometimes the families will pay you extra.

What are the tasks you perform at work?
I do some house cleaning, laundry, and dishes. I take them out shopping, to doctor's appointments and fix their meals for them; sometimes it's at my house and sometimes theirs. We make sure they don't fall and injure themselves.

If you were starting over to be a Personal Home Care Aide, knowing what you know now, how would you better prepare yourself?
You want to learn all about the person and about the type of work; we went through a special orientation. You need to know house cleaning and laundry. It is very basic. Things you learn as you grow up.

What keeps you wanting to do this type of work?
It can be very rewarding because it's a challenge. When you are able to help people do things, or just to be there for them to talk to, it feels good. The appreciation my clients give me is the best reward.

What qualities, in your opinion, make a good Personal and Home Care Aide?
I think you have to like people and enjoy helping them.

Pharmacy Technicians

Pharmacy Technicians fill orders for unit doses and prepackaged pharmaceuticals and perform other related duties under the supervision and direction of a pharmacy supervisor or staff pharmacist. Duties include keeping records of drugs delivered to the pharmacy, storing incoming merchandise in proper locations, and informing the supervisor of stock needs and shortages. They may clean equipment used in the performance of duties and assist in the care and maintenance of equipment and supplies (OES 325180).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$10.00 - $13.00/hr	$10.00/hr
New Hires/Exp'd:	$8.00 - $13.00/hr	$10.00/hr
Exp'd/After 3 Years:	$10.00 - $17.00/hr	$13.50/hr

Hours: Most jobs are 36-45 hours per week. Some jobs are 16-30 hours per week.

Benefits: EMPLOYER PAID: Most employers provide medical insurance and a vacation. Many also provide sick leave. Some provide dental insurance, vision insurance, a retirement plan, and life insurance. SHARED COST: Some employers provide a retirement plan. For part-time employees: Some employers provide sick leave and a vacation.

Training, Experience, and Other Requirements

License: Required for this occupation; contact the State Board of Pharmacy at 916-445-5014 for licensing information.

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

Experience: Most employers do not require prior experience.

Training: Some employers report that word processing and spreadsheet skills are important. Employers generally provide on-the-job training for this occupation, although related training programs are available.

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 345-420 Pharmacy Technicians currently employed in the North Bay Counties. Local surveys indicate about 80% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 10-15 job openings are projected per year due to a net increase in occupation size. About 10-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Pharmacy Technicians is expected to grow as fast as average for all occupations through 2008 due to the increased pharmaceutical needs of a larger and older population, and greater use of medication. The increased number of middle aged and elderly people will spur demand for technicians and assistants in all practice settings. The middle aged and elderly populations use more prescription drugs, on average, than younger people.

Other Information

Where the Jobs Are: Drug stores, grocery stores with in house pharmacies, and hospitals. Nationally, less than 1% 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 by hiring unsolicited applicants. Some fill openings by hiring referrals from colleges and universities, schools and training programs, and/or through in-house promotion or transfer.

Important 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 (4.16)
- 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 (4.00)
- Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (3.66)

Important Skills:
- Using mathematics to solve problems (3.83)
- Understanding written sentences and paragraphs in work related documents (3.83)
- Listening to what other people are saying and asking questions as appropriate (3.33)

Important Abilities:
- 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)
- The ability to add, subtract, multiply, or divide quickly and correctly (3.40)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (3.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 15 employers surveyed representing 41 employees in this occupation.

Career Path: Pharmacy Technicians

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Store or Pharmacy Clerk Cashiers Short-term OJT $9.08/hr	**Pharmacy Technician** Moderate-term OJT $15.19/hr	**Lead Pharmacy Technician**	**Manager** First-Line Supervisors/Managers of Retail Sales Workers Work Experience $18.07/hr
			Pharmacist Professional Degree $38.99/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Hotel, Motel, and Resort Desk Clerks	Short-term OJT	$9.28
Credit Authorizers	Short-term OJT	$13.72
Correspondence Clerks	Moderate-term OJT	$13.73
Statement Clerks	Moderate-term OJT	$14.04
Medical Records and Health Information Technicians	Associate degree	$14.23
Medical Secretaries	Post-secondary training	$14.34
Interviewers, Except Eligibility and Loan	Short-term OJT	$14.74
Pharmacy Technicians	Moderate-term OJT	$15.19
Surgical Technologists	Associate degree	$16.80
License Clerks	Moderate-term OJT	$17.02
Title Searchers	Moderate-term OJT	$23.85

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 Melinda Carlson

What is your job title?
Senior Pharmacy Technician

What type of work do you do?
I fill prescriptions and type orders. I also do insurance third party billing and order inventory.

What are the things that attracted you to this type of work?
I was already working in the store. The pay and the hours were better, and I enjoyed working with and learning about the different medicines.

What are the tasks you perform at work (skills)?
Overall, you should know the medication(s) and be able to decipher what the doctor has written.

If you were starting over to be a Pharmacy Technician, knowing what you know now, how would you better prepare yourself?
I would have more on-the-job training as a Cashier and I would expand my multi-tasking ability.

What keeps you wanting to do this type of work?
I enjoy it. I like seeing both sides in working with the Pharmacists and the patients.

What qualities, in your opinion, make a good Pharmacy Technician?
I would say multi-tasking abilities and being able to deal with customers. Each pharmacy is different and so are insurance policies. Knowing about insurance and how it works is extremely helpful.

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:	$20.19 - $28.85/hr	$25.00/hr
New Hires/Exp'd:	$20.00 - $31.25/hr	$25.00/hr
Exp'd/After 3 Years:	$20.00 - $35.00/hr	$29.29/hr

Some Physical Therapists may also receive bonuses.

Hours: Most jobs are 38-40 hours per week. Some 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 (0) — = Insufficient Data

A few employers also provide continuing education benefits.

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: Employers require either a bachelor degree or a masters degree for job entry.

Experience: Many employers report that they do not always require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 6-36 months. Some employers are willing to accept training as a substitute for experience.

Training: All accredited physical therapy programs in California will be at the master's degree level (or above) by the end of 2001. Certificates are awarded to students with a bachelor degree in a related field and who have completed a 12-16 month course in physical therapy. In addition to classroom instruction, students receive supervised clinical experience as interns in hospitals and treatment centers for an average of 18 weeks. Some employers report that word processing software skills are important.

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: 18 employers surveyed representing 144 employees in this occupation.

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

Small. There are approximately 470-575 Physical Therapists currently employed in the North Bay Counties. Local surveys indicate that about 65% are female. A few jobs are union.

Employment Trends

The growth rate is projected to be slower 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 5-10 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 2010. Federal legislation imposing limits on reimbursement for therapy services may adversely affect the job market for physical therapists in the near term. However, over the long run, the demand for Physical Therapists should continue to rise as a result of growth in the number of individuals with disabilities or limited function requiring therapy services.

Other Information

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

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements. Many also fill openings by hiring employee referrals. Some fill openings by hiring referrals from schools and training programs. Some also recruit applicants through internet job listings and/or trade journal ads.

Important 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)

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

Important 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 *Source: O*NET Database version 3.0*

Career Path for Physical Therapists

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Intern	**Physical Therapist** Bachelor degree $31.68/hr	**Clinical Supervisor or Coordinator**	**Clinic Director**
			Owner or Partner, Physical Therapy Office or Clinic

Occupations with Similar Skill Patterns

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?
Physical Therapy Aide and general office work too. I was a Billing Clerk and I was a Medical Records Clerk.

What kind of work 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 gets a prescription for physical therapy they bring it to us and if required, we get authorization. I see them for that initial visit, evaluate their condition, and determine what is an appropriate treatment plan. 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.

What was it that attracted you to this type of work?
In high school I had 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.

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.

What is the best preparation for someone who wants to go into this occupation?
Starting out as soon as possible. Do background work and research where the programs are, and what the prerequisites are. 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. 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. Listening and empathy are huge.

Physical Therapy (PT) 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 - $22.00/hr	$10.00/hr
New Hires/Exp'd:	$8.00 - $23.01/hr	$10.00/hr
Exp'd/After 3 Years:	$9.64 - $25.00/hr	$12.39/hr

Hours: Most jobs are 15-27 hours per week. Some jobs are 35-40 hours per week.

Benefits: EMPLOYER PAID: Many employers provide medical insurance. Most provide sick leave and a vacation. Many also provide dental and life insurance. Some provide vision insurance. SHARED COST: Some employers provide medical insurance. Many provide a retirement plan. Some also provide dental and vision insurance. For part-time employees: Some employers provide medical insurance. Many provide sick leave and a vacation. Some also provide dental insurance, vision insurance, life insurance, and a retirement plan.

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers do not require prior experience.

Training: Employers generally provide on-the-job training for this occupation, although related training programs are available.

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 160-195 Physical Therapy Aides currently employed in the North Bay Counties. Local surveys indicate about 75% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. 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 Therapy Aides is expected to grow much faster than the average through the year 2008. However, Federal legislation imposing limits on reimbursement for therapy services may continue to adversely affect the job market for Physical Therapy Aides in the near term.

Other Information

Where the Jobs Are: Offices of physical therapists, hospitals, and clinics. Nationally, less than 1% are self-employed.

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

Important 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 (4.66) • 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 (4.33) • 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 (3.50)
Important Skills:	• Talking to others to effectively convey information (3.83) • Teaching others how to do something (3.66) • Being aware of others' reactions and understanding why they react the way they do (3.50)
Important Abilities:	• The ability to communicate information and ideas in speaking so others will understand (4.20) • The ability to listen to and understand information and ideas presented through spoken words and sentences (3.80) • 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. (3.20)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 14 employers surveyed representing 61 employees in this occupation.

Career Path: Physical Therapy (PT) Aides

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

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Personal and Home Care Aides	Short-term OJT	$8.11
Physical Therapist Aides	Moderate-term OJT	$11.09
Occupational Therapist Aides	Moderate-term OJT	$13.63
Opticians, Dispensing	Long-term OJT	$15.52
Psychiatric Technicians	Associate degree	$17.43
Licensed Practical and Licensed Vocational Nurses	Post-secondary training	$18.05
Occupational Therapist Assistants	Associate degree	$18.89
Physical Therapist Assistants	Associate degree	$20.16
Respiratory Therapists	Associate degree	$21.66
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 Estella Mendoza

What is your job title?
I am a Physical Therapy Aide.

What type of work do you do?
As a Physical Therapy Aides, I have to be with patients and handle basic office/clerical duties. I update notes on charts and continue the physical therapy exercise(s) with the patient. I have to do anything that the physical therapist may not have the time for, although he has to co-sign everything that I do. I take care of a lot of paperwork.

What are the things that attracted you to this type of work?
I like helping people and seeing them recover.

What are the tasks you perform at work (skills)?
You have to know how to do the paper work, which includes knowing how to deal with the insurance companies. Knowing the exercises for the patients is important, too. You must be able to gauge a patient's abilities to find out if they should increase or decrease the exercises.

If you were starting over to be a Physical Therapy Aide, knowing what you know now, how would you better prepare yourself?
I think I'd learn more about the exercise equipment.

What keeps you wanting to do this type of work?
I think it's a really fun job. You meet people who really can't do anything, and then two weeks later they can do a lot more than before. For example, if they came here after shoulder surgery or something…and four weeks later they can dress themselves and do things around the house. That's a really great process to watch.

What qualities, in your opinion, make a good Physical Therapy Aide?
You have to be positive all the time, no matter what. Every person that we have is always in pain. Sometimes it's worse and sometimes it's better, but they're still in pain. If you're in a bad mood, it can make them feel worse. So, someone who's pleasant, has a good outlook, and smiles all the time will help them feel a little bit better.

Physical Therapy (PT) 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:	$8.00 - $14.38/hr	$12.75/hr
New Hires/Exp'd:	$8.00 - $24.00/hr	$15.00/hr
Exp'd/After 3 Years:	$11.50 - $25.00/hr	$17.00/hr

Hours: Many jobs are 36-40 hours per week. Many other jobs are 8-28 hours per week.

Benefits: EMPLOYER PAID: Some employers provide medical insurance. Most provide a vacation, sick leave, and a retirement plan. Some also provide dental and life insurance. SHARED COST: Some employers provide medical insurance and dental insurance. For part-time employees: Some employers provide medical insurance. Many provide a vacation and sick leave. Some also provide a retirement plan.

Training, Experience, and Other Requirements

License: Required for this occupation; contact the State Medical Board, Physical Therapy Examining Committee at 916-263-2550 for licensing information.

Education: Many employers require an associate degree for job entry. Many others are willing to accept a high school level education.

Experience: Most employers do not require prior 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.

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 240-295 Physical Therapy Assistants currently employed in the North Bay Counties. Local surveys indicate about 50% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 10-15 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 Therapy Assistants is expected to grow much faster than the average through the year 2008. However, Federal legislation imposing limits on reimbursement for therapy services may continue to adversely affect the job market for Physical Therapy Assistants in the near term.

Other Information

Where the Jobs Are: Offices of physical therapists, hospitals, and clinics. Nationally, less than 1% are self-employed.

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

Important 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 (4.66)
- 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 (4.33)
- 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 (3.50)

Important Skills:
- Talking to others to effectively convey information (3.83)
- Teaching others how to do something (3.66)
- Being aware of others' reactions and understanding why they react the way they do (3.50)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.20)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (3.80)
- 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. (3.20)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 15 employers surveyed representing 27 employees in this occupation.

Career Path: Physical Therapy (PT) Assistants

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

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Personal and Home Care Aides	Short-term OJT	$8.11
Physical Therapist Aides	Moderate-term OJT	$11.09
Occupational Therapist Aides	Moderate-term OJT	$13.63
Opticians, Dispensing	Long-term OJT	$15.52
Psychiatric Technicians	Associate degree	$17.43
Licensed Practical and Licensed Vocational Nurses	Post-secondary training	$18.05
Occupational Therapist Assistants	Associate degree	$18.89
Physical Therapist Assistants	Associate degree	$20.16
Respiratory Therapists	Associate degree	$21.66
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 Sara Hernandez

What is your job title?
Physical Therapy Assistant

What type of work do you do?
I work hands-on with patients doing exercises and rehabilitation for injuries or strengthening purposes. After surgery, muscles react differently and we work to get them back to normal. We do this using modalities such as ultrasound or electrical stimulation. We also have them do some exercise routines to get their muscles back to their normal strength.

What are the things that attracted you to this type of work?
I like working with the elderly and watching the recovery of people.

What are the tasks you perform at work (skills)?
I do things that the aides do, like assisting the doctor with patient needs. But I also work with them on my own performing what's called joint mobilization. It's a little difficult to understand unless you've been to school for it.

If you were starting over to be a Physical Therapy Assistant, knowing what you know now, how would you better prepare yourself?
I would have paid more attention in school. I would also do more outside reading and do some volunteering at different physical therapy places, because actually being there and seeing what goes on is the better way to learn.

What keeps you wanting to do this type of work?
It's the satisfaction of knowing that I'm helping someone. I enjoy working with elderly people and watching somebody that's hurt get better. It's nice to know that you were part of their recovery.

What qualities, in your opinion, make a good Physical Therapy Assistant?
I know a lot of people that go into the field and don't really know too much about it. They heard a few things and then decided to go that route before they did some volunteering work. Understanding what you're getting yourself into is really important because it will affect the way you treat people.

Plumbers, Pipefitters, and Steamfitters

Plumbers, Pipefitters, and Steamfitters assemble, install, alter and repair pipe systems (metal, plastic, ceramic, composition, etc.) that carry water, steam, air, or other liquids or gases. Does not include Plumbers and Pipefitters who primarily install and repair heating, air conditioning, and refrigeration systems (OES 875020).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.67 - $13.00/hr	$10.00/hr
New Hires/Exp'd:	$9.00 - $22.00/hr	$15.00/hr
Exp'd/After 3 Years:	$15.00 - $29.83/hr	$24.50/hr

Hours: Almost all jobs are 35-45 hours per week.

Benefits: EMPLOYER PAID: Most employers provide medical insurance and a vacation. Many also provide a retirement plan. Some provide dental insurance, vision insurance, and sick leave. A few provide life insurance. SHARED COST: A few employers provide dental and vision insurance.

Training, Experience, and Other Requirements

License: Not required, except for individuals who want to be licensed as plumbing contractors; contact the Contractors State License Board at 916-255-3900 for licensing information.

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: Many employers do not require prior experience. Many others require 6-36 months of prior experience. Most employers are willing to accept training as a substitute for experience.

Training: Apprenticeship training takes about 5 years to complete and to achieve journey-level status. However, no local programs were identified for this occupation.

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

Medium. There are approximately 820 - 1,000 Plumbers currently employed in the North Bay Counties. Local surveys indicate less than 5% are female. A few jobs are union.

Employment Trends

The growth rate is projected to be the slower than the average for all occupations through the year 2004. About 20-25 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 Plumbers is expected to grow more slowly than the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Plumbing, heating, and air conditioning contractors. Nationally, about 12% are self-employed.

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

Important Knowledge:	• Knowledge of materials, methods, and the appropriate tools to construct objects, structures, and buildings (4.20) • Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (4.20) • Knowledge of equipment, tools, mechanical devices, and their uses to produce motion, light, power, technology, and other applications (2.60)
Important Skills:	• Installing equipment, machines, wiring, or programs to meet specifications (3.60) • Repairing machines or systems using the needed tools (3.40) • Determining the kind of tools and equipment needed to do a job (3.40)
Important Abilities:	• The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged (4.75) • 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 (4.75) • The ability to make precisely coordinated movements of the fingers of one or both hands to grasp, manipulate, or assemble very small objects (4.25)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 16 employers surveyed representing 180 employees in this occupation.

Career Path: Plumbers, Pipefitters, and Steamfitters

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Helper or Laborer Helpers-Plumbers, Pipefitters, and Steamfitters Short-term OJT $12.62/hr	**Journeyman Plumber** Plumbers, Pipefitters, and Steamfitters Long-term OJT $21.01/hr	**Foreman**	**Plumbing Contractor**
Apprentice			

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Woodworking Machine Operators and Tenders, Except Sawing	Moderate-term OJT	$9.96
Grips and Set-Up Workers, Motion Picture Sets, Studios, and Stages	Short-term OJT	$10.09
Bench Workers, Jewelry	Long-term OJT	$11.28
Timing Device Assemblers, Adjusters, and Calibrators	Work experience	$11.57
Helpers--Installation, Maintenance, and Repair Workers	Short-term OJT	$11.57
Electrical and Electronic Equipment Assemblers	Post-secondary training	$11.90
Rough Carpenters	Long-term OJT	$20.30
Boat Builders and Shipwrights	Long-term OJT	$20.30
Pipe Fitters	Long-term OJT	$21.01
Plumbers	Long-term OJT	$21.01
Aircraft Structure Assemblers, Precision	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 Mark Zunie

What is your job title?
I am a plumber.

What kind of work do you do?
I install water and waste systems so people can wash dishes, take a bath, take a shower, etc. I design the layout as well.

What are the things that attracted you to this type of work?
My friend mentioned a plumbing position to me at a prison that was being built. Within the first day, I was drilling holes in concrete, cutting pieces of metal and bolting them to the floors. I enjoyed the quick learning process and the hands-on orientation of the job.

What kind of things do you do at work (skills)?
I install heaters, water lines, and gas lines. I install the entire plumbing system in a new building. I have a lot of tools that I have either bought or had to make myself.

If you were starting over to be a Plumber, knowing what you know now, how would you better prepare yourself?
I would have studied more math. This job requires the constant measuring of many different things; you have to figure out what size pipes you need, how strong the water pressure will be, and where outlets and faucets will be installed. Sometimes you even have to know some trigonometry, because if you don't, you'll end up cutting something incorrectly, or damaging something else.

What keeps you wanting to do this type of work?
I would say the variety of it. The job changes constantly- from renovations, like putting in hot tubs and heaters, to working on a high rise using iron materials, to getting rain water from the roof or waste from sewage lines. It's very hard to get bored in this line of work.

What qualities make an exceptional Plumber?
Doing things right the first time, I would say. You can always do a quick job on something that no one will see, but it will catch up to you later. Problem solving skills are very good to have, too. You have to be very inventive sometimes to assess something and know how to get the job done without wasting time or materials.

Police Patrol Officers

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:	$15.14 - $28.77/hr	$22.22/hr
New Hires/Exp'd:	$17.84 - $29.02/hr	$24.04/hr
Exp'd/After 3 Years:	$20.14 - $31.78/hr	$27.31/hr

Hours: All employers surveyed report that their jobs range from 36-44 hours per week. Shiftwork is necessary because protection must be provided around the clock. Junior officers frequently work weekends, holidays, and nights. Police Officers are required to work at any time their services are needed and may work long hours during investigations. In most jurisdictions, whether on or off duty, officers are expected to be armed and to exercise their arrest authority whenever necessary.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required; however, to qualify as a Police Officer you must be between the ages of 21-37 and be a U.S. Citizen. You must also pass various tests, a background investigation, drug screening, and an oral interview. Police Officers must be in excellent physical condition. Persons convicted of a felony are disqualified from employment.

Education: All employers surveyed require a high school diploma or equivalent for job entry.

Experience: Most employers report that they do not always require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 3-12 months. Most employers are willing to accept training as a substitute for experience.

Training: Almost all employers require completion of police academy training. Most employers report that word processing software skills are important.

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 614 employees in 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

Large. There are approximately 1,335 – 1,630 Police Officers currently employed in the North Bay Counties. Local surveys indicate about 10% are female. Almost all jobs are union.

Employment Trends

The growth rate is projected to be the same as 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 35-45 job openings are projected per year due to separations (workers retiring or leaving the occupation).Nationwide, employment of Police Officers is expected to increase faster than the average for all occupations through 2010. A more security-conscious society and concern about drug-related crimes should contribute to the increasing demand for police services.

Other Information

Where the Jobs Are: Cities and the California Highway Patrol. (Counties employ Deputy Sheriffs.) Nationally, less than 1% are self-employed.

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

Important Knowledge:	• Knowledge of weaponry, public safety, and security operations, rules, regulations, precautions, prevention, and the protection of people, data, and property (Rating: 5.00) Law, Government and Jurisprudence: Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process (4.66)
Important 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 (4.33) • Being aware of others' reactions and understanding why they react the way they do (4.33) • Using logic and analysis to identify the strengths and weaknesses of different approaches (4.33)
Important Abilities:	• The ability to communicate information and ideas in speaking so others will understand (4.66) • The ability to quickly respond (with the hand, finger, or foot) to one signal (sound, light, picture, etc.) when it appears (4.50) • 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 (4.33)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Police Patrol Officers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Cadet/Junior Police Officer	**Police Officer** Police Patrol Officers Moderate-term OJT $25.82/hr	**Corporal or Sergeant**	**Lieutenant or Captain** First-Line Supervisors/Managers of Police and Detectives Work experience $37.35/hr
Reserve Police Officer or Community Service Officer		**Detective** Police Detectives Work experience $29.09/hr	**Deputy Chief or Chief**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Security Guards	Short-term OJT	$9.30
Animal Control Workers	Short-term OJT	$12.46
Ambulance Drivers and Attendants, Except Emergency Medical Technicians	Short-term OJT	$12.49
Private Detectives and Investigators	Long-term OJT	$16.37
Transit and Railroad Police	Moderate-term OJT	$18.27
Sheriffs and Deputy Sheriffs	Moderate-term OJT	$25.82
Highway Patrol Pilots	Bachelor degree	$25.82
Police Patrol Officers	Moderate-term OJT	$25.82
Police Detectives	Work experience	$29.09
Criminal Investigators and Special Agents	Work experience	$29.09
First-Line Supervisors/Managers of Police and Detectives	Work experience	$37.35

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 Roxanne Thompson

What are some of the job titles you've held previously?
I actually came from a totally different industry.

What kind of work do you do in a typical day?
Check out my patrol car and work my way towards my assigned zone. During the day I make traffic stops and respond to all calls given to me by dispatch. There are a wide variety of possibilities everyday. Calls can include domestic disturbances, homicides, drug busts, accidents, disturbances of the peace, drunken in public, and deaths by natural causes; basically any call made to 911 that needs a response. During the day I try and keep up on my reports as much as possible. More often than not I finish the paperwork back at the station after my patrol is done. The more involved a scene is, the more paperwork necessary. There have been times when I got on shift at 9am one day, and have not gotten off shift until 4am the next day.

What was it that attracted you to this type of work?
I have wanted to be a Police Officer ever since I was a teenager. I went into a different career, but still always wanted to do police work. I have a friend who is an FBI agent, and another who works for the Oakland Police Department; they both encouraged me to pursue becoming a Police Officer.

What knowledge, skills and abilities are important in this kind of work?
You need to be streetwise, you need to be able to read people, and you have to be a quick thinker and a cautious person. You need to have good writing skills, good communication skills, and the ability to remain calm in tense situations. You have to have good instincts and the ability to diffuse situations. You must be able to work with a wide variety of people from all different walks of life.

What is the best preparation for someone who wants to go into this occupation?
You can go through recruitment with a police department and they will put you through the academy, or you can put yourself through the academy and then apply for positions that are advertised as being open. Some large departments have their own academies so you need to know where you would like to work and then see what they require. There is a battery of background investigations, psychological testing, agility testing, and a lie detector test that you go through during the hiring and screening process. So you need to be prepared for a long process.

What is it that keeps you wanting to do this kind of work?
I enjoy the type of work I do and I enjoy trying to help people. Things are constantly changing, every day is different, and every call is different. So I like the variety that this job gives me.

What qualities make for an exceptional Police Officer?
A quick thinker and someone with the ability to stay calm and diffuse volatile situations. Someone with good instincts and quick reflexes. You have to be extremely observant and aware of your surroundings at all times.

What are the next steps in your career path?
I am not exactly sure what my next steps are going to be, but I am interested in the K-9 unit. I love dogs and think it would be great to have one as a partner.

Property and Real Estate Managers and Administrators

(Also known as Property Managers.)

Property and Real Estate Managers and Administrators plan, organize, direct, control, or coordinate real estate property management, purchase, sales and leasing activities. Their work involves management of buildings or properties, management of real estate buying and selling activities for clients or employers, and management of rented or leased housing units, buildings, or land (including rights-of-way). Does not include workers whose duties are not primarily managerial or who are engaged primarily in direct buying or selling of real estate. (OES 150110)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.81 - $17.00/hr	$13.00/hr
New Hires/Exp'd:	$7.81 - $26.37/hr	$16.16/hr
Exp'd/After 3 Years:	$12.81 - $36.06/hr	$21.61/hr

Some employers report that their Property Managers may also receive bonuses, profit sharing, and/or commission income.

Hours: Almost all jobs are 37-48 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required, except for individuals who want to be licensed as Real Estate Agents or Brokers; contact the California Department of Real Estate at 916-227-0931 for licensing information.

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

Experience: Many employers require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 1-5 years. Many employers are willing to accept training as a substitute for experience.

Training: Most employers either require or prefer a real estate license. Good speaking, writing, computer, and financial skills, as well as an ability to tactfully deal with people, are essential in property management. Almost all employers report that word processing and spreadsheet software skills are important.

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 540-660 Property Managers currently employed in the North Bay Counties. Local surveys indicate about 70% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. About 5-10 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 Property Managers is projected to increase faster than the average for all occupations through the year 2010. Many job openings are expected to occur as managers transfer to other occupations or leave the labor force. Opportunities should be best for those with a college degree in business administration, real estate, or a related field, and for those who attain a professional designation.

Other Information

Where the Jobs Are: Property management firms and real estate offices. Nationally, about 37% 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 or transfer.

Important 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 (4.40)
- Knowledge of laws, legal codes, court procedures, precedents, government regulations, executive orders, agency rules, and the democratic political process (3.40)
- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (3.40)

Important Skills:
- Talking to others to effectively convey information (4.40)
- Listening to what other people are saying and asking questions as appropriate (4.00)
- Motivating, developing, and directing people as they work, identifying the best people for the job (4.00)
- Weighing the relative costs and benefits of a potential action (4.00)

Important Abilities:
- The ability to add, subtract, multiply, or divide quickly and correctly (4.40)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.40)
- The ability to communicate information and ideas in speaking so others will understand (4.20)
- The ability to read and understand information and ideas presented in writing (4.20)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

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 97 employees in this occupation.

Career Path for Property and Real Estate Managers and Administrators

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Administrative Assistant Executive Secretaries and Administrative Assistants Work experience $18.05/hr	**Assistant Property Manager or On-Site Manager**	**Property Manager** Property, Real Estate, and Community Association Managers Bachelor degree $21.36/hr	**Broker or Owner**
Building Maintenance Worker		**Real Estate Agent** Real Estate Sales Agents Post-secondary training $18.34/hr	

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Welfare Eligibility Workers and Interviewers	Moderate-term OJT	$14.13
Real Estate Sales Agents	Post-secondary training	$18.34
Archivists	Masters degree	$20.25
Curators	Masters degree	$20.25
Property, Real Estate, and Community Association Managers	Bachelor degree	$21.36
Paralegals and Legal Assistants	Associate degree	$22.41
Vocational Education Teachers, Postsecondary	Bachelor + work exp	$24.20
Personnel Recruiters	Work experience	$25.23
Storage and Distribution Managers	Work experience	$30.30
Purchasing Managers	Bachelor + work exp	$32.15
Agents and Business Managers of Artists, Performers, and Athletes	Bachelor degree	$47.07

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 John McKay

What are some of the job titles you've held previously?
This is the only position I have held in this field.

What kind of work do you do in a typical day?
I deal with and try to resolve owner and tenant issues regarding the properties. I review the rent rolls and make sure that tenants have paid rent on time, and follow up if they haven't. I approve tenant applications and I sign contracts. We are in a smaller organization, so I also fill in as the Financial Manager, the Human Resources Manager, the General Manager and the Marketing Manager. So the rest of my day is filled up with those tasks.

What was it that attracted you to this type of work?
I had intended to get into real estate. However I did not find working nights and weekends attractive. I was more interested in managing a company.

What knowledge, skills and abilities are important in this kind of work?
You should have a real estate license. You should read as much as possible about the legal rights of tenants. Although you are not the tenant's agent, you have to adhere to their legal rights. You should quickly get a good background on tenant landlord issues. You need to know how to manage and run an organization. You need good communication skills, both verbal and written. You need computer skills, because we use software programs to manage the accounts.

What is the best preparation for someone who wants to go into this occupation?
You should have a good business background. You need to have real estate knowledge and, once again, you need to be knowledgeable about tenant landlord issues.

What is it that keeps you wanting to do this kind of work?
We are continuing to grow the company. We are adding more accounts and making more money. This job is still meeting my social needs of working a normal workweek. I get freedom in my schedule.

What qualities make for an exceptional Property and Real Estate Manager?
Being able to manage people, communication skills, and knowledge of the business.

What are the next steps in your career path?
My goal is to get my own Broker's license so at some point I will be able to set up my own property management company.

Psychiatric Technicians

(Also known as Licensed Psychiatric Technicians and Psych Techs.)

Psychiatric Technicians provide nursing care to mentally ill, emotionally disturbed, or mentally retarded patients and participate in rehabilitation and treatment programs. They help with personal hygiene, and administer oral medications and hypodermic injections, following physician's prescriptions and hospital procedures. They monitor patients' physical and emotional well-being and report to medical staff. (OES 329310)

Wages and Benefits

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	$18.58 - $20.14/hr	$18.84/hr	—	—
New Hires/Exp'd:	$19.00 - $21.02/hr	$19.68/hr	$14.86 - $16.83/hr	$16.07/hr
Exp'd/After 3 Years:	$20.23 - $21.62/hr	$21.14/hr	$16.72 - $21.64/hr	$18.38/hr

Hours: Most jobs are 40 hours per week. Some jobs are part-time or on-call, ranging from 16-32 hours per week. Most employers report that swing shifts and graveyard shifts are common for this occupation.

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 (0) — = Insufficient Data

Many employers report that they also provide continuing education benefits.

Training, Experience, and Other Requirements

License: Required for this occupation; contact the State Board of Vocational Nursing at 916-263-7800 for information.

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

Experience: Many employers report that they do not always require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 6-12 months. Some employers are willing to accept training as a substitute for experience.

Training: Almost all employers require completion of a Licensed Psychiatric Technician training program. Workers in this occupation should be tactful, patient, understanding, healthy, emotionally stable, dependable, and have a desire to help people. They should also be able to work as part of a team, have good communication skills, and be willing to perform repetitive, routine tasks.

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: 9 employers surveyed representing 422 employees in this occupation.

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

Small. There are approximately 435-535 Psychiatric Technicians currently employed in the North Bay Counties. Local surveys indicate about 50% are female. Almost all jobs are union.

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 5-10 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Psychiatric Technicians is expected to grow as fast as the average through the year 2010. The number of jobs in hospitals, where one-half of Psychiatric Technicians work, will decline due to attempts to contain costs by limiting inpatient psychiatric treatment. However, employment in other sectors will rise in response to a number of factors including the growth in the number of older persons (many of whom will require mental health services), increasing public acceptance of formal treatment for drug abuse and alcoholism, and a lessening of the stigma attached to those receiving mental health care.

Other Information

Where the Jobs Are: Most Psychiatric Technicians work in State hospitals. Others work in county facilities, private institutions, and community psychiatric and addiction treatment centers. Nationally, less than 1% are self-employed.

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements. Many fill openings by hiring employee referrals. Many others recruit applicants through internet job listings. Some fill job openings by hiring referrals from schools or training programs and/or through word-of-mouth.

Important 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 (4.83)
- Knowledge of human behavior and performance, mental processes, psychological research methods, and the assessment and treatment of behavioral and affective disorders (4.83)
- 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)

Important Skills:
- Being aware of others' reactions and understanding why they react the way they do (4.33)
- Actively looking for ways to help people (3.83)
- Listening to what other people are saying and asking questions as appropriate (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)

Important 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 (3.80)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Psychiatric Technicians

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Psychiatric Aide Post-secondary training $11.79/hr	**Psychiatric Technician** Associate degree $17.43/hr	**Supervisor**	**Mental Health Counselor**
Nurse Aide Nursing Aides, Orderlies, and Attendants Post-secondary training $9.76/hr	**Licensed Vocational Nurse** Licensed Practical and Licensed Vocational Nurses Post-secondary training $18.05/hr	**Psychiatric or Registered Nurse** Registered Nurses Associate degree $27.82/hr	**Mental Health or Substance Abuse Social Worker**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Personal and Home Care Aides	Short-term OJT	$8.11
Child Care Workers	Post-secondary training	$9.18
Home Health Aides	Post-secondary training	$9.75
Physical Therapist Aides	Moderate-term OJT	$11.09
Social and Human Service Assistants	Associate degree	$13.50
Psychiatric Technicians	Associate degree	$17.43
Licensed Practical and Licensed Vocational Nurses	Post-secondary training	$18.05
Physical Therapist Assistants	Associate degree	$20.16
Respiratory Therapists	Associate degree	$21.66
Probation Officers and Correctional Treatment Specialists	Bachelor degree	$26.64
Physician Assistants	Bachelor degree	$34.04

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 Joe Aultman

What are some of the job titles you've held previously?
I have been an Auto Mechanic and I basically did manual labor until about 12 years ago. My Aunt is an LCSW (Licensed Clinical Social Worker) and I was interested in it, so I went back to school and got into the mental health nursing field.

What kind of work do you do in a typical day?
I do every aspect of patient care, from helping them get up in the morning, getting breakfast going, handing out medications, checking vital signs, and providing counseling. Basically, whatever it takes to get them through the day.

What was it that attracted you to this type of work?
Helping people out. If my family members needed mental health care, I would want somebody like myself working with them; somebody that is in a caring position.

What knowledge, skills, and abilities are important in this kind of work?
Being able to recognize behavioral issues outside the norm. If somebody is denying that they are hearing voices, or having auditory hallucinations, you need to be able to identify that they are indeed having these experiences. You have to be knowledgeable of medications, their side effects, and what they are used for. Medication is a big part, because when they are having thought process problems, a lot of the medications have side effects. So you have to be on the ball with that and recognize the little things to help keep the patients from being over-medicated, or from having an allergic reaction. You need to possess people skills and be able to relate to people in crisis situations. It comes with experience, but it is definitely good to have that skill first.

What is the best preparation for someone who wants to go into this occupation?
You can go to a junior college program to get your education and to get ready for the state board exam. Then you should have some basic knowledge of nursing. There is a lot of nursing involved, but Psychiatric Technicians are specialized in the mental health part of it. It is more behavioral psychological stuff.

What is it that keeps you wanting to do this kind of work?
Job satisfaction. Seeing somebody come in and, six to ten days later, they are feeling better and are able to communicate. They can tell you that they appreciate the help, but even if they don't voice their appreciation, you can always tell.

What qualities make for an exceptional Psychiatric Technician?
The ability to accept that every person is different and every situation affects every person differently. Being able to be objective in most situations.

What are the next steps in your career path?
Probably getting my RN (Registered Nurse) license. There are two routes, one is mental health social work, and the other one is becoming an RN. There is a lot of use for RNs in the mental health field.

Quality Assurance Managers

(Also known as Quality Control Managers.)

Quality Assurance Managers set up systems, processes and implement new programs. They manage/implement quality, reliability and product safety and administer IS09000 activities. They are responsible for developing and administering quality control programs, and ensure quality control procedures and policies are coordinated throughout the company. They are responsible for establishing testing policies and procedures for maintaining a program that will meet the quality control needs of the entire organization. They are also responsible for assessing compliance to regulatory and manufacturing specs. (Non-OES 169167995)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$10.00 - $19.18/hr	$14.92/hr
Exp'd/After 3 Years:	$12.00 - $27.90/hr	$17.43/hr

Hours: Almost all jobs are 40-55 hours per week.

Benefits: EMPLOYER PAID: Many employers provide medical insurance. Almost all provide a vacation. Most provide sick leave. Many also provide dental insurance. Some provide a retirement plan, vision insurance, and life insurance. SHARED COST: Many employers provide medical insurance. Most provide a retirement plan. Many also provide dental, life, and vision insurance.

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Almost all employers require 1-5 years of related 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. Many also report that database skills are important. Training for this occupation is typically learned on-the-job and varies by industry.

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 200-300 Quality Assurance Managers currently employed in the North Bay Counties. Local surveys indicate about 55% are female.

Employment Trends

Insufficient data; however, almost all employers surveyed expect their employment for this occupation to remain stable over the next two years. Nationwide, employment growth will reflect industry growth and the continuing self-enforcement of government and company regulations and policies, particularly among franchise operations in various industries.

Other Information

Where the Jobs Are: In a variety of manufacturing and production related industries.

Methods Used to Fill Job Openings: Most employers recruit applicants through newspaper advertisements. Many fill openings by hiring employee referrals and/or colleges and universities. Some fill openings by hiring referrals from employment agencies. Some also fill openings through in-house promotion or transfer and/or recruit applicants through internet job listings.

Important Knowledge:
- Knowledge of inputs, outputs, raw materials, waste, quality control, costs, and techniques for maximizing the manufacture and distribution of goods (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 (4.91)
- 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 (3.68)

Important Skills:
- Adjusting actions in relation to others' actions (4.50)
- Inspecting and evaluating the quality of products (4.25)
- Weighing the relative costs and benefits of a potential action (4.16)

Important 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 (4.25)
- The ability to read and understand information and ideas presented in writing (4.08)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 15 employers surveyed representing 29 employees in this occupation.

Career Path: Quality Assurance Managers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Quality Assurance Technician	**Quality Assurance Supervisor**	**Quality Assurance Manager**	**Production Manager** Industrial Production Managers Bachelor + work exp $35.76/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Production, Planning, and Expediting Clerks	Short-term OJT	$16.63
Food Service Managers	Work experience	$19.89
Environmental Compliance Inspectors	Bachelor degree	$22.28
Government Property Inspectors and Investigators	Work experience	$22.28
First-Line Supervisors/Managers of Production and Operating Workers	Work experience	$22.55
Medical and Clinical Laboratory Technologists	Bachelor degree	$26.12
Industrial Production Managers	Bachelor + work exp	$35.76
Petroleum Engineers	Bachelor degree	$38.65
Financial Managers, Branch or Department	Bachelor + work exp	$39.50
Natural Sciences Managers	Masters + work exp	$40.15
Computer and Information Systems Managers	Bachelor + work exp	$44.34

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 Isidro Laron

What is your job title?
Production Planner.

What kind of work do you do?
I look ahead- six months ahead, a year ahead. Based on the forecast provided for us from the sales group, I figure out what we'll need in the future. Mostly this is in regard to staffing. On a daily basis we figure out how much candy to make and when to make it. In a nutshell, that's what I do.

What are the things that attracted you to this type of work?
I started out at the company 24 years ago as a production worker right out of high school. A friend told me about this candy company that had decided to hire young kids in hopes that maybe they'd grow with the company. So I started out as a Production Worker and worked up to the position I'm in now. I've worked in almost all the departments. The good thing about this company is that if you know what you're doing and they (management) think that you're capable of doing a job, they will promote you. So they recognize you and you're just not about a number.

What kind of things do you do at work (skills)?
Using a program called MRT, (Material Requirement Transaction) I keep track of what product we have on hand. It tells you what's being ordered against what you have in stock. It also tells you what's forecasted so I can decide if we need more of anything. I use it to keep track of re-order points, too. For instance, if the forecast is for 200 cases, you'll still have the 200 cases you need for certain. But you need a safety spot incase there's an unexpected increase.

If you were starting over to be an Industrial Production Manager, knowing what you know now, how would you better prepare yourself?
I would definitely go to college and get a degree in business. Since I work with so many numbers, I'd say I'd want to know math a little better than I did when I started.

What keeps you wanting to do this type of work?
You need to take a look at the total picture. I look at the growth of the company on a yearly basis with regard to where we started and where we're going. I ask myself, "Am I part of this growth?" or "Did I make a difference in this growth?" This company is very family oriented. How I can make a difference in this company is what keeps me motivated. I also enjoy the different challenges that I face on a daily basis; I can count on two hands the number of times that I have been bored over a span of 24 years.

What qualities make an exceptional Industrial Production Manager?
You need to know the people that work for you- how they are or handle stress, knowing what they're capable of doing, and what makes them tick. They say that you should treat people the same way, and to a point that's correct. However, you need to adjust the way you treat different people in order for you to be a successful manager. So the way I would do it is to treat people fairly, but always in relation to who and how they are.

Radiologic Technologists

(Includes Ultrasound Techs.)

Radiologic Technologists take X-rays and CAT scans or administer nonradioactive materials into patients blood stream 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

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	$23.00 - $25.00/hr	$24.00/hr	$19.00 - $24.04/hr	$21.63/hr
New Hires/Exp'd:	$23.46 - $28.00/hr	$25.50/hr	$16.00 - $27.00/hr	$21.04/hr
Exp'd/After 3 Years:	$24.69 - $30.00/hr	$26.50/hr	$21.63 - $28.85/hr	$25.48/hr

Hours: Many jobs are 35-40 hours per week. Some jobs are 17-30 hours per week. A few jobs are temporary or on-call. Most employers report that swing shifts are common for this occupation. Many also report that graveyard shifts are common.

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 (0) ▬ = Insufficient Data

Training, Experience, and Other Requirements

License: License requirements vary depending on the type of work to be done; contact the State Department of Health Services, Food, Drug, and Radiation Safety Division at 916-445-0931 for information.

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

Experience: Many employers report that they do not always require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 6-24 months. A few employers are willing to accept training as a substitute for experience.

Training: Most employers require completion of a vocational training program which take 2-3 years to complete. Classroom instruction is supplemented by clinical experience in one or more hospitals. In college programs, graduates complete a degree as well as certification requirements.

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: 19 employers surveyed representing 440 employees in this occupation.

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

Small. There are approximately 430-525 Radiologic Technologists currently employed in the North Bay Counties. Local surveys indicate about 70% are female. Many jobs are union.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. About 5-10 job openings are projected per year due to a net increase in occupation size. About 5-10 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Radiologic Technologists is expected to grow faster than the average for all occupations through 2010. The demand for diagnostic imaging increases as the population grows and ages.

Other Information

Where the Jobs Are: Hospitals, clinics, medical groups, and laboratories with radiology services. Nationally, less than 1% are self-employed.

Methods Used to Fill Job Openings: Most employers fill openings by hiring employee referrals. Many also recruit applicants through newspaper advertisements. Some fill openings by hiring referrals from schools and training programs. Some recruit applicants through internet job listings and/or trade journal ads.

Important 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)
Important 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)
Important 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) • 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 *Source: O*NET Database version 3.0*

Career Path for Radiologic Technologists

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Radiologic Technologist Post-secondary training or Associate degree $22.13/hr	**Chief Radiologic Technologist/Supervisor**	**Manager**	**Radiology Department Director** Medical and Health Services Managers Bachelor degree + work exp $35.81/hr
	Radiologic Specialist (CT Scanning, Angiography, Magnetic Resonance Imaging)	**Radiation Therapist** Associate degree $26.98/hr	**Radiologist**

Occupations with Similar Skill Patterns

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?
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 a typical day?
I take the x-rays that are ordered for the day. I also do all the ordering of medical and office supplies, help the nurses, room the patients, set up trays, and clean up. We apply the halter-monitors, set up treadmills, EKG's and all the other extra tests that we do here. We're a small family practice clinic, so experience is broad.

What was it that attracted you to this type of work?
You are never bored. It's exciting and fun; that's what drew me into it. I chose x-ray because it was more technically oriented as far as working with machines and taking pictures. There's always something different and new and when exciting technology comes around you are right on the cutting edge.

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. Knowledge as far as the medical background you need pretty much comes with the training. Of course, people skills are important. You should also have a tolerance for seeing disease or people that are sick and who look bad.

What is the best preparation for someone who wants to go into this occupation?
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. 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. 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.

Receptionists and Information Clerks

Receptionists and Information Clerks answer inquiries 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. Does not include Receptionists who primarily operate switchboards (OES 553050).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$9.00 - $13.15/hr	$11.00/hr
New Hires/Exp'd:	$8.00 - $14.25/hr	$11.00/hr
Exp'd/After 3 Years:	$10.00 - $17.26/hr	$13.50/hr

Hours: Most jobs are 35-40 hours per week. Some jobs are temporary or on-call.

Benefits: EMPLOYER PAID: Some employers provide medical insurance. Almost all provide a vacation. Most provide sick leave. Many also provide a retirement plan. Some provide dental and life insurance. SHARED COST: Some employers provide medical insurance. Many provide a retirement plan. Some also provide dental and vision insurance.

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Many employers do not require prior experience. Many others require 9-24 months of prior experience. Many employers are willing to accept training as a substitute for experience.

Training: Most employers report that word processing skills are important. Many also report that spreadsheet skills are important. Some report that database 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 applicants who meet their hiring standards. This indicates a **good outlook** for qualified job seekers. Annual turnover estimated to be very low (less than 10%). This turnover rate does not include temporary/on-call employment.

Size of Occupation

Very large. There are approximately 5,085 - 6,215 Receptionists and Information Clerks currently employed in the North Bay Counties. Local surveys indicate about 90% are female.

Employment Trends

The growth rate is projected to be the same as the average for all occupations through the year 2004. About 135-165 job openings are projected per year due to a net increase in occupation size. About 100-120 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Receptionists is expected to grow faster than the average for all occupations through 2008. This increase will result from rapid growth in services industries including physician's offices, law firms, temporary help agencies, and consulting firms where most receptionists are employed.

Other Information

Where the Jobs Are: In a wide variety of industries, with about 1 in 4 employed by healthcare and dental services firms. Nationally, about 1% are self-employed.

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

Important 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 (4.50) • 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 (4.16) • Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (3.75)
Important Skills:	• Talking to others to effectively convey information (4.08) • Actively looking for ways to help people (3.91) • Listening to what other people are saying and asking questions as appropriate (3.91)
Important Abilities:	• The ability to speak clearly so that it is understandable to a listener (4.66) • The ability to communicate information and ideas in speaking so others will understand (4.66) • The ability to listen to and understand information and ideas presented through spoken words and sentences (4.33)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 16 employers surveyed representing 36 employees in this occupation.

Career Path: Receptionists and Information Clerks

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Receptionist Receptionists and Information Clerks Short-term OJT $11.31/hr	**Secretary or Administrative Assistant** Secretaries, Except Legal, Medical, and Executive Post-secondary training $14.34/hr	**Executive Secretary** Executive Secretaries and Administrative Assistants Work experience $18.05/hr	**Office Manager/Supervisor** First-Line Supervisors, Administrative Support Work Experience $21.85/hr
			Bookkeeper Bookkeeping, Accounting, and Auditing Clerks Moderate-term OJT $15.31/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Hotel, Motel, and Resort Desk Clerks	Short-term OJT	$9.28
Counter and Rental Clerks	Short-term OJT	$9.73
Tellers	Moderate-term OJT	$10.52
Receptionists and Information Clerks	Short-term OJT	$11.31
Office Clerks, General	Post-secondary training	$12.18
Reservation and Transportation Ticket Agents	Short-term OJT	$13.08
Secretaries, Except Legal, Medical, and Executive	Post-secondary training	$14.34
Customer Service Representatives, Utilities	Short-term OJT	$15.03
Loan Interviewers and Clerks	Short-term OJT	$15.74
Public Address System and Other Announcers	Work experience	$16.69
Insurance Claims 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 Myria Jones

What is your job title?
Administrative Clerk II.

What kind of work do you do?
I answer phones. I do database keyboarding, sort and distribute mail, take messages, and give out applications. I also direct people to the right place when they come in looking for an appointment.

What are the things that attracted you to this type of work?
I like to help people.

What kind of things do you do at work (skills)?
You have to have a lot of patience to deal with people who are low income. They really don't have a lot going for them right now, so I try to motivate them to get what they need and then direct them to the employment side. Once they find employment, they're much happier with their lives and with themselves.

If you were starting over to be a Receptionist, knowing what you know now, how would you better prepare yourself?
I would do a lot more training because I came in from working in customer service. You need to know what to say, so you don't anger them, but I learned the hard way that interpersonal skills are vital. You want people leaving here happy, but you should also remember that you can't please everyone.

What keeps you wanting to do this type of work?
Again, it's the people. At first they come in here all mad and upset, but in the long run they appreciate that you were the one that helped them. And you're the one who helped them to finally find employment. It's interesting to watch them begin and struggle, but sometimes they have better jobs than I do after they leave.

What qualities make an exceptional Receptionist?
Patience. Attitude. Respect for the clients. You can't ask for anything more than that because if you have respect for them, they'll have respect for you.

Registered Nurses (RNs)

(Includes Staff Nurses.)

Registered Nurses administer nursing care to ill or injured persons. This group includes administrative, public health, industrial, private duty, and surgical nurses. Licensing or registration is required. Does not include Nursing Instructors and Teachers (OES 325020).

Wages and Benefits

	Non-Union	Median	Union	Median
New Hires/Inexp'd:	$14.38 - $21.00/hr	$18.00/hr	—	—
New Hires/Exp'd:	$10.23 - $30.00/hr	$20.00/hr	$21.00 - $29.00/hr	$25.08/hr
Exp'd/After 3 Years:	$17.58 - $35.00/hr	$25.00/hr	$23.00 - $33.00/hr	$28.45/hr

Hours: Many jobs are 40-60 hours per week. Some jobs are 7-32 hours per week. Some other jobs are temporary or on-call, ranging from 10-28 hours per week.

Benefits: EMPLOYER PAID: Most employers provide medical insurance. Almost all provide a vacation and sick leave. Most also provide vision insurance and a retirement plan. Many provide dental and life insurance. SHARED COST: Some employers provide a retirement plan, dental, vision, and life insurance. For part-time employees: Many employers provide medical insurance and other benefits, including a vacation and sick leave. Some also provide dental insurance, vision insurance, a retirement plan, and life insurance.

Training, Experience, and Other Requirements

License: Required for this occupation; contact the State Board of Registered Nursing at 916-322-3350 for information.

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

Experience: Many employers do not require prior experience. Many others require 6-24 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Many RNs develop specialties, which usually require additional training or certification. Specialty areas include emergency room, surgery, intensive care, outpatient/clinic, anesthetist, pediatrics, obstetrics/gynecology, oncology and hospice, among others. Some employers report that word processing skills are important.

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%). This turnover rate does not include temporary or on-call employment.

Size of Occupation

Very large. There are approximately 6,785 - 8,290 Registered Nurses currently employed in the North Bay Counties. Local surveys indicate about 90% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. About 150-180 job openings are projected per year due to a net increase in occupation size. About 100-120 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Registered Nurses is expected to grow faster than the average for all occupations through 2008.

Other Information

Where the Jobs Are: Hospitals and clinics. Nationally, about 1% are self-employed.

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

Important 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 (4.83)
- Knowledge of plant and animal living tissue, cells, organisms, and entities, including their functions, interdependencies, and interactions with each other and the environment (4.50)
- 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 (4.33)

Important Skills:
- Talking to others to effectively convey information (4.16)
- Actively looking for ways to help people (4.16)
- Being aware of others' reactions and understanding why they react the way they do (3.91)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.75)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.66)
- 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. (4.66)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 17 employers surveyed representing 1,185 employees in this occupation.

Career Path: Registered Nurses

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Nurse Aide Nursing Aides, Orderlies, and Attendants Post-secondary training $9.76/hr	**Licensed Vocational Nurse** Post-secondary training $18.05/hr	**Registered Nurse** Associate Degree $27.82/hr	**Director of Nursing**
			Medical or Health Services Manager Bachelor + work exp $35.81/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Nursing Instructors and Teachers, Postsecondary	Masters degree	—
Internists, General	Professional degree	—
Obstetricians and Gynecologists	Professional degree	—
Medical Assistants	Post-secondary training	$13.26
First-Line Supervisors, Administrative Support	Work experience	$21.85
Kindergarten Teachers, Except Special Education	Masters degree	$22.60
Medical and Clinical Laboratory Technologists	Bachelor degree	$26.12
Registered Nurses	Associate degree	$27.82
Orthotists and Prosthetists	Post-secondary training	$27.84
Family and General Practitioners	Professional degree	$38.16
Pediatricians, General	Professional degree	$48.43

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 Rebecca Tabion

What is your job title?
I am a Charge Nurse and Night Supervisor.

What kind of work do you do?
I am a Registered Nurse. I am in charge of 30-31 patients on my ward and nursing for the night shift.

What are the things that attracted you to this type of work?
I wanted to go into agriculture. I was living in the Philippines and started taking the courses to do so. I had a few days off from school and my aunt talked with me. She encouraged me to be a nurse and pointed out that if I wanted to go to America, that nurses could easily get jobs. After starting classes in nursing, I realized that I liked helping and taking care of patients and making sure that their needs came first. I have been in nursing over 20 years. I enjoy when I help people and get praise from the patient, their families, doctors, or others. I can also work the shifts that I want to, and there are lots of jobs in many different places that make use of nurses.

What kind of things do you do at work (skills)?
I make sure the other "Nurses" (Nursing Assistants) take care of the patients. This means I make sure they bathe them, keep them clean, turn them, feed them, and I also help in doing this. I give the medications. I also start, monitor, and stop IV's. I talk with the patients and try to make them comfortable, because although some have families, most do not. I also have patients on "in-home" dialysis, which also requires monitoring. As the supervisor I help the other wards assess patients. We assess them to see if we need to call the doctor because the doctors almost never come to see the patients. If someone passes, I must follow the county laws and under certain circumstances, call the Coroner. If they have not been seen by a doctor in the last 20 days or have fallen recently, I must call the Coroner. I also call the family if there is any, or the public guardian.

If you were starting over to be a Registered Nurse, knowing what you know now, how would you better prepare yourself?
I would say that you must go to school and love nursing. You must be sure that this is what you want to do.

What keeps you wanting to do this type of work?
The money is not bad and there is lots of work. I live in Sacramento and drive to work here because this facility is like a family. Don't get me wrong- we have our problems but it's like a family. I enjoy helping and serving others and getting praise. I feel special.

What qualities make an exceptional Registered Nurse?
You must know how to do procedures and give care by following the steps. You must love nursing, as it can be a "dirty" job caring for the patients. An exceptional Nurse will talk with the patients, laughs with them, and even sings with them. She is caring and can follow the steps. She deals well with the patients and their families.

Residential Counselors

(Includes Activities Directors.)

Residential Counselors coordinate activities for residents of care and treatment institutions, boarding schools, college fraternities or sororities, children homes, or similar establishments. Their work includes developing or assisting in the development of program plans for individuals, maintaining household records, and assigning rooms. They counsel residents in identifying and resolving social or other problems. They order supplies and determine need for maintenance, repairs, and furnishings. (OES 273070)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$8.00 - $16.83/hr	$13.00/hr
New Hires/Exp'd:	$8.00 - $16.83/hr	$13.36/hr
Exp'd/After 3 Years:	$9.00 - $19.18/hr	$15.00/hr

Hours: Most jobs are 40 hours per week. Some jobs are part-time or on-call, ranging from 8-30 hours per week. Many employers report that swing shifts are common for this occupation. A few report that graveyard shifts are common as well.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers report that they do not always require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 6-24 months. Many employers are willing to accept training as a substitute for experience.

Training: Specialized training or experience in a particular field, such as art, music, drama, or sports, is an asset for Residential Counselor positions. Some jobs may also require certification in gerontology services or childcare services. Most employers report that word processing software skills are important. Many report that spreadsheet skills are important as well.

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 222 employees in 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 high (30-39%).

Size of Occupation

Medium. There are approximately 810-990 Residential Counselors currently employed in the North Bay Counties. Local surveys indicate about 65% 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. About 15-20 job openings are projected per year due to a net increase in occupation size. About 15-25 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Residential Counselors is projected to increase faster than the average for all occupations through the year 2010.

Other Information

Where the Jobs Are: Residential care facilities. Nationally, less than 1% are self-employed.

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

Important 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)
- Knowledge of human behavior and performance, mental processes, psychological research methods, and the assessment and treatment of behavioral and affective disorders (3.66)
- 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 (3.33)

Important Skills:
- Being aware of others' reactions and understanding why they react the way they do (5.00)
- Listening to what other people are saying and asking questions as appropriate (4.66)
- 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 (4.66)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (3.40)
- The ability to speak clearly so that it is understandable to a listener (3.20)
- 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 (3.20)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Residential Counselors

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Resident Assistant or Caregiver	**Residential Counselor or Activities Director** Residential Advisors Work experience $9.91/hr	**Supervisor or Lead Counselor**	**Activities Coordinator or Manager**
Certified Nursing Assistant (CNA) Nursing Aides, Orderlies, and Attendants Post-secondary training $9.76/hr			**Facilities Manager or Administrator**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	Short-term OJT	$7.52
Residential Advisors	Work experience	$9.91
Demonstrators and Product Promoters	Short-term OJT	$11.36
Dietetic Technicians	Associate degree	$12.85
Social and Human Service Assistants	Associate degree	$13.50
Janitorial Supervisors	Work experience	$15.45
First-Line Supervisors/Managers of Personal Service Workers	Work experience	$16.38
Recreational Therapists	Bachelor degree	$17.03
Child, Family, and School Social Workers	Masters degree	$17.90
Educational, Vocational, and School Counselors	Masters degree	$22.60
Postmasters and Mail Superintendents	Bachelor + work exp	$25.73

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 Diane Penserini

What are some of the job titles you've held previously?
I used to work in retail as a Manager. So basically, I came into this job without any previous experience in this particular field.

What kind of work do you do in a typical day?
I start off the day with an exercise class. I bring in other organizations from the Bay Area, like Napa Adult School, and people who have things of interest to the residents here. I do arts and crafts classes, cooking classes. I perform five classes a day plus outings. I work with people individually and in groups.

What was it that attracted you to this type of work?
In retail you sell and sell and sell, but there is not much satisfaction. I was looking for a career that would give me some job satisfaction. In this particular job, whatever effort you put into it is what you get out of it. The rewards are very great in this particular career. I am doing something here for a lot of people who are put on shelves and are just tucked away. I get great satisfaction in knowing that I am making their days a lot better.

What knowledge, skills and abilities are important in this kind of work?
You have to have a very flexible routine. You need a personality that will mesh with almost any type of individual. You need to have a lot of courage; sometimes the residents are not so nice to you, so you can't take anything personally. You need to be very original and artistic. There are so many diversified people here, so you have to know a little bit about a lot of things.

What is the best preparation for someone who wants to go into this occupation?
I did not go to school, but luckily I had a lot of talent and tools to work with. The average person with no background should go to school. There is an Activities Director program that takes about a year. The program is geared more towards the medical end of it, not a lot of the artsy-craftsy types of activities, but more about how to deal with different types of personalities.

What is it that keeps you wanting to do this kind of work?
It is challenging and rewarding. The pay is not all that great, but the hours are great. I like the feeling of accomplishment that I receive and the fact that everyday is different. It's never boring.

What qualities make for an exceptional Residential Counselor?
I think consistency and the ability to motivate the residents is important, because they have a tendency to just want to stay in their room. You do a lot of promoting and encouraging the residents. It's very challenging. Loving what you are doing will make the difference between a good activities director and one that fails.

What are the next steps in your career path?
I would like to pursue being a Regional Activities Director. I think that is one area that is lacking and I think it is very difficult to come up with a good variety of activities every month. It takes a lot of research. It seems that many places have the same activities every day, but residents need variety. I think we really have a need for people who can direct and who have knowledge of how to obtain a professional staff.

Sales Representatives – Except Scientific and Related Products and Services

(Also known as Sales Reps.)

Sales Representatives, Except Scientific and Related Products and Services, sell goods and services for wholesalers or manufacturers to businesses or groups of individuals. This work requires a substantial knowledge of the items sold. Sales representatives solicit orders from established clients or secure new customers (OES 490080).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$9.59 - $13.00/hr	$10.09/hr
New Hires/Exp'd:	$9.59 - $21.58/hr	$18.22/hr
Exp'd/After 3 Years:	$14.96 - $39.42/hr	$21.00/hr

Some Sales Reps may also receive sales commissions.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Many employers require 1-3 years of prior experience. Many other employers do not require prior experience.

Training: The background needed varies by product line and market. Employers increasingly prefer a bachelor degree as job requirements have become more technical and analytical. Nevertheless, many employers still hire individuals with previous sales experience who do not have a college degree. For some consumer products, factors such as sales ability, personality, and familiarity with brands are as important as a degree. On the other hand, employers selling complex, technical products may require a technical degree in addition to some sales experience. Many employers have formal training programs for beginning Sales Reps. Many employers report that word processing and spreadsheet skills are important.

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 4,130 – 5,050 Sales Reps currently employed in the North Bay Counties. Local surveys indicate about 35% are female.

Employment Trends

The growth rate is projected to be the same as the average for all occupations through the year 2004. About 105-130 job openings are projected per year due to a net increase in occupation size. About 100-120 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Manufacturers' and Wholesale Sales Representatives is expected to grow more slowly than the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Manufacturers and wholesalers. Nationally, about 5% 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 referrals from private employment agencies.

Important Knowledge:	• 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 (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 (4.16) • Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (3.83)
Important Skills:	• Talking to others to effectively convey information (4.66) • Being aware of others' reactions and understanding why they react the way they do (4.33) • Actively looking for ways to help people (4.33)
Important Abilities:	• The ability to communicate information and ideas in speaking so others will understand (5.00) • The ability to speak clearly so that it is understandable to a listener (4.83) • The ability to listen to and understand information and ideas presented through spoken words and sentences (4.66)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

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 85 employees in this occupation.

Career Path for Sales Representatives – Except Scientific and Related Products and Services

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Trainee	**Sales Rep** Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products Moderate-term OJT $24.07/hr	**Sales Manager** Sales Managers Bachelor + work exp $41.45/hr	**District or Regional Sales Manager**
Retail Salesperson Retail Salespersons Short-term OJT $10.43/hr		**Office Manager** First-Line Supervisors, Administrative Support Work experience $21.85/hr	**Marketing Manager** Bachelor + work exp $42.27/hr
Stocker Stock Clerks, Sales Floor Short-term OJT $11.10/hr		**Customer Service Manager** First-Line Supervisors, Customer Service Work experience $21.85/hr	

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Teacher Assistants	Work experience	—
Tour Guides and Escorts	Work experience	$11.34
Secretaries, Except Legal, Medical, and Executive	Post-secondary training	$14.34
First-Line Supervisors, Administrative Support	Work experience	$21.85
Wholesale and Retail Buyers, Except Farm Products	Bachelor degree	$21.92
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	Moderate-term OJT	$24.07
Librarians	Masters degree	$24.08
Administrative Services Managers	Bachelor + work exp	$29.21
Sales Representatives, Mechanical Equipment and Supplies	Moderate-term OJT	$31.81
Sales Engineers	Bachelor degree	$33.40
Sales Managers	Bachelor + work exp	$41.45

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 Sam Link

What are some of the job titles you've held previously?
Sales Manager, Sales Executive, Target Accounts Manager, and Marketing Manager.

What kind of work do you do in your current job and what do you do in a typical day?
I solicit Fortune 500 companies and identify their key business initiatives and then match our business application solutions to their initiatives. We then try to demonstrate the benefit of using our business solutions towards those initiatives. A typical day consists of cold calling businesses, speaking with CEO's, CIO's, CFO's, etc. I then discuss these conversations with internal technical people to see if we can identify matches. I conduct Internet research to find companies that may be a match for our product. I also make presentations to customers.

What was it that attracted you to this work?
I enjoy talking to people, finding out interesting things about them. When I was in college I was always the first one who would visit and talk. I would volunteer to do presentations and public speaking opportunities. It is exciting to me to meet face-to-face with new clients and people in general.

What knowledge, skills, and abilities are important in this kind of work?
You definitely need to be well spoken, using proper English and courtesy. I believe a diverse background is helpful so that you have a more rounded understanding of the customers needs. You should also have a good handle on history and current events as they may impact the needs of a business. You should also have a thorough understanding of product information so that you can present to the customer in terms that they understand.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Get a good understanding of what your goals, objectives, and needs are. Then do some research on companies that best fit your expectations. You need to develop interpersonal skills that allow you to deal with rejection and rudeness and turn it into a positive.

What is it that keeps you wanting to do this kind of work?
It's the excitement and opportunity to learn something new about the client. I can then take this and keep in the back of my mind, and perhaps it will become useful at a later time. I like the fact that I get to deal with people one-on-one.

What qualities make for an exceptional Sales Representative?
A person definitely needs to be self-driven, be determined to meet their goal. They should also be creative in coming up with approaches and strategies to achieve their goals.

Salespersons – Parts

(Also known as Parts Counterperson.)

Parts Salespersons sell spare and replaceable parts and equipment from behind a counter in agency, repair shop, or parts store. They determine the make, year, and type of part needed by observing the damaged part or listening to a description of the malfunction. They read a catalogue to find stock number, price, etc., and fill the customer's order from stock. Does not include workers whose primary responsibilities are to receive, store, and issue materials, equipment, and other items from the stockroom. (OES 490140)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.00 - $13.15/hr	$9.14/hr
New Hires/Exp'd:	$8.00 - $19.73/hr	$11.99/hr
Exp'd/After 3 Years:	$11.00 - $25.00/hr	$17.26/hr

A few employers report that their Parts Salespersons may also receive commission earnings.

Hours: Almost all jobs are 35-46 hours per week. A few jobs are 24-25 hours per week. Some employers report that swing shifts are common for this occupation.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Many employers report that they do not always require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 6-36 months. Almost all employers are willing to accept training as a substitute for experience.

Training: Employers generally provide on-the-job training for this occupation, although some mechanical knowledge is helpful. Courses in automobile mechanics, business mathematics, merchandising, selling and English, which can be taken either in a high school or community college, are good preparation for the occupation.

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 121 employees in 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

Large. There are approximately 1,390 – 1,700 Parts Salespersons currently employed in the North Bay Counties. Local surveys indicate about 15% are female. A few jobs are union.

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 40-50 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Parts Salespersons is expected to decline through the year 2010.

Other Information

Where the Jobs Are: Auto and home supply stores, automobile dealers, boat dealers, and motorcycle dealers. Nationally, less than 1% are self-employed.

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

Important Knowledge:
- Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (3.83)
- 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)
- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (3.66)
- 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 (3.66)

Important Skills:
- Actively looking for ways to help people (4.33)
- Talking to others to effectively convey information (4.00)
- 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 (3.66)
- Being aware of others' reactions and understanding why they react the way they do (3.66)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.33)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.33)
- The ability to read and understand information and ideas presented in writing (4.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Salespersons – Parts

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Parts Runner Couriers and Messengers Short-term OJT $10.25/hr	**Parts Salesperson** Parts Salespersons Moderate-term OJT $13.85/hr	**Supervisor or Manager** First-Line Supervisors, Customer Service Work experience $21.85/hr	**District or Regional Manager**
Warehouse Worker Stock Clerks- Stockroom, Warehouse, or Storage Yard Short-term OJT $11.10/hr	**Forklift Operator** Industrial Truck and Tractor Operators Short-term OJT $13.53		**Warehouse Supervisor or Manager** Storage and Distribution Managers Work experience $30.30/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Combined Food Preparation and Serving Workers, Including Fast Food	Short-term OJT	$7.26
Service Station Attendants	Short-term OJT	$8.47
Cashiers	Short-term OJT	$9.08
Counter and Rental Clerks	Short-term OJT	$9.73
Retail Salespersons	Short-term OJT	$10.43
Tellers	Moderate-term OJT	$10.52
Mail Clerks, Except Mail Machine Operators and Postal Service	Short-term OJT	$10.67
Reservation and Transportation Ticket Agents	Short-term OJT	$13.08
Precision Devices Inspectors and Testers	Work experience	$13.27
Parts Salespersons	Moderate-term OJT	$13.85
Postal Service Clerks	Moderate-term OJT	$18.84

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 Tammy Bell

What are some of the job titles you've held previously?
When I started out I was a Cashier.

What kind of work do you do in a typical day?
I work behind the counter. I sell auto parts, answer phones, and pull the parts for the customers.

What was it that attracted you to this type of work?
I am very people oriented. I enjoy interacting and talking with people, and I enjoy meeting all different kinds of people. Being behind the parts counter allows me to learn a lot from our customers. Everyday is a learning experience, but you are never going to know everything behind the counter.

What knowledge, skills and abilities are important in this kind of work?
You have to have customer service skills. You have to have phone skills. You need to be detail oriented and accurate, getting all the correct information so you can better service the customer.

What is the best preparation for someone who wants to go into this occupation?
It is basically one of those jobs that you learn on the job. You need to learn to observe people, listening and watching how others serve people.

What is it that keeps you wanting to do this kind of work?
I love the people I work with. All the guys I work with are great. The customers are fantastic. I like what I do, plus I think I am good at it. I enjoy helping people, and that is what I get to do all day.

What qualities make for an exceptional Parts Salesperson?
You need to be able to listen to the customer and to accurately write the information down that they give you. If you are not sure about something, you can't hesitate to ask someone. Customer service is a big thing here; you have to want to serve the customer.

What are the next steps in your career path?
I have been working the parts counter for about 9 months, and I am not sure exactly where I want to go after this. Maybe outside sales, or maybe into wholesale.

Salespersons - Retail (Except Vehicle Sales)

(Also known as Sales Associates and Sales 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. Does not include workers who work primarily as Cashiers (OES 490112).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$5.75 - $9.00/hr	$7.00/hr
New Hires/Exp'd:	$6.00 - $10.00/hr	$8.50/hr
Exp'd/After 3 Years:	$8.25 - $14.00/hr	$10.00/hr

Hours: Many jobs are 15-32 hours per week. Many other jobs are 40-45 hours per week.

Benefits: EMPLOYER PAID: Many employers provide medical insurance. Most provide a paid vacation. Many also provide paid sick leave. Some provide dental and vision insurance. SHARED COST: Some employers provide medical insurance and other benefits, including a retirement plan, dental insurance, vision insurance, and life insurance. For part-time employees: A few employers provide medical insurance.

Training, Experience, and Other Requirements

License: Not required.

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 do not require prior experience.

Training: Employers generally provide on-the-job training for this occupation, although related training programs are available.

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

Very large. There are approximately 16,025 - 19,585 Retail Salespersons currently employed in the North Bay Counties. Local surveys indicate about 50% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 525-640 job openings are projected per year due to a net increase in occupation size. About 555-675 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Retail Salespersons is expected to increase about as fast as the average for all occupations through the year 2008 due to anticipated growth in retail sales created by a growing population.

Other Information

Where the Jobs Are: Retailers and specialty shops. Nationally, about 3% are self-employed.

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

Important Knowledge:	• 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 (4.75) • 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 (4.41) • Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (3.75)
Important Skills:	• Actively looking for ways to help people (4.66) • Talking to others to effectively convey information (4.08) • Being aware of others' reactions and understanding why they react the way they do (3.83)
Important Abilities:	• The ability to communicate information and ideas in speaking so others will understand (4.66) • The ability to listen to and understand information and ideas presented through spoken words and sentences (4.33) • The ability to speak clearly so that it is understandable to a listener (4.16)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 16 employers surveyed representing 688 employees in this occupation.

Career Path: Salespersons-Retail (Except Vehicle Sales)

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Stock Clerk	**Salesperson (Retail)** Short-term OJT $10.43/hr	**Assistant Manager**	**Store Manager**
		Dept. Manager First-Line Supervisors/Managers of Retail Sales Workers Work Experience $18.07/hr	

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Combined Food Preparation and Serving Workers, Including Fast Food	Short-term OJT	$7.26
Counter and Rental Clerks	Short-term OJT	$9.73
Retail Salespersons	Short-term OJT	$10.43
Tellers	Moderate-term OJT	$10.52
Telemarketers	Short-term OJT	$11.63
Transportation Attendants, Except Flight Attendants and Baggage Porters	Short-term OJT	$12.67
Door-To-Door Sales Workers, News and Street Vendors, and Related Workers	Short-term OJT	$12.70
Parts Salespersons	Moderate-term OJT	$13.85
Billing, Cost, and Rate Clerks	Moderate-term OJT	$14.04
Bill and Account Collectors	Moderate-term OJT	$14.57
Insurance Claims 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 Arica Grafton

What is your job title?
My main title is Sales Associate.

What type of work do you do?
I deal with credit cards and am in charge of different activities that we conduct to boost credit card applications. We also work with hundreds of women every day as they come in to shop for personal items. We assist them in finding correct sizes as well as what's comfortable for them. It's a very large business and there's a lot of volume that comes through. We ensure that our sales are high enough for the company.

What are the things that attracted you to this type of work?
I like working with and helping people on a more personal level. This company has a good balance of work and personal involvement with the clientele and I enjoy that. I've had different jobs in the medical field where you deal with fewer people, but at a higher level of intensity. This type of work is done more at the surface level, but it's also very personal. There's a lot of variety as well. Something different happens every day and I enjoy that, too. It's very spontaneous.

What are the tasks that you perform at work?
We get credit card sign-ups frequently, which is really important for the company and the different promotions we run. We meet once a month after hours to change the floor set of the store. We promote products for the new season and stay organized to keep up with the different products coming out. We work one on one with the women and try to make it easy for them.

If you were starting over to be a Retail Salesperson, knowing what you know now, how would you better prepare yourself?
If I knew what I know now, I wouldn't have been as shy and I wouldn't have withdrawn myself as much. I would have gone out earlier and found another job that involved helping people so that I understood the whole concept of caring about the customer. I also would try to get some experience so that I had a better perspective of sales. My idea was that all salespeople were pushy and presumptuous, so I didn't know how to get the balance to where I was selling, but also helping.

What keeps you wanting to do this type of work?
I like helping people and making them happy and that's what makes me happy, so it's a good place for me. I like the flexibility and the closeness with my managers and the team. Overall it lets me keep a good balance of life and work, but again it's also very rewarding to help people.

What qualities, in your opinion, make a good Retail Salesperson?
A big heart, a lot of compassion, and not just the typical wheeler/dealer salesman attitude. Also, the ability to really see what customers need or want will help you make a sale and leave the customer feeling satisfied with your service. It's also important that you really care about the people you're working with and you're working for.

Secretaries – Except Legal and Medical

(Includes 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. Does not include Medical and Legal Secretaries (OES 551080).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$9.00 - $11.51/hr	$10.35/hr
New Hires/Exp'd:	$10.00 - $15.00/hr	$12.00/hr
Exp'd/After 3 Years:	$11.50 - $19.18/hr	$14.38/hr

A few Secretaries may also receive bonuses.

Hours: Almost all jobs are 40 hours per week. A few 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers require or prefer 1-3 years of prior experience.

Training: Secretaries acquire skills in various ways. Training ranges from high school vocational education programs that teach office skills and keyboarding to 1-2 year programs in office administration offered by vocational and technical schools and community colleges. Almost all employers report that word processing and spreadsheet skills are important. Most also report that database skills are important.

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 83 employees in this occupation.

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 low (10-19%).

Size of Occupation

Very large. There are approximately 6,715 – 8,390 Secretaries (except legal and medical) currently employed in the North Bay Counties. Local surveys indicate about 95% are female. Few jobs are union.

Employment Trends

The growth rate is projected to be much faster than the average for all occupations through the year 2004. About 70-80 job openings are projected per year due to a net increase in occupation size. About 110-130 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, little or no change is expected in the employment of Secretaries over the 1998-2008 period.

Other Information

Where the Jobs Are: In a wide variety of industries, including educational services, government agencies, and temporary employment agencies. Nationally, less than 5% are self-employed.

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

Important 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 (5.00)
- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (4.00)

Important Skills:
- Listening to what other people are saying and asking questions as appropriate (4.00)
- Adjusting actions in relation to others' actions (4.00)
- Communicating effectively with others in writing as indicated by the needs of the audience (3.83)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.83)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.66)
- The ability to read and understand information and ideas presented in writing (4.33)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Secretaries – Except Legal and Medical

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Receptionist Receptionists and Information Clerks Short-term OJT $11.31/hr	**Secretary** Secretaries, Except Legal, Medical, and Executive Post-secondary training $14.34/hr	**Administrative Assistant** Executive Secretaries and Administrative Assistants Work experience $18.05/hr	**Customer Service Manager** First-Line Supervisors, Customer Service Work experience $21.85/hr
Clerical Support Worker		**Supervisor or Office Manager** First-Line Supervisors, Administrative Support Work experience $21.85/hr	**Bookkeeper** Bookkeeping, Accounting, and Auditing Clerks Moderate-term OJT $15.31/hr
			Sales Rep Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products Moderate-term OJT $24.07/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Cashiers	Short-term OJT	$9.08
Tellers	Moderate-term OJT	$10.52
Receptionists and Information Clerks	Short-term OJT	$11.31
Office Clerks, General	Post-secondary training	$12.18
Reservation and Transportation Ticket Agents	Short-term OJT	$13.08
Billing, Cost, and Rate Clerks	Moderate-term OJT	$14.04
Secretaries, Except Legal, Medical, and Executive	Post-secondary training	$14.34
Word Processors and Typists	Post-secondary training	$14.35
Bookkeeping, Accounting, and Auditing Clerks	Moderate-term OJT	$15.31
Loan Interviewers and Clerks	Short-term OJT	$15.74
Librarians	Masters degree	$24.08

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 Lori Lucero

What are some of the job titles you've held previously?
Administrative Manager, Customer Service Manager, Legal Secretary.

What kind of work do you do in your current job and what do you do in a typical day?
I am responsible for the administrative functions for the office. This includes assisting the Director and regional analyst, schedule meetings, take and transcribe meeting minutes, make travel arrangements for the office staff, as well as other clerical functions. I am also responsible for personnel matters such as time sheet input, new hire paperwork, and other related items.

What was it that attracted you to this work?
I enjoy working with different types of people. I also like helping them complete their tasks. The variety of tasks is also something that I like about my job. There is always something a little bit different to do each day.

What knowledge, skills, and abilities are important in this kind of work?
You will need computer skills especially the ability to use word processing and spreadsheet applications. You need to be very organized and be able to handle multiple tasks simultaneously. You need good communication skills both verbal and written. I would also recommend that someone posses basic typing and short hand skills. These are old school skills, but I still find that they are needed. I also think the ability to focus on a particular task is important.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
Again, you will need some fundamental computer knowledge like Windows, MS Word, MS Excel, etc. I also think you need to find and internship or work experience program. Make sure you like this type of work because it is not for everyone. You need to have good people skills because essentially a lot of your job is taking care of other people.

What is it that keeps you wanting to do this kind of work?
I like working with people, and helping them. I like the dynamics of this job in that there is always something new to learn and do. I like that I get to be somewhat of my own boss. I take direction from management, but it is mostly up to me to figure the best way to meet the task.

What qualities make for an exceptional Secretary?
The qualities that I feel are important are organization, having the ability to work well with people with various personalities, and you need to be a self-starter and disciplined.

Sheet Metal Workers

(Includes HVAC Installers who are primarily Sheet Metal Workers.)

Sheet Metal Workers fabricate, assemble, install, and repair sheet metal products and equipment, such as control boxes, drainpipes, and furnace casings. Their work may involve setting up and operating fabricating machines to cut, bend, and straighten sheet metal; shaping metal over anvils, blocks, or forms using a hammer; operating soldering and welding equipment to join sheet metal parts; and inspecting, assembling, and smoothing seams and joints of burred surfaces. (OES 891320)

Wages and Benefits

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	$9.00 - $11.00/hr	$9.23/hr	$8.00 - $15.21/hr	$9.00/hr
New Hires/Exp'd:	$31.07 - $31.30/hr	$31.30/hr	$12.00 - $20.00/hr	$15.00/hr
Exp'd/After 3 Years:	$31.07 - $39.00/hr	$31.30/hr	$17.50 - $35.00/hr	$25.00/hr

Hours: Most jobs are 38-40 hours per week. Some jobs are 35-36 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

Education: All employers report that they require a high school diploma or equivalent for job entry.

Experience: Almost all employers report that they do not always require prior experience.

Training: Apprenticeship training is generally is considered to be the best way to learn this trade. Apprenticeship programs consist of 4 or 5 years of on-the-job training and a minimum number of hours per year of classroom instruction. Apprenticeship programs provide comprehensive instruction in both sheet metal fabrication and installation.

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 281 employees in 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 540-660 Sheet Metal Workers currently employed in the North Bay Counties. Local surveys indicate less than 5% are female. Most jobs are union.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2006. About 15-25 job openings are projected per year due to a net increase in occupation size. About 10-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Sheet Metal Workers in construction is expected to increase faster than the average for all occupations through 2010, reflecting growth in the demand for sheet metal installations as more industrial, commercial, and residential structures are built. The need to install energy-efficient air-conditioning, heating, and ventilation systems in the increasing stock of old buildings and to perform other types of renovation and maintenance work also should boost employment. Average job growth, however, is projected for Sheet Metal Workers in manufacturing.

Other Information

Where the Jobs Are: Plumbing, heating, and air conditioning contractors, sheet metal manufacturers and installers, and federal government agencies. Nationally, less than 1% are self-employed.

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

Important Knowledge:
- Knowledge of inputs, outputs, raw materials, waste, quality control, costs, and techniques for maximizing the manufacture and distribution of goods (4.33)
- Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (3.66)

Important Skills:
- Installing equipment, machines, wiring, or programs to meet specifications (4.33)
- Controlling operations of equipment or systems (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)

Important Abilities:
- 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 (4.20)
- The ability to exert maximum muscle force to lift, push, pull, or carry objects (3.20)
- The ability to quickly and repeatedly make precise adjustments in moving the controls of a machine or vehicle to exact positions (3.00)
- 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 (3.00)
- The ability to imagine how something will look after it is moved around or when its parts are moved or rearranged (3.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Sheet Metal Workers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Helper or Apprentice Helpers, Production Workers Short-term OJT $9.12/hr	**Sheet Metal Worker** Sheet Metal Workers Long-term OJT $18.60	**Lead Person or Shop Foreman**	**Shop Manager** First-Line Supervisors/Managers of Construction Trades and Extractive Workers Work experience $22.55/hr
	HVAC Mechanic or Installer Heating and Air Conditioning Mechanics Long-term OJT $18.82/hr		**Owner**

Occupations with Similar Skill Patterns

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
Grinding, Honing, Lapping, and Deburring Machine Set-Up Operators	Moderate-term OJT	$10.98
Cabinetmakers and Bench Carpenters	Long-term OJT	$11.18
Outdoor Power Equipment and Other Small Engine Mechanics	Long-term OJT	$13.49
Patternmakers, Wood	Long-term OJT	$13.65
Metal Fabricators, Structural Metal Products	Long-term OJT	$14.04
Lathe and Turning Machine Tool Setters, Operators, and Tenders Metal and Plastic	Moderate-term OJT	$14.55
Sheet Metal Workers	Long-term OJT	$18.60
Model Makers, Wood	Long-term OJT	$18.63
Electric Home Appliance and Power Tool Repairers	Long-term OJT	$20.00
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 Rex Waterman

What are some of the job titles you've held previously?
I have worked in this industry for 50 years. I started as an Apprentice and have been a Shop Foreman, as well as a Field Superintendent.

What kind of work do you do in a typical day?
Right now I do estimating, some shop work, and I go and work in the field once in a while. When someone starts out in this industry they would be in the field most of the day, loading up the truck with sheet metal, going to various houses throughout the area installing gutters or downspouts on the sheet metal side. Or be in attics installing air conditioning and heating units. Most would be working with a journeyman.

What was it that attracted you to this type of work?
My father thought it was a good trade. I took a trade class in high school. One day a business agent of the Sheet Metal Workers Union came in looking for some young men interested in sheet metal, and I was one of the guys chosen.

What knowledge, skills and abilities are important in this kind of work?
Wanting to work is of the utmost importance. Also being willing to learn the trade and being able to visualize the finished product before you start the project.

What is the best preparation for someone who wants to go into this occupation?
I would say there are two ways. If they are fortunate enough to have someone in the sheet metal trade who they can learn under, that is a great resource for experience. Or you can go into a union apprenticeship program.

What is it that keeps you wanting to do this kind of work?
I like to work with my hands and I enjoy working with a lot of different people. I have had a lot of fun on the job over the years.

What qualities make for an exceptional Sheet Metal Worker?
Being able to visualize what the project is going to be like when a particular job is done. You also have to have an understanding of how to treat people. You have a lot of involvement with the homeowners, and you have to be able to relate with them and keep the customers satisfied.

What are the next steps in your career path?
I would like to teach the fundamentals of the trade.

Stock Clerks – Stockroom, Warehouse, Storage Yard

(Also known as Warehouse Workers and Material Handlers.)

Stock Clerks receive, store, and issue materials, equipment, and other items from stockroom, warehouse, or storage yard, and keep records and compile stock reports. Does not include Stockroom Laborers and workers whose primary duties involve shipping, weighing, and checking (OES 580230).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.25 - $10.00/hr	$7.50/hr
New Hires/Exp'd:	$6.75 - $11.00/hr	$8.75/hr
Exp'd/After 3 Years:	$7.00 - $15.00/hr	$10.50/hr

Hours: Many jobs are 40-44 hours per week. Many other jobs are 8-30 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%) ■■ = Some (20-39%) ■ = Few (1-19%)
□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Almost all employers do not require prior experience.

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

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 86 employees in 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 3,180 – 2,470 Stock Clerks currently employed in the North Bay Counties. Local surveys indicate about 30% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 105-125 job openings are projected per year due to a net increase in occupation size. About 40-50 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, job prospects for Stock Clerks should be favorable even though employment is expected to grow more slowly than the average for all occupations through 2008.

Other Information

Where the Jobs Are: Warehouses, distribution centers, department stores, building supply stores, and grocery stores. Nationally, less than 1% 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 and/or recruit applicants through newspaper advertisements.

Important 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 (4.80) • Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (3.60)
Important Skills:	• Understanding written sentences and paragraphs in work related documents (4.00) • Finding ways to structure or classify multiple pieces of information (4.00) • Listening to what other people are saying and asking questions as appropriate (3.80)
Important Abilities:	• 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 (4.00) • The ability to produce many rules so that each rule tells how to group (or combine) a set of things in a different way. (3.80) • The ability to bend, stretch, twist, or reach out with the body, arms, and/or legs (3.80)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Stock Clerks – Stockroom, Warehouse, Storage Yard

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Stock Clerk Stock Clerks- Stockroom, Warehouse, or Storage Yard Short-term OJT $11.10/hr	**Salesperson or Sales Rep** Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products Moderate-term OJT $24.07/hr	**Supervisor** Sales Managers Bachelor + work exp $41.45/hr	**Warehouse Manager** Storage and Distribution Managers Work experience $30.30/hr
Stocker Stock Clerks, Sales Floor Short-term OJT $11.10/hr	**Grocery Checker**	**Assistant Manager** First-Line Supervisors/Managers of Retail Sales Workers Work experience $18.07/hr	**Store Manager**
Courtesy Clerk Packers and Packagers, Hand Short-term OJT $8.22/hr			

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Stock Clerks- Stockroom, Warehouse, or Storage Yard	Short-term OJT	$11.10
Library Assistants, Clerical	Short-term OJT	$11.52
Driver/Sales Workers	Moderate-term OJT	$12.17
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	Moderate-term OJT	$13.15
Weighers, Measurers, Checkers, and Samplers, Recordkeeping	Short-term OJT	$13.21
Production Inspectors, Testers, Graders, Sorters, Samplers, Weighers	Work experience	$13.27
Statement Clerks	Moderate-term OJT	$14.04
Cargo and Freight Agents	Short-term OJT	$16.80
Automatic Teller Machine Servicers	Post-secondary training	$16.89
Septic Tank Servicers and Sewer Pipe Cleaners	Moderate-term OJT	$17.54
Licensing Examiners and Inspectors	Work experience	$22.28

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 Chris Kane

What are some of the job titles you've held previously?
Installer of heating and air conditioning equipment, Duct Installer, Duct Cleaner.

What kind of work do you do in your current job and what do you do in a typical day?
I organize the shop and warehouse. I make sure we have an adequate supply of heating and air conditioning parts on hand for repairs in our parts room, and I stock new heating and air conditioning units as well. A typical day consists of inventory management, distributing parts and equipment to the repair crews, and placing orders to replenish supplies. I am also responsible for keeping the warehouse clean.

What was it that attracted you to this work?
I have always liked jobs that involved organization. Cleaning was also something that I enjoy. It was just a natural fit to work for this company. We clean and maintain HVAC equipment and do repairs. I like the fact that I get to manage the warehouse. It was a natural fit for me, organizing and managing the warehouse.

What knowledge, skills, and abilities are important in this kind of work?
Time management is important. A person should have good planning skills, be able to think ahead and anticipate what parts may be needed during a certain season. Inventory management skills are important as well. This job does require that someone be able to lift at least 50lbs. Basic computer skills are also required as we keep our inventory on the computer.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
A person should have good personal appearance, clean and neat. People skills are important, as you need to be able to work with Drivers, Installers, and a variety of people. For this particular industry a person should have a basic understanding of heating and air conditioning systems.

What is it that keeps you wanting to do this kind of work?
I like this job because it is low stress, I have a set schedule, and I work with minimal supervision.

What qualities make for an exceptional Stock Clerk?
I think a person needs to have exceptional people skills, and be very organized. Another key skill is time management. Someone needs to know how to prioritize their responsibilities, and make sure that all of the tasks are completed by the end of the day.

Systems Analysts – Electronic Data Processing

(Also known as Computer Systems Analysts.)

Systems Analysts, Electronic Data Processing, analyze business, scientific, and technical problems for application to electronic data processing systems. Does not include persons working primarily as Engineers, Mathematicians, Programmers, or Scientists (OES 251020).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	—	—
New Hires/Exp'd:	$11.99 - $33.56/hr	$23.35/hr
Exp'd/After 3 Years:	$19.18 - $40.00/hr	$28.99/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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

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

Training: Most employers report that word processing and spreadsheet skills are important. Many also report that database skills are important.

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 108 employees in 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

Large. There are approximately 1,445 – 1,765 Computer Systems Analysts currently employed in the North Bay Counties. Local surveys indicate about 45% 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 2004. About 85-100 job openings are projected per year due to a net increase in occupation size. About 5-10 job openings are projected per year due to 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: Computer-related services, government agencies, and insurance companies. Nationally, about 8% are self-employed.

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

Important Knowledge:
- Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (5.00)
- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (4.00)
- 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 (3.83)

Important Skills:
- Understanding written sentences and paragraphs in work related documents (4.66)
- Writing computer programs for various purposes (4.66)
- Determining what is causing an operating error and deciding what to do about it (4.66)

Important Abilities:
- The ability to read and understand information and ideas presented in writing (4.83)
- The ability to understand and organize a problem and then to select a mathematical method or formula to solve the problem (4.66)
- 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 *Source: O*NET Database version 3.0*

Career Path for Systems Analysts – Electronic Data Processing

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
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	**Executive Management**
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	
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 Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Computer Operators	Post-secondary training	$16.75
Medical and Clinical Laboratory Technologists	Bachelor degree	$26.12
Computer Security Specialists	Bachelor degree	$29.64
Database Administrators	Bachelor degree	$29.97
Computer Systems Analysts	Bachelor degree	$31.76
Computer Programmers	Bachelor degree	$32.96
Physicists	Doctoral degree	$38.88
Computer Software Engineers, Systems Software	Bachelor degree	$38.93
Computer Software Engineers, Applications	Bachelor degree	$39.47
Computer Hardware Engineers	Bachelor degree	$39.67
Computer and Information Systems Managers	Bachelor + work exp	$44.34

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 Ryan Grant

What are some of the job titles you've held previously?
I actually broke into my computer career as an Office Clerk. It was in this position that I was able to learn and use office computer systems. My titles have ranged from Office Administrator, to Consultant to my current title as Financial Systems Analyst.

What kind of work do you do in your current job and what do you do in a typical day?
I work with accounting software and systems. I provide a lot of technical support on the telephone, work with individual customers and the errors they are encountering. I can provide assistance to a single person's desktop computer or a server for a company that causes an entire department to not be able to function. My day can go from not very stressful to extremely stressful in a matter of seconds. It can be a wide range of issues when the phone rings: anywhere from an accounting error all the way to a virus or a system issue.

What was it that attracted you to this work?
My dad started this company 18 years ago. From the time that I was a little kid I was around computers so I was exposed to technology at an early age. I played games, explored the Internet and gained an understanding of how computers worked; I explored what I could do to test them and also encountered what I shouldn't do that would cause a problem. I became computer literate and had an opportunity to work in the industry that I didn't think I could pass up in the current day and age.

What knowledge, skills, and abilities are important in this kind of work?
I think you need to be a people person and have the ability to work well with others; to get along and have the ability to interact. Patience is also extremely important, not everyone that you work with who calls with a problem is computer literate. The ability to stay current on new technology is also critical since the industry changes constantly.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
There are a lot of courses or certifications that you can take to become educated in the computer industry that are extremely valuable and in high demand right now. In my opinion, these current courses/certifications are the best way to enter into the computer industry. An office administration or business background and experience is also helpful, to provide you hands-on experience and training.

What is it that keeps you wanting to do this kind of work?
I enjoy working with computers; the possibilities are exciting and endless. I also find working with clients who need assistance and providing help to them and their systems is also very rewarding.

What qualities make for an exceptional Systems Analyst?
Patience, flexibility, and good communication skills are qualities that make for an exceptional Systems Analyst. Problem solving and the ability to trouble shoot are also key to being exceptional in this field.

Taxi Drivers and Chauffeurs

Taxi Drivers and Chauffeurs drive automobiles, limousines, custom built sedans, or hearses to transport passengers or cargo. They may drive automobiles for delivery. Does not include Ambulance Drivers and Bus Drivers. (OES 971140)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.00 - $15.00/hr	$9.00/hr
New Hires/Exp'd:	$6.90 - $25.00/hr	$10.00/hr
Exp'd/After 3 Years:	$9.00 - $25.00/hr	$13.19/hr

Some employers report that their Taxi Drivers and Chauffeurs also receive tips.

Hours: Many jobs are 15-25 hours per week. Some jobs are 37-40 hours per week. Some others are 48-55 hours per week. Most employers report that swing shifts are common for this occupation. Many report that graveyard/night shifts are common as well.

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Required for this occupation; local governments set license standards and requirements for Taxi Drivers and Chauffeurs that include minimum qualifications for driving experience and training.

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: All employers surveyed report that they do not always require prior experience.

Training: Local authorities generally require applicants for a Taxi Driver or Chauffeur license to pass a written exam or complete a training program that may include up to 80 hours of instruction. To qualify through either an exam or a training program, applicants must know local geography, motor vehicle laws, safe driving practices, regulations governing taxicabs, and display some aptitude for customer service. Many taxicab and limousine companies sponsor applicants and give them a temporary permit that allows them to drive, although they may not yet have finished the training program or passed the test. Some taxi and limousine companies provide new drivers with on-the-job training.

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 315 employees in 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 330-400 Taxi Drivers and Chauffeurs currently employed in the North Bay Counties. Local surveys indicate about 15% are female.

Employment Trends

The growth rate is projected to be slower 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. Less than 10 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Taxi Drivers and Chauffeurs is expected to grow faster than the average for all occupations through the year 2010, as local and suburban travel increases with population growth. Employment growth will also stem from Federal legislation requiring increased services for persons with disabilities. Opportunities should be best in rapidly growing metropolitan areas.

Other Information

Where the Jobs Are: Taxicab and limousine companies. Nationally, about 25% are self-employed.

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

Important Knowledge:
- Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including their relative costs, advantages, and limitations (4.40)
- 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 (4.00)
- Knowledge of various methods for describing the location and distribution of land, sea, and air masses including their physical locations, relationships, and characteristics (3.60)

Important Skills:
- Controlling operations of equipment or systems (4.80)
- Actively looking for ways to help people (4.00)
- Listening to what other people are saying and asking questions as appropriate (3.40)

Important Abilities:
- The ability to listen to and understand information and ideas presented through spoken words and sentences (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 read and understand information and ideas presented in writing (3.80)
- The ability to add, subtract, multiply, or divide quickly and correctly (3.80)
- The ability to quickly respond (with the hand, finger, or foot) to one signal (sound, light, picture, etc.) when it appears (3.80)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Taxi Drivers and Chauffeurs

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Driver Taxi Drivers and Chauffeurs Short-term OJT $11.12/hr	**Dispatcher** Dispatchers, Except Police, Fire, and Ambulance Moderate-term OJT $15.21/hr	**Operations Manager**	**Owner**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Parking Lot Attendants	Short-term OJT	$7.25
Taxi Drivers and Chauffeurs	Short-term OJT	$8.30
Bus Drivers, School	Moderate-term OJT	$9.34
Office Clerks, General	Post-secondary training	$10.06
Truck Drivers, Light or Delivery Services	Short-term OJT	$10.59
Bus Drivers, Transit and Intercity	Moderate-term OJT	$12.50
Truck Drivers, Heavy	Moderate-term OJT	$14.08
Excavating and Loading Machine Operators	Moderate-term OJT	$14.52
Construction Drillers	Moderate-term OJT	$14.54
Rail Yard Engineers, Dinkey Operators, and Hostlers	Work experience	$17.26
Subway and Streetcar Operators	Moderate-term OJT	$19.83

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 Myles Wenderoth

What are some of the job titles you've held previously?
I have been a Chauffer, a Sales and Marketing Representative, and an Operations Manager.

What kind of work do you do in a typical day?
As a Chauffer, you clean your car and make sure it is ready to go, docking it, and then go pick up your clients and take them where they need to go. In-between, you are cleaning your car and making sure it is presentable every time a customer gets in it.

What was it that attracted you to this type of work?
The money and the fact that there is a lot of room for advancement in this field. Plus I enjoy meeting new people.

What knowledge, skills and abilities are important in this kind of work?
A good driving record is essential. You have to be able to handle a big car and you must be good with people. Maybe anybody can drive a vehicle, but you have to sell yourself and the car, and you have to be able to talk to people.

What is the best preparation for someone who wants to go into this occupation?
This is the type of occupation where you have to want to do this job. You need to familiarize yourself with driving a big vehicle. If the thought of driving a large vehicle bothers you, you have to get over that quickly. You are driving around town in a $100,000 to $200,000 vehicle, so you have to be able to handle it.

What is it that keeps you wanting to do this kind of work?
This is great work. You get to meet new people, and talk to different type of people. Also the money is good and the atmosphere is great.

What qualities make for an exceptional Taxi or Limousine Driver?
The ability to take a bad situation and turn it into something good, an outgoing personality, and an excellent driving record and driving skills.

What are the next steps in your career path?
Starting off as a Chauffer, you could then become a Marketing Representative, and then move into working in the office. From Office Manager, you could become Operations Manager and, if you are lucky, you could become a partner or owner.

Teachers - Elementary School

Elementary School Teachers teach elementary (kindergarten through eighth grade) pupils in public or private schools basic academic, social, and other formative skills. Does not include Special Education Teachers who teach only handicapped pupils (OES 313050).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$12.00 - $25.31/hr	$17.16/hr
New Hires/Exp'd:	$14.39 - $21.37/hr	$17.85/hr
Exp'd/After 3 Years:	$15.00 - $22.47/hr	$19.18/hr

Wages for Teachers are typically paid on an annual basis. For inexperienced new hires, salaries range from $20,000 - $36,000. For experienced new hires, salaries range from $25,000 - $39,000. For experienced employees after 3 years, salaries range from $25,000 - $45,000. Teachers typically work nine months per year.

Hours: Most jobs are 35-45 hours per week. Some jobs are 12-32 hours per week.

Benefits: EMPLOYER PAID: Most employers provide medical insurance and other benefits, including sick leave and dental insurance. Many also provide vision insurance and a retirement plan. Some provide life insurance and a vacation. SHARED COST: Some employers provide medical insurance. Many provide a retirement plan. Some also provide dental, vision, and life insurance. For part-time employees: Most employers provide medical insurance and dental insurance. Many also provide sick leave and a retirement plan. Some provide vision insurance and a vacation. A few provide life insurance.

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: Almost all employers do not require prior experience.

Training: Many employers report that word processing skills are important. A few also report that spreadsheet skills are important.

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 6,245 - 7,635 Elementary School Teachers currently employed in the North Bay Counties. Local surveys indicate about 80% are female. Almost all jobs are union.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. About 145-175 job openings are projected per year due to a net increase in occupation size. About 120-150 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, overall employment of Kindergarten, Elementary, and Secondary School Teachers is expected to increase about as fast as 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% 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 recruit applicants through internet job listings. A few fill openings by hiring unsolicited applicants.

Important 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 the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (4.50)
- Knowledge of human behavior and performance, mental processes, psychological research methods, and the assessment and treatment of behavioral and affective disorders (4.16)

Important Skills:
- Teaching others how to do something (4.83)
- Talking to others to effectively convey information (4.66)
- Using multiple approaches when learning or teaching new things (4.33)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.83)
- The ability to speak clearly so that it is understandable to a listener (4.50)
- The ability to read and understand information and ideas presented in writing (4.50)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 17 employers surveyed representing 500 employees in this occupation.

Career Path: Teachers - Elementary

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Instructional Aide Teacher Assistants Work experience $21,775/yr	**Student Teacher**	**Teacher - Elementary** Elementary School Teachers, Except Special Education Masters degree $48,150/yr	**Instructional Coordinator** Masters degree $25.81/hr
			Vice Principal or Principal (Education Administrator) Masters + work exp $82,301/yr
			Superintendent

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Chemistry Teachers, Postsecondary	Doctoral degree	—
Nursing Instructors and Teachers, Postsecondary	Masters degree	—
Preschool Teachers, Except Special Education	Post-secondary training	$11.51
First-Line Supervisors, Customer Service	Work experience	$18.07
Food Service Managers	Work experience	$19.89
Farm and Home Management Advisors	Bachelor degree	$20.79
Kindergarten Teachers, Except Special Education	Masters degree	$22.60
Dietitians and Nutritionists	Bachelor degree	$23.25
Elementary School Teachers, Except Special Education	Masters degree	$24.08
Compensation, Benefits, and Job Analysis Specialists	Bachelor degree	$25.11
Sales Managers	Bachelor + work exp	$41.45

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 Becky Malmgren

What is your job title?
Elementary Teacher.

What type of work do you do?
I teach all subjects for fourth graders such as math, reading, language arts, social studies, science, physical education, health, and English.

What are the things that attracted you to this type of work?
I've always enjoyed learning and that attracted me to teaching. I am also a mom and I want to be at home with my children as much as I possibly can, so the summers off attract me to it as well. I like it when I teach something the children are able to learn; I love the way they light up and say, "Oh! I understand!"

What are the tasks that you perform at work (skills)?
We cooperate and share ideas, work on committees, and plan and prepare for the year's goals as well as the nine-week goals. We also work closely with the Principal, the parents, and the community's people. We invite them into our classrooms to talk with the children about the careers they do and try to interest the children in their line of work.

If you were starting over to be an Elementary School Teacher, knowing what you know now, how would you better prepare yourself?
I feel I prepared myself fairly well. I volunteered in the schools before I became a teacher, had children in school, and volunteered in their classes. I became a PTO (Parent/Teacher Organization) mom and served on committees all the way up to PTO President. It helps to hold leadership positions in community affairs and I did that. I also took on leadership positions in my church that involves working with children. I really feel like I got my heels in from the ground up.

What keeps you wanting to do this type of work?
I absolutely love the children! They are so eager to learn and improve their skills and I feel I am able to help them accomplish that. It makes me feel successful. They trust you and look up to you and that helps me become a better role model for them. I also feel like I can relate to them. I think that they appreciate that and understand how I really care about them as people. I would encourage anyone who has any interest in children to go into this occupation.

What qualities, in your opinion, make a good Elementary School Teacher?
It's very important to be organized. You have to plan way ahead and yet you have to plan for the very next moment and the very next day as well. You need to be pleasant and outgoing, and I think it's good to be friendly and professional. When you're talking to parents, it is very important to make yourself approachable while maintaining a professional attitude.

Teachers - Preschool

Preschool Teachers instruct children (normally up to 5 years of age) in activities designed to promote social, physical, and intellectual growth needed for primary school in preschool, day care center, or other child development facility. May be required to hold State certification (OES 313030).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.00 - $11.75/hr	$8.50/hr
New Hires/Exp'd:	$7.48 - $12.85/hr	$10.25/hr
Exp'd/After 3 Years:	$8.15 - $15.83/hr	$12.00/hr

Hours: Many jobs are 35-40 hours per week. Many other jobs are 20-30 hours per week.

Benefits: EMPLOYER PAID: Some employers provide medical insurance. Many provide a vacation and sick leave. SHARED COST: Some employers provide medical insurance. For part-time employees: Some employers provide medical insurance and a vacation.

Training, Experience, and Other Requirements

License: Required for this occupation. For public schools, contact the State Commission on Teacher Credentialing at 916-445-7254 for licensing information. For private schools, contact the California Department of Social Services at 707-588-5026 for licensing information.

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

Experience: Most employers do not require prior experience.

Training: A few employers report that word processing skills are important. Employers require completion of 6-12 units of Early Childhood Education (ECE).

Supply/Demand Assessment

Employers generally report that it is a 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 1,775 - 2,170 Preschool Teachers currently employed in the North Bay Counties. Local surveys indicate about 95% are female.

Employment Trends

The growth rate is projected to be the same as the average for all occupations through the year 2004. About 50-60 job openings are projected per year due to a net increase in occupation size. About 35-40 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Preschool Teachers is projected to increase faster than the average for all occupations through the year 2008. In addition, many Preschool Teachers leave the occupation each year for other jobs, family responsibilities, or other reasons. High turnover, combined with job growth, is expected to create many job openings.

Other Information

Where the Jobs Are: Public school districts and private schools with pre-kindergarten programs. Nationally, about 2% are self-employed.

Methods Used to Fill Job Openings: Almost all employers recruit applicants through newspaper advertisements. Most also fill openings by hiring employee referrals. Many fill openings by hiring referrals from colleges and universities.

Important 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 (4.83)
- 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 (4.66)
- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (4.16)

Important Skills:
- Talking to others to effectively convey information (4.50)
- Using multiple approaches when learning or teaching new things (4.50)
- Teaching others how to do something (4.50)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.83)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.50)
- The ability to speak clearly so that it is understandable to a listener (4.33)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 16 employers surveyed representing 230 employees in this occupation.

Career Path: Teachers – Preschool

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Teacher Aide or Assistant Child Care Workers Post-secondary training $9.18/hr	**Preschool Teacher** Preschool Teachers, Except Special Education Post-secondary training $11.51/hr	**Lead or Head Teacher**	**Assistant Director**
			Director Education Administrators, Preschool and Child Care Bachelors + work exp $20.92/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Art, Drama, and Music Teachers, Postsecondary	Doctoral degree	—
Umpires, Referees, and Other Sports Officials	Long-term OJT	—
Teacher Assistants	Work experience	—
Locker Room, Coatroom, and Dressing Room Attendants	Short-term OJT	$8.82
Preschool Teachers, Except Special Education	Post-secondary training	$11.51
Secretaries, Except Legal, Medical, and Executive	Post-secondary training	$14.34
Kindergarten Teachers, Except Special Education	Masters degree	$22.60
Elementary School Teachers, Except Special Education	Masters degree	$24.08
Librarians	Masters degree	$24.08
Sheriffs and Deputy Sheriffs	Moderate-term OJT	$25.82
Police Detectives	Work experience	$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 Xochil Gomes

What kind of work do you do?
I'm Director of a preschool program and a Preschool Teacher. My job involves supervising children, setting up curriculum, charging fees, planning field trips, hiring support staff, and creating an academic environment for the children. There are lots of hands-on activities.

What are the things that attracted you to this type of work?
I've always loved children. I wanted to get into a field where I could be around my own children or at least involved in what they were doing and pre-school seemed to be just that. Of course, there's the attractive teacher's hours and vacations, but most of all the children are great. They never arrive in bad moods and they're always happy and uplifting.

What kind of things do you do at work (skills)?
We use a lot of academic and social skills. We have to be extremely nurturing with the children while we teach them the basic concepts like the alphabet, colors, and numbers. Believe it or not, the children are even potty trained in our classroom.

If you were starting over to be a Pre-School Teacher, knowing what you know now, how would you better prepare yourself?
I'd volunteer a lot at a children's school or anywhere else there were children. What happens to a lot of people is that they go into a career they have romanticized. But not until you work with the children do you know what it entails. They would also really need to take child development because they need to understand children, how they develop, and what makes them tick. It really does train you. You should also know some children's music, children's activities, and games.

What keeps you wanting to do this type of work?
I think I really have a love for children, I mean a unique love for them. I've always enjoyed working with children since I was a little girl. I feel that I can relate to and bond with the children, and I like that. I like that the children listen when I read and also how they get excited about learning. I think that my job is interesting, it's challenging, every day is different, every year is different, and my children are always changing. Each child comes in with a different set of values or a different upbringing. I love it. I really do. I enjoy the fact that I learn form them and they learn from me.

What qualities make an exceptional Preschool Teacher?
Patience. You have to be a patient person. If you're the type of person that loses your temper because someone just cut you off in traffic, you cannot go into pre-school. If you need things done extremely fast, do not go into pre-school. If you get upset when things are spilled, dropped, or not done correctly, don't go into pre-school work. It requires a lot of energy and a lot of enthusiasm. You just have to be enthusiastic about what you're doing or the children will find you boring.

Teachers - Secondary School

Secondary School Teachers instruct students in public or private high schools in one or more subjects, such as English, mathematics, or social studies. Includes vocational high school teachers. Does not include Special Education Teachers who teach only students with disabilities (OES 313080).

Wages and Benefits

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	$12.27 - $22.78/hr	$16.30/hr	$12.00 - $26.85/hr	$15.19/hr
New Hires/Exp'd:	$12.27 - $24.04/hr	$18.03/hr	$12.50 - $18.08/hr	$15.98/hr
Exp'd/After 3 Years:	$12.27 - $30.56/hr	$19.95/hr	$16.00 - $19.18/hr	$17.26/hr

Wages for Teachers are typically paid on an annual basis. For inexperienced new hires, salaries range from $25,000 - $34,000. For experienced new hires, salaries range from $26,000 - $36,000. For experienced employees after 3 years, salaries range from $30,000 - $51,000. Teachers typically work nine months per year.

Hours: Most jobs are 35-40 hours per week. Some jobs are 15-26 hours per week.

Benefits: EMPLOYER PAID: Many employers provide medical insurance. Of the employers surveyed, all report that they provide sick leave. Most provide a retirement plan. Many also provide dental, vision, and life insurance. Some provide a vacation. SHARED COST: Many employers provide medical insurance and dental insurance. Some also provide vision insurance, a retirement plan, and life insurance. For part-time employees: Most employers provide medical insurance and other benefits, including sick leave, dental insurance, and a retirement plan. Many also provide vision and life insurance.

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: Most employers require a bachelor degree for job entry. Some require a graduate degree.

Experience: Almost all employers do not require prior experience.

Training: Some employers report that word processing skills are important.

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

Very large. There are approximately 4,570 - 5,585 Secondary School Teachers currently employed in the North Bay Counties. Local surveys indicate about 60% are female. Most jobs are union.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 155-190 job openings are projected per year due to a net increase in occupation size. About 140-170 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, overall employment of Kindergarten, Elementary, and Secondary School Teachers is expected to increase about as fast as 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% 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 fill openings by hiring employee referrals. Some recruit applicants through internet job listings. Some also fill openings by hiring unsolicited applicants and/or fill openings by hiring referrals from employment agencies.

Important 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 the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (4.16)
- 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 (3.16)

Important Skills:
- Talking to others to effectively convey information (4.83)
- Teaching others how to do something (4.83)
- Using multiple approaches when learning or teaching new things (4.66)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.80)
- The ability to communicate information and ideas in writing 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 *Source: O*NET Database version 3.0*

Key Terms: All (100%) Almost All (80-99%) Most (60-79%) Many (40-59%) Some (20-39%) Few (<20%)
CCOIS survey data collected in 2000: 15 employers surveyed representing 1,933 employees in this occupation.

Career Path: Teachers - Secondary School

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Student Teacher	**Teacher - Secondary** Secondary School Teachers, Except Special and Vocational Education Masters degree $51,736/yr	**Vice Principal or Principal** Education Administrator Masters + work exp $82,301/yr	**Superintendent**
Instructional Aide Teacher Assistants Work experience $21,775/yr		**Instructional Coordinator** Masters degree $25.81/hr	

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Health Educators	Bachelor degree	$19.93
Middle School Teachers, Except Special and Vocational Education	Masters degree	$24.40
Special Education Teachers, Middle School	Masters degree	$25.08
Special Education Teachers, Preschool, Kindergarten, and Elementary School	Masters degree	$25.64
Secondary School Teachers, Except Special and Vocational Education	Masters degree	$25.87
Vocational Education Teachers, Middle School	Bachelor degree	$25.87
Special Education Teachers, Secondary School	Masters degree	$27.02
Vocational Education Teachers, Secondary School	Bachelor degree	$27.63
History Teachers, Postsecondary	Doctoral degree	$32.50
Sociology Teachers, Postsecondary	Doctoral degree	$35.67
Health Specialties Teachers, Postsecondary	Doctoral degree	$41.27

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 John Abigana

What is your job title?
Music Educator.

What kind of work do you do?
I primarily educate secondary students in the area of music. In my case it's instrumental music so I have two periods of band, one period of Jazz band, I have one period of guitar, and one period of advanced placement music theory which is more of a college prep class.

What are the things that attracted you to this type of work?
My fifth grade Music Teacher. That's when I made the decision; it was just something that clicked in me, that I knew I was going to be doing this for the rest of my life.

What kind of things do you do at work (skills)?
On a daily basis, well, I use the computer a lot. Primarily it's database duties, but there's a lot of letter writing and word processing. There's music and recording software that we also use; we do a lot of that. That's outside of the actual teaching of the music but that's how the day goes, essentially. I spend a lot of time on the planning of what I'm going to do, how I'm going to approach a particular problem or subject, and then going for it.

If you were starting over to be a Secondary School Teacher, knowing what you know now, how would you better prepare yourself?
Obviously the musical standpoint is number one. The other part of it would be to cultivate a strong sense of personal commitment. Sometimes people go into this field, I see it a lot in the younger Teachers, and don't realize how much of a personal commitment the job's going to be or how it could create problems in their personal relationships, e.g. wives, husbands, kids. There's going to be a lot of hours, a lot of 12-14 hour days, too, and people should be prepared for that.

What keeps you wanting to do this type of work?
The kids. I've been doing this for 26 years.

What qualities make an exceptional Secondary School Teacher?
Especially nowadays, you have to take on the role of guidance counselor, and not just (music) teacher; sometimes that actually becomes secondary. We have a lot of outside groups come in, but you know, the kids will listen to their main teacher a lot more, and so guidance counseling is one of the main abilities you should have. Sometimes you may even take on a parental role. Sometimes you take on the role of nurse, an advisor, or a friend, so you should be able to change gears easily in this respect. You also have to be well aware of what's going on and know what's out there because frankly, I don't think I'd make it through high school if I had all the stuff that kids had to go through. And finally, you really have to like the kids.

Telecommunications Technicians

(Includes Line and Equipment Installers. Also includes Electricians who specialize in telecommunications systems.)

Telecommunications Technicians provide for day-to-day operations and technical oversight of assigned telecommunications systems, services and facilities. They perform a range of telecommunication technical support functions. They trouble shoot systems, and may analyze and evaluate technological changes and innovations, or determine feasibility or emerging technologies. (Non-OES 003061998)

Wages and Benefits

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	$12.00 - $12.83/hr	$12.50/hr	$8.00 - $30.68/hr	$11.26/hr
New Hires/Exp'd:	$12.00 - $34.00/hr	$17.00/hr	$10.00 - $38.36/hr	$17.16/hr
Exp'd/After 3 Years:	$18.00 - $34.00/hr	$26.55/hr	$15.00 - $38.36/hr	$21.40/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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

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

Training: Most employers seek applicants with postsecondary training in electronics and a familiarity with computers. Training sources include community college and private vocational/technical school programs in electronics or communications. Military experience with communications equipment is highly valued by many employers. In addition, new employees usually receive some training from their employers. This on-the-job training may include formal classroom training in electronics, communications systems or software, and informal hands-on training with communications equipment. Many employers report that word processing skills are important. Some also report that spreadsheet skills are important.

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 203 employees in this occupation.

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 very low (less than 10%).

Size of Occupation

Small. There are approximately 200-250 Telecommunications Technicians currently employed in the North Bay Counties. Local surveys indicate about 5% are female. Most 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 Telecommunications Equipment Mechanics, Installers, and Repairers is expected to grow about as fast as the average for all occupations through 2008.

Other Information

Where the Jobs Are: Telephone/cable communications companies and specialty electrical contractors. Nationally, about 6% are self-employed.

Methods Used to Fill Job Openings: Most employers fill openings by hiring employee referrals. Many also recruit applicants through newspaper advertisements.

Important Knowledge:	• Knowledge of transmission, broadcasting, switching, control, and operation of telecommunications systems (4.16) • Knowledge of electric circuit boards, processors, chips, and computer hardware and software, including applications and programming (3.00) • Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (2.83)
Important Skills:	• Installing equipment, machines, wiring, or programs to meet specifications (4.83) • Repairing machines or systems using the needed tools (4.66) • Determining what is causing an operating error and deciding what to do about it (4.50)
Important 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 (3.80) • The ability to listen to and understand information and ideas presented through spoken words and sentences (3.60) • The ability to quickly and repeatedly make precise adjustments in moving the controls of a machine or vehicle to exact positions (3.60)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Telecommunications Technicians

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Apprentice or Helper	**Technician – Journey Level**	**Senior Technician** Communication Equipment Mechanics, Installers, and Repairers Post-secondary training $21.09/hr	**Communications Analyst** Network Systems and Data Communications Analysts Bachelor degree $32.52/hr
Telecommunications Technician – Junior Level Telecommunications Line Installers and Repairers Long-term OJT $20.32/hr		**Supervisor or Foreman** First-Line Supervisors/Managers of Mechanics, Installers, and Repairers Work experience $25.88/hr	**Communications Engineer** Computer Software Engineers, Systems Software Bachelor degree $38.93/hr

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Coil Winders, Tapers, and Finishers	Short-term OJT	$9.65
Electrical and Electronic Equipment Assemblers	Post-secondary training	$11.90
Printing Press Machine Operators and Tenders	Long-term OJT	$14.60
Automotive Glass Installers and Repairers	Long-term OJT	$14.73
Electric Home Appliance and Power Tool Repairers	Long-term OJT	$17.92
Refrigeration Mechanics	Long-term OJT	$18.82
Heating and Air Conditioning Mechanics	Long-term OJT	$18.82
Telecommunications Line Installers and Repairers	Long-term OJT	$20.32
Station Installers and Repairers, Telephone	Post-secondary training	$20.32
Communication Equipment Mechanics, Installers, and Repairers	Post-secondary training	$21.09
Electrical and Electronics Repairers, Powerhouse, Substation, and Relay	Long-term OJT	$22.67

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 Eric Parks

What are some of the job titles you've held previously?
I have been an Automotive Mechanic, a Line Mechanic that dealt with automotive electrical and electronic systems. I have also installed light bars, radios, and other equipment on emergency vehicles.

What kind of work do you do in your current job and what do you do in a typical day?
I administer the voice mail system, which includes adding voice mailboxes. I install and maintain phones, phone lines, and data and networking connections. I also install and maintain alarm systems, P.A. systems, closed circuit TV, cable TV, two-way radio, and microwave communication systems. My typical day involves installing, repairing, configuring, troubleshooting any of the systems that I mentioned.

What was it that attracted you to this work?
I was very interested in working hands-on in the electronics field. I like the challenge of learning new and evolving technology. There is always something fresh and new to do.

What knowledge, skills, and abilities are important in this kind of work?
You need a good foundation in electronics, knowing how components work together. For this particular job you work with a lot of people, end-users and such. As a result you need to have good people and communication skills. You need to be able to trouble shoot system problems. This again is where your people skills come in. You need to be able to decipher the user's description of a problem into technical terms and vice-versa. Communication skills are a key part of this.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I would recommend that they obtain an electronics background at a community college, or private school. I would also recommend that they focus on telephony, IT (information technology), and computer applications. I would also advise that someone get hands on experience in any background where electronics is involved. Automotive worked for me, but it could be anything where electronics is involved.

What is it that keeps you wanting to do this kind of work?
The pay is good. The technology is always changing, so I need to learn new things. I like the different phases of this job, installation, repairing, replacing, there is always something new to do.

What qualities make for an exceptional Telecommunications Technician?
I think you need the ability to think abstractly. Think beyond the obvious. The answer to a problem is not always cut and dry, so you need to be able to think outside the box, and then convert that into practical diagnosis and repairs. The second most important quality is the ability to deal with people, personalities, and their demands.

Tellers

(Also known as Customer Service Representatives.)

Tellers receive and pay out money, and keep records of money and negotiable instruments involved in various financial institutions' transactions (OES 531020).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.00 - $10.50/hr	$8.50/hr
New Hires/Exp'd:	$8.00 - $12.66/hr	$10.00/hr
Exp'd/After 3 Years:	$9.50 - $15.00/hr	$12.37/hr

Some Tellers may also receive bonuses.

Hours: Most jobs are 35-40 hours per week. Some jobs are 17-35 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%) ■■ = Some (20-39%) ■ = Few (1-19%)
□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Many employers do not require prior experience. Many other employers require or prefer 6-24 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Newly hired Tellers usually learn company procedures and receive on-the-job training under the guidance of a supervisor or other experienced Teller. Some formal training also may be necessary, such as training in specific computer software. Tellers must be careful, orderly, and detail-oriented in order to avoid making errors and to recognize errors made by others. They must also be discreet and trustworthy, because of the nature of confidential material. They must also have a strong aptitude for numbers. Some employers report that word processing and spreadsheet software skills are important.

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 125 employees in 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 very high (40% or more).

Size of Occupation

Large. There are approximately 2,445 – 2,990 Tellers currently employed in the North Bay Counties. Local surveys indicate about 80% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. About 50-60 job openings are projected per year due to a net increase in occupation size. About 130-160 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Bank Tellers is expected to decline through 2008.

Other Information

Where the Jobs Are: Banks, savings and loan institutions, and credit unions. Nationally, less than 1% are self-employed.

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

Important Knowledge:	• Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (4.66) • Knowledge of economic and accounting principles and practices, the financial markets, banking, and the analysis and reporting of financial data (4.50) • 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 (4.16)
Important Skills:	• Using mathematics to solve problems (4.83) • Actively looking for ways to help people (3.83) • Talking to others to effectively convey information (3.66)
Important Abilities:	• The ability to add, subtract, multiply, or divide quickly and correctly (4.83) • The ability to speak clearly so that it is understandable to a listener (4.33) • The ability to communicate information and ideas in speaking so others will understand (4.33)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Tellers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Teller – Limited Transaction Moderate-term OJT $10.52/hr	**Teller – Full Service**	**Senior or Lead Teller**	**Supervisor** First-Line Supervisors, Customer Service Work experience $21.85/hr
Cashier Cashiers Short-term OJT $9.08/hr		**Customer Service or New Account Rep** New Accounts Clerks Work experience $13.35/hr	**Loan Officer** Bachelor degree $26.65/hr
			Manager Trainee

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Gaming and Sports Book Writers and Runners	Short-term OJT	$7.57
Cashiers	Short-term OJT	$9.08
Gaming Dealers	Short-term OJT	$9.65
Tellers	Moderate-term OJT	$10.52
Receptionists and Information Clerks	Short-term OJT	$11.31
Office Clerks, General	Post-secondary training	$12.18
Reservation and Transportation Ticket Agents	Short-term OJT	$13.08
Billing, Cost, and Rate Clerks	Moderate-term OJT	$14.04
Customer Service Representatives, Utilities	Short-term OJT	$15.03
Bookkeeping, Accounting, and Auditing Clerks	Moderate-term OJT	$15.31
Loan Interviewers and Clerks	Short-term OJT	$15.74

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 Andre Gardiner

What are some of the job titles you've held previously?
I started out in this field by working as a Bookkeeper, which gave me the exposure to handling money and then I moved into an entry-level position as a Teller.

What kind of work do you do in your current job and what do you do in a typical day?
A typical day includes counting the cash drawer; receive the transactions from the customers, take payments and deposits, cashing checks and to making sure that my cash drawer balances at the end of the day.

What was it that attracted you to this work?
I think Teller is a good entry-level position and gives you exposure to the world of banking and money. If you are good at what you do, you are able to progress into many different areas of the bank and it also gives you a good background to go into other fields.

What knowledge, skills, and abilities are important in this kind of work?
I think good math skills are important as well as common sense, and people skills. When you are handling people's finances, you are required to have a whole different level of customer service. People can be very sensitive about their money and you need to be able to show sensitivity.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
You need to have a basic understanding of money and transactions. One way a person might prepare for an entry level position is to work as a store clerk or in some type of sales position. Basic Finance 101 is important to know the basic training and tools for the work.

What is it that keeps you wanting to do this kind of work?
I think the work is fun and challenging. This position allows for movement into other positions in banking and is a good beginning to the world of finance. The job also allows for flexibility of hours and even part-time work.

What qualities make for an exceptional Teller?
To be an exceptional Teller you need to be friendly, organized, detailed and poised under fire. You need basic financial skills and some financial savvy to be exceptional.

Traffic, Shipping, and Receiving Clerks

Traffic, Shipping, and Receiving Clerks verify and keep records on incoming and outgoing shipments and prepare items for shipment. Duties include assembling, addressing, stamping, and shipping merchandise or material; receiving, unpacking, verifying, and recording incoming merchandise or material; and arranging for the transportation of products. Does not include Stock Clerks, and workers whose primary duties involve weighing and checking (OES 580280).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.25 - $10.00/hr	$8.88/hr
New Hires/Exp'd:	$6.25 - $12.00/hr	$10.00/hr
Exp'd/After 3 Years:	$6.75 - $16.30/hr	$12.00/hr

Hours: Almost all jobs are 40-55 hours per week. A few 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%)
□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most employers do not require prior experience.

Training: Some employers report that spreadsheet and database skills are important. Employers generally provide on-the-job training for this occupation.

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 138 employees in 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 3,145 – 3,845 Shipping, Receiving, and Traffic Clerks currently employed in the North Bay Counties. Local surveys indicate about 40% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. 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 Shipping, Receiving, and Traffic Clerks is expected to grow more slowly than the average for all occupations through 2008.

Other Information

Where the Jobs Are: Wholesalers and manufacturers, trucking and warehousing, food processing, large retailers, and the U.S. Postal Service. Nationally, less than 1% are self-employed.

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

Important Knowledge:	• Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including their relative costs, advantages, and limitations (4.20) • 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 (3.60) • Knowledge of inputs, outputs, raw materials, waste, quality control, costs, and techniques for maximizing the manufacture and distribution of goods (3.60)
Important Skills:	• Identifying the nature of problems (4.50) • Using mathematics to solve problems (4.50) • Communicating effectively with others in writing as indicated by the needs of the audience (4.16)
Important Abilities:	• The ability to read and understand information and ideas presented in writing (3.80) • The ability to communicate information and ideas in writing so others will understand (3.80) • The ability to communicate information and ideas in speaking so others will understand (3.60)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Traffic, Shipping, and Receiving Clerks

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Stock Clerk Stock Clerks- Stockroom, Warehouse, or Storage Yard Short-term OJT $11.10/hr	**Shipping/Receiving Clerk** Shipping, Receiving, and Traffic Clerks Short-term OJT $11.58/hr	**Supervisor** First-Line Supervisors/Managers of Helpers, Laborers, and Material Movers, Hand Work experience $20.06/hr	**Manager** Storage and Distribution Managers Work experience $30.30/hr
Cashier Cashiers Short-term OJT $9.08/hr	**Forklift Operator** Industrial Truck and Tractor Operators Short-term OJT $13.53/hr		**Sales Rep**
	Shipping Agent Cargo and Freight Agents Short-term OJT $16.80/hr		

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Mail Clerks, Except Mail Machine Operators and Postal Service	Short-term OJT	$10.67
Shipping, Receiving, and Traffic Clerks	Short-term OJT	$11.58
Chemical Equipment Controllers and Operators	Moderate-term OJT	$14.74
Production, Planning, and Expediting Clerks	Short-term OJT	$16.63
First-Line Supervisors and Manager/Supervisors - Animal Care Workers, Except Livestock	Work experience	$17.03
Exhibit Designers	Bachelor degree	$21.46
First-Line Supervisors/Managers of Transportation and Material-Moving Machine and Vehicle Operators	Work experience	$23.64
Freight Inspectors	Work experience	$25.75
Marine Engineers	Bachelor degree	$27.49
Fashion Designers	Bachelor degree	$27.73
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 Hillary Butts

What are some of the job titles you've held previously?
I have been a Receiving Manager and I am currently a Processing Center Manager.

What kind of work do you do in your current job and what do you do in a typical day?
I have at least four or five people who work for me, and I delegate their work. We receive distribution trucks from the main distribution warehouse each day. These trucks are sealed and scanned at the warehouse as the materials are going on the truck; we need to make sure that the seals are not tampered with upon arrival. The first thing we do is set up for the truck. Upon arrival, we call each department back to help unload the truck. All of the merchandise comes on one truck and it is all processed. It is palletized as it comes off the truck by department so the crew at night can take it out to the floor and fill it. After the truck is unloaded, the rest of the day is dealing with the other delivery trucks that come in. Those deliveries need to be manually scanned in and audited for the contents. We make sure that the stock rooms are straight and put merchandise away that the night crew doesn't put away. For outgoing merchandise, we need to make sure that the correct paperwork is attached and it is shipped in the proper way.

What was it that attracted you to this work?
This position is a higher paid position then my previous position and there are a lot of responsibilities, which I enjoy. It is a fast paced job and there is never a dull moment.

What knowledge, skills, and abilities are important in this kind of work?
You need to be organized when you are dealing with a huge amount of freight and volume that comes through the store. In my opinion, you need to have good communication skills because you have to be able to project what you want. You need to be able to work well with others and work as a team. You need to be thorough yet quick when unloading freight. You also need strength and endurance in order to do this work.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I think the best thing to do to prepare yourself for this job is to work in different areas of the store or business.

What is it that keeps you wanting to do this kind of work?
I continue to do this work because it changes every day, it is never the same thing. It keeps you fit and keeps your heart pumping. It is very challenging; you are always under the gun.

What qualities make for an exceptional Traffic, Shipping and Receiving Clerk?
Integrity and tolerance are extremely important, as well as trustworthiness in being an exceptional Traffic, Shipping and Receiving Clerk. Being a good mentor, trainer and teacher are valuable qualities in order to communicate with line staff and it is also useful to have the savvy to communicate well with management staff, since often you have to be the go-between. Lastly I think to be exceptional you must be organized and efficient.

Travel Agents

(Also known as Travel Consultants.)

Travel Agents plan entire trips for customers of their travel agency. Their duties include determining destinations, modes of transportation, travel dates, costs, accommodations required, and planning, describing, or selling itinerary package tours. Travel agents may specialize in foreign or domestic service, individual or group travel, specific geographical area, airplane charters, or package tours (OES 430210).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.25 - $14.38/hr	$9.50/hr
New Hires/Exp'd:	$7.50 - $16.00/hr	$11.00/hr
Exp'd/After 3 Years:	$9.50 - $26.00/hr	$13.12/hr

Some Travel Agents may receive commissions or bonuses.

Hours: Most jobs are 38-40 hours per week. Some jobs are 8-39 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Most 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: Most employers report that word processing skills are important. Some report that spreadsheet skills are important. Many employers require completion of a certificate training program.

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 115 employees in 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 low (10-19%).

Size of Occupation

Small. There are approximately 630-770 Travel Agents currently employed in the North Bay Counties. Local surveys indicate about 90% are female.

Employment Trends

The growth rate is projected to be the same as the average for all occupations through the year 2004. About 15-25 job openings are projected per year due to a net increase in occupation size. About 10-15 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Travel Agents is expected to grow about as fast as the average for all occupations through 2008.

Other Information

Where the Jobs Are: Travel agencies. Nationally, about 6% 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 by hiring unsolicited applicants.

Important 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 (4.66)
- Knowledge of various methods for describing the location and distribution of land, sea, and air masses including their physical locations, relationships, and characteristics (4.66)
- Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including their relative costs, advantages, and limitations (4.50)

Important Skills:
- Adjusting actions in relation to others' actions (4.00)
- Talking to others to effectively convey information (4.00)
- Actively looking for ways to help people (4.00)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.60)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.20)
- 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 *Source: O*NET Database version 3.0*

Career Path for Travel Agents

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Reservation Clerk/Receptionist Reservation and Transportation Ticket Agents Short-term OJT $13.08/hr	**Travel Agent or Consultant** Post-secondary training $13.83/hr	**Office Manager** First-Line Supervisors, Customer Service Work experience $21.85/hr	**Travel Agency Owner**
Travel Clerk Short-term OJT $13.08/hr			**Tour/Travel Guide**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Hotel, Motel, and Resort Desk Clerks	Short-term OJT	$9.28
Travel Clerks	Short-term OJT	$13.08
Credit Authorizers	Short-term OJT	$13.72
Travel Agents	Post-secondary training	$13.83
Bill and Account Collectors	Moderate-term OJT	$14.57
Interviewers, Except Eligibility and Loan	Short-term OJT	$14.74
Procurement Clerks	Short-term OJT	$15.85
Paralegals and Legal Assistants	Associate degree	$22.41
Employment Interviewers, Private or Public Employment Service	Associate degree	$25.23
Insurance Sales Agents	Bachelor degree	$26.11
Sales Representatives, Agricultural	Moderate-term OJT	$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 Linda Gallagher

What are some of the job titles you've held previously?
I have been a travel agent for 13 years.

What kind of work do you do in your current job and what do you do in a typical day?
In a typical day I check on my client's schedules, make telephone calls, handle changes and questions relating to travel, take payments and check payments due, research fares, including, air, hotels, train and car rentals. The fares are constantly changing so I need to make sure that I am constantly aware of the new rates, schedules, etc.

What was it that attracted you to this work?
I was very interested in travel and thought it would be a nice industry to work in. I attended the Western School of Travel and began my career.

What knowledge, skills, and abilities are important in this kind of work?
I think it is important to be friendly and truthful. The clients need to know that they can trust you with their travel arrangements. You need basic math skills; you need to be organized and efficient.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I would recommend travel agent school as the best way to enter into this field. I had very little travel experience prior to this job, but since I have been working here, I have been able to travel and learn about the industry.

What is it that keeps you wanting to do this kind of work?
I love it! It is always changing and very interesting. I enjoy the people and meeting their travel needs.

What qualities make for an exceptional Travel Agent?
A Travel Agent needs to be extremely friendly, outgoing, assertive and truthful. If you want your clients to come back they need to be able to trust you and your ability to make their travel plans successfully.

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 form. They may be required to unload trucks (OES 971020).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$11.99 - $17.33/hr	$12.00/hr
New Hires/Exp'd:	$8.57 - $17.00/hr	$14.00/hr
Exp'd/After 3 Years:	$11.43 - $22.00/hr	$17.26/hr

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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: A commercial drivers 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 6-36 months of prior experience. Some employers are willing to accept training as a substitute for experience.

Training: Many employers require technical or vocational training prior to employment.

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 3,815 – 4,665 Heavy or Tractor Trailer Truck Drivers currently employed in the North Bay Counties. Local surveys indicate less than 5% are female. Some jobs are union.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 120-150 job openings are projected per year due to a net increase in occupation size. About 50-65 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Heavy or Tractor Trailer 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% are self-employed.

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

Important 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)
Important Skills:	• Controlling operations of equipment or systems (3.33) • Performing routine maintenance and determining when and what kind of maintenance is needed (2.83) • Watching gauges, dials, or other indicators to make sure a machine is working properly (2.50)
Important 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 *Source: O*NET Database version 3.0*

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 544 employees in this occupation.

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** Tractor-Trailer Truck Drivers 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 Patterns

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?
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 the 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.

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.

Truck Drivers, Light – Including Delivery and Route Drivers

Light Truck Drivers, Including Delivery and Route Workers, drive vehicles with a capacity under 3 tons. They deliver or pick up merchandise and may load and unload trucks. Does not include workers whose duties include sales (OES 971050).

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$7.00 - $12.00/hr	$9.80/hr
New Hires/Exp'd:	$7.50 - $19.18/hr	$13.00/hr
Exp'd/After 3 Years:	$8.00 - $21.85/hr	$14.38/hr

Hours: Almost all jobs are 40-60 hours per week. A few jobs are 10-35 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Employers may sometimes require a commercial drivers license for this occupation. 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. Some are willing to accept less than a high school level education.

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

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

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 153 employees in this occupation.

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 4,625 – 5,650 Light Truck and Delivery Drivers currently employed in the North Bay Counties. Local surveys indicate about 5% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 170-210 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 Truckdrivers, including Sales and Route Drivers, is expected to increase slower than the average for all occupations through the year 2008.

Other Information

Where the Jobs Are: Trucking and warehousing, courier services, newspaper publishing, and retailers/wholesalers with delivery services. Nationally, about 8% are self-employed.

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

Important Knowledge:	• Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including their relative costs, advantages, and limitations (4.83) • Knowledge of various methods for describing the location and distribution of land, sea, and air masses including their physical locations, relationships, and characteristics (3.50) • Knowledge of machines and tools, including their designs, uses, benefits, repair, and maintenance (3.50)
Important Skills:	• Controlling operations of equipment or systems (3.33) • Watching gauges, dials, or other indicators to make sure a machine is working properly (2.83) • Performing routine maintenance and determining when and what kind of maintenance is needed (2.66)
Important Abilities:	• The ability to see details at a distance (4.00) • The ability to quickly respond (with the hand, finger, or foot) to one signal (sound, light, picture, etc.) when it appears (4.00) • 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 (4.00)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Truck Drivers, Light – Including Delivery and Route Drivers

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Helper or Laborer Freight, Stock, and Material Movers, Hand Short-term OJT $10.09/hr	**Light Truck Driver** Truck Drivers, Light or Delivery Services Short-term OJT $12.24/hr	**Truck Driver** Truck Drivers, Heavy Moderate-term OJT $16.74/hr	**Dispatcher or Operations Manager**
Courier or Messenger Couriers and Messengers Short-term OJT $10.25/hr	**Delivery Driver** Driver/Sales Workers Moderate-term OJT $12.17/hr	**Tractor-Trailer Truck Driver** Tractor-Trailer Truck Drivers 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

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Laundry and Drycleaning Machine Operators and Tenders, Except Pressing	Moderate-term OJT	$8.43
Freight, Stock, and Material Movers, Hand	Short-term OJT	$10.09
Truck Drivers, Light or Delivery Services	Short-term OJT	$12.24
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters	Short-term OJT	$12.96
Industrial Truck and Tractor Operators	Short-term OJT	$13.53
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
Continuous Mining Machine Operators	Long-term OJT	$20.07
Excavating and Loading Machine Operators	Moderate-term OJT	$20.78
Loading Machine Operators, Underground Mining	Moderate-term OJT	$22.23

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 Trunkey

What are some of the job titles you've held previously?
I have been a Truck Driver since 1974. I began by getting my Class 1 driver's license to drive a heavy truck (18-wheeler). I got tired of the long days and time away from home. I liked the rhythm of the light truck driving and the consistency of the work.

What kind of work do you do in your current job and what do you do in a typical day?
First thing in the morning I do an inspection of the truck. I have a check off list to check things like the brakes, tires, lights, mirrors, fuel, fluids and the overall condition of the truck. The truck is then loaded and I am given an invoice that tells me what materials are on the truck and where they are going. Sometimes I have one point of delivery and other times I have multiple delivery points. Once I get to the delivery point, I often assist with unloading. My truck has a forklift that fits on the back of the truck, called a piggyback to help with the big jobs.

What was it that attracted you to this work?
I like being able to move from one point to another; I am not stuck in the load. I get to travel around a lot and I enjoy being on the road. I also enjoy the solitude and independence. The responsibility of the truck is also fulfilling, to know the company relies on me to delivery the material safely and keep the truck in good condition.

What knowledge, skills, and abilities are important in this kind of work?
You need to have the mechanics of the job, a Class B license as a minimum. You need to be fairly well coordinated and have good common sense to deal with both the customers and other drivers on the road. Good communication skills to deal with customers. You also need to be safety conscious and know the rules of the road.

What would you recommend as the best preparation for someone who wants to enter into this occupation?
I would recommend some type of training course for truck drivers. On the job training is also critical; joining a company who is willing to train on the job is a plus. If you have a friend who is a truck driver, and if the company will allow it, I encourage a person interested to ride along to get a feel for the job.

What is it that keeps you wanting to do this kind of work?
I love being on the road. The job is different everyday and provides for a diverse work environment.

What qualities make for an exceptional Light Truck Driver?
To be an exceptional Light Truck Driver, you need to be an easygoing person and have the ability to get along with many different people: the customers, the general public, the other people on the road and the people that you work with.

Veterinary Assistants

(Includes 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 - $10.00/hr	$8.00/hr
New Hires/Exp'd:	$6.25 - $15.00/hr	$10.00/hr
Exp'd/After 3 Years:	$9.00 - $18.00/hr	$12.00/hr

Hours: Most jobs are 36-50 hours per week. Many jobs are 15-33 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required, except for individuals who want to be licensed as a registered veterinary technician; contact the State Veterinary Medical Board at 916-263-2610 for information.

Education: Most 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 6-24 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: Some employers report that word processing skills are important. Employers generally provide on-the-job training for this occupation, although related training programs are available.

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.

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 235-285 Veterinary Assistants currently employed in the North Bay Counties. Local surveys indicate about 90% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2004. 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% 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. Many also fill openings by hiring referrals from colleges and universities.

Important 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)
Important 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)
Important 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 *Source: O*NET Database version 3.0*

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 Patterns

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?
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.

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 Assistant?
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.

Vocational and Educational Counselors

(Includes School/Guidance Counselors and Case Managers.)

Vocational and Educational Counselors counsel individuals and provide group educational and vocational guidance services. (OES 315140)

Wages and Benefits

	Union	Median	Non-Union	Median
New Hires/Inexp'd:	$15.34 - $19.73/hr	$18.59/hr	$11.98 - $21.37/hr	$13.92/hr
New Hires/Exp'd:	$13.50 - $25.18/hr	$20.19/hr	$12.59 - $22.42/hr	$14.88/hr
Exp'd/After 3 Years:	$15.50 - $26.50/hr	$21.39/hr	$14.57 - $25.35/hr	$16.81/hr

Hours: Almost all jobs are 35-40 hours per week. A few jobs are 16-24 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%) ■■ = Some (20-39%) ■ = Few (1-19%)
□ = None (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: A Pupil Personnel Services Credential is required for secondary school/guidance counselors; contact the State Commission on Teacher Credentialing at 916-445-7254 for licensing information.

Education: Some employers require a bachelor degree for job entry. Some others require graduate study. Some others waive college requirements (or require less than a bachelor degree) when candidates have suitable work experience.

Experience: Almost all employers report that they do not always require prior experience.

Training: A Pupil Personnel Services Credential requires completion of at least 30 semester units in a counseling program, including a practicum which involves students. The prospective School/Guidance Counselor must also pass the California Basic Educational Skills Test (CBEST). College and University Counselors need a bachelor degree and completion of, or current enrollment in, a master's program in counseling, guidance, psychology, or social studies. Vocational Rehabilitation Counselors should have a master's degree or be enrolled in a master's program. Vocational/Career Counselor and Case Manager jobs in government agencies usually require a minimum of a bachelor degree with related work experience. Most employers report that word processing and spreadsheet software skills are important. Many also report that database skills are important.

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 127 employees in 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

Medium. There are approximately 875 – 1,070 Vocational and Educational Counselors currently employed in the North Bay Counties. Local surveys indicate about 65% are female. Almost all jobs are union.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. About 15-25 job openings are projected per year due to a net increase in occupation size. About 15-25 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Vocational and Educational Counselors is expected to grow faster than the average for all occupations through 2010. Numerous job openings will also occur as many counselors reach retirement age. Employment is expected to grow due to a number of factors: increasing student enrollments, particularly in secondary and postsecondary schools; State legislation requiring counselors in elementary schools; and expansion of counselor responsibilities. Counselors are also becoming more involved in crisis and preventive counseling. The demand for Vocational/Employment Counselors is expected to continue to grow as current welfare laws require welfare recipients to find jobs. However, uncertainty about the future of welfare reform could limit this growth.

Other Information

Where the Jobs Are: Elementary and secondary schools, Regional Occupational Programs, adult education schools, job training and vocational rehabilitation agencies, colleges and universities, and private vocational/technical schools. Nationally, about 3% are self-employed.

Methods Used to Fill Job Openings: Almost all employers recruit applicants through newspaper advertisements. Most also recruit applicants through internet job listings. Some fill job openings by hiring referrals from colleges or universities.

Important Knowledge:
- Knowledge of principles and methods for moving people or goods by air, rail, sea, or road, including their relative costs, advantages, and limitations (4.40)
- 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 (4.00)

Important Skills:
- Controlling operations of equipment or systems (4.80)
- Actively looking for ways to help people (4.00)
- Listening to what other people are saying and asking questions as appropriate (3.40)

Important Abilities:
- The ability to listen to and understand information and ideas presented through spoken words and sentences (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 read and understand information and ideas presented in writing (3.80)
- The ability to add, subtract, multiply, or divide quickly and correctly (3.80)
- The ability to quickly respond (with the hand, finger, or foot) to one signal (sound, light, picture, etc.) when it appears (3.80)

Importance Rating: Not Important < 1 2 3 4 5 > Extremely Important *Source: O*NET Database version 3.0*

Career Path for Vocational and Educational Counselors

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Instructional Aide Teacher Assistants Work experience $21,775/yr	**Teacher - Secondary** Secondary School Teachers, Except Special and Vocational Education Masters degree $51,736/yr	**Vocational or Educational Counselor** Educational, Vocational, and School Counselors Masters degree $47,022/yr	**Vice Principal or Principal** Education Administrator Masters + work exp $82,301/yr
	Teacher - Elementary Elementary School Teachers, Except Special Education Masters degree $48,150/yr		**Superintendent**

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
English Language and Literature Teachers, Postsecondary	Doctoral degree	—
Foreign Language and Literature Teachers, Postsecondary	Doctoral degree	—
History Teachers, Postsecondary	Doctoral degree	—
Graduate Teaching Assistants	Masters degree	$17.87
Child, Family, and School Social Workers	Masters degree	$17.90
Educational, Vocational, and School Counselors	Masters degree	$23.51
Special Education Teachers, Middle School	Masters degree	$25.08
Employment Interviewers, Private or Public Employment Service	Associate degree	$25.23
Special Education Teachers, Preschool, Kindergarten, and Elementary School	Masters degree	$25.64
Special Education Teachers, Secondary School	Masters degree	$27.02
Budget Analysts	Bachelor degree	$27.25

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 Constance Stevens

What are some of the job titles you've held previously?
I was a School Teacher for ten years and I worked in special ed and early child development. Then I became a Systems Analyst working with software security systems. And then I was a Supervisor of Transcripts and Records at a university. And then I turned into a Career Counselor.

What kind of work do you do in a typical day?
It changes from day to day, but usually includes: One-on-one career counseling in private practice. I'm also on contract to a large university to provide one-on-one career counseling to staff, including everyone from Janitors to Physics Professors. Then I do consulting projects which range from curriculum and program development to facilitating workshops. I also do writing and consultation on such things as employee handbooks, resume guides, or how-to-find-a-job type stuff.

What was it that attracted you to this type of work?
I had burned out on school teaching, thinking that I didn't want to work with people anymore, so that's when I let the pendulum swing and became a Systems Analyst. But then I realized that I definitely wanted to work with people, but I just didn't know in what capacity. I thought I had pretty good people skills, but when I analyzed everything, I realized that I didn't want to be a marriage and family counselor. The one thing I always did enjoy was helping people get other jobs. I always seemed to be full of bright ideas on how they could change their resume, and why they didn't need to stay in lowly positions if they're unfulfilled. So I was sort of doing that by intuition, and then I found out that there was a masters in career counseling program at a local state university. That's when I knew for sure that I wanted to be a College Career Counselor.

What knowledge, skills, and abilities are important in this kind of work?
Definitely counseling skills. And then resourcefulness. In today's world, you have to be computer savvy - using the Internet and particular career information systems. For example, I now use assessment tools that are online. And being able to find and use labor market information.

What is the best preparation for someone who wants to go into this occupation?
I think that a master's degree in career counseling is the baseline. There are also paraprofessional programs, but I think that it really is a counseling field and that it's best to have a master's degree in counseling with a specialty in career counseling, or a master's degree in career development.

What is it that keeps you wanting to do this kind of work?
I really do like to help people. And like many others, it just took me a few years to figure out in what capacity I needed to be working in; what populations I liked working with, and how I liked working with people. And I really like the positive side of career development where you can enable people to make decisions that impact their whole lives. Also, private practice turned out to be particularly important for me because I do like being in charge of myself, I do like autonomy, and I do like to be able to create materials and not have to fight bureaucracy and all that stuff. So what I said about helping people is true, but I don't know that I would be a happy camper if I wasn't in private practice.

What qualities make for an exceptional Career Counselor?
Excellent counseling skills, being up-to-date, and being willing to be adaptable for the client's needs.

What are the next steps in your career path?
I'll continue to stay in private practice and do individual counseling. I also need to try to generate more business for individual counseling, which requires more marketing. As far as my professional development goes, I'm taking more human resources and organizational development and leadership type classes so that I get other perspectives. But a current and future focus for me is working with people who are thinking about early retirement. As the baby boomers are getting older, more of them are retiring early, but they have to work because they're going to need money after retirement and they're going to need fulfillment. So people, a lot of times, don't know what they want to do, they just know they don't want to do what they're doing anymore.

Waiters and Waitresses

(Also known as Servers.)

Waiters and Waitresses serve food and/or beverages to patrons at tables. They usually take orders from patrons and make out the check. Their duties may include setting tables with linen and silverware and taking payment from patrons. They may serve customers at counters as well as at tables. Does not include workers who only work at counters. (OES 650080)

Wages and Benefits

	Range	Median
New Hires/Inexp'd:	$6.75 - $6.75/hr	$6.75/hr
New Hires/Exp'd:	$6.75 - $15.00/hr	$6.75/hr
Exp'd/After 3 Years:	$6.75 - $17.00/hr	$6.75/hr

Waiters and Waitresses generally earn an additional $5.00 - $25.00/hr in tips.

Hours: Most jobs are 8-28 hours per week. Some jobs are 30-40 hours per week. Almost all employers report that swing shifts are common for this occupation. A few report that evening and graveyard shifts are common as well.

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 (0) ▬ = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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 require prior experience. When prior experience is required or preferred, the length of experience generally ranges from 6-36 months. Many employers are willing to accept training as a substitute for experience.

Training: Although some training program are available, most Waiters and Waitresses pick up their skills on-the-job by observing and working with more experienced workers. Because maintaining a restaurant's image is important to its success, employers emphasize personal qualities. Waiters and Waitresses are in close contact with the public, so they should be well spoken and have a neat, clean appearance. They should enjoy dealing with all kinds of people and possess a pleasant disposition.

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: 20 employers surveyed representing 527 employees in 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 very high (40% or more).

Size of Occupation

Very large. There are approximately 8,075 – 9,865 Waiters and Waitresses currently employed in the North Bay Counties. Local surveys indicate about 50% are female.

Employment Trends

The growth rate is projected to be slower than the average for all occupations through the year 2006. About 135-165 job openings are projected per year due to a net increase in occupation size. About 445-545 job openings are projected per year due to separations (workers retiring or leaving the occupation). Nationwide, employment of Waiters and Waitresses is expected to grow about as fast as the average for all occupations over the 2000-10 period. Factors include increases in population, personal incomes, and leisure time. While employment growth will produce many new jobs, the overwhelming majority of openings will arise from the need to replace the high proportion of workers who leave this occupation each year.

Other Information

Where the Jobs Are: Eating and drinking places, and hotels with restaurants. Nationally, less than 1% are self-employed.

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

Important 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 (5.00)
- Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications (3.33)
- Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar (3.16)

Important Skills:
- Actively looking for ways to help people (4.66)
- Listening to what other people are saying and asking questions as appropriate (4.50)
- Talking to others to effectively convey information (4.00)

Important Abilities:
- The ability to communicate information and ideas in speaking so others will understand (4.66)
- The ability to listen to and understand information and ideas presented through spoken words and sentences (4.16)
- The ability to speak clearly so that it is understandable to a listener (4.00)
- The ability to remember information such as words, numbers, pictures, and procedures (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 *Source: O*NET Database version 3.0*

Career Path for Waiters and Waitresses

Entry Level ►	Mid–Level ►	Advanced Level ►	Options
Bus Person Dining Room and Cafeteria Attendants and Bartender Helpers Short-term OJT $6.80/hr	**Food Server** Waiters and Waitresses Short-term OJT $7.19/hr	**Supervisor or Assistant Manager** First-Line Supervisors/Managers of Food Preparation and Serving Workers Work experience $12.94/hr	**Restaurant Manager** Food Service Managers Work experience $19.89/hr
	Host or Hostess Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop Short-term OJT $7.52/hr		

Occupations with Similar Skill Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Dishwashers	Short-term OJT	$6.88
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
Bartenders	Short-term OJT	$8.43
Meat, Poultry, and Fish Cutters and Trimmers	Short-term OJT	$9.14
Gaming Dealers	Short-term OJT	$9.65
Counter and Rental Clerks	Short-term OJT	$9.73
Retail Salespersons	Short-term OJT	$10.43
Stock Clerks, Sales Floor	Short-term OJT	$11.10
Central Office Operators	Moderate-term OJT	$14.50

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 Jill Ellington

What are some of the job titles you've held previously?
Waitress and Hostess.

What kind of work do you do in a typical day?
Greet the customers (who have already been seated), tell them the day's specials, give them a little bit of time, take their order and write it down using our codes, check appearance of the food to make sure everything's correctly prepared, bring their food to them, suggest condiments and drinks, make sure the food's tasty, and then provide follow-up service.

What was it that attracted you to this type of work?
It's the social life. But I also think it was the money. It's not easy money, because you do work hard on the job. But I think it's the money that keeps me in it. Also, my whole family has been in the restaurant business. My father started as a dishwasher, then he became a cook, worked his way up and owned a restaurant, and retired at 47. So it's in our family blood.

What knowledge, skills, and abilities are important in this kind of work?
You need to be a good people person. You need a friendly personality and the ability to deal with a variety of different people. You need to be able to do a few different tasks at once. And it's a sales job.

What is the best preparation for someone who wants to go into this occupation?
I would say go out and eat at different restaurants and see what kind of service you get. That will help you see what service you prefer to get - by the lack of service you get from different restaurants. Food service or culinary classes in school can be helpful, but it's not a requirement.

What is it that keeps you wanting to do this kind of work?
It's a good social life for me. I enjoy getting to know my customers. So it's kind of like you're waiting on family and friends. I really like to get to know people.

What qualities make for an exceptional Waiter or Waitress?
Friendliness, knowledge, and sincerity are the three most important things.

What are the next steps in your career path?
I was offered a management position in another restaurant, but for me there was more money in being a server, so I turned it down.

Welders and Cutters

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:	$8.00 - $13.77/hr	$11.29/hr
New Hires/Exp'd:	$9.22 - $26.00/hr	$14.58/hr
Exp'd/After 3 Years:	$14.00 - $28.00/hr	$18.00/hr

Some Welders may also receive bonuses.

Hours: Almost all jobs are 35-50 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 (0) — = Insufficient Data

Training, Experience, and Other Requirements

License: Not required.

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

Experience: Many employers require or prefer 1-4 years 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 require or prefer completion of a certificate training program. Completion of a training program does not necessarily eliminate the need for apprenticeship or on-the-job training.

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 145 employees in 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 low (10-19%).

Size of Occupation

Medium. There are approximately 790-970 Welders and Cutters currently employed in the North Bay Counties. Local surveys indicate about 5% are female.

Employment Trends

The growth rate is projected to be faster than the average for all occupations through the year 2004. About 25-35 job openings are projected per year due to a net increase in occupation size. About 15-25 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% 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.

Important 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)
Important Skills:	• Inspecting and evaluating the quality of products (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)
Important 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 *Source: O*NET Database version 3.0*

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 Patterns

O*NET-SOC Occupation Title	Education/Training Level	Wage
Coil Winders, Tapers, and Finishers	Short-term OJT	$9.65
Metal Molding, Coremaking, 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?
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.

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.

Appendix

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. The LMID then contracts with "Local Partners" (LPs) to operate the individual projects. The LPs are typically local workforce investment boards.

Roles

• 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 LPs.

• The LPs select the occupations to be studied, conduct the research, process and analyze the data, and produce and distribute the annual publications.

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 are 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 using a computerized sample design process. The samples are then reviewed and edited by analysts to ensure that they are representative of the overall employment for each 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 size of the employers is considered to ensure that the sample represents the employers most likely to provide future employment. For 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. A sample questionnaire is included on the following pages.

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 per occupation. 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 for use in the data analysis process. From those tabulations, the data is analyzed by the LP's analyst(s) and draft occupational profiles are prepared. The draft profiles and other report materials are then reviewed by LMID analysts. Following the review and editing process, an Occupational Outlook 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.

Disclaimers

1. Although some of the occupational data in this report is shown to the nearest whole number, or in the case of wages, to the nearest cent, readers should not interpret this as an indication of precision. The occupational data in this report is based on what is thought to be a representative sampling of local employers using survey methodology that is generally considered to be of the highest standards. However, survey research is a "snapshot in time" and can never guarantee 100 percent precision or accuracy. Occupational data, therefore, is best used in the context of comparing information between occupations.

2. Wage information included in this report includes wages paid by the employers participating in the survey for their employees at three levels of experience and does not include extreme wages.

3. Because a lack of formal education creates a barrier for some employers, employers' educational statements have been included in this report. However, while minimum educational requirements are presented as the employers have expressed them, these educational requirements are not always essential for the performance of job duties.

Sample Questionnaire

ALL RESPONSES ARE KEPT STRICTLY CONFIDENTIAL
Whom should we contact with any further questions?
Name: _____
Position: _____
Phone: _____ Fax: _____

Please return completed questionnaire to:
CSU Sacramento, Institute for Social Research
6000 J Street, Sacramento, CA 95819-6101
Phone: 916-278-5737 Fax: 916-278-5150

Financial Managers: Financial Managers plan, organize, direct, control, or coordinate the financial activities of an organization. Includes managers in banks or similar financial institutions who advise on credit and investment policy or negotiate general policy with financial or other institutions. (OES 130020)

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 the North Bay region of Marin, Napa, Solano, and Sonoma 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 <u>not</u> 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)

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**? _____ _____ (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	PT	FT	PT	FT	PT	FT	PT
Medical Insurance	☐	☐	☐	☐	☐	☐	☐	☐
Dental Insurance	☐	☐	☐	☐	☐	☐	☐	☐
Vision Insurance	☐	☐	☐	☐	☐	☐	☐	☐
Life Insurance	☐	☐	☐	☐	☐	☐	☐	☐
Sick Leave	☐	☐	☐	☐	☐	☐	☐	☐
Vacation	☐	☐	☐	☐	☐	☐	☐	☐
Retirement Plan	☐	☐	☐	☐	☐	☐	☐	☐
Child Care	☐	☐	☐	☐	☐	☐	☐	☐
Other (Please Specify):	☐	☐	☐	☐	☐	☐	☐	☐

15a. 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?

_____ _____ _____

15b. What skills are important for career advancement?

_____ _____ _____

Sample Questionnaire - continued

15c. Does your firm ever promote employees into this occupation from **lower level** positions? ☐ Yes ☐ No

If yes, what are the career paths that can lead to this occupation?

_____ _____ _____

16. 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

Specify software names: _____ _____ _____ _____ _____

17. What other new skills are needed to perform the duties of this occupation?

_____ _____

18. When your firm hires employees **for this occupation**, which are the **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):

19. Are you aware of any new, changing, or emerging occupations in your industry? ☐ Yes ☐ No

If yes, please specify:

_____ _____ _____

20. Do you have an employee in this occupation that is both skilled and articulate? If so, may we contact him/her to discuss the possibility of a brief 'Career Dialogue' interview that may be published in our Occupational Outlook & Training Directory?

Name: _____ Phone: _____

Would you like to receive a complimentary copy of the survey results for this occupation? ☐ Yes ☐ No

Thank you for your participation in this CCOIS survey!

Training Provider Reference

This listing of area training providers and their courses and programs is intended to be used only as a first step in gathering information on possible career training and education alternatives. Anyone using this information is advised to contact the providers directly to obtain up-to-date information on the services and programs they offer. The organizations responsible for the production of this publication do not necessarily endorse or recommend any particular training providers or programs, nor are they responsible for the accuracy of the information.

Six Types of Training Providers in California

1. Private schools, colleges and universities, the largest group of training and education providers, come in all shapes and sizes, including for-profit and non-profit, and are regulated in California by the Bureau for Private Postsecondary and Vocational Education (BPPVE). Collectively, private training and education providers offer all types of programs and services, including college degrees at all levels, technical training, certificate training programs, continuing education classes, and license/test preparation services. 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 talk to a representative of the private school you are planning to attend and a college or university counselor to discuss your plan and the issue of credit transfer. 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.

2. Apprenticeships are formal on-the-job training programs typically administered by labor organizations (unions). Apprentices earn a training wage while learning their trade, generally through a combination of on-the-job training and formal classroom instruction. Completing an apprenticeship can take anywhere from 2-5 years, depending on the occupation. Journey-person status is awarded upon completion. The Department of Industrial Relations, Division of Apprenticeship Standards administers California apprenticeship laws and enforces standards for wages, hours, working conditions, and the specific skills required for journey-person status in an occupation.

3. Adult education schools are public schools for adults that generally offer a variety of basic education classes, literacy programs, continuing education classes, and vocational/technical training. Most also offer a General Education Diploma, or GED –the equivalent of a high school diploma and an important credential for job seekers without 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/technical school.

4. Community colleges (aka junior colleges) are public colleges for adults that generally offer a very comprehensive set of programs and services at a very affordable cost (usually $11 per unit, plus books). They offer remedial, basic, and advanced college-level courses, continuing education courses, vocational/technical certificate programs, and associate degrees. They also provide an opportunity for students who plan to transfer to four-year colleges after they have completed up to two years of community college work (toward their bachelor degree). For those who work during the day, community colleges usually offer a broad range of evening classes.

5. ROP, or 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 but, if openings exist, adults may usually enroll on a first-come, first-served basis. Certificate programs offered through ROP are very affordable and rarely more than one year in length. The brevity of some 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/technical school.

6. Public universities include California State University and University of California campuses. Both types of institutions typically offer a wide variety of undergraduate programs (bachelor degrees), graduate programs (teacher credential programs and master's degrees), and certificate programs that are usually offered through their extended/continuing education programs. The vast majority of doctoral degree programs are offered through UC institutions, including law schools and medical schools. The cost of attending a UC campus is generally about twice the cost of attending a CSU campus. (Note that there are no UC institutions in the North Bay Counties.)

Alchemy Institute of Healing Arts
567-A Summerfield Road
Santa Rosa, CA 95405
(707) 537-0495
http://www.alchemyinstitute.com
Courses/Programs:
Hypnotherapist

Alive & Well! Institute of Conscious Bodywork
100 Shaw Drive
San Anselmo, CA 94960
(415) 258-0402
http://www.alivewell.com
Courses/Programs:
Massage Therapist

American Gunsmithing Institute
1325 Imola Avenue West, Suite 504
Napa, CA 94559
(707) 253-0462
http://www.americangunsmith.com
Courses/Programs:
Firearms Courses

American National Red Cross
5297 Aero Drive
Santa Rosa, CA 95403
(707) 577-7600
http://www.redcross-sonomacounty.org/
Courses/Programs:
CPR/First Aid
Certified Nurse Assistant (Nurse Aide)
Certified Home Health Aide

Anthony Schools (training locations in Novato and Santa Rosa)
2145 19th Ave., Suite 201
San Francisco, CA 94116
(888) 373-7277
http://www.anthonyschools.com
Courses/Programs:
Real Estate Appraiser
Real Estate Broker
Real Estate Sales Agent
Contractor License Prep

Bartender's School of Santa Rosa
1731 King St
Santa Rosa, CA 95404
(707) 523-1611
Courses/Programs:
Bartender
Bar Manager
Cocktail Server

Bay Area Center for Waldorf Teacher Training
P.O. Box 2228
Sausalito, CA 94966
(415) 332-2133
http://www.bacwtt.org/
Courses/Programs:
Waldorf Teacher

Bay Area Computer Training
4340 Redwood Highway, Suite A1
San Rafael, CA 94903
(415) 507-0384
http://www.bactrain.com
Courses/Programs:
Computer Literacy
General Office (Office/Clerical Support Occupations)
Documents and Graphics (Desktop Publishing Specialist, Graphic Arts Technician)
Data and Information (Database/Records Specialist, Data Entry Clerk)
Web and Internet (Entry Level Website Designer/Developer)

Bonnie Bergin Assistance Dog Institute, The
P. O. Box 2334
Rohnert Park, CA 94927
(707) 585-0300
http://www.assistancedog.org
Courses/Programs:
Assistance Dog Training

Boston Reed Company
1154 Lodi Lane
St. Helena, CA 94574
(800) 201-1141
http://www.bostonreed.com
Courses/Programs:
Administrative Medical Assistant
Phlebotomist
Clinical Medical Assistant (Continuing Ed)
EKG Technician (Continuing Ed)
Orthopedic Technician (Continuing Ed)

CADD APPLICATIONS
354 Bel Marin Keys Blv, Ste A1
Novato, CA 94949
(415) 883-0352
Courses/Programs:
- Drafter/CAD Operator
- Webmaster (Website Designer/Developer)
- Multimedia for the Professional

CADD Learning Center
450 Larkfield Center
Santa Rosa, CA 95403
(707) 566-0480
Courses/Programs:
- Drafter/CAD Operator

CAL INC.
2040 Peabody Road, Suite 400
Vacaville, CA 95687
(707) 446-7996
http://www.cal-inc.com
Courses/Programs:
- Hazardous Materials: Asbestos, Lead, Mold (Hazardous Materials Worker)

California Contractors and Inspectors Certification Examinations
526 Third St
San Rafael, CA 94901
(415) 256-2500
http://www.ccice.com
Courses/Programs:
- Building Inspector
- Contractor License Prep

California Institute of Massage & Spa Services
P.O. Box 673
Sonoma, CA 95476
(707) 939-9431
Courses/Programs:
- Massage Therapist

California Maritime Academy (California State University)
200 Maritime Academy Drive
Vallejo, CA 94590
(707) 654-1330
http://www.csum.edu
Courses/Programs:
- Business Administration/Undergraduate (Transportation Focus)
- Facilities Engineering Technology/Undergraduate (Industrial Engineer)
- Global Studies and Maritime Affairs/Undergraduate (International Relations Specialist, Maritime Policy Analyst)
- Marine Engineering Technology/Undergraduate (Marine Engineer)
- Marine Transportation/Undergraduate (Deck Officer)
- Mechanical Engineering/Undergraduate (Mechanical Engineer, Plant Engineer, Merchant Marine Engineer)

Calistoga Massage Therapy School
5959 Commerce Blvd, Suite 13
Rohnert Park, CA 94928
(707) 586-1953
http://www.calistogamts.com
Courses/Programs:
- Massage Therapist

Career Transitions
2235 Challenger Way, Suite 104
Santa Rosa, CA 95407
(707) 546-6605
http://www.careertrans.com
Courses/Programs:
- Accounting Clerk/Bookkeeper
- Administrative Assistant
- CAD Operator (Drafter/CAD Operator)
- Internet Information Specialist
- Medical Front Office (Medical Assistant, Medical Office/Clerical Support Occupations)
- Multimedia Web Design Specialist (Entry Level Website Designer/Developer)
- Receptionist/Data Entry Clerk
- Sales & Customer Relations (Call Center Worker, Customer Service Rep, Telemarketer)
- User Support Technician
- Basic Computer Operations - Microsoft Office Software Proficiency Program

Carpenter's Training Committee of Northern California
715-E Southpoint Boulevard
Petaluma, CA 94952
(707) 762-5840
http://www.carpenter-trng-ncal.org
Courses/Programs:
- Acoustical Ceiling Installer
- Carpenter - General
- Carpenter - Hardwood Floor
- Insulation Installer
- Millwright
- Pile-Driver Operator
- Roofer

Chapman University
450 Chadbourne Road
Fairfield, CA 94585
(707) 438-0108
http://www.chapman.edu
Courses/Programs:
- Education Credential Programs (Teacher)
- Education - Curriculum/Graduate (Instructional Coordinator)
- Health Administration/Graduate (Health Care Administrator)
- Human Resources/Graduate (Human Resources Manager)
- Organizational Leadership/Graduate
- Psychology – MFCC/Graduate (Psychologist, Social Worker)
- CLAD/Cross-Cultural, Language and Academic Development Certificate (Teacher)
- Health Systems Management Certificate (Medical/Health Services Manager)
- Human Resources Certificate (Human Resources Manager)
- Organizational Leadership Certificate

CHDC/Anthony Soto Employment Training
100 Sebastopol Road
Santa Rosa, CA 95407
(707) 566-3969
http://www.chdcorp.org
Courses/Programs:
- Assembler/Fabricator
- Electronic Assembler
- Security Officer
- Shipping and Receiving Clerk
- Truck Driver
- Welder

Christian Life International Bible College
1370 South Novato Boulevard
Novato, CA 94947
(415) 892-4113
http://www.clibc.edu
Courses/Programs:
- Minister/Pastor

Coaches Training Institute, The
1879 Second St
San Rafael, CA 94901
(800) 691-6008
http://www.thecoaches.com
Courses/Programs:
- Coaching (Instructor/Coach - Sports/Physical Training)

College of Marin
835 College Avenue
Kentfield, CA 94904
(415) 457-8811
http://www.marin.cc.ca.us/
Courses/Programs:
- Accounting, Applied (Accounting Clerk/Bookkeeper)
- Administration of Justice (Law Enforcement Occupations)
- Aeronautics (Pilot)
- Anthropology
- Architecture
- Art
- Astronomy
- Automotive Body and Fender (Auto Body Repairer)
- Automotive Technology (Auto Mechanic)
- Behavioral Science
- Biology
- Business
- Business Office Systems (Office Manager, Office/Clerical Support Occupations)
- Chemistry
- Communications
- Computer Information Systems (Computer/Technical Related Occupations)
- Computer Science
- Counseling (Human Service Worker)
- Court Reporting (Court Reporter)
- Dance
- Dental Assisting: Registered (Dental Assistant)
- Directed Study
- Drama

College of Marin – Continued
Early Childhood Education (Child Care Worker, Preschool Teacher)
Economics
Education
Electronics Technology
Engineering
English
English as a Second Language
Environmental Landscaping (Gardener/Groundskeeper)
Environmental Science
Ethnic Studies
Film
Fire Technology
French
Geography
Geology
Health Education
History
Humanities
Italian
Japanese
Journalism
Landscape Management (under Environmental Landscaping)
Library
Machine and Metals Technology (Machinist, Welder)
Management
Mathematics
Medical Assisting (Medical Assistant)
Multimedia Studies
Music
Nursing Education: Registered (Registered Nurse)
Philosophy
Physical Education
Physics
Political Science
Psychology
Real Estate (Real Estate Sales Agent, Real Estate Broker)
Social Science
Sociology
Spanish
Speech
Statistics

CompUSA Inc Technology Training
655 Irwin Street (Shamrock Center)
San Rafael, CA 94901
(415) 743-3250
http://www.compusa.com
Courses/Programs:
Advanced Technical Training (Computer/Technical Related Occupations)
Computer Software Courses

CompUSA Inc Technology Training
2835 Santa Rosa Avenue (Santa Rosa Town Center)
Santa Rosa, CA 95407
(707) 570-3150
http://www.compusa.com
Advanced Technical Training (Computer/Technical Related Occupations)
Computer Software Courses

Computer Services and Instruction, Inc.
190 S Orchard Ave, Ste B-230
Vacaville, CA 95688
(707) 455-0557
http://www.traincsi.com
Courses/Programs:
Advanced Technical Training (Computer/Technical Related Occupations)
Computer Software Courses

Contractors License Courses
987 Airway Court, Suite 201
Santa Rosa, CA 95403
(707) 578-8877
Courses/Programs:
Contractor License Prep

Contractors Testing Service of San Rafael
95 Woodland Avenue
San Rafael, CA 94901
(415) 479-9900
http://www.cacontractorslicense.com/index.htm
Contractor License Prep

Culinary Institute of America, The
2555 Main Street
St. Helena, CA 94574
(800) 285-4627
http://www.ciachef.edu
Courses/Programs:
Culinary Arts (Cook/Chef, Baker)
Management (Restaurant Manager)

Deloux Cosmetology
1787 North Texas Street
Fairfield, CA 94533
(707) 427-1712
Courses/Programs:
Cosmetology (Hairstylist)
Esthetician
Manicurist

Deloux Cosmetology
827 Fourth St
San Rafael, CA 94901
(415) 454-5432
Cosmetology (Hairstylist)
Esthetician
Manicurist

Diamond Light School of Massage and Healing Arts
45 San Clemente
Corte Madera, CA 94925
(415) 454-6651
http://www.diamondlight.net
Courses/Programs:
Massage Therapist
Hypnotherapist

Dominican College of San Rafael
50 Acacia Avenue
San Rafael, CA 94901
(415) 457-4440
http://www.dominican.edu
Courses/Programs:
Art/Undergraduate (Artist)
Art History/Undergraduate
Biology/Undergraduate
Business Administration - Global Strategic Management/Graduate
Business Administration - International Management/Undergraduate and Graduate
Business Administration - Strategic Leadership/Graduate
Communications/Undergraduate
Counseling Psychology/Graduate (Counselor, Psychologist)
Curriculum and Instruction/Graduate (Instructional Coordinator, Education Administrator)
English Literature - Writing Emphasis/Undergraduate
English Literature/Undergraduate
Environmental Studies/Undergraduate
History/Undergraduate
Human Resource Management/Undergraduate (Human Resources Manager)
Humanities/Undergraduate and Graduate
International Languages/Undergraduate
International Studies/Undergraduate
Liberal Studies/Undergraduate
Music/Undergraduate (Musician, Music Teacher)
Nursing/Undergraduate (Registered Nurse)
Occupational Therapy/Undergraduate (Occupational Therapist)
Politics/Undergraduate
Pre-Law Program/Undergraduate
Pre-Medical Program/Undergraduate
Psychology/Undergraduate
Religion/Undergraduate
Teaching Credential Programs (Teacher)

Empire College
3035 Cleveland Avenue
Santa Rosa, CA 95403
(707) 546-4000
http://www.empcol.com
Courses/Programs:
Accounting & Bookkeeping (Accounting Clerk/Bookkeeper)
Computer Technology (Computer/Technical Related Occupations)
Legal (Legal Secretary, Paralegal)
Medical (Medical Assistant, Medical Office/Clerical Support Occupations)
Office Administration (Office/Clerical Support Occupations)
Travel & Hospitality (Travel Agent, Front Desk Clerk)
Law School (Lawyer)

Fairfield-Suisun Adult School (Fairfield-Suisun Unified School District)
1100 Civic Center Drive
Fairfield, CA 94533
(707) 421-4155
http://www.fsusd.k12.ca.us/schools/adult/index.html
Courses/Programs:
- Adult Basic Education/GED Test Preparation
- Business Skills and Technology
- Computer Software Courses
- CPR/First Aid
- English as a Second Language
- Medical Assistant
- Medical Secretary
- Pharmacy Technician

Falcon Truck School
P.O. Box 2134
Vallejo, CA 94590
(707) 562-3580
Courses/Programs:
- Truck Driver

Field Ironworker Apprenticeship
3130 Bayshore Road
Benicia, CA 94510
(707) 746-7666
Courses/Programs:
- Ironworker

Golden Gate Baptist Theological Seminary
201 Seminary Drive
Mill Valley, CA 94941
(415) 380-1300
http://www.ggbts.edu
Courses/Programs:
- Various Religious Related Programs (Minister/Pastor)

H & R Block Tax Training School
9000 Northgate Mall
San Rafael, CA 94903
(800) 573-5625
http://www.hrblock.com
Courses/Programs:
- Tax Preparer

Hypnotherapy Training Institute
1815 Redwood Hwy
Corte Madera, CA 94924
(707) 579-9023
http://www.hypnoschool.com
Courses/Programs:
- Hypnotherapist

Information Management Instruction Training (IMIT)
951 Petaluma Boulevard South
Petaluma, CA 94952
(707) 765-6214
http://www.imitschool.com
Courses/Programs:
- Micro Computer Operator/LAN Tech (Computer/Technical Related Occupations)
- Customer Service Rep
- Marketing Assistant (Desktop Publishing Specialist, Graphic Arts Technician)
- Administrative Assistant
- PC Support/Network Engineer (Computer/Technical Related Occupations)
- Web Site Designer (Entry Level Website Designer/Developer)

Institute for Educational Therapy
7981 Old Redwood Hwy, Ste F
Cotati, CA 94931
(707) 795-1284
http://www.iet.org
Courses/Programs:
- Culinary Arts (Cook/Chef, Baker)
- Nutrition (Dietician/ Nutritionist)

Institute of Imaginal Studies: Graduate School & Research Center
47 Sixth Street
Petaluma, CA 94952
(707) 765-1836
http://www.imaginal.edu
Courses/Programs:
- Counseling Psychology/Master's Degree (Counselor)
- Psychology/Master's Degree (Psychologist)
- Psychology/Doctoral Degree (Psychologist)

Institute of Integrated Healing Arts
802 First St W
Sonoma, CA 95476
(707) 933-9374
http://www.tbishop.com/iha/
Courses/Programs:
Massage Therapist
Hypnotherapist

J Bass & Associates
6400 Redwood Drive, Suite 203
Rohnert Park, CA 94928
(707) 584-3488
http://www.jbass.com
Courses/Programs:
Advanced Technical Training (Computer/Technical Related Occupations)
Computer Software Courses

Jackson Hewitt Tax School
1501 Tennessee Street
Vallejo, CA 94590
(707) 647-3278
http://www.jacksonhewitt.com
Courses/Programs:
Tax Preparer

Jean Pierre International Models
3336 North Texas Street, Suit
Fairfield, CA 94533
(707) 429-0802
Courses/Programs:
Model

John Robert Powers School
901 Sir Francis Drake Blvd.
Kentfield, CA 94904
(415) 259-3910
http://www.jrpowers.net
Courses/Programs:
Actor
Model

Julie Nation Academy
2455 Bennett Vly Rd, Ste 110 A
Santa Rosa, CA 95404
(707) 575-8585
http://www.julienation.com
Courses/Programs:
Actor
Model

Jupiter Hollow School for Massage
P.O. Box 8043
Santa Rosa, CA 95407
(707) 584-7903
Courses/Programs:
Massage Therapist

Le Melange Academy of Hair
931 Coombs Street
Napa, CA 94559
(707) 257-7767
http://www.lemelangeacademy.com
Courses/Programs:
Cosmetology (Hairstylist)
Esthetician
Manicurist

Lewis Adult Education Center (Santa Rosa City School District)
2230 Lomitas Avenue
Santa Rosa, CA 95404
(707) 522-3280
http://www.lewisadult.com
Courses/Programs:
Adult Basic Education/GED Test Preparation
Business (Office/Clerical Support Occupations)
Computer Software Courses
English as a Second Language

Lifestream Massage School
2744 Jefferson
Napa, CA 94558
(707) 226-2090
http://www.lstreammassageschool.com
Courses/Programs:
Massage Therapist

Lytle's Redwood Empire Beauty College
186 Wikiup Drive
Santa Rosa, CA 95403
(707) 545-8490
http://www.lytles-rebc.com
Courses/Programs:
Cosmetology (Hairstylist)
Esthetician
Manicurist

Marin County ROP/Regional Occupational Program (Marin County Office of Education)
P.O. Box 4925
San Rafael, CA 94913
(415) 499-5860
http://www.mcoeweb.marin.k12.ca.us/rop/default.htm
Automotive Technology Apprentice Auto Mechanic)
Business Office Technology (Office/Clerical Support Occupations)
Certified Home Health Aide (Home Health Aide)
Certified Nurses Assistant (Nurse Aide)
Childcare Occupations (Child Care Worker)
Computer Applications 1 & 2 (Office/Clerical Support Occupations)
Computer Graphics (Desktop Publishing Specialist, Graphic Arts Technician)
Computerized Accounting (Accounting Clerk/Bookkeeper)
Construction/Remodeling (Apprentice Carpenter)
Cosmetology (Hairstylist)
Culinary Occupations (Cook/Chef, Baker)
Electronics Technology (Data Processing Equipment Repairer, Telecommunications Technician)
Fashion Design & Marketing (Retail Salesperson)
Gourmet Catering & Creative Foods (Caterer)
Internet Marketing and Research
Medical Assisting (Medical Assistant)
Multimedia
Personal Home Care Worker (Personal/Home Care Aide)
Radio Broadcasting
T. V. Production (TV/Video Production Occupations)
Teaching Occupations
Welding Technology (Apprentice Welder)
Word Processing (Office/Clerical Support Occupations)

Michael's Transportation School
140 Yolano Drive
Vallejo, CA 94589
(707) 643-2099
http://www.bustransportation.com
Courses/Programs:
School Bus Driver

Napa County ROP/Regional Occupational Program (Napa County Office of Education)
1015 Kaiser Road
Napa, CA 94558
(707) 253-6830
http://www.mos.ccsesa.org/Napa/student/instructional/rop
Courses/Programs:
Agricultural Mechanics (Farm Equipment Mechanic)
Applied Animal Science Practices (Animal Caretaker, Veterinary Assistant)
Automotive Services (Auto Mechanic)
Business Technology & Computer Applications (Office/Clerical Support Occupations)
Careers in Child Development (Child Care Worker)
Careers in Finance (Teller)
Computer Repair Technician (Data Processing Equipment Repairer)
Construction Technology (Apprentice Carpenter)
Cosmetology (Hairstylist)
Drafting & Engineering (Drafter/CAD Operator)
Hospitality Services (Host/Hostess, Hotel Desk Clerk)
Landscape Management (Gardener/Groundskeeper)
Manicuring (Manicurist)
Nursing Assistant (Nurse Aide)
Ornamental Horticulture (Gardener/Groundskeeper)
Printing and Graphics (Desktop Publishing Specialist, Graphic Arts Technician)
Publications Production (Desktop Publishing Specialist)
Student Store (Retail Salesperson)
Telecommunications & Electronics Technology (Electrical/Electronic Assembler)
Veterinary Practices (Animal Caretaker, Veterinary Assistant)
Viticulture Practices (Agricultural Occupations)

Napa Valley Adult School
2447 Old Sonoma Road
Napa, CA 94558
(707) 253-3594
http://www.adulted.nvusd.k12.ca.us
Courses/Programs:
Adult Basic Education/GED Test Preparation
Business (Office/Clerical Support Occupations)
Computer Software Courses
English as a Second Language

Napa Valley College
2277 Napa - Vallejo Highway
Napa, CA 94558
(707) 253-3000
http://www.nvc.cc.ca.us/
Courses/Programs:
- Administration of Justice (Emergency Dispatcher, Correctional Officer, Law Enforcement Occupations)
- Business: Accounting and Finance
- Business: Bookkeeping (Accounting Clerk/Bookkeeper)
- Business: Business and Commerce
- Business: Computer Studies (Computer/Technical Related Occupations)
- Business: Management and Marketing
- Business: Office Administration (Office Manager, Office/Clerical Support Occupations)
- Business: Real Estate (Real Estate Sales Agent, Real Estate Broker)
- Child/Family Studies (Child Care Worker, Preschool Teacher)
- Cosmetology (Hairstylist)
- Drafting Technology (Drafter/CAD Operator)
- Electronics: Biomedical (Biomedical Equipment Service Technician)
- Electronics: Communications/CATV Technology (TV/Video Production Occupations)
- Electronics: Technology (Electrical/Electronic Engineering Technician)
- Environmental Technology
- Health Care: Nursing (Registered Nurse)
- Health Care: Intravenous Therapy
- Health Care: Emergency Medical Technician
- Health Care: Psychiatric Technician
- Health Care: Respiratory Therapy (Respiratory Therapist)
- Health Care: Vocational Nursing (Licensed Vocational Nurse)
- Machine Tool Technology (Machinist)
- Photography (Photographer)
- Telecommunications Technology (Telecommunications Technician)
- Viticulture and Wine Technology (Agricultural Related Occupations)
- Wine Marketing and Sales (Sales Representative)
- Welding Technology (Welder)

Napa Valley School of Massage
1131 Trancas Street
Napa, CA 94558
(888) 282-1212
http://www.napamassageschool.com
Courses/Programs:
- Massage Therapist

Napa/Solano Office Skills Center
364 Pittman Road Ste 7
Suisun City, CA 94585
(707) 864-6062
Courses/Programs:
- A+ Computer Service and Repair (Data Processing Equipment Repairer)
- Advanced Technical Training (Computer/Technical Related Occupations)
- Bookkeeping (Accounting Clerk/Bookkeeper)
- Computer Software Courses
- Desktop Publishing (Desktop Publishing Specialist)
- Medical Billing (Medical Office/Clerical Support Occupations)

National Neon Institute
1070 Tyler Street
Benicia, CA 94510
(707) 747-6167
http://www.neonschool.com
Courses/Programs:
- Neon Sign Fabricator

New Directions Learning Center
125 Plaza Drive, Suite 405
Vallejo, CA 94591
(707) 435-1155
http://www.ndlchome.com
Courses/Programs:
- A+ Computer Technician (Data Processing Equipment Repairer)
- Administrative Assistant
- Bookkeeper/Computerized Accounting (Accounting Clerk/Bookkeeper)
- Computerized Office Systems (Office/Clerical Support Occupations)
- Customer Service Rep
- Dispatcher
- Medical Billing Clerk (Medical Office/Clerical Support Occupations)
- Medical Transcriber (Medical Office/Clerical Support Occupations)

New Directions Learning Center
1300 0liver Dr Ste 185
Fairfield, CA 94533
(916) 927-1515
http://www.ndlchome.com
Courses/Programs:
- A+ Computer Technician (Data Processing Equipment Repairer)
- Administrative Assistant
- Bookkeeper/Computerized Accounting (Accounting Clerk/Bookkeeper)
- Computerized Office Systems (Office/Clerical Support Occupations)
- Customer Service Rep
- Dispatcher
- Medical Billing Clerk (Medical Office/Clerical Support Occupations)
- Medical Transcriber (Medical Office/Clerical Support Occupations)

Operating Engineers JAC
6225 State Farm Drive, Ste 100
Rohnert Park, CA 94928
(707) 585-3430
http://www.oe3.org/
Courses/Programs:
- Operating Engineer

Pacific Union College
460 Howell Mountain Road
Angwin, CA 94508
(707) 965-6303
http://www.puc.edu
Courses/Programs:
- Aviation/Bachelor (Pilot)
- Behavioral Science/Bachelor (Social Worker)
- Biochemistry/Bachelor
- Biology/Bachelor
- Biophysics/Bachelor
- Business Administration: Accounting/Bachelor (Accountant/Auditor)
- Business Administration: Administrative Services/Bachelor (Manager/Administrator)
- Business Administration: Fashion Marketing/Bachelor (Marketing/Advertising/Public Relations Manager)
- Business Administration: Finance/Bachelor (Financial Analyst, Financial Manager)
- Business Administration: General Business/Bachelor
- Business Administration: Information Systems/Bachelor (MIS Manager)
- Business Administration: International Business/Bachelor
- Business Administration: Management/Bachelor (Manager/Administrator)
- Business Administration: Marketing/Bachelor (Marketing/Advertising/Public Relations Manager)
- Business Administration: Long Term Health Care/Bachelor (Manager/Administrator)
- Business Administration: Office Administration/Associate (Office/Clerical Support Occupations)
- Chemistry/Bachelor
- Communication/Bachelor (Marketing/Advertising/Public Relations Manager, Journalist, Speech Pathologist)
- Computer Science/Bachelor (Computer Programmer, Systems Analyst)
- Digital Media Technology/Bachelor (TV/Video Production Occupations)
- Early Child Education/Associate and Bachelor (Preschool Teacher, Preschool Center Director)
- English: British & American Literature/Bachelor (Writer, Editor)
- English: English as a Second Language/Certificate and Bachelor
- English: English Education/Bachelor
- English: Writing/Bachelor (Writer, Editor)
- Fine Arts/Bachelor (Artist)
- Graphic Design/Associate and Bachelor (Graphic Arts Technician, Graphic Designer, Illustrator, Art Director)
- Graphics Technology/Bachelor (Desktop Publishing Specialist, Graphic Arts Technician)
- History/Bachelor
- Instructional Leadership/Graduate (Teacher)
- International Communication/Bachelor (French, German and Spanish Emphasis)
- Journalism/Bachelor (Journalist)
- Lay Ministries & Bible Instructor Training/Associate
- Liberal Studies/Bachelor
- Mathematics/Bachelor
- Modern Languages: French or Spanish/Bachelor (Interpreter, Translator)
- Music/Associate and Bachelor (Musician, Music Teacher)
- Nursing/Associate and Bachelor (Registered Nurse)

Pacific Union College – Continued
Office Administration/Associate (Office/Clerical Support Occupations, Legal Office/Clerical Support Occupations, Medical Office/Clerical Support Occupations)
Photography/Associate and Bachelor (Photographer)
Physical Education/Bachelor (Instructor/Coach – Sports/Physical Training)
Physics/Bachelor
Psychology/Bachelor (Social Worker)
Public Relations/Bachelor (Marketing/Advertising/Public Relations Manager)
Religion/Bachelor (Minister/Pastor)
Social Studies/Bachelor
Social Work/Bachelor (Social Worker)
Teaching Credential (Teacher)
Theology/Bachelor (Minister/Pastor)

Petaluma Adult Education
200 Douglas Street
Petaluma, CA 94952
(707) 778-5083
http://www.petalumacityschools.org
Courses/Programs:
Adult Basic Education/GED Test Preparation
English as a Second Language
Clinical Medical Assistant
Pharmacy Technician
Phlebotomy (Phlebotomist)

Redwood Computers
720 South Point Blvd. Suite 202
Petaluma, CA 94954
(888) 640-0888
http://www.redwd.com
Courses/Programs:
Advanced Technical Training (Computer/Technical Related Occupations)
Computer Software Courses

Redwood Empire Electrical JATC
1700 Corby Avenue, Suite F
Santa Rosa, CA 95407
(707) 523-3837
http//www.ibewlocal551.org
Courses/Programs:
Electrical Apprenticeship (Electrician)

Saint Mary's College - Fairfield Extended Education Center
320 Campus Lane, Suite D
Suisun, CA 94585
(707) 863-8181
http://www.stmarys-ca.edu
Courses/Programs:
Health Services Administration/Bachelor (Medical/Health Services Manager)
Management/Bachelor (Manager/Administrator)

San Francisco Theological Seminary
2 Kensington Road
San Anselmo, CA 94960
(415) 258-6500
http://www.sjcl.edu
Courses/Programs:
Various Religious Related Programs (Minister/Pastor)

Santa Rosa Junior College
1501 Mendocino Avenue
Santa Rosa, CA 95401
(707) 527-4011
http://www.santarosa.edu
Courses/Programs:
Administration of Justice (Correctional Officer, Emergency Dispatcher, Law Enforcement Occupations)
Aeronautical and Aviation Technology (Pilot)
African American Studies
Agriculture/Natural Resources: Agribusiness (Sales Rep)
Agriculture/Natural Resources: Animal Science (Animal Caretaker, Veterinary Assistant)
Agriculture/Natural Resources: Equine Science (Animal Caretaker, Veterinary Assistant)
Agriculture/Natural Resources: General Agriculture (Agricultural Related Occupations)
Agriculture/Natural Resources: Horticulture – Landscape Management (Gardener/Groundskeeper)
Agriculture/Natural Resources: Natural Resources Conservation Technology
Agriculture/Natural Resources: Nursery Production (Gardener/Groundskeeper)
Agriculture/Natural Resources: Park and Recreation Technology (Recreation Worker)
Agriculture/Natural Resources: Plant Science (Gardener/Groundskeeper)

Santa Rosa Junior College – Continued

Agriculture/Natural Resources: Wine Marketing and Sales – Viticulture (Sales Rep)
American Sign Language (Sign Language Interpreter)
Anatomy
Anthropology
Applied Graphics (Desktop Publishing Specialist, Graphic Arts Technician)
Applied Technology (Drafter/CAD Operator)
Art
Astronomy
Automotive Technology (Auto Mechanic)
Biology
Botany
Business: Administration
Business: Banking and Financial Services (Teller, Loan Clerk, Financial/Customer Services Rep)
Business: Bookkeeping (Accounting Clerk/Bookkeeper)
Business: Hospitality (Hotel Desk Clerk)
Business: Human Resources (Human Resources Technician, Human Resources Manager)
Business: International Business
Business: Legal (Legal Office/Clerical Support Occupations)
Business: Management (Office Manager, Supervisor/Manager)
Business: Office Technology (Office/Clerical Support Occupations)
Business: Payroll (Payroll Clerk)
Business: Real Estate (Real Estate Sales Agent, Real Estate Broker)
Business: Sales and Marketing (Retail Salesperson, Sales Rep, Sales Manager)
Business: Small Business Management (Small Business Owner/Operator)
Chemistry (Chemical Technician)
Chicano Studies
Child Development (Child Care Worker, Preschool Teacher)
Chinese
Civil and Surveying Technology (Surveying/Mapping Technician)
Communication Studies
Computer and Information Sciences (Computer/Technical Related Occupations)
Construction Technology (Building Inspector, Construction Manager)
Consumer and Family Studies: Fashion (Fashion/Apparel Designer, Custom Tailor/Sewer)
Consumer and Family Studies: Floristry (Florist/Floral Designer)
Consumer and Family Studies: Interior Design (Interior Designer/Decorator)
Consumer and Family Studies: Retail Merchandising (Retail Salesperson, Sales Rep, Sales Manager)
Consumer Issues
Counseling: Human Services (Human Service Worker)
Culinary Training (Cook/Chef, Baker)
Dental Assisting (Dental Assistant)
Dental Hygiene (Dental Hygienist)
Diesel Equipment Technology (Bus/Truck/Diesel Mechanic)
Dietetic Technology (Dietetic Technician)
Earth and Space Sciences
Economics
Electronic Technology (Electrical/Electronic Engineering Technician)
Emergency Medical Care (Emergency Medical Technician, Paramedic)
Engineering
English
English as a Second Language
Environmental Technology (Water Treatment Plant Operator)
Fashion (Fashion/Apparel Designer, Custom Tailor/Sewer)
Fire Technology (Firefighter)
Food/Nutrition (Dietician/ Nutritionist)
French
Geography
Geology
German
Health Care
Health Education
History
Horticulture (Gardener/Landscaper)
Humanities
Italian
Japanese
Journalism
Latin
Library Science
Life Science

Santa Rosa Junior College - Continued
Machine Tool Technology (Machinist)
Mathematics
Media (TV/Video Production Occupations)
Medical Assisting (Medical Assistant)
Meteorology
Modern and Classical Languages
Music
Native American Studies
Natural Resource Management (Forestry and Conservation Occupations)
Nursing: Aide (Home Health Aide, Nurse Aide)
Nursing: Associate Degree (Registered Nurse)
Nursing: Vocational (Licensed Vocational Nurse)
Oceanography
Philosophy
Physical Education
Physical Science
Physics
Physiology
Political Science
Psychiatric Technician
Psychology
Radiologic Technology (Radiologic Technologist, Radiologic Technician)
Religious Studies
Russian
Social Science
Sociology
Spanish
Speech
Theater Arts
Welding (Welder)

School of Thai Traditional Medical Massage
9 Homestead Blvd
Mill Valley, CA 94941
(415) 383-4492
http://www.thai-massage.com
Courses/Programs:
Massage Therapist

Sebastopol Massage Center
108 North Main Street, Suite 5
Sebastopol, CA 95472
(707) 823-3550
Courses/Programs:
Massage Therapist

Sheet Metal Training School Local 104
1250 Petaluma Boulevard North
Petaluma, CA 94952
(707) 762-0181
http://www.smw104.org
Courses/Programs:
HVAC Technician
Sheet Metal Worker

Solano Community College
4000 Suisun Valley Road
Suisun City, CA 94585
(707) 864-7000
http://www.solano.cc.ca.us
Courses/Programs:
Accounting (Accounting Clerk/Bookkeeper)
Aeronautics (Aircraft Mechanic)
Art
Automotive - Body and Repair (Auto Body Repairer)
Automotive Technician/Mechanics (Auto Mechanic)
Banking and Finance - Bank Operations (Teller, Loan Clerk, Financial/Customer Services Rep)
Biology
Biotechnology Production Technician
Business - General Transfer
Chemistry (Chemical Technician)
Communications Studies
Computer Information Science (Computer/Technical Related Occupations)
Cosmetology (Hairstylist)
Criminal Justice - Corrections (Correctional Officer)
Criminal Justice - Law Enforcement (Law Enforcement Officer)
Drafting Technician (Drafter/CAD Operator)
Early Childhood Education (Child Care Worker, Preschool Teacher)
Electronics - Computer Servicing Technology (Electronic Home Entertainment Equipment Repairer)
Emergency Medical Technician
English
Ethnic Studies
Fashion Merchandising (Retail Salesperson, Sales Manager)
Film and Television (TV/Video Production Occupations)
Fine Arts
Fire Technology (Firefighter)
Foreign Languages

Solano Community College – Continued
Graphic Design & Illustration (Graphic Arts Technician, Graphic Designer, Illustrator)
Hazardous Substance & Waste Handling Technician (Hazardous Materials Worker)
History
Home Economics and Life Management
Human Services (Human Service Worker)
Industrial Management, Safety (Industrial Safety Officer)
Interior Design and Fashion Design (Interior Designer/Decorator, Fashion/Apparel Designer, Custom Tailor/Sewer)
International Relations
Journalism (Journalist)
Liberal Arts
Life Management
Maintenance Technician (Maintenance Repairer, Machinery Maintenance Mechanic)
Management (Office Manager, Supervisor/Manager)
Management – Retail (Sales Manager)
Management - Small Business (Small Business Owner/Operator)
Marketing
Mathematics
Music
Office Technology (Office/Clerical Support Occupations)
Ornamental Horticulture (Gardener/Landscaper)
Physical Education
Physics
Political Science
Professional Photography (Photographer)
Psychology
Registered Nursing (Registered Nurse)
Real Estate (Real Estate Sales Agent, Real Estate Broker)
Science - General
Social Science
Sports Medicine/Fitness Science (Instructor/Coach - Sports/Physical Training)
Theatre Arts
Water and Wastewater Technician (Water Treatment Plant Operator)
Welding (Welder)

Solano County ROP/Regional Occupational Program (Solano County Office of Education)
2460 Clay Bank Road
Fairfield, CA 94533
(707) 421-6525
http://www.solanoemployment.com/jobseekers/partners/scoerop.htm
Courses/Programs:
Advanced Technical Training (Computer/Technical Related Occupations)
Automotive Technology (Auto Mechanic)
Computer Software Courses
Construction Trades Introduction: Pre-Apprenticeship
Cosmetology (Hairstylist)
Dental Assisting (Dental Assistant)
Forklift Operation/Warehousing (Stock Clerk, Forklift Operator)
Heating, Ventilation, Air Conditioning and Refrigeration (HVAC Technician)
Medical Assisting (Medical Assistant)
Medical Clerical (Medical Office/Clerical Support Occupations)
Medical Laboratory Assisting (Medical/Clinical Lab Assistant)
Pharmacy Technician
Welding (Welder)

Solano School of Nursing Assistants
1330 Springs Road
Vallejo, CA 94591
(707) 557-7173
http://www.simple2net.net/solanoshool
Courses/Programs:
Home Health Aide
Nursing Assistant (Nurse Aide)

Sonoma County ROP/Regional Occupational Program (Sonoma County Office of Education)
5340 Skyline Boulevard
Santa Rosa, CA 95403
(707) 524-2720
http://www.scoe.org/depts/rop/
Courses/Programs:
Agricultural Business (Sales Rep)
Agricultural Mechanics (Agricultural Equipment Mechanic)
Auto Body Repair and Paint (Auto Body Repairer, Auto Painter)

Sonoma County ROP – Continued
Automotive Technology (Auto Mechanic)
Cabinet/Furniture Making (Cabinetmaker)
Computer Applications in Business (Office/Clerical Support Occupations)
Computer Repair Technician (Data Processing Equipment Repairer)
Computerized Accounting (Accounting Clerk/Bookkeeper)
Construction Technology
Culinary Arts (Cook/Chef, Baker)
Desktop Publishing (Desktop Publishing Specialist, Graphic Arts Technician)
Drafting Technology (Drafter/CAD Operator)
Electronics Technology
Occupations with Children (Child Care Worker)
Ornamental Horticulture (Gardener/Groundskeeper)
Preparation for Health Care
Retail Merchandising (Retail Salesperson, Sales Manager)
Sports Fitness Technician (Instructor/Coach – Sports/Physical Training)
Video Communications (TV/Video Production Occupations)
Welding (Welder)

Sonoma State University (California State University, Sonoma)
1801 East Cotati Avenue
Rohnert Park, CA 94928
(707) 664-2346
http://www.sonoma.edu
Courses/Programs:
American Multicultural Studies/Undergraduate
Anthropology/Undergraduate
Art Studio: Painting/Undergraduate (Artist, Painter)
Art Studio: Photography/Undergraduate (Photographer)
Art: Art History/Undergraduate
Art: Art Studio/Undergraduate (Artist)
Art: Film Emphasis/Undergraduate
Biology/Graduate (Biologist, Teacher)
Biology: Aquatic Biology/Undergraduate
Biology: Botany/Undergraduate
Biology: Cell Biology/Undergraduate
Biology: Ecology/Undergraduate
Biology: Marine Biology/Undergraduate
Biology: Medical Laboratory/Undergraduate (Clinical Lab Scientist)
Biology: Microbiology/Undergraduate
Biology: Physiology Animal/Undergraduate
Biology: Physiology Plant/Undergraduate
Biology: Technology/Undergraduate
Biology: Zoology/Undergraduate
Business Administration/Graduate (Manager/Administrator)
Business Administration: Accounting/Undergraduate (Accountant)
Business Administration: Business Economics/Undergraduate
Business Administration: Finance/Undergraduate (Financial Analyst, Financial Manager)
Business Administration: Human Resources Management/Undergraduate (Human Resources Manager)
Business Administration: International Management/Undergraduate
Business Administration: Management/Undergraduate (Manager/Administrator)
Business Administration: Management Marketing/Undergraduate (Marketing/Advertising/Public Relations Manager)
Business Administration: Wine Business Strategies/Undergraduate (Marketing/Advertising/Public Relations Manager)
California Cultural Studies/Undergraduate
Chemistry/Undergraduate (Chemical Technician)
Chicano and Latino Studies/Undergraduate
Communication Studies/Undergraduate
Computer and Engineering Science/Graduate (Computer Engineer)
Computer Science/Undergraduate (Computer Programmer, Computer/Technical Related Occupations, Systems Analyst)
Counseling: School/Graduate (School/Guidance Counselor)
Counseling: Marriage, Family, and Child/Graduate (MFCC/Counselor)
Criminal Justice Administration/Undergraduate (Law Enforcement Occupations)
Cultural Resources Management/Graduate (Anthropologist)
Economics: Business Economics/Undergraduate
Economics: Computer Applications in Economics/Undergraduate
Economics: International Economics/Undergraduate
Education - Teacher Credentialing Programs (Teacher)

Sonoma State University – Continued
Education: Curriculum, Teaching and Learning/Graduate (Teacher, Instructional Coordinator)
Education: Early Childhood Education/Graduate (Preschool Teacher, Preschool Center Director)
Education: Educational Administration/Graduate (Education Administrator)
Education: Reading and Language/Graduate (Teacher, Instructional Coordinator)
Education: Special Education/Graduate (Teacher)
English/Graduate (Writer, Editor, Teacher)
English: Creative Writing/Undergraduate
English: Literature/Undergraduate
English: Preparation/Undergraduate
English: Secondary Teaching/Undergraduate
Environmental Studies: Environmental Conservation and Restoration/Undergraduate (Forestry and Conservation Occupations)
Environmental Studies: Environmental Education/Undergraduate
Environmental Studies: Environmental Planning/Undergraduate (Forestry and Conservation Occupations)
Environmental Studies: Environmental Technology/Undergraduate (Forestry and Conservation Occupations)
French/Undergraduate (Interpreter, Translator)
Gender Studies/Undergraduate
Geography: Cultural Studies/Undergraduate
Geography: Earth Sciences/Undergraduate
Geology/Undergraduate
Global Studies/Undergraduate
History/Graduate (Historian, Teacher)
History/Undergraduate
Human Development/Undergraduate
Hutchins School of Liberal Studies: Interdisciplinary Studies Plan/Undergraduate
Hutchins School of Liberal Studies: Liberal Studies/Undergraduate
Hutchins School of Liberal Studies: Teaching Credential Preparation Plan/Undergraduate
Interdisciplinary Studies – ITDS/Graduate
Interdisciplinary Studies/Graduate
Kinesiology/Graduate
Kinesiology: Adapted Physical Education/Undergraduate
Kinesiology: Athletic Training/Undergraduate
Kinesiology: Exercise Science/Undergraduate
Kinesiology: Physical Education/Undergraduate
Mathematics/Undergraduate
Mathematics: Applied Mathematics/Undergraduate
Mathematics: Computer Science/Undergraduate
Mathematics: Statistics/Undergraduate
Music: Jazz Studies/Undergraduate
Music: Music Education/Undergraduate (Music Teacher)
Music: Performance/Undergraduate (Musician)
Nursing: Basic BSN/Undergraduate (Registered Nurse)
Nursing: Family Nurse Practitioner/Graduate
Nursing: Leadership/Case Management/Graduate
Nursing: LVN-to-BSN/Undergraduate (Registered Nurse)
Nursing: RN-to-BSN/Undergraduate (Registered Nurse)
Philosophy/Undergraduate
Physics/Undergraduate
Physics: Applied Physics/Undergraduate
Political Science/Undergraduate
Psychology/Undergraduate
Psychology: Art Therapy/Graduate (Art Therapist)
Psychology: Organization Development/Graduate
Psychology: Special Interest Areas/Graduate
Public Administration/Graduate (Public Policy Analyst, Manager/Administrator)
Sociology/Undergraduate
Spanish/Undergraduate (Interpreter, Translator)
Theatre Arts: Dance/Undergraduate (Dancer)
Theatre Arts: Drama/Undergraduate (Actor)
Theatre Arts: Technical Theatre/Undergraduate (Theater Production Occupations)
Women's and Gender Studies/Undergraduate

Sonoma State University, Extended Education
1801 Cotati Avenue
Rohnert Park, CA 94928
(707) 664-2394
http://www.sonoma.edu/ExEd/
Courses/Programs:
Attorney Assistant (Paralegal)
Conflict Resolution
Construction Management (Construction Manager)
Educational Technology (Teacher)
Human Resource Management (Human Resource Manager)
Management & Supervision (Manager/Administrator)
Meeting Management (Meeting Planner)
Family Nurse Practitioner Certificate Program/Post Graduate
Art Therapy Certificate/Post Graduate (Art Therapist)
Training the Trainer (Trainer)

Sonoma-Marin School of Real Estate
5430 Commerce Boulevard, Ste J
Rohnert Park, CA 94928
(707) 586-9448
Courses/Programs:
Real Estate Sales Agent
Real Estate Broker

Southern Illinois University at Carbondale
530 Hickam Avenue, 60th MSS/DPE Ste 40
Travis A F B, CA 94535
(707) 437-2982
http://www.siuc.edu/
Courses/Programs:
Industrial Technology: Engineering/Bachelor (Industrial Engineer)

Southern Marin Bible Institute
825 Drake Ave
Marin City, CA 94965
(415) 332-5156
Courses/Programs:
Various Religious Related Programs (Minister/Pastor)

Tamalpa Institute
P.0. Box 794
Kentfield, CA 94914
(415) 457-8555
http://www.tamalpa.org
Courses/Programs:
Movement Based Expressive Arts Therapy & Education

Tamalpais Adult & Community Education
(Tamalpais Union High School District)
P.O. Box 605
Larkspur, CA 94977
(415) 945-3730
http://www.marinlearn.com
Courses/Programs:
Adult Basic Education/GED Test Preparation
Art
Business
Business – Finance
Communications
Computer Software Courses
Cooking
Dance
Drama
English as a Second Language
Fitness & Exercise
Foreign Language
Health & Well Being
Home & Garden
Literary
Music
Nature & Animal Behavior
Parenting
Personal Growth
Sports
Swimming
Technical Arts

Travis AFB Aero Club, Flight Training Center
P O Box 1477
Travis A F B, CA 94535
(707) 437-3470
http://www.60thservices.com
Courses/Programs:
Flight Training (Aircraft Pilot)

Trinity Biblical University
1128 Western Street
Fairfield, CA 94533
(707) 438-0703
http://www.tbu.edu
Courses/Programs:
Various Religious Related Programs (Minister/Pastor)

Trinity College
804 W. Texas St.
Fairfield, CA 94533
(707) 425-2288
http://www.trinitycollege.com
Courses/Programs:
Administrative Medical/Dental Assistant (Medical Office/Clerical Support Occupations, Dental Office/Clerical Support Occupations)
Medical Assisting (Medical Assistant)
Massage Therapy (Massage Therapist)
Pharmacy Technician
Computer Technician (Computer/Technical Related Occupations)
Surgical Technologist
Holistic Health Practitioner (Massage Therapist)

University of Northern California
1304 Southpoint Blvd., Ste 220
Petaluma, CA 94954
(707) 765-6400
http://www.uncm.edu
Courses/Programs:
- College of Engineering: Biomedical Engineering (Biomedical Engineer)
- College of Engineering: Optical & Photonic Engineering (Optical and Photonic Engineer/Scientist)
- College of Engineering: Systems Engineering (Computer Engineer, Electronic Engineer)
- School of Languages and Linguistics: Chinese (Interpreter, Translator)
- Master of Business Administration (Manager/Administrator)
- General Education Courses

Vacaville Adult & Community Education
(Vacaville Unified School District)
100 West Monte Vista Avenue
Vacaville, CA 95688
(707) 453-6018
http://www.vusd.solanocoe.k12.ca.us
Courses/Programs:
- Adult Basic Education/GED Test Preparation
- Clinical Medical Assistant
- Computer Software Courses
- English as a Second Language
- General Office (Office/Clerical Support Occupations)
- Photography (Photographer)

Vallejo Adult School (Vallejo City Unified School District)
1140 Capitol Street
Vallejo, CA 94590
(707) 556-8680
http://www.vallejo.k12.ca.us/adultschool.asp
Courses/Programs:
- Adult Basic Education/GED Test Preparation
- Computer Software Courses
- English as a Second Language
- Business (Accounting Clerk/Bookkeeper, Office/Clerical Support Occupations)
- Nurse Assistant (Nurse Aide)
- Home Health Aide
- Surgical Technician
- Insurance Clerk - Medical Billing (Medical Office/Clerical Support Occupations)
- Medical Secretary (Medical Office/Clerical Support Occupations)
- Construction Worker (Apprentice Carpenter)
- Hazardous Waste Management (Hazardous Materials Worker)
- Semiautomatic Sewing Machine Operator (Tailor/Sewer)
- Lifeguard
- Child Daycare Center Worker (Child Care Worker)

Vallejo Nursing School
704 Tuolumne Street
Vallejo, CA 94590
(707) 645-9714
Courses/Programs:
- Certified Nursing Assistant (Nurse Aide)
- Home Health Aide

Vintage Academy of Hair Design
2110 Main Street
Napa, CA 94558
(707) 226-1845
Courses/Programs:
- Cosmetology (Hairstylist)
- Manicurist

Wellness Holistic School of Massage
345 South East Street
Santa Rosa, CA 95404
(707) 546-8115
Courses/Programs:
- Massage Therapist

Western Institute of Science and Health
130 Avram Avenue, Suite 103a
Rohnert Park, CA 94928
(707) 664-9267
http://www.westerni.org
Courses/Programs:
- Massage Therapist

Occupation-Training Index

Accountants and Auditors
Pacific Union College
Sonoma State University

Administrative Assistants
Career Transitions
Information Management Instruction Training
New Directions Learning Center
See also Office/Clerical Support Occupations

Adult and Child Day Care Center Directors
Pacific Union College
Sonoma State University

Amusement and Recreation Attendants
On-the-job training provided by employers

Animal Caretakers – Except Farm
Napa County ROP
Santa Rosa Junior College
On-the-job training provided by employers

Assemblers and Fabricators – Except Machine, Electrical, Electronic, and Precision
CHDC/Anthony Soto Employment Training
On-the-job training provided by employers

Automotive Body and Related Repairers
College of Marin
Solano Community College
Sonoma County ROP
Apprenticeship and on-the-job training provided by employers

Automotive Mechanics
College of Marin
Marin County ROP
Napa County ROP
Santa Rosa Junior College
Solano Community College
Solano County ROP
Sonoma County ROP
Apprenticeship and on-the-job training provided by employers

Bakers – Bread and Pastry
Culinary Institute of America
Institute for Educational Therapy
Marin County ROP
Santa Rosa Junior College
Sonoma County ROP

Bill and Account Collectors
On-the-job training provided by employers

Billing, Cost, and Rate Clerks (including Medical Billing Clerks)
Napa/Solano Office Skills Center
New Directions Learning Center
Vallejo Adult School

Biotechnology Laboratory Assistants
On-the-job training provided by employers

Bus and Truck Mechanics and Diesel Engine Specialists
Santa Rosa Junior College

Cabinetmakers and Bench Carpenters
Sonoma County ROP
Apprenticeship and on-the-job training provided by employers

Carpenters
Carpenter's Training Committee of Northern California
Marin County ROP
Napa County ROP
Vallejo Adult School
Apprenticeship and on-the-job training provided by employers

Cashiers
On-the-job training provided by employers

Child Care Workers
College of Marin
Marin County ROP
Napa County ROP
Napa Valley College
Santa Rosa Junior College
Solano Community College
Sonoma County ROP
Vallejo Adult School

Civil Engineers
No local programs identified for this occupation

Computer Engineers and Programmers
Pacific Union College
Sonoma State University
University of Northern California
See also Computer/Technical Related Occupations

Computer Network Administrators and Technicians
See Computer/Technical Related Occupations

Computer Support Specialists
See Computer/Technical Related Occupations

Computer/Technical Related Occupations
College of Marin
CompUSA Inc Technology Training
Computer Services and Instruction, Inc.
Empire College
Information Management Instruction Training
J Bass & Associates
Napa Valley College
Napa/Solano Office Skills Center
Redwood Computers
Santa Rosa Junior College
Solano Community College
Solano County ROP
Sonoma State University
Trinity College

Cooks – Restaurant
Culinary Institute of America
Institute for Educational Therapy
Marin County ROP
Santa Rosa Junior College
Sonoma County ROP
On-the-job training provided by employers

Correction Officers and Jailers
Napa Valley College
Santa Rosa Junior College
Solano Community College
On-the-job training provided by employers

Counter and Rental Clerks
On-the-job training provided by employers

Court Clerks
College of Marin
See also Office/Clerical Support Occupations

Data Processing Equipment Repairers
See Computer/Technical Related Occupations

Database Administrators
See Computer/Technical Related Occupations

Demonstrators and Promoters
On-the-job training provided by employers

Dental Assistants
College of Marin
Santa Rosa Junior College
Solano County ROP
Trinity College

Dental Hygienists
Santa Rosa Junior College

Dining Room and Cafeteria Attendants and Bartender Helpers
On-the-job training provided by employers

Dispatchers – Except Police, Fire, and Ambulance
New Directions Learning Center
On-the-job training provided by employers

Drafters
CADD APPLICATIONS
CADD Learning Center
Career Transitions
Napa County ROP
Napa Valley College
Santa Rosa Junior College
Solano Community College
Sonoma County ROP

Drywall Installers
Apprenticeship and on-the-job training provided by employers

Duplicating Machine Operators
On-the-job training provided by employers

Electrical and Electronic Engineering Technicians and Technologists
Napa Valley College
Santa Rosa Junior College

Electricians
Redwood Empire Electrical JATC
Apprenticeship and on-the-job training provided by employers

Engineering, Mathematical, and Natural Sciences Managers
Sonoma State University, Extended Education

Enologists
Napa Valley College
See also University of California, Davis (Yolo County): http://www.ucdavis.edu

Farm Equipment Mechanics
Napa County ROP

Financial Managers
Pacific Union College
Sonoma State University

Firefighters
Santa Rosa Junior College
Solano Community College

First Line Supervisors and Manager/Supervisors – Clerical and Administrative Support Occupations
College of Marin
Napa Valley College
Santa Rosa Junior College
Solano Community College
Sonoma State University, Extended Education
See also Office/Clerical Support Occupations

First Line Supervisors and Manager/Supervisors – Production and Operating Workers
Sonoma State University, Extended Education
On-the-job training provided by employers

First Line Supervisors and Manager/Supervisors – Sales and Related Occupations
Santa Rosa Junior College
Solano Community College
Sonoma State University, Extended Education
On-the-job training provided by employers

Food Preparation Workers (Prep Cooks)
Culinary Institute of America
Institute for Educational Therapy
Marin County ROP
Santa Rosa Junior College
Sonoma County ROP
On-the-job training provided by employers

Food Service Managers
Culinary Institute of America
On-the-job training provided by employers

General Office Clerks
See Office/Clerical Support Occupations

Graphic Art Technicians
Bay Area Computer Training
Information Management Instruction Training
Marin County ROP
Napa County ROP
Pacific Union College
Santa Rosa Junior College
Solano Community College
Sonoma County ROP

Graphic Designers
Pacific Union College
Solano Community College

Guards and Watch Guards
CHDC/Anthony Soto Employment Training
See also California Security Training Academy (Sacramento County): http://www.casecuritytraining.com/

Hairdressers, Hairstylists, and Cosmetologists
Deloux Cosmetology
Le Melange Academy of Hair
Lytle's Redwood Empire Beauty College
Marin County ROP
Napa County ROP
Napa Valley College
Solano Community College
Solano County ROP
Vintage Academy of Hair Design Inc.

Hand Packers and Packagers
On-the-job training provided by employers

Heating, Air Conditioning and Refrigeration Mechanics and Installers
Sheet Metal Training School Local 104
Solano County ROP
Apprenticeship and on-the-job training provided by employers

Helpers, All Other Construction Trade Workers
On-the-job training provided by employers

Home Health Aides
American National Red Cross
Marin County ROP
Santa Rosa Junior College
Solano School of Nursing Assistants
Vallejo Adult School
Vallejo Nursing School

Hosts, Hostesses – Restaurant, Lounge or Coffee Shop
On-the-job training provided by employers

Hotel Desk Clerks
Napa County ROP
Santa Rosa Junior College
On-the-job training provided by employers

Human Service Workers
College of Marin
Solano Community College
On-the-job training provided by employers

Industrial Production Managers
California Maritime Academy
Southern Illinois University at Carbondale
See also business administration/management programs

Industrial Truck and Tractor (Forklift) Operators
Solano County ROP
On-the-job training provided by employers

Instructional Aides
On-the-job training provided by employers

Internet Web Site Designers (Webmasters)
Bay Area Computer Training
CADD APPLICATIONS
Career Transitions
Information Management Instruction Training
See also training providers with "Computer Software Courses" that often include html (web page) authoring, Java programming, etc.

Janitors and Cleaners – Except Maids and Housekeeping Cleaners
On-the-job training provided by employers

Laboratory Technicians – Winery
See Enologists

Laborers, Landscaping and Groundskeeping
College of Marin
Napa County ROP
Santa Rosa Junior College
Solano Community College
Sonoma County ROP
On-the-job training provided by employers

Legal Office/Clerical Support Occupations
Empire College
Pacific Union College
Santa Rosa Junior College

Legal Secretaries
See Legal Office/Clerical Support Occupations

Licensed Vocational Nurses (LVNs)
Napa Valley College
Santa Rosa Junior College

Machinery Maintenance Mechanics
Solano Community College

Machinists
College of Marin
Napa Valley College
Santa Rosa Junior College

Maids and Housekeeping Cleaners
On-the-job training provided by employers

Maintenance Repairers – General Utility
Solano Community College

Marketing, Advertising, and Public Relations Managers
Pacific Union College
Sonoma State University

Massage Therapists
Alive & Well! Institute of Conscious Bodywork
California Institute of Massage & Spa Services
Calistoga Massage Therapy School
Diamond Light School of Massage and Healing Arts
Institute of Integrated Healing Arts
Jupiter Hollow School for Massage
Lifestream Massage School
Napa Valley School of Massage
School of Thai Traditional Medical Massage
Sebastopol Massage Center
Trinity College
Wellness Holistic School of Massage
Western Institute of Science and Health

Medical and Clinical Laboratory Technologists (Clinical Lab Scientists)
Sonoma State University

Medical Assistants
Boston Reed Company
Career Transitions
College of Marin
Empire College
Fairfield-Suisun Adult School
Marin County ROP
Petaluma Adult Education
Santa Rosa Junior College
Solano County ROP
Trinity College
Vacaville Adult & Community Education

New Accounts Clerks
Napa County ROP
Santa Rosa Junior College
Solano Community College
On-the-job training provided by employers

Nurse Aides
American National Red Cross
Marin County ROP
Napa County ROP
Santa Rosa Junior College
Solano School of Nursing Assistants
Vallejo Adult School
Vallejo Nursing School

Office/Clerical Support Occupations
Bay Area Computer Training
College of Marin
Empire College
Lewis Adult Education Center
Marin County ROP
Napa County ROP
Napa Valley Adult School
Napa Valley College
New Directions Learning Center
Pacific Union College
Santa Rosa Junior College
Solano Community College
Sonoma County ROP
Vacaville Adult & Community Education
Vallejo Adult School

Packaging and Filling Machine Operators and Tenders
On-the-job training provided by employers

Painters and Paperhangers – Construction and Maintenance
Apprenticeship and on-the-job training provided by employers

Paralegal Personnel
Empire College
Sonoma State University, Extended Education

Personal and Home Care Aides
Marin County ROP
On-the-job training provided by employers

Pharmacy Technicians
Fairfield-Suisun Adult School
Petaluma Adult Education
Solano County ROP
Trinity College

Physical Therapists
No local programs identified for this occupation

Physical Therapy (PT) Assistants and Aides
No local programs identified for this occupation

Plumbers, Pipefitters, and Steamfitters
Apprenticeship and on-the-job training provided by employers

Police Patrol Officers
College of Marin
Napa Valley College
Santa Rosa Junior College
Solano Community College
Sonoma State University

Property and Real Estate Managers and Administrators
Anthony Schools
College of Marin
Napa Valley College
Santa Rosa Junior College
Solano Community College
Sonoma-Marin School of Real Estate

Psychiatric Technicians
Napa Valley College
Santa Rosa Junior College

Quality Assurance Managers
On-the-job training provided by employers

Radiologic Technologists
Santa Rosa Junior College

Receptionists and Information Clerks
Career Transitions
See also Office/Clerical Support Occupations

Registered Nurses (RNs)
College of Marin
Dominican College of San Rafael
Napa Valley College
Santa Rosa Junior College
Solano Community College

Residential Counselors
No local programs identified for this occupation

Sales Representatives – Except Scientific and Related Products and Services
Napa Valley College
Santa Rosa Junior College
Sonoma County ROP

Salespersons – Parts
On-the-job training provided by employers

Salespersons – Retail (Except Vehicle Sales)
Napa County ROP
Santa Rosa Junior College
Solano Community College
Sonoma County ROP
On-the-job training provided by employers

Secretaries – Except Legal and Medical
See Office/Clerical Support Occupations

Sheet Metal Workers
Sheet Metal Training School Local 104
Apprenticeship and on-the-job training provided by employers

Stock Clerks – Stockroom, Warehouse, Storage Yard
Solano County ROP
On-the-job training provided by employers

Systems Analysts – Electronic Data Processing (Computer)
Pacific Union College
Sonoma State University
University of Northern California
See also Computer/Technical Related Occupations

Taxi Drivers and Chauffeurs
On-the-job training provided by employers

Teachers – Elementary and Secondary School
Bay Area Center for Waldorf Teacher Training
Chapman University
Dominican College of San Rafael
Pacific Union College
Sonoma State University
Sonoma State University, Extended Education

Teachers – Preschool
College of Marin
Napa Valley College
Pacific Union College
Solano Community College
Sonoma State University

Telecommunications Technicians
Marin County ROP
Napa County ROP
Napa Valley College
See also Electrical and Electronic Engineering Technicians and Technologists

Tellers
Napa County ROP
Santa Rosa Junior College
Solano Community College
On-the-job training provided by employers

Traffic, Shipping, and Receiving Clerks
CHDC/Anthony Soto Employment Training
On-the-job training provided by employers

Travel Agents
Empire College

Truck Drivers (all types)
CHDC/Anthony Soto Employment Training
Falcon Truck School
On-the-job training provided by employers

Veterinary Assistants
Napa County ROP
Santa Rosa Junior College
On-the-job training provided by employers

Vocational and Educational Counselors
Dominican College of San Rafael
Institute of Imaginal Studies
Sonoma State University

Waiters and Waitresses
On-the-job training provided by employers

Welders and Cutters
CHDC/Anthony Soto Employment Training
College of Marin
Marin County ROP
Napa Valley College
Santa Rosa Junior College
Solano Community College
Solano County ROP
Sonoma County ROP
Apprenticeship and on-the-job training provided by employers