

Occupation Report

Health Science (CTE Cluster)

Sacramento-Roseville-Folsom, CA MSA

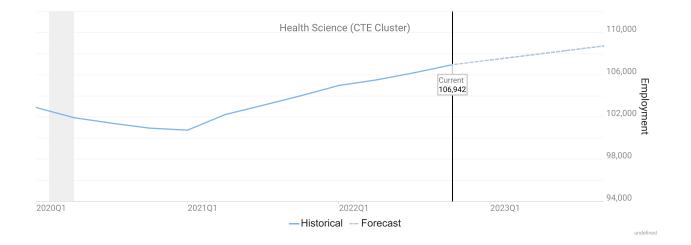


Occupation Snapshot	3
Employment by Industry	4
Wages	5
Occupation Demographics	6
Education Profile	7
Postsecondary Programs Linked to Health Science (CTE Cluster)	8
RTI (Job Postings)	9
Top Skill and Certification Gaps	13
Occupation Gaps	14
Geographic Distribution	15
Sacramento-Roseville-Folsom, CA MSA Regional Map	17
Data Notes	
Region Definition	
FAQ	



Occupation Snapshot

6-Digit Occupation	Empl	Avg Mean Wages	LQ	3-Year Empl Change	Annual Demand	Forecast Ann Growth
Registered Nurses	22,999	\$143,600	1.06	1,527	1,617	1.1%
Home Health Aides	11,647	\$33,600	1.75	-1,615	1,819	3.1%
Medical Secretaries and Administrative Assistants	6,427	\$49,600	1.38	471	852	1.2%
Nursing Assistants	6,422	\$42,700	0.70	-182	1,071	1.1%
Medical Assistants	6,226	\$55,100	1.18	578	1,066	2.2%
Licensed Practical and Licensed Vocational Nurses	4,717	\$70,100	1.05	-302	453	1.2%
Medical and Health Services Managers	3,589	\$148,400	1.12	324	425	3.1%
Dental Assistants	3,312	\$49,500	1.32	-26	541	1.3%
Pharmacy Technicians	2,342	\$54,600	0.77	190	245	1.1%
Pharmacists	2,018	\$154,700	0.91	130	91	0.5%
Remaining Component Occupations	37,241	\$126,700	0.98	3,495	3,374	1.6%
Health Science (CTE Cluster)	106,942	\$101,100	1.06	4,593	11,594	1.7%



"Annual Demand" is the projected need for new entrants into an occupation. New entrants are needed due to expected growth and to replace workers who left the occupation due to factors such as retirement or switching careers.

"Forecast Ann Growth" is the expected change in jobs due to national, long-term trend projections (per the BLS) as well as local factors such as industry mix and population growth (as computed and modeled by Chmura).



Employment by Industry

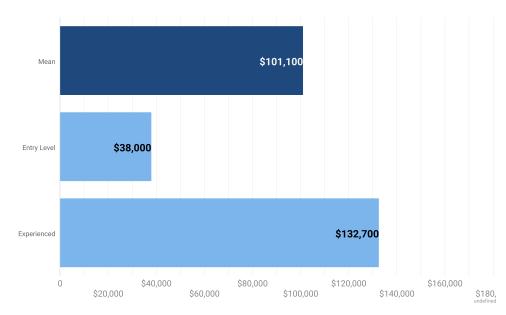
Industry Title	% of Occ Empl	Empl	10-Year Separations	10-Year Empl Growth	10-Year Total Demand
General Medical and Surgical Hospitals	24.4%	26,122	20,132	2,806	22,938
Outpatient Care Centers	13.6%	14,515	13,075	3,860	16,935
Offices of Physicians	10.9%	11,603	10,237	1,960	12,198
Individual and Family Services	10.1%	10,767	13,807	4,266	18,073
Offices of Dentists	6.6%	7,085	7,551	1,003	8,554
Nursing Care Facilities (Skilled Nursing Facilities)	3.8%	4,081	4,468	135	4,603
Offices of Other Health Practitioners	3.6%	3,834	3,409	950	4,359
Home Health Care Services	3.2%	3,458	3,468	882	4,350
Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	2.5%	2,689	3,333	606	3,939
Other Professional, Scientific, and Technical Services	2.4%	2,616	3,288	702	3,989
Health and Personal Care Retailers	1.9%	2,037	1,679	88	1,767
Executive, Legislative, and Other General Government Support	1.8%	1,952	1,668	41	1,708
Employment Services	1.3%	1,439	1,349	135	1,483
Colleges, Universities, and Professional Schools	1.1%	1,197	934	177	1,111
Elementary and Secondary Schools	1.1%	1,197	865	146	1,012
Administration of Human Resource Programs	1.1%	1,145	970	17	987
Justice, Public Order, and Safety Activities	1.0%	1,074	905	38	944
Administration of Environmental Quality Programs	1.0%	1,060	879	11	890
Administration of Economic Programs	0.9%	968	808	7	816
Medical and Diagnostic Laboratories	0.9%	929	862	172	1,033
All Others	6.7%	7,173	6,308	1,235	7,542

The industry distribution indicates the industries in which workers in the occupation(s) are primarily found.

"10-Year Empl Growth" may show industries with positive as well as negative growth; this would indicate that the occupation(s) being examined are expected to expand within some industries while contracting in others.



Wages



Occupation	Mean	Median	Entry Level	Experienced
Oral and Maxillofacial Surgeons	\$462,000	\$363,900	\$188,300	\$598,900
Emergency Medicine Physicians	\$460,800	\$381,300	\$209,700	\$586,400
Orthopedic Surgeons, Except Pediatric	\$454,300	\$354,400	\$185,300	\$588,700
Pediatric Surgeons	\$430,700	\$315,800	\$183,900	\$554,100
Ophthalmologists, Except Pediatric	\$400,700	\$303,200	\$180,300	\$510,800
Surgeons, All Other	\$395,300	\$270,700	\$126,000	\$530,000
Radiologists	\$388,100	\$265,500	\$144,900	\$509,600
Cardiologists	\$386,100	\$357,300	\$218,500	\$469,900
Anesthesiologists	\$357,600	\$283,400	\$166,000	\$453,500
Obstetricians and Gynecologists	\$348,200	\$292,300	\$162,700	\$440,900

Occupation wages here utilize BLS OEWS data, imputed and brought forward by Chmura.

When this report is run for an occupation group, the table above displays up to the top ten detailed occupations which have the highest average wages within the occupation group.



Occupation Demographics

Age			
8.0% 25.4%	23.2%	21.5%	16.3% 4.9%
16 to 19 years (0.6%) 20 to 24 years (8.0%)	25 to 34 years (25.4%) 35 to 44 years (23.2%)	45 to 54 years (21.5%) 55 to 64 years (16.3%) 65 years and over (4.9%)	
Race			
	62.0%	9.1% 2	0.3% 6.9%
White (62.0%) Black (9.1%)	American Indian (0.4%) Asian (20.3%)	Pacific Islander (1.1%) Two or More Races (6.9%)
Ethnicity			
	83.7%		16.3%
Non-Hispanic/Latino (83.7%)	Hispa	nic or Latino (of any race) (16.3%)	
Gender			
20.3%		79.7%	
Male (20.3%)	Femal	le (79.7%)	
Education and Training Requirements			
14.1% 8.8%	32.5%	28.0%	16.1%

14.170	0.070	52.570		10.1%
Short-term OJT, no exp, n	o award (14.1%)	Long-term training, no exp, no award (0.5%)) 2-year degree or certificate (32.	5%)
Moderate-term OJT, no ex	kp, no award (8.8%	Previous work experience, no award (0.0%)) Bachelor's degree (28.0%)	
			Postgraduate degree (16.1%)	



Education Profile

Educational Attainment

12.0%	17.0%		27.3%	9.1%	11.9%
< High School (2.6%)High School (12.0%)		Some College (17.0%) Two-Year (20.1%)	Four-Year (27.3%) Master's (9.1%) PhD (11.9%)		
Occupation			Typical Entry-Level Education	Previous Work Experience	Typical On-the Job Training
Registered Nurses	5		Bachelor's degree	None	None
Home Health Aide	25		High school diploma or equivalent	None	Short-term on the-job training
Medical Secretario	es and Administrative	Assistants	High school diploma or equivalent	None	Moderate-tern on-the-job training
Nursing Assistants	5		Postsecondary non- degree award	None	None
Medical Assistant	S		Postsecondary non- degree award	None	None
Licensed Practical	and Licensed Vocatic	onal Nurses	Postsecondary non- degree award	None	None
Medical and Healt	th Services Managers		Bachelor's degree	Less than 5 years	None
Dental Assistants			Postsecondary non- degree award	None	None
Pharmacy Technic	cians		High school diploma or equivalent	None	Moderate-tern on-the-job training
Pharmacists			Doctoral or professional degree	None	None

The stacked bar chart here illustrates the estimated mix of educational attainment of the workers in this occupation(s) in aggregate.

The table indicates typical education and training requirements rather than the mix of attainment of workers in such positions.



Postsecondary Programs Linked to Health Science (CTE Cluster)

Program	Awards
California State University-Sacramento	
Communication Sciences and Disorders, General	161
Registered Nursing/Registered Nurse	316
Carrington College-Sacramento	
Dental Assisting/Assistant	147
Licensed Practical/Vocational Nurse Training	213
Medical Administrative/Executive Assistant and Medical Secretary	81
Medical Insurance Specialist/Medical Biller	266
Medical/Clinical Assistant	100
National Career Education	
Medical Office Assistant/Specialist	72
UEI College-Sacramento	
Medical/Clinical Assistant	204
University of California-Davis	
Veterinary Medicine	135

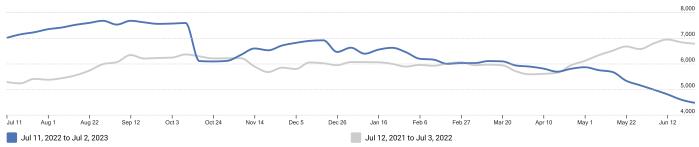
The number of graduates from postsecondary programs in the region identifies the pipeline of future workers as well as the training capacity to support industry demand.

Among postsecondary programs at schools located in the Sacramento-Roseville-Folsom, CA MSA, the sampling above identifies those most linked to Health Science (CTE Cluster). For a complete list see JobsEQ®, http://www.chmuraecon.com/jobseq



RTI (Job Postings)

Active Job Ads by Date



Online job ads are a timely indicator of local demand. Occupation assignments shown below are made by Chmura based upon analysis of job titles and job descriptions. Top employers and listed job requirements are shown on the following pages.

	Occupations		
SOC	Occupation	Active Job Ads	
29-1141.00	Registered Nurses	7,487	
11-9111.00	Medical and Health Services Managers	2,926	
43-6013.00	Medical Secretaries and Administrative Assistants	1,820	
29-2061.00	Licensed Practical and Licensed Vocational Nurses	1,657	
31-1131.00	Nursing Assistants	1,387	
29-1127.00	Speech-Language Pathologists	1,043	
31-9092.00	Medical Assistants	1,012	
29-2034.00	Radiologic Technologists and Technicians	1,001	
29-1071.00	Physician Assistants	982	
29-2052.00	Pharmacy Technicians	908	



Locations

	Active Job	
Location	Ads	
Sacramento, California	6,322	
University of California Davis	3,413	
Roseville, California	1,398	
University of California Davis Health System	960	
Carmichael, California	571	
Folsom, California	477	
Davis, California	471	
Placerville, California 95667	363	
Elk Grove, California	326	
Sacramento, CA 95825	326	

Employers

	Active
Employer Name	Job Ads
Sacramento, California	3,346
Kaiser Permanente	1,444
Fusion Medical Staffing	1,274
Davis, California	1,002
Sutter Health	678
Cynet Health	516
PACIFIC DENTAL SERVICES	450
Procare Therapy	442
SunBelt Staffing	391
University of California, Davis	382



Hard Skills

	Active Job
Skill Name	Ads
Medical Terminology	2,770
Microsoft Excel	1,710
Microsoft Office	1,559
Ability to Lift 21-30 lbs.	1,506
Ability to Lift 51-100 lbs.	1,500
Epic Systems	1,411
Critical Care	1,238
Pediatrics	1,232
Nursing	1,081
Patient Care	967

Job Titles

	Active
Job Title	Job Ads
Registered Nurse	527
Registered Nurse (RN)	216
Pharmacy Technician	209
Medical Assistant	191
Behavior Technician	176
Registered Dental Hygienist	171
Registered Dental Assistant	141
ER RN	123
Telemetry RN	120
Certified Nursing Assistant	115



Education Levels

Minimum Education Level	Active Job Ads
High school diploma or equivalent	4,989
Bachelor's degree	4,589
Master's degree	1,553
Associate's degree	1,173
Doctoral or professional degree	593
Unspecified/other	22,559

Programs

Program Name	Active Job Ads
Nursing	2,865
Pharmacy	427
Speech-Language Pathology	418
Physical Therapy	358
Psychology	341
Nursing Practice	338
Biology	302
Science	217
Occupational Therapy	193
Physician Assistant	191



Top Skill and Certification Gaps

Top 10 Skill Gaps in Sacramento-Roseville-Folsom, CA MSA

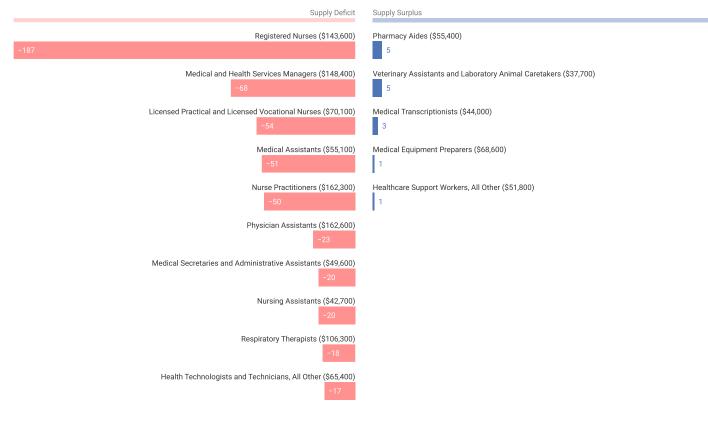
Name	Candidates	Openings	Gap
Medical Terminology	841	1,102	-262
Pharmacology	34	227	-193
Insurance Billing	82	262	-179
Caregiving	221	397	-176
Risk Management	11	171	-160
Cash Registers	123	281	-158
Telecommunications	12	168	-156
ICD-10	56	211	-155
Physiology	74	210	-136
Electronic Medical Record System (EMR System)	148	278	-130

Top 10 Certification Gaps in Sacramento-Roseville-Folsom, CA MSA			
Name	Candidates	Openings	Gap
Phlebotomy Technician (NCPT)	11	220	-209
Licensed Practical Nurse (LPN)	28	150	-122
Medical Assistant Certification (MA)	359	434	-75
First Aid Certification	128	198	-69
National Phlebotomy Association Certified Phlebotomist	59	96	-36
Certified Radiologic Technologist (CRT)	10	31	-21
Medication Aide Certification (MACE)	0	20	-20
Certified Home Health Aide	148	162	-15
Certified Phlebotomy Technician (CPT)	30	44	-15
Occupational Therapist Registered (OTR)	11	23	-12

Skill and certifications gaps can help inform employee development programs, as well as provide a comparison of the needs of regional employers to the supply.



Occupation Gaps

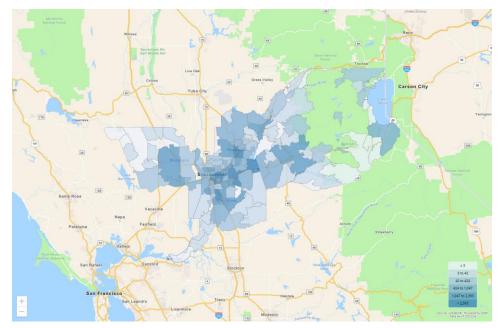


The above are the potential average annual gaps over 10 years. Many variables go into this analysis, but at its core it is based on a forecast comparing occupation demand growth to the local population growth and the projected educational attainment of those residents. When an area, for example, has an occupation expected to grow quickly but the educational requirement for the occupation does not match well with the educational attainment of its residents, there is a high potential for an occupation shortfall in the region. Alternatively, slow-growing or contracting occupations often represent potential supply surpluses.

The potential supply shortfall is an underlying force that the market needs to resolve one way or another, such as by employers recruiting from further distances for these occupations, wages going up to attract more candidates, and/or increased demand and wages enticing more local residents to get training for these occupations. While this an important analysis for determining local occupation needs, the occupation gap should be considered along with other regional data including growth and separation forecasts, unemployment rates, wage trends, and award and skill gap analyses.



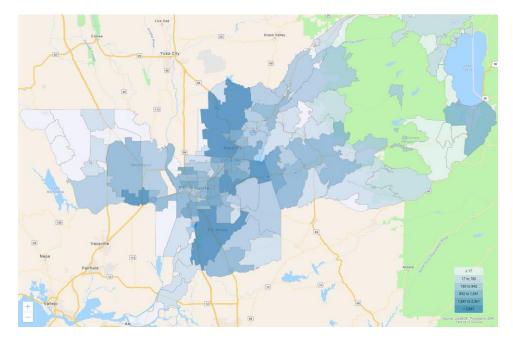
Geographic Distribution



Top ZCTAs by Place of Work for Health Science (CTE Cluster), 2022Q4

	Region	Employment
ZCTA 95817		8,736
ZCTA 95661		7,866
ZCTA 95825		7,575
ZCTA 95823		7,468
ZCTA 95816		6,014
ZCTA 95608		4,430
ZCTA 95814		3,918
ZCTA 95630		3,538
ZCTA 95678		3,301
ZCTA 95655		2,569





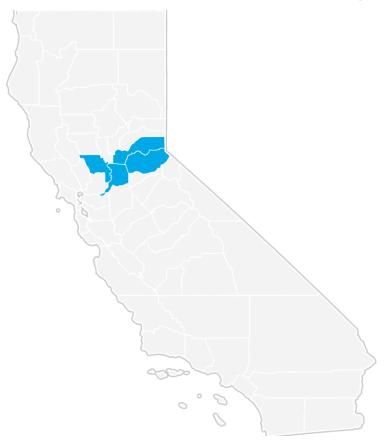
Top ZCTAs by Place of Residence for Health Science (CTE Cluster), 2022Q4

	Region	Employment
ZCTA 95630		3,849
ZCTA 95747		3,647
ZCTA 95758		3,587
ZCTA 95608		3,411
ZCTA 95823		3,237
ZCTA 95624		3,070
ZCTA 95757		2,676
ZCTA 95678		2,636
ZCTA 95616		2,534
ZCTA 95670		2,484

"Place of work" employment is based upon the location of employers for these workers. "Place of residence" data refers to the home locations of the workforce, which is typically the preferred data set to use when calculating labor availability within a drive-time or radius of a potential worksite.



Sacramento-Roseville-Folsom, CA MSA Regional Map





Data Notes

- Occupation employment by default indicates employment by place of work. Occupation employment is as of 2022Q4 and is based on industry employment and local staffing patterns calculated by Chmura and utilizing BLS OEWS data. Employment forecasts are modeled by Chmura and are consistent with BLS national-level 10-year forecasts. Wages by occupation are as of 2022Q4, utilizing BLS OEWS data, imputed and brought forward by Chmura. Entry-level and experienced wages are derived from these source data, computed by Chmura.
- Industry employment is as of 2022Q4 and is based upon BLS QCEW data, imputed by Chmura where necessary, and supplemented by additional sources including Census ZBP data.
- Education and training requirements are from the BLS. Educational attainment mix and other occupation demographics data are modeled by Chmura for 2022Q4 using regional occupation employment from JobsEQ, ZCTA-level demographics data from the Census Bureau, and national occupation-demographics patterns from the BLS.
- Postsecondary awards are per the NCES and are for the 2020-2021 academic year. Any programs shown are linked with the occupation(s) being analyzed via the program-occupation crosswalk, which may not be comprehensive. Any programs shown reflect only data reported to the NCES; reporting is required of all Title IV schools. Training providers that do not report data to the NCES are not reflected.
- Job ads data are online job posts from the Real-Time Intelligence (RTI) data set, produced wholly by Chmura and gleaned from over 40,000 websites. Data reflect ads active during the last twelve month period ending 07/11/2023 and advertised for any Zip Code Tabulation Area in or intersecting with the region for which this report was produced. Historical ad volume is revised as additional data are made available and processed. Since many extraneous factors can affect short-term volume of online job postings, time-series data can be volatile and should be used with caution. All ad counts represent deduplicated figures.
- For skill and certification gaps, openings and candidates are based upon regional occupation demand (growth plus separations) and the percent of skill demand and supply. Skill demand mix data are per a one-year sample of RTI data; skill supply data are estimated using a five-year sample of resumes data; both data sets compiled as of August 2021. Data may be based, at least in part, on data from broader geographies; see the Skill Gaps analytic export for more details.
- Occupation gaps are modeled by Chmura, indicating long-term potential supply and demand mismatches in a region due, in part, to job demand and labor pool dyanamics, including educational attainment and projected growth.
- Occupation employment by place of residence is as of 2022Q4 and modeled by Chmura based upon occuaption employment by place of work and commuting patterns. Commuting patterns are derived from source data from the Census Bureau, occupation-specific commuting tendancies, and updated to reflect more recent population and employment estimates.
- Figures may not sum due to rounding.



Region Definition

Sacramento-Roseville-Folsom, CA MSA is defined as the following counties:

El Dorado County, California

Placer County, California

Sacramento County, California

Yolo County, California



What is (LQ) location quotient?

Location quotient 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 annual demand?

Annual demand is a of the sum of the annual projected growth demand and separation demand. Separation demand is the number of jobs required due to separations—labor force exits (including retirements) and turnover resulting from workers moving from one occupation into another. Note that separation demand does not include all turnover—it does not include when workers stay in the same occupation but switch employers. Growth demand is the increase or decrease of jobs expected due to expansion or contraction of the overall number of jobs.

