

Napa Construction and Renovation Industry: A Workforce Needs and Opportunities Study

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Preface

As most of us know, the construction and renovation industry has been strongly affected by the credit crisis and the economic recession that began in late 2007. Housing prices dropped and home foreclosures rose sharply, especially in overbuilt areas of the country. New home construction dropped significantly and retailers stopped building new stores. State and local governments also cut back on spending which affected construction related projects. In short, recent years have not been good for the construction industry and its many workers. Of course, most of us realize that as the economy improves, so does the outlook for the construction industry. That, however, is little consolation for the construction contractors and their workers, and for the other businesses that depend on the construction industry.

As energy costs continue to rise, and as we become more aware of the tremendous waste of energy that accompanies our existing homes and buildings, people are increasingly turning to energy efficiency measures. Businesses and homeowners alike are finding it desirable to renovate homes and buildings that are not energy efficient, and, when designing and building new homes and buildings, to make them more energy efficient.

"Green building" has thus become increasingly popular in recent years. Green building is a new approach to designing, building and renovating homes and buildings that incorporates three elements: sustainable design, green building practices, and sustainable building materials. Green building often includes an investment in renewable energy (e.g. solar panels that produce electricity is a common sight in California), although that's not a requirement of sustainable design. In the Napa Valley, however, one easily notices the increasing use of solar power by many of our wineries.

Despite the effects of the poor economy, the contribution of the construction and renovation industry to the Napa Valley economy is significant. Consider that:

- This industry ranks #3 out of 20 major industries in terms of the number of businesses (835).
- This industry ranks #6 out of 20 major industries in terms of the number of jobs (4,761).
- This industry ranks #5 out of 20 major industries in terms of the annual payroll (\$267 million) and #5 in terms of the average annual wage (\$56,000).

I hope you'll agree that it is because of these contributions to our Napa economy that the construction and renovation industry is important to understand from an education, training and job placement perspective.

What is the purpose of this report?

In late 2009, the Napa County Workforce Investment Board embarked on a new series of industry sector initiatives in order to better understand the needs of local employers – specifically their workforce needs and challenges, and the opportunities they present.

Six industry sector initiative projects each focus on a priority industry selected by the Workforce Investment Board (including the Construction and Renovation Industry). Each project includes:

- An initial community forum with business leaders representing those industries (includes focus group discussion)
- An extensive workforce needs and opportunities survey with industry employers
- A second community forum to present the findings of the survey and analysis, and to discuss the future of each industry group

Industry sector initiatives have proven to be effective ways for workforce investment boards to develop more effective programs, services and policies in order to better prepare the local workforce to meet the challenges and opportunities of local employers. Another benefit of industry sector initiatives is that the business leaders who participate in the process often find themselves at the center of formal or informal advisory groups that represent the workforce and workforce development interests of their industry.

In conducting this survey and preparing this report, certain workforce challenges and their inherent opportunities became apparent. They are included in a chapter entitled Challenges and Recommendations.



Who are we?

We are the Napa County Workforce Investment Board (WIB). In partnership with the Napa County Board of Supervisors, the WIB oversees local workforce development activities and establishes programs and services in response to the workforce needs of Napa County. Our programs and services are designed to serve employers, employees, job seekers and youth in accordance with our 5 Year Strategic Plan. The plan describes the Workforce Investment Board's commitment to establishing a comprehensive, demand-driven workforce development system for Napa County.



Our Business & Career Center, which is operated by WorkforceNapa, a consortium of local service providers, is the center of our local workforce development system. This important community resource offers a wealth of training and employment resources, and labor market information, to assist both job seekers and businesses.

WorkforceNapa Business & Career Center

650 Imperial Way, Suite 101
Napa, California, 94559
Phone: (707) 259-8786
www.workforcenapa.org

We also have a satellite career center at the Napa Main Library at 580 Coombs Street in Napa.

Questions regarding the survey should be directed to Jim Cassio, our Workforce Development Analyst:
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Other questions regarding this report or our industry sector initiatives should be directed to me.

Sincerely,

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Construction and Renovation Industry Overview

The Construction and Renovation Industry in Napa County includes businesses (mostly licensed contractors) engaged in the preparation of land and construction, alteration, and repair of buildings, structures, and other property.

The largest of the three subsectors, Construction of Buildings, includes both residential and nonresidential building contractors – often referred to as general building contractors. We found this sector to have just over 2,000 jobs and about 350 employers.

The second largest of the three subsectors, Specialty Trade Contractors, includes specialty contractors (e.g., concrete masonry, site preparation, plumbing, painting, and electrical work). We found this sector to have just under 2,000 jobs and just over 400 employers.

Heavy and Civil Engineering Construction Contractors are the third subsector and include just over 700 jobs and about 70 employers.

In all, the Construction and Renovation Industry in Napa County is comprised of about 800 employers who provide nearly 5,000 local jobs. This amounts to about 7% of all the jobs in Napa County.

Subsectors of the Construction and Renovation Industry in Napa County (sorted by # of jobs)	# of Jobs	# of Firms	NAICS codes
Construction of Buildings	2,060	350	236
Specialty Trade Contractors	1,978	415	238
Heavy and Civil Engineering Construction	723	70	237
TOTAL	4,761	835	

Source: Dun & Bradstreet database, Winter 2009-2010

NAICS Industry Sector Descriptions

NAICS (the North American Industry Classification System) is the standard industry classification system used throughout North America. It is used by all U.S. Federal agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. economy.

- Construction of Buildings**
 This subsector includes businesses primarily responsible for the construction of buildings. Includes new work, additions, alterations, or maintenance and repairs.
- Specialty Trade Contractors**
 This subsector includes businesses that perform specific activities involved in building construction but are not responsible for the entire project. This includes concrete masonry, site preparation, plumbing, painting, and electrical work. Includes new work, additions, alterations, maintenance, and repairs.
- Heavy and Civil Engineering Construction**
 This subsector includes businesses whose primary activity is the construction of entire engineering projects such as highways and dams. Includes specialty trade contractors whose primary activity is the production of specific components for such projects.



Sample of Occupations

The following 34 occupations are not exclusive to this industry, but are commonly found in this industry. These occupations also do not constitute a complete list of occupations found in this industry. They are simply the 34 occupations that are most often represented by the jobs in this industry. For a profile of each of these occupations, see the chapter entitled Occupation and Training Profile.

- Architects
- Architectural and Civil Drafters
- Bookkeeping, Accounting, and Auditing Clerks
- Brickmasons and Blockmasons
- Carpenters
- Carpet Installers
- Cement Masons and Concrete Finishers
- Civil Engineers
- Construction and Building Inspectors
- Construction Laborers
- Construction Managers
- Cost Estimators
- Drywall and Ceiling Tile Installers
- Electricians
- First-Line Sup/Mgrs of Construction Trades and Extraction Workers
- Heating, Air Conditioning, and Refrigeration Mechanics and Installers
- Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters
- Helpers--Carpenters
- Helpers--Electricians
- Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons
- Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters
- Helpers--Roofers
- Operating Engineers and Other Construction Equipment Operators
- Painters, Construction and Maintenance
- Plasterers and Stucco Masons
- Plumbers, Pipefitters, and Steamfitters
- Reinforcing Iron and Rebar Workers
- Roofers
- Sales Representatives, Wholesale and Manufacturing
- Secretaries
- Sheet Metal Workers
- Tile and Marble Setters
- Truck Drivers, Heavy and Tractor-Trailer
- Truck Drivers, Light or Delivery Services

Annual Payroll and Wage Analysis

With a total annual payroll of about \$267 million, the Construction and Renovation Industry in Napa County ranks 5th out of the 20 major industries. Total annual payroll is a combination of total jobs and the wages or salaries paid for those jobs (based on statistics from the California Employment Development Department's Labor Market Information Division). In Napa County, the average annual wage for workers in this industry is \$56,000. This is considerably higher than the average for all nonfarm industries of about \$44,000 per year.



Sector Strategies

The Napa County Workforce Investment Board (WIB) embarked on a series of industry sector initiatives in late 2009 in order to better understand the needs of local employers – specifically their workforce needs and challenges, and the opportunities they present.

To initiate the sectoral strategy, the WIB selected six industry sector projects with each one focusing on a priority industry:

1. Food and Beverage Manufacturing
2. Durable Goods Manufacturing
3. Healthcare
4. Transportation, Warehousing and Utilities
5. Professional and Business Services
6. Construction and Renovation

A seventh industry sector initiative project - a study of the green economy - has since been added to the list. What makes this green economy project different is the fact that many sectors of the green economy overlap with other industries, including several of those identified for the purposes of our industry sector initiatives.

Each industry sector initiative project includes:

- An initial community forum with business leaders representing the subsectors of each industry (including focus group discussions)
- A workforce needs and opportunities survey with industry employers
- A second community forum to present the findings of the survey and to discuss the challenges and opportunities

What are the objectives and outcomes of industry sector initiatives?

Industry sector initiatives have proven to be effective ways for workforce investment boards to:

1. Better understand the workforce needs and challenges of specific industries
2. Bring together leaders from the business and workforce development communities to address the needs and challenges identified by the sector initiatives
3. Develop more effective workforce development programs, services and policies in order to better prepare the local and regional workforce
4. Develop industry-driven skill panels or employer advisory groups that represent the workforce and workforce development interests of their industries

Outcome examples of industry sector initiatives:

- Partnerships can leverage resources to develop new training programs or seek funds for special projects
- Closer working relationship allows for better labor market research and an improved understanding of the industry's workforce needs and the workforce development system's programs and services
- Allows for the development of new programs and services for incumbent workers
- Allows for better mapping of career pathways and entry-level employment opportunities

The role of education and training providers in industry sector initiatives

Education and training providers play an important role in most sector initiatives. Many of the community-based organizations that operate long-standing sector initiatives, including workforce investment boards, began by providing or brokering training services. Moreover, public policy has increasingly encouraged the development of sector partnerships involving formal education providers such as community colleges and technical schools, and these relationships are growing in number.



Industry sector initiative resources

- **National Association of Workforce Boards (NAWB) - www.nawb.org**

The National Association of Workforce Boards represents the interests of the nation's business-led Workforce Investment Boards. NAWB is guided by a Board of Directors, composed primarily of Workforce Board chairs and past chairs that oversee job training at the local level. Founded in 1979, NAWB membership consists of local boards and governor-appointed state workforce investment boards representing approximately 15,000 volunteers from business and other sectors. Services available include customized-training, publications and information dissemination to workforce investment boards.

- **National Network of Sector Partners (NNSP) - www.insightcced.org/index.php?page=nnspp**

The National Network of Sector Partners is the trade association and resource center for organizations working to develop industry-specific workforce and economic development initiatives across the United States. NNSP can provide information on organizations conducting initiatives in specific sectors and can share strategies that have worked elsewhere. Visit NNSP for profiles of current initiatives, publications, conference announcements, resources, and a quarterly newsletter. Small grants, teleconferences on hot sector topics, and other resources are also available to members.

- **Workforce Strategies Initiative - The Aspen Institute - www.aspenwsi.org**

The Aspen Institute Workforce Strategies Initiative has conducted evaluations, provided technical assistance, and designed key publications in the sector field. Search their website for key publications, findings, and materials on developing outcomes for both individual program participants and employer partners, including information specific to WIB-sponsored sector initiatives.

- **Public/Private Ventures (P/PV) - www.ppv.org**

Public/Private Ventures has developed key publications and evaluations on sector initiatives. They also offer training for workforce development professionals (Working Ventures) and run a small grants program to assist workforce organizations in key sector initiative areas. Search their website for a range of publications and materials of help to practitioners.

- **Working for America Institute - AFL-CIO - www.workingforamerica.org**

The Working for America Institute supports the development of sectoral labor-management partnerships through publications, technical assistance, and workforce policy supports. Visit their website for information on labor-management sectoral programs in the building trades, health care, hospitality, and manufacturing sectors.



Workforce Needs and Opportunities Survey

This survey was conducted in March and April of 2010 following a focus group discussion with business leaders representing the Construction and Renovation Industry in Napa County. In addition to the focus group participants, a total of 17 employers participated in the online survey which was conducted as a confidential survey using SurveyMonkey. The survey response constitutes an approximate 47% response rate. Survey respondents were assured that they would not be identified by name or organization; therefore the survey results are summarized.

1. How many employees do you currently have working at your Napa County location(s)?

Total: 419 employees

Individual responses ranged from 2 employees to over 100 employees.

2. Of your current employees, how many are:

	Number	Percent
Full time:	355	84.7%
Part time:	13	3.1%
On call:	31	7.4%
Temp or seasonal:	20	4.8%

3. About what percent of your employees live outside Napa County?

Average: 23.6%

Individual responses ranged from 10% to a high of 75%.

4. Over the past 12 months, has your number of employees:

	Number of employers	Percent of jobs
Increased:	1	1.9%
Decreased:	12	89.3%
Remained about the same:	4	8.7%

5. For what jobs did you hire the most replacement workers over the past 2 years?

(listed alphabetically)

- Job Superintendents
- Journeyman Electricians (3x)
- Laborers (2x)
- Plastering Workers
- Tapers, Sheetrockers
- Truck Drivers, Operators



6. For what jobs have you had significant difficulty finding qualified applicants who meet your hiring standards?

- Estimators, Project Managers
- Home automation specialists
- Job Superintendents
- Laborers
- Remodel multi-trade workers

7. When you consider the new employees you have hired over the past 2 years, are there any specific knowledge, skills or abilities that you feel are in short supply?

- Carpentry skills
- Estimation and project management skills
- General work ethic, use of common sense to think on your own and with regard to safety
- Math and communication skills

8. About how many new jobs do you expect to add during the next 2 years?

	Number of new jobs	Percent of new jobs
Full time:	45	54.9%
Part time:	0	0.0%
On call:	7	8.5%
Temp or seasonal:	30	36.6%
TOTAL:	82	100.0%

9. What types of jobs will make up the most new positions?

- Carpenters
- Carpenters, Laborers
- Certified Green Technicians
- Electricians (2x)
- Electricians, Project Managers
- Electricians, Union
- Heavy Equipment Operators
- Laborers
- Mechanical personnel, Plumbers
- Operators, Laborers
- Plastering Workers
- Truck Drivers, Operators, Job Superintendents, Carpenters, Laborers



10. Do you expect your overall number of employees to be reduced over the next 2 years?

	Number of employers
Yes:	3
No:	14

11. If YES, about how many employees do you expect to lose?

Three employers reported a total of 12-17 employees that they expect to lose over the next 2 years (via job reduction). Two of the employers attributed this to the downturn in the economy, and the third employer attributed it to an increase in inexperienced and/or unqualified bidders competing for work.

12. What are the top trends that we should we be aware of that are affecting, or will affect, your industry?

- Ability of business owners to loan money for construction projects; the vast availability of vacant commercial space; residential and commercial construction standard changes; Building Information Modeling (BIM) software and construction processes
- Automation requiring computer and low voltage wiring
- Economy
- Green energy (in a positive way), general economy
- Higher gas and material prices and insurance rates
- Lack of available credit
- Lack of available credit for developers, permit fee increases
- Lack of control over the underground economy (especially when it comes to bidding)
- Lack of public works contracts available
- New laws and regulations
- New laws and regulations, lack of available credit
- Project labor agreements (PLAs) are bad, California Air Resources Board (CARB) regulations are expensive
- Tax deductions and credits
- Too much regulatory interference from county building and planning departments

13. Are there any specific education or training programs in Napa County or nearby that you would like to recognize as excellent programs for preparing a skilled workforce?

- IBEW & NECA Joint Apprenticeship Program for Electricians (3x)
- Marin County's Associated Builder and Contractors Program (for apprentices)
- UA Local 343 Plumbers & Steamfitters Apprenticeship Program

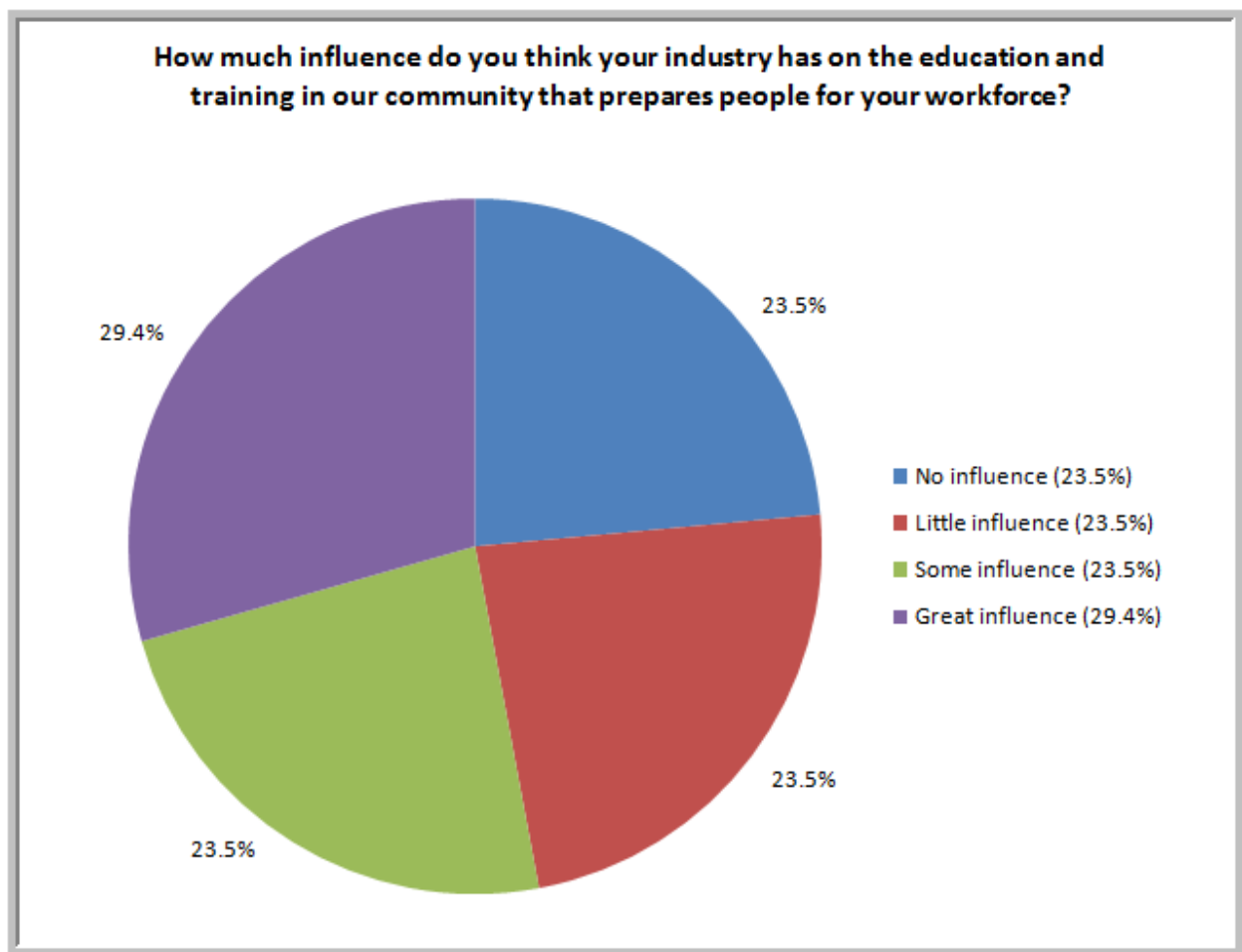


14. Are there any specific education or training programs in Napa County or nearby that you would like to recognize as being deficient in their ability to prepare a skilled workforce?

Responses to this question will be communicated directly to the education/training providers.

15. How much influence do you think your industry has on the education and training in our community that prepares people for your workforce? (Check one)

	Number of employers	Percent of employers
No influence:	4	23.5%
Little influence:	4	23.5%
Some influence:	4	23.5%
Great influence:	5	29.4%





16. In what ways are you able to have that influence?

Respondents who said “No influence”

- One respondent said: I actually believe there is negative influence from educators, steering youth away from the construction industry. Nobody wants to tell their kids to go do physical labor for a living.

Respondents who said “Little influence”

- By being active in the community through Kiwanis, Rotary, etc
- Through industry awareness and promotion of opportunities

Respondents who said “Some influence”

- By being bi-lingual
- Through in-house training
- Through the apprenticeship program (2x)

Respondents who said “Great influence”

- By hiring local workers
- By helping to develop training material through the NECA/IBEW committees
- Great teachers and lots of community involvement

17. In general, how important are the following types of labor market information to you?

- **Economic outlook reports by industry sector:**

	Number of employers	Percent of employers
Extremely Important:	2	11.8%
Very Important:	6	35.3%
Somewhat Important:	8	47.1%
Not Important:	1	5.9%

- **Occupational research reports:**

	Number of employers	Percent of employers
Extremely Important:	2	11.8%
Very Important:	1	5.9%
Somewhat Important:	8	47.1%
Not Important:	6	35.3%

- **Postsecondary education and training directory:**

	Number of employers	Percent of employers
Extremely Important:	4	23.5%
Very Important:	1	5.9%
Somewhat Important:	5	29.4%
Not Important:	7	41.2%



18. In general, how difficult is it for you to find new employees who possess these **BASIC SKILLS** prior to employment:

- **READING SKILLS:**

	Number of employers	Percent of employers
Extremely Difficult:	1	5.9%
Very Difficult:	1	5.9%
Somewhat Difficult:	6	35.3%
Not At All Difficult:	9	52.9%

- **WRITING SKILLS:**

	Number of employers	Percent of employers
Extremely Difficult:	1	5.9%
Very Difficult:	2	11.8%
Somewhat Difficult:	5	29.4%
Not At All Difficult:	9	52.9%

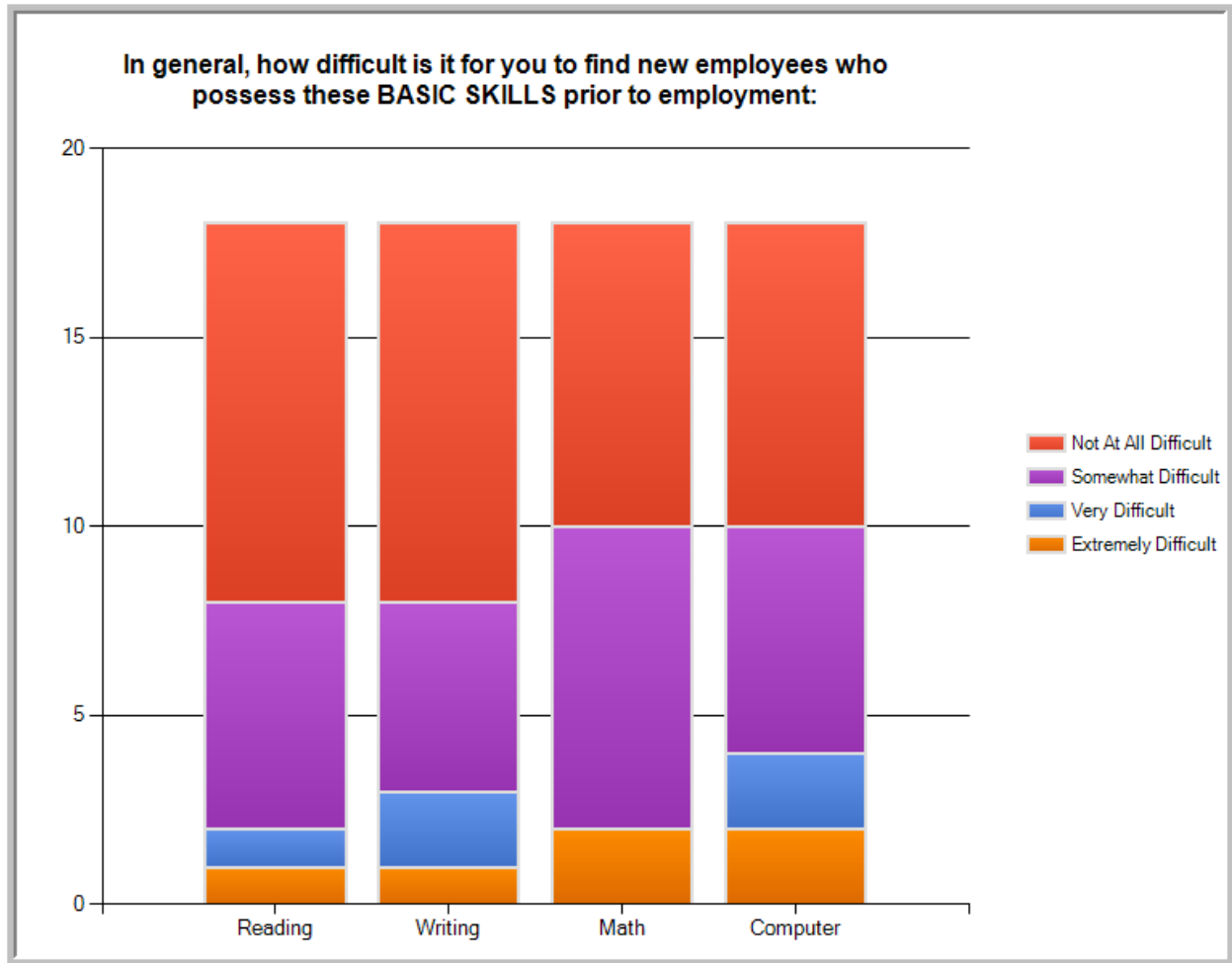
- **MATH SKILLS:**

	Number of employers	Percent of employers
Extremely Difficult:	2	11.8%
Very Difficult:	0	0.0%
Somewhat Difficult:	8	47.1%
Not At All Difficult:	7	41.2%

One non-response to the math skills question

- **COMPUTER SKILLS:**

	Number of employers	Percent of employers
Extremely Difficult:	2	11.8%
Very Difficult:	2	11.8%
Somewhat Difficult:	6	35.3%
Not At All Difficult:	7	41.2%





19. In general, how difficult is it for you to find new employees who possess these WORKPLACE SKILLS prior to employment:

• **TEAMWORK SKILLS:**

	Number of employers	Percent of employers
Extremely Difficult:	1	5.9%
Very Difficult:	1	5.9%
Somewhat Difficult:	9	52.9%
Not At All Difficult:	6	35.3%

• **PROBLEM SOLVING/CRITICAL THINKING SKILLS:**

	Number of employers	Percent of employers
Extremely Difficult:	1	5.9%
Very Difficult:	3	17.6%
Somewhat Difficult:	10	58.8%
Not At All Difficult:	3	17.6%

• **COMMUNICATION SKILLS:**

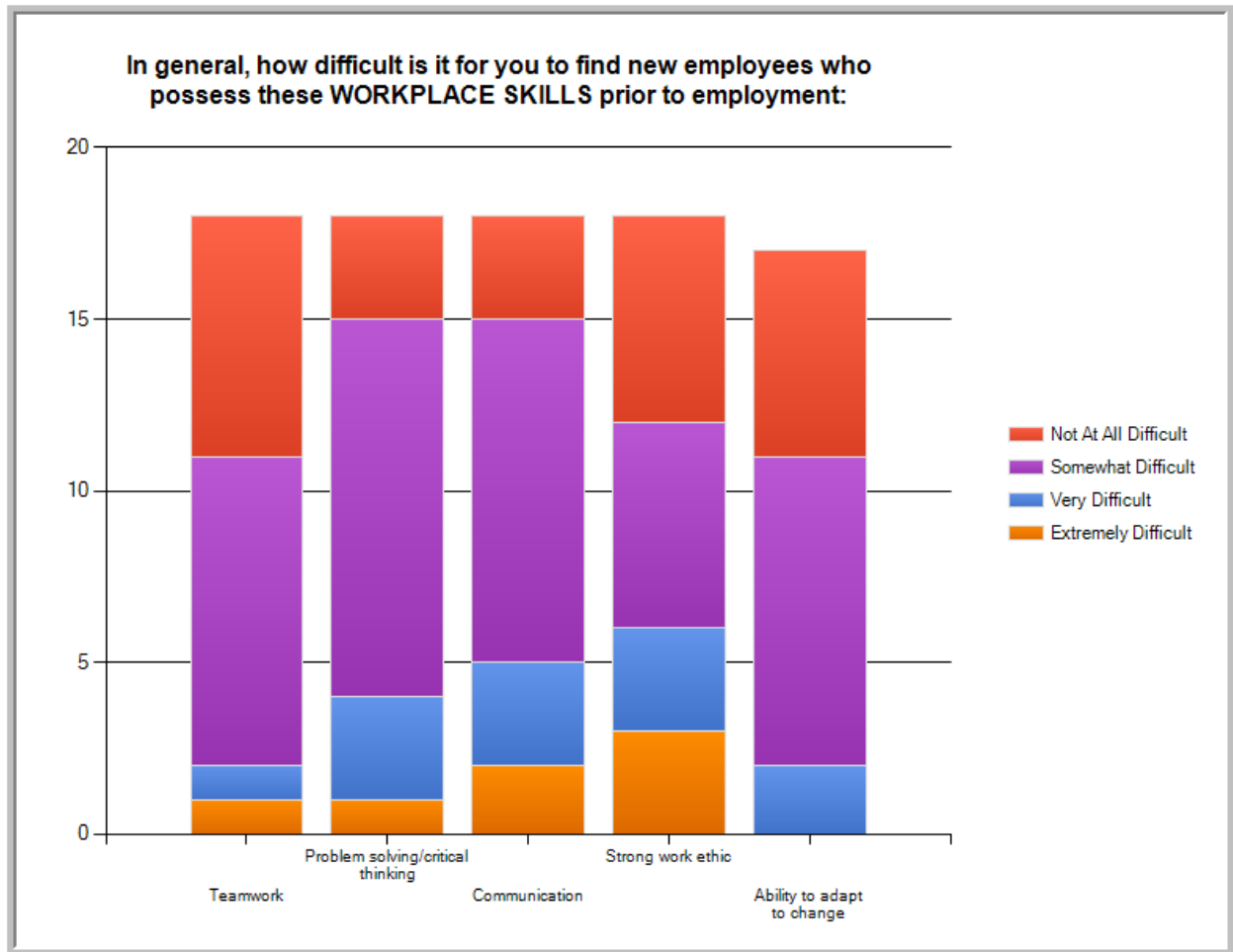
	Number of employers	Percent of employers
Extremely Difficult:	2	11.8%
Very Difficult:	3	17.6%
Somewhat Difficult:	9	52.9%
Not At All Difficult:	3	17.6%

• **STRONG WORK ETHIC:**

	Number of employers	Percent of employers
Extremely Difficult:	3	17.6%
Very Difficult:	3	17.6%
Somewhat Difficult:	6	35.3%
Not At All Difficult:	5	29.4%

• **ABILITY TO ADAPT TO CHANGE:**

	Number of employers	Percent of employers
Extremely Difficult:	0	0.0%
Very Difficult:	2	11.8%
Somewhat Difficult:	9	52.9%
Not At All Difficult:	6	35.3%



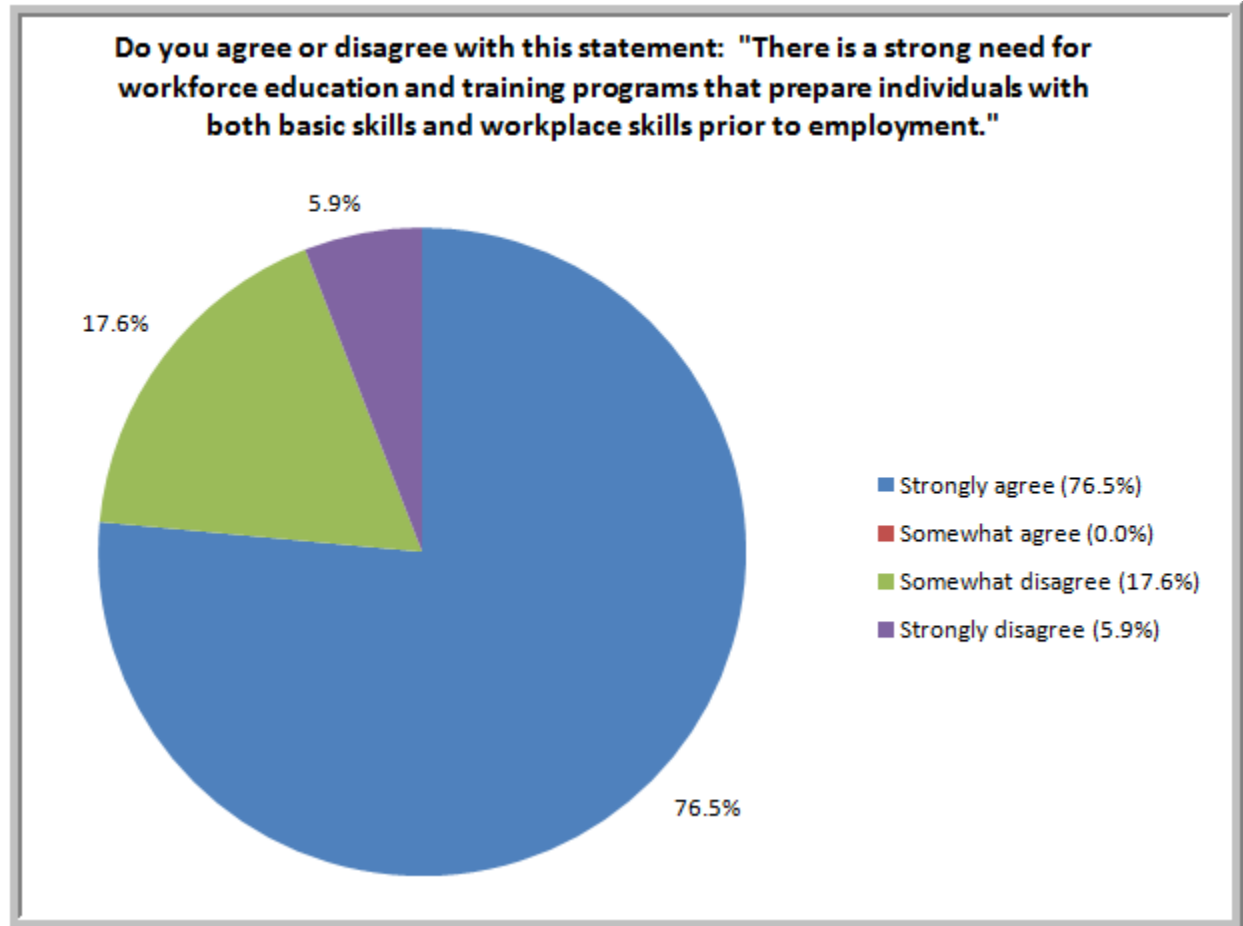


20. What JOB SPECIFIC SKILLS are difficult for you to find in new employees prior to employment?

- Common sense, work ethic
- Construction project management skills
- Customer service skills, organizational skills, prioritization of tasks by importance
- English language skills
- English speaking skills
- English speaking, communication skills
- Motivation
- Prompt and timely
- Public relations skills
- Supervisory skills

21. Do you agree or disagree with this statement: "There is a strong need for workforce education and training programs that prepare individuals with both basic skills and workplace skills prior to employment."

	Number of employers	Percent of employers
Strongly agree	13	76.5%
Somewhat agree	0	0.0%
Somewhat disagree	3	17.6%
Strongly disagree	1	5.9%



22. If you agree with the above statement, what should be the focus of the training?

- Common sense, work ethic, specific job training for Operators, Truck Drivers and Laborers
- English speaking, communication, a sampling of vocational training in various trades
- Estimating, construction management
- How to be a team player, how to communicate problems that arise in the workplace with co-workers, stress the importance of a good work ethic
- How to develop and use your common sense
- Public relations skills, specific craft skills
- Reading, writing, math
- Soft skills, communication skills
- Trade specific skills training
- Work ethic, basic communication skills
- Work ethic, how to work in the workplace
- Work ethic, workplace skills like timeliness, knowing the right tools to bring to the job



23. Do your employees have job specific skill deficiencies that could be addressed by a new training program?

	Number of employers	Percentage of employers	Percentage of jobs
Yes:	3	17.6%	28.6%
No:	14	82.4%	71.4%

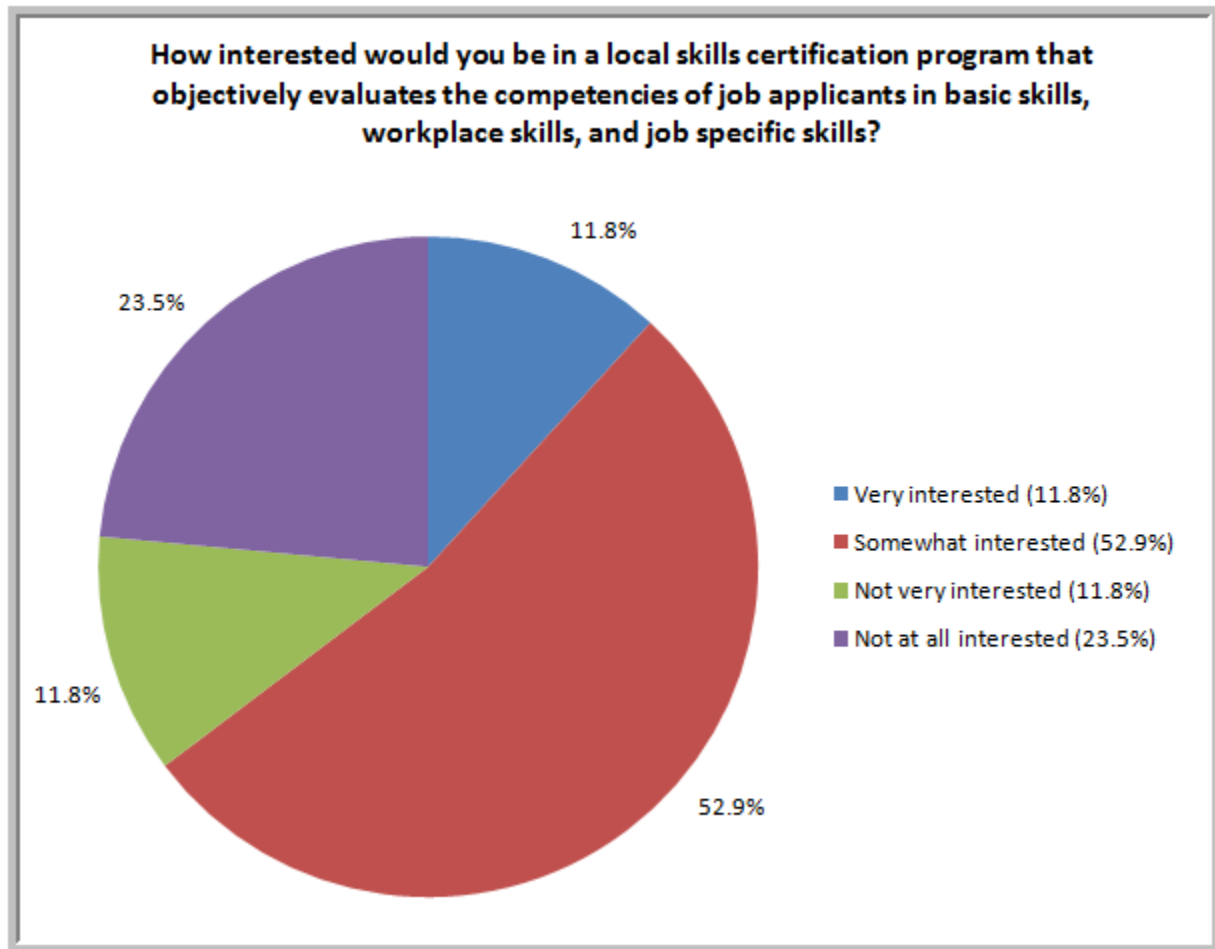
24. If YES, what kind of skill deficiencies?

- Customer service skills
- Training on the latest products and tools



25. How interested would you be in a local skills certification program that objectively evaluates the competencies of job applicants in basic skills, workplace skills, and job specific skills? (Check one)

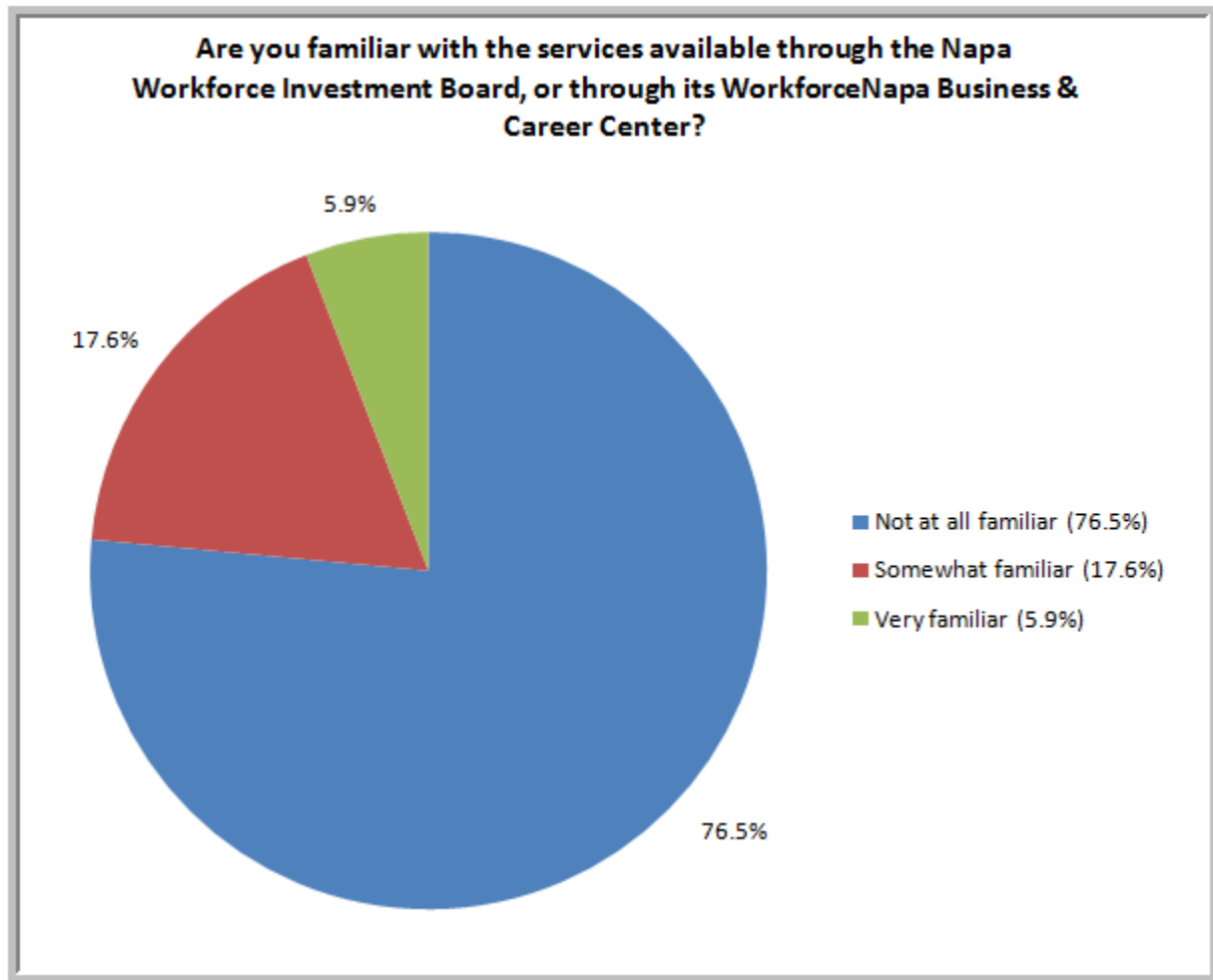
	Number of employers	Percent of employers
Very interested:	2	11.8%
Somewhat interested:	9	52.9%
Not very interested:	2	11.8%
Not at all interested:	4	23.5%






26. Are you familiar with the services available through the Napa Workforce Investment Board, or through its WorkforceNapa Business & Career Center?

	Number of employers	Percent of employers
Not at all familiar:	13	76.5%
Somewhat familiar:	3	17.6%
Very familiar:	1	5.9%





27. Please indicate which of the following services would be of value to you as an employer?

		Response Percent	Response Count
Recruiting or prescreening assistance		41.7%	5
On-site recruitment at the WorkforceNapa Business & Career Center		25.0%	3
Subsidized employment (e.g. on-the-job training incentives)		83.3%	10
Assistance in developing one or more internship positions (paid or unpaid)		33.3%	4
Outplacement services or lay-off assistance		25.0%	3
Understanding regulatory or legal issues		25.0%	3
How to utilize employee tax credits		58.3%	7
Developing a business plan		16.7%	2
Developing and implementing a marketing plan		25.0%	3
Strategic growth planning		41.7%	5
Business succession or employee ownership planning		25.0%	3
Business closure assistance		16.7%	2
Meeting or conference room space		16.7%	2
		answered question	12
		skipped question	6



Top Job Opportunities in the Napa Construction and Renovation Industry

Here are the top local job opportunities in this industry – based on what our employers have told us in our surveys and in focus group discussions. The matrix indicates whether the job is in-demand because of:

- A. Significant worker replacement needs
- B. Employer difficulty in finding qualified applicants
- C. Jobs that will offer the most new positions in the next two years

	A. Jobs with Significant Replacement Needs	B. Difficulty Finding Qualified Applicants	C. Jobs Expected to Add the Most New Positions in Next 2 Yrs
Architects			
Architectural and Civil Drafters			
Bookkeeping, Accounting, and Auditing Clerks			
Brickmasons and Blockmasons			
Carpenters			X
Carpet Installers			
Cement Masons and Concrete Finishers			
Civil Engineers			
Construction and Building Inspectors			
Construction Laborers	X	X	X
Construction Managers	X	X	X
Cost Estimators		X	
Drywall and Ceiling Tile Installers	X		
Electricians	X		X
First-Line Sup/Mgrs of Construction Trades and Extraction Workers	X	X	X
Heating, Air Conditioning, and Refrigeration Mechanics and Installers			
Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters			
Helpers--Carpenters			
Helpers--Electricians			
Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons			
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters			
Helpers--Roofers			
Operating Engineers and Other Construction Equipment Operators	X		X
Painters, Construction and Maintenance			
Plasterers and Stucco Masons	X		X
Plumbers, Pipefitters, and Steamfitters			X
Reinforcing Iron and Rebar Workers			
Roofers			
Sales Representatives, Wholesale and Manufacturing Secretaries			
Sheet Metal Workers			
Tile and Marble Setters			
Truck Drivers, Heavy and Tractor-Trailer	X		X
Truck Drivers, Light or Delivery Services	X		X



Occupation and Training Profile

The 34 occupations profiled on the following pages are not exclusive to this industry, but are commonly found in this industry.

These occupations also do not constitute a complete list of occupations found in this industry. They are simply the 34 occupations that are most often represented by the jobs in this industry.

Wages and employment statistics are from the California Labor Market Information Division (www.labormarketinfo.edd.ca.gov). Note that wages and employment statistics for these occupations are not industry-specific.

The O*NET Link leads to a profile for each occupation that provides comprehensive information on important knowledge, skills and abilities. O*NET is from the U.S. Department of Labor and is the nation's largest database of occupational qualifications and characteristics.



Architects

What do they do?

Plan and design structures, such as private residences, office buildings, theaters, factories, and other structural property.

<i>Typical Education Level:</i>	Bachelor's Degree
<i>Median Annual Wage:</i>	\$81,200 (California)
<i>Estimated Jobs in 2006 & 2016:</i>	15,700 - 16,900 (California)
<i>Projected Growth 2006-2016:</i>	8% (California)
<i>Relative Growth Rate:</i>	About average growth (California)
<i>Job Openings from Growth and Replacements 2006-2016:</i>	4,200 (California)
<i>Training Available From:</i>	No local degree programs identified. However, there are several architectural schools in the bay area, including Academy of Art University's Architecture Program (San Francisco), California College of the Arts School of Architecture (San Francisco), San Francisco Institute of Architecture (Alameda), and University of California, Berkeley. Also, some community colleges have classes and programs that can apply toward a Bachelor's degree in Architecture.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/17-1011.00

Architectural and Civil Drafters

What do they do?

Prepare detailed drawings of architectural and structural features of buildings or drawings and topographical relief maps used in civil engineering projects, such as highways, bridges, and public works. Utilize knowledge of building materials, engineering practices, and mathematics to complete drawings.

<i>Typical Education Level:</i>	Postsecondary Vocational or Technical Education
<i>Median Annual Wage:</i>	\$50,617
<i>Estimated Jobs in 2006 & 2016:</i>	40 – 50
<i>Projected Growth 2006-2016:</i>	25.0%
<i>Relative Growth Rate:</i>	Much faster than average growth
<i>Job Openings from Growth and Replacements 2006-2016:</i>	20
<i>Training Available From:</i>	Napa Valley College offers night classes in the use of AutoCAD software. However, the nearest program for architectural and civil drafting would be at College of Marin, Santa Rosa Junior College, and Solano Community College.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/17-3011.00



Bookkeeping, Accounting, and Auditing Clerks

What do they do?

Compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. May also check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers.

<i>Typical Education Level:</i>	Moderate-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$39,892
<i>Estimated Jobs in 2006 & 2016:</i>	1,150 - 1,310
<i>Projected Growth 2006-2016:</i>	13.9%
<i>Relative Growth Rate:</i>	Faster than average growth
<i>Job Openings from Growth and Replacements 2006-2016:</i>	340
<i>Training Available From:</i>	Although this is an on-the-job training type occupation, Napa Valley College has a certificate program in bookkeeping and an AS degree program in accounting.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/43-3031.00

Brickmasons and Blockmasons

What do they do?

Lay and bind building materials, such as brick, structural tile, concrete block, cinder block, glass block, and terra-cotta block, with mortar and other substances to construct or repair walls, partitions, arches, sewers, and other structures.

<i>Typical Education Level:</i>	Long-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$49,646
<i>Estimated Jobs in 2006 & 2016:</i>	150 - 160
<i>Projected Growth 2006-2016:</i>	6.7%
<i>Relative Growth Rate:</i>	About average growth
<i>Job Openings from Growth and Replacements 2006-2016:</i>	40
<i>Training Available From:</i>	Apprenticeship training (union and non-union) is typical for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-2021.00



Carpenters

What do they do?

Construct, erect, install, or repair structures and fixtures made of wood, such as concrete forms; building frameworks, including partitions, joists, studding, and rafters; wood stairways, window and door frames, and hardwood floors. May also install cabinets, siding, drywall and batt or roll insulation. Includes brattice builders who build doors or brattices (ventilation walls or partitions) in underground passageways to control the proper circulation of air through the passageways and to the working places.

<i>Typical Education Level:</i>	Long-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$50,647
<i>Estimated Jobs in 2006 & 2016:</i>	1,580 - 1,370
<i>Projected Growth 2006-2016:</i>	-13.3%
<i>Relative Growth Rate:</i>	Rapid decline
<i>Job Openings from Growth and Replacements 2006-2016:</i>	210
<i>Training Available From:</i>	Apprenticeship training (union and non-union) is typical for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-2031.00

Carpet Installers

What do they do?

Lay and install carpet from rolls or blocks on floors. Install padding and trim flooring materials.

<i>Typical Education Level:</i>	Moderate-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$39,100 (California)
<i>Estimated Jobs in 2006 & 2016:</i>	16,300 - 16,500 (California)
<i>Projected Growth 2006-2016:</i>	1.2% (California)
<i>Relative Growth Rate:</i>	Little or no change (California)
<i>Job Openings from Growth and Replacements 2006-2016:</i>	2,500 (California)
<i>Training Available From:</i>	Apprenticeship training (union and non-union) is typical for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-2041.00



Cement Masons and Concrete Finishers

What do they do?

Smooth and finish surfaces of poured concrete, such as floors, walks, sidewalks, roads, or curbs using a variety of hand and power tools. Align forms for sidewalks, curbs, or gutters; patch voids; use saws to cut expansion joints.

<i>Typical Education Level:</i>	Moderate-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$53,516
<i>Estimated Jobs in 2006 & 2016:</i>	130 – 120
<i>Projected Growth 2006-2016:</i>	-7.7%
<i>Relative Growth Rate:</i>	Moderate decline
<i>Job Openings from Growth and Replacements 2006-2016:</i>	40
<i>Training Available From:</i>	Apprenticeship training (union and non-union) is typical for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-2051.00

Civil Engineers

What do they do?

Perform engineering duties in planning, designing, and overseeing construction and maintenance of building structures, and facilities, such as roads, railroads, airports, bridges, harbors, channels, dams, irrigation projects, pipelines, power plants, water and sewage systems, and waste disposal units. Includes architectural, structural, traffic, ocean, and geo-technical engineers.

<i>Typical Education Level:</i>	Bachelor's Degree
<i>Median Annual Wage:</i>	\$64,348
<i>Estimated Jobs in 2006 & 2016:</i>	100 – 130
<i>Projected Growth 2006-2016:</i>	30.0%
<i>Relative Growth Rate:</i>	Much faster than average growth
<i>Job Openings from Growth and Replacements 2006-2016:</i>	60
<i>Training Available From:</i>	No local degree programs identified. The nearest programs are offered by University of California-Davis and San Francisco State University.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/17-2051.00



Construction and Building Inspectors

What do they do?

Inspect structures using engineering skills to determine structural soundness and compliance with specifications, building codes, and other regulations. Inspections may be general in nature or may be limited to a specific area, such as electrical systems or plumbing.

<i>Typical Education Level:</i>	Work Experience in a Related Occupation
<i>Median Annual Wage:</i>	\$68,300 (California)
<i>Estimated Jobs in 2006 & 2016:</i>	12,500 - 15,100 (California)
<i>Projected Growth 2006-2016:</i>	21.0% (California)
<i>Relative Growth Rate:</i>	Much faster than average growth (California)
<i>Job Openings from Growth and Replacements 2006-2016:</i>	4,900 (California)
<i>Training Available From:</i>	This occupation requires a combination of 4 things: one, extensive work experience in a related field such as architecture, civil engineering or construction; two, 1-2 years of college courses or a certificate/degree in building/construction inspection or construction technology; three, memorization of building codes; and four, on-the-job training under an experienced inspector. No local certificate or degree programs were identified for this occupation. The nearest programs were at Diablo Valley College in Pleasant Hill, Laney College in Oakland, and College of San Mateo.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-4011.00

Construction Laborers

What do they do?

Perform tasks involving physical labor at building, highway, and heavy construction projects, tunnel and shaft excavations, and demolition sites. May operate hand and power tools of all types: air hammers, earth tampers, cement mixers, small mechanical hoists, surveying and measuring equipment, and a variety of other equipment and instruments. May clean and prepare sites, dig trenches, set braces to support the sides of excavations, erect scaffolding, clean up rubble and debris, and remove asbestos, lead, and other hazardous waste materials. May assist other craft workers.

<i>Typical Education Level:</i>	Moderate-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$38,509
<i>Estimated Jobs in 2006 & 2016:</i>	780 – 740
<i>Projected Growth 2006-2016:</i>	-5.1%
<i>Relative Growth Rate:</i>	Moderate decline
<i>Job Openings from Growth and Replacements 2006-2016:</i>	60
<i>Training Available From:</i>	The Regional Occupational Program (ROP) in Napa County offers a construction technology program for high school students (only). No other local certificate training programs were identified. However, the WorkforceNapa Business and Career Center may offer green-building related training opportunities for unemployed or underemployed construction workers.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-2061.00



Construction Managers

What do they do?

Plan, direct, coordinate, or budget, usually through subordinate supervisory personnel, activities concerned with the construction and maintenance of structures, facilities, and systems. Participate in the conceptual development of a construction project and oversee its organization, scheduling, and implementation.

<i>Typical Education Level:</i>	Bachelor's Degree
<i>Median Annual Wage:</i>	\$111,349
<i>Estimated Jobs in 2006 & 2016:</i>	310 – 310
<i>Projected Growth 2006-2016:</i>	0.0%
<i>Relative Growth Rate:</i>	Little or no change
<i>Job Openings from Growth and Replacements 2006-2016:</i>	50
<i>Training Available From:</i>	For construction manager jobs, a Bachelor's Degree in construction science, construction management, building science, or civil engineering, plus work experience, is becoming the norm. However, years of experience, in addition to taking classes in the field or getting an Associate's Degree, can substitute for a Bachelor's Degree. Practical construction experience is very important for entering the construction manager and cost estimator occupations, whether earned through internships, cooperative education programs, or jobs in the construction trades. Sonoma State University has the nearest construction management certificate program.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/11-9021.00

Cost Estimators

What do they do?

Prepare cost estimates for product manufacturing, construction projects, or services to aid management in bidding on or determining price of product or service. May specialize according to particular service performed or type of product manufactured.

<i>Typical Education Level:</i>	Bachelor's Degree
<i>Median Annual Wage:</i>	\$76,407
<i>Estimated Jobs in 2006 & 2016:</i>	140 – 140
<i>Projected Growth 2006-2016:</i>	0.0%
<i>Relative Growth Rate:</i>	Little or no change
<i>Job Openings from Growth and Replacements 2006-2016:</i>	30
<i>Training Available From:</i>	For construction cost estimator jobs, a Bachelor's Degree in construction science, construction management, building science, or civil engineering, plus work experience, is becoming the norm (similar to the requirements for construction manager jobs). However, several years of experience, in addition to college level classes, can substitute for a Bachelor's Degree. Practical construction experience is very important for entering the construction manager and cost estimator occupations, whether earned through internships, cooperative education programs, or jobs in the construction trades. Sonoma State University has the nearest construction management certificate program.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/13-1051.00



Drywall and Ceiling Tile Installers

What do they do?

Apply plasterboard or other wallboard to ceilings or interior walls of buildings. Apply or mount acoustical tiles or blocks, strips, or sheets of shock-absorbing materials to ceilings and walls of buildings to reduce or reflect sound. Materials may be of decorative quality. Includes lathers who fasten wooden, metal, or rockboard lath to walls, ceilings or partitions of buildings to provide support base for plaster, fire-proofing, or acoustical material.

<i>Typical Education Level:</i>	Moderate-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$54,352
<i>Estimated Jobs in 2006 & 2016:</i>	120 – 100
<i>Projected Growth 2006-2016:</i>	-16.7%
<i>Relative Growth Rate:</i>	Rapid decline
<i>Job Openings from Growth and Replacements 2006-2016:</i>	20
<i>Training Available From:</i>	Apprenticeship training (union and non-union) is typical for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-2081.00

Electricians

What do they do?

Install, maintain, and repair electrical wiring, equipment, and fixtures. Ensure that work is in accordance with relevant codes. May install or service street lights, intercom systems, or electrical control systems.

<i>Typical Education Level:</i>	Long-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$70,598
<i>Estimated Jobs in 2006 & 2016:</i>	360 – 330
<i>Projected Growth 2006-2016:</i>	-8.3%
<i>Relative Growth Rate:</i>	Moderate decline
<i>Job Openings from Growth and Replacements 2006-2016:</i>	90
<i>Training Available From:</i>	Apprenticeship training (union and non-union) is typical for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-2111.00



First-Line Supervisors/Managers of Construction Trades and Extraction Workers

What do they do?

Directly supervise and coordinate activities of construction or extraction workers.

<i>Typical Education Level:</i>	Work Experience in a Related Occupation
<i>Median Annual Wage:</i>	\$65,468
<i>Estimated Jobs in 2006 & 2016:</i>	390 – 370
<i>Projected Growth 2006-2016:</i>	-5.1%
<i>Relative Growth Rate:</i>	Moderate decline
<i>Job Openings from Growth and Replacements 2006-2016:</i>	60
<i>Training Available From:</i>	For new hires into this occupation, about 1/3 have completed 1-2 years of college. Another 10% have completed a Bachelor's degree or higher. Sonoma State University has the nearest construction management certificate program.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-1011.00

Heating, Air Conditioning, and Refrigeration Mechanics and Installers

What do they do?

Install or repair heating, central air conditioning, or refrigeration systems, including oil burners, hot-air furnaces, and heating stoves.

<i>Typical Education Level:</i>	Postsecondary Vocational or Technical Education
<i>Median Annual Wage:</i>	\$58,135
<i>Estimated Jobs in 2006 & 2016:</i>	40 – 40
<i>Projected Growth 2006-2016:</i>	0.0%
<i>Relative Growth Rate:</i>	Little or no change
<i>Job Openings from Growth and Replacements 2006-2016:</i>	10
<i>Training Available From:</i>	No local certificate or degree programs identified. The nearest training program is offered by the City College of San Francisco. Apprenticeship training (union and non-union) is also common for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/49-9021.00



Helpers--Brickmasons, Blockmasons, Stonemasons, and Tile and Marble Setters

What do they do?

Help brickmasons, blockmasons, stonemasons, or tile and marble setters by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment.

<i>Typical Education Level:</i>	Short-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$30,851
<i>Estimated Jobs in 2006 & 2016:</i>	40 – 40
<i>Projected Growth 2006-2016:</i>	0.0%
<i>Relative Growth Rate:</i>	Little or no change
<i>Job Openings from Growth and Replacements 2006-2016:</i>	10
<i>Training Available From:</i>	No local certificate training programs identified.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-3011.00

Helpers—Carpenters

What do they do?

Help carpenters by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment.

<i>Typical Education Level:</i>	Short-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$47,953
<i>Estimated Jobs in 2006 & 2016:</i>	50 – 40
<i>Projected Growth 2006-2016:</i>	-20.0%
<i>Relative Growth Rate:</i>	Rapid decline
<i>Job Openings from Growth and Replacements 2006-2016:</i>	10
<i>Training Available From:</i>	No local certificate training programs identified.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-3012.00



Helpers—Electricians

What do they do?

Help electricians by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment.

<i>Typical Education Level:</i>	Short-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$31,100 (California)
<i>Estimated Jobs in 2006 & 2016:</i>	5,300 - 5,600 (California)
<i>Projected Growth 2006-2016:</i>	6.0% (California)
<i>Relative Growth Rate:</i>	Slower than average growth (California)
<i>Job Openings from Growth and Replacements 2006-2016:</i>	1,700 (California)
<i>Training Available From:</i>	No local certificate training programs identified.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-3013.00

Helpers--Painters, Paperhangers, Plasterers, and Stucco Masons

What do they do?

Help painters, paperhangers, plasterers, or stucco masons by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment.

<i>Typical Education Level:</i>	Short-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$23,600 (California)
<i>Estimated Jobs in 2006 & 2016:</i>	3,400 - 3,500 (California)
<i>Projected Growth 2006-2016:</i>	3.0% (California)
<i>Relative Growth Rate:</i>	Slower than average growth (California)
<i>Job Openings from Growth and Replacements 2006-2016:</i>	900 (California)
<i>Training Available From:</i>	No local certificate training programs identified.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-3014.00



Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters

What do they do?

Help plumbers, pipefitters, steamfitters, or pipelayers by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment.

<i>Typical Education Level:</i>	Short-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$29,100 (California)
<i>Estimated Jobs in 2006 & 2016:</i>	7,600 - 8,700 (California)
<i>Projected Growth 2006-2016:</i>	15.0% (California)
<i>Relative Growth Rate:</i>	Faster than average growth (California)
<i>Job Openings from Growth and Replacements 2006-2016:</i>	3,000 (California)
<i>Training Available From:</i>	No local certificate training programs identified.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-3015.00

Helpers--Roofers

What do they do?

Help roofers by performing duties of lesser skill. Duties include using, supplying or holding materials or tools, and cleaning work area and equipment.

<i>Typical Education Level:</i>	Short-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$28,300 (California)
<i>Estimated Jobs in 2006 & 2016:</i>	1,600 - 1,700 (California)
<i>Projected Growth 2006-2016:</i>	6.0% (California)
<i>Relative Growth Rate:</i>	Slower than average growth (California)
<i>Job Openings from Growth and Replacements 2006-2016:</i>	500 (California)
<i>Training Available From:</i>	No local certificate training programs identified.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-3016.00



Operating Engineers and Other Construction Equipment Operators

What do they do?

Operate one or several types of power construction equipment, such as motor graders, bulldozers, scrapers, compressors, pumps, derricks, shovels, tractors, or front-end loaders to excavate, move, and grade earth, erect structures, or pour concrete or other hard surface pavement. May repair and maintain equipment in addition to other duties.

<i>Typical Education Level:</i>	Moderate-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$61,877
<i>Estimated Jobs in 2006 & 2016:</i>	340 – 370
<i>Projected Growth 2006-2016:</i>	8.8%
<i>Relative Growth Rate:</i>	About average growth
<i>Job Openings from Growth and Replacements 2006-2016:</i>	100
<i>Training Available From:</i>	Apprenticeship training (union and non-union) is typical for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-2073.00

Painters, Construction and Maintenance

What do they do?

Co

<i>Typical Education Level:</i>	Moderate-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$33,596
<i>Estimated Jobs in 2006 & 2016:</i>	260 – 250
<i>Projected Growth 2006-2016:</i>	Moderate decline
<i>Relative Growth Rate:</i>	-3.8%
<i>Job Openings from Growth and Replacements 2006-2016:</i>	50
<i>Training Available From:</i>	Apprenticeship training (union and non-union) is typical for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-2141.00



Plasterers and Stucco Masons

What do they do?

Apply interior or exterior plaster, cement, stucco, or similar materials. May also set ornamental plaster.

<i>Typical Education Level:</i>	Long-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$49,171
<i>Estimated Jobs in 2006 & 2016:</i>	120 – 100
<i>Projected Growth 2006-2016:</i>	-16.7%
<i>Relative Growth Rate:</i>	Rapid decline
<i>Job Openings from Growth and Replacements 2006-2016:</i>	30
<i>Training Available From:</i>	Apprenticeship training (union and non-union) is typical for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-2161.00

Plumbers, Pipefitters, and Steamfitters

What do they do?

Assemble, install, alter, and repair pipelines or pipe systems that carry water, steam, air, or other liquids or gases. May install heating and cooling equipment and mechanical control systems.

<i>Typical Education Level:</i>	Long-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$46,364
<i>Estimated Jobs in 2006 & 2016:</i>	230 – 210
<i>Projected Growth 2006-2016:</i>	-8.7%
<i>Relative Growth Rate:</i>	Moderate decline
<i>Job Openings from Growth and Replacements 2006-2016:</i>	50
<i>Training Available From:</i>	Apprenticeship training (union and non-union) is typical for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-2152.00



Reinforcing Iron and Rebar Workers

What do they do?

Position and secure steel bars or mesh in concrete forms in order to reinforce concrete. Use a variety of fasteners, rod-bending machines, blowtorches, and hand tools.

<i>Typical Education Level:</i>	Long-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$52,400 (California)
<i>Estimated Jobs in 2006 & 2016:</i>	160 – 150
<i>Projected Growth 2006-2016:</i>	-6.3%
<i>Relative Growth Rate:</i>	Moderate decline
<i>Job Openings from Growth and Replacements 2006-2016:</i>	40
<i>Training Available From:</i>	Apprenticeship training (union and non-union) is typical for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-2171.00

Roofers

What do they do?

Cover roofs of structures with shingles, slate, asphalt, aluminum, wood, and related materials. May spray roofs, sidings, and walls with material to bind, seal, insulate, or soundproof sections of structures.

<i>Typical Education Level:</i>	Moderate-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$45,662
<i>Estimated Jobs in 2006 & 2016:</i>	210 – 190
<i>Projected Growth 2006-2016:</i>	-9.5%
<i>Relative Growth Rate:</i>	Moderate decline
<i>Job Openings from Growth and Replacements 2006-2016:</i>	50
<i>Training Available From:</i>	Apprenticeship training (union and non-union) is typical for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-2181.00



Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products

What do they do?

Sell goods for wholesalers or manufacturers to businesses or groups of individuals. Work requires substantial knowledge of items sold.

<i>Typical Education Level:</i>	Moderate-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$72,738
<i>Estimated Jobs in 2006 & 2016:</i>	800 - 1,000
<i>Projected Growth 2006-2016:</i>	25.0%
<i>Relative Growth Rate:</i>	Much faster than average growth
<i>Job Openings from Growth and Replacements 2006-2016:</i>	380
<i>Training Available From:</i>	Although this is an on-the-job training type occupation, most employers require previous sales experience and prefer the completion of some college coursework. About half of the new hires in this occupation have a Bachelor's degree or higher. Courses in marketing, economics and communication will all help make an individual more employable and a more effective sales rep. These types of courses are available through Napa Valley College.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/41-4012.00

Secretaries

What do they do?

Perform routine clerical and administrative functions such as drafting correspondence, scheduling appointments, organizing and maintaining paper and electronic files, or providing information to callers.

<i>Typical Education Level:</i>	Moderate-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$38,604
<i>Estimated Jobs in 2006 & 2016:</i>	740-750
<i>Projected Growth 2006-2016:</i>	1.4%
<i>Relative Growth Rate:</i>	Little or no change expected
<i>Job Openings from Growth and Replacements 2006-2016:</i>	130
<i>Training Available From:</i>	Although this is typically an on-the-job training type occupation, there are many classes that can be taken in high school and following high school that can prepare a person with the skills they need for this type of work. This includes knowledge of spreadsheet and word processing software and answering telephones.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/43-6014.00



Sheet Metal Workers

What do they do?

Fabricate, assemble, install, and repair sheet metal products and equipment, such as ducts, control boxes, drainpipes, and furnace casings. Work may involve any of the following: setting up and operating fabricating machines to cut, bend, and straighten sheet metal; shaping metal over anvils, blocks, or forms using hammer; operating soldering and welding equipment to join sheet metal parts; inspecting, assembling, and smoothing seams and joints of burred surfaces.

<i>Typical Education Level:</i>	Long-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$43,164
<i>Estimated Jobs in 2006 & 2016:</i>	100 – 90
<i>Projected Growth 2006-2016:</i>	-10.0%
<i>Relative Growth Rate:</i>	Rapid decline
<i>Job Openings from Growth and Replacements 2006-2016:</i>	30
<i>Training Available From:</i>	Apprenticeship training (union and non-union) is typical for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-2211.00

Tile and Marble Setters

What do they do?

Apply hard tile, marble, and wood tile to walls, floors, ceilings, and roof decks.

<i>Typical Education Level:</i>	Long-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$43,928
<i>Estimated Jobs in 2006 & 2016:</i>	120 – 110
<i>Projected Growth 2006-2016:</i>	-8.3%
<i>Relative Growth Rate:</i>	Moderate decline
<i>Job Openings from Growth and Replacements 2006-2016:</i>	20
<i>Training Available From:</i>	Apprenticeship training (union and non-union) is typical for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/47-2044.00



Truck Drivers, Heavy and Tractor-Trailer

What do they do?

Drive a tractor-trailer combination or a truck with a capacity of at least 26,000 GVW, to transport and deliver goods, livestock, or materials in liquid, loose, or packaged form. May be required to unload truck. May require use of automated routing equipment. Requires commercial drivers' license.

<i>Typical Education Level:</i>	Moderate-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$42,181
<i>Estimated Jobs in 2006 & 2016:</i>	360 - 480
<i>Projected Growth 2006-2016:</i>	33.3%
<i>Relative Growth Rate:</i>	Much faster than average growth
<i>Job Openings from Growth and Replacements 2006-2016:</i>	180
<i>Training Available From:</i>	Although this is an on-the-job training type occupation, many truck drivers attend a truck driver training program at their own expense. Others are trained by their employer. No local certificate training programs identified for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/53-3032.00

Truck Drivers, Light or Delivery Services

What do they do?

Drive a truck or van with a capacity of under 26,000 GVW, primarily to deliver or pick up merchandise or to deliver packages within a specified area. May require use of automatic routing or location software. May load and unload truck.

<i>Typical Education Level:</i>	Short-Term On-the-Job Training
<i>Median Annual Wage:</i>	\$24,287
<i>Estimated Jobs in 2006 & 2016:</i>	310 – 380
<i>Projected Growth 2006-2016:</i>	22.6
<i>Relative Growth Rate:</i>	Much faster than average growth
<i>Job Openings from Growth and Replacements 2006-2016:</i>	130
<i>Training Available From:</i>	Although this is an on-the-job training type occupation, many truck drivers attend a truck driver training program at their own expense. Others are trained by their employer. No local certificate training programs identified for this occupation.
<i>O*NET Link:</i>	http://online.onetcenter.org/link/summary/53-3033.00



Challenges and Recommendations

Challenges

A. We lack an adequate supply of local workers who are qualified for the jobs in this industry

Our survey of the Napa Construction and Renovation Industry indicates that, even with fewer construction related jobs as a result of the recession, about one out of four of the local jobs in this industry are filled by workers who live outside Napa County. While this is a lower ratio than for most industries, it nevertheless suggests that we lack an adequate supply of local workers who are qualified for those jobs.

Lack of affordable housing in Napa, of course, is always an important factor. Some of Napa County's workers simply cannot afford to live in Napa County.

Commute patterns into and out of Napa County (from the 2000 Census) indicate that more people commute into Napa than commute out of Napa for jobs:

Total number of non-Napa County residents commuting into Napa for Napa jobs: 15,534

Total number of Napa County residents commuting out of Napa for their jobs: 13,052

In focus group discussions and in surveys, industry employers indicated a somewhat serious concern about basic skill deficiencies among job applicants – especially for those jobs that don't require a 4-year college degree. Math and basic computer skills appear to be a common concern. Other common skill deficiencies include problem solving/critical thinking skills, communication skills, and a strong work ethic.

B. Need to strengthen our local and regional economies to create a stronger and more resilient job market

In the last year, about 70% of our survey respondents decreased the number of workers on their payrolls. It is well documented that this has been a common problem for most industries due to the severe economic recession we have had and are continuing to experience. But the damage to the construction industry has been severe. In any case, this does raise the question as to what strategies can be used to strengthen our local and regional economies in order to create a stronger and more resilient job market.

C. Need to address basic skills, workplace skills, and specific knowledge and skill deficiencies identified by local employers

Many employers expressed concerns about basic and workplace skill deficiencies among job applicants. Others were also concerned about job-specific skills. The range of skill deficiencies includes:

- Math skills
- Basic computer skills
- Problem solving/critical thinking skills
- Communication skills
- Strong work ethic
- English language skills



These are the specific knowledge and skill areas reported by employers to be in short supply for jobs (in general) in this industry:

- Carpentry skills
- Estimation and project management skills
- General work ethic, use of common sense to think on your own and with regard to safety
- Math and communication skills.

More than 75% of employers surveyed agreed that there is a *strong need for workforce education and training programs that prepare individuals with both basic skills and workplace skills prior to employment.*

About two-thirds of the employers surveyed report that they would be interested in a local skills certification program that objectively evaluates the competencies of job applicants in basic skills, workplace skills, and job specific skills.

The above findings indicate some serious challenges in being able to provide an adequate supply of qualified workers for jobs in this industry. Yet our economy depends on exactly that: having an adequate supply of qualified workers.

Recommendations

1. Establish an Industry Skill Panel

Establish an industry-based and industry-driven “Skill Panel.” The Skill Panel will advise and inform the education, training and workforce development sectors while representing the workforce interests of the Construction and Renovation Industry in Napa County.

The Skill Panel will serve to:

- Continuously inform our education, training and workforce development partners
- Work with industry to establish benchmarks and incentives for career pathways as a way of dealing with employee turnover and career development
- Communicate resources and strategies to other industry employers, including on the subjects of effective worker recruitment, training and retention practices
- Support and communicate labor market and workforce information to industry employers
- Certify education and training programs that meet industry standards
- Identify and communicate employment, training and internship opportunities
- Support and encourage collaboration on initiatives that address fundamental industry challenges
- Develop and implement a public awareness campaign to inform Napa residents about the challenges and opportunities that the industry faces, including promoting the image of the industry as a desirable career choice
- Engage high profile industry leaders to promote strategies and initiatives aimed at addressing the industry’s major challenges
- Develop incentives that encourage students to participate in work experience programs in this industry (i.e. secondary and postsecondary vocational and technical training, co-op placements, internships, work experience placements, etc.)
- Support and promote vocational and technical training programs (i.e. local ROP/Career Technical Education programs)



2. Develop a local Education and Training Consortium and develop/provide programs and courses to help meet industry workforce needs

Develop a local education and training consortium focused on basic employability skills and job specific skills designed to meet the needs of the Construction and Renovation Industry in Napa County.

The consortium will be comprised of the following education, training and workforce development partners:

- Napa County Office of Education (including ROP/Career Technical Education)
- Public school districts (that include high schools):
 - Calistoga Unified School District
 - Napa Valley Unified School District (including the Napa Valley Adult School)
 - St. Helena Unified School District
- Napa Valley College
- Napa County Workforce Investment Board
- Private sector education and training providers

The workforce development strategies of the consortium must also address the fact that many of the younger jobseekers who are interested in jobs in this industry lack the necessary workplace readiness skills that both jobseekers and employers need. This includes students currently in the K-12 system, as well as students who have left school (without graduating) and others who have graduated but lack workplace readiness skills. To help prepare a skilled and qualified workforce, the consortium must work closely with the skill panel to develop and implement a school-based training certificate program to ensure that greater numbers of high school students and young job seekers receive workplace readiness skill training. With skills such as teamwork, communication, problem solving and critical thinking applicable to all disciplines, these skills can be recognized or incorporated into existing programs and curricula. Students and young adults demonstrating qualities such as showing up on time and exhibiting responsibility and initiative could be recognized in the high school, adult education and community college experience as workplace readiness skills. This certificate program would reward students for promising behavior such as consistently high attendance rates, above average academic performance, finishing their junior year on time, and taking initiative by enrolling in extra courses. Industry employers could agree to accept the certificate as evidence of workforce preparedness for entry-level jobs.

The consortium will establish an articulated subsidized and unsubsidized internship/work experience program between K-12, adult education, community college, and the WorkforceNapa Business & Career Center. This program should have an extremely robust employer site identification system. The program will establish and implement:

- Subsidized and unsubsidized on-the-job training
- Subsidized employment
- Expanded work experience program
- Unsubsidized internships

The consortium will also serve to:

- Articulate basic employability skills between local public education and training programs (Adult Ed, Community College, NCOE/K-12 system)
- Establish a link between the industry skill panel and local career guidance counselors at schools and training institutions
- Identify workplace expectations modules, especially for small and growing businesses
- Provide information about relevant programs and initiatives to industry partners
- Develop and implement a public awareness campaign to inform Napa students and job seekers about the career opportunities that the industry offers to Napa County residents
- Advocate to increase funds for literacy, basic skills, ESL, and incumbent worker training
- Work collaboratively with the industry skill panel to aggressively seek public and private grant resources and expand capacity of existing education and training resources (includes customer service and supervisory skills training modules)



3. Establish a skills assessment certificate program for students and job seekers

Establish an objective skills assessment certificate program for students and job seekers who wish to improve their chances of employment and career advancement within the Construction and Renovation Industry in Napa County. Such a certificate program would need to be approved and supported by both the industry skill panel and the education and training consortium.

The Napa County Workforce Investment Board has been offering and testing a nationally recognized skills certificate program called WorkKeys – which could be considered as one possible solution. WorkKeys, which measures and certifies basic employability skills, as well as technical skills, is appropriate for both adults and for secondary and postsecondary student populations, and can be adapted to any industry.

Ideally, all interested students and job seekers interested in the Napa Construction and Renovation Industry would be referred to a single point of contact where they can undergo the assessment. One possibility for this would be the community-based WorkforceNapa Business & Career Center.

4. Provide a single point of contact for industry employers

Provide a single point of contact for industry employers who need to know what education, training, workforce development, and economic development resources exist in Napa County. This includes resources for incumbent worker training.

5. Provide the necessary information

Ensure that the necessary information is developed, available and accessible for planning and implementing all the above activities and programs, including needs assessments and continuing studies of the industry's workforce needs.