



# Occupation Report

## Natural Sciences Managers

Sacramento-Roseville-Folsom, CA MSA



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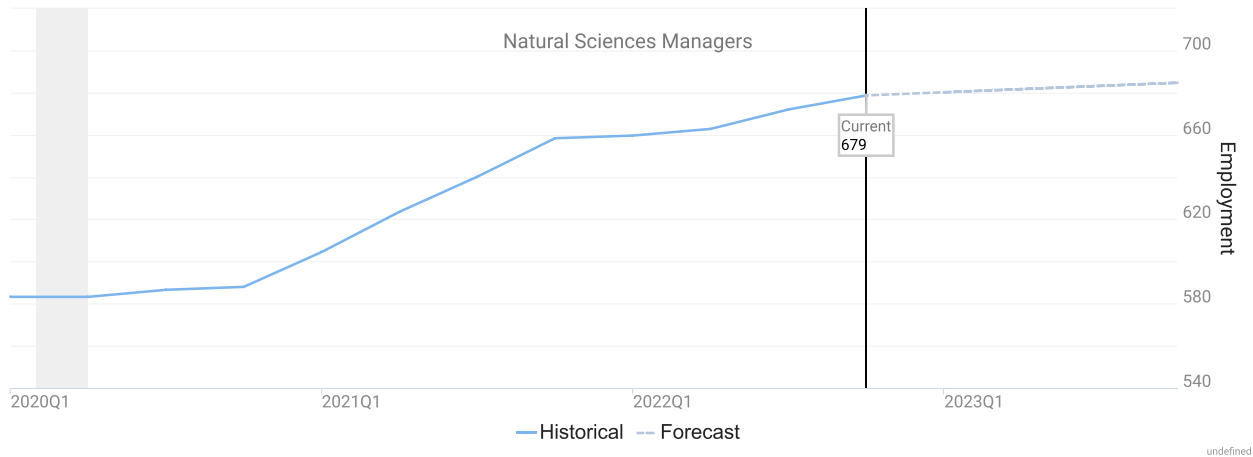
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# Occupation Snapshot



6-Digit Occupation	Empl	Avg Mean Wages	LQ	3-Year Empl Change	Annual Demand	Forecast Ann Growth
Natural Sciences Managers	679	\$162,000	1.25	98	61	0.9%
<b>Natural Sciences Managers</b>	<b>679</b>	<b>\$162,000</b>	<b>1.25</b>	<b>98</b>	<b>61</b>	<b>0.9%</b>



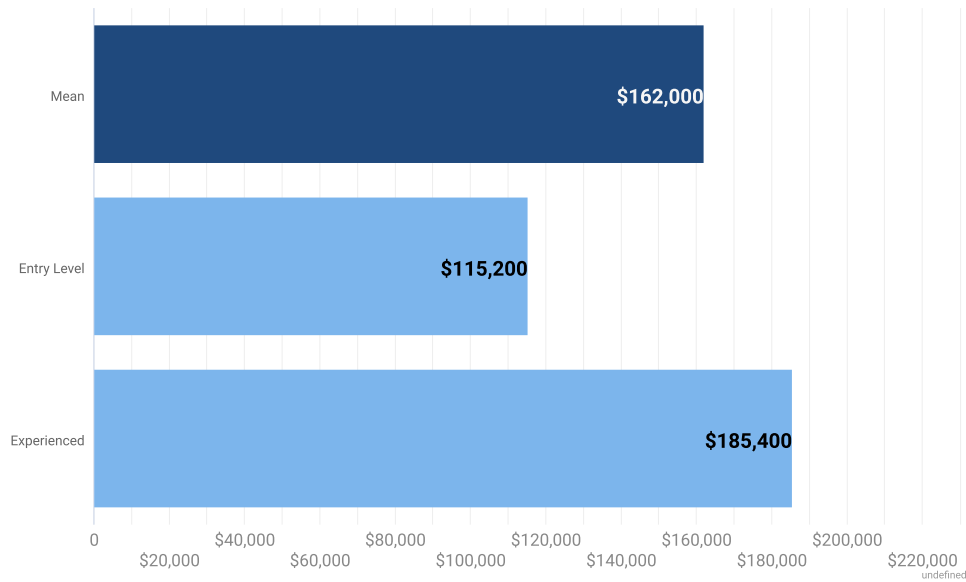
- 💡 “Annual Demand” is the projected need for new entrants into an occupation. New entrants are needed due to expected growth and to replace workers who left the occupation due to factors such as retirement or switching careers.
- 💡 “Forecast Ann Growth” is the expected change in jobs due to national, 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
Scientific Research and Development Services	41.2%	280	236	41	277
Executive, Legislative, and Other General Government Support	10.0%	68	54	0	53
Administration of Human Resource Programs	6.0%	41	32	0	32
Administration of Environmental Quality Programs	5.9%	40	32	0	31
Administration of Economic Programs	5.4%	37	29	0	29
Justice, Public Order, and Safety Activities	5.2%	35	28	0	28
Management of Companies and Enterprises	3.5%	24	20	2	22
Management, Scientific, and Technical Consulting Services	2.4%	16	14	3	17
Architectural, Engineering, and Related Services	2.4%	16	13	1	15
Colleges, Universities, and Professional Schools	2.4%	16	13	2	15
General Medical and Surgical Hospitals	2.3%	16	13	2	15
Pharmaceutical and Medicine Manufacturing	1.9%	13	11	2	12
Offices of Physicians	1.4%	10	8	1	9
Insurance Carriers	0.8%	6	5	1	5
National Security and International Affairs	0.7%	5	4	0	4
Social Advocacy Organizations	0.6%	4	4	1	4
Medical Equipment and Supplies Manufacturing	0.6%	4	4	1	4
All Others	7.1%	48	41	7	48

-  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

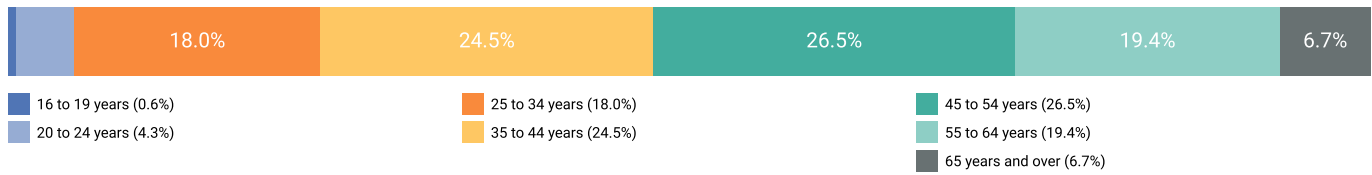


Occupation	Mean	Median	Entry Level	Experienced
Natural Sciences Managers	\$162,000	\$149,500	\$115,200	\$185,400

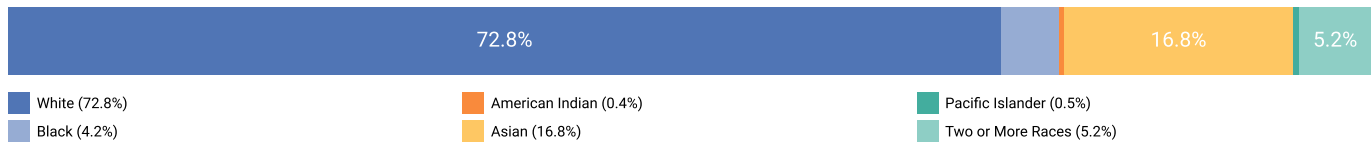
- 💡 Occupation wages here utilize BLS OEWS data, imputed and brought forward by Chmura.
- 💡 When this report is run for an occupation group, the table above displays up to the top ten detailed occupations which have the highest average wages within the occupation group.

# Occupation Demographics

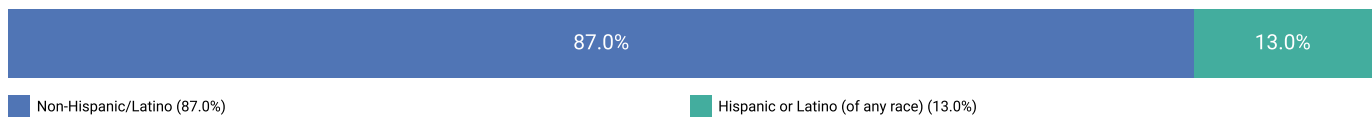
## Age



## Race



## Ethnicity



## Gender

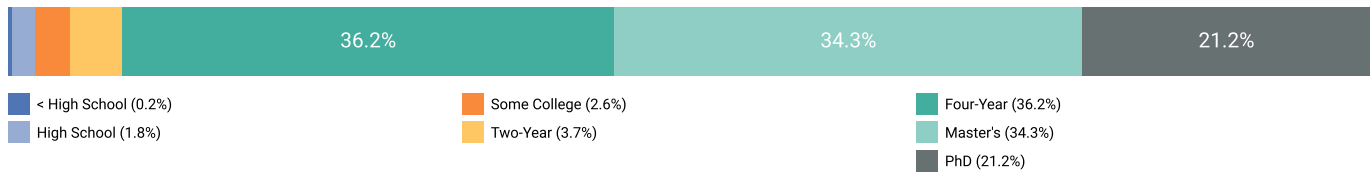


## Education and Training Requirements



# Education Profile

## Educational Attainment



Occupation	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
Natural Sciences Managers	Bachelor's degree	5 years or more	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 Natural Sciences Managers

Program	Awards
<b>American River College</b>	
Biological and Physical Sciences	353
Physical Sciences, General	129
<b>Cosumnes River College</b>	
Biological and Physical Sciences	177
<b>Folsom Lake College</b>	
Biological and Physical Sciences	170
<b>Sacramento City College</b>	
Biological and Physical Sciences	199
<b>Sierra College</b>	
Biological and Physical Sciences	749
<b>University of California-Davis</b>	
Biology/Biological Sciences, General	364
Cognitive Science, General	184
Molecular Biochemistry	214
Neurobiology and Anatomy	518

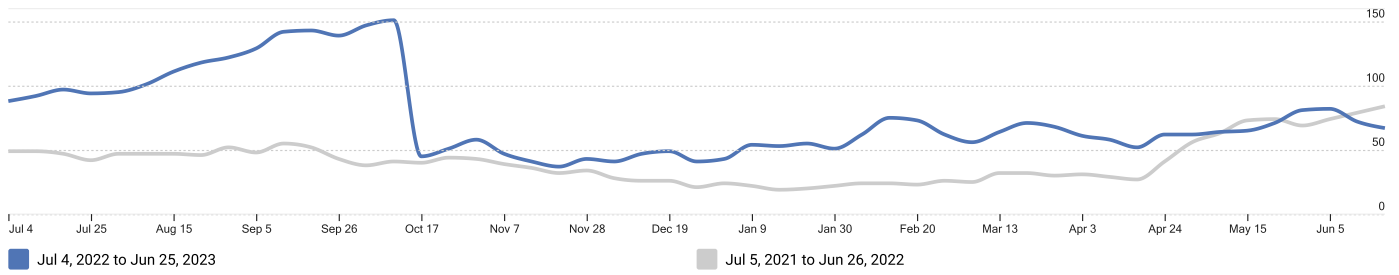
 The number of graduates from postsecondary programs in the region identifies the pipeline of future workers as well as the training capacity to support industry demand.

 Among postsecondary programs at schools located in the Sacramento-Roseville-Folsom, CA MSA, the sampling above identifies those most linked to Natural Sciences Managers. 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
11- 9121.01	Clinical Research Coordinators	446
11- 9121.02	Water Resource Specialists	69
11- 9121.00	Natural Sciences Managers	11

### Locations

Location	Active Job Ads	
University of California Davis	282	
Sacramento, California	94	
University of California Davis Health System	52	
Sacramento County, California	17	
Yolo County, California	13	
Roseville, California	6	
Davis, California	4	
Sacramento, CA, 95864	4	
Sacramento, California 94203	4	
South Lake Tahoe, CA 96150	4	

### Employers

Employer Name	Active Job Ads	
Davis, California	169	
Sacramento, California	155	
State of California Department of Water Resources	28	
University of California, Davis	16	
Nationwide	10	
ICON Strategic Solutions	9	
Kaiser Permanente	9	
HDR	7	
University of California- Davis Health	7	
Endemic Environmental Services	6	

### Hard Skills

Skill Name	Active Job Ads	
Clinical Research	365	
Medical Terminology	216	
Microsoft Excel	161	
Microsoft Word	132	
Microsoft Office	89	
Spanish	64	
Oncology	62	
Physiology	54	
Mathematics	48	
FDA Regulations	47	

### Job Titles

Job Title	Active Job Ads	
Senior Clinical Research Coordinator SOM: Orthopaedic Surgery Sacramento Campus	14	
Clinical Research Coordinator	11	
Clinical Research Coordinator- SOM: Psychiatry & Behavioral Sciences- Sacramento Campus	10	
Clinical Research Coordinator / Senior Clinical Research Coordinator -SOM: Cancer Center Department- Sacramento Campus	9	
ENGINEER, WATER RESOURCES	9	
Data Clinical Research Coordinator Supervisor 2 SOM: MED: Cancer Center Sacramento Campus	7	
SUPERVISING ENGINEER WATER RESOURCES	7	
Clinical Research Coordinator, Assistant CRC or Senior CRC SOM: MED: Internal Medicine Pulmonary Sacramento Campus	6	
Assistant Clinical Research Coordinator (CRC) or Clinical Research Coordinator (CRC) - SOM: Internal Medicine Infectious Diseases - Sacramento Campus	5	
Assistant Clinical Research Coordinator SOM: NEUROLOGY- East Bay	4	

### Education Levels

Minimum Education Level	Active Job Ads	
Bachelor's degree	197	
High school diploma or equivalent	20	
Master's degree	11	
Associate's degree	3	
Doctoral or professional degree	2	
Unspecified/other	293	

### Programs

Program Name	Active Job Ads	
Science	42	
Public Health	35	
Biology	30	
Psychology	26	
Health	16	
Business	11	
Civil Engineering	11	
Health Science	10	
Engineering	9	
Nursing	9	

# Top Skill and Certification Gaps

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

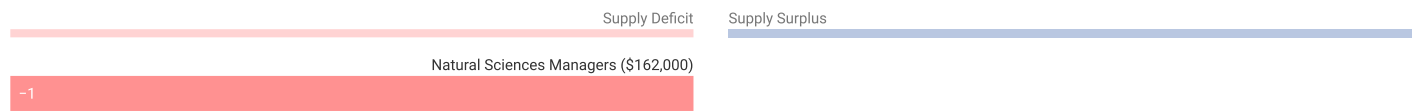
Name	Candidates	Openings	Gap
Medical Terminology	6	17	-11
Clinical Research	25	34	-9
Oncology	3	6	-3
Microsoft Access	1	4	-3
Personal Computers (PC)	0	2	-2
Understanding of Health Insurance Portability and Accountability Act (HIPAA)	0	3	-2
Spanish	2	4	-2
Working With Children	0	2	-2
Physiology	1	3	-2
Budgeting	1	2	-1



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

Name	Candidates	Openings	Gap
Certified Clinical Research Coordinator (CCRC)	1	5	-4
Certified Research Administrator (CRA)	2	5	-3
National Phlebotomy Association Certified Phlebotomist	0	2	-2
Basic Life Support (BLS)	1	2	-1
First Aid Certification	0	1	-1
Certification in Cardiopulmonary Resuscitation (CPR)	0	1	-1
Obstetrics and Gynecology (Obstetrics & Gynecology)	0	1	-1
Project Management Professional (PMP)	1	0	0
Regulatory Affairs Certification - US (RAC)	1	0	1
Registered Nurse (RN)	1	0	1

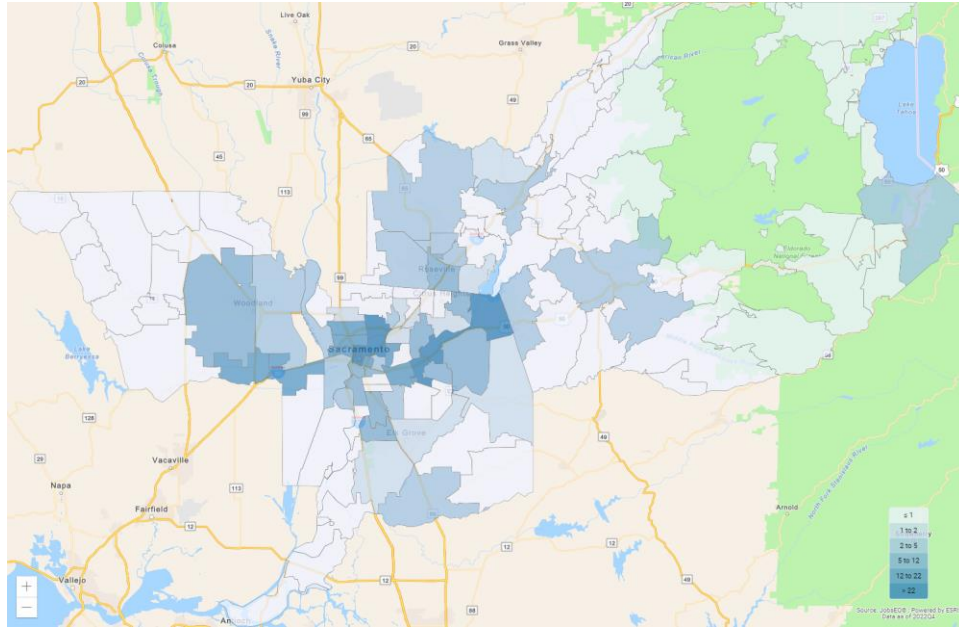
 Skill and certifications gaps can help inform employee development programs, as well as provide a comparison of the needs of regional employers to the supply.

# Occupation Gaps



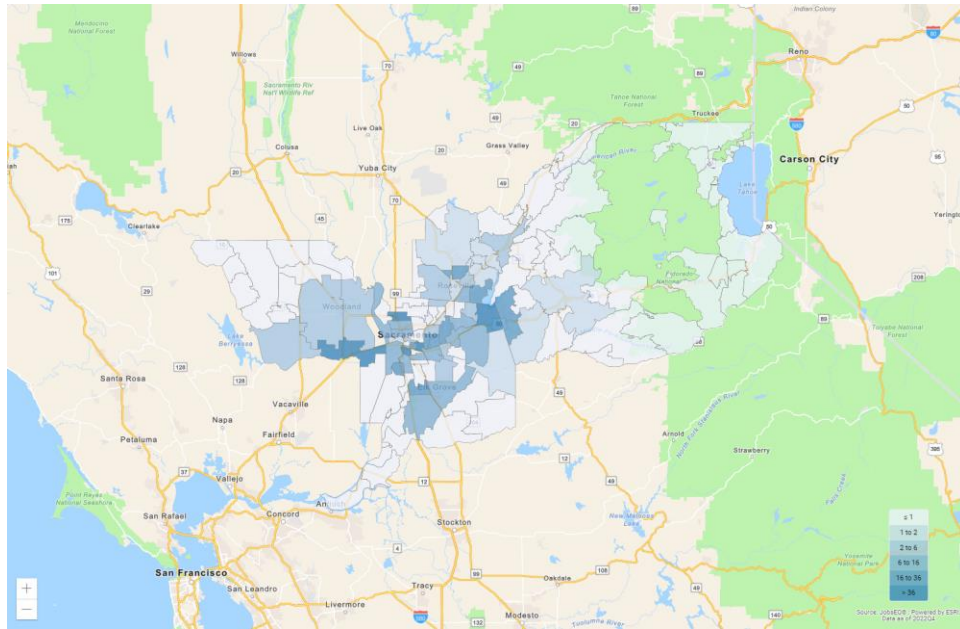
-  The above are the potential average annual gaps over 10 years. Many variables go into this analysis, but at its core it is based on a forecast comparing occupation demand growth to the local population growth and the projected educational attainment of those residents. When an area, for example, has 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 Natural Sciences Managers, 2022Q4**

Region	Employment
ZCTA 95814	143
ZCTA 95827	92
ZCTA 95630	44
ZCTA 95815	30
ZCTA 95670	28
ZCTA 95838	22
ZCTA 95811	22
ZCTA 95605	19
ZCTA 95834	19
ZCTA 95825	18



**Top ZCTAs by Place of Residence for Natural Sciences Managers, 2022Q4**

Region	Employment
ZCTA 95630	72
ZCTA 95616	60
ZCTA 95835	44
ZCTA 95818	39
ZCTA 95819	37
ZCTA 95618 (Yolo County, CA portion)	37
ZCTA 95816	34
ZCTA 95864	31
ZCTA 95762	19
ZCTA 95758	17

💡 “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 07/05/2023 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 dynamics, including educational attainment and projected growth.
- Occupation employment by place of residence is as of 2022Q4 and modeled by Chmura based upon occupation employment by place of work and commuting patterns. Commuting patterns are derived from source data from the Census Bureau, occupation-specific commuting tendencies, 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

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Placer County, California

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Sacramento County, California

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Yolo County, California

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# FAQ

## 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.