The 2014 Fresno Regional Employment Study Report

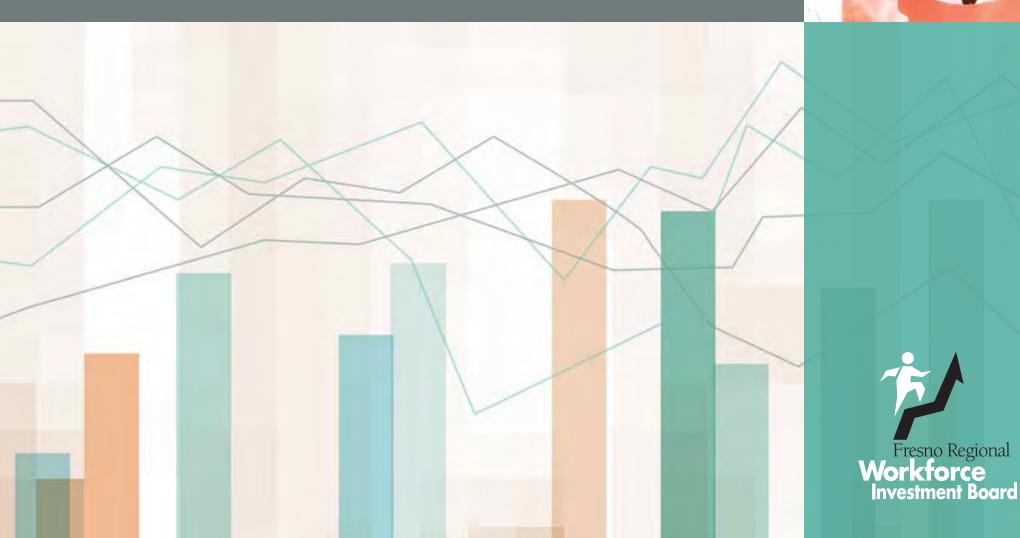


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Acknowledgements

The Fresno Regional Workforce Investment Board would like to thank all of the individuals who participated in the 2014 Fresno Regional Employment Study, and a special thank you to the 1,420 plus employers throughout the County who gave their valuable time and knowledge to provide the data used for this report.

We look forward to the communities' participation in our next Fresno Regional Employment Study.

Message from the Executive Director

The 2014 Fresno Regional Employment Study Report shows an unmistakable disconnection between job seeker talent and employer-demanded skills. While 12.5 percent of companies in the ten highest growing industries in Fresno say it is difficult to find qualified talent for technical positions, Fresno unemployment hovers at 10.4 percent. So what does the community do next to change this reality?

Fresno Regional Workforce Investment Board (FRWIB) exists to draw lines – the shortest distance between two points. By identifying business barriers – Point A, FRWIB works with the industry to design training programs that prepare job seekers for employment in high-growth careers – Point B. Once employees are trained, they are more competitive and typically get hired by companies that value their skill-set – Point C.

Let me start with Point A: Business Barriers. The 2014 Fresno Regional Employment Study shows that, similar to 2012, the most common business barriers include Market Conditions, Regulatory Constraints/State and Federal Regulations, Labor Availability and Cost, Cost of Doing Business, and Competition. However, a new barrier added in 2014, "Compliance with Affordable Healthcare Act," pushed "Access to Capital" further down the list of most pressing business barriers.

While examining high-growth Fresno County industries, Point B refers to employment goals. Employers surveyed in the 2014 Fresno Regional Employment Study forecast hiring an additional 5,517 employees over the next three years; a 70 percent decrease from the 2012 three-year forecast of 18,953 new employees. Of these 5,517 positions, over 1,000 new employees will be hired in the Logistics and Distribution industry. Just like in 2012, truck drivers are in highest demand for this industry. Given the aging population in Fresno County, it comes as no surprise that Healthcare will hire 834 new employees, including Home Health Aides.

Point B also refers to training programs. In the Construction Trades occupation that estimates hiring over 1,000 new employees (within three years), the FRWIB has completed infrastructure training programs where 83 graduates have been trained. Of these 83 graduates; Point C is represented through 61 individuals who have found employment and 27 with employment in a union. Four additional infrastructure cohorts began in September and October of 2014, followed by another cohort starting in January 2015.

The FRWIB strives to keep both employer and employee satisfied so they stay in Fresno County. If you have a solution to any of the barriers outlined on Pages 24-25, please give our Business Services Center a call at (559) 230-4062.

Blake Konczal Executive Director



Fresno Regional Workforce Investment Board exists to draw lines – the shortest distance between two points.

Executive Summary



Overall employment in Fresno is still down when compared to pre-recession levels. Over the last eight (8) years, the FRWIB has conducted four (4) employment studies. As with our four (4) prior studies, the 2014 Fresno Regional Employment Study provides us a strong forecasting tool to guide us as we collaborate with community partners, businesses, and education to develop strategies around workforce shortages, training, and business assistance. The 2014 survey provides us an excellent overview of the current and future employment needs within our targeted high-growth, high-wage industries, and to do data-based forecasting.

Incremental gains in employment were found in some sectors of the regional economy, with Healthcare, Agriculture and Logistics experiencing reasonably strong growth between 2010 and 2013. Overall employment in Fresno¹ is still down when compared to pre-recession levels, but the County has seen employment gains from 2010 to 2013. Furthermore, each industry cluster examined as part of this research experienced a positive net business start-up rate over the same time period.

The Healthcare industry in Fresno County has added 1,469 jobs from 2010 to 2013 and has fared better than other industry clusters, or the County as a whole, in terms of employment growth. The Healthcare industry cluster is also the largest of those that were examined in the research and represents over 10 percent of all employment in the County.

Agribusiness, a foundational industry cluster in Fresno County, has added 911 jobs from 2010 to 2013 even though it experienced an eight percent decline in overall employment from 2007 to 2010. The broader Agriculture industry² in the County represents more than \$6 billion in production value for agricultural products, leading not only the state, but the nation as a whole.³ The health of the agricultural sector is crucial for our regional economy, and the positive numbers over 2010 to 2013 are heartening, especially given our current drought.

Agriculture and Healthcare are not the only industry clusters to experience job gains as both Automotive and Logistics underwent employment growth of over eight percent each when compared to 2010, while Construction Trades experienced nearly four percent employment growth over the same time period. Manufacturing lost nearly eight percent of overall employment in the County over the three-year period between 2010 and 2013, adding to the consistent struggle experienced by the industry cluster since 2007 (19 percent overall decrease in employment).

Executive Summary

Manufacturing is a concern for Fresno County as it is underperforming when compared to the state as a whole, which has seen a one percent increase in jobs since 2010.⁴ Despite the contraction experienced by the Manufacturing cluster since the Great Recession, it still represents over six percent of all employment in the County.

The survey also provides excellent information regarding the economic health of the businesses within the targeted clusters. The responses have provided the ability to pinpoint specific obstacles so that we can better engage our business clients with customized solutions and connect them to our business serving partners. The current data shows us that while there hasn't been a significant increase in the number of barriers reported by businesses from the last survey, there are still a high number of barriers for businesses across all clusters. Additionally, most businesses reported barriers in multiple areas of their operations. One such barrier, newly added to the survey this year, is compliance with the Affordable Care Act (ACA). The business feedback received ranked it as one of the top barriers.



It is apparent that while the employment picture is improving, a sharp focus on enhancing services to both FRWIB clients (job seekers and businesses) will have a positive reciprocal impact on each other.

1 Overall employment numbers, Economic Modeling Specialist Int'l (EMSI) Quarterly Census of Employed Workers (QCEW) & non-QCEW Employment 2014.1 2 Including support services

3 County of Fresno: Comprehensive Economic Development Strategy – April 2013 Update, retrieved from: http://www.co.fresno.ca.us/ViewDocument.aspx?id=54759 4 California manufacturing employment growth, EMSI QCEW & non-QCEW Employment 2014.1

Executive Summary



2014 Employment Study by Sector

The data below reflects job projections from 2014 compared to the 2012 Employment Survey:

	Number of Employers Surveyed	Current Employment	Projected Increase/ Decrease to Year One	Projected Increase/ Decrease to Year Three	Number of Employers Surveyed	Actual Employment	Projected Increase/ Decrease to Year One	Projected Increase/ Decrease to Year Three
	2014	2014	2014	2014	2012	2012	2012	2012
Agribusiness	126	10,527	99	134	109	15,799	2,044	3,124
Automotive	113	7,464	309	403	102	6,507	449	908
Healthcare	278	31,697	794	834	222	35,714	1,853	3,675
Information Technology ¹	119	3,209	51	95	170	4,797	485	930
Logistics	104	16,017	1,321	1,383	76	10,244	792	1,680
Manufacturing	164	15,138	470	576	138	18,882	1,467	2,554
Professional / Technical ¹	248	15,742	802	813	212	18,900	1,983	3,749
Renewable Energy	65	2,843	30	49	28	2,217	85	162
Construction Trades	203	12,136	993	1,230	154	10,672	1,048	2,171
Total	1,420	114,773	4,869	5,517	1,211	123,732	10,206	18,953

1 Information Technology and Professional/Technical survey spans multiple sectors and with a focus on specific occupations.

Occupational Cluster Generalizations

The overall occupational and economic changes that occurred in the seven sectors and two occupational survey groups were:

Information Technology

The demand in this sector forecasts an additional 95 new jobs in the next three years. Data Entry Keyers, System Software Developers, and Network/Computer System Administrators are most in demand in this occupational group.

Renewable Energy

An increase in employment is expected for this industry particularly due to statewide solar implementation efforts. An additional 49 workers is projected over the next three years. Solar Sales and Assessors, Solar Installers/Technicians, and Hydrologists are most in demand for this sector.

Automotive Technology

The job demand increased with employers forecasting the need for an additional 403 new employees over the next three years. Most demand is for Automotive Service Technicians/Mechanics, Refrigeration Mechanics/Installers, and Automotive Body and Related Repairers.

Logistics and Distribution

The demand is higher in this industry with employers anticipating a need for an additional 1,383 workers in the next three years. The largest job growth is for Light Truck or Delivery Drivers, Heavy and Tractor-Trailer Truck Drivers, and Freight, Stock, and Material Movers.

Manufacturing

Manufacturing shows an improvement of an additional 576 jobs forecast by our employers within the next three years. Welders, Cutters, Welder Fitters, Production Workers, and Machinists are most in demand.

Agribusiness

Employers anticipate hiring an additional 134 employees over the next three years. Much of the increase in Manufacturing and Logistics industries is in support of this industry. Landscape/Groundskeeping Workers, Packers and Packagers, and Farmworkers/Laborers are most in need in this industry.

Professional and Technical

Employers project an increase in this employment arena and forecasted the need for an additional 813 new employees over the next three years. Most in demand in this occupational grouping is Security Guards, Sheriffs/Deputy Sheriffs, and Retail Sales Persons.

Healthcare

An increase of an additional 834 new employees is forecast over the next three years. The occupations identified as most in need are Home Health Aides, Registered Nurses and Nursing Assistants. Additionally, customer service representatives are in demand in this sector.

Construction Trades

Employers in this industry are anticipating an additional 1,230 new employees will be needed in the next three years. Carpenters, Drywall/Ceiling Tile Installers and Plumbers are most in need.





Analysis

For the purpose of this analysis, Economic Modeling Specialist Int'l (EMSI), Hoovers and older National Establishment Time Series (NETS) data was used to evaluate total industry employment from 2007 to 2013. This included counts of both Quarterly Census of Employed Workers (QCEW), as well as non-QCEW workers compiled in EMSI's 2014.1 update. Building off historical establishment counts from previous NETS data from 2007 to 2012, counts for 2013 were generated from the Dun & Bradstreet (D&B) database and filtered through Hoovers. Hoovers updates its establishment data annually, and this year's count builds upon the NETS establishment data compiled from 2007 to 2012.

Results of the EMSI and Hoovers Analysis

The EMSI and Hoovers data allow us to compare the change in overall industry employment and the number of employers in six of the seven industry clusters. Renewable energy is not easily defined by Standard Industrial Classification (SIC) or North American Industry Classification System (NAICS) so it is not included in this analysis.

Overall employment by each of the industry clusters declined from 2007 to 2013, except for Healthcare and Logistics, which grew by 2,221 and 513 employees respectively. The largest decline in overall industry employment both in terms of the number of workers (8,927) and the percentage of the industry workforce from 2007 (-40.9 percent) was found in Construction Trades. The second largest decline in overall employment over the same time period was in Manufacturing (5,121), followed by Automotive (1,255).

Employment trends in Fresno County improved when reviewing growth since 2010. Overall industry cluster employment increased between 3.9 percent for Construction Trades from 2010 to 2013. There was an 8.5 percent increase in that same time period for Logistics. Only Manufacturing sustained job loss (-7.7 percent) over the three year period between 2010 and 2013. It is also worth noting that although Manufacturing contracted in overall jobs, the industry experienced a 3.9 percent growth in the number of businesses for the same time period.

Although the majority of industry clusters saw employment gains and all industries experienced an uptick in the number of businesses, it should be emphasized that results were not as positive when looking at the period between 2012 and 2013. Four of the six industry clusters (Agribusiness, Manufacturing, Automotive, and Healthcare) sustained employment losses less than one percent (-0.4 percent) and more than four percent (-4.1 percent). Furthermore, four industry clusters (Agribusiness, Construction Trades, Manufacturing, and Healthcare) also experienced contraction in the number of businesses between two percent (-2.0 percent) to over six percent (-6.5 percent).

FIGURE 1 and **TABLE 1** illustrate the trend in employment for the six identified industry clusters in Fresno County from 2007 to 2013. Healthcare and Logistics are the only two industry clusters that have grown over the six-year time period, Construction Trades has shown some recovery in overall employment since 2011, and Manufacturing has consistently lost employment.

FIGURE 1 Overall Industry Employment Changes

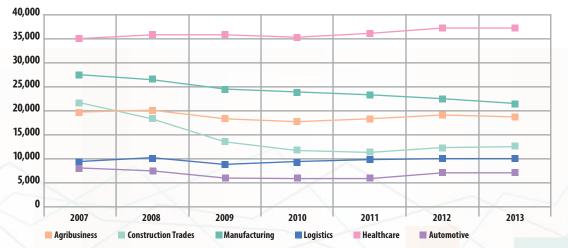


FIGURE 1 Overall Industry Employment Changes

The graph reflects the job availability in the targeted sectors based on changes in business NETS.

TABLE 1 Change in Overall Employment by Industry

			11	IDUSTRY CLUS	TER EMPLOYM	ENT		
	2007	2008	2009	2010	2011	2012	2013	2007 to 2013
Agribusiness	19,793	20,193	18,883	18,147	18,837	19,496	19,058	(735)
Construction Trades	21,834	18,629	14,289	12,428	12,001	12,573	12,907	(8,927)
Manufacturing	27,340	26,312	24,613	24,077	23,514	23,157	22,219	(5,121)
Logistics	9,578	9,890	9,140	9,302	9,961	10,036	10,091	513
Healthcare	34,977	35,937	36,030	35,729	36,253	37,422	37,198	2,221
Automotive	8,283	7,779	6,723	6,494	6,539	7,058	7,028	(1,255)

TABLE 1 Change in Overall

Employment by Industry

The table reflects the increase or decrease in job growth in the targeted sectors based on changes in business NETS.



As illustrated in **FIGURE 2** and **TABLE 2**, four of the six industry clusters experienced growth in the total number of businesses from 2007 to 2013. The largest growth occurred in the Logistics industry as 798 more businesses were present in 2013 when compared to 2007 (46.1 percent growth). Healthcare and Construction Trades expanded by 562 and 349 respectively over the same time period. The largest decline occurred in Manufacturing with the industry contracting by 239 firms (-15.0 percent) between 2007 and 2013. Business counts in Agribusiness have changed somewhat year over year, but total businesses are nearly at 2007 levels (-8 total businesses when compared to 2007).

FIGURE 2 Business Count by Industry Cluster from 2007 to 2013

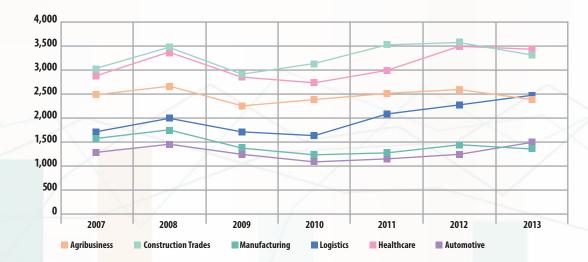


FIGURE 2

Business Count by Industry Cluster from 2007 to 2013

The graph reflects the increase or decrease of businesses based on NETS data.

	NUMBER OF INDUSTRY CLUSTER BUSINESSES										
	2007	2008	2009	2010	2011	2012	2013	2007 to 2013			
Agribusiness	2,496	2,650	2,281	2,443	2,556	2,595	2,488	(8)			
Construction Trades	3,021	3,490	2,905	3,099	3,563	3,606	3,370	349			
Manufacturing	1,591	1,763	1,414	1,301	1,349	1,438	1,352	(239)			
Logistics	1,731	2,028	1,776	1,667	2,081	2,245	2,529	798			
Healthcare	2,882	3,393	2,894	2,797	3,017	3,514	3,444	562			
Automotive	1,335	1,475	1,245	1,110	1,239	1,271	1,484	149			

TABLE 2 Change in the Number of Businesses by Industry Cluster from 2007 to 2013

TABLE 2

Change in the Number of Businesses by Industry Cluster from 2007 to 2013

The table reflects the number of businesses that increased or decreased from 2007 to 2013 based on NETS data.





As shown in **TABLE 3** below, the ratio of employment compared to the number of businesses provides a valuable barometer in understanding the employment structure of different industries. The average size of businesses decreased for each industry cluster for the six years between 2007 and 2013. On average, Construction Trade businesses in 2013 were almost half their size when compared to 2007.

TABLE 3 Ratio of Employment to Businesses by Industry Cluster

			NUMBER	OF BUSINESS	ES BY INDUSTR	Y CLUSTER		
	2007	2008	2009	2010	2011	2012	2013	2007 to 2013
Agribusiness	7.93	7.62	8.28	7.43	7.37	7.51	7.66	-3%
Construction Trades	7.23	5.34	4.92	4.01	3.37	3.49	3.83	-47%
Manufacturing	17.18	14.92	17.41	18.51	17.43	16.10	16.43	-4%
Logistics	5.53	4.88	5.15	5.58	4.79	4.47	3.99	-28%
Healthcare	12.14	10.59	12.45	12.77	12.02	10.65	10.80	-11%
Automotive	6.20	5.27	5.40	5.85	5.28	5.55	4.74	-24%

As with previous Fresno County studies, it is important to note that an overall positive start-up rate for businesses does not necessarily correlate with an increase in employment. For instance, although Manufacturing contracted in overall employment (-7.7 percent), net business growth was at nearly four percent (3.9 percent).

TABLE 4 on the following page shows that each of the other industry clusters grew in employment and business count from 2010 to 2013.

TABLE 3 Ratio of Employment to Businesses by Industry Cluster

The table reflects the average number of employees within each industry.



	START-UP RATE ANALYSIS FROM 2010 TO 2013											
	Change in Employment	Change in Businesses	Net Job Start-up Rate (2010 to 2013)	Net Business Start-up Rate (2010 to 2013)								
Agribusiness	911	45	5.0%	1.8%								
Construction Trades	479	271	3.9%	8.7%								
Manufacturing	(1,858)	51	-7.7%	3.9%								
Logistics	789	862	8.5%	51.7%								
Healthcare	1,469	647	4.1%	23.1%								
Automotive	534	374	8.2%	33.7%								

TABLE 4 Industry Cluster Changes from 2010 to 2013 including Net Start-up Rates

TABLE 5 below indicates that there was mixed growth among industry clusters for the one-year period between 2012 and 2013. Construction Trades and Logistics each grew in employment, with Construction Trades experiencing a drop in the overall number of firms. Only Logistics and Automotive experienced positive business start-up rates over this time period, with both industry clusters increasing the total number of businesses by over 10 percent.

TABLE 5 Industry Cluster Changes from 2012 to 2013 including Net Start-up Rates

		START-UP RATE ANA	LYSIS FROM 2012 TO 2013	
	Change in Employment	Change in Businesses	Net Job Start-up Rate (2012 to 2013)	Net Business Start-up Rate (2012 to 2013)
Agribusiness	(438)	(107)	-2.2%	-4.1%
Construction Trades	344	(236)	2.7%	- 6.5 %
Manufacturing	(938)	(86)	-4.1%	- 6.0 %
Logistics	55	284	0.5%	12.7%
Healthcare	(224)	(70)	-0.6%	-2.0%
Automotive	(30)	213	- 0.4 %	16.8 %

TABLE 4

Industry Cluster Changes from 2010 to 2013 including Net Start-up Rates

The table reflects an increase in overall employment, as well as an increase in total number of businesses from 2010 to 2013.

TABLE 5

Industry Cluster Changes from 2012 to 2013 including Net Start-up Rates

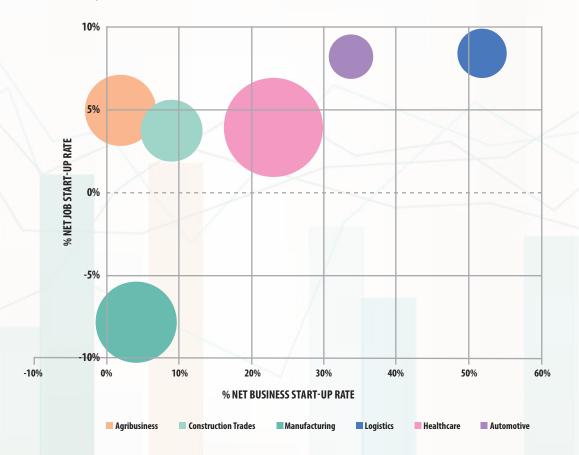
The table reflects a decrease in overall employment, as well as an increase in total number of businesses from 2012 to 2013.



FIGURE 3 Industry Cluster Growth Rates from 2010 to 2013

The table reflects the number of businesses in each cluster that increased during this time period. **FIGURE 3** below displays the relative size of employment in each industry (by the size of the sphere). This data was calculated based on the net job start-up rate from 2010 to 2013 (on the vertical axis), and the net business start-up rate from 2010 to 2013 (on the horizontal axis). As described previously, the number of businesses in each industry cluster increased between 2010 and 2013. Manufacturing was the only industry cluster to experience a negative job start-up rate (-7.7 percent). The position of Logistics in the upper right portion of the chart indicates its relatively high job (8.5 percent) and business (51.7 percent) start-up rates over the three-year analysis.

FIGURE 3 Industry Cluster Growth Rates from 2010 to 2013



Key Employment Trends Emerge

Some of the other key trends and conclusions that have emerged from this research include:

- From 2007 to 2013, most industry cluster businesses in Fresno County have diminished in employee size, in terms of the average number of employees per business. Automotive firms have shrunk from an average of 6.2 employees (2007) to 4.7 employees (2013), while Construction Trades has experienced an even bigger decline in average employment per business from 7.2 (2007) to 3.8 (2013) employees. Even among clusters that have traditionally had larger firms (less businesses and more employment) like Healthcare, they have experienced a decline in average employment per business over this time period.
- Taking a more current view of the recovery period of 2010 to 2013 there are three noticeable trends occurring across the industry sectors in Fresno County from 2010 to 2013:
 - Regarding business start-up rates, every industry cluster examined in this research experienced a net increase in the number of businesses in Fresno County, and except for Manufacturing, all industry clusters experienced employment growth.
 - The proportional growth in new businesses outpaced the growth in employment as average business size declined for every industry cluster except Agribusiness.
 - Agribusiness experienced a higher average business size due to employment growth outpacing business start-up rate.
- Looking to the future, industry cluster employment expectations in Fresno County were positive, but not overly optimistic, with four percent growth expected over the next twelve months and five percent growth over the next thirty-six months. Employers in Logistics and Construction Trades were the most optimistic regarding employment growth (eight percent over the next twelve months) while employers in Renewable Energy and Agribusiness were the least optimistic regarding employment growth (one percent over the next twelve months).



Guide to Reading the Occupational Data Charts



Total Number of Employers = 1,420

Occupation Occupations identified by employers surveyed

Current Number of Positions Needed Number of positions employers identified as currently open

Projected Number of Positions – Year One Projected number of positions needed in 2015

Projected Number of Positions – Year Three Projected number of positions needed in 2018

Drug Testing Required Percentage of employers requiring test as a condition of employment

Background Check Required Percentage of employers requiring background check as a condition of employment **Physical Exam Required** Percentage of employers requiring a physical exam as a condition of employment

High School Diploma Required Percentage of employers requiring a high school diploma as a condition of employment

Certification Required Percentage of employers requiring certification as a condition of employment

Salary Estimate (Low/High) Salary estimates are reflective of the Fresno County area

OCCUPATION	Current Number of Positions Needed	Projected Number of Positions – Year 1 (based on the sample size surveyed in each industry)	Projected Number of Positions – Vear 3 (based on the sample size surveyed in each industry)	Drug Testing Required (percentage of companies surveyed)	Background Check Required (percentage of companies surveyed)	DMV Report Required (percentage of companies surveyed)	Physical Exam Required (percentage of companies surveyed)	High School Diploma Required (percentage of companies surveyed)	Certification Required (percentage of companies surveyed)	Salary Estimate – Low	Salary Estimate – High
A		,		53 000/	FO 00 0/	27.000/	10 750/	F4 170/	16 670/	617 20	620.14
Accountants and Auditors	1	6	6	52.08 %	50.00%	27.08%	18.75%	54.17%	16.67%	\$17.29	\$28.14
Administrative Services Managers	0	-3	-3	56.25%	72.92%	35.42%	41.67%	70.83%	35.42%	\$16.59	\$20.72
Aircraft Mechanics and Service Technicians	0	-3	-3	80.00%	80.00%	16.67 %	16.67 %	90.00 %	16.67 %	\$19.35	\$33.88
Ambulance Drivers and Attendants, Except Emergency Medical Technicians	2	3	3	80.00 %	80.00 %	1 00.00 %	100.00%	50.00 %	100.00%	\$8.00	\$8.00
Assemblers and Fabricators, All Other	0	3	3	62.50 %	31.25%	31.25%	18.75%	50.00 %	25.00 %	\$12.50	\$19.33
Audio-Visual and Multimedia Collections Specialists	1	5	5	25.00 %	25.00 %	25.00 %	25.00%	80.00%	0.00%	\$10.00	\$10.00
Automotive Body and Related Repairers	5	31	59	23.08%	30.77%	69.23 %	23.08%	30.77 %	53.85 %	\$15.73	\$27.15
Automotive Service Technicians and Mechanics	5	70	88	46.43 %	51.79%	58.93 %	21.43%	35.71%	51.79 %	\$15.63	\$21.51
Automotive Specialty Technicians	0	23	27	100.00%	66.67 %	66.67 %	0.00%	0.00%	33.33%	\$12.89	\$16.52
Billing, Cost, and Rate Clerks	0	11	11	39.13 %	50.00 %	28.26 %	32.61 %	82.61 %	32.61%	\$14.19	\$18.13
Biochemists and Biophysicists	0	3	3	90.00 %	90.00 %	100.00%	12.50 %	100.00%	25.00 %	\$21.90	\$56.76
Biological Technicians	2	11	11	100.00%	100.00%	0.00%	50.00 %	100.00%	0.00%	\$15.25	\$20.25
Bookkeeping, Accounting, and Auditing Clerks	2	-1	5	46.79 %	50.46 %	33.94 %	17.43%	48.62 %	11.01 %	\$16.31	\$24.26
Bus and Truck Mechanics and Diesel Engine Specialists	3	8	8	79.17 %	62.50 %	45.83 %	54.17 %	37.50 %	29.17 %	\$13.54	\$21.31
Bus Drivers, Transit and Intercity	2	26	26	100.00%	100.00%	100.00%	100.00%	80.00%	100.00%	\$12.00	\$15.54
Cabinetmakers and Bench Carpenters	1	-3	-3	0.00%	50.00 %	50.00 %	0.00%	0.00%	0.00%	\$8.25	\$8.25
Carpenters	2	193	233	58.33 %	25.00%	66.67 %	0.00%	25.00 %	33.33%	\$19.49	\$32.29
Cashiers	2	16	22	53.33%	80.00%	20.00%	0.00%	26.67 %	6.67 %	\$8.99	\$10.78
Cement Masons and Concrete Finishers	0	3	3	71.43%	14.29 %	42.86 %	28.57 %	28.57 %	14.29 %	\$18.45	\$21.88
Chief Executives	1	-10	-10	41.67 %	41.11%	35.56%	25.00%	42.78 %	19.44 %	\$31.99	\$51.51
Civil Engineers	1	4	4	42.11%	63.16 %	57.89 %	26.32 %	94.74 %	78.95 %	\$28.51	\$39.54
Cleaners of Vehicles and Equipment	3	32	48	62.50 %	62.50 %	87.50 %	0.00%	25.00%	37.50 %	\$9.48	\$12.50

OCCUPATION	Current Number of Positions Needed	Projected Number of Positions – Year 1 (based on the sample size surveyed in each industry)	Projected Number of Positions – Year 3 (based on the sample size surveyed in each industry)	Drug Testing Required (percentage of companies surveyed)	Background Check Required (percentage of companies surveyed)	DMV Report Required (percentage of companies surveyed)	Physical Exam Required (percentage of companies surveyed)	High School Diploma Required (percentage of companies surveyed)	Certification Required (percentage of companies surveyed)	Salary Estimate – Low	Salary Estimate – High
Clergy	1	3	3	50.00%	12.50 %	50.00 %	0.00%	100.00%	33.33%	\$20.00	\$23.00
Coil Winders, Tapers, and Finishers	0	0	31	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$8.00	\$12.00
Commercial Pilots	1	3	3	100.00%	100.00%	100.00%	100.00%	0.00%	100.00 %	\$37.38	\$40.87
Computer and Information Systems Managers	0	1	3	35.71%	57.14%	28.57%	17.86%	71.43%	39.29%	\$33.48	\$44.74
Computer Programmers	1	-6	3	41.18%	58.82 %	41.18%	17.65%	52.94 %	35.29 %	\$24.05	\$38.95
Computer Science Teachers, Postsecondary	0	0	16	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	\$21.39	\$59.95
Computer User Support Specialists	2	4	4	54.05 %	67.57 %	54.05 %	27.03 %	78.38 %	35.14%	\$19.59	\$26.03
Computer-Controlled Machine Tool Operators, Metal and Plastic	3	6	6	83.33%	33.33%	16.67 %	1 6.67 %	66.67 %	0.00%	\$12.25	\$17.00
Construction Laborers	7	44	-18	46.67 %	36.67 %	73.33%	26.67 %	16.67 %	30.00%	\$15.26	\$21.58
Cooks, Restaurant	0	-5	-5	64.29 %	39.29 %	7.14%	14.29 %	60.7 1%	32.14%	\$10.07	\$11.23
Cost Estimators	1	15	31	48.84 %	34.88 %	62.79 %	18.60 %	30.23%	27.91 %	\$21.48	\$30.99
Crane and Tower Operators	0	2	2	100.00%	100.00%	50.00 %	0.00%	50.00 %	100.00%	\$19.00	\$20.50
Customer Service Representatives	15	216	216	55.07 %	68.12 %	26.09 %	18.84 %	65.22%	13.04 %	\$12.37	\$26.52
Data Entry Keyers	0	16	16	50.00 %	68.75 %	18.75 %	25.00 %	75.00 %	18.75 %	\$13.12	\$16.92
Data Warehousing Specialists	1	5	5	50.00%	100.00%	50.00 %	50.00 %	100.00%	50.00 %	\$18.52	\$59.58
Dental Assistants	1	9	14	20.83%	45.83%	25.00 %	29.17 %	91.67 %	95.83 %	\$13.18	\$18.99
Dental Hygienists	0	6	6	26.67 %	46.67 %	20.00%	26.67 %	86.67 %	80.00%	\$25.12	\$34.11
Dentists, General	0	23	23	28.57 %	42.86 %	21.43%	42.86 %	100.00%	100.00%	\$39.26	\$68.91
Diagnostic Medical Sonographers	1	3	3	25.00 %	14.29 %	0.00%	0.00%	100.00%	37.50 %	\$25.00	\$33.00
Dietetic Technicians	10	5	5	76.47 %	94.12 %	29.41 %	100.00%	64.71 %	29.41 %	\$9.56	\$11.28
Dispatchers, Except Police, Fire, and Ambulance	1	-5	23	69.23 %	82.05 %	56.41 %	28.21 %	61.54 %	7.69 %	\$16.76	\$21.51
Driver/Sales Workers	0	5	10	100.00%	80.00 %	100.00%	60.00%	60.00%	40.00 %	\$10.69	\$15.36
Drywall and Ceiling Tile Installers	0	123	132	75.00 %	25.00%	50.00 %	25.00%	75.00%	50.00 %	\$11.31	\$23.58

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Earth Drillers, Except Oil and Gas	3	2	4	100.00 %	33.33%	66.67 %	33.33%	16.67 %	66.67 %	\$15.84	\$29.87
Electrical and Electronic Equipment Assemblers	0	3	3	80.00%	20.00%	20.00%	20.00%	80.00%	0.00%	\$15.04	\$12.00
Electrical and Electronics Repairers, Commercial and Industrial Equipment	0	8	8	0.00%	0.00%	100.00%	0.00%	100.00%	0.00%	\$9.00	\$21.00
Electrical Engineering Technicians	0	3	3	75.00 %	50.00 %	25.00 %	25.00 %	75.00 %	0.00%	\$23.00	\$30.50
Electrical Engineers	1	4	4	66.67 %	50.00 %	25.00 %	25.00 %	66.67 %	16.67 %	\$22.65	\$39.57
Electricians	11	45	94	61.54%	46.15 %	53.85 %	46.15 %	23.08 %	46.15 %	\$19.03	\$29.18
Electronics Engineering Technicians	0	8	8	71.43%	85.71%	57.14%	42.86 %	71.43%	57.14%	\$11.67	\$25.08
Emergency Medical Technicians and Paramedics	26	21	21	100.00%	100.00%	50.00 %	100.00%	100.00%	100.00%	\$15.74	\$20.61
English Language and Literature Teachers, Postsecondary	0	3	3	100.00%	100.00%	50.00 %	50.00 %	100.00%	100.00%	\$25.00	\$30.00
Entertainers and Performers, Sports and Related Workers, All Other	4	9	9	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	\$8.00	\$9.00
Environmental Science and Protection Technicians, Including Health	1	1	1	50.00 %	100.00%	1 00.00 %	0.00%	50.00 %	100.00%	\$13.86	\$21.11
Environmental Scientists and Specialists, Including Health	1	2	2	57.14%	85.71%	42.86 %	85.71 %	71.43%	57.14%	\$33.31	\$37.72
Executive Secretaries and Executive Administrative Assistants	0	-1	-1	58.06 %	61.29 %	29.03 %	22.58%	58.06 %	9.68 %	\$16.03	\$22.20
Extruding and Forming Machine Setters, Operators, and Tenders, Synthetic and Glass Fibers	1	3	3	100.00%	100.00%	0.00%	100.00%	0.00%	0.00%	\$10.00	\$15.00
Family and General Practitioners	0	3	8	72.48%	45.83%	34.45%	9.56 %	100.00%	27.12%	\$105.37	\$166.27
Farm Equipment Mechanics and Service Technicians	2	3	8	37.50%	37.50%	12 .50 %	12.50 %	12.50 %	12.50 %	\$18.37	\$22.51
Farmworkers and Laborers, Crop	204	1097	1097	42.31%	19.23 %	26.92 %	1 5.38 %	15.38%	7.69 %	\$11.18	\$17.10
Farmworkers and Laborers, Crop, Nursery, and Greenhouse	0	0	27	26.32 %	15.79 %	26.32 %	10.53 %	15.79 %	10.53 %	\$8.54	\$11.23
First-Line Supervisors of Construction Trades and Extraction Workers	4	10	21	56.67 %	40.00%	80.00%	23.33%	46.67 %	30.00%	\$22.26	\$30.98
First-Line Supervisors of Helpers, Laborers, and Material Movers, Hand	1	-5	-5	40.00%	20.00%	60.00%	0.00%	20.00%	20.00%	\$16.70	\$20.77
First-Line Supervisors of Mechanics, Installers, and Repairers	0	9	9	62.30 %	72.13%	57.38 %	32.79 %	47.54%	24.59 %	\$19.69	\$27.48
First-Line Supervisors of Office and Administrative Support Workers	0	10	21	41.95 %	51.22%	40.49 %	21.95 %	54.63 %	15.61 %	\$17.37	\$24.33

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First-Line Supervisors of Production and Operating Workers	1	1	6	65.52 %	57.76 %	33.62 %	32.76 %	55.17%	19.83 %	\$21.05	\$27.05
First-Line Supervisors of Retail Sales Workers	3	11	11	72.09 %	74.42%	41.86 %	20.93 %	46.51 %	2.33%	\$16.09	\$26.73
Fitness Trainers and Aerobics Instructors	1	3	3	50.00 %	0.00%	0.00%	0.00%	100.00%	50.00 %	\$9.16	\$29.99
Floor Layers, Except Carpet, Wood, and Hard Tiles	0	18	18	25.00 %	50.00 %	25.00 %	0.00%	25.00 %	0.00%	\$8.50	\$12.75
Food Science Technicians	0	3	3	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	\$14.00	\$19.00
General and Operations Managers	2	-6	-3	52.02 %	57.58 %	39.90 %	25.76 %	55.05 %	15.15%	\$27.65	\$38.09
Geoscientists, Except Hydrologists and Geographers	1	2	2	50.00 %	50.00 %	50.00 %	100.00%	100.00%	100.00%	\$31.00	\$35.16
Graphic Designers	1	8	8	35.29 %	52.94 %	23.53%	17.65 %	76.47 %	11.76 %	\$16.63	\$27.74
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	0	-3	-3	50.00 %	25.00 %	50.00 %	50.00 %	25.00 %	0.00%	\$9.13	\$11.63
Health Technologists and Technicians, All Other	0	3	3	100.00%	100.00%	0.00%	22.00 %	100.00%	100.00%	\$19.00	\$31.50
Heating and Air Conditioning Mechanics and Installers	2	49	49	83.33%	66.67 %	100.00 %	0.00%	66.67 %	83.33%	\$18.82	\$23.40
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	0	28	28	66.67 %	100.00%	100.00%	66.67 %	33.33%	66.67 %	\$10.17	\$21.00
Heavy and Tractor-Trailer Truck Drivers	8	162	180	92.00 %	67.00 %	100.00 %	62.00 %	32.00%	48.00 %	\$14.31	\$19.40
Helpers – Carpenters	0	15	15	66.67 %	66.67 %	66.67 %	0.00%	0.00%	0.00%	\$9.00	\$13.00
Helpers – Installation, Maintenance, and Repair Workers	0	6	6	80.00%	80.00%	100.00 %	40.00 %	20.00%	20.00%	\$10.92	\$22.18
Helpers – Painters, Paperhangers, Plasterers, and Stucco Masons	0	32	37	40.00 %	60.00%	60.00 %	20.00%	40.00 %	40.00%	\$15 .0 8	\$21.46
Helpers – Pipelayers, Plumbers, Pipefitters, and Steamfitters	0	33	49	66.67 %	44.44%	66.67 %	0.00%	0.00%	33.33%	\$11.00	\$15.22
Helpers – Production Workers	20	156	239	67.27 %	61.82 %	23.64 %	29.09 %	40.00%	16.36 %	\$10.83	\$14.63
Home Health Aides	12	144	144	47.37%	94.74 %	57.89 %	94.74 %	52.63 %	42.11 %	\$9.03	\$10.05
Human Resources Managers	1	-5	-5	61.36%	75.00%	38.64 %	27.27%	63.64 %	15.91 %	\$31.21	\$37.51
Hydrologists	2	4	4	66.67 %	100.00%	66.67 %	66.67 %	100.00%	33.33%	\$48.56	\$58.01
Industrial Machinery Mechanics	1	4	4	72.73%	45.45%	54.55%	36.36 %	54.55%	18.18 %	\$15.34	\$19.66

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Industrial Production Managers	0	-2	-2	79.37 %	60.32%	34.92 %	42.86 %	52.38%	9.52%	\$32.16	\$39.14
Industrial Truck and Tractor Operators	4	27	30	71.43%	57.14%	31.43%	28.57%	31.43%	31.43%	\$10.99	\$14.91
Inspectors, Testers, Sorters, Samplers, and Weighers	2	2	2	71.43%	71.43%	28.57%	42.86%	57.14%	28.57%	\$11.22	\$12.18
Installation, Maintenance, and Repair Workers, All Other	1	21	21	89.47 %	57.89 %	78.95%	42.11%	26.32%	26.32%	\$14.21	\$22.35
Insurance Appraisers, Auto Damage	0	-3	-3	0.00%	50.00 %	50.00 %	0.00%	50.00%	50.00 %	\$20.00	\$30.00
Internists, General	1	0	-3	100.00%	51.35%	16.22 %	100.00%	83.78 %	100.00%	\$19.23	\$20.68
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	1	7	7	69.57 %	73.91 %	26.09 %	47.83%	60.87 %	0.00%	\$11.73	\$13.14
Laborers and Freight, Stock, and Material Movers, Hand	25	73	73	68.75 %	59.38 %	34.38%	37.50%	21.88 %	0.00%	\$12.49	\$14.56
Landscaping and Groundskeeping Workers	3	21	21	40.00 %	20.00 %	40.00 %	40.00%	20.00%	25.00 %	\$12.69	\$15.69
Lawyers	1	2	2	25.00 %	25.00 %	0.00%	0.00%	100.00%	75.00 %	\$56.57	\$76.60
Licensed Practical and Licensed Vocational Nurses	0	5	5	100.00%	97.37 %	26.32%	100.00%	81.58 %	100.00%	\$21.73	\$27.68
Light Truck or Delivery Services Drivers	15	96	99	71.15%	75.00 %	90.38 %	25.00%	30.77 %	100.00%	\$12.15	\$15.75
Logistics Managers	0	-3	-3	30.00%	60.00 %	10.00%	20.00%	50.00%	10.00 %	\$28.85	\$28.85
Machinists	5	26	34	63.64 %	45.45%	22.73%	22.73%	18.18%	18.18 %	\$11.75	\$17.93
Maintenance and Repair Workers, General	10	13	34	68.97 %	87.93 %	43.10%	51.72%	48.28 %	17.24%	\$13.25	\$19.76
Market Research Analysts and Marketing Specialists	0	0	3	61.67 %	57.50 %	33.33%	10.83%	72.50 %	28.33%	\$16.77	\$28.16
Mechanical Engineers	0	2	2	61.54%	23.08 %	23.08%	7.69 %	69.23 %	23.08%	\$19.28	\$26.84
Medical and Health Services Managers	5	34	30	59.09 %	86.36 %	34.85 %	60.61 %	83.33%	46.97 %	\$22.11	\$28.71
Medical Assistants	12	42	60	100.00%	58.18 %	21.82 %	100.00%	81.82 %	100.00%	\$12.17	\$19.36
Medical Records and Health Information Technicians	0	8	8	51.11%	64.44 %	35.56%	44.44%	75.56 %	100.00%	\$12.05	\$23.44
Mixing and Blending Machine Setters, Operators, and Tenders	11	21	21	83.33%	66.67 %	43.18%	59.85 %	50.00 %	34.85%	\$14.40	\$18.13
Mobile Heavy Equipment Mechanics, Except Engines	0	3	3	60.00%	60.00 %	40.00 %	60.00%	40.00%	40.00 %	\$17.73	\$23.28
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	0	8	8	82.61 %	47.83 %	13 .0 4%	30.43%	65.22 %	17.39%	\$14.48	\$21.01

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Network and Comp	uter Systems Administrators	0	5	11	22.22%	66.67 %	38.89%	0.00%	66.67 %	50.00 %	\$16.50	\$29.83
Nonfarm Animal Ca	•	1	3	3	30.00 %	40.00 %	20.00 %	10.00 %	40.00 %	10.00%	\$8.19	\$8.82
Nurse Practitioners		1	3	5	100.00%	60.87 %	13.04 %	100.00%	100.00%	100.00 %	\$40.45	\$55.99
Nursing Assistants		2	90	90	75.00 %	100.00%	15.00 %	100.00 %	55.00 %	100.00%	\$10.63	\$14.13
Office Clerks, Genera	al	11	2	9	49.76 %	52.66 %	34.78 %	24.6 4%	51.21%	14.49 %	\$11.24	\$15.68
Operating Engineer	s and Other Construction Equipment Operators	0	4	4	75.00 %	56.25 %	87.50 %	62.50 %	37.50 %	62.50 %	\$17.25	\$30.01
Packers and Packag	ers, Hand	0	20	20	44.44%	33.33%	5.56 %	11.11%	11.11%	11.11%	\$9.72	\$11.52
Painters, Constructi	on and Maintenance	0	28	30	40.00%	40.00 %	80.00 %	0.00%	60.00%	40.00 %	\$10.50	\$19.17
Painters, Transporta	ation Equipment	0	-1	-1	0.00%	33.33%	50.00 %	0.00%	33.33%	50.00 %	\$13.54	\$21.22
Parts Salespersons		1	18	28	63.33%	53.33%	70.00 %	30.00 %	46.67 %	6.67 %	\$13.07	\$19.68
Personal Care Aides		4	16	16	62.50 %	83.33%	25.00 %	0.00%	62.50 %	50.00 %	\$8.38	\$8.94
Petroleum Enginee	rs	0		2	0.00%	100.00%	100.00 %	100.00%	100.00 %	100.00%	\$24.04	\$50.00
Pharmacy Technicia	ns	0	-6	-6	100.00%	100.00%	14 .29 %	14.29 %	75.00 %	100.00%	\$12.16	\$18.38
Physical Therapist A	ides	0	-10	-10	42.86 %	28.57 %	0.00%	14.29 %	57.14%	83.33%	\$9.33	\$12.33
Physical Therapists		0	3		100.00%	100.00%	34.78%	100.00%	86.96 %	100.00%	\$28.14	\$36.78
Physician Assistants		0	3	3	40.00 %	60.00 %	30.00 %	40.00 %	90.00 %	100.00%	\$33.46	\$38.48
Plumbers		4	51	78	71.43%	50.00 %	85.71 %	14.29 %	14.29 %	85.71 %	\$18.21	\$27.34
Print Binding and Fi	inishing Workers	1	11	11	20.00%	60.00 %	0.00%	20.00%	40.00 %	20.00 %	\$11.88	\$18.00
Printing Press Opera	ators	1	8	8	14.29 %	57.14%	14.29 %	14.29 %	42.86 %	28.57 %	\$13.68	\$18.78
Production Workers	, All Other	0	13	18	80.95 %	57.14%	19.05 %	42.86 %	47.62 %	9.52 %	\$15.72	\$22.60
Program Directors		3	17	19	45.95 %	70.27 %	43.24%	27.03 %	75.68 %	40.54 %	\$20.53	\$29.18
Purchasing Manage	rs	1	2	2	87.50 %	87.50 %	55.56 %	62.50 %	54.17%	30.56 %	\$27.64	\$33.65
Quality Control Ana	lysts	1	3	3	89.47 %	73.68 %	0.00%	42.11 %	68.42 %	5.26 %	\$20.36	\$24.76

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	Radiologic Technicians	0	5	5	61.54%	92.31%	15.38%	30.77%	84.62 %	92.31%	\$20.61	\$24.16	
	Real Estate Sales Agents	0	13	13	20.00%	60.00%	60.00%	0.00%	60.00%	40.00%	\$24.32	\$65.95	
	Receptionists and Information Clerks	8	23	34	42.86%	56.19%	26.67%	21.90%	64.76%	23.81%	\$11.96	\$15.81	
	Recycling and Reclamation Workers	1	8	8	50.00 %	60.00 %	40.00 %	10.00%	30.00 %	20.00%	\$10.47	\$14.15	
	Refrigeration Mechanics and Installers	1	44	54	0.00%	0.00%	0.00%	0.00%	33.33%	66.67 %	\$13.63	\$24.37	
	Registered Nurses	8	52	52	100.00%	100.00%	25.40 %	100.00%	82.54%	100.00%	\$29.90	\$38.47	
	Retail Salespersons	62	161	178	54.40 %	62.40 %	44.80 %	18.40%	42.40 %	5.60 %	\$15.19	\$22.78	
	Roofers	0	0	19	33.33%	33.33%	100.00%	0.00%	0.00%	33.33%	\$13.41	\$24.28	
	Rough Carpenters	0	2	2	0.00%	0.00%	50.00 %	0.00%	50.00 %	50.00 %	\$14.90	\$17.65	
	Sales Managers	1	3	3	64.63 %	75.61 %	36.59 %	14.63 %	50.00 %	15.85 %	\$27.78	\$34.00	
	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	1	33	35	65.00 %	65.00 %	35.00 %	15 .00 %	30.00%	0.00%	\$20.37	\$29.65	
	Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	2	32	32	66.25 %	51.25%	56.25 %	26.25%	45.00 %	6.25 %	\$20.29	\$27.05	
	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	5	8	13	38.97 %	57.35%	34.56 %	17.65%	48.53%	10.29%	\$13.18	\$18.31	
	Security Guards	150	345	345	81.82 %	100.00%	72.73%	36.36%	72.73%	100.00%	\$8.71	\$10.75	
	Sheriffs and Deputy Sheriffs	0	289	289	100.00%	100.00%	1 00.00 %	100.00%	100.00%	100.00%	\$26.98	\$46.64	
	Shipping, Receiving, and Traffic Clerks	0	6	6	75.00 %	58.33 %	36.11 %	30.56%	41.67 %	8.33%	\$11.58	\$13.69	
	Social and Human Service Assistants	1	3	3	63.64 %	90.91 %	40.91 %	72.73%	72.73%	50.00 %	\$12.71	\$16.62	
	Software Developers, Applications	0	2	2	37.50 %	75.00 %	33.33%	0.00%	75.00 %	70.83 %	\$31.50	\$43.25	
	Software Developers, Systems Software	0	9	9	53.33%	83.33%	63.33%	0.00%	100.00%	100.00%	\$29.67	\$38.33	
	Solar Sales Representatives and Assessors	8	14	14	100.00%	100.00%	75.00 %	0.00%	62.50 %	0.00%	\$13.21	\$38.85	
	Solar Thermal Installers and Technicians	0	7	14	100.00%	100.00%	25.00 %	0.00%	50.00 %	0.00%	\$12.00	\$20.00	

OCCUPATION	Current Number of Positions Needed	Projected Number of Positions – Year 1 (based on the sample size surveyed in each industry)	Projected Number of Positions – Year 3 (based on the sample size surveyed in each industry)	Drug Testing Required (percentage of companies surveyed)	Background Check Required (percentage of companies surveyed)	DMV Report Required (percentage of companies surveyed)	Physical Exam Required (percentage of companies surveyed)	High School Diploma Required (percentage of companies surveyed)	Certification Required (percentage of companies surveyed)	Salary Estimate – Low	Salary Estimate – High
Stock Clerks – Stockroom, Warehouse, or Storage Yard	0	32	40	52.95 %	59.15 %	38.62 %	33.13%	29.52 %	6.59 %	\$10.43	\$15.68
Transportation Managers	0	-7	-7	57.14%	85.71 %	57.14%	57.14%	28.57%	14 .29 %	\$48.08	\$48.08
Upholsterers	10	25	25	0.00%	33.33%	33.33%	33.33%	66.67 %	0.00%	\$10.00	\$16.00
Ushers, Lobby Attendants, and Ticket Takers	0	-3	-3	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	\$8.25	\$8.25
Veterinary Assistants and Laboratory Animal Caretakers	0	31	31	14.29 %	57.14%	0.00%	0.00%	42.86 %	42.86 %	\$9.50	\$14.00
Veterinary Technologists and Technicians	1	3	3	12.50 %	25.00 %	0.00%	0.00%	75.00 %	75.00 %	\$19.25	\$23.75
Water and Wastewater Treatment Plant and System Operators	3	9	33	75.00 %	69.23 %	50.00 %	75.00 %	75.00 %	75.00 %	\$19.81	\$24.98
Weatherization Installers and Technicians	0	8	8	66.67 %	66.67 %	100.00%	33.33%	66.67 %	100.00%	\$14.42	\$28.84
Welders, Cutters, and Welder Fitters	25	127	127	69.70 %	30.30%	24.24%	24.24%	36.36 %	27.27%	\$13.78	\$20.16
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	2	4	4	100.00%	100.00%	0.00%	0.00%	100.00%	0.00%	\$13.00	\$19.00

Business Feedback

While the 2014 employment projections indicate a slight improvement compared to the 2012 survey, the data shows us that businesses are still struggling with a multitude of issues that impair their ability to thrive, expand, and hire. While the number of barriers faced by business has not increased, there are still a high percentage of businesses struggling to overcome them. It should be noted that the decrease in the number of barriers/ obstacles below doesn't necessarily reflect that there was a positive change between the 2012 and 2014 surveys, as the

response rate of those surveyed decreased significantly from the prior year. As an enhancement to this year's survey, the FRWIB Business Services Team utilized Fresno4Biz, a collaborative partnership of twelve public/private business serving organizations (including FRWIB), to

	CURRENT OBSTACLE		EXPANSIO	N BARRIER
	2014	2012	2014	2012
Access to Capital	42	116	10	45
Available Local Infrastructure	9	39	3	15
Community Image	1	29	1	8
Competition	44	164	2	16
Compliance with ACA	66	-	3	-
Cost of Doing Business	53	274	5	35
Import / Export Barriers	0	14	0	0
Keeping up with Changing Tech	10	49	0	9
Labor (Availability, Cost, Skills)	65	300	15	104
Litigation Environment	1	51	0	2
Local Permitting, Fee, Process	18	54	3	18
Market Conditions	123	408	22	56
Regulatory Constraints	72	181	3	29
Utilities (Access to, Cost)	14	34	1	1
TOTAL	518	1713	68	338

OF EMPLOYERS20142012Completed Survey14201211Responded to
Obstacles Questions3801083Responded to
Barriers Questions55287

provide follow-up to businesses requesting assistance with barriers.

As part of the survey, local employers were asked two economic questions to help us better understand their current and future needs in order to determine the best ways to assist them. The questions were as follows: 1) What are the major obstacles facing your business today?, and 2) If you plan to expand, what obstacles do you expect in the process? Their responses are on the following pages.



Business Feedback



Obstacles Identified

518 responses were received from local employers identifying the most significant current obstacles they face. The more prevalent responses are as follows:

Market Conditions

123 responses or 23.7 percent

- Tight banking climate no access to cash
- Sales are very low
- Customers cannot access financing

Regulatory Constraints / State and Federal Regulations

72 responses or 13.9 percent

- Permitting is a long process
- Rigid certification requirements
- High regulation standards
- Air standards extremely difficult to meet
- New emissions standards
- Licensing
- Changing regulations
- New oversight boards and large fees

Compliance with Affordable Healthcare Act

66 responses or 12.7 percent

- Cost too much for the healthcare law downsizing staff size as a result
- The government is cutting back on (Medicare) payments
- Premiums going up
- Health insurance cost too high

Business Feedback

Labor Availability and Cost

65 responses or 12.5 percent

- Cost of labor taxes, liability insurance, workers compensation insurance, health insurance, etc.
- Lack of qualified workers for technical positions
- Unreliable job seekers
- Job seekers/employees do not appear to be committed to their job just the paycheck
- Job seekers have lack of work ethic and proper training
- Job seekers have poor skills
- Job seekers have lack of basic comprehension can't read or follow instructions

Cost of Doing Business

53 responses or 10.2 percent

- State and federal taxes
- Employer insurance
- Cost of worker compensation insurance and payroll taxes
- Cost of healthcare
- High cost of utilities and labor

Competition

44 responses or 8.5 percent

- Undercutting of bids
- · Competition with low-cost businesses that skirt regulatory issues to cut costs
- Overseas competition
- Competitors in neighboring states can operate for less and charge less

Access to Capital

42 responses or 8.1 percent

- Resistance to lending
- Can not accurately forecast sales to support loans



Methodology



From September through December of 2013, surveys were completed among 1,420 employers across seven industry and two occupational clusters in Fresno County.

Data Collection Methods

Fresno employers, in the sample, were mailed a letter and asked if they would be willing to participate in the survey by calling a 1-800 number or waiting to be contacted by the data collection facility. Fresno employers were contacted by telephone and asked to complete a survey asking about current and expected occupational growth. Employers who were unwilling to complete a survey over the phone were given the opportunity to complete a paper version of the survey and have it emailed or faxed to the data collection facility. The average number of attempts across all firms in the sample was five and some employers were attempted up to twenty-six times (depending on cluster and size).

Industry & Occupational Clusters

Seven industry clusters and two occupational clusters were chosen to represent the region's economic potential and job growth. The seven industry clusters were:

- Agribusiness
- Automotive
- Construction Trades
- Healthcare
- Logistics
- Manufacturing
- Renewable Energy

There were two occupational cluster employers in Fresno County that were not included in the industry clusters above. It should be noted that the occupational clusters are not specific to a given industry, but instead employers were asked about the related occupations for that cluster across industries. The two occupational clusters were:

- Information Technology
- Professional and Technical Services

Methodology

Sampling

Firms from each of the nine sectors were categorized as small (five to nine employees), medium (ten to forty-nine employees) and large (fifty or more employees) based on the data provided by InfoUSA. The company overseeing the research for this project, BW Research, attempted contact with all firms in the sample. The overall extrapolation for industry and occupational cluster employment was completed by measuring the relational growth in employment between the sample of small, medium, and large employers for each industry and occupational cluster in comparison to the universe of employers that existed in Fresno County according to InfoUSA, along with an estimate of firms that have gone out of business (OOB) by industry and employer size. The OOB estimate was incorporated into the overall estimate of the universe size for each of the seven industry clusters by employment size to provide a more accurate estimate of current industry cluster employment.

Margin of Error

Assuming a 90 percent level of confidence, below is the margin of error associated with the overall industry extrapolations:

- Agribusiness +/- 6.39 percent
- Automotive
- Construction Trades
- Healthcare
- Logistics
- +/- 7.12 percent

+/- 6.90 percent

+/- 5.01 percent

+/- 4.32 percent

- Manufacturing +/- 5.41 percent
- Renewable Energy +/- 7.13 percent

The margin of error associated with specific occupational extrapolations varies by the number of employers that provided information in relation to the total number of employers in Fresno County that hire for that specific occupation.



Next Steps and Conclusion



The 2014 employment survey continues to be a valuable tool to evaluate the current needs of high-growth industries. The data clearly indicates that there is an opportunity to enhance services to both business and job seeker clients. The FRWIB continues their commitment to providing a business-driven focus on services provided so that they can effectively address current and future hiring and skills needs.

The FRWIB will continue to focus its efforts to support local businesses by:

- Aligning training funds and program services to high-demand industries and positions
- Better screening and preparation of candidates to meet employer needs
- · Supporting ongoing two-way communication with local businesses for timely solutions to their business barriers
- Encouraging and supporting Fresno4Biz partners that provide technical assistance to business so that they can start-up, grow, and thrive
- Addressing the soft and technical skills gap that may occur between employer's needs and what job seekers offer
- Providing access to additional business resources through the FRWIB Business Services Center and Website
- Providing more layoff aversion assistance, especially with impending drought impacts
- Communicating workforce training and skills requirements to post-secondary training providers
- Funding and supporting of high-growth industry initiatives

Conclusion

Although the 2014 survey shows some improvement in employment demand when compared to the 2012 survey, local businesses continue to struggle with the after effects of the Great Recession. As the FRWIB continues to support businesses with a qualified workforce and barrier specific assistance, they in turn can create opportunities for job seekers. The FRWIB will continue to develop innovative strategies that assist local and regional companies in the creation and retention of job positions. This is a win-win situation that strengthens the local economy and provides greater opportunities for gainful employment for job seekers.



Access the 2014 Fresno Regional Employment Study Report on our website at: www.workforce-connection.com, click on "Studies and Reports" and utilize the Occupational Data Comparison feature. This feature provides the convenience of selecting various occupations of interest and comparing wages, requirements and projections all on the same page.



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