# ATTACHMENT 3

# Regional Planning Unit Summary: San Joaquin Valley and Associated Counties

Employment Development Department, Labor Market Information Division



Fresno, Kern, Inyo, Mono, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare Counties





## **Regional Planning Unit: San Joaquin Valley and Associated Counties**

Local Workforce Development Areas: Fresno County, Kern, Inyo, Mono Consortium, Kings County, Madera County, Merced County, San Joaquin County, Stanislaus County, and Tulare County Counties: Fresno, Kern, Inyo, Mono, Kings, Madera, Merced, San Joaquin, Stanislaus, and Tulare

#### Labor Market Profile

	May 2016	May 2015	Change	Percent
Labor Market	1,871,810	1,873,910	-2,100	-0.1%
Employed	1,710,720	1,689,870	20,850	1.2%
Unemployed	160,910	184,240	-23,330	-12.7%
Unemployment Rate	8.6%	9.8%	-1.2%	-

Source: Employment Development Department, Labor Market Information Division. Data Note: Numbers may not add due to rounding.

#### **Unemployment Insurance Claims**

Unemployment Insurance Claims data is available by county <u>here</u>. Source: Employment Development Department, Unemployment Insurance Division.

#### **Commute Patterns**

Living and Employed in the Area	Inflow	Outflow
991,078	223,636	321,863

Source: U.S. Census Bureau, OnTheMap Application and LEHD Origin-Destination Employment Statistics (Beginning of Quarter Employment, 2nd Quarter of 2002-2014).

#### **Regional Economic Growth**

Major Industry Sector	May 2016 (preliminary)	May 2012	Change	Percent	Location Quotient
Total All Industries	1,514,200	1,368,720	145,480	10.6%	-
Total Farm	240,000	220,001	19,999	9.1%	5.6
Total Nonfarm	1,274,200	1,148,720	125,480	10.9%	0.9
Mining and Logging	9,930	13,451	-3,521	-26.2%	4.4
Construction	43,130	36,530	6,600	18.1%	0.6
Manufacturing	111,240	102,701	8,539	8.3%	1.0
Trade, Transportation and Utilities	268,450	235,200	33,250	14.1%	1.0
Information	11,840	11,660	180	1.5%	0.3
Financial Activities	42,940	42,540	400	0.9%	0.6
Professional and Business Services	110,120	101,620	8,500	8.4%	0.5
Educational and Health Services	205,460	181,400	24,060	13.3%	0.9
Leisure and Hospitality	126,430	106,960	19,470	18.2%	0.7
Other Services	38,790	35,700	3,090	8.7%	0.8
Government	287,380	266,760	20,620	7.7%	1.3

Source: Employment Development Department, Labor Market Information Division.

Data Note: Numbers may not add due to suppression. Location quotients (LQs) are ratios that allow a Regional Planning Unit (RPU)'s distribution of employment for an industry to be compared to California's distribution of employment for the same industry. Specifically, LQs are calculated by first dividing RPU industry employment by the all industry total of RPU employment. Second, California industry employment is divided by the all industry total for California. Finally, the RPU ratio (first calculation) is divided by the California ratio (second calculation). If an LQ is equal to 1, then the industry has the same share of RPU employment than is the case statewide.

**Demand Industry Sectors** 

Top Demand Industry Sub Sector	Total Projected Job Openings 2012-2022	Location Quotient
Support Activities for Crop Production	53,533	6.7
Restaurants and Other Eating Places	50,829	0.9
Elementary and Secondary Schools	35,929	1.5
Individual and Family Services	20,045	0.9
General Medical and Surgical Hospitals	18,716	1.1
Employment Services	14,915	0.8
Offices of Physicians	13,370	1.0
Grocery Stores	11,199	1.0
Other General Merchandise Stores	9,151	1.2
Fruit and Tree Nut Farming	8,615	4.8

Source: Employment Development Department, Labor Market Information Division.

Data Note: Total projected job openings are the sum of new and replacement job openings.

## **Emergent Industry Sectors**

Top Emergent Industry Sub Sector	Numeric Change 2012-2022	Percent Change	Location Quotient
Motor Vehicle Parts Manufacturing	1,280	108.5%	1.0
Other General Merchandise Stores	6,320	73.4%	1.2
Social Advocacy Organizations	860	71.7%	0.7
Highway, Street, and Bridge Construction	1,200	71.0%	1.0
Other Support Services	1,420	68.9%	0.9
Continuing Care Retirement Communities and Assisted Living	4,510	68.0%	0.9
Facilities for the Elderly			
Building Finishing Contractors	4,060	64.2%	0.9
Wired Telecommunications Carriers	1,090	63.4%	0.8
Petroleum and Coal Products Manufacturing	670	59.8%	1.1
Management, Scientific, and Technical Consulting Services	3,660	59.5%	0.3

Source: Employment Development Department, Labor Market Information Division.

Data Note: Emergent industry sectors are industries with the highest levels of growth as measured by percent change.

Top 25 Middle-Skill, Middle-Wage or Higher Occupations	Total Projected Job Openings 2012-2022	HWOL Job Ads	Median Annual Wage 2016 1st Quarter
Heavy and Tractor-Trailer Truck Drivers	10,494	5,728	\$40,041
Registered Nurses	9,600	6,196	\$91,510
Teacher Assistants	5,245	872	\$28,905
Nursing Assistants	4,863	411	\$27,057
Medical Assistants	4,231	505	\$30,558
Licensed Practical and Licensed Vocational Nurses	2,956	813	\$51,343
Preschool Teachers, Except Special Education	1,935	349	\$30,319
Dental Assistants	1,586	407	\$31,716
First-Line Supervisors of Production and Operating Workers	1,478	909	\$53,638
Firefighters	1,080	29	\$55,844
Computer User Support Specialists	1,048	727	\$47,185
Heating, Air Conditioning, and Refrigeration Mechanics and Installers	1,025	367	\$44,599
Dental Hygienists	966	105	\$86,444
Emergency Medical Technicians and Paramedics	909	87	\$33,149
Medical Records and Health Information Technicians	892	257	\$38,238
Paralegals and Legal Assistants	828	129	\$48,905
Aircraft Mechanics and Service Technicians	739	103	\$57,758
Library Technicians	699	25	\$35,389
Medical and Clinical Laboratory Technicians	671	50	\$43,721
Telecommunications Equipment Installers and Repairers, Except Line Installers	621	202	\$53,645
Phlebotomists	522	76	\$36,274
Respiratory Therapists	503	88	\$77,694
Radiologic Technologists	492	244	\$74,594
Forest and Conservation Technicians	464	129	\$32,406
Agricultural and Food Science Technicians	444	46	\$37,365

Top 25 Middle-Skill, Middle-Wage or Higher Occupations

Source: Employment Development Department, Labor Market Information Division; The Conference Board Help Wanted OnLine<sup>™</sup> (HWOL) Data Series, 120-day period ending June 21, 2016.

Data Note: Middle-skill occupations typically require more than a high school diploma but less than a Bachelor's degree. Middle-wage occupations make at least 80 percent of the area's median annual wage (\$33,796). Demographic Data

Age	Population	Percent Share of Total Population
Under 5 Years	333,960	8.2%
5 to 9 Years	331,184	8.1%
10 to 14 Years	328,524	8.1%
15 to 17 Years	200,666	4.9%
18 and 19 Years	126,636	3.1%
20 Years	70,751	1.7%
21 Years	66,804	1.6%
22 to 24 Years	183,845	4.5%
25 to 29 Years	298,348	7.3%
30 to 34 Years	281,255	6.9%
35 to 39 Years	259,620	6.4%
40 to 44 Years	254,588	6.2%
45 to 49 Years	255,167	6.3%
50 to 54 Years	253,973	6.2%
55 to 59 Years	222,730	5.5%
60 and 61 Years	79,803	2.0%
62 to 64 Years	105,872	2.6%
65 and 66 Years	64,101	1.6%
67 to 69 Years	76,464	1.9%
70 to 74 Years	100,429	2.5%
75 to 79 Years	74,251	1.8%
80 to 84 Years	55,364	1.4%
85 Years and Older	55,274	1.4%
Total	4,079,609	100.0%

Source: U.S. Census Bureau, 2010-2014 American Community Survey, 5-Year Estimates.

Gender	Population
Male	2,053,624
Female	2,025,985
Total	4,079,609

Median Household Income by County	Median Household Income
Fresno	\$45,201
Inyo	\$45,625
Kern	\$48,574
Kings	\$47,341
Madera	\$45,490
Merced	\$43,066
Mono	\$61,814
San Joaquin	\$53,253
Stanislaus	\$49,573
Tulare	\$42,863

Poverty Status	Population	Percentage
Income in the Past 12 Months Below Poverty Level	940,042	23.7%
Income in the Past 12 at or Above Poverty Level	3,030,436	76.3%
Total	3,970,478	100.0%

Source: U.S. Census Bureau, 2010-2014 American Community Survey, 5-Year Estimates.

Race	Population	Percentage
Hispanic or Latino	2,018,605	100.0%
White Alone	1,332,905	66.0%
Black or African American Alone	13,492	0.7%
American Indian and Alaska Native Alone	20,737	1.0%
Asian Alone	7,720	0.4%
Native Hawaiian and Other Pacific Islander Alone	1,329	0.1%
Some Other Race Alone	548,857	27.2%
Two or More Races	93,565	4.6%
Non-Hispanic or Latino	2,061,004	100.0%
White Alone	1,452,229	70.5%
Black or African American Alone	180,518	8.8%
American Indian and Alaska Native Alone	24,507	1.2%
Asian Alone	296,367	14.4%
Native Hawaiian and Other Pacific Islander Alone	11,187	0.5%
Some Other Race Alone	6,589	0.3%
Two or More Races	89,607	4.3%

Source: U.S. Census Bureau, 2010-2014 American Community Survey, 5-Year Estimates.

Native and Foreign Born	Population	Percentage
Native	3,192,815	78.3%
Foreign Born	886,794	21.7%
Total	4,079,609	100.0%

English Learners	Population	Percentage
Speaks English Less Than "Very Well"	711,447	19.0%
Speaks English "Very Well"	916,870	24.5%
Speaks Only English	2,117,332	56.5%
Total	3,745,649	100.0%

Veteran Status	Population	Percentage
Male Veterans	179,774	93.2%
Female Veterans	13,092	6.8%
Total	192,866	100.0%

Source: U.S. Census Bureau, 2010-2014 American Community Survey, 5-Year Estimates.

Disability Status	Population	Percentage
With Any Disability	482,044	12.1%
No Disability	3,507,996	87.9%
Total	3,990,040	100.0%

Source: U.S. Census Bureau, 2010-2014 American Community Survey, 5-Year Estimates.

Labor Force Participation	Population	Percentage
Employed or in Armed Forces	1,562,189	51.7%
Unemployed	261,676	8.7%
Not in labor force	1,196,002	39.6%
Total	3,019,867	100.0%

Source: U.S. Census Bureau, 2010-2014 American Community Survey, 5-Year Estimates.

Individuals with Barriers to Employment	Total
Ethnic Minorities	2,627,380
Households with Cash Public Assistance or Food Stamps	227,663
Population 18 and Over with Less Than a 9 <sup>th</sup> Grade Level Education	383,224
Single Parent Households	299,397
Speak English Less Than "Very Well"	711,447
Youth Ages 10 to 24	977,226

Source: U.S. Census Bureau, 2010-2014 American Community Survey, 5-Year Estimates.

Educational Attainment	Male	Percentage	Female	Percentage
Less than 9th grade	198,654	13.8%	184,570	12.8%
9th to 12th grade, no diploma	196,833	13.6%	153,414	10.6%
High school graduate (includes equivalency)	394,997	27.4%	366,649	25.4%
Some college, no degree	363,871	25.2%	397,218	27.6%
Associate's degree	92,503	6.4%	118,626	8.2%
Bachelor's degree	131,471	9.1%	154,746	10.7%
Graduate or professional degree	65,809	4.6%	65,914	4.6%
Total	1,444,138	100.0%	1,441,137	100.0%

Educational Attainment, 25 Years and Over	Hispanic or Latino	Percent of Hispanic or Latino, Total	White alone, not Hispanic or Latino	Percent of White alone, not Hispanic or Latino, Total
Less than high school diploma	465,066	45.5%	106,769	10.1%
High school graduate (includes equivalency)	249,071	24.3%	288,617	27.4%
Some college or associate's degree	240,004	23.5%	409,059	38.8%
Bachelor's degree or higher	68,756	6.7%	249,627	23.7%
Total	1,022,897	100.0%	1,054,072	100.0%

Educational Attainment by Race, 25 Years and Over	White Alone	Percent of White Alone, Total	Black or African American Alone	Percent of Black or African American Alone, Total	American Indian and Alaska Native Alone	Percent of American Indian and Alaska Native Alone, Total	Asian Alone	Percent of Asian Alone, Total	Native Hawaiian and Other Pacific Islander Alone	Percent of Native Hawaiian and Other Pacific Islander Alone, Total	Some Other Race Alone	Percent of Some Other Race Alone, Total	Two or More Races	Percent of Two or more races, Total
Less than high school diploma	409,495	23.7%	20,148	17.7%	6,927	25.2%	44,779	24.1%	1,557	19.9%	145,998	48.8%	17,118	22.6%
High school graduate (includes equivalency)	453,186	26.2%	29,249	25.7%	7,990	29.0%	35,705	19.2%	2,492	31.9%	70,944	23.7%	19,431	25.7%
Some college or associate's degree	567,212	32.8%	48,411	42.5%	9,907	36.0%	50,399	27.1%	3,082	39.5%	65,473	21.9%	26,872	35.5%
Bachelor's degree or higher	296,868	17.2%	16,067	14.1%	2,704	9.8%	55,247	29.7%	677	8.7%	16,978	5.7%	12,323	16.3%
Total	1,726,761	100.0%	113,875	100.0%	27,528	100.0%	186,130	100.0%	7,808	100.0%	299,393	100.0%	75,744	100.0%

Gross Domestic Product (GDP) by Metropolitan Statistical Area (MSA)

The Bureau of Economic Analysis (BEA) estimates GDP at the State and MSA level only. Where applicable, the tables below display MSA data as a substitute for county level data.

Major Industry Sector	2014 Millions of Current Dollars
Total All Industries	\$37,149
Agriculture, Forestry, Fishing, and Hunting	\$3,875
Mining	\$157
Utilities	\$964
Construction	\$1,291
Manufacturing	\$2,563
Wholesale Trade	\$2,348
Retail Trade	\$2,642
Transportation and Warehousing	\$1,069
Information	\$1,045
Finance, Insurance, Real Estate, Rental, and Leasing	\$7,298
Professional and Business Services	\$2,357
Educational Services, Health Care, and Social Assistance	\$3,632
Arts, Entertainment, Recreation, Accommodation, and Food Services	\$979
Other Services, Except Government	\$958
Government	\$5,971

GDP by Fresno MSA (substitute for Fresno County)

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Major Industry Sector	2014 Millions of Current Dollars
Total All Industries	\$39,989
Agriculture, Forestry, Fishing, and Hunting	\$5,083
Mining	\$6,486
Utilities	\$564
Construction	\$1,724
Manufacturing	\$3,294
Wholesale Trade	\$2,057
Retail Trade	\$2,327
Transportation and Warehousing	\$1,131
Information	\$439
Finance, Insurance, Real Estate, Rental, and Leasing	\$3,948
Professional and Business Services	\$2,589
Educational Services, Health Care, and Social Assistance	\$2,137
Arts, Entertainment, Recreation, Accommodation, and Food Services	\$789
Other Services, Except Government	\$1,059
Government	\$6,364

GDP by Bakersfield MSA (substitute for Kern County)

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Major Industry Sector	2014 Millions of Current Dollars
Total All Industries	\$5,275
Agriculture, Forestry, Fishing, and Hunting	\$1,135
Mining	(L)
Utilities	\$33
Construction	\$86
Manufacturing	\$556
Wholesale Trade	\$132
Retail Trade	\$277
Transportation and Warehousing	\$88
Information	\$36
Finance, Insurance, Real Estate, Rental, and Leasing	\$272
Professional and Business Services	\$137
Educational Services, Health Care, and Social Assistance	\$340
Arts, Entertainment, Recreation, Accommodation, and Food Services	\$90
Other Services, Except Government	\$100
Government	\$1,992

GDP by Hanford-Corcoran MSA (substitute for Kings County)

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Data Note: Industry detail is based on the 2007 North American Industry Classification System (NAICS). (L) Less than \$500,000 in nominal or real GDP by metropolitan area. Per capita real GDP statistics for 2001-2014 reflect Census Bureau mid-year population estimates available as of March 2015. Last updated: September 23, 2015.

Major Industry Sector	2014 Millions of Current Dollars
Total All Industries	\$4,729
Agriculture, Forestry, Fishing, and Hunting	(D)
Mining	(D)
Utilities	\$119
Construction	\$135
Manufacturing	\$501
Wholesale Trade	\$143
Retail Trade	\$294
Transportation and Warehousing	\$77
Information	\$103
Finance, Insurance, Real Estate, Rental, and Leasing	\$308
Professional and Business Services	\$199
Educational Services, Health Care, and Social Assistance	\$529
Arts, Entertainment, Recreation, Accommodation, and Food Services	\$105
Other Services, Except Government	\$124
Government	\$851

GDP by Madera MSA (substitute for Madera County)

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Data Note: Industry detail is based on the 2007 North American Industry Classification System (NAICS). (D) Not shown in order to avoid the disclosure of confidential information; estimates are included in higher level totals. Per capita real GDP statistics for 2001-2014 reflect Census Bureau mid-year population estimates available as of March 2015. Last updated: September 23, 2015.

Major Industry Sector	2014 Millions of Current Dollars
Total All Industries	\$7,225
Agriculture, Forestry, Fishing, and Hunting	(D)
Mining	(D)
Utilities	(D)
Construction	\$222
Manufacturing	\$997
Wholesale Trade	(D)
Retail Trade	\$539
Transportation and Warehousing	\$226
Information	\$58
Finance, Insurance, Real Estate, Rental, and Leasing	\$621
Professional and Business Services	\$310
Educational Services, Health Care, and Social Assistance	\$517
Arts, Entertainment, Recreation, Accommodation, and Food Services	\$168
Other Services, Except Government	\$191
Government	\$1,466

GDP by Merced MSA (substitute for Merced County)

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Data Note: Industry detail is based on the 2007 North American Industry Classification System (NAICS). (D) Not shown in order to avoid the disclosure of confidential information; estimates are included in higher level totals. Per capita real GDP statistics for 2001-2014 reflect Census Bureau mid-year population estimates available as of March 2015. Last updated: September 23, 2015.

Major Industry Sector	2014 Millions of Current Dollars
Total All Industries	\$23,491
Agriculture, Forestry, Fishing, and Hunting	\$1,674
Mining	\$228
Utilities	\$523
Construction	\$931
Manufacturing	\$2,092
Wholesale Trade	\$1,879
Retail Trade	\$1,853
Transportation and Warehousing	\$1,363
Information	\$456
Finance, Insurance, Real Estate, Rental, and Leasing	\$4,046
Professional and Business Services	\$1,394
Educational Services, Health Care, and Social Assistance	\$2,270
Arts, Entertainment, Recreation, Accommodation, and Food Services	\$628
Other Services, Except Government	\$627
Government	\$3,527

GDP by Stockton-Lodi MSA (substitute for San Joaquin County)

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Major Industry Sector	2014 Millions of Current Dollars
Total All Industries	\$18,094
Agriculture, Forestry, Fishing, and Hunting	\$1,729
Mining	\$7
Utilities	(D)
Construction	\$645
Manufacturing	\$2,662
Wholesale Trade	(D)
Retail Trade	\$1,521
Transportation and Warehousing	\$645
Information	\$182
Finance, Insurance, Real Estate, Rental, and Leasing	\$2,946
Professional and Business Services	\$1,082
Educational Services, Health Care, and Social Assistance	\$2,196
Arts, Entertainment, Recreation, Accommodation, and Food Services	\$513
Other Services, Except Government	\$453
Government	\$2,392

GDP by Modesto MSA (substitute for Stanislaus County)

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Data Note: Industry detail is based on the 2007 North American Industry Classification System (NAICS). (D) Not shown in order to avoid the disclosure of confidential information; estimates are included in higher level totals. Per capita real GDP statistics for 2001-2014 reflect Census Bureau mid-year population estimates available as of March 2015. Last updated: September 23, 2015.

Major Industry Sector	2014 Millions of Current Dollars
Total All Industries	\$13,632
Agriculture, Forestry, Fishing, and Hunting	\$2,977
Mining	\$24
Utilities	\$257
Construction	\$429
Manufacturing	\$1,339
Wholesale Trade	\$696
Retail Trade	\$1,185
Transportation and Warehousing	\$507
Information	\$256
Finance, Insurance, Real Estate, Rental, and Leasing	\$1,096
Professional and Business Services	\$695
Educational Services, Health Care, and Social Assistance	\$768
Arts, Entertainment, Recreation, Accommodation, and Food Services	\$329
Other Services, Except Government	\$398
Government	\$2,675

GDP by Visalia-Porterville MSA (substitute for Tulare County)

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

	Skills														·									
Occupations	Active Learning	Active Listening	Complex Problem Solving	Coordination	Critical Thinking	Equipment Maintenance	Installation	Instructing	Judgment and Decision Making	Learning Strategies	Management of Personnel Resources	Monitoring	Operation and Control	Operation Monitoring	Quality Control Analysis	Reading Comprehension	Repairing	Science	Service Orientation	Social Perceptiveness	Speaking	Time Management	Troubleshooting	Writing
Heavy and Tractor-Trailer Truck Drivers		•	•		٠	•						•	•	•		•					•	•		
Registered Nurses	٠	٠		•	•			•				٠				٠			•	•	•			
Teacher Assistants		٠		•	٠			•		•		•				•			•	•	•			
Nursing Assistants	•	•		•	٠							•				•			•	•	•			•
Medical Assistants	٠	٠		•	٠							•				•			•	•	•			•
Licensed Practical and Licensed Vocational		•		•	•				•			•				•			•	•	•	•		
Nurses					Ť				-			-							Ĩ	Ĩ	Ĩ	Ĩ		
Preschool Teachers, Except Special Education		٠		•	•					٠		٠				٠			•	•	٠	•		
Dental Assistants	•	٠			•			٠				•				٠			•	•	•			٠
First-Line Supervisors of Production and		•	•	•	•						•					•				•	•	•		•
Operating Workers																								
Firefighters*		٠		•	٠				•			•		٠		•			•	٠	٠			
Computer User Support Specialists	•	٠		•	٠			٠				•				•			•		٠			•
Heating, Air Conditioning, and Refrigeration Mechanics and Installers*		•		•	•	•	•						•		•	•	•						•	
Dental Hygienists	•	٠	٠	•	٠							•				٠			•		•			٠
Emergency Medical Technicians and					_																			
Paramedics	•	•		•	•				•			•				•			•	•	•			
Medical Records and Health Information		•	•		•				•	•		•				•					•	•		•
Technicians																					-	-		-
Paralegals and Legal Assistants	•	٠		٠	٠							٠				٠				٠	٠	٠		٠
Aircraft Mechanics and Service Technicians		٠	•		٠	٠			•					٠	٠	•	•						•	
Library Technicians	•	•		•	٠			٠				٠				٠			•		٠			٠
Medical and Clinical Laboratory Technicians	•	٠	٠	•	٠					٠		٠				٠		•			•			
Telecommunications Equipment Installers	•	•	•		•							•		•	•	•	•						•	
and Repairers, Except Line Installers		Ĺ			_							_				_							Ĺ	
Phlebotomists	•	٠		٠	٠			٠				٠				٠			•	•	٠			
Respiratory Therapists	•	•			٠				٠			٠				٠		٠	٠	•	٠			
Radiologic Technologists	•	٠		٠	٠							٠				٠				•	٠	٠		٠
Forest and Conservation Technicians		٠	٠	٠	٠				٠	٠	•	٠				٠					٠			
Agricultural and Food Science Technicians*	•	•	٠	•	٠			•				•				•					•			•

Skill Requirements for Top 25 Middle-Skill, Middle-Wage or Higher Occupations

Source: U.S. Department of Labor's Occupational Information Network (O\*NET) at www.onetonline.org.

\* Skills listed for the occupation represent a specialty occupation.

Knowledge Requirements for Top	25 Middle-Skill, Middle-Wag	e or Higher Occupations

	Knowledge																												
Occupations	Administration and Management	Biology	Building and Construction	Chemistry	Clerical	Communications and Media	Computers and Electronics	<b>Customer and Personal Service</b>	Design	Economics and Accounting	Education and Training	Engineering and Technology	English Language		overnment	Mathematics	Mechanical	Medicine and Dentistry	Personnel and Human Resources	Philosophy and Theology	Physics	Production and Processing	Psychology	Public Safety and Security	Sales and Marketing	Sociology and Anthropology	Telecommunications	Therapy and Counseling	Transportation
Heavy and Tractor-Trailer Truck Drivers	٠							٠			٠		٠	٠	•	٠	٠							٠					•
Registered Nurses		•			٠			٠			•		•			•		•					•			•		•	
Teacher Assistants					٠		٠	•			•		٠	•		٠							٠			•		•	
Nursing Assistants					٠		٠	٠			•		٠					٠	•				۲	٠				•	
Medical Assistants	٠				٠		٠	٠			•		٠					٠					•	٠				•	
Licensed Practical and Licensed				•	•			•			•		•			•		•		•			•					•	
Vocational Nurses				•	•			•			•		•			•		•		•			•					•	
Preschool Teachers, Except Special	•							•			•		•	•						•			•	•		•		•	
Education	•							•			-		_	•						•			•	•		_		•	
Dental Assistants				٠	٠		٠	٠			٠		٠					٠				•	٠		٠				
First-Line Supervisors of Production and	•						•		•		•	•				•	•		•			•							
Operating Workers	Ĩ				Ĩ		Ĩ		-		-	Ľ				-	-		•			-							
Firefighters*	٠		٠	٠				٠			٠		٠		•		٠				٠			٠					
Computer User Support Specialists	٠				٠	٠	٠	٠			٠	•	٠			•											٠		
Heating, Air Conditioning, and				•			•	•	•			•	•			•	•				•								
Refrigeration Mechanics and Installers*								_	-				_			_	_				_								
Dental Hygienists		٠		٠	٠		٠	٠			٠		٠					٠					٠		٠				
Emergency Medical Technicians and				•				•			•		•			•		•					•	•				•	•
Paramedics																													
Medical Records and Health Information	•				•		•	•			•		•		•	•								•					
Technicians																													
Paralegals and Legal Assistants	٠				٠	۰	٠	٠			٠		٠		•	٠							•						
Aircraft Mechanics and Service				•				•	•			•	•			•	•				•	•		•					•
Technicians																													
Library Technicians	٠				•	•	•	٠	_	•	٠		٠		•	٠								_					
Medical and Clinical Laboratory		•		•	•		•	•					•			•		•				•		•					
Technicians						⊢	-		_															_					
Telecommunications Equipment Installers					•		•	•			•	•	•			•	•							•			•		
and Repairers, Except Line Installers				-	-	<u> </u>	<u> </u>								_								L	<u> </u>					
Phlebotomists				•	•	<u> </u>	•	•	_		•		•		_			٠		٠			•	٠				H	
Respiratory Therapists		•		٠		<u> </u>	•	•	_		•		•		_	•		•				$\square$	•	_			$\square$	•	
Radiologic Technologists		•			•		٠	٠			٠		٠			٠		٠			٠		•						
Forest and Conservation Technicians		•					٠	٠			٠		٠	٠	•	٠	٠							٠					•
Agricultural and Food Science	•	•		•	•		•				•		•	•		•			•										
Technicians*	ļ	L	L	<u> </u>	L	ļ	<u> </u>								L									L					

Source: U.S. Department of Labor's Occupational Information Network (O\*NET) at www.onetonline.org.

\* Knowledge listed for the occupation represent a specialty occupation.