

Labor Market Information 101 with Santa Monica College

LA Center of Excellence (COE) for Labor Market Research

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About the Centers of Excellence (COE)

California Community Colleges need to ensure that CTE curriculum produces workers with the skills relevant to the regional and statewide economies.

The COE provide **quality labor market data and information** to help colleges respond to workforce needs.

Colleges use the data for:



Investing in new and relevant programs



Assessing labor market needs



Reviewing existing programs



Pursuing grants

COE Team

<https://coecc.net/regions/>



Today's Conversation

- What is Labor Market Information (Traditional LMI)?
- Why is LMI important and why do we use it?
- Code Definitions (TOP, CIP & SOC)
- Jobs outlook (LA & CA)
- Job Postings (Real-Time LMI)
- LMI Resources – live demo
- Q&A



What is Labor Market Information (LMI)?

...data about employment

- Location
- Occupations (what people do) and Industries (what businesses do)
- Earnings
- Unemployment
- Demographics of the Labor Force
- Supply (number of awards) and Demand (number of job openings)



Why is LMI important and why do we use it?

- Data used for decision making
- Guides colleges to create new programs
- [PCAH](#): Program and Course Approval Handbook requires it for CE programs
- Equilibrium of supply and demand in the middle-skill job market
- Most importantly – to guide our students towards in-demand jobs that pay above a living wage

INFORM



Inform through real-time regional and local labor market research and data validated by industry partners

CONNECT



Connect business and industry with community colleges, and workforce and economic development professionals who are committed to developing an outstanding workforce

ADVANCE



Advance the economic and workforce development mission of California's community colleges in partnering with employers and preparing the workforce to succeed in the future

What are TOP-SOC-CIP codes?

TOP: Taxonomy of Programs

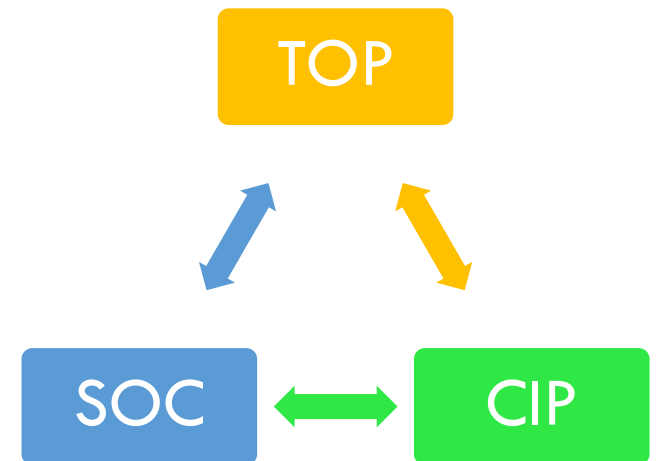
- Used by California Community Colleges

CIP: Classification of Instructional Programs

- Federal codes assigned to programs

SOC: Standard Occupational Classification

- Federal codes assigned to occupations



NAICS and SOC

- [NAICS: North American Industry Classification System \(NAICS\)](#)
 - Construction, Manufacturing, Healthcare, Food Services, etc.
 - NAICS codes classify what **BUSINESSES** do
- [SOC: Standard Occupational Classification](#)
 - Carpenters, Registered Nurses, Automotive Mechanics
 - SOC codes classify what **PEOPLE** do

LMI Questions

- Which occupations are most in **demand** in Los Angeles County?
- Is demand for relevant **occupations** increasing or decreasing?
- What is the **typical education requirement** for the occupations students are interested in?
- What are **expected** earnings for an occupation?
- What **skills** should students be learning to be qualified in the labor market?

Jobs Outlook: Los Angeles County vs. California

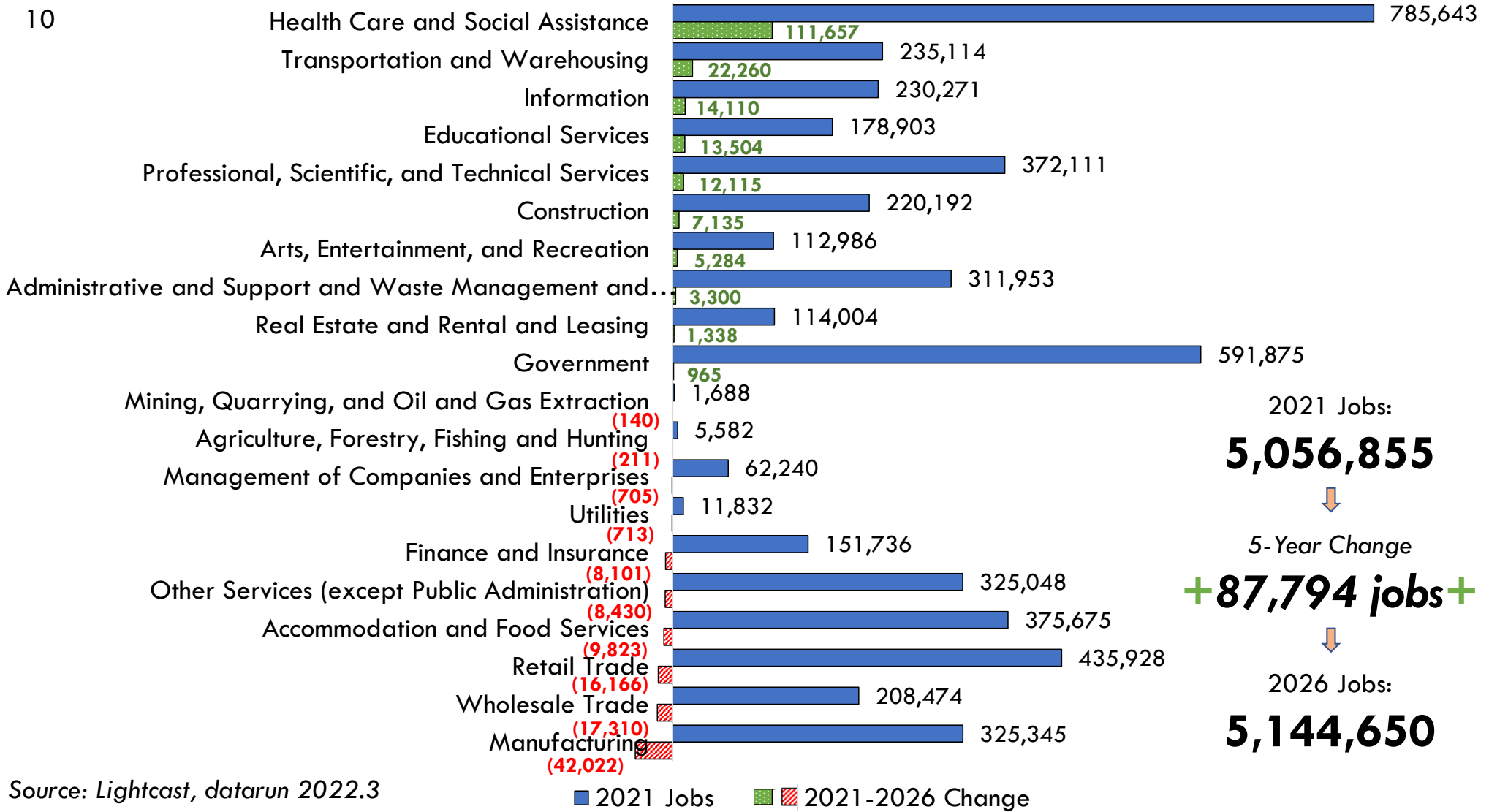
- 26% of ALL jobs in the state are in Los Angeles County

Region	2021 Jobs	2026 Jobs	5-Year Change	5-Year % Change	Annual Openings*
Los Angeles County	5,056,855	5,144,650	87,794	2%	591,192
California	19,656,836	20,414,385	757,549	4%	2,380,845

*Annual openings = new jobs + replacements (retirements)

Source: Lightcast, datarun 2022.3

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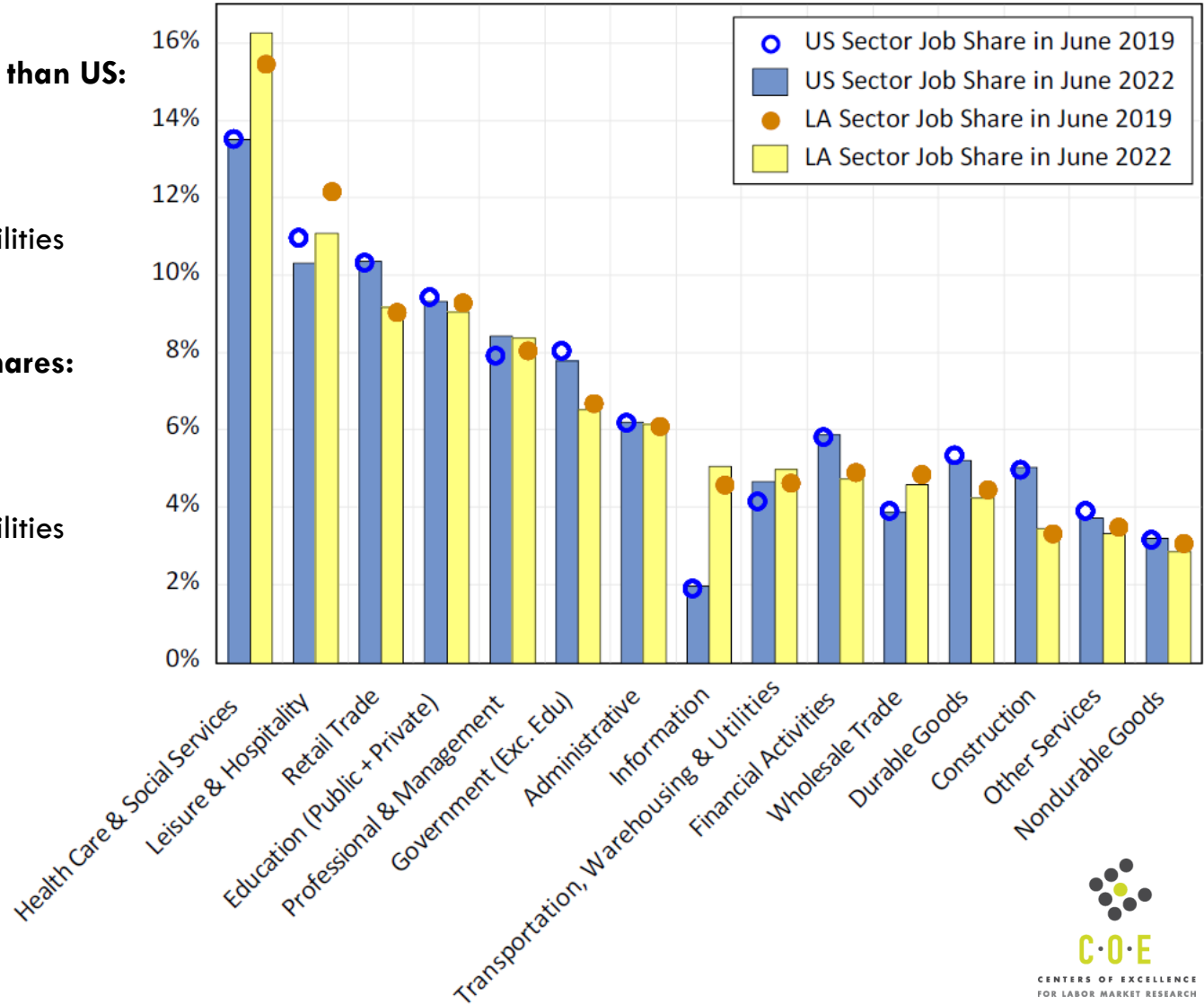
Source: Lightcast, datarun 2022.3

LA Industry Sectors with larger job share than US:

- Health Care & Social Services
- Leisure and Hospitality
- Information
- Transportation, Warehousing & Utilities
- Wholesale Trade

LA Industry Sectors with increased job shares:

- Health Care & Social Services
- Professional & Management
- Information
- Transportation, Warehousing & Utilities
- Construction



Source: UCLA Anderson Forecast – Los Angeles County Quarterly Forecast, July 2022

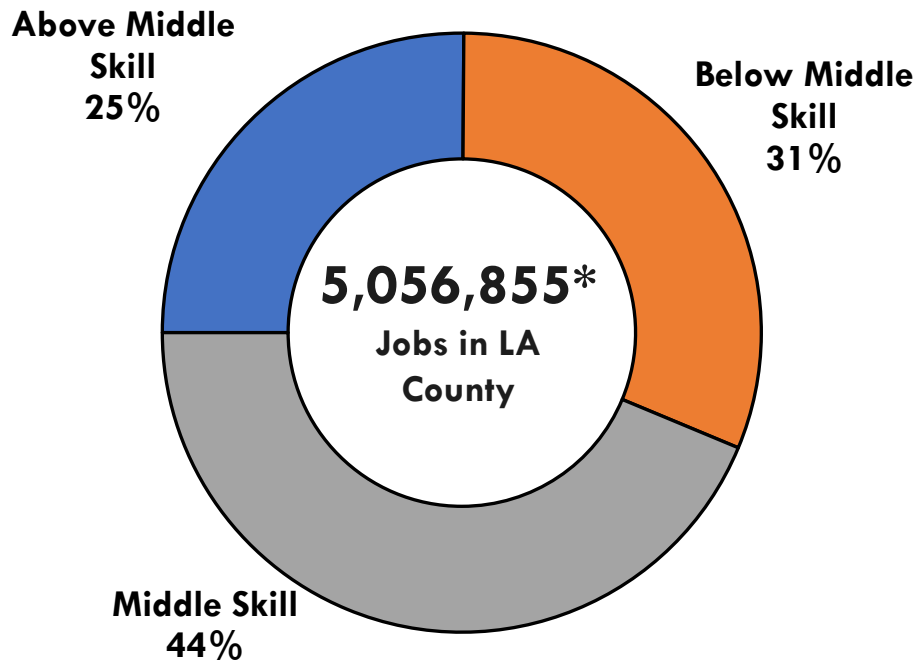
Data Sources: California Employment Development Department (EDD) and Bureau of Labor Statistics (BLS)

Occupations by Skill Level

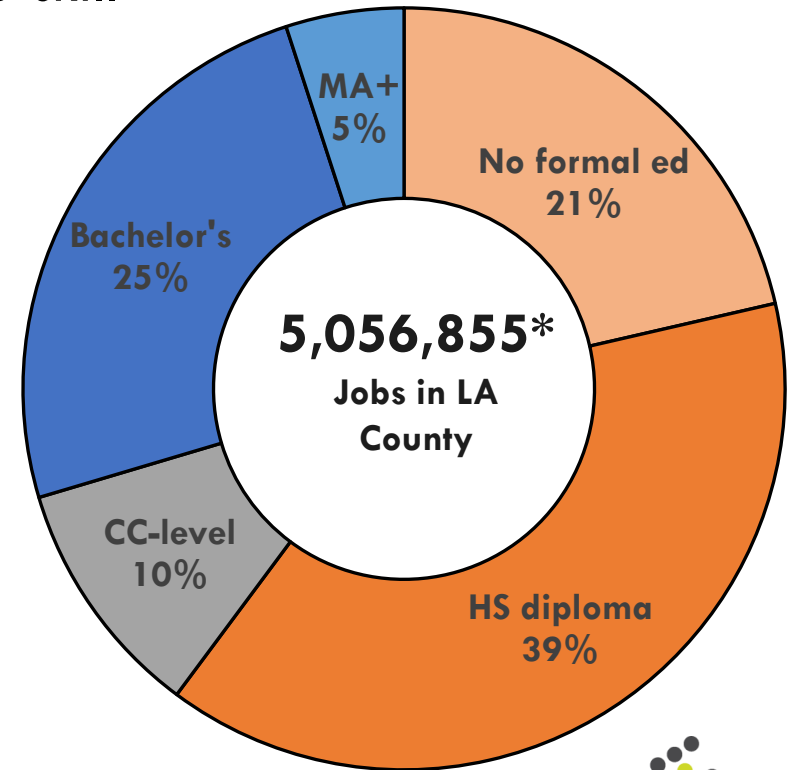
- SOC: Standard Occupational Classification
 - below middle-skill
 - **middle-skill****
 - above middle-skill
- **COE classifies middle-skill jobs as**
 - Requiring some college, associate degree or apprenticeship;
 - Requiring a bachelor's degree, but also have more than one-third of their existing labor force with an educational attainment of some college or associate degree; or
 - Requiring a high school diploma or equivalent or no formal education, but also require short- to long-term on-the-job training where multiple community colleges have existing programs.

Skill Level Breakdown of LA County Jobs

- Nearly half of jobs in LA county are middle-skill



Source: COE middle-skill methodology



Source: Lightcast, datarun 2022.3

Middle-Skill Occupations – Most Annual Job Openings

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Occupation	2021 Jobs	Avg. Annual Openings	Median Hourly Wage
Home Health and Personal Care Aides	297,077	37,288	\$14.29
Childcare Workers	55,482	12,014	\$14.62
Customer Service Representatives	58,151	7,590	\$18.37
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	58,320	7,397	\$22.12
Bookkeeping, Accounting, and Auditing Clerks	52,154	6,504	\$22.95
Registered Nurses	92,463	5,833	\$58.19
Heavy and Tractor-Trailer Truck Drivers	51,643	5,798	\$23.22
Nursing Assistants	33,196	4,940	\$17.75
First-Line Supervisors of Retail Sales Workers	39,292	4,801	\$20.32
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	44,838	4,782	\$29.17
First-Line Supervisors of Office and Administrative Support Workers	41,919	4,778	\$29.95
First-Line Supervisors of Food Preparation and Serving Workers	29,320	4,312	\$18.76
Teaching Assistants, Except Postsecondary	35,907	4,067	\$18.34

Source: Lightcast, datarun 2022.3

Middle-Skill Occupations – Highest Median Hourly Wages

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Occupation	2021 Jobs	Avg. Annual Openings	Median Hourly Wage
Commercial Pilots	2,089	228	\$81.25
First-Line Supervisors of Police and Detectives	2,950	214	\$79.20
Makeup Artists, Theatrical and Performance	997	148	\$78.08
First-Line Supervisors of Firefighting and Prevention Workers	1,267	107	\$77.78
Registered Nurses	92,463	5,833	\$58.19
Producers and Directors	43,002	4,038	\$57.04
Detectives and Criminal Investigators	2,502	273	\$55.71
Police and Sheriff's Patrol Officers	21,901	2,002	\$49.85
Electrical Power-Line Installers and Repairers	1,859	180	\$48.65
Industrial Production Managers	6,075	430	\$48.17
Diagnostic Medical Sonographers	2,246	175	\$47.88
Forensic Science Technicians	910	111	\$47.71
Power Plant Operators	553	120	\$47.39

Source: Lightcast, datarun 2022.3

Job Postings (Real-Time LMI)

- Job postings are NOT the same as Annual Openings
- Job posting data is supplementary to traditional LMI
- Despite limitations, job postings can provide rich information not available in traditional LMI:

- *Which employers are hiring?*
- *Which skills are in demand?*
- *Which certifications are in demand?*
- *How quickly are specific jobs filled?*
- *Which job titles are most common?*



Traditional LMI vs. Real-Time LMI

PROs	CONs	PROs	CONs
More reliable - Based on actual past trends	Not as Timely – a lagging indicator of what is	Timely – current up to yesterday’s postings	Less reliable - A single job posting does not always equal a single job opportunity
Projections revised annually	Sometimes incomplete		
More Accurate - Based on Employer Surveys and Tax Records	Sample sizes for these surveys can sometimes be small	Rich data – employers, skills, actual educational requirements, salary info (sometimes), certifications in demand, and much more	Job postings are often a “wish list” from the employer. Actual hiring practices can vary significantly
Best for long-term trend analysis and planning	Some sources not updated as regularly as others	Best for shorter-term analysis and insights related to emerging fields and occupations	Posting Intensity varies by Industry and Occupation, and not all jobs are posted online
Very conservative – BLS and EDD only publish data they have a high degree of confidence in, also publish margins of error	Very conservative – Data is suppressed when only a few establishments exist in a given industry in a region	Great to analyze a specific times – e.g., right before graduation	Prone to seasonal fluctuations – think Ag (summer) and Xmas sales jobs (winter)

Best Analogy (in my mind anyway)

- Job posting data is supplementary/complementary to traditional LMI
- Think of Real-Time LMI as the PB/J to Traditional LMI's bread...



← These ingredients are great on their own, but when combined become something truly special. Yummy 😊

→ Think about it – does anyone eat plain PB and J on a plate? Nope. Got to have the bread for a foundation.

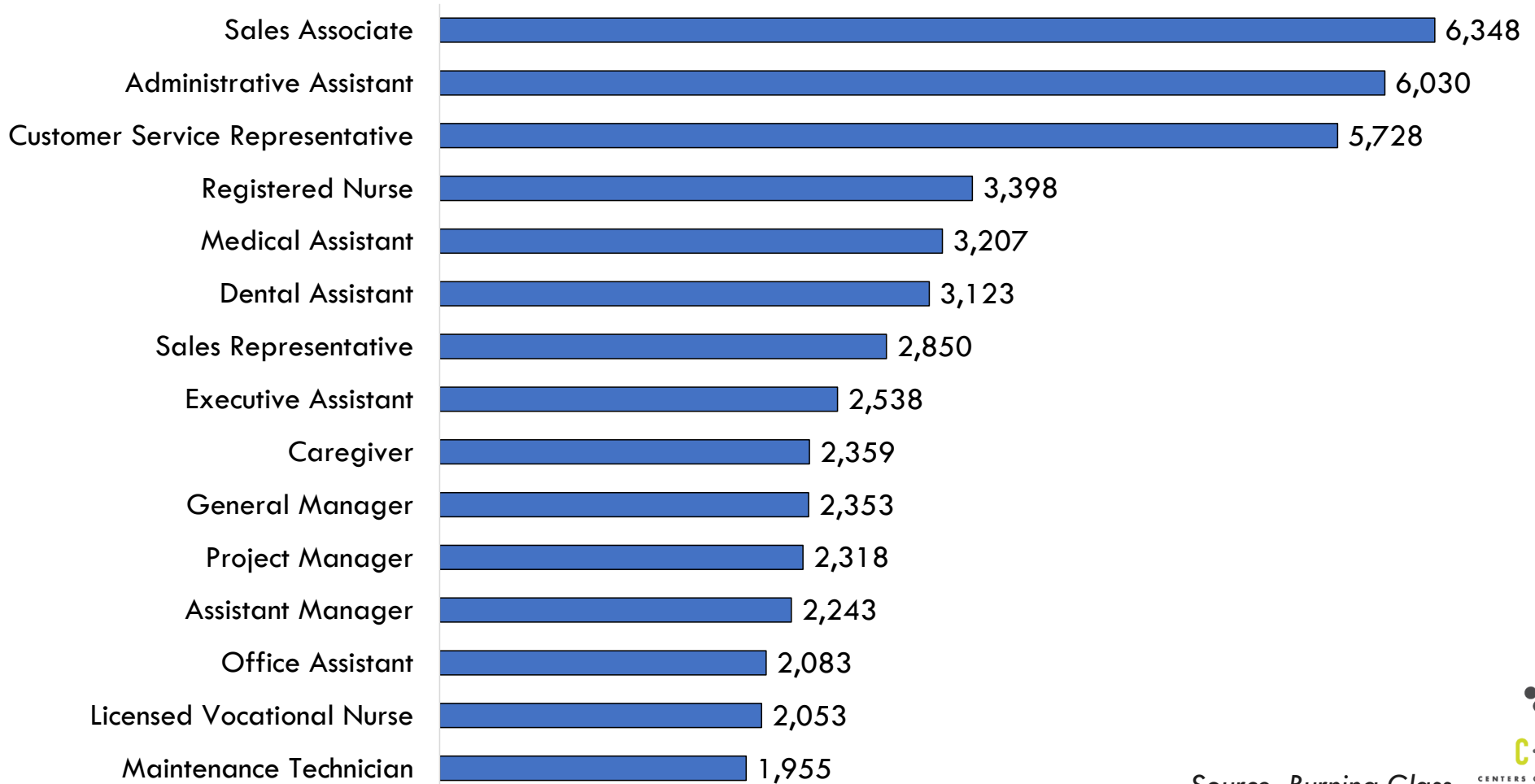


Top Employers, Skills & Occupations from Job Postings (past 12 months) ¹⁹

Employers	<i>n</i>	Skills	<i>n</i>	Occupations	<i>n</i>
Anthem Blue Cross	18,598	Customer Service	236,417	Registered Nurses	65,369
Northrop Grumman	10,642	Scheduling	195,038	Sales Reps., Wholesale & Manufacturing, Except Technical & Scientific Products	38,705
Amazon	10,392	Sales	140,061	Software Developers, Applications	37,323
Cedars-Sinai	9,112	Budgeting	125,567	Retail Salespersons	35,921
Allied Universal	8,760	Project Management	102,825	Customer Service Representatives	34,667
PIH Health	8,423	Customer Contact	89,748	First-Line Supervisors of Retail Sales Workers	23,392

Source: Burning Glass

Job Postings in LA County – Past 12 months



Source: Burning Glass

How to Access...

www.coeccc.net



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RESOURCES

PUBLICATION SEARCH

The leading source of labor market research for the California Community Colleges

Our work empowers community colleges to make informed decisions for preparing the workforce of tomorrow



O*NET Online

www.onetonline.org

The screenshot shows the O*NET OnLine website interface. At the top left is the O*NET logo and the text "O*NET OnLine". To the right is an "Occupation Quick Search" bar. Below the header is a navigation menu with links for "Help", "Find Occupations", "Advanced Search", "Crosswalks", "Share", and "O*NET Sites".

The main content area features a large banner with a construction crane image and the text: "Build your future with O*NET OnLine. Welcome to your tool for career exploration and job analysis! O*NET OnLine has detailed descriptions of the world of work for use by job seekers, workforce development and HR professionals, students, researchers, and more!" Below this banner is a "What is O*NET?" button.

On the right side, there are several promotional boxes:

- What's New!**: "Discover your interests while using O*NET OnLine" with a "Learn More" button and a note to get news by email or RSS.
- I want to be a...**: "Start the career you've dreamed about, or find one you never imagined." with a "Find It Now" button and the text "at My Next Move".
- ATTN: VETERANS**: "Put your military skills and experience to work in civilian life. Learn how at: MY NEXT MOVE FOR VETERANS" with a "Get Started" button.
- Hot Technologies**: "are frequently included in employer job postings." with a "Learn More" button.

At the bottom, there are three main search categories:

- Occupation Search**: Includes a search bar for "Keyword or O*NET-SOC Code".
- Find Occupations**: "Browse groups of similar occupations to explore careers. Choose from industry, field of work, science area, and more." Includes a dropdown menu currently set to "Bright Outlook".
- Advanced Search**: "Focus on occupations that use a specific tool or software. Explore occupations that need your skills." Includes a dropdown menu for "Browse by O*NET Data".
- Crosswalks**: "Connect to a wealth of O*NET data. Enter a code or title from another classification to find the related O*NET-SOC occupation." Includes a dropdown menu currently set to "Apprenticeship".

Center for a Competitive Workforce (CCW)

www.competitiveworkforce.la

Careers with a Bright Future

L.A. Basin Labor Market Reports, with analysis of growing occupations

The Center for a Competitive Workforce produces ongoing regional labor market reports, primarily focused on middle-skill occupations, to better understand regional labor market supply and demand data, support industry-driven career education and workforce development programs, and strengthen industry engagement with higher education or community colleges across the Los Angeles region.

- MANUFACTURING: AN INDUSTRY IN TRANSITION (2020)
- THE INFORMATION AND COMMUNICATIONS TECHNOLOGY INDUSTRY AND ITS WORKFORCE (2020)
- CONSTRUCTION: AN INDUSTRY WITH GROWING "MIDDLE-SKILL" WORKFORCE SHORTAGES (2020)
- PROTECTIVE SERVICES IN THE LA BASIN (2020)
- POWERING ECONOMIC OPPORTUNITY (2019 UPDATE)
- HIGH GROWTH MIDDLE-SKILL OCCUPATIONS (2019)
- HEALTH CARE SERVICES IN THE LA BASIN (2018)
- ENTERTAINMENT AND THE RISE OF DIGITAL MEDIA (2018)
- PROFESSIONAL SERVICES (2018)
- POWERING ECONOMIC OPPORTUNITY (2017) (SUPERSEDED)

Protective Services Occupations
In the Los Angeles Basin
JUNE 2020

Construction
in the Los Angeles Basin
JUNE 2020

An industry with growing "middle-skill" workforce shortages

Legislation that will impact LA labor market

- [Inflation Reduction Act](#) – Nationwide
 - Electricity Programs focused on clean energy, greenhouse gas reduction, expanding rural electric capacity, hydrogen and fuel cell technology, renewable energy, and others (*see job creation table, next slide*)
- [California's Master Plan for Kids' Mental Health](#) – California
 - *“The funding creates new virtual platforms and establishes a new pipeline for the mental health workforce, adding **40,000 new mental health workers** in the state.”*
- [Homelessness](#) – California
 - SB 1338 includes \$15.3 billion in funding to tackle homelessness, **\$1.4 billion for health and human services workforce**

TOTAL JOB CREATION ESTIMATES
Summary Figures

	Average Annual Budget and Job Creation Figures over 10 Years			Total Budget and Job-Years Figures	
	Public Spending	Total Spending (= <i>public</i> + <i>private spending</i>)	Annual Job Creation	Total Spending	Total Job Creation, Job Years
Electricity Programs	\$21.4 billion	\$66.3 billion	573,177	\$663 billion	5,731,771
Transportation Programs	\$3.3 billion	\$5.6 billion	65,821	\$56 billion	658,212
Building Programs	\$4.8 billion	\$9.4 billion	91,082	\$94 billion	910,819
Manufacturing Programs	\$6.7 billion	\$12.8 billion	106,032	\$127.7 billion	1,060,320
Environmental Justice and Community Resilience Programs	\$1.1 billion	\$1.1 billion	14,892	\$11 billion	148,916
Lands Programs	\$1.1 billion	\$1.1 billion	22,582	\$10.9 billion	225,817
Agriculture Programs	\$2.2 billion	\$2.2 billion	38,573	\$22 billion	385,732
TOTALS	\$40.6 billion	\$98.4 billion	912,159	\$984 billion	9,121,587

Table from:
[Job Creation
Estimates Through
Proposed Inflation
Reduction Act](#)

Political Economy
Research Institute
(PERI) at the
University of
Massachusetts
Amherst

Other Resources

- [CA EDD Occupational Guides](#)
- [BLS Occupational Outlook Handbook](#)
- [LA Sector Profiles](#)
- [LA Regional Plan](#)
- [DataMart](#), [LaunchBoard](#), [COCI](#), [CTEOS](#)
- [LARC Regional Program Recommendation Process](#) – requesting LMI, different request types, timeline, etc.
- LA Supply/Demand by Sector – September 2022 refresh



Thank You!

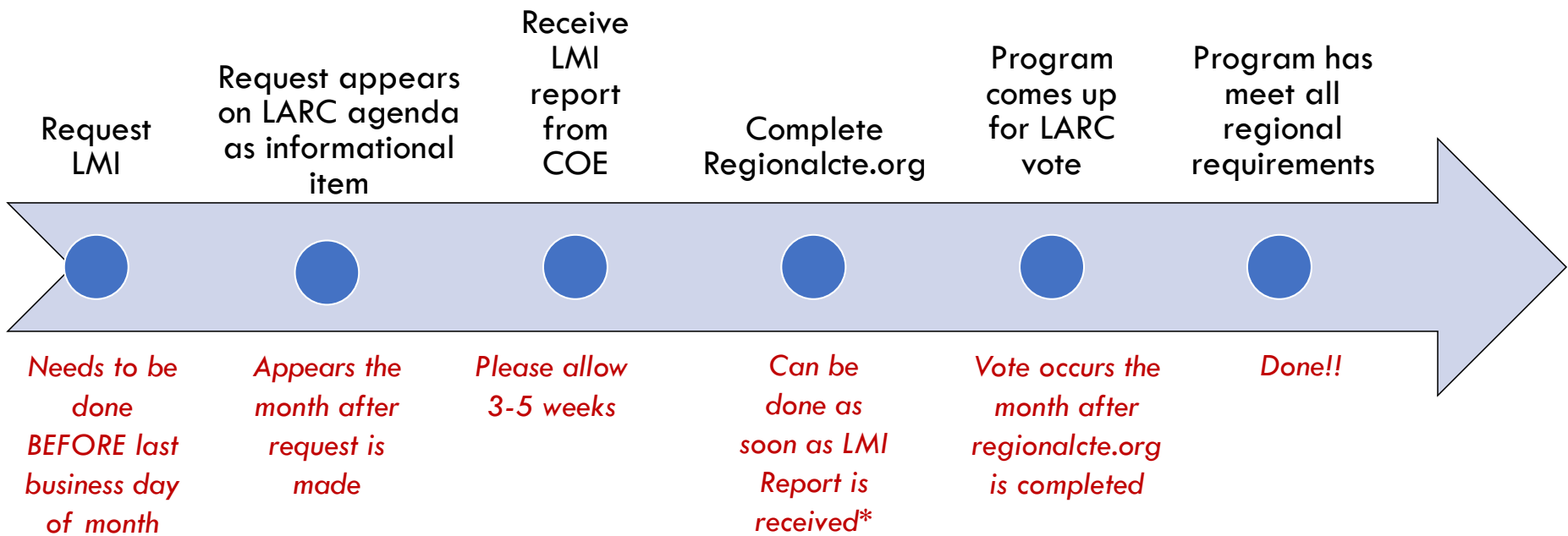
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Los Angeles County Region

Centers of Excellence for Labor Market Research

<https://coeccc.net/region/los-angeles/>

Program Recommendation Timeline



*LMI has 1-year shelf life

Sample Timeline

