JOBSEQ

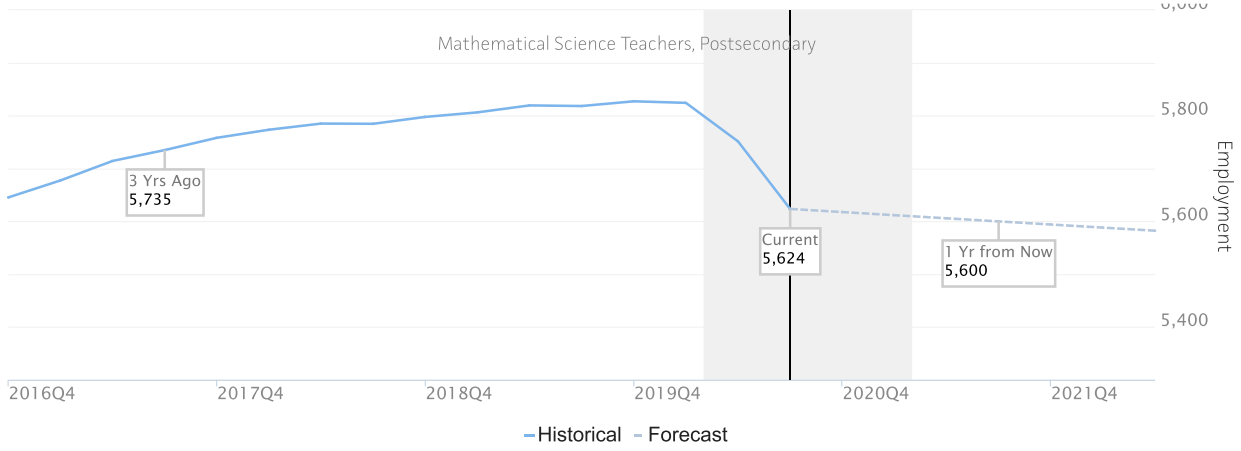
Occupation Report

Mathematical Science Teachers, Postsecondary

California

Occupation Snapshot

6-Digit Occupation	Empl	Avg Mean Wages	LQ	3-Year Empl Change	Annual Demand	Forecast Ann Growth
Mathematical Science Teachers, Postsecondary	**5,624**	**$126,600**	**0.99**	**-111**	**435**	**-0.4%**



"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

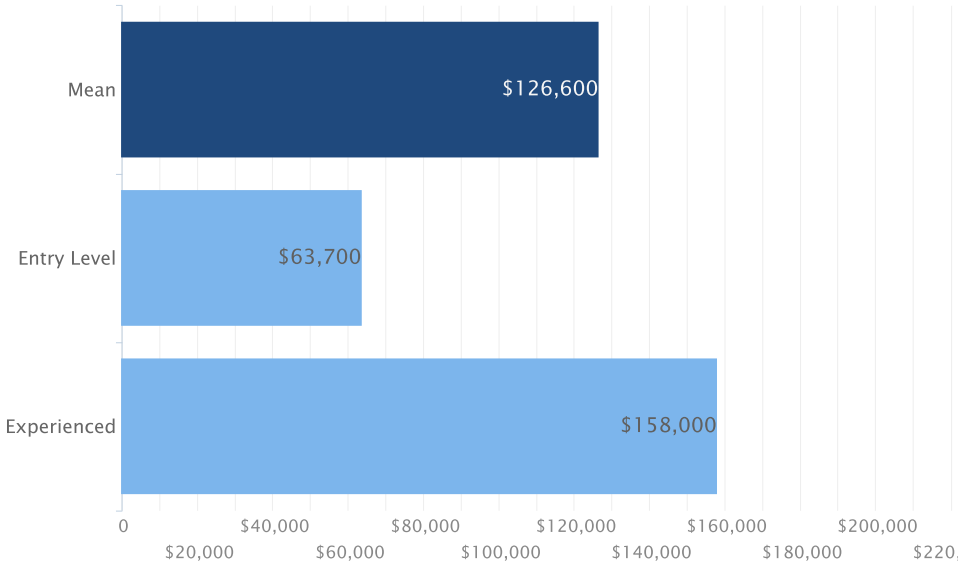
Industry Title	% of Occ Empl	Empl	10-Year Separations	10-Year Empl Growth	10-Year Total Demand
Junior Colleges	54.8%	3,079	2,400	-370	2,030
Colleges, Universities, and Professional Schools	44.4%	2,496	2,121	129	2,250
All Others	0.9%	49	44	10	54

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.

Source: JobsEQ®, http://www.chmuraecon.com/jobseq

Wages



Occupation	Mean	Median	Entry Level	Experienced
Mathematical Science Teachers, Postsecondary	$126,600	$115,700	$63,700	$158,000

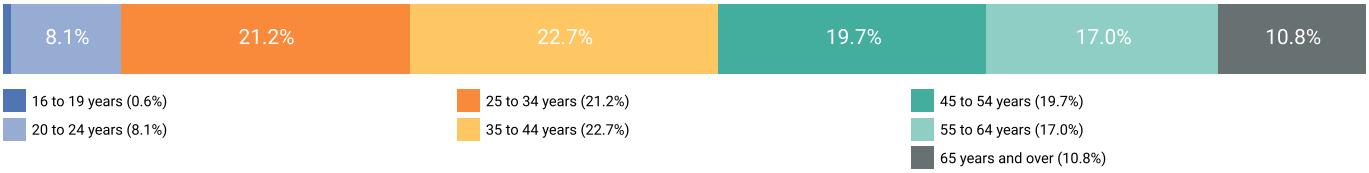
Occupation wages here are based on data from the Bureau of Labor Statistics, OES program, and imputed by Chmura where necessary.

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.

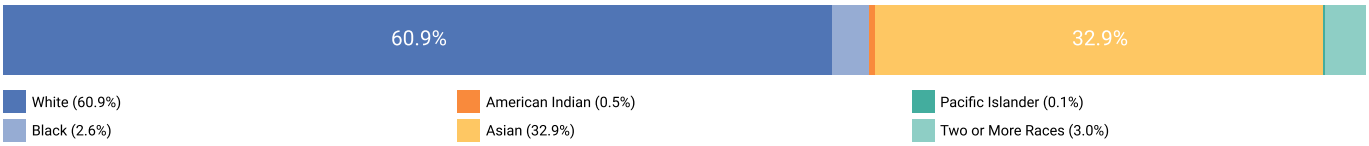
Source: JobsEQ®, http://www.chmuraecon.com/jobseq

Occupation Demographics

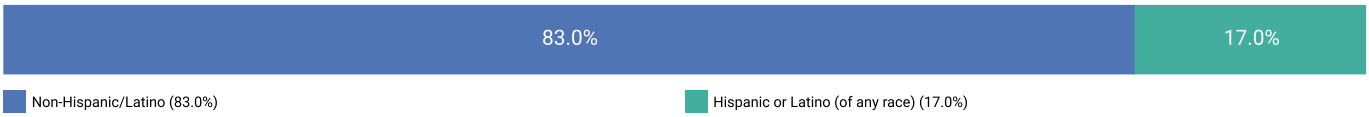
Age



Race

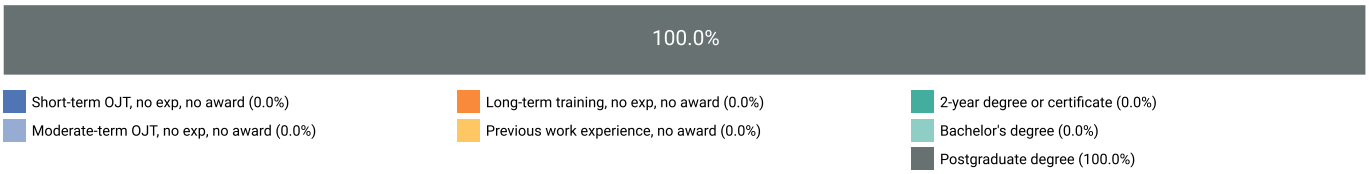


Ethnicity



Gender

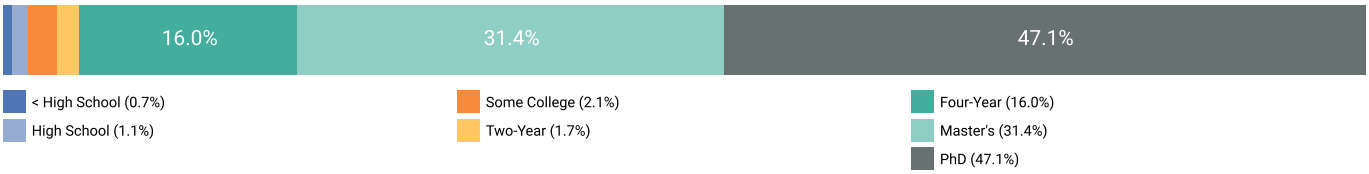
Education and Training Requirements



Source: JobsEQ®, http://www.chmuraecon.com/jobseq

Education Profile

Educational Attainment



Occupation	Typical Entry-Level Education	Previous Work Experience	Typical On-the-Job Training
Mathematical Science Teachers, Postsecondary	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 Mathematical Science Teachers, Postsecondary

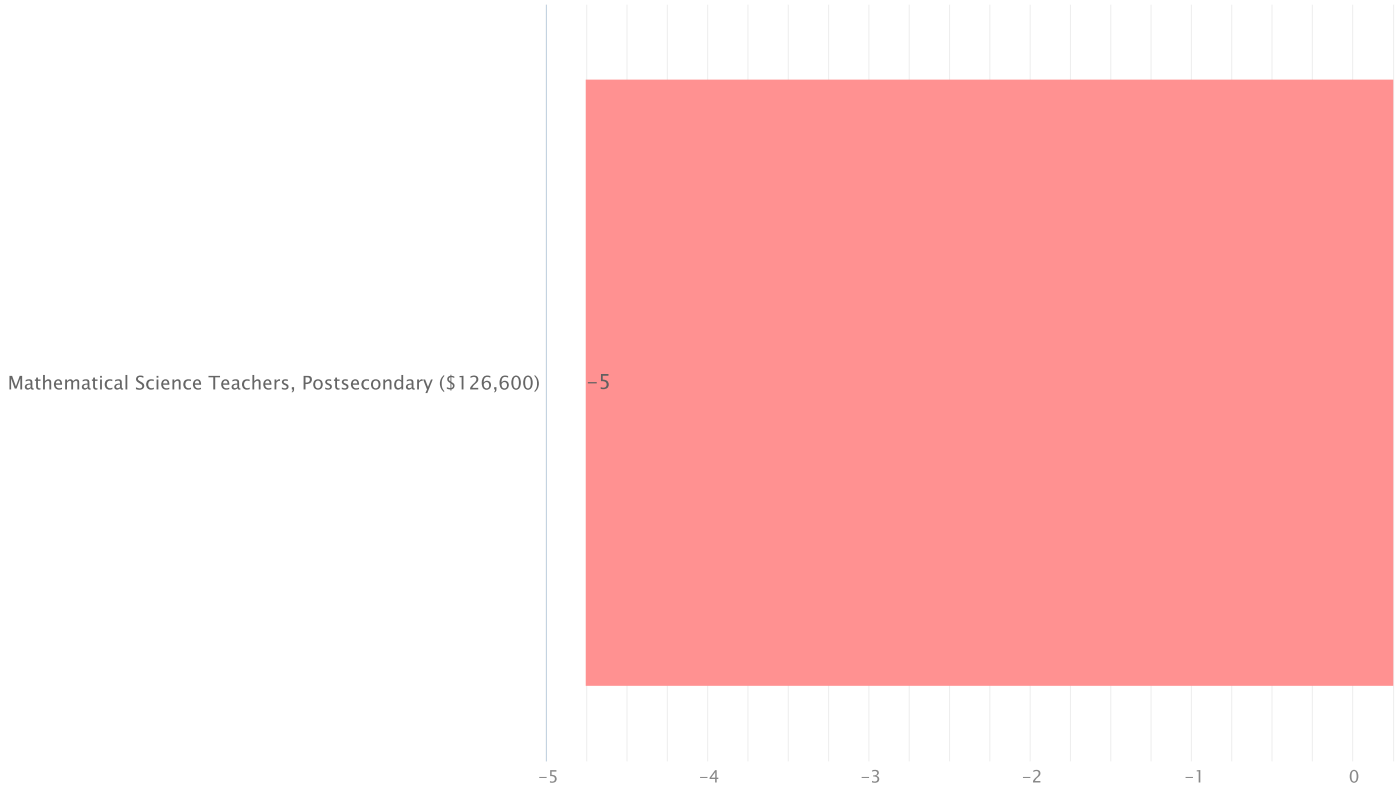
Program	Awards
Pepperdine University	
Financial Mathematics	158
University of California-Berkeley	
Applied Mathematics, General	317
Statistics, General	265
University of California-Davis	
Statistics, General	254
University of California-Los Angeles	
Applied Mathematics, General	156
Statistics, General	195
University of California-San Diego	
Applied Mathematics, General	182
Mathematics, Other	174
University of California-Santa Barbara	
Statistics, General	183
University of Southern California	
Business Statistics	151

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 California, the sampling above identifies those most linked to Remote Jobs. For a complete list see JobsEQ®, http://www.chmuraecon.com/jobseq

Source: JobsEQ®, http://www.chmuraecon.com/jobseq

Occupation Gaps

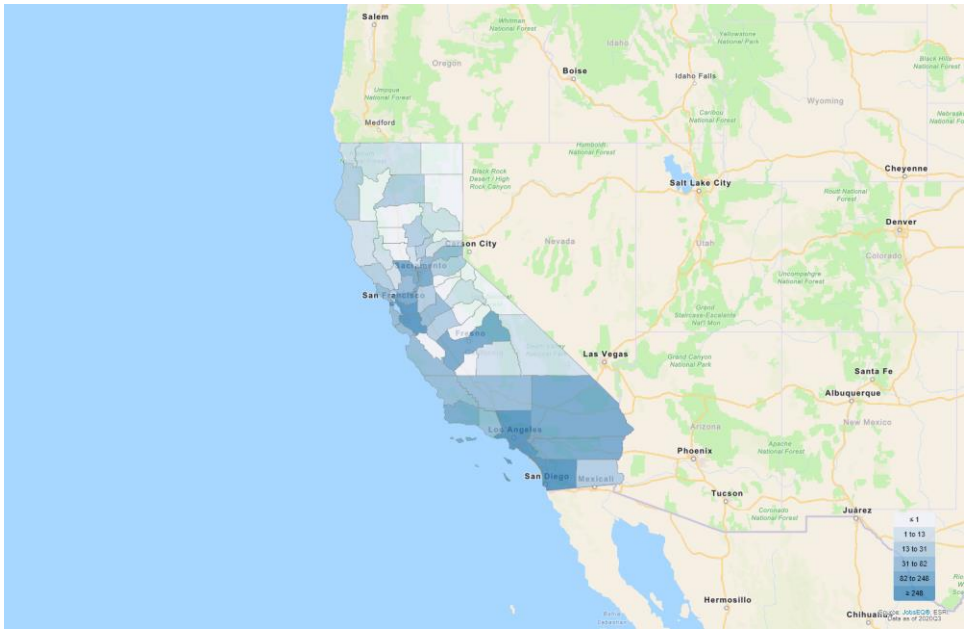


The above are the potential average annual gaps over 10 years. Many variables go into this analysis, but at its core it is based on a forecast comparing occupation demand growth to the local population growth and the projected educational attainment of those residents. When an area, for example, has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

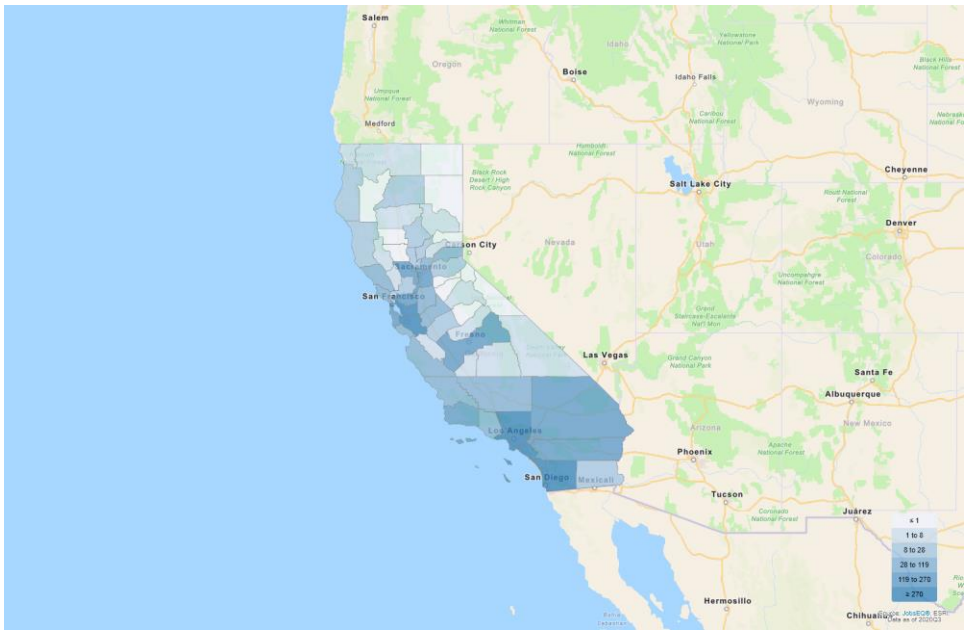
Source: JobsEQ®, http://www.chmuraecon.com/jobseq

Geographic Distribution



Top Counties by Place of Work for Mathematical Science Teachers, Postsecondary, 2020Q3

Region	Employment
Los Angeles County, California	1,545
San Diego County, California	589
Orange County, California	527
San Francisco County, California	453
Santa Clara County, California	365
Alameda County, California	249
Riverside County, California	214
San Bernardino County, California	199
Sacramento County, California	177
Fresno County, California	156

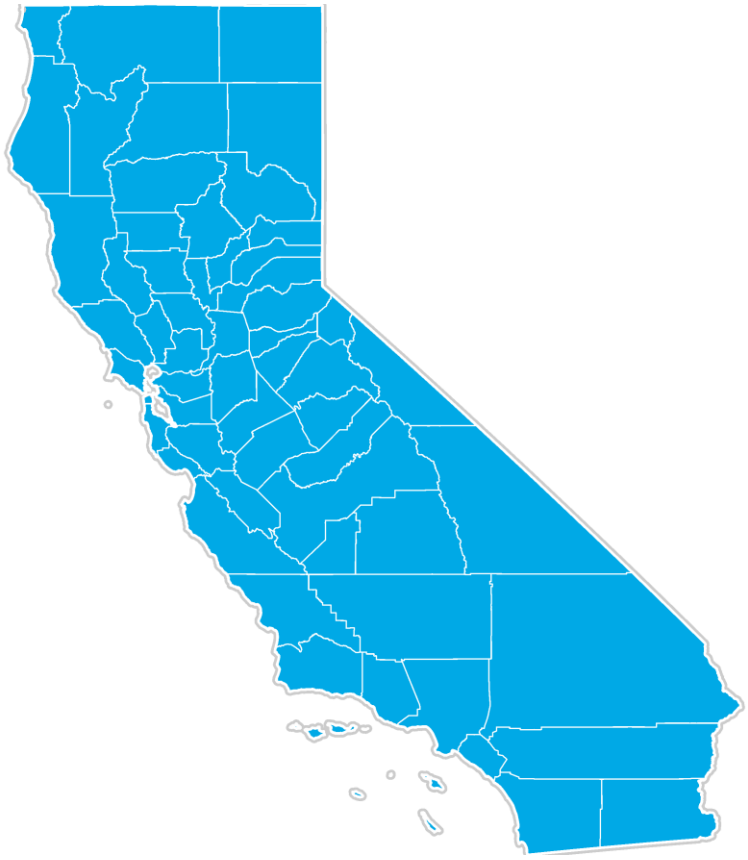


Top Counties by Place of Residence for Mathematical Science Teachers, Postsecondary, 2020Q3

Region	Employment
Los Angeles County, California	1,440
San Diego County, California	583
Orange County, California	543
Santa Clara County, California	361
San Francisco County, California	357
Alameda County, California	270
Riverside County, California	238
San Bernardino County, California	236
Yolo County, California	160
Sacramento County, California	150

"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.

California Regional Map



Source: JobsEQ®, http://www.chmuraecon.com/jobseq

Data Notes

- Occupation employment by default indicates employment by place of work. Occupation employment is as of 2020Q3 and is based on industry employment and local staffing patterns calculated by Chmura and utilizing BLS OES data. Employment forecasts are modeled by Chmura and are consistent with BLS national-level 10-year forecasts. Occupation wages (mean, median, and percentiles) are derived from BLS OES data and are as of 2019 and represent the average for all Covered Employment. Entry-level and experienced wages are derived from these source data, computed by Chmura.
- Industry employment is as of 2020Q3 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 2020Q3 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 2018-2019 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 30,000 websites. Data reflect ads active during the last twelve month period ending 04/20/2021 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 January 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 2020Q3 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.

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.