

June 22, 2017



Data From



## **Industry and Economic Overview**

**Prepared for the  
Monterey County Workforce  
Development Board**



# TABLE OF CONTENT

<b>DEMOGRAPHIC PROFILE .....</b>	<b>3</b>
<b>EMPLOYMENT TRENDS.....</b>	<b>5</b>
<b>UNEMPLOYMENT RATE.....</b>	<b>5</b>
<b>WAGE TRENDS.....</b>	<b>6</b>
<b>COST OF LIVING INDEX.....</b>	<b>6</b>
<b>INDUSTRY SNAPSHOT .....</b>	<b>7</b>
<b>OCCUPATION SNAPSHOT.....</b>	<b>9</b>
<b>INDUSTRY CLUSTERS .....</b>	<b>11</b>
<b>EDUCATION LEVELS .....</b>	<b>11</b>
<b>GROSS DOMESTIC PRODUCT .....</b>	<b>12</b>
<b>FAQ .....</b>	<b>13</b>

# Demographic Profile

In 2015, the population in Monterey County, California was 435,232. Between 2005 and 2015, the region's population grew at an annual average rate of 0.8%.

The region has a civilian labor force of 193,691 with a participation rate of 59.3%. Of individuals 25 to 64 in Monterey County, California, 21.0% have a bachelor's degree or higher which compares with 31.3% in the nation.

The median household income in Monterey County, California is \$58,783 and the median house value is \$369,100.

Summary <sup>1</sup>						
	Percent			Value		
	Monterey County, California	Regional Planning Unit	USA	Monterey County, California	Regional Planning Unit	USA
<b>Demographics</b>						
Population <sup>6</sup>	—	—	—	435,232	1,438,962	323,127,513
Population Annual Average Growth <sup>6</sup>	0.8%	0.9%	0.8%	3,340	11,693	2,474,760
Median Age <sup>2,4</sup>	—	—	—	32.9	35.2	37.2
Under 18 Years <sup>4</sup>	26.7%	23.0%	24.0%	111,013	315,319	74,181,467
18 to 24 Years <sup>4</sup>	11.1%	13.5%	9.9%	46,253	185,335	30,672,088
25 to 34 Years <sup>4</sup>	15.0%	13.5%	13.3%	62,077	185,626	41,063,948
35 to 44 Years <sup>4</sup>	13.2%	12.3%	13.3%	54,820	168,125	41,070,606
45 to 54 Years <sup>4</sup>	12.8%	13.6%	14.6%	53,254	186,282	45,006,716
55 to 64 Years <sup>4</sup>	10.4%	11.8%	11.8%	43,218	161,284	36,482,729
65 to 74 Years <sup>4</sup>	5.5%	6.3%	7.0%	22,921	86,758	21,713,429
75 Years, and Over <sup>4</sup>	5.2%	6.0%	6.0%	21,501	82,242	18,554,555
Race: White <sup>4</sup>	55.6%	68.5%	72.4%	230,717	938,805	223,553,265
Race: Black or African American <sup>4</sup>	3.1%	2.2%	12.6%	12,785	29,614	38,929,319
Race: American Indian and Alaska Native <sup>4</sup>	1.3%	1.1%	0.9%	5,464	15,738	2,932,248
Race: Asian <sup>4</sup>	6.1%	4.8%	4.8%	25,258	65,542	14,674,252
Race: Native Hawaiian and Other Pacific Islander <sup>4</sup>	0.5%	0.3%	0.2%	2,071	3,615	540,013
Race: Some Other Race <sup>4</sup>	28.3%	18.6%	6.2%	117,405	254,427	19,107,368
Race: Two or More Races <sup>4</sup>	5.1%	4.6%	2.9%	21,357	63,230	9,009,073
Hispanic or Latino (of any race) <sup>4</sup>	55.4%	40.2%	16.3%	230,003	551,755	50,477,594
<b>Economic</b>						
Labor Force Participation Rate and Size (civilian population 16 years and over)	59.3%	61.3%	63.3%	193,691	691,071	158,897,824
Armed Forces Labor Force	1.9%	0.8%	0.4%	6,049	9,478	1,015,464
Veterans, Age 18-64	3.8%	3.8%	5.5%	9,845	34,300	10,750,884
Median Household Income <sup>2</sup>	—	—	—	\$58,783	\$62,520	\$53,889
Per Capita Income	—	—	—	\$24,994	\$29,488	\$28,930
Poverty Level (of all people)	17.0%	16.0%	15.5%	69,475	215,175	47,749,043
Households Receiving Food Stamps	7.1%	6.9%	13.2%	8,953	32,065	15,399,651

Summary <sup>1</sup>						
	Percent			Value		
	Monterey County, California	Regional Planning Unit	USA	Monterey County, California	Regional Planning Unit	USA
Mean Commute Time (minutes)	—	—	—	22.3	21.8	25.9
Commute via Public Transportation	2.1%	2.5%	5.1%	3,697	15,993	7,362,038
Union Membership <sup>3</sup>	14.6%	15.1%	10.7%	—	—	—
<b>Educational Attainment, Age 25-64</b>						
No High School Diploma	30.6%	21.0%	11.8%	67,077	147,294	19,736,243
High School Graduate	21.2%	18.4%	26.4%	46,518	129,251	43,982,863
Some College, No Degree	19.2%	22.6%	21.7%	41,976	158,683	36,187,232
Associate's Degree	8.0%	8.7%	8.8%	17,533	61,042	14,742,654
Bachelor's Degree	13.5%	18.7%	19.9%	29,476	131,760	33,245,950
Postgraduate Degree	7.6%	10.7%	11.4%	16,550	74,951	18,952,103
<b>Housing</b>						
Total Housing Units	—	—	—	139,794	517,769	133,351,840
Median House Value (of owner-occupied units) <sup>2</sup>	—	—	—	\$369,100	\$461,662	\$178,600
Homeowner Vacancy	1.9%	1.5%	1.9%	1,227	3,774	1,492,691
Rental Vacancy	4.2%	3.2%	6.4%	2,791	7,180	2,949,366
Renter-Occupied Housing Units (% of Occupied Units)	50.8%	46.4%	36.1%	63,655	216,321	42,214,214
Occupied Housing Units with No Vehicle Available (% of Occupied Units)	5.1%	5.6%	9.1%	6,364	26,314	10,628,474
<b>Social</b>						
Enrolled in Grade 12 (% of total population)	1.6%	1.4%	1.4%	7,019	20,162	4,451,334
Disconnected Youth <sup>5</sup>	2.6%	1.6%	3.0%	643	1,493	518,859
Children in Single Parent Families (% of all children)	36.4%	33.1%	34.8%	39,300	99,784	24,408,909
With a Disability, Age 18-64	6.8%	7.1%	10.3%	17,014	62,340	19,985,588
With a Disability, Age 18-64, Labor Force Participation Rate and Size	40.8%	41.5%	41.0%	6,940	25,841	8,185,456
Foreign Born	30.1%	21.8%	13.2%	128,986	307,900	41,717,420
Speak English Less Than Very Well (population 5 yrs and over)	28.8%	18.1%	8.6%	113,939	239,244	25,410,756

Source: [JobsEQ®](#)

1. ACS 2011-2015, unless noted otherwise

2. Median values for certain aggregate regions (such as MSAs) may be estimated as the weighted averages of the median values from the composing counties.

3. 2016; Current Population Survey, unionstats.com, and Chmura; county- and zip-level data are best estimates based upon industry-, MSA-, and state-level data

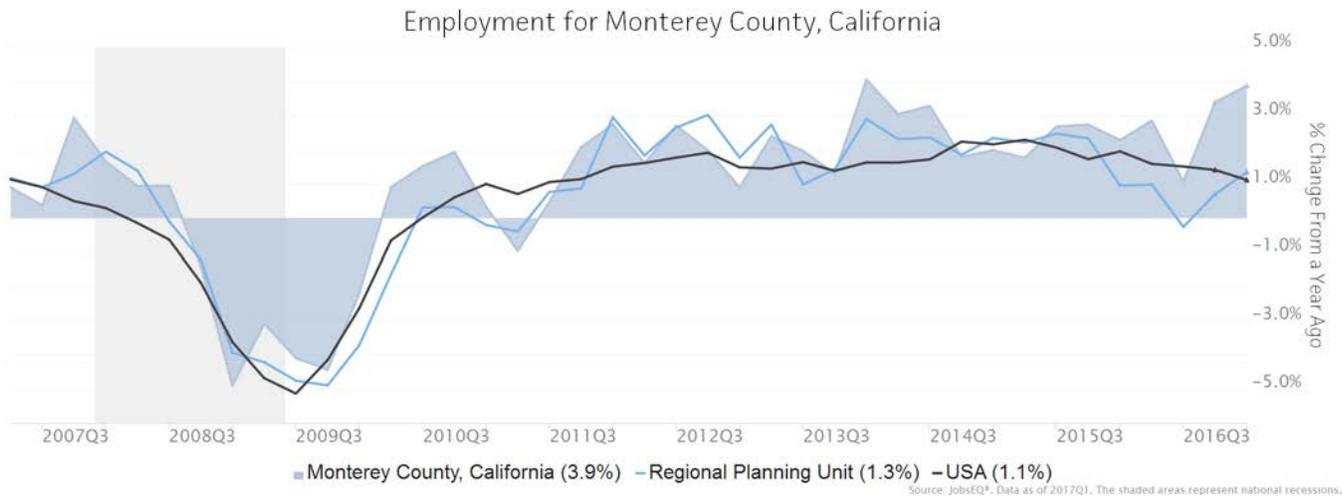
4. Census 2010

5. Disconnected Youth are 16-19 year olds who are (1) not in school, (2) not high school graduates, and (3) either unemployed or not in the labor force.

6. Census 2016, annual average growth rate since 2006

# Employment Trends

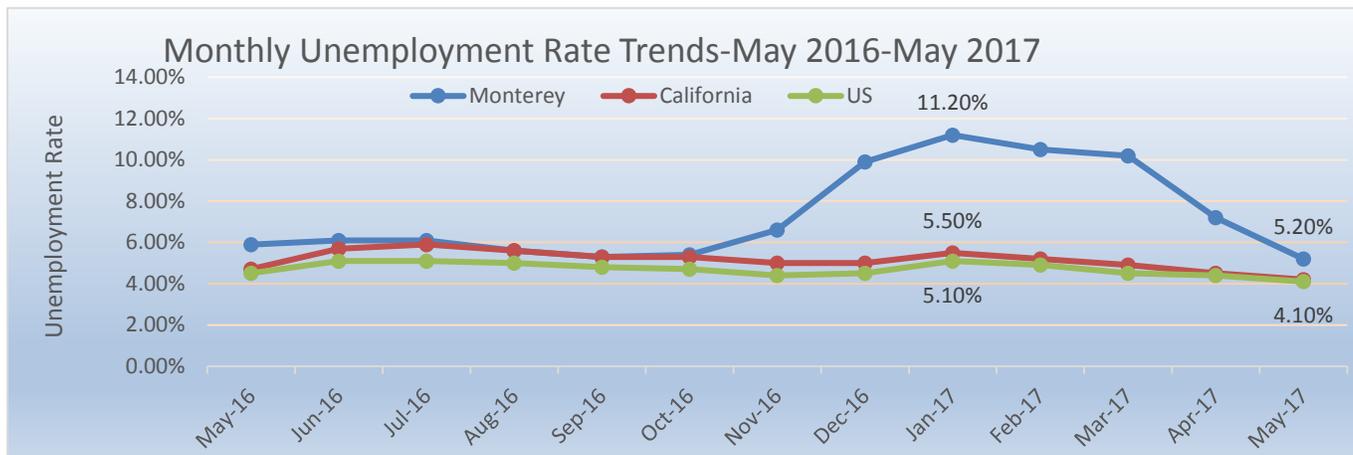
As of 2017Q1, total employment for Monterey County, California was 200,999 (based on a four-quarter moving average). Over the year ending 2017Q1, employment increased 3.9% in the region.



Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2016Q3 with preliminary estimates updated to 2017Q1.

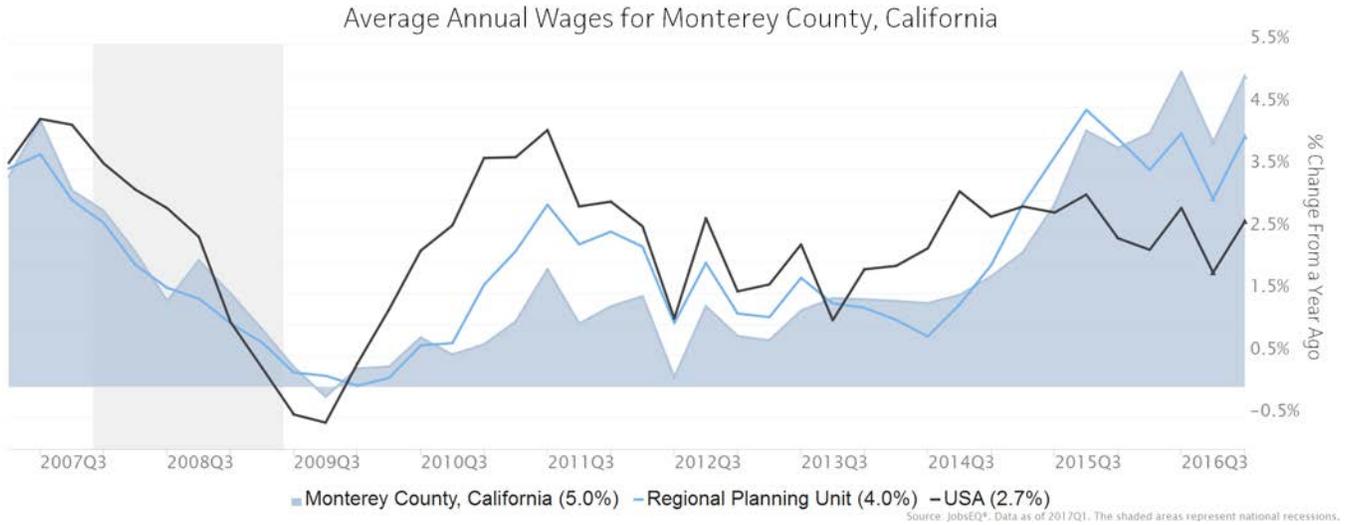
# Unemployment Rate

The unemployment rate in the Monterey County was 5.2 percent (11,600 unemployed) in May 2017, down from a revised 7.1 percent in April 2017, and below the year-ago estimate of 6.0 percent. This compares with an unadjusted unemployment rate of 4.2 percent for California and 4.1 percent for the nation during the same period



# Wage Trends

The average worker in Monterey County, California earned annual wages of \$47,971 as of 2017Q1. Average annual wages per worker increased 5.0% in the region during the preceding four quarters. For comparison purposes, annual average wages were \$53,246 in the nation as of 2017Q1.



Annual average wages per worker data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2016Q3 with preliminary estimates updated to 2017Q1.

# Cost of Living Index

The Cost of Living Index estimates the relative price levels for consumer goods and services. When applied to wages and salaries, the result is a measure of relative purchasing power. The cost of living is 33.1% higher in Monterey County, California than the U.S. average.

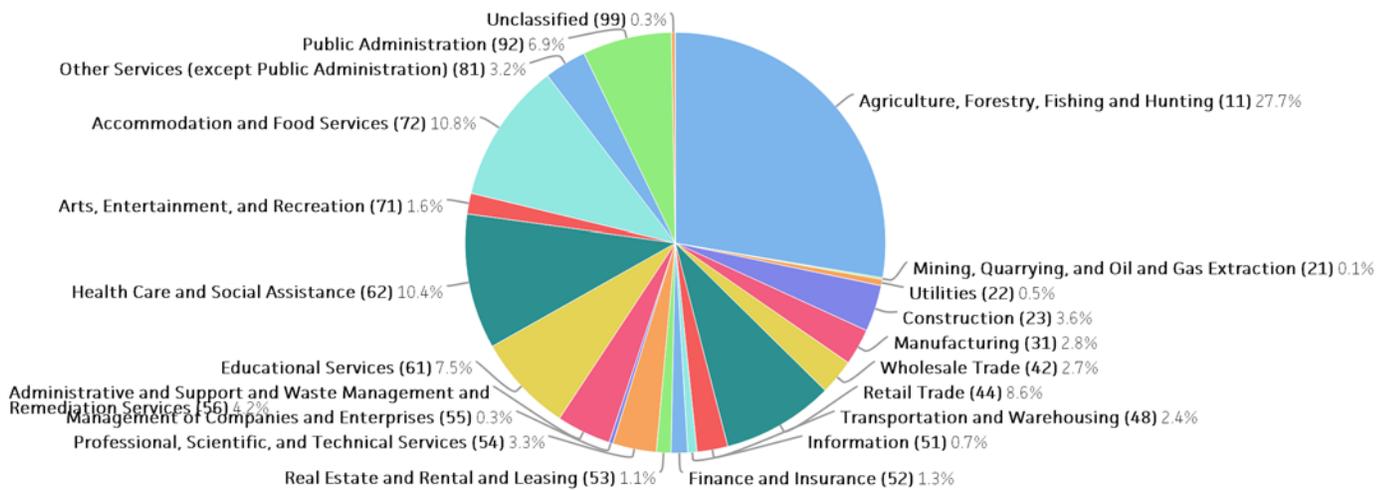
Cost of Living Information			
	Annual Average Salary	Cost of Living Index (Base US)	US Purchasing Power
Monterey County, California	\$47,971	133.1	\$36,051
Regional Planning Unit	\$49,020	144.0	\$34,050
USA	\$53,246	100.0	\$53,246

Source: [JobsEQ®](#)  
 Data as of 2017Q1  
 Cost of Living per C2ER, data as of 2016q4, imputed by Chmura where necessary.

# Industry Snapshot

The largest sector in Monterey County, California is Agriculture, Forestry, Fishing and Hunting, employing 55,587 workers. The next-largest sectors in the region are Accommodation and Food Services (21,734 workers) and Health Care and Social Assistance (20,823). High location quotients (LQs) indicate sectors in which a region has high concentrations of employment compared to the national average. The sectors with the largest LQs in the region are Agriculture, Forestry, Fishing and Hunting (LQ = 19.13), Public Administration (1.44), and Accommodation and Food Services (1.21). (Data is at the 2 Digit Industry Code)

Total Workers for Monterey County, California by Industry



Source: JobsEQ\*, Data as of 2017Q1

Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2016Q3 with preliminary estimates updated to 2017Q1.

Sectors in Monterey County, California with the highest average wages per worker are Mining, Quarrying, and Oil and Gas Extraction (\$106,015), Utilities (\$105,833), and Management of Companies and Enterprises (\$94,745). Regional sectors with the best job growth (or most moderate job losses) over the last 5 years are Agriculture, Forestry, Fishing and Hunting (+7,854 jobs), Health Care and Social Assistance (+4,663), and Accommodation and Food Services (+3,179).

Over the next 3 years, employment in Monterey County, California is projected to expand by 5,519 jobs. The fastest growing sector in the region is expected to be Health Care and Social Assistance with a +2.1% year-over-year rate of growth. The strongest forecast by number of jobs over this period is expected for Health Care and Social Assistance (+1,315 jobs), Agriculture, Forestry, Fishing and Hunting (+995), and Accommodation and Food Services (+638).

		Current			Historical				Forecast		
		Four Quarters Ending with 2017q1			Total Change over the Last 5 Years	Average Annual % Change in Employment 2012q1-2017q1			Over the Next 3 Years		
NAICS	Industry	Empl	Avg. Annual Wages	Location Quotient	Empl	Monterey County, California	Regional Planning Unit	USA	Total Approx Repl Demand	Total Growth Demand	Avg. Annual Growth Percent
11	Agriculture, Forestry, Fishing and Hunting	55,587	\$43,263	19.13	7,854	3.1%	2.4%	0.8%	5,903	995	0.6%
21	Mining, Quarrying, and Oil and Gas Extraction	256	\$106,015	0.32	39	3.4%	-4.5%	-4.5%	19	8	1.0%
22	Utilities	980	\$105,833	0.91	172	3.9%	0.9%	0.1%	76	23	0.8%
23	Construction	7,171	\$54,361	0.65	1,990	6.7%	4.9%	3.1%	429	339	1.6%
31	Manufacturing	5,645	\$51,886	0.34	-240	-0.8%	2.2%	0.9%	394	12	0.1%
42	Wholesale Trade	5,509	\$76,892	0.70	420	1.6%	1.8%	1.0%	367	121	0.7%
44	Retail Trade	17,308	\$33,157	0.80	575	0.7%	1.0%	1.4%	1,621	423	0.8%
48	Transportation and Warehousing	4,757	\$52,516	0.57	903	4.3%	2.8%	2.5%	379	71	0.5%
51	Information	1,404	\$58,669	0.35	-441	-5.3%	1.4%	0.8%	102	1	0.0%
52	Finance and Insurance	2,547	\$85,146	0.32	-176	-1.3%	-1.1%	1.1%	182	67	0.9%
53	Real Estate and Rental and Leasing	2,262	\$55,517	0.67	111	1.0%	1.6%	1.9%	152	59	0.9%
54	Professional, Scientific, and Technical Services	6,732	\$70,455	0.51	-180	-0.5%	0.4%	2.6%	424	307	1.5%
55	Management of Companies and Enterprises	630	\$94,745	0.21	-684	-13.7%	-2.3%	3.0%	40	16	0.8%
56	Administrative and Support and Waste Management and Remediation Services	8,413	\$34,341	0.65	2,603	7.7%	-1.2%	2.7%	573	314	1.2%
61	Educational Services	15,122	\$52,844	0.91	2,684	4.0%	0.2%	0.7%	954	312	0.7%
62	Health Care and Social Assistance	20,823	\$55,781	0.73	4,663	5.2%	4.6%	2.5%	1,230	1,315	2.1%
71	Arts, Entertainment, and Recreation	3,209	\$36,770	0.81	387	2.6%	2.6%	2.3%	296	110	1.1%
72	Accommodation and Food Services	21,734	\$27,194	1.21	3,179	3.2%	3.9%	3.0%	2,305	638	1.0%
81	Other Services (except Public Administration)	6,522	\$33,884	0.73	-1,773	-4.7%	-2.1%	-0.1%	495	175	0.9%
92	Public Administration	13,786	\$74,090	1.44	-91	-0.1%	0.3%	0.0%	1,002	142	0.3%
99	Unclassified	604	\$33,518	1.49	265	12.3%	10.5%	13.0%	45	17	0.9%
	Total - All Industries	200,999	\$47,971	1.00	22,261	2.4%	1.8%	1.7%	14,872	5,519	0.9%

Source: [JobsEQ®](#)

Employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and imputed where necessary. Data are updated through 2016Q3 with preliminary estimates updated to 2017Q1. Forecast employment growth uses national projections adapted for regional growth patterns.

# Occupation Snapshot

The largest major occupation group in Monterey County, California is Farming, Fishing, and Forestry Occupations, employing 42,737 workers. The next-largest occupation groups in the region are Office and Administrative Support Occupations (21,803 workers) and Food Preparation and Serving Related Occupations (17,502). High location quotients (LQs) indicate occupation groups in which a region has high concentrations of employment compared to the national average. The major groups with the largest LQs in the region are Farming, Fishing, and Forestry Occupations (LQ = 32.15), Education, Training, and Library Occupations (1.21), and Management Occupations (1.07).

Occupation groups in Monterey County, California with the highest average wages per worker are Healthcare Practitioners and Technical Occupations (\$105,800), Management Occupations (\$98,500), and Architecture and Engineering Occupations (\$94,800). The unemployment rate in the region varied among the major groups from 2.1% among Healthcare Practitioners and Technical Occupations to 17.6% among Farming, Fishing, and Forestry Occupations.

Over the next 3 years, the fastest growing occupation group in Monterey County, California is expected to be Healthcare Support Occupations with a +2.2% year-over-year rate of growth. The strongest forecast by number of jobs over this period is expected for Farming, Fishing, and Forestry Occupations (+802 jobs) and Food Preparation and Serving Related Occupations (+525). Over the same period, the highest replacement demand (occupation demand due to retirements and workers moving from one occupation to another) is expected in Farming, Fishing, and Forestry Occupations (3,434 jobs) and Food Preparation and Serving Related Occupations (2,043).

Occupation Snapshot in Monterey County, California														
		Current					Historical				Forecast			
		Four Quarters Ending with 2017q1			2017q1		Total Change over the Last 5 Years	Avg Ann % Chg in Empl 2012q1-2017q1			Over the Next 3 Years			
SOC	Title	Empl	Avg. Annual Wages <sup>1</sup>	LQ	Unempl	Unempl Rate		Empl	Monterey County, California	Regional Planning Unit	USA	Current Online Job Ads <sup>2</sup>	Total Repl Demand	Total Growth Demand
11-0000	Management Occupations	13,079	\$98,500	1.07	348	2.8%	1,063	1.7%	1.4%	1.6%	438	1,642	184	0.5%
13-0000	Business and Financial Operations Occupations	6,216	\$80,100	0.60	396	6.3%	106	0.3%	0.6%	1.7%	251	406	209	1.1%
15-0000	Computer and Mathematical Occupations	2,408	\$87,500	0.41	162	5.7%	-56	-0.5%	1.9%	2.6%	385	109	107	1.5%
17-0000	Architecture and Engineering Occupations	1,571	\$94,800	0.46	85	4.9%	91	1.2%	0.0%	1.1%	22	116	34	0.7%
19-0000	Life, Physical, and Social Science Occupations	1,656	\$82,500	0.99	73	4.7%	121	1.5%	-0.7%	1.2%	140	165	47	0.9%
21-0000	Community and Social Service Occupations	2,472	\$47,200	0.77	63	2.7%	743	7.4%	3.5%	1.9%	163	159	116	1.5%
23-0000	Legal Occupations	1,010	\$84,500	0.61	30	3.1%	-28	-0.6%	0.0%	0.4%	12	60	30	1.0%

### Occupation Snapshot in Monterey County, California

		Current					Total Change over the Last 5 Years	Historical			Forecast				
		Four Quarters Ending with 2017q1			2017q1			Empl	Avg Ann % Chg in Empl 2012q1-2017q1			Over the Next 3 Years			
SOC	Title	Empl	Avg. Annual Wages <sup>1</sup>	LQ	Unempl	Unempl Rate			Monterey County, California	Regional Planning Unit	USA	Current Online Job Ads <sup>2</sup>	Total Repl Demand	Total Growth Demand	Avg. Annual Growth Percent
25-0000	Education, Training, and Library Occupations	13,783	\$65,800	1.21	424	3.4%	2,427	3.9%	1.2%	0.8%	528	877	329	0.8%	
27-0000	Arts, Design, Entertainment, Sports, and Media Occupations	2,359	\$54,700	0.65	141	6.0%	-44	-0.4%	0.1%	1.3%	129	253	53	0.7%	
29-0000	Healthcare Practitioners and Technical Occupations	7,766	\$105,800	0.68	154	2.1%	670	1.8%	1.7%	1.7%	802	498	423	1.8%	
31-0000	Healthcare Support Occupations	3,385	\$35,700	0.60	299	8.4%	532	3.5%	3.4%	2.2%	187	213	232	2.2%	
33-0000	Protective Service Occupations	4,256	\$59,200	0.98	335	7.9%	10	0.0%	0.7%	1.0%	224	309	101	0.8%	
35-0000	Food Preparation and Serving Related Occupations	17,502	\$30,000	1.02	2,622	13.4%	2,785	3.5%	3.9%	2.9%	699	2,043	525	1.0%	
37-0000	Building and Grounds Cleaning and Maintenance Occupations	7,476	\$33,100	1.06	1,283	14.9%	-10	0.0%	-0.1%	1.0%	274	529	241	1.1%	
39-0000	Personal Care and Service Occupations	5,754	\$29,000	0.74	507	8.2%	478	1.7%	3.3%	2.1%	263	468	285	1.6%	
41-0000	Sales and Related Occupations	16,196	\$41,000	0.78	1,464	8.7%	646	0.8%	1.2%	1.4%	1,197	1,618	381	0.8%	
43-0000	Office and Administrative Support Occupations	21,803	\$39,700	0.73	2,153	9.4%	1,690	1.6%	1.2%	1.7%	820	1,475	416	0.6%	
45-0000	Farming, Fishing, and Forestry Occupations	42,737	\$26,200	32.15	8,147	17.6%	6,315	3.2%	2.7%	1.4%	11	3,434	802	0.6%	
47-0000	Construction and Extraction Occupations	5,984	\$55,500	0.67	1,233	16.6%	1,439	5.7%	3.7%	2.3%	93	331	269	1.5%	
49-0000	Installation, Maintenance, and Repair Occupations	6,190	\$48,100	0.81	461	7.2%	801	2.8%	2.3%	1.6%	263	460	216	1.2%	
51-0000	Production Occupations	5,776	\$36,400	0.47	786	11.4%	570	2.1%	1.7%	1.3%	140	478	118	0.7%	
53-0000	Transportation and Material Moving Occupations	11,621	\$36,500	0.86	1,628	12.7%	1,912	3.7%	2.2%	2.2%	298	885	370	1.0%	
00-0000	Total - All Occupations	200,999	\$47,000	1.00	n/a	n/a	22,261	2.4%	1.8%	1.7%	7,339	16,528	5,519	0.9%	

Source: [JobsEQ®](#)

Data as of 2017Q1 unless noted otherwise

Note: Figures may not sum due to rounding.

1. Occupation wages are as of 2016 and should be taken as the average for all Covered Employment

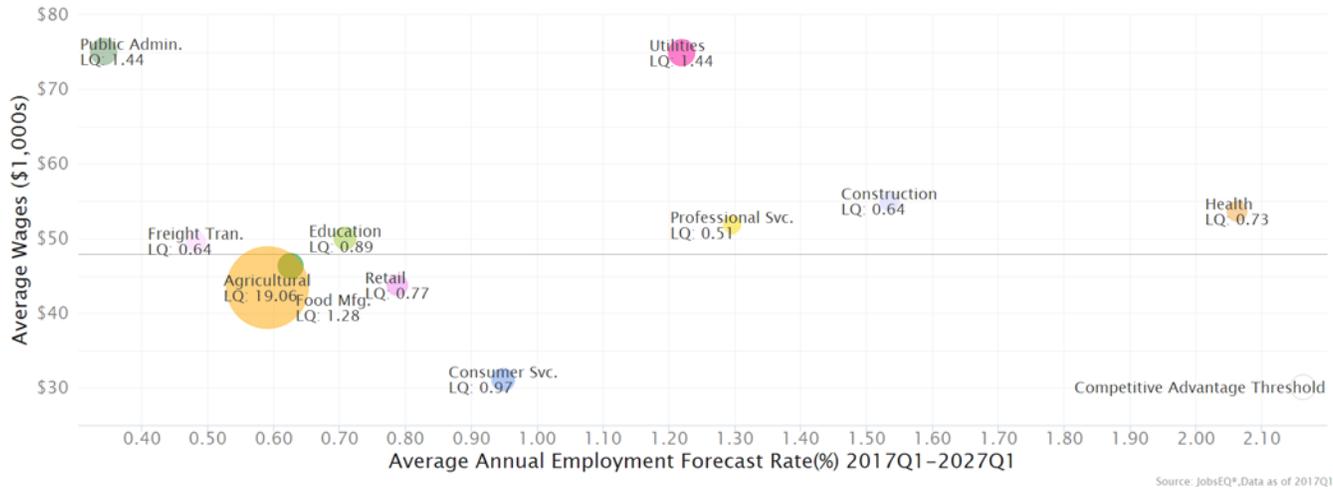
2. Data represent found online ads active within the last thirty days in any zip code intersecting or within the selected region; data represents a sampling rather than the complete universe of postings.

Occupation employment data are estimated via industry employment data and the estimated industry/occupation mix. Industry employment data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics and currently updated through 2016Q3, imputed where necessary with preliminary estimates updated to 2017Q1. Wages by

# Industry Clusters

A cluster is a geographic concentration of interrelated industries or occupations. The industry cluster in Monterey County, California with the highest relative concentration is Agricultural with a location quotient of 19.06. This cluster employs 55,708 workers in the region with an average wage of \$43,477. Employment in the Agricultural cluster is projected to expand in the region about 0.6% per year over the next ten years.

Industry Clusters for Monterey County, California as of 2017Q1

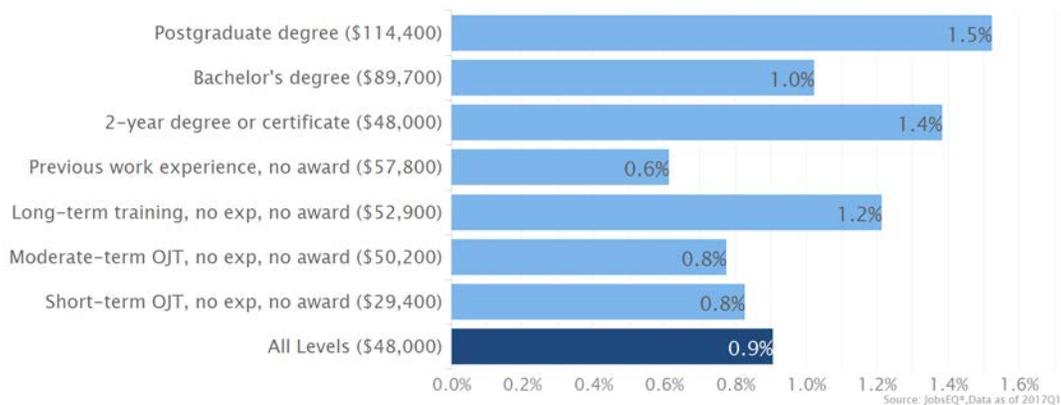


Location quotient and average wage data are derived from the Quarterly Census of Employment and Wages, provided by the Bureau of Labor Statistics, imputed where necessary, and updated through 2016Q3 with preliminary estimates updated to 2017Q1. Forecast employment growth uses national projections from the Bureau of Labor Statistics adapted for regional growth patterns.

# Education Levels

Expected growth rates for occupations vary by the education and training required. While all employment in Monterey County, California is projected to grow 0.9% over the next ten years, occupations typically requiring a postgraduate degree are expected to grow 1.5% per year, those requiring a bachelor's degree are forecast to grow 1.0% per year, and occupations typically needing a 2-year degree or certificate are expected to grow 1.4% per year.

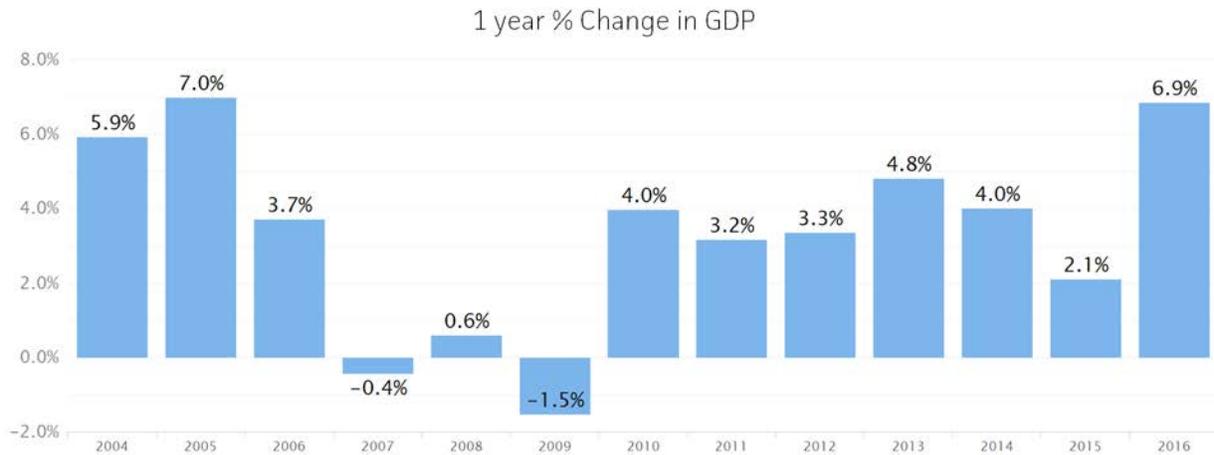
Annual Average Projected Job Growth by Training Required for Monterey County, California



Employment by occupation data are estimates as of 2017Q1. Education levels of occupations are based on BLS assignments. Forecast employment growth uses national projections from the Bureau of Labor Statistics adapted for regional growth patterns.

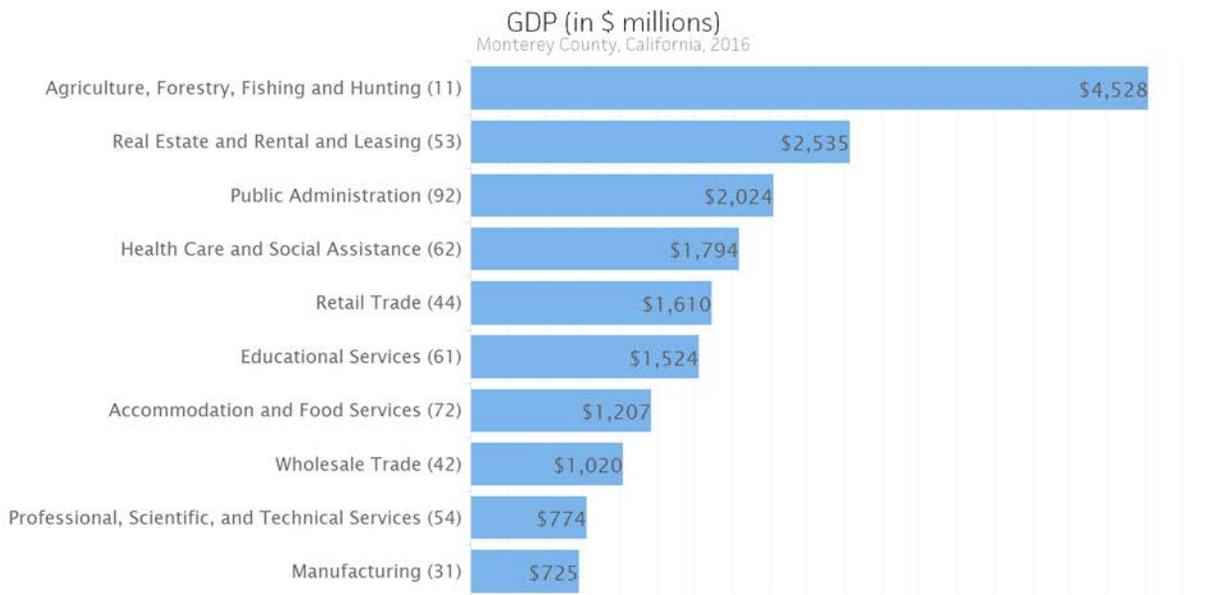
# Gross Domestic Product

Gross Domestic Product (GDP) is the total value of goods and services produced by a region. In 2016, nominal GDP in Monterey County, California expanded 6.9%. This follows growth of 2.1% in 2015. As of 2016, total GDP in Monterey County, California was \$21,449,870,000.



Gross Domestic Product data are provided by the Bureau of Economic Analysis, imputed by Chmura where necessary, updated through 2016.

Of the sectors in Monterey County, California, Agriculture, Forestry, Fishing and Hunting contributed the largest portion of GDP in 2016, \$4,528,253,000. The next-largest contributions came from Real Estate and Rental and Leasing (\$2,534,926,000); Public Administration (\$2,023,980,000); and Health Care and Social Assistance (\$1,793,624,000).



Gross Domestic Product data are provided by the Bureau of Economic Analysis, imputed by Chmura where necessary, updated through 2016.

# FAQ

## What is a location quotient?

A location quotient (LQ) is a measurement of concentration in comparison to the nation. An LQ of 1.00 indicates a region has the same concentration of an industry (or occupation) as the nation. An LQ of 2.00 would mean the region has twice the expected employment compared to the nation and an LQ of 0.50 would mean the region has half the expected employment in comparison to the nation.

## What is replacement demand?

Replacement demand is the number of jobs required due to replacements—retirements and turnover resulting from workers moving from one occupation into another. Note that replacement demand does not include all turnover—it does not include when workers stay in the same occupation but switch employers. The replacement demand shown in this report may also be understated; thus, it can be taken to be a minimum measure of the number of workers who will need to be trained for the occupation due to replacements. The total projected demand for an occupation is the sum of the replacement demand and the growth demand (which is the increase or decrease of jobs in an occupation expected due to expansion or contraction of the overall number of jobs in that occupation).

## What is a cluster?

A cluster is a geographic concentration of interrelated industries or occupations. If a regional cluster has a location quotient of 1.25 or greater, the region is considered to possess a *competitive advantage* in that cluster.

## What is the difference between industry wages and occupation wages?

Industry wages and occupation wages are estimated via separate data sets, often the time periods being reported do not align, and wages are defined slightly differently in the two systems (for example, certain bonuses are included in the industry wages but not the occupation wages). It is therefore common that estimates of the average industry wages and average occupation wages in a region do not match exactly.

## What is NAICS?

The North American Industry Classification System (NAICS) is used to classify business establishments according to the type of economic activity. The NAICS Code comprises six levels, from the “all industry” level to the 6-digit level. The first two digits define the top level category, known as the “sector,” which is the level examined in this report.

## What is SOC?

The Standard Occupational Classification system (SOC) is used to classify workers into occupational categories. All workers are classified into one of over 820 occupations according to their occupational definition. To facilitate classification, occupations are combined to form 23 major groups, 96 minor groups, and 449 occupation groups. Each occupation group includes detailed occupations requiring similar job duties, skills, education, or experience.

## About This Report

This report and all data herein were produced by JobsEQ®, a product of Chmura Economics & Analytics. The information contained herein was obtained from sources we believe to be reliable. However, we cannot guarantee its accuracy and completeness.