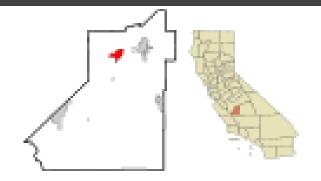
# 2017

# Labor Market Analysis: GREATER LEMOORE AREA





Prepared by the Central Valley/ Mother Lode Center of Excellence



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## Introduction

The Central Valley/Mother Lode Center of Excellence was asked by West Hills College Lemoore to analyze occupational employment encompassing the greater Lemoore area, a 30-mile radius surrounding the City of Lemoore.

The Lemoore 30-mile radius covers 46 cities and communities identified by ZIP codes for three counties— Fresno, Kings and Tulare. (See Appendix B for a complete list.)

The geographic area studied for this report overlaps with the Coalinga and Firebaugh employment scan previously produced for West Hills College Coalinga. Therefore, annual openings should not be viewed as additions to the existing report, but as an expanded view.

Occupations selected for inclusion are those having "10 or more annual openings." In some cases, there are fewer than 10 annual openings for a single occupation. However, if aggregated, there may be 10 or more annual openings if one community college program trains for multiple occupations.

For example, within the agriculture, water and environmental technologies industry, the occupation of food science technicians is related to the occupation of food scientists and technologists because both incorporate food science and quality control, and share identical knowledge, skills, abilities and work activities.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> O\*NET Online.

# Agriculture, Water & Environmental Technologies

## **OCCUPATIONAL DEMAND**

For the combined greater Lemoore area, the three leading occupations in the agriculture, water and environmental technologies industry are: agricultural equipment operators, 283 annual openings; farmers, ranchers and other agricultural managers, 282; and first-line supervisors of farming, fishing and forestry workers, 146.

Within the greater Lemoore area, several occupations in this industry will experience a decline in employment over the next five years: farmers, ranchers and other agricultural managers, a loss of 428 jobs; first-line supervisors of farming, fishing and forestry workers, a loss of 52 jobs; forest and conservation technicians, a loss of 22 jobs; and animal trainers, a loss of 10 jobs (Exhibit 1).

Occupation	2016 Jobs	5-Year Change	5-Year % Change	Annual Openings
Agricultural Equipment Operators	1,697	66	4%	283
Farmers, Ranchers and Other Agricultural Managers	3,724	(428)	(11%)	282
First-Line Supervisors of Farming, Fishing and Forestry Workers	1,258	(52)	(4%)	146
Compliance Officers	348	36	10%	33
Pest Control Workers	264	1	0%	33
Agricultural Inspectors	336	(4)	(1%)	32
First-Line Supervisors of Landscaping, Lawn Service and Groundskeeping Workers	360	5	1%	31
Agricultural and Food Science Technicians	262	5	2%	29
Forest and Conservation Technicians	242	(22)	(9%)	27
Animal Trainers	182	(10)	(5%)	23
Forest and Conservation Workers	145	(4)	(3%)	19
Veterinary Assistants and Laboratory Animal Caretakers	100	6	6%	19
Pesticide Handlers, Sprayers and Applicators, Vegetation	116	6	5%	16
Food Scientists and Technologists	135	4	3%	14
Chemical Technicians	114	8	7%	13
Life, Physical and Social Science Technicians, All Other	80	6	8%	11
Environmental Science and Protection Technicians, Including Health	76	4	5%	10

Exhibit 1. Agriculture, water and environmental technologies employment in Lemoore

#### WAGES

All the agriculture, water and environmental technologies occupations have entry-level wages that exceed the 2014 Kings County self-sufficiency wage, \$9.57/hour, and 11 occupations exceed the 2017 living wage for a single adult in the county, \$10.85/hour.

The highest entry-level wages in this sector are earned by compliance officers, \$19.35/hour, followed by agriculture inspectors, \$15.24/hour, and life, physical, and social science technicians (all other) \$14.60/hour (Exhibit 2).

Occupation	Pct. 10 Hourly Earnings	Median Hourly Earnings
Compliance Officers	\$19.75	\$31.74
Agricultural Inspectors	\$15.24	\$21.43
Life, Physical and Social Science Technicians, All Other	\$14.60	\$21.21
Food Scientists and Technologists	\$13.53	\$27.32
First-Line Supervisors of Landscaping, Lawn Service and Groundskeeping Workers	\$13.01	\$16.75
Environmental Science and Protection Technicians, Including Health	\$11.68	\$21.99
Chemical Technicians	\$11.65	\$14.00
Pest Control Workers	\$11.43	\$16.22
Animal Trainers	\$10.97	\$12.84
Forest and Conservation Technicians	\$10.91	\$15.51
Agricultural and Food Science Technicians	\$10.86	\$17.52
Pesticide Handlers, Sprayers and Applicators, Vegetation	\$10.76	\$15.61
First-Line Supervisors of Farming, Fishing and Forestry Workers	\$10.56	\$15.12
Veterinary Assistants and Laboratory Animal Caretakers	\$10.50	\$12.83
Forest and Conservation Workers	\$10.50	\$11.03
Agricultural Equipment Operators	\$10.50	\$11.99
Farmers, Ranchers and Other Agricultural Managers	\$10.50	\$14.19

Exhibit 2. Agriculture, water and environmental technologies wages in Lemoore

Five of the 14 occupations in the agriculture, water and environmental technologies industry are middleskill, requiring an associate degree (Exhibit 3). Three occupations require at least a bachelor's degree: agricultural inspectors, food scientists and technologists, and compliance officers.

The remaining occupations in the group require a high school diploma or equivalent. However, these occupations are considered relevant to community colleges due to required work experience and/or specialized training needs.

Occupation	Typical Entry-Level Education	Work Experience Required	Typical On-The-Job Training	CPS
Farmers, Ranchers and Other Agricultural Managers	High school diploma or equivalent	5 years or more	None	28.9%
Compliance Officers	Bachelor's degree	None	Moderate-term	28.3%
Food Scientists and Technologists	Bachelor's degree	None	None	18.9%
Agricultural and Food Science Technicians	Associate degree	None	Moderate-term	36.3%
Chemical Technicians	Associate degree	None	Moderate-term	35.8%
Environmental Science and Protection Technicians, Including Health	Associate degree	None	None	33.9%
Forest and Conservation Technicians	Associate degree	None	None	33.9%
Life, Physical and Social Science Technicians, All Other	Associate degree	None	None	33.9%
First-Line Supervisors of Landscaping, Lawn Service and Groundskeeping Workers	High school diploma or equivalent	Less than 5 years	None	32.9%
Pest Control Workers	High school diploma or equivalent	None	Moderate-term	39%
Pesticide Handlers, Sprayers and Applicators, Vegetation	High school diploma or equivalent	None	Moderate-term	19.7%
Animal Trainers	High school diploma or equivalent	None	Moderate-term	35.4%
First-Line Supervisors of Farming, Fishing and Forestry Workers	High school diploma or equivalent	Less than 5 years	None	22.8%
Agricultural Inspectors	Bachelor's degree	None	Moderate-term	28.7%
Agricultural Equipment Operators	No formal educational credential	None	Short-term	12.7%
Forest and Conservation Workers	High school diploma or equivalent	None	Moderate-term	31.3%
Veterinary Assistants and Laboratory Animal Caretakers	High school diploma or equivalent	None	Short-term	47.1%

Exhibit 3. Agriculture, water and environmental technologies educational attainment

# **Business**

## **OCCUPATIONAL DEMAND**

The largest business occupation within the greater Lemoore area is office clerks (general), which employs more than 6,085 workers. This occupation also has the greatest number of annual openings, 787, and moderate projected growth, 7% (Exhibit 4).

The three other leading occupations in the area are: secretaries and administrative assistants (except legal, medical and executive), with 495 annual openings; customer service representatives, with 413 annual openings; and bookkeeping, accounting and auditing clerks, with 376 annual openings.

Occupation	2016 Jobs	5-Year Change	5-Year % Change	Annual Openings
Office Clerks, General	6,085	410	7%	787
Secretaries and Administrative Assistants, Except Legal, Medical and Executive	4,095	308	8%	495
Customer Service Representatives	2,717	302	11%	413
Bookkeeping, Accounting and Auditing Clerks	3,417	(20)	(1%)	376
First-Line Supervisors of Retail Sales Workers	2,734	205	7%	347
First-Line Supervisors of Office and Administrative Support Workers	2,343	210	9%	267
Receptionists and Information Clerks	1,362	109	8%	203
Sales Representatives, Services, All Other	1,183	125	11%	166
Business Operations Specialists, All Other	1,455	99	7%	143
Medical Secretaries	1,068	119	11%	139
Billing and Posting Clerks	730	81	11%	94
Executive Secretaries and Executive Administrative Assistants	826	25	3%	92
Office and Administrative Support Workers, All Other	717	34	5%	83
Eligibility Interviewers, Government Programs	928	36	4%	81
Information and Record Clerks, All Other	678	16	2%	75
Insurance Claims and Policy Processing Clerks	643	31	5%	68
Insurance Sales Agents	603	18	3%	62
Payroll and Timekeeping Clerks	600	6	1%	61
First-Line Supervisors of Non-Retail Sales Workers	639	23	4%	61
Tellers	541	(78)	(14%)	61
Dispatchers, Except Police, Fire and Ambulance	518	57	11%	60
First-Line Supervisors of Housekeeping and Janitorial Workers	458	33	7%	55
Data Entry Keyers	482	1	0%	54
Administrative Services Managers	543	37	7%	51
Cost Estimators	437	27	6%	46

#### Exhibit 4. Business employment in Lemoore

Occupation	2016 Jobs	5-Year Change	5-Year % Change	Annual Openings
Real Estate Sales Agents	445	18	4%	46
Bill and Account Collectors	392	(5)	(1%)	45
Interviewers, Except Eligibility and Loan	313	27	9%	41
Demonstrators and Product Promoters	218	6	3%	39
Tax Examiners and Collectors, and Revenue Agents	573	(9)	(2%)	38
Training and Development Specialists	317	33	10%	35
Property, Real Estate and Community Association Managers	399	16	4%	34
Purchasing Agents, Except Wholesale, Retail and Farm Products	341	24	7%	33
Legal Secretaries	285	5	2%	31
Paralegals and Legal Assistants	335	18	5%	31
Claims Adjusters, Examiners and Investigators	322	21	7%	30
Gaming Cage Workers	205	12	6%	28
Human Resources Assistants, Except Payroll and Timekeeping	241	15	6%	27
Library Assistants, Clerical	158	12	8%	25
Gaming Change Persons and Booth Cashiers	126	3	2%	24
Court, Municipal and License Clerks	209	24	11%	22
Loan Officers	261	(7)	(3%)	21
Word Processors and Typists	178	(3)	(2%)	20
Advertising Sales Agents	134	0	0%	18
Procurement Clerks	184	2	1%	18
Tax Preparers	153	4	3%	17
Police, Fire and Ambulance Dispatchers	173	5	3%	17
Real Estate Brokers	141	7	5%	15
Loan Interviewers and Clerks	130	2	2%	13
Computer Operators	124	(7)	(6%)	11

### WAGES

Nearly 80% of the 51 business occupations in the greater Lemoore area have entry-level wages above the living wage for a single adult in Kings County, \$10.85/hour (Exhibit 5).

The highest entry-level paid occupations are: administrative service managers, \$22.93/hour; claims adjusters, examiners and investigators, \$18.52/hour; and real estate brokers, \$18.12/hour.

Exhibit 5. Dositiess way		
Occupation	Pct. 10 Hourly	Median Hourly
Administrative Services Managerers	Earnings	Earnings
Administrative Services Managers	\$22.93	\$36.76
Claims Adjusters, Examiners and Investigators	\$18.52	\$31.62
Real Estate Brokers	\$18.12	\$24.54
Cost Estimators	\$17.06	\$29.44
Loan Officers	\$16.95	\$32.19
Court, Municipal and License Clerks	\$16.12	\$20.75
Executive Secretaries and Executive Administrative Assistants	\$15.98	\$23.61
Eligibility Interviewers, Government Programs	\$15.57	\$22.23
First-Line Supervisors of Non-Retail Sales Workers	\$15.29	\$19.94
First-Line Supervisors of Office and Administrative Support Workers	\$15.06	\$23.89
Property, Real Estate and Community Association Managers	\$14.97	\$22.06
Paralegals and Legal Assistants	\$14.83	\$21.01
Word Processors and Typists	\$14.60	\$18.13
Legal Secretaries	\$14.37	\$22.68
Tax Examiners and Collectors, and Revenue Agents	\$14.15	\$21.96
Police, Fire and Ambulance Dispatchers	\$14.07	\$20.84
Sales Representatives, Services, All Other	\$13.85	\$21.29
Procurement Clerks	\$13.72	\$18.90
Purchasing Agents, Except Wholesale, Retail, and Farm Products	\$13.65	\$26.05
Real Estate Sales Agents	\$13.62	\$18.05
Cargo and Freight Agents	\$13.62	\$19.70
Information and Record Clerks, All Other	\$13.52	\$17.62
Business Operations Specialists, All Other	\$13.51	\$28.64
Training and Development Specialists	\$13.32	\$25.65
Insurance Claims and Policy Processing Clerks	\$13.19	\$17.53
Advertising Sales Agents	\$12.98	\$24.03
Human Resources Assistants, Except Payroll and Timekeeping	\$12.53	\$18.42
Payroll and Timekeeping Clerks	\$12.43	\$19.40

#### Exhibit 5. Business wages in Lemoore

Occupation	Pct. 10 Hourly Earnings	Median Hourly Earnings
First-Line Supervisors of Housekeeping and Janitorial Workers	\$12.42	\$16.71
Bookkeeping, Accounting and Auditing Clerks	\$12.20	\$18.64
Bill and Account Collectors	\$11.90	\$16.67
Insurance Sales Agents	\$11.68	\$22.26
First-Line Supervisors of Retail Sales Workers	\$11.55	\$16.24
Demonstrators and Product Promoters	\$11.50	\$14.06
Loan Interviewers and Clerks	\$11.24	\$17.30
Medical Secretaries	\$11.23	\$16.03
Dispatchers, Except Police, Fire and Ambulance	\$11.17	\$16.58
Secretaries and Administrative Assistants, Except Legal, Medical and Executive	\$11.07	\$16.84
Data Entry Keyers	\$11.00	\$14.82
Billing and Posting Clerks	\$10.86	\$16.01
Tax Preparers	\$10.65	\$19.92
Interviewers, Except Eligibility and Loan	\$10.50	\$16.64
Customer Service Representatives	\$10.50	\$15.35
Computer Operators	\$10.50	\$17.52
Tellers	\$10.50	\$12.76
Gaming Cage Workers	\$10.50	\$12.51
Office Clerks, General	\$10.50	\$14.59
Gaming Change Persons and Booth Cashiers	\$10.50	\$11.46
Receptionists and Information Clerks	\$10.50	\$12.70
Library Assistants, Clerical	\$10.50	\$12.90
Office and Administrative Support Workers, All Other	\$10.50	\$13.11

Seven of the business occupations analyzed have a typical entry-level education of a bachelor's degree, but current population survey results for all of them, except business operation specialists (all other), indicate that more than one-third of workers in these occupations have completed some college or an associate degree as their highest level of education, qualifying these occupations as middle-skill jobs (Exhibit 6).

Bookkeeping, accounting and auditing clerks has a typical entry-level education of some college. The remaining business occupations require some level of work experience or training that can be obtained at a local community college.

Occupation	Typical Entry-Level	Work Experience	Typical On-The-Job	CPS
	Education	Required	Training	
Administrative Services Managers	Bachelor's degree	Less than 5 years	None	42%
Property, Real Estate and Community Association Managers	High school diploma or equivalent	Less than 5 years	None	36.7%
Purchasing Agents, Except Wholesale, Retail and Farm Products	Bachelor's degree	None	Long-term	36.5%
Claims Adjusters, Examiners and Investigators	High school diploma or equivalent	None	Long-term	34.6%
Cost Estimators	Bachelor's degree	None	None	40.8%
Training and Development Specialists	Bachelor's degree	Less than 5 years	None	33.7%
Business Operations Specialists, All Other	Bachelor's degree	None	None	27.9%
Loan Officers	Bachelor's degree	None	Moderate- term	33.8%
Tax Examiners and Collectors, and Revenue Agents	Bachelor's degree	None	Moderate- term	35%
Tax Preparers	High school diploma or equivalent	None	Moderate- term	33.8%
Paralegals and Legal Assistants	Associate degree	None	None	42.6%
First-Line Supervisors of Housekeeping and Janitorial Workers	High school diploma or equivalent	Less than 5 years	None	35.2%
First-Line Supervisors of Retail Sales Workers	High school diploma or equivalent	Less than 5 years	None	38.1%
First-Line Supervisors of Non-Retail Sales Workers	High school diploma or equivalent	Less than 5 years	None	32.2%
Gaming Change Persons and Booth Cashiers	High school diploma or equivalent	None	Short-term	33%
Advertising Sales Agents	High school diploma or equivalent	None	Moderate- term	30.1%
Insurance Sales Agents	High school diploma or equivalent	None	Moderate- term	35.6%
Sales Representatives, Services, All Other	High school diploma or equivalent	None	Moderate- term	34.3%
Demonstrators and Product Promoters	High school diploma or equivalent	None	Short-term	36.4%

#### Exhibit 6. Business educational attainment

Occupation	Typical	Work	Typical	CPS
	Entry-Level	Experience	On-The-Job	
	Education	Required	Training	
Real Estate Brokers	High school diploma	Less than	None	37.9%
	or equivalent	5 years		
Real Estate Sales Agents	High school diploma	None	Moderate-	37.9%
	or equivalent		term	
•	High school diploma	Less than	None	40.8%
Administrative Support Workers	or equivalent	5 years		
Bill and Account Collectors	High school diploma	None	Moderate-	50.2%
	or equivalent		term	
Billing and Posting Clerks	High school diploma	None	Moderate-	49.6%
	or equivalent		term	
Bookkeeping, Accounting and Auditing	Some college, no	None	Moderate-	48.8%
Clerks	degree		term	
Gaming Cage Workers	High school diploma	None	Short-term	45.3%
	or equivalent			
Payroll and Timekeeping Clerks	High school diploma	None	Moderate-	51.3%
	or equivalent		term	
Procurement Clerks	High school diploma	None	Moderate-	45.3%
	or equivalent		term	
Tellers	High school diploma	None	Short-term	44.5%
	or equivalent			
Court, Municipal and License Clerks	High school diploma	None	Moderate-	47.5%
	or equivalent		term	
Customer Service Representatives	High school diploma	None	Short-term	43.7%
	or equivalent			
Eligibility Interviewers, Government	High school diploma	None	Moderate-	38.4%
Programs	or equivalent		term	
Interviewers, Except Eligibility and	High school diploma	None	Short-term	49.5%
Loan	or equivalent			
Library Assistants, Clerical	High school diploma	None	Short-term	37.6%
	or equivalent			
Loan Interviewers and Clerks	High school diploma	None	Short-term	45.7%
	or equivalent			
Human Resources Assistants, Except	Associate degree	None	None	46.7%
Payroll and Timekeeping				
Receptionists and Information Clerks	High school diploma	None	Short-term	46.1%
	or equivalent			
Information and Record Clerks, All	High school diploma	None	Short-term	51.5%
Other	or equivalent			
Police, Fire and Ambulance	High school diploma	None	Moderate-	47.6%
Dispatchers	or equivalent		term	
•	High school diploma	None	Moderate-	47.6%
Ambulance	or equivalent		term	
Executive Secretaries and Executive	High school diploma	Less than	None	47.5%
Administrative Assistants	or equivalent	5 years		
Legal Secretaries	High school diploma	None	Moderate-	47.5%
	or equivalent		term	
Medical Secretaries	High school diploma	None	Moderate-	47.5%
	or equivalent		term	

Occupation	Typical Entry-Level Education	Work Experience Required	Typical On-The-Job Training	CPS
Secretaries and Administrative Assistants, Except Legal, Medical and Executive	High school diploma or equivalent	None	Short-term	47.5%
Computer Operators	High school diploma or equivalent	None	Moderate- term	43.8%
Data Entry Keyers	High school diploma or equivalent	None	Moderate- term	46.3%
Word Processors and Typists	High school diploma or equivalent	None	Short-term	46%
Insurance Claims and Policy Processing Clerks	High school diploma or equivalent	None	Moderate- term	46.5%
Office Clerks, General	High school diploma or equivalent	None	Short-term	45.6%
Office and Administrative Support Workers, All Other	High school diploma or equivalent	None	Short-term	42.7%

# Education

## **OCCUPATIONAL DEMAND**

The two education occupations with the largest growth projections are: social and human service assistants, 14% growth, with 132 annual openings; and self-enrichment education teachers, 12% growth, with 59 annual openings (Exhibit 7).

The largest education occupation in the greater Lemoore area is teacher assistants, which is expected to undergo 8% growth and offer 606 annual openings.

This occupation is followed by childcare workers, which will offer 435 annual openings, even though employment will decline by 3% over the next five years.

Occupation	2016 Jobs	5-Year Change	5-Year % Change	Annual Openings
Teacher Assistants	5,244	418	8%	606
Childcare Workers	3,068	(97)	(3%)	435
Social and Human Service Assistants	907	128	14%	132
Preschool Teachers, Except Special Education	904	40	4%	97
Kindergarten Teachers, Except Special Education	558	46	8%	63
Self-Enrichment Education Teachers	417	52	12%	59
Library Technicians	229	14	6%	35
Career/Technical Education Teachers, Secondary School	171	18	11%	17
Education Administrators, Preschool and Childcare Center/Program	147	3	2%	11

#### Exhibit 7. Education employment in Lemoore

## WAGES

Three education occupations in the greater Lemoore area offer entry-level wages above the living wage for a single adult in Kings County, \$10.85/hour:

- Career/technical education teachers (secondary education), \$21.96/hour;
- Kindergarten teachers (except special education), \$21.92/hour; and
- Library technicians, \$14.05/hour (Exhibit 8).

Occupation	Pct. 10 Hourly Earnings	Median Hourly Earnings
Career/Technical Education Teachers,	\$21.96	\$33.41
Secondary School		
Kindergarten Teachers, Except Special Education	\$21.92	\$30.59
Library Technicians	\$14.05	\$17.25
Self-Enrichment Education Teachers	\$10.53	\$17.55
Social and Human Service Assistants	\$10.50	\$16.14
Teacher Assistants	\$10.50	\$13.50
Preschool Teachers, Except Special Education	\$10.50	\$12.70
Childcare Workers	\$10.50	\$10.50
Education Administrators, Preschool and Childcare Center/Program	\$10.50	\$21.17

#### Exhibit 8. Education wages in Lemoore

## **EDUCATIONAL ATTAINMENT & WORK EXPERIENCE**

Three occupations have a typical entry-level education of a bachelor's degree: education administrators, preschool and childcare center/program, kindergarten teachers (except special education) and career/technical education teachers (secondary school) (Exhibit 9).

However, 38% of workers currently employed as career/technical education teachers have completed some college or an associate degree as their highest level of education. As a result, this occupation is considered middle-skill and is relevant to community college education.

Preschool teachers (except special education) is the only other occupation in the cluster that requires a college degree. Preschool teachers have a typical entry-level education of an associate degree.

Two other occupations require some college, but no degree. The library technicians occupation has a typical entry-level education of postsecondary nondegree award, and the occupation of teacher assistants typically requires some college, but no degree.

The remaining occupations have lower educational requirements; however, many local community colleges have programs that address the knowledge, skills and abilities required by those occupations.

Exhibit 9	Education	educational	attainment
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Occupation	Typical Entry-Level Education	Work Experience Required	Typical On-The-Job Training	CPS
Education Administrators, Preschool and Childcare Center/Program	Bachelor's degree	Less than 5 years	None	13%
Social and Human Service Assistants	High school diploma or equivalent	None	Short-term	40%
Preschool Teachers, Except Special Education	Associate degree	None	None	37.8%
Kindergarten Teachers, Except Special Education	Bachelor's degree	None	Internship/residency	37.8%
Career/Technical Education Teachers, Secondary School	Bachelor's degree	Less than 5 years	Internship/residency	4.8%
Self-Enrichment Education Teachers	High school diploma or equivalent	Less than 5 years	None	26.7%
Library Technicians	Postsecondary nondegree award	None	None	26.1%
Teacher Assistants	Some college, no degree	None	None	43.7%
Childcare Workers	High school diploma or equivalent	None	Short-term	36.7%

# **Energy, Construction & Utilities**

### **OCCUPATIONAL DEMAND**

Within the energy, construction and utilities industry, the occupations with the largest growth projections across the greater Lemoore area are:

- Hazardous materials removal workers, 25%;
- Septic tank servicers and sewer pipe cleaners, 24%; and
- Telecommunications equipment installers and repairers (except Line Installers carpenters), 22%.

Those occupations having the greatest number of annual openings are:

- Carpenters, 135;
- Electricians, 118; and
- Heating, air conditioning and refrigeration mechanics and installers, 111.

However, employment of carpenters is projected to decline by 1%, shedding10 jobs over the next five years (Exhibit 10).

#### Exhibit 10. Energy, construction and utilities employment in Lemoore

Occupation	2016	5-Year	5-Year %	Annual
	Jobs	Change	Change	Openings
Carpenters	1,435	(10)	(1%)	135
Electricians	999	79	8%	118
Heating, Air Conditioning and Refrigeration Mechanics and Installers	891	102	11%	111
Telecommunications Equipment Installers and Repairers, Except Line Installers	704	152	22%	104
Plumbers, Pipefitters and Steamfitters	754	101	13%	100
First-Line Supervisors of Construction Trades and Extraction Workers	832	39	5%	91
Cement Masons and Concrete Finishers	690	10	1%	75
Operating Engineers and Other Construction Equipment Operators	569	54	9%	72
Painters, Construction and Maintenance	684	(31)	(5%)	60
Drywall and Ceiling Tile Installers	432	32	7%	46
Construction Managers	579	(21)	(4%)	40
Telecommunications Line Installers and Repairers	264	48	18%	37
Roofers	318	(2)	(1%)	36
Sheet Metal Workers	295	21	7%	32
Plasterers and Stucco Masons	296	4	1%	32
Hazardous Materials Removal Workers	165	41	25%	28
Water and Wastewater Treatment Plant and System Operators	289	15	5%	28

Occupation	2016 Jobs	5-Year Change	5-Year % Change	Annual Openings
Computer, Automated Teller and Office Machine Repairers	156	13	8%	19
Tile and Marble Setters	208	(7)	(3%)	18
Control and Valve Installers and Repairers, Except Mechanical Door	123	21	17%	15
Home Appliance Repairers	110	20	18%	14
Tapers	132	10	8%	14
Septic Tank Servicers and Sewer Pipe Cleaners	94	23	24%	14
Highway Maintenance Workers	88	22	25%	14
Electrical and Electronics Repairers, Commercial and Industrial Equipment	118	8	7%	13
Construction and Building Inspectors	98	10	10%	12
Structural Iron and Steel Workers	100	1	1%	12
Earth Drillers, Except Oil and Gas	96	9	9%	12
Electrical Power-Line Installers and Repairers	106	8	8%	11
Glaziers	104	0	0%	11
Solar Photovoltaic Installers	84	6	7%	11
Paving, Surfacing, and Tamping Equipment Operators	101	(2)	(2%)	11

## WAGES

In the Lemoore area, all but two of the occupations analyzed in the energy, construction and utilities cluster have entry-level wages above the living wage for a single adult in Kings County, \$10.85/hour (Exhibit 11). Plasters and stucco masons, and drywall, \$10.81/hour, and ceiling tile installers, \$10.74/hour, earn the lowest entry-level wages within the sector.

Electrical power-line installers and repairers, and construction and building inspectors earn the highest entry-level wages, \$22.24/hour and \$17.43/hour respectively.

Occupation	Pct. 10 Hourly Earnings	Median Hourly Earnings
Electrical Power-Line Installers and Repairers	\$22.24	\$39.99
Construction and Building Inspectors	\$17.43	\$29.92
Water and Wastewater Treatment Plant and System Operators	\$16.52	\$23.20
Operating Engineers and Other Construction Equipment Operators	\$15.86	\$25.43
Electricians	\$15.36	\$25.63
First-Line Supervisors of Construction Trades and Extraction Workers	\$15.04	\$27.33
Telecommunications Line Installers and Repairers	\$14.99	\$29.10
Paving, Surfacing and Tamping Equipment Operators	\$14.72	\$21.78
Electrical and Electronics Repairers, Commercial and Industrial Equipment	\$14.66	\$22.56
Highway Maintenance Workers	\$14.45	\$20.65
Hazardous Materials Removal Workers	\$14.38	\$20.85
Construction Managers	\$14.12	\$30.95
Plumbers, Pipefitters and Steamfitters	\$14.09	\$24.64
Solar Photovoltaic Installers	\$13.56	\$17.51
Sheet Metal Workers	\$13.51	\$22.77
Tapers	\$13.40	\$19.41
Telecommunications Equipment Installers and Repairers, Except Line Installers	\$13.21	\$24.14
Heating, Air Conditioning and Refrigeration Mechanics and Installers	\$13.11	\$20.11
Roofers	\$12.77	\$20.22
Control and Valve Installers and Repairers, Except Mechanical Door	\$12.69	\$20.90
Structural Iron and Steel Workers	\$12.66	\$18.18
Cement Masons and Concrete Finishers	\$12.63	\$16.36
Tile and Marble Setters	\$12.43	\$16.36
Septic Tank Servicers and Sewer Pipe Cleaners	\$12.37	\$16.63
Computer, Automated Teller and Office Machine Repairers	\$12.05	\$18.84
Earth Drillers, Except Oil and Gas	\$12.03	\$17.03
Home Appliance Repairers	\$12.00	\$16.67
Carpenters	\$11.78	\$15.02
Painters, Construction and Maintenance	\$11.69	\$14.58
Glaziers	\$11.64	\$17.46
Plasterers and Stucco Masons	\$10.81	\$16.22
Drywall and Ceiling Tile Installers	\$10.74	\$19.10

#### Exhibit 11. Energy, construction and utilities wages in Lemoore

The typical entry-level education for construction managers is a bachelor's degree, but nearly 33% of workers have completed some college or an associate degree, which qualifies this occupation as middle-skill and means it is relevant to community colleges (Exhibit 12).

A postsecondary degree is typically required as entry-level education for: telecommunications equipment installers and repairers (except line installers); electrical and electronics repairers, commercial and industrial equipment; and heating, air conditioning and refrigeration mechanics and installers.

Some college, but no degree, is typically required for computer, automated teller and office machine repairers.

The remaining occupations—including carpenters, and plumbers, pipefitters and steamfitters—typically require apprenticeships or specialized skills training that some local community college programs address.

Occupation	Typical Entry-Level Education	Work Experience Required	Typical On-The-Job Training	CPS
Construction Managers	Bachelor's degree	None	Moderate- term	32.8%
First-Line Supervisors of Construction Trades and Extraction Workers	High school diploma or equivalent	5 years or more	None	32.8%
Carpenters	High school diploma or equivalent	None	Apprenticeship	25.9%
Tile and Marble Setters	No formal educational credential	None	Long-term	18.8%
Cement Masons and Concrete Finishers	No formal educational credential	None	Moderate- term	15.2%
Paving, Surfacing and Tamping Equipment Operators	High school diploma or equivalent	None	Moderate- term	8.2%
Operating Engineers and Other Construction Equipment Operators	High school diploma or equivalent	None	Moderate- term	24.3%
Drywall and Ceiling Tile Installers	No formal educational credential	None	Moderate- term	15.4%
Tapers	No formal educational credential	None	Moderate- term	15.4%
Electricians	High school diploma or equivalent	None	Apprenticeship	47.3%
Glaziers	High school diploma or equivalent	None	Apprenticeship	23.5%
Painters, Construction and Maintenance	No formal educational credential	None	Moderate- term	20.5%
Plumbers, Pipefitters and Steamfitters	High school diploma or equivalent	None	Apprenticeship	31.4%
Plasterers and Stucco Masons	No formal educational credential	None	Long-term	14.5%
Roofers	No formal educational credential	None	Moderate- term	13.7%
Sheet Metal Workers	High school diploma or equivalent	None	Apprenticeship	34.4%

Exhibit 12. Energy, construction and utilities educational attainment

Occupation	Typical Entry-Level Education	Work Experience Required	Typical On-The-Job Training	CPS
Structural Iron and Steel Workers	High school diploma or equivalent	None	Apprenticeship	31.2%
Solar Photovoltaic Installers	High school diploma or equivalent	None	Moderate- term	28%
Construction and Building Inspectors	High school diploma or equivalent	5 years or more	Moderate- term	44.5%
Hazardous Materials Removal Workers	High school diploma or equivalent	None	Moderate- term	27.5%
Highway Maintenance Workers	High school diploma or equivalent	None	Moderate- term	27.1%
Septic Tank Servicers and Sewer Pipe Cleaners	No formal educational credential	None	Moderate- term	28%
Earth Drillers, Except Oil and Gas	High school diploma or equivalent	None	Moderate- term	22.8%
Computer, Automated Teller and Office Machine Repairers	Some college, no degree	None	Short-term	53.1%
Telecommunications Equipment Installers and Repairers, Except Line Installers	Postsecondary nondegree award	None	Moderate- term	52.8%
Electrical and Electronics Repairers, Commercial and Industrial Equipment	Postsecondary nondegree award	None	Long-term	56.8%
Control and Valve Installers and Repairers, Except Mechanical Door	High school diploma or equivalent	None	Moderate- term	49.1%
Heating, Air Conditioning and Refrigeration Mechanics and Installers	Postsecondary nondegree award	None	Long-term	43.9%
Home Appliance Repairers	High school diploma or equivalent	None	Moderate- term	37.6%
Electrical Power-Line Installers and Repairers	High school diploma or equivalent	None	Long-term	49.8%
Telecommunications Line Installers and Repairers	High school diploma or equivalent	None	Long-term	47.2%
Water and Wastewater Treatment Plant and System Operators	High school diploma or equivalent	None	Long-term	45.4%

# **Global Trade & Logistics**

### **OCCUPATIONAL DEMAND**

Within the global trade and logistics industry, the occupation with the largest growth projection across the greater Lemoore area is heavy and tractor-trailer truck drivers, with 842 annual openings and 10% growth (Exhibit 13).

This is followed by sales representatives, wholesale and manufacturing (except technical and scientific products), with 374 annual openings and 6% growth. Employment of industrial truck and tractor operators, will increase by 5%, resulting in 304 annual openings. The occupation of shipping, receiving and traffic clerks will expand slightly, by 3%, resulting in 238 annual openings.

Occupation	2016 Jobs	5-Year Change	5-Year % Change	Annual Openings
Heavy and Tractor-Trailer Truck Drivers	6,491	622	10%	842
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	3,257	198	6%	374
Industrial Truck and Tractor Operators	2,572	126	5%	304
Shipping, Receiving and Traffic Clerks	2,232	68	3%	238
Production, Planning and Expediting Clerks	541	42	8%	60
First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	485	48	10%	60
First-Line Supervisors of Helpers, Laborers and Material Movers, Hand	493	36	7%	58
Weighers, Measurers, Checkers and Samplers, Recordkeeping	537	28	5%	57
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	430	44	10%	54
Transportation, Storage and Distribution Managers	321	14	4%	27
Wholesale and Retail Buyers, Except Farm Products	189	9	5%	22
Logisticians	187	9	5%	17
Commercial Pilots	111	13	12%	14
Cargo and Freight Agents	128	1	1%	12
Conveyor Operators and Tenders	88	7	8%	12
Excavating and Loading Machine and Dragline Operators	70	5	7%	10

#### Exhibit 13. Global trade and logistics employment in Lemoore

#### WAGES

In Kings County, the 2014 self-sufficiency wage is \$9.57/hour and the living wage for a single adult is \$10.85/hour.

Ten of the 15 global trade and logistics occupations exceed the county's living wage of \$10.85/hour (Exhibit 14). The highest wages are earned by transportation, storage and distribution managers, \$24.14/hour and logisticians, \$21.13/hour.

The lowest entry-level wages are earned by:

- Conveyor operators and tenders, shipping, receiving and traffic clerks, \$10.50/hour;
- Industrial truck and tractor operators, \$10.50/hour;
- Shipping, receiving and traffic clerks, \$10,50/hour; and
- Weighers, measurers, checkers and samplers (recordkeeping), \$10.50/hour.

Occupation	Pct. 10 Hourly Earnings	Median Hourly Earnings
Transportation, Storage and Distribution Managers	\$24.14	\$36.78
Logisticians	\$21.13	\$32.93
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	\$20.41	\$31.43
Commercial Pilots	\$19.74	\$33.25
First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	\$14.23	\$23.18
Excavating and Loading Machine and Dragline Operators	\$13.97	\$22.54
Wholesale and Retail Buyers, Except Farm Products	\$13.52	\$24.79
Production, Planning and Expediting Clerks	\$13.43	\$20.31
Heavy and Tractor-Trailer Truck Drivers	\$12.82	\$18.98
First-Line Supervisors of Helpers, Laborers and Material Movers, Hand	\$11.87	\$23.55
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	\$11.80	\$26.06
Conveyor Operators and Tenders	\$10.50	\$13.54
Industrial Truck and Tractor Operators	\$10.50	\$13.29
Shipping, Receiving and Traffic Clerks	\$10.50	\$13.34
Weighers, Measurers, Checkers and Samplers, Recordkeeping	\$10.50	\$12.83

## **EDUCATIONAL ATTAINMENT & WORK EXPERIENCE**

Of the 15 occupations analyzed within the global trade and logistics cluster, only one requires an entrylevel education that can be provided by community colleges: heavy and tractor-trailer truck drivers, which requires a postsecondary nondegree award (Exhibit 15).

Wholesale and retail buyers (except farm products) and logisticians require entry-level education of a bachelor's degree; however, both meet the current population survey qualification for middle-skill community college relevant occupations.

The occupation of sales representatives wholesale and manufacturing (technical and scientific products) is not a middle-skill job because fewer than 33% of workers have completed some college or an associate degree as their highest level of education.

All other occupations have specialized skills in business or logistics that are addressed by programs offered by local community colleges.

Occupation	Typical Entry-Level Education	Work Experience Required	Typical On-The-Job Training	CPS
Transportation, Storage and Distribution Managers	High school diploma or equivalent	5 years or more	None	34.5%
Wholesale and Retail Buyers, Except Farm Products	Bachelor's degree	None	Long-term	36.7%
Logisticians	Bachelor's degree	None	None	38.8%
Cargo and Freight Agents	High school diploma or equivalent	None	Short-term	46%
Production, Planning and Expediting Clerks	High school diploma or equivalent	None	Moderate- term	40.1%
Shipping, Receiving and Traffic Clerks	High school diploma or equivalent	None	Short-term	32.9%
Weighers, Measurers, Checkers and Samplers, Recordkeeping	High school diploma or equivalent	None	Short-term	33.9%
Sales Representatives, Wholesale and Manufacturing, Technical and Scientific Products	Bachelor's degree	None	Moderate- term	31.6%
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	High school diploma or equivalent	None	Moderate- term	31.6%
First-Line Supervisors of Helpers, Laborers and Material Movers, Hand	High school diploma or equivalent	Less than 5 years	None	39.5%
First-Line Supervisors of Transportation and Material-Moving Machine and Vehicle Operators	High school diploma or equivalent	Less than 5 years	None	39.5%
Commercial Pilots	High school diploma or equivalent	None	Moderate- term	20.5%
Heavy and Tractor-Trailer Truck Drivers	Postsecondary nondegree award	None	Short-term	28.3%
Conveyor Operators and Tenders	No formal educational credential	None	Short-term	27.3%
Excavating and Loading Machine and Dragline Operators	High school diploma or equivalent	Less than 5 years	Moderate- term	23.7%
Industrial Truck and Tractor Operators	No formal educational credential	None	Short-term	24.2%

#### Exhibit 15. Global trade and logistics educational attainment

# **Health Care**

## **OCCUPATIONAL DEMAND**

In the greater Lemoore area, the health care occupation with the most employment and the greatest growth projection is registered nurses with 414 annual openings (Exhibit 16). This is followed by nursing assistants, 377 annual openings, medical assistants, 195 annual openings, and home health aides, 119 annual openings.

In the greater Lemoore area, the occupation of home health aides is projected to undergo massive growth, 81%, with 119 annual openings.

Occupation	2016	5-Year	5-Year %	Annual
	Jobs	Change	Change	Openings
Registered Nurses	4,854	743	15%	414
Nursing Assistants	2,324	420	18%	377
Medical Assistants	1,425	154	11%	195
Home Health Aides	364	295	81%	119
Licensed Practical and Licensed Vocational Nurses	1,290	168	13%	113
Dental Assistants	672	55	8%	88
Emergency Medical Technicians and Paramedics	851	143	17%	73
Pharmacy Technicians	667	58	9%	58
Psychiatric Technicians	769	(48)	(6%)	55
Health Care Support Workers, All Other	255	24	9%	37
Health Technologists and Technicians, All Other	381	74	19%	36
Phlebotomists	196	32	16%	28
Pharmacy Aides	183	0	0%	26
Medical Records and Health Information Technicians	310	39	13%	26
Radiologic Technologists	318	36	11%	24
Dental Hygienists	258	26	10%	21
Massage Therapists	142	19	13%	19
Surgical Technologists	171	28	16%	18
Respiratory Therapists	238	30	13%	18
Medical and Clinical Laboratory Technicians	161	31	19%	15
Physical Therapist Aides	101	17	17%	15
Medical Equipment Preparers	85	14	16%	14
Medical and Clinical Laboratory Technologists	135	27	20%	13
Physical Therapist Assistants	68	21	31%	13
Dietetic Technicians	121	12	10%	11
Psychiatric Aides	44	22	50%	11
Opticians, Dispensing	82	24	29%	10
Medical Transcriptionists	89	0	0%	10

#### Exhibit 16. Health care employment in Lemoore

## WAGES

In the greater Lemoore area, seven occupations in the health care cluster have entry-level wages below the living wage for a single adult in Kings County, \$10.85/hour (Exhibit 17). The occupation of registered nurses pays the highest entry-level wage, \$28.01/hour, followed by dental hygienists, \$23.81/hour, and respiratory therapists, \$22.66/hour.

Occupation	Pct. 10 Hourly Earnings	Median Hourly Earnings
Registered Nurses	\$28.01	\$39.35
Dental Hygienists	\$23.81	\$38.52
Respiratory Therapists	\$22.66	\$33.71
Radiologic Technologists	\$22.66	\$35.45
Surgical Technologists	\$20.11	\$26.54
Licensed Practical and Licensed Vocational Nurses	\$19.74	\$23.83
Psychiatric Technicians	\$19.53	\$27.50
Physical Therapist Assistants	\$17.87	\$28.31
Medical and Clinical Laboratory Technologists	\$16.18	\$39.60
Medical and Clinical Laboratory Technicians	\$14.57	\$22.08
Health Care Support Workers, All Other	\$14.44	\$20.42
Opticians, Dispensing	\$13.82	\$18.58
Medical Equipment Preparers	\$13.46	\$18.99
Phlebotomists	\$13.34	\$17.23
Pharmacy Technicians	\$12.44	\$17.27
Medical Transcriptionists	\$11.93	\$15.53
Health Technologists and Technicians, All Other	\$11.80	\$19.32
Medical Records and Health Information Technicians	\$11.75	\$17.31
Dental Assistants	\$11.71	\$17.07
Emergency Medical Technicians and Paramedics	\$11.56	\$15.38
Psychiatric Aides	\$11.00	\$13.64
Medical Assistants	\$10.85	\$14.35
Physical Therapist Aides	\$10.84	\$13.65
Massage Therapists	\$10.50	\$12.89
Pharmacy Aides	\$10.50	\$12.69
Nursing Assistants	\$10.50	\$12.37
Dietetic Technicians	\$10.50	\$11.59
Home Health Aides	\$10.50	\$10.50

All occupations analyzed in the health care cluster are relevant to community college education due to certification or credentialing requirements (Exhibit 18).

Occupation	Typical Entry-Level	Work Experience	Typical On-The-Job	CPS
	Education	Required	Training	
Respiratory Therapists	Associate degree	None	None	69.9%
Registered Nurses	Bachelor's degree	None	None	42.1%
Medical and Clinical Laboratory Technologists	Bachelor's degree	None	None	36.2%
Medical and Clinical Laboratory Technicians	Associate degree	None	None	36.2%
Dental Hygienists	Associate degree	None	None	60.8%
Radiologic Technologists	Associate degree	None	None	66.1%
Emergency Medical Technicians and Paramedics	Postsecondary nondegree award	None	None	68.3%
Dietetic Technicians	Associate degree	None	None	56.4%
Pharmacy Technicians	High school diploma or equivalent	None	Moderate- term	56.4%
Psychiatric Technicians	Postsecondary nondegree award	Less than 5 years	Short-term	56.4%
Surgical Technologists	Postsecondary nondegree award	None	None	56.4%
Licensed Practical and Licensed Vocational Nurses	Postsecondary nondegree award	None	None	74.1%
Medical Records and Health Information Technicians	Postsecondary nondegree award	None	None	54.9%
Opticians, Dispensing	High school diploma or equivalent	None	Long-term	56.1%
Health Technologists and Technicians, All Other	High school diploma or equivalent	None	None	45.4%
Home Health Aides	No formal educational credential	None	Short-term	41.7%
Psychiatric Aides	High school diploma or equivalent	None	Short-term	41.7%
Nursing Assistants	Postsecondary nondegree award	None	None	41.7%
Physical Therapist Assistants	Associate degree	None	None	70.9%
Physical Therapist Aides	High school diploma or equivalent	None	Short-term	70.9%
Massage Therapists	Postsecondary nondegree award	None	None	54%

#### Exhibit 18. Health care educational attainment

Occupation	Typical Entry-Level Education	Work Experience Required	Typical On-The-Job Training	CPS
Dental Assistants	Postsecondary nondegree award	None	None	58.3%
Medical Assistants	Postsecondary nondegree award	None	None	65%
Medical Equipment Preparers	High school diploma or equivalent	None	Moderate- term	38.1%
Medical Transcriptionists	Postsecondary nondegree award	None	None	60.9%
Pharmacy Aides	High school diploma or equivalent	None	Short-term	50.3%
Phlebotomists	Postsecondary nondegree award	None	None	61.1%
Health Care Support Workers, All Other	High school diploma or equivalent	None	None	38.1%

\*The education level for registered nurses in California is an associate degree.

# Hospitality

## **OCCUPATIONAL DEMAND**

The hospitality industry was broken into two parts for analysis: the culinary arts sector and the hospitality (general) sector. Across the greater Lemoore area in the culinary arts sector, the largest occupation with the greatest growth projection is first-line supervisors of food preparation and serving workers (Exhibit 19). This occupation is projected to undergo strong expansion, 13%, with 271 annual openings. Other leading occupations within the culinary arts sector are cooks (restaurant), with 229 annual openings, and cooks (institution and cafeteria), 122 annual openings.

Occupation	2016 Jobs	5-Year Change	5-Year % Change	Annual Openings
First-Line Supervisors of Food Preparation and Serving Workers	1,563	204	13%	271
Cooks, Restaurant	1,293	170	13%	229
Cooks, Institution and Cafeteria	688	90	13%	122
Food Service Managers	671	27	4%	78
Butchers and Meat Cutters	375	46	12%	58
Bakers	336	16	5%	55
Chefs and Head Cooks	215	22	10%	30

#### Exhibit 19. Culinary arts employment in Lemoore

Across the greater Lemoore area, the largest occupation in the hospitality sector is hairdressers, hairstylists and cosmetologists with 104 annual openings and 5% projected growth (Exhibit 20). Other leading occupations are fitness trainers and aerobics instructors, with 59 annual openings, and first-line supervisors of personal service workers, 34 annual openings.

Occupation	2016 Jobs	5-Year Change	5-Year % Change	Annual Openings
Hairdressers, Hairstylists and Cosmetologists	741	40	5%	104
Fitness Trainers and Aerobics Instructors	322	26	8%	59
First-Line Supervisors of Personal Service Workers	228	47	21%	34
Funeral Attendants	136	9	7%	26
Musicians and Singers	227	11	5%	24
Interpreters and Translators	200	27	14%	24
Manicurists and Pedicurists	166	16	10%	23
Merchandise Displayers and Window Trimmers	160	16	10%	19
Audio and Video Equipment Technicians	141	18	13%	18
Photographers	161	2	1%	16
Gaming Supervisors	90	6	7%	15
Tour Guides and Escorts	63	5	8%	12
Broadcast Technicians	110	6	5%	12
Floral Designers	99	1	1%	11
Radio and Television Announcers	102	(6)	(6%)	10

#### Exhibit 20. Hospitality (general) employment in Lemoore

#### WAGES

One of the stark realities of all the culinary arts occupations in the Lemoore area is that the wages are low. All the occupations have entry-level wages below the living wage for a single adult in Kings County, \$10.85/hour, except chefs and head cooks, \$11.23/hour (Exhibit 21).

Occupation	Pct. 10 Hourly Earnings	Median Hourly Earnings
Chefs and Head Cooks	\$11.23	\$18.78
Cooks, Institution and Cafeteria	\$10.78	\$13.89
First-Line Supervisors of Food Preparation and Serving Workers	\$10.50	\$13.40
Butchers and Meat Cutters	\$10.50	\$13.47
Cooks, Restaurant	\$10.50	\$11.81
Bakers	\$10.50	\$11.34
Food Service Managers	\$10.50	\$15.40

In the greater Lemoore area, the highest entry-level wage from the hospitality sector is earned by gaming supervisors, \$15.62/hour, followed by interpreters and translators, \$15.19/hour (Exhibit 22).

Occupation	Pct. 10 Hourly Earnings	Median Hourly Earnings
Gaming Supervisors	\$15.62	\$24.84
Interpreters and Translators	\$15.19	\$23.19
Musicians and Singers	\$12.18	\$18.30
Radio and Television Announcers	\$12.13	\$19.42
Photographers	\$11.69	\$15.87
First-Line Supervisors of Personal Service Workers	\$11.13	\$15.79
Broadcast Technicians	\$10.73	\$18.13
Fitness Trainers and Aerobics Instructors	\$10.57	\$20.66
Tour Guides and Escorts	\$10.50	\$13.73
Hairdressers, Hairstylists and Cosmetologists	\$10.50	\$11.82
Funeral Attendants	\$10.50	\$14.11
Audio and Video Equipment Technicians	\$10.50	\$20.65
Floral Designers	\$10.50	\$11.62
Merchandise Displayers and Window Trimmers	\$10.50	\$11.98
Manicurists and Pedicurists	\$10.50	\$10.50

#### Exhibit 22. Hospitality (general) wages in Lemoore

Educational attainment for culinary arts occupations is relatively low (Exhibit 23). Three occupations require a high school diploma or equivalent: chefs and head cooks, first-line supervisors of food preparation and serving workers, and food service managers.

The remaining occupations require no formal education credential.

Occupation	Typical	Work	Typical	CPS
	Entry-Level	Experience	On-The-Job	
	Education	Required	Training	
Food Service Managers	High school diploma	Less than	None	37.7%
	or equivalent	5 years		
Chefs and Head Cooks	High school diploma	5 years	None	39.4%
	or equivalent	or more		
First-Line Supervisors of Food	High school diploma	Less than	None	37.9%
Preparation and Serving Workers	or equivalent	5 years		
Cooks, Institution and Cafeteria	No formal educational	None	Short-term	23.4%
	credential			
Cooks, Restaurant	No formal educational	Less than	Moderate-	23.4%
	credential	5 years	term	
Bakers	No formal educational	None	Long-term	27.8%
	credential			
Butchers and Meat Cutters	No formal educational	None	Long-term	20.5%
	credential			

#### Exhibit 23. Culinary arts educational attainment

Within the hospitality sector, radio and television announcers, and interpreters and translators typically require a bachelor's degree as their entry-level education, but these occupations qualify as middle-skill jobs and are relevant to community colleges (Exhibit 24).

Broadcast technicians have a typical entry-level education of an associate degree.

Three occupations require a postsecondary nondegree award:

- Audio and visual equipment technicians;
- Hairdressers, hairstylists and cosmetologists; and
- Manicurists and pedicurists.

The remaining occupations require only a high school diploma or equivalent, or no formal education credential.

Occupation	Typical Entry-Level Education	Work Experience Required	Typical On-The- Job Training	CPS
Floral Designers	High school diploma or equivalent	None	Moderate- term	30.3%
Merchandise Displayers and Window Trimmers	High school diploma or equivalent	None	Moderate- term	30.3%
Musicians and Singers	No formal educational credential	None	Long-term	27.4%
Radio and Television Announcers	Bachelor's degree	None	Short-term	42%
Interpreters and Translators	Bachelor's degree	None	Short-term	36%
Audio and Video Equipment Technicians	Postsecondary nondegree award	None	Short-term	44.6%
Broadcast Technicians	Associate degree	None	Short-term	44.6%
Photographers	High school diploma or equivalent	None	Long-term	33%
Gaming Supervisors	High school diploma or equivalent	Less than 5 years	None	38.3%
First-Line Supervisors of Personal Service Workers	High school diploma or equivalent	Less than 5 years	None	37.6%
Funeral Attendants	High school diploma or equivalent	None	Short-term	51.9%
Hairdressers, Hairstylists and Cosmetologists	Postsecondary nondegree award	None	None	41.6%
Manicurists and Pedicurists	Postsecondary nondegree award	None	None	30.2%
Tour Guides and Escorts	High school diploma or equivalent	None	Moderate- term	36.9%
Fitness Trainers and Aerobics Instructors	High school diploma or equivalent	None	Short-term	34.1%

#### Exhibit 24. Hospitality (general) educational attainment

# ICT/Digital Media

## **OCCUPATIONAL DEMAND**

In the greater Lemoore area, the occupation of computer user support specialists will offer the most employment opportunities in the ICT/digital media sector, with 11% projected growth and 68 annual openings (Exhibit 25). This is followed by graphic designers, an occupation projected to contract by 2%, that will still offer 28 annual job openings.

Occupation	2016 Jobs	5-Year Change	5-Year % Change	Annual Openings
Computer User Support Specialists	723	77	11%	68
Graphic Designers	291	(7)	(2%)	28
Network and Computer Systems Administrators	332	34	10%	28
Computer Occupations, All Other	264	13	5%	20
Computer Network Support Specialists	161	29	18%	18
Web Developers	98	13	13%	10
Computer Network Architects	53	16	30%	7

#### Exhibit 25. ICT/digital media employment in Lemoore

## WAGES

All occupations in the ICT/digital media sector offer wages above the county's living wage for a single adult in Kings County, \$10.85/hour (Exhibit 26). The highest entry-level wages are earned by computer network architects, \$26.72/hour, followed by network and computer systems administrators, \$20.86/hour.

#### Exhibit 26. ICT/digital media wages in Lemoore

Occupation	Pct. 10 Hourly Earnings	Median Hourly Earnings
Computer Network Architects	\$26.72	\$46.56
Network and Computer Systems Administrators	\$20.86	\$34.28
Web Developers	\$16.74	\$23.70
Computer Occupations, All Other	\$16.21	\$32.37
Computer Network Support Specialists	\$15.47	\$30.24
Graphic Designers	\$14.02	\$20.75
Computer User Support Specialists	\$11.96	\$22.46

Four occupations within the ICT/digital media sector, those of network and computer systems administrators, computer occupations (all other), graphic designers and computer network architects, require an entry-level education of a bachelor's degree, but three qualify as community college relevant because at least 33.3% of current workers in these occupations have some college to an associate degree. The fourth, graphic designers, is also considered community college relevant because many local community colleges have programs that train for this occupation (Exhibit 27).

Both Web developers and computer network support specialists have a typical entry-level education level of an associate degree.

Computer user support specialists have some college, no degree.

Occupation	Typical Entry-Level Education	Work Experience Required	Typical On-The-Job Training	CPS
Web Developers	Associate's degree	None	None	27.2%
Network and Computer Systems Administrators	Bachelor's degree	None	None	39.5%
Computer User Support Specialists	Some college, no degree	None	None	45.2%
Computer Network Support Specialists	Associate's degree	None	None	45.2%
Computer Occupations, All Other	Bachelor's degree	None	None	36.9%
Graphic Designers	Bachelor's degree	None	None	30.3%
Computer Network Architects	Bachelor's degree	5 years or more	None	37.0%

#### Exhibit 27. ICT/digital media educational attainment

# Manufacturing

## **OCCUPATIONAL DEMAND**

Within the greater Lemoore area, the four occupations that employ the most workers are:

- Packaging and filling machine operators and tenders, 2,794 jobs in 2016;
- Team assemblers, 1,561 jobs;
- First-line supervisors of production and operating workers, 1,504 jobs; and
- Inspectors, testers, sorters and weighers, 1,109 jobs (Exhibit 28).

With 7% projected growth, packaging and filling machine operators and tenders will offer the most annual openings, 367. This is followed by team assemblers, 9% growth, with 217 annual openings.

There is some overlap across industries for several occupations that could be grouped into the manufacturing industry. These include mechanical, electrical and maintenance occupations related to manufacturing which are shared with at least two other industries. As a result, these occupations have been moved into the following section for multi-sector industrial and heavy equipment mechanics (maintenance and repair).

Occupation	2016 Jobs	5-Year Change	5-Year % Change	Annual Openings
Packaging and Filling Machine Operators and Tenders	2,794	182	7%	367
Team Assemblers	1,561	140	9%	217
First-Line Supervisors of Production and Operating Workers	1,504	100	7%	169
Inspectors, Testers, Sorters, Samplers and Weighers	1,109	91	8%	155
Welders, Cutters, Solderers and Brazers	814	47	6%	102
Production Workers, All Other	615	31	5%	79
Machinists	539	58	11%	70
Separating, Filtering, Clarifying, Precipitating and Still Machine Setters, Operators and Tenders	591	34	6%	70
Assemblers and Fabricators, All Other	271	39	14%	42
Cabinetmakers and Bench Carpenters	339	(29)	(9%)	33
Industrial Production Managers	374	26	7%	31
Structural Metal Fabricators and Fitters	194	11	6%	20
Computer-Controlled Machine Tool Operators, Metal and Plastic	116	22	19%	17
Painters, Transportation Equipment	119	6	5%	14
Electrical and Electronics Engineering Technicians	149	15	10%	13
Lathe and Turning Machine Tool Setters, Operators and Tenders, Metal and Plastic	103	(5)	(5%)	12
Cooling and Freezing Equipment Operators and Tenders	82	7	9%	11
Architectural and Civil Drafters	128	0	0%	10

#### Exhibit 28. Manufacturing employment in Lemoore

Occupation	2016 Jobs	5-Year Change	5-Year % Change	Annual Openings
Grinding, Lapping, Polishing and Buffing Machine Tool Setters, Operators and Tenders, Metal and Plastic	87	(1)	(1%)	10
Multiple Machine Tool Setters, Operators and Tenders, Metal and Plastic	66	11	17%	10
Molding, Coremaking and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	78	3	4%	9
Civil Engineering Technicians	85	15	18%	9
Stationary Engineers and Boiler Operators	73	4	5%	9
Plating and Coating Machine Setters, Operators and Tenders, Metal and Plastic	83	(3)	(4%)	8
Engineering Technicians, Except Drafters, All Other	73	7	10%	6
Drilling and Boring Machine Tool Setters, Operators and Tenders, Metal and Plastic	56	(3)	(5%)	6
Welding, Soldering and Brazing Machine Setters, Operators, and Tenders	48	1	2%	6
Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	35	6	17%	5
Mechanical Drafters	45	3	7%	4
Milling and Planing Machine Setters, Operators and Tenders, Metal and Plastic	28	(1)	(4%)	3
Industrial Engineering Technicians	23	5	22%	3
Mechanical Engineering Technicians	20	3	15%	2
Electrical and Electronics Drafters	19	3	16%	2

## WAGES

Within the greater Lemoore area, half of the 32 manufacturing occupations analyzed offer an entry-level wage above the living wage for a single adult in Kings County, \$10.85/hour (Exhibit 29). The occupations offering the highest wages have entry-level wages more than double this amount:

- Stationary engineers and boiler operators, \$24.98/hour;
- Industrial production managers, \$24.85/hour; and
- Electrical and electronics engineering technicians, \$22.36/hour.

### Exhibit 29. Manufacturing wages in Lemoore

Occupation	Pct. 10 Hourly Earnings	Median Hourly Earnings
Stationary Engineers and Boiler Operators	\$24.98	\$33.99
Industrial Production Managers	\$24.85	\$41.28
Electrical and Electronics Engineering Technicians	\$22.36	\$31.31
Electrical and Electronics Drafters	\$18.83	\$30.12
Civil Engineering Technicians	\$18.02	\$31.83
Engineering Technicians, Except Drafters, All Other	\$17.95	\$31.35
Industrial Engineering Technicians	\$17.21	\$27.40

Occupation	Pct. 10 Hourly Earnings	Median Hourly Earnings
Mechanical Engineering Technicians	\$17.13	\$27.42
Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	\$16.97	\$24.76
Architectural and Civil Drafters	\$16.62	\$22.69
Mechanical Drafters	\$15.64	\$23.94
Welding, Soldering, and Brazing Machine Setters, Operators, and Tenders	\$13.66	\$18.36
Painters, Transportation Equipment	\$13.17	\$21.55
First-Line Supervisors of Production and Operating Workers	\$13.12	\$23.44
Welders, Cutters, Solderers, and Brazers	\$12.49	\$17.26
Computer-Controlled Machine Tool Operators, Metal and Plastic	\$11.91	\$16.52
Milling and Planing Machine Setters, Operators, and Tenders, Metal and Plastic	\$11.79	\$17.51
Structural Metal Fabricators and Fitters	\$11.48	\$17.38
Machinists	\$11.38	\$18.36
Multiple Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$11.35	\$14.93
Separating, Filtering, Clarifying, Precipitating, and Still Machine Setters, Operators, and Tenders	\$11.11	\$19.35
Grinding, Lapping, Polishing, and Buffing Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$10.87	\$14.95
Molding, Coremaking, and Casting Machine Setters, Operators, and Tenders, Metal and Plastic	\$10.68	\$12.42
Cooling and Freezing Equipment Operators and Tenders	\$10.64	\$13.93
Assemblers and Fabricators, All Other	\$10.59	\$12.71
Cabinetmakers and Bench Carpenters	\$10.50	\$12.77
Team Assemblers	\$10.50	\$12.16
Lathe and Turning Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$10.50	\$14.44
Inspectors, Testers, Sorters, Samplers, and Weighers	\$10.50	\$13.69
Packaging and Filling Machine Operators and Tenders	\$10.50	\$13.32
Production Workers, All Other	\$10.50	\$11.46
Drilling and Boring Machine Tool Setters, Operators, and Tenders, Metal and Plastic	\$10.50	\$13.53

## **EDUCATIONAL ATTAINMENT & WORK EXPERIENCE**

The typical entry-level education for industrial production managers is a bachelor's degree, but nearly 33% of workers currently in the occupation have completed some college or an associate degree as their highest level of education, which makes this a middle-skill job and relevant to community college education (Exhibit 30).

The three drafters and five engineering technicians occupations have a typical entry-level education of an associate degree. The remaining occupations are all below the community college level; however, the increasing integration of robotics and other technological advancements in manufacturing will make it necessary for workers to obtain specialized training to be successful in these occupations.

Occupation	Typical Entry-Level Education	Work Experience Required	Typical On-The-Job Training	CPS
Industrial Production Managers	Bachelor's degree	5 years or more	None	32.7%
Architectural and Civil Drafters	Associate degree	None	None	61.6%
Electrical and Electronics Drafters	Associate degree	None	None	61.6%
Mechanical Drafters	Associate degree	None	None	61.6%
Civil Engineering Technicians	Associate degree	None	None	55.1%
Electrical and Electronics Engineering Technicians	Associate degree	None	None	55.1%
Industrial Engineering Technicians	Associate degree	None	None	55.1%
Mechanical Engineering Technicians	Associate degree	None	None	55.1%
Engineering Technicians, Except Drafters, All Other	Associate degree	None	None	55.1%
First-Line Supervisors of Production and Operating Workers	High school diploma or equivalent	Less than 5 years	None	35.3%
Structural Metal Fabricators and Fitters	High school diploma or equivalent	None	Moderate- term	34.7%
Team Assemblers	High school diploma or equivalent	None	Moderate- term	29.2%
Assemblers and Fabricators, All Other	High school diploma or equivalent	None	Moderate- term	29.2%
Computer-Controlled Machine Tool Operators, Metal and Plastic	High school diploma or equivalent	None	Moderate- term	43.6%
Computer Numerically Controlled Machine Tool Programmers, Metal and Plastic	High school diploma or equivalent	None	Long-term	43.6%
Drilling and Boring Machine Tool Setters, Operators and Tenders, Metal and Plastic	High school diploma or equivalent	None	Moderate- term	24.4%
Grinding, Lapping, Polishing and Buffing Machine Tool Setters, Operators and Tenders, Metal and Plastic	High school diploma or equivalent	None	Moderate- term	24.4%
Lathe and Turning Machine Tool Setters, Operators and Tenders, Metal and Plastic	High school diploma or equivalent	None	Moderate- term	24.4%

#### Exhibit 30. Manufacturing educational attainment

Occupation	Typical Entry-Level Education	Work Experience Required	Typical On-The-Job Training	CPS
Milling and Planing Machine Setters, Operators and Tenders, Metal and Plastic	High school diploma or equivalent	None	Moderate- term	24.4%
Machinists	High school diploma or equivalent	None	Long-term	38.8%
Molding, Coremaking and Casting Machine Setters, Operators and Tenders, Metal and Plastic	High school diploma or equivalent	None	Moderate- term	28.6%
Multiple Machine Tool Setters, Operators and Tenders, Metal and Plastic	High school diploma or equivalent	None	Moderate- term	25.8%
Welders, Cutters, Solderers and Brazers	High school diploma or equivalent	None	Moderate- term	28.2%
Welding, Soldering and Brazing Machine Setters, Operators and Tenders	High school diploma or equivalent	None	Moderate- term	28.2%
Cabinetmakers and Bench Carpenters	High school diploma or equivalent	None	Moderate- term	25.7%
Stationary Engineers and Boiler Operators	High school diploma or equivalent	None	Long-term	42.1%
Separating, Filtering, Clarifying, Precipitating and Still Machine Setters, Operators and Tenders	High school diploma or equivalent	None	Moderate- term	40.7%
Inspectors, Testers, Sorters, Samplers and Weighers	High school diploma or equivalent	None	Moderate- term	37.7%
Packaging and Filling Machine Operators and Tenders	High school diploma or equivalent	None	Moderate- term	18.6%
Painters, Transportation Equipment	High school diploma or equivalent	None	Moderate- term	27.1%
Cooling and Freezing Equipment Operators and Tenders	High school diploma or equivalent	None	Moderate- term	26.7%
Production Workers, All Other	High school diploma or equivalent	None	Moderate- term	26.7%

# Multi-sector Industrial and Heavy Equipment Mechanics, Maintenance & Repair Workers

## **OCCUPATIONAL DEMAND**

The occupational cluster encompassed by multi-sector industrial and heavy equipment mechanics, maintenance and repair workers will experience mixed growth over the next five years.

For the combined greater Lemoore area, the occupation offering the most employment is maintenance and repair workers (general) with nearly 2,900 jobs in the region, which is expected to expand by 7%, offering 313 annual openings (Exhibit 31).

This occupation is followed by industrial machinery mechanics, which is projected to undergo robust growth, 15%, with 177 annual openings.

First-line supervisors of mechanics, installers and repairers is projected to grow by 9%, with 97 annual openings.

Occupation	2016	5-Year	5-Year %	Annual
	Jobs	Change	Change	Openings
Maintenance and Repair Workers, General	2,893	215	7%	313
Industrial Machinery Mechanics	1,454	218	15%	177
First-Line Supervisors of Mechanics, Installers and Repairers	923	79	9%	97
Bus and Truck Mechanics and Diesel Engine Specialists	501	64	13%	58
Mobile Heavy Equipment Mechanics, Except Engines	456	14	3%	48
Installation, Maintenance and Repair Workers, All Other	420	20	5%	45
Farm Equipment Mechanics and Service Technicians	400	22	6%	43
Maintenance Workers, Machinery	294	32	11%	36
Aircraft Mechanics and Service Technicians	163	(9)	(6%)	14

#### Exhibit 31. Multi-sector industrial and heavy equipment mechanics employment in Lemoore

### WAGES

In the greater Lemoore area, four out of six occupations in the multi-sector cluster offer entry-level wages above the living wage for a single adult in Kings County, \$10.85/hour (Exhibit 32).

The highest paid occupation is aircraft mechanics and service technicians, \$18.91/hour entry level and \$26.59/hour median, followed by first-line supervisors of mechanics, installers and repairers, \$18.19/hour entry level and \$29.95/hour median.

Occupation	Pct. 10 Hourly Earnings	Median Hourly Earnings
Aircraft Mechanics and Service Technicians	\$18.91	\$26.59
First-Line Supervisors of Mechanics, Installers, and Repairers	\$18.19	\$29.95
Mobile Heavy Equipment Mechanics, Except Engines	\$15.96	\$25.54
Industrial Machinery Mechanics	\$14.40	\$22.08
Bus and Truck Mechanics and Diesel Engine Specialists	\$13.21	\$19.87
Maintenance Workers, Machinery	\$11.58	\$17.49
Farm Equipment Mechanics and Service Technicians	\$10.90	\$17.55
Maintenance and Repair Workers, General	\$10.89	\$17.96
Installation, Maintenance, and Repair Workers, All Other	\$10.50	\$14.93

Exhibit 32. Multi-sector industrial and heavy equipment mechanics wages in Lemoore

## **EDUCATIONAL ATTAINMENT & WORK EXPERIENCE**

All occupations in the multi-sector cluster have extensive specialized skills training requirements that are addressed by community colleges with relevant programs (Exhibit 33).

Occupation	Typical Entry-Level Education	Work Experience Required	Typical On-The-Job Training	CPS
First-Line Supervisors of Mechanics, Installers and Repairers	High school diploma or equivalent	Less than 5 years	None	42.9%
Aircraft Mechanics and Service Technicians	Postsecondary nondegree award	None	None	60%
Bus and Truck Mechanics and Diesel Engine Specialists	High school diploma or equivalent	None	Long-term	34.8%
Farm Equipment Mechanics and Service Technicians	High school diploma or equivalent	None	Long-term	37%
Mobile Heavy Equipment Mechanics, Except Engines	High school diploma or equivalent	None	Long-term	37%
Industrial Machinery Mechanics	High school diploma or equivalent	None	Long-term	41.7%
Maintenance Workers, Machinery	High school diploma or equivalent	None	Moderate- term	34.5%
Maintenance and Repair Workers, General	High school diploma or equivalent	None	Long-term	38.2%
Installation, Maintenance and Repair Workers, All Other	High school diploma or equivalent	None	Moderate- term	35%

### Exhibit 33. Multi-sector industrial and heavy equipment mechanics educational attainment

# **Public Safety**

## **OCCUPATIONAL DEMAND**

The public safety occupation in the greater Lemoore area with the most employment is correctional officers and jailers, with more than 3,300 jobs in 2016. Employment of this occupation is projected to undergo very strong growth, 12%, offering 344 annual openings (Exbibit 34).

The occupation of police and sheriff's patrol officers employed more than 1,300 workers in 2016. With a projected growth rate of 5%, this occupation is expected to have 104 annual openings.

Protective service workers (all other) will experience substantial growth, 9%, with 103 annual openings.

Occupation	2016 Jobs	5-Year Change	5-Year % Change	Annual Openings	
Correctional Officers and Jailers	3,361	387	12%	344	
Police and Sheriff's Patrol Officers	1,311	62	5%	104	
Protective Service Workers, All Other	398	35	9%	103	
Firefighters	534	23	4%	41	
Lifeguards, Ski Patrol and Other Recreational Protective Service Workers	121	9	7%	31	
First-Line Supervisors of Correctional Officers	300	36	12%	28	
First-Line Supervisors of Police and Detectives	157	15	10%	13	
Detectives and Criminal Investigators	139	13	9%	13	
First-Line Supervisors of Protective Service Workers, All Other	113	4	4%	12	
Private Detectives and Investigators	104	(4)	(4%)	10	
Gaming Surveillance Officers and Gaming Investigators	72	2	3%	10	
First-Line Supervisors of Fire Fighting and Prevention Workers	82	4	5%	6	

#### Exhibit 34. Public safety employment in Lemoore

### WAGES

Wages for occupations in the public safety cluster tend to be considerably higher than the county's living wage.

Only two public safety occupations in the Lemoore area fall below the living wage for a single adult in Kings County, \$10.85/hour (Exhibit 35). These occupations are protective service workers (all other) and lifeguards, ski patrol and other recreational protective service workers.

The highest paid occupation is first-line supervisors of police and detectives with an entry-level wage of \$51.09/hour.

Occupation	Pct. 10 Hourly Earnings	Median Hourly Earnings
First-Line Supervisors of Police and Detectives	\$51.09	\$82.13
First-Line Supervisors of Correctional Officers	\$43.76	\$61.16
First-Line Supervisors of Fire Fighting and Prevention Workers	\$32.76	\$53.66
Correctional Officers and Jailers	\$31.32	\$42.05
Detectives and Criminal Investigators	\$26.41	\$38.38
Police and Sheriff's Patrol Officers	\$24.73	\$33.37
Gaming Surveillance Officers and Gaming Investigators	\$19.87	\$25.22
Firefighters	\$19.38	\$25.41
Private Detectives and Investigators	\$19.20	\$34.85
First-Line Supervisors of Protective Service Workers, All Other	\$16.51	\$33.04
Protective Service Workers, All Other	\$10.50	\$15.55
Lifeguards, Ski Patrol, and Other Recreational Protective Service Workers	\$10.50	\$15.42

### Exhibit 35. Public safety wages in Lemoore

## **EDUCATIONAL ATTAINMENT & WORK EXPERIENCE**

Both fire fighters and first-line supervisors of firefighting and prevention workers require a post-secondary degree award.

Workers in all but one of the public safety occupations are required to attend an academy and pass an exam to be employable (Exhibit 36). The exception is protective service workers (all other).

Protective service workers have the lowest educational attainment requirements, with only a high school diploma and short-term, on-the-job training needed for employment.

These requirements are addressed by community colleges that offer relevant programs.

Occupation	Typical	Work	Typical	CPS
e coopunon	Entry-Level	Experience	On-The-Job	
	Education	Required	Training	
First-Line Supervisors of Correctional	High school diploma	Less than	Moderate-	46.3%
Officers	or equivalent	5 years	term	
First-Line Supervisors of Police and	High school diploma	Less than	Moderate-	43.4%
Detectives	or equivalent	5 years	term	
First-Line Supervisors of Firefighting	Postsecondary	Less than	Moderate-	59.2%
and Prevention Workers	nondegree award	5 years	term	
First-Line Supervisors of Protective	High school diploma	Less than	None	43.1%
Service Workers, All Other	or equivalent	5 years		
Firefighters	Postsecondary	None	Long-term	63.6%
	nondegree award			
Correctional Officers and Jailers	High school diploma	None	Moderate-	52.4%
	or equivalent		term	0 - 00/
Detectives and Criminal Investigators	High school diploma	Less than	Moderate-	35.2%
	or equivalent	5 years	term	
Police and Sheriff's Patrol Officers	High school diploma	None	Moderate-	51.6%
	or equivalent		term	00.10/
Private Detectives and Investigators	High school diploma	Less than	Moderate-	32.1%
	or equivalent	5 years	term	
Gaming Surveillance Officers and	High school diploma	None	Short-term	42.7%
Gaming Investigators	or equivalent			<b>.</b>
Lifeguards, Ski Patrol and Other	No formal	None	Short-term	36.4%
Recreational Protective Service	educational			
Workers	credential			04.404
Protective Service Workers, All Other	High school diploma	None	Short-term	36.4%
	or equivalent			

### Exhibit 36. Public safety educational attainment

## Other

## **OCCUPATIONAL DEMAND**

The four occupations grouped in the "other" occupational cluster are two automotive repair occupations and two bus driver occupations.

In the greater Lemoore area, automotive service technicians and mechanics is projected to offer 190 annual openings, followed by bus drivers (school or special client), with 145 annual openings (Exhibit 37).

Occupation	2016 Jobs	5-Year Change	5-Year % Change	Annual Openings
Automotive Service Technicians and Mechanics	1,867	82	4%	190
Bus Drivers, School or Special Client	830	153	18%	145
Bus Drivers, Transit and Intercity	288	22	8%	42
Automotive Body and Related Repairers	314	17	5%	32

### WAGES

Three of the four "other" occupations in the greater Lemoore area offer an entry-level wage above the living wage for a single adult in Kings County, \$10.85/hour (Exhibit 38).

The highest paid occupation is bus drivers (transit and intercity), with an entry-level wage of \$13.31/hour.

Automotive service technicians and mechanics earn an entry-level wage of only \$10.56/hour.

#### Exhibit 38. Other wages in Lemoore

Occupation	Pct. 10 Hourly Earnings	Median Hourly Earnings
Bus Drivers, Transit and Intercity	\$13.31	\$19.64
Bus Drivers, School or Special Client	\$11.30	\$16.40
Automotive Body and Related Repairers	\$11.13	\$15.72
Automotive Service Technicians and Mechanics	\$10.56	\$14.11

## **EDUCATIONAL ATTAINMENT & WORK EXPERIENCE**

The typical entry-level education for automotive service technicians and mechanics is a postsecondary nondegree. In comparison, automotive body and related repair workers need only a high school diploma or equivalent (Exhibit 39).

Both bus driver occupations require some specialized training and a commercial driver's license with a passenger endorsement.

Occupation	Typical Entry-Level Education	Work Experience Required	Typical On-The-Job Training	CPS
Automotive Body and Related Repairers	High school diploma or equivalent	None	Long-term	26.1%
Automotive Service Technicians and Mechanics	Postsecondary nondegree award	None	Short-term	33.4%
Bus Drivers, Transit and Intercity	High school diploma or equivalent	None	Moderate- term	36.1%
Bus Drivers, School or Special Client	High school diploma or equivalent	None	Short-term	36.1%

### Exhibit 39. Other educational attainment

# **Community College Supply: West Hills College Lemoore**

Because the greater Lemoore area encompasses the service area of several community colleges, the college should also review the community college supply analysis contained in the South Central Valley/Southern Mother Lode report released in the summer of 2017.

West Hills College Lemoore does not appear to confer awards (degree and certificates) specifically related to the following areas:

- Agriculture, water and environmental technologies;
- Energy, utilities and construction; and
- Those occupations listed under the multi-sector section of this employment scan (Exhibit 56).

Business-related programs conferred 76 degrees and eight certificates per year on average. The specific breakdown of these awards is:

- Accounting, four degrees and four certificates;
- Business administration, 51 degrees; and
- Business management, four degrees and four certificates.

On average, 17 retail store operations management certificates are awarded each year. When these certificates are added to those of business management, this brings the total certificates for this four-digit TOP code (0506) to 21.

Although the college's software applications program is considered an area of computer science, it is frequently used to support business-related occupations. The college's four-year average for software applications awards is 14 degrees and 27 certificates per year.

Regarding the education sector, West Hills College Lemoore conferred, on average each year, 14 degrees and 114 certificates in childhood development/early childhood education, two certificates in human services, and 13 degrees in physical education. These two latter award areas also can be attributed to the health care sector depending on the curriculum focus.

In the area of health care, the college has a four-year average of 43 degrees and one certificate for registered nursing, and 58 degrees in health professions, but the degrees in health professions are transfer core curriculum. The average annual completions for the college's paramedics program total one degree and four certificates.

Hospitality-related programs conferred a four-year average of 51 awards. Specifically, resort and club management averages two degrees, and restaurant and food service and management averages 49 certificates annually.

West Hills College Lemoore has a four-year average of five degrees that would support advanced manufacturing occupations, but these awards are all in an engineering, general transfer program.

For the public safety sector, the college has an annual average of 51 awards in two areas: administration of justice, 42 degrees; and corrections, nine degrees.

The remaining 257 awards conferred by West Hills College Lemoore are transfer related.

	4-Year Average		
Top Title - 6-digit Code	Degrees	Certificates	
Accounting-050200	4	4	
Administration of Justice-210500	42		
Art-100200	3		
Biological and Physical Sciences (and Mathematics)-490200	25		
Biology, General-040100	3		
Business Administration-050500	51		
Business Management-050600	4	4	
Child Development/Early Care and Education-130500	14	114	
Children with Special Needs-130520		-	
Corrections-210510	9		
Engineering, General (requires Calculus) (Transfer)-090100	5		
Geography-220600	1		
Geology-191400	-		
Health Professions, Transfer Core Curriculum-126000	58		
Human Services-210400		2	
Humanities and Fine Arts-490310	31		
Humanities-490300	4		
Liberal Arts and Sciences, General-490100	111		
Liberal Studies-490120	40		
Mathematics, General-170100	5		
Paramedic-125100	1	4	
Physical Education-083500	13		
Physics, General-190200	3		
Political Science-220700	1		
Psychology, General-200100	29		
Registered Nursing-123010	43	1	
Resort and Club Management-130730	2		
Restaurant and Food Services and Management-130710		49	
Retail Store Operations and Management-050650		17	
Sociology-220800	2		
Software Applications-070210	14	27	
Speech Communication-150600	-		
World Wide Web Administration-070900		-	

### Exhibit 56. West Hills College Lemoore programs and awards

## **Conclusion & Recommendations**

### Key findings from this study include:

- West Hills College Lemoore does not appear to confer awards (degree and certificates) specifically related to the following sectors: agriculture, water and environmental technologies; energy, utilities and construction; and those occupations listed under the multi-sector section of this employment scan.
- The 50 business-related occupations represent an overall demand of 5,019 projected annual openings in the study area. Most of these jobs are in: office support, 51%; accounting, 17%; supervisorial, 16%; and sales positions, 16%. With only 76 awards conferred by related programs, demand is far higher than supply even when the 41 annual average software applications awards are taken into consideration.
- The college has a four-year average of 128 childhood development/early childhood education completions. The total demand projection for three of the early education occupations is 1,409 annual openings—indicating an undersupply of nearly 1,300 trained workers per year.
- The majority of global trade and logistics occupations are in: equipment operations, 55%; sales, 21%; office support, 16%; and logistics and management, 8%. The college currently does not appear to offer equipment operation or logistics programs. Workforce demand has already been established in sales and management. With projections of 2,161 annual job openings distributed across 16 occupations, there is an undersupply of trained workers.
- There are 179 annual openings distributed across the seven ICT/digital media occupations and only 41 software application completions. It is recommended that the college compare the curriculum content with the requirements of the business and ICT/digital media occupations to ascertain whether these completions are business and/or ICT/digital media applicable. In either case, demand is greater than supply.
- Twenty-two percent of the heath care sector's annual workforce demand is for registered nurses, with 414 annual openings. When nursing assistants and licensed vocational nurses are included, this percentage rises to nearly half of the entire sector. With only 44 annual registered nursing awards, there is an undersupply of trained workers in the nursing profession. Similarly, annual demand of EMTs/paramedics is 73 workers, but the college only confers on average five awards per year. As in the above described health care examples, demand is great than supply for all the health care occupations.
- Although there are 843 annual openings in food service-related occupations, West Hills College Lemoore has on average only 17 related completions each year, an undersupply of workers in this area. However, there are 49 annual openings (first-line supervisors of personal service workers, 34 annual openings and gaming supervisors, 15 annual openings) and 49 annual awards in hospitality (resort and club) management. In this case, because supply equals demand, expansion of this program is not recommended.
- The advanced manufacturing sector has a four-year average of only five degrees, and they are transfer focused. With just over 1,500 annual openings in this sector, plus the nearly 700 annual openings for multi-sector occupations that are also related to advanced manufacturing, demand is far greater than West Hills College Lemoore supply.

• When the supply side of programs related to public safety and administration of justice are considered, there again appears to be an undersupply. The demand in the study area exceeds 700 annual openings for related occupations. Supply from the college's programs is substantially lower, with just over 50 completions annually.

#### **Recommendations:**

The regional parameters set to pull data for this report include areas served by two or more community colleges; therefore, it is recommended that data contained in the subregional overview released August 2017 <u>http://coeccc.net/Search.aspx#idDetailPanel</u> and its supplemental document <u>http://coeccc.net/Search.aspx#idDetailPanel</u> be consulted before determining the basis for adding or expanding programs at West Hills College Lemoore. This will lower the risk of oversupplying the area with newly trained workers.

# **APPENDIX A: Methodology & Data Sources**

## Data Sources

Labor market and educational supply data compiled in this report derive from a variety of sources. Data were drawn from external sources, including the Economic Modeling Specialists, Inc., the California Community Colleges Chancellor's Office Management Information Systems Data Mart and the National Center for Educational Statistics (NCES) Integrated Postsecondary Education Data System (IPEDS). Below is the summary of the data sources found in this study.

Data Type	Source
Estimates and	Economic Modeling Specialists, Intl. (EMSI). EMSI occupational employment data are based on final EMSI industry data and final EMSI staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates also affected by county-level EMSI earnings by industry: economicmodeling.com.
Living Wage	A living wage calculator that estimates the cost of living in a specific community or region: livingwage.mit.edu.
Typical Education Level and On-the-job Training	Bureau of Labor Statistics (BLS) uses a system to assign categories for entry-level education and typical on-the-job training to each occupation for which BLS publishes projections data: www.bls.gov/emp/ep_education_tech.htm.
Labor Force, Employment and Unemployment Estimates	California Employment Development Department, Labor Market Information Division, <u>labormarketinfo.edd.ca.gov</u>
Job Posting and Skills Data	Burning Glass, <u>http://www.burning-glass.com/</u>
Additional Education Requirements/ Employer Preferences	The O*NET Job Zone database includes over 900 occupations as well as information on skills, abilities, knowledge, work activities and interests associated with specific occupations: www.onetonline.org

## **Key Terms and Concepts**

**Annual Job Openings:** Annual openings are calculated by dividing the number of years in the projection period by total job openings.

Education Attainment Level: The highest education attainment level of workers age 25 years or older.

Employment Estimate: The total number of workers currently employed.

**Employment Projections:** Projections of employment are calculated by a proprietary Economic Modeling Specialists, Intl. (EMSI) formula that includes historical employment and economic indicators along with national, state and local trends.

**Living Wage:** The cost of living in a specific community or region for one adult and no children. The cost increases with the addition of children.

**Occupation:** An occupation is a grouping of job titles that have a similar set of activities or tasks that employees perform.

**Percent Change:** Rate of growth or decline in the occupation for the projected period; this does not factor in replacement openings.

**Replacements:** Estimate of job openings resulting from workers retiring or otherwise permanently leaving an occupation. Workers entering an occupation often need training. These replacement needs, added to job openings due to growth, may be used to assess the minimum number of workers who will need to be trained for an occupation.

**Total Job Openings (New + Replacements):** Sum of projected growth (new jobs) and replacement needs. When an occupation is expected to lose jobs, or retain the current employment level, number of openings will equal replacements.

**Typical Education Requirement:** represents the typical education level most workers need to enter an occupation.

**Typical On-The-Job Training:** indicates the typical on-the-job training needed to attain competency in the skills needed in the occupation.

**Wages Family Compositions:** The living wage calculator estimates the living wage needed to support families. For single adult families, the adult is assumed to be employed full time. For two adult families where both adults are in the labor force, both adults are assumed to be employed full time. For two adult families where one adult is not in the labor force, one of the adults is assumed to be employed full time while the other non-wage-earning adult provides full-time child care for the family's children. Full-time work is assumed to be year-round, 40 hours per week for 52 weeks, per adult. Families with one child are assumed to have a 'young child' (4 years old). Families with two children are assumed to have a 'young child' and a 'child' (9 years old). Families with three children are assumed to have a 'young child,' a 'child,' and a 'teenager' (15 years old).

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## **APPENDIX B: ZIP Codes**

The 30-mile radius around Lemoore California encompasses 46 ZIP codes representing 38 cities or communities. These cities and their corresponding ZIP codes are:

Alpaugh (93201), Armona (93202), Avenal (93204), Coalinga (93210), Corcora (93212), Goshen (93227), Hanford (93230), Hanford (93232), Huron (93234), Kettleman City (93239), Laton (93242), Lemoore (93245), Lemoore (93246), Pixley (93256), Stratford (93266), Tipton (93272), Tulare (93274), Visalia (93277), Waukena (93282), Visalia (93291), Visalia (93292), Burrel (93607), Cantua (93608), Caruthers (93609), Cutler (93615), Del Rey (93616), Dinuba (93618), Five Points (93624), Fowler (93625), Helm (93627), Kerman (93630), Kingsburg (93631), Parlier (93648), Raisin City (93652), Reedley (93654), Riverdale (93656), Sanger (93657), San Joaquin (93660), Selma (93662), Sultana (93666), Traver (93673), Fresno (93702), Fresno (93706), Fresno (93721), Fresno (93725), and Fresno (93727).