Labor Market Analysis for Program Recommendation: 0506.00/Business Management CIP: 52.1001/Human Resources Management/Personnel Administration, General *(Associate of Science in Human Resources Management)*

Orange County Center of Excellence, November 2026

⚠ Endorsed: Caution Advised			
Program LMI Endorsement Criteria			
	Met ☐	Partially Met ☑	Not Met ☐
Supply Gap:	There are projected to be **416 annual job openings** throughout Los Angeles and Orange counties for *human resources assistants, except payroll and timekeeping*, which **is less than the 3,304 awards conferred by educational institutions**. However, these educational programs also prepare students for **six other related occupations some of which are classified as above middle-skill and account for 9,187 additional annual job openings.** *Because this program trains for a variety of occupations with high demand, there is most likely an undersupply of labor for human resources assistants, except payroll and timekeeping.*		
	Met ☐	Partially Met ☐	Not Met ☑
Self-Sufficiency Standard Living Wage[1]:	**Typical entry-level wages** for *human resources assistants, except payroll and timekeeping* **are $22.64**, **which is below the OC living wage of $27.13**.		
	Met ☑	Partially Met ☐	Not Met ☐
Education:	Typical education requirement for *human resources assistants, except payroll and timekeeping* is an **associate's degree**, and 32% of workers in the field have completed some college or an associate degree as their highest level of education.		

This LMA brief is valid for 12 months and expires November 2027.

Summary

The Orange County Center of Excellence for Labor Market Research (OC COE) prepared this report to determine whether there is a supply gap in the Los Angeles and Orange counties regional labor market related to one occupation:

- Middle-Skill
  - *Human Resources Assistants, Except Payroll and Timekeeping (43-4161)*

Although the number of awards exceeds demand for *human resources assistants, except payroll and timekeeping*, supply is likely overstated because related education programs train for an additional six occupations. When considering the strong demand across these occupations, it is likely the region is experiencing a supply gap. Additionally, typical education requirements for this occupation aligns with a community college education. However, entry-level wages are below the Self-Sufficiency Standard living wage. **Therefore, due to**

[1] The living wage endorsement criteria in this report uses the University of Washington's Center for Women's Welfare Self-Sufficiency Standard, which the COE refers to as a living wage; Orange County's living wage of $27.13, was last updated in March 2024.

some of the regional labor market criteria being met, the COE endorses this proposed program.

Exhibit 1 lists the occupational demand, supply, typical entry-level education, and educational attainment for the middle-skill and above middle-skill occupations included in this report.

Exhibit 1: Labor Market Endorsement Summary

Occupation (SOC)	Demand (Annual Openings)	Supply (CC and Non-CC)	Entry-Level Hourly Earnings (25th Percentile)	Typical Entry-Level Education	Community College Educational Attainment
Human Resources Assistants, Except Payroll and Timekeeping (43-4161)	LA: 302 OC: 115	LA: 2,603 OC: 701	OC: $22.64	Associate's degree	32%
Total	**416**	**3,304**	**N/A**	**N/A**	**N/A**

Demand

- In Los Angeles and Orange counties, the number of jobs related to these human resources occupations is projected to decrease 2% through 2030, equating to 416 annual job openings.
- Hourly entry-level wages for *human resources assistants, except payroll and timekeeping* are $22.64 in Orange County; which is below the Self-Sufficiency Standard living wage.
- There were 2,865 online job postings for *human resources assistants, except payroll and timekeeping* over the past 12 months. The highest number of postings were for human resources assistants, human resources coordinators, and recruiting coordinators.
- The typical entry-level education for *human resources assistants, except payroll and timekeeping* is an associate's degree.
- Between 32% of workers in the field have completed some college or an associate degree as their highest level of educational attainment.

Supply

- Between 2022 to 2024, an average of 2,933 awards were conferred by 29 community colleges for the middle-skill occupation in Los Angeles and Orange counties.
    - Community colleges awards applicable towards the above middle-skill occupation are accounted for within the middle-skill occupation.
- From 2021 to 2024, non-community college institutions conferred an average of 371 awards for the middle-skill occupation.
    - Non-community colleges awards applicable towards the above middle-skill occupation are accounted for within the middle-skill occupation.
- In the 2023-24 academic year, Orange County community college students that exited human resources programs had a median annual wage of $42,148 ($20.26 per hour) post-exit, and 33% attained the regional living wage.

- In 2022-23, 34% of Orange County human resources students that exited their programs reported working a job closely related to their field of study.

Above Middle-Skill Occupations

Although the endorsement summary is based on occupations attainable at the community college level, including related above middle-skill occupations can help illustrate potential career pathways and emerging labor market trends. Since the related program may serve as a stepping-stone toward further education and training, the following above middle-skill occupations, which require a bachelor's degree or higher, are included in this report:

- Above Middle-Skill – denoted with a caret (^) throughout this report.
  - *Human Resources Specialists (13-1071)^*
  - *Human Resources Managers (11-3121)^*

Exhibit 2 lists the occupational demand, supply, typical entry-level education, and educational attainment for the above middle-skill occupations included in this report.

Exhibit 2: Labor Market Summary for Above Middle-Skill Occupation

Occupation (SOC)	Demand (Annual Openings)	Supply (CC and Non-CC)	Entry-Level Hourly Earnings (25th Percentile)	Typical Entry-Level Education	Community College Educational Attainment
Human Resources Managers (11-3121)^	LA: 514 OC: 207 *TTL: 721*	*Accounted for Above*	OC: $59.77	Bachelor's degree	30%
Human Resources Specialists (13-1071)^	LA: 2,314 OC: 899 *TTL: 3,213*	*Accounted for Above*	OC: $30.13	Bachelor's degree	23%
Total	**3,934**	***Accounted for Above***	**N/A**	**N/A**	**N/A**

Demand

Occupational Projections

Exhibit 3 shows the annual percentage change in jobs for these human resources occupations from 2020 through 2030. Beginning in 2025, Orange County job levels are projected to grow at a similar rate than all occupations through 2030.

Exhibit 3: Annual Percentage Change in Jobs for Human Resources Occupations, 2020-2030

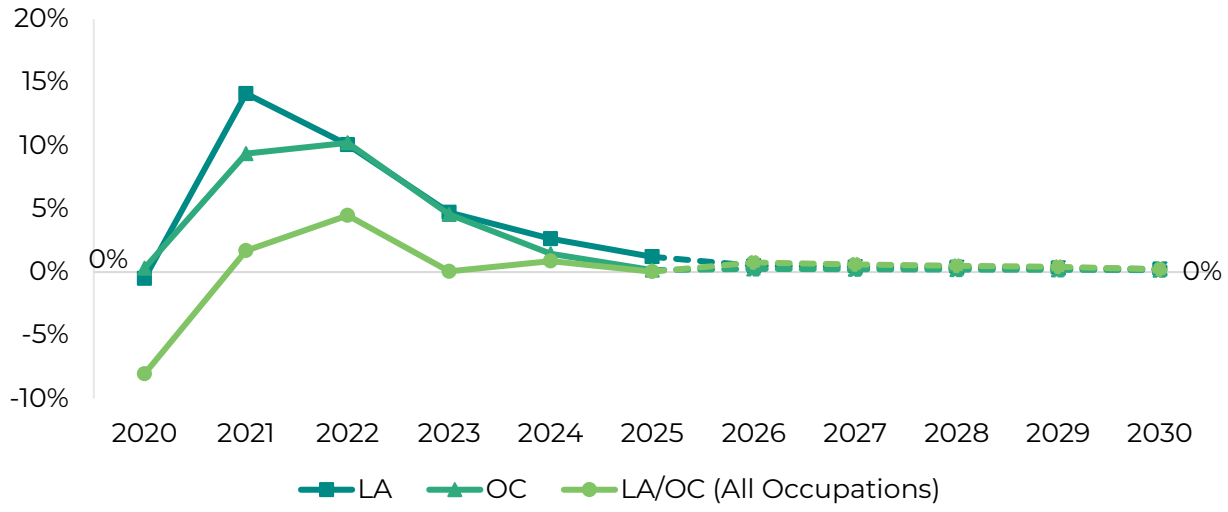


Exhibit 4 shows the five-year occupational demand projections for the middle-skill human resources occupation. In Los Angeles and Orange counties, the number of jobs related to these occupations is projected to decrease 2% through 2030. There is projected to be 416 jobs available annually.

Exhibit 4: Middle-Skill Occupational Demand in Los Angeles and Orange Counties[2]

Geography	2025 Jobs	2030 Jobs	2025-2030 Change	2025-2030 % Change	Annual Openings
Los Angeles	2,893	2,828	(65)	(2%)	302
Orange	1,103	1,074	(29)	(3%)	115
Total	**3,996**	**3,902**	**(94)**	**(2%)**	**416**

Exhibit 5 shows the five-year occupational demand projections for these above middle-skill human resources occupations. In Los Angeles and Orange counties, the number of jobs related to this occupation is projected to increase 2% through 2030. There is projected to be 3,934 jobs available annually.

Exhibit 5: Above-Middle Skill Occupational Demand in Los Angeles and Orange Counties

Geography	2025 Jobs	2030 Jobs	2025-2030 Change	2025-2030 % Change	Annual Openings
Los Angeles	34,208	34,977	769	2%	1,106

[2] Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

Geography	2025 Jobs	2030 Jobs	2025-2030 Change	2025-2030 % Change	Annual Openings
Orange	13,732	13,912	180	1%	1,106
Total	**47,940**	**48,889**	**949**	**2%**	**3,934**

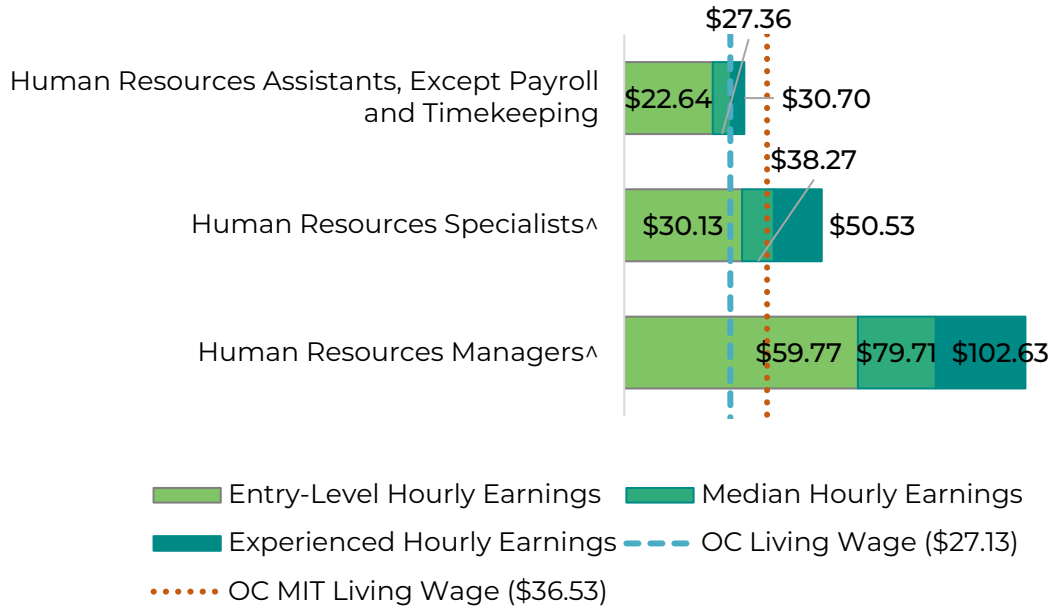
Wages

The labor market endorsement in this report considers the entry-level hourly wages for these human resources occupations in Orange County as they relate to the county's living wage. Los Angeles County wages are included below to provide a complete analysis of the LA/OC region.

In addition to the Self Sufficiency Standard living wage, data for the MIT Living Wage (updated on February 15, 2026) is provided as a reference. Currently, the MIT Living Wage in Orange County is $36.53. Both figures account for geographic-specific costs of necessities such as housing, food, health care, and transportation to assess the cost of living, and are notated in the exhibits below.

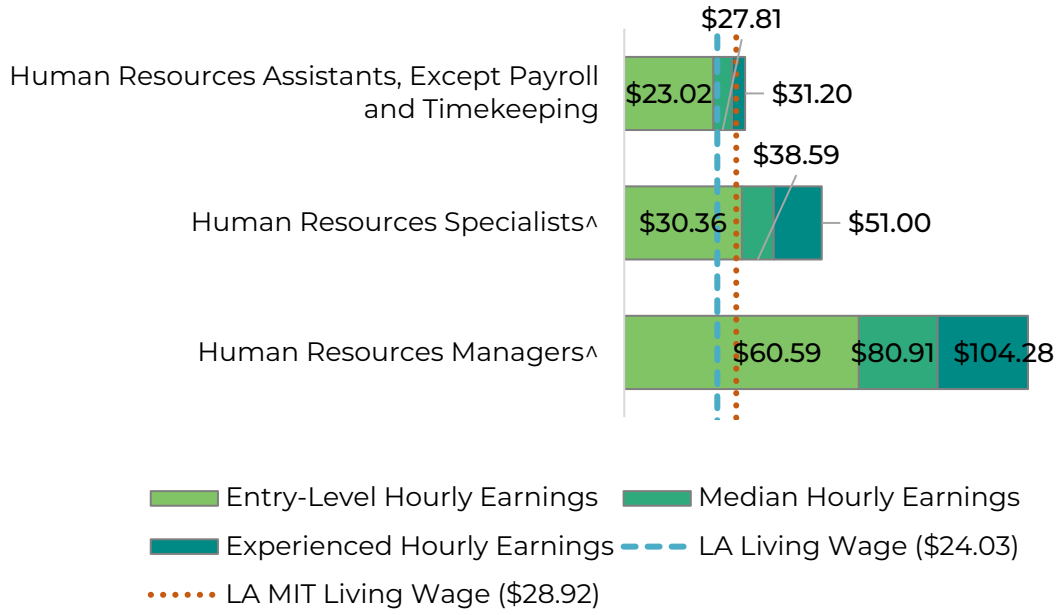
In Orange County, *human resources assistants, except payroll and timekeeping* have entry-level wages below the Self-Sufficiency living wage of $27.13 for a single adult, at $22.64. Exhibit 6 shows the wage range for each of these human resources occupations in Orange County and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

Exhibit 6: Wages by Occupation in Orange County



In Los Angeles County, *human resources assistants, except payroll and timekeeping* have entry-level wages below the Self-Sufficiency living wage of $24.03 for a single adult, at $23.02. Exhibit 7 shows the wage range for each of these human resources occupations in Los Angeles County and how they compare to the regional living wage, sorted from lowest to highest entry-level wage.

Exhibit 7: Wages by Occupation in Los Angeles County



Resilient Jobs and U.S. News & World Report Best Jobs

Exhibit 8 shows if each occupation is considered an Orange County Great Recession-Resilient, COVID-19 Pandemic Recession-Resilient Job, or a 2026 U.S. News & World Report (USN&WR) Best Job[3]. *Human resources specialists^* and *human resources managers^* met the criteria to be considered a COVID-19 Pandemic Recession-Resilient Job and USN&WR Best Jobs. *Human resources assistants, except payroll and timekeeping* did not meet the criteria to be considered a Great Recession-Resilient Job, COVID-19 Pandemic Recession-Resilient Job or USN&WR Best Job.

Exhibit 8: Resilient Jobs and USN&WR Best Jobs Designations

Occupation	Great Recession-Resilient Job	COVID-19 Pandemic Recession-Resilient Job	2026 USN&WR Best Job
Human Resources Assistants, Except Payroll and Timekeeping	☐	☐	☐
Human Resources Specialists^	☐	☑	☑
Human Resources Managers^	☐	☑	☑

Job Postings

Important Job Postings Data Note: *There are limitations when analyzing job postings. A single job posting may not represent a single job opening for a variety of reasons.*

[3] "100 Best Jobs," U.S. News & World Report, accessed January 12, 2026, https://money.usnews.com/careers/best-jobs/rankings/the-100-best-jobs.

There were 15,875 online job postings related to these human resources occupations listed in the past 12 months. Exhibit 9 shows the number of job postings by occupation. Over 50% of job postings were for *human resources specialists^* and nearly 26% were for human resources managers^.

Exhibit 9: Number of Job Postings by Occupation (n= 15,875)

Occupation	Job Postings	Percentage of Job Postings
Human Resources Specialists^	8,882	56%
Human Resources Managers^	4,128	26%
Human Resources Assistants, Except Payroll and Timekeeping	2,865	18%
Total Postings	**15,875**	**100%**

Job Postings for Middle-Skill Occupation

The top job titles for the middle-skill human resources occupation in the region, by number of job postings, are shown in Exhibit 10.

Exhibit 10: Top Job Titles by Number of Job Postings for Middle-Skill Occupation (n=2,865)

Job Titles	Job Postings	Percentage
Human Resources Assistants	491	17%
Human Resources Coordinators	362	13%
Recruiting Coordinators	168	6%
Human Resources Administrators	160	6%
Human Resources Administrative Assistants	99	3%
Human Resources Clerks	52	2%
Onboarding Coordinators	49	2%
Human Resources Technicians	45	2%
Recruiting Assistants	35	1%
Administrative Assistants	34	1%

The top employers for the middle-skill human resources occupation in the region, by number of job postings, are shown in Exhibit 11.

Exhibit 11: Top Employers by Number of Job Postings for Middle-Skill Occupation (n=2,865)

Employer	Job Postings	Percentage of Job Postings
Robert Half	128	4%
AppleOne	64	2%
Vaco	57	2%
Ultimate Staffing	42	1%
Aston Carter	36	1%
Edjoin.Org	34	1%
Lee Hecht Harrison	25	<1%
Activ8 Recruitment & Solutions	16	<1%
West Capital Lending	15	<1%
Vinmotion Multifunctional Robot Research Development and Application	14	<1%

The top specialized, soft, and computer skills for these middle-skill human resources occupations listed by those most frequently mentioned in job postings (denoted in parentheses) are shown in Exhibit 12.

Exhibit 12: Top Skills by Number of Job Postings for Middle-Skill Occupation (n=2,865)

Top Specialized Skills	Top Soft Skills	Top Computer Skills
Human Resources Information System (HRIS) (941)	Communication (1,823)	Microsoft Office (982)
Administrative Support (922)	Detail Oriented (1,468)	Human Resources Information System (HRIS) (941)
Auditing (774)	Coordinating (995)	Microsoft Excel (919)
Employee Onboarding (679)	Microsoft Office (982)	Microsoft Outlook (677)
Data Entry (583)	Confidentiality (966)	Microsoft PowerPoint (439)
Employee Relations (468)	Microsoft Excel (919)	Applicant Tracking Systems (373)
HR Operations (420)	Operations (918)	Spreadsheets (268)
Applicant Tracking Systems (373)	Administrative Functions (915)	Microsoft Word (250)
Workflow Management (349)	Organizational Skills (841)	Google Workspace (174)
Labor Law (300)	Scheduling (803)	Workday (Software) (164)

Job Postings for Above Middle-Skill Occupation

The top job titles for these above middle-skill human resources occupations in the region, by number of job postings, are shown in Exhibit 13.

Exhibit 13: Top Job Titles by Number of Job Postings for Above Middle-Skill Occupation (n=13,009)

Job Titles	Job Postings	Percentage
Human Resources Generalists	1,393	11%
Human Resources Managers	774	6%
Recruiters	713	5%
Directors of Human Resources	411	3%
Human Resources Business Partners	409	3%
Human Resources Specialists	297	2%
Talent Acquisition Specialists	264	2%
Human Resources Coordinators	251	2%
Technical Recruiters	189	1%
Talent Acquisition Partners	158	1%

The top employers for these above middle-skill human resources occupations in the region, by number of job postings, are shown in Exhibit 14.

Exhibit 14: Top Employers by Number of Job Postings for Above Middle-Skill Occupation(n=13,009)

Employer	Job Postings	Percentage of Job Postings
Robert Half	507	4%
Ultimate Staffing	231	2%
AppleOne	200	2%
Vaco	163	1%
Anduril Industries	136	1%
Aston Carter	74	<1%
University of California	68	<1%
Northrop Grumman	59	<1%
Adecco	57	<1%
Edjoin.Org	54	<1%

The top specialized, soft, and computer skills for these above middle-skill human resources occupations listed by those most frequently mentioned in job postings (denoted in parentheses) are shown in Exhibit 15.

Exhibit 15: Top Skills by Number of Job Postings for Above Middle-Skill Occupation(n=13,009)

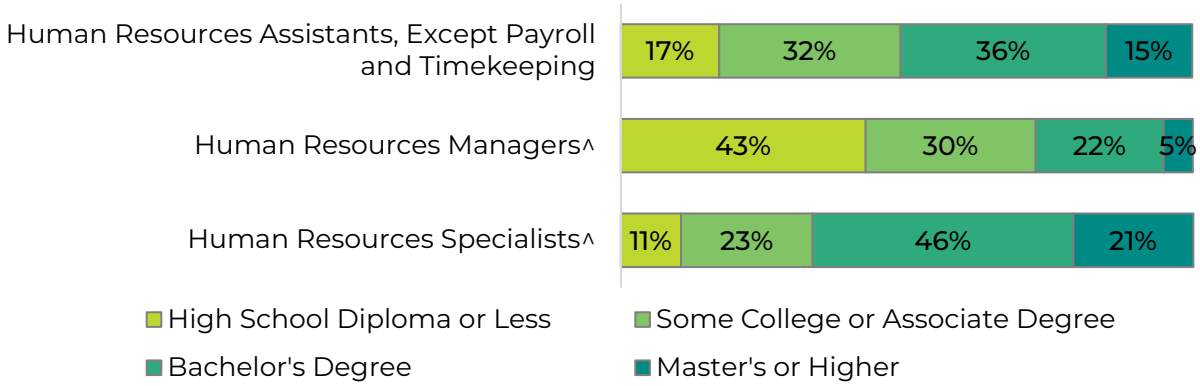
Top Specialized Skills	Top Soft Skills	Top Computer Skills
Employee Relations (3,969)	Communication (8,174)	Human Resources Information System (HRIS) (3,401)
Human Resources Information System (HRIS) (3,401)	Leadership (5,254)	Microsoft Office (2,665)
Performance Management (2,598)	Management (4,216)	Microsoft Excel (2,155)
Full-Cycle Recruitment (2,276)	Detail Oriented (3,585)	Applicant Tracking Systems (1,917)
Labor Law (2,192)	Operations (3,582)	Microsoft PowerPoint (1,257)
Auditing (2,018)	Problem Solving (2,682)	Microsoft Outlook (1,140)
Applicant Tracking Systems (1,917)	Microsoft Office (2,665)	Workday (Software) (946)
Employee Onboarding (1,916)	Coordinating (2,609)	Dashboard (739)
Process Improvement (1,789)	Customer Service (2,238)	LinkedIn Recruiter (634)
Talent Acquisition (1,709)	Business Administration (2,221)	Microsoft Word (501)

Educational Attainment

The Bureau of Labor Statistics (BLS) lists associate's degree as the typical entry-level education for *human resources assistants, except payroll and timekeeping*, and bachelor's degree for *human resources managers^* and *human resources specialists^*.

The national-level educational attainment data indicates between 23% and 32% of workers in the field have completed some college or an associate degree as their highest level of education. Exhibit 16 shows the educational attainment for each occupation, sorted by highest community college educational attainment to lowest.

Exhibit 16: National-level Educational Attainment for Occupations



Requested Minimum Education Requirement

Of the cumulative job postings for these human resources occupations in Los Angeles and Orange counties that listed a minimum education requirement:

- 59% of Middle-Skill Occupations Job Postings
  - 56% (947) requested a high school diploma or associate degree
  - 44% (740) requested a bachelor's degree
- 63% of Above Middle-Skill Occupations Job Postings
  - 19% (1,573) requested a high school diploma or associate degree
  - 79% (6,391) requested a bachelor's degree.

Educational Supply

The following tables display the total educational supply for the TOP and CIP codes associated with the middle-skill occupations.

Community College Supply

Exhibit 17 shows the three-year average number of awards conferred by community colleges in the related TOP codes:

- Business Management (0506.00)
- Office Technology/Office Computer Applications (0514.00)

The colleges with the most completions in the region are Cerritos (1,055), followed by Mt San Antonio (472), and Santa Ana (262). Over the past 12 months, there were two other related program recommendation requests from regional community colleges.

Exhibit 17: Regional Community College Awards (Certificates and Degrees), 2022-2025

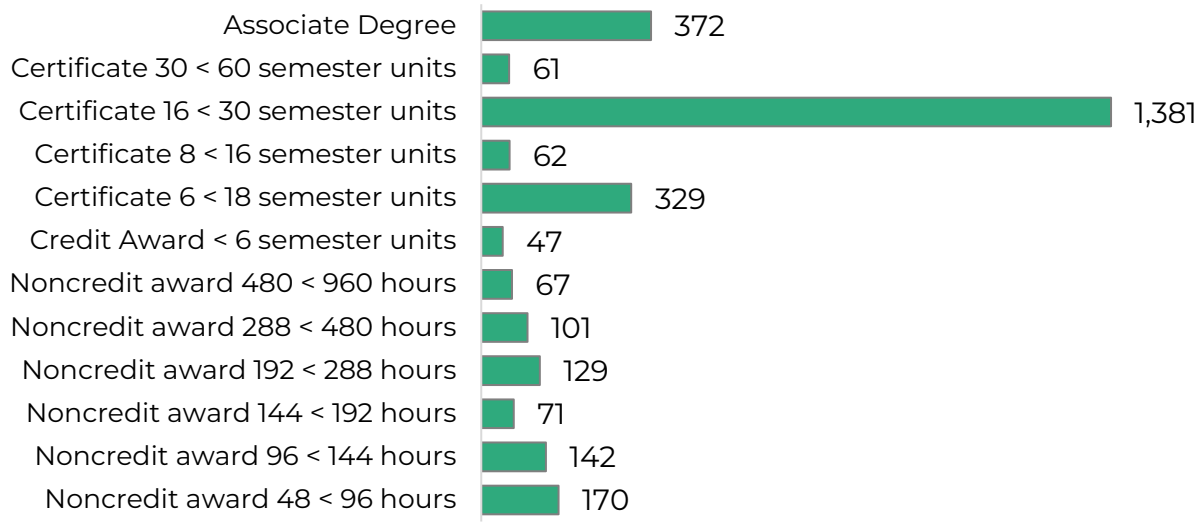
TOP Code	Program	College	2022-2023 Awards	2023-2024 Awards	2024-2025 Awards	3-Year Award Average
0506.00	Business Management	Cerritos	469	1,526	1,115	1,037
		Citrus	0	2	5	2
		Compton	0	1	2	1
		East LA	14	23	20	19
		El Camino	40	31	42	38
		Glendale	22	28	23	24
		LA City	40	33	27	33
		LA Mission	3	4	7	5
		LA Pierce	9	9	9	9
		LA Valley	34	37	74	48
		Long Beach	26	43	38	36
		Mt San Antonio	157	192	226	192
		Pasadena	2	7	13	7
		Santa Monica	0	1	20	7
		LA Subtotal	**816**	**1,937**	**1,621**	**1,458**
		Coastline	40	36	30	35
		Cypress	3	1	0	1
		Fullerton	20	39	51	37
		Golden West	5	8	12	8
		Irvine	20	36	30	29
		Orange Coast	2	0	8	3
		Saddleback	0	7	13	7
		Santa Ana	62	63	60	62

TOP Code	Program	College	2022-2023 Awards	2023-2024 Awards	2024-2025 Awards	3-Year Award Average
		Santiago Canyon	173	72	21	89
		North Orange Continuing Education	0	37	38	25
		OC Subtotal	**325**	**299**	**263**	**296**
Supply Subtotal/Average			**1,141**	**2,236**	**1,884**	**1,754**
0514.00	Office Technology/ Office Computer Applications	Cerritos	20	24	10	18
		Citrus	2	3	5	3
		East LA	17	43	56	39
		El Camino	2	3	3	3
		Glendale	94	38	59	64
		LA City	43	33	60	45
		LA Harbor	0	2	2	1
		LA Mission	16	7	16	13
		LA Pierce	38	64	46	49
		LA Swest	1	1	0	1
		LA Trade	14	17	7	13
		LA Valley	95	120	121	112
		Long Beach	74	58	62	65
		Mt San Antonio	210	305	325	280
		Pasadena	21	163	93	92
		Rio Hondo	0	3	0	1
		Santa Monica	8	15	36	20
		West LA	19	1	46	22
		LA Subtotal	**674**	**900**	**947**	**840**
		Coastline	0	11	9	7
		Cypress	1	1	0	1
		Golden West	0	4	3	2
		Irvine	11	3	2	5
		Orange Coast	24	33	31	29
		Saddleback	46	70	11	42
		Santa Ana	133	204	264	200
		Santiago Canyon	41	35	29	35
		North Orange Continuing Education	0	26	25	17
		OC Subtotal	**256**	**387**	**374**	**339**

TOP Code	Program	College	2022-2023 Awards	2023-2024 Awards	2024-2025 Awards	3-Year Award Average
		Supply Subtotal/Average	**930**	**1,287**	**1,321**	**1,179**
		Supply Total/Average	**2,071**	**3,523**	**3,205**	**2,933**

Exhibit 18 shows the annual average community college awards by type from 2022-23 to 2024-25. The plurality of the awards are for certificate 16 to 30 semester units, followed by associate degree then certificate 6 to 18 semester units..

Exhibit 18: Annual Average Community College Awards by Type, 2022-2025



Community College Student Outcomes

Exhibit 19 shows the Strong Workforce Program (SWP) metrics for business management programs in South Orange County Community College District (SOCCCD), the Orange County Region, and California. Of the 6,955 Orange County business management students in the 2024-25 academic year, 20% (1,392) attended an SOCCCD college.

SOCCCD students that exited business management programs in the 2023-24 academic year had higher median annual earnings ($46,108 or $22.17 per hour) compared to all business management students in Orange County ($42,148 or $20.26 per hour). A higher percentage of SOCCCD business management students attained the living wage (41%) when compared to all business management students in Orange County (33%).

Exhibit 19: Business Management (0506.00) Strong Workforce Program Metrics, 2022-25[4]

SWP Metric	SOCCCD	OC Region	California
SWP Students	1,392	6,955	46,927
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	32%	29%	39%
SWP Students Who Completed a Noncredit CTE or Workforce Preparation Course	64%	83%	74%

[4] All SWP metrics are for 2024-25 unless otherwise noted.

SWP Metric	SOCCCD	OC Region	California
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	28	184	2,985
SWP Students Who Transferred to a Four-Year Postsecondary Institution (2023-24)	187	579	3,623
SWP Students with a Job Closely Related to Their Field of Study (2022-23)	29%	34%	43%
Median Annual Earnings for SWP Exiting Students (2023-24)	$46,108 ($22.17)	$42,148 ($20.26)	$47,370 ($22.77)
Median Change in Earnings for SWP Exiting Students (2023-24)	51%	25%	23%
SWP Exiting Students Who Attained the Living Wage (2023-24)	41%	33%	48%

Non-Community College Supply

To comprehensively analyze the regional supply, it is crucial to include data from other institutions offering business management programs. Exhibit 20 displays the annual and three-year average awards granted by these institutions under the related Classification of Instructional Programs (CIP) codes: Human Resources Management/Personnel Administration, General (52.1001)

The available data covers 2021 to 2024. During this period, non-community college institutions in the region conferred an average of 371 awards annually in related programs.

Exhibit 20: Regional Non-Community College Awards, 2021-2024

CIP Code	Program	College	2021-2022 Awards	2022-2023 Awards	2023-2024 Awards	3-Year Award Average
52.1001	Human Resources Management/ Personnel Administration, General	Claremont Graduate University	9	11	7	9
		Claremont Lincoln University	19	30	30	26
		Mount Saint Mary's University	0	1	0	0
		Pepperdine University	46	49	40	45
		Touro University Worldwide	18	21	17	19
		University of Massachusetts Global	60	48	32	47
		University of Southern California	218	234	222	225
		Westcliff University	0	0	1	0
Supply Total/Average			**370**	**394**	**349**	**371**

Regional Demographics

The following section presents occupational, community college program, and population demographic data for Orange County. This comparison can help identify possible equity gaps between the local workforce and the student pipeline who are preparing for these occupations. These insights can inform program development, outreach, and support strategies to better align community college programs with current labor market needs.

Ethnicity

Exhibit 21 compares the ethnicity of Orange County community college students enrolled in business management programs, the overall Orange County population, and occupation-specific data for these business management occupations included in this report.

White workers have more than double the representation in business management occupations (44%) compared to the proportion of white community college business management students (19%). Conversely, Hispanic or Latino individuals make up 50% of business management students, but only 28% of the workforce, indicating a potential disconnect between training and employment outcomes.

Exhibit 21: Program and County Demographics by Ethnicity

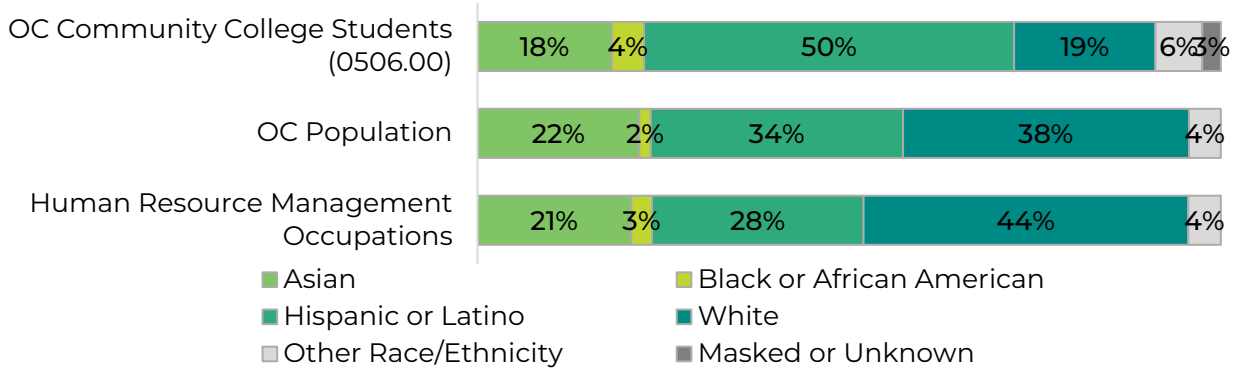
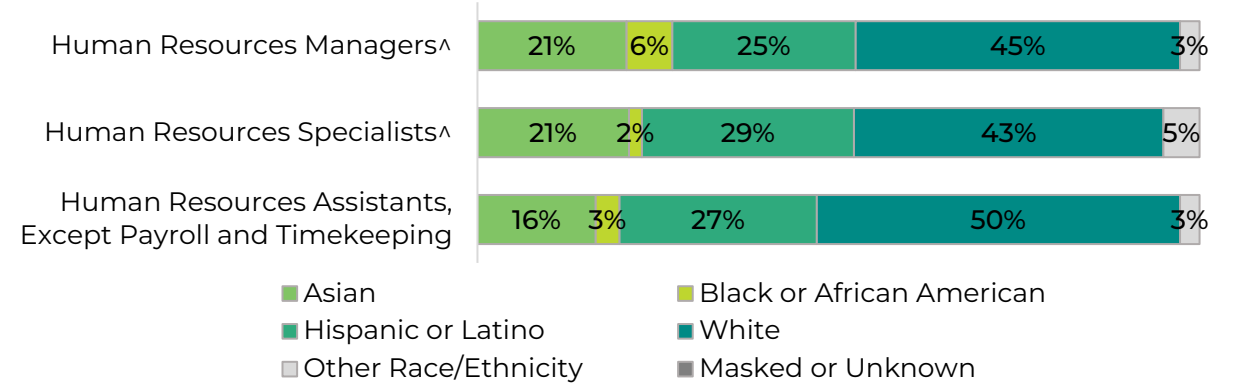


Exhibit 22 shows the disaggregated ethnicity data for each occupation, revealing potential disparities in entry into well-paying occupations or career advancement.

Throughout business management workers, the demographic makeup is roughly equivalent across the occupations presented, albeit Asian workers are slightly underrepresented in *human resources assistants, except payroll and timekeeping* (16%) and whites are slightly more represented (50%).

Exhibit 22: Disaggregated Ethnic Distribution by Occupation



Age

Exhibit 22 compares the age of Orange County community college students enrolled in business management programs, the overall Orange County population, and occupation-specific data for these business management occupations included in this report.

Although only 8% of business management workers are 24 and younger, the majority of students (64%) are of this age group. This may indicate the need for more on-the-job experience to become a business management worker. Additionally, there are far more business management workers who are 35 and older (64%) compared to business management students (16%), indicating a possible shift in careers to business management later in life.

Exhibit 23: Program and County Demographics by Age

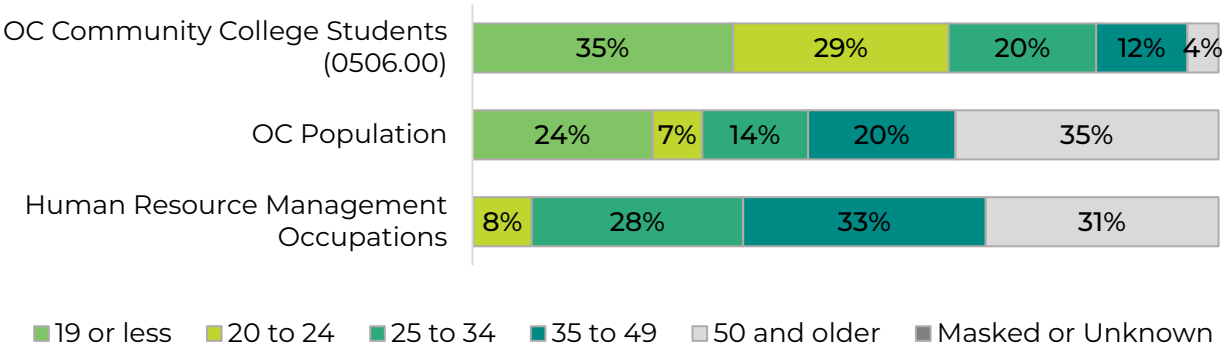
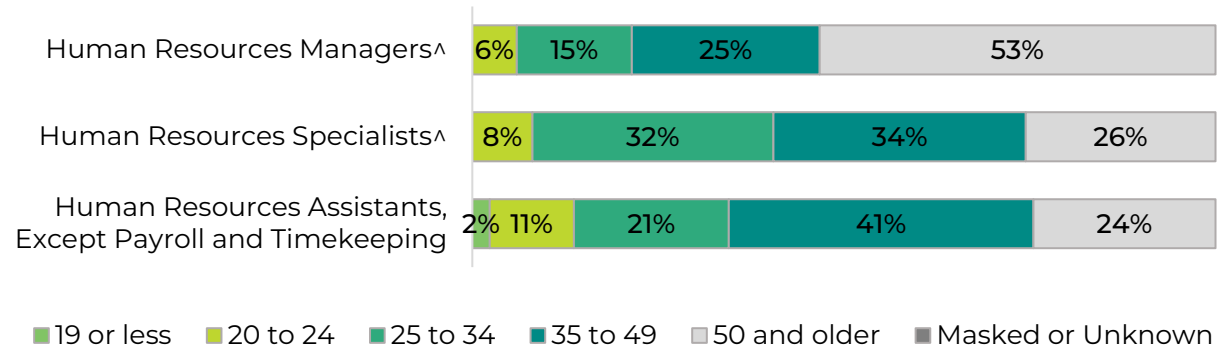


Exhibit 24 shows the disaggregated age data for each occupation, revealing potential disparities in entry into well-paying occupations or career advancement.

Out of all business management workers, those who are 35 to 49 years of age make up 41% of the workforce in the lower paying ($22.64 per hour), lower educational requirement (associate's degree) occupation *human resources assistance, except payroll and timekeeping*. Those who are 50 and older make up the higher wage ($59.77 per hour), higher educational requirement (bachelor's degree) occupation *human resources managers^*.

Exhibit 24: Disaggregated Age Distribution by Occupation



Sex

Exhibit 23 compares the sex of Orange County community college students enrolled in business management programs, the overall Orange County population, and occupation-specific data for these business management occupations.

Though the population is split evenly between women and men, men make up only 27% of business management workers in the field, but 52% of community college students in business management programs.

Exhibit 25: Program and County Demographics by Sex

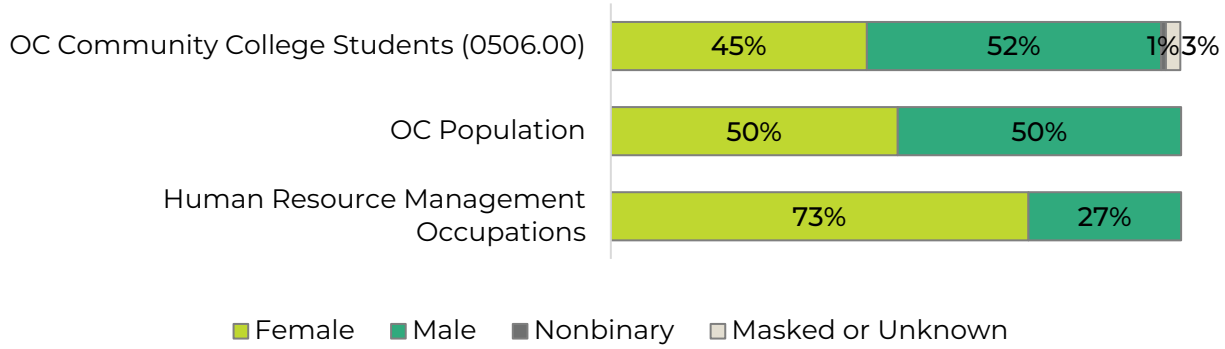
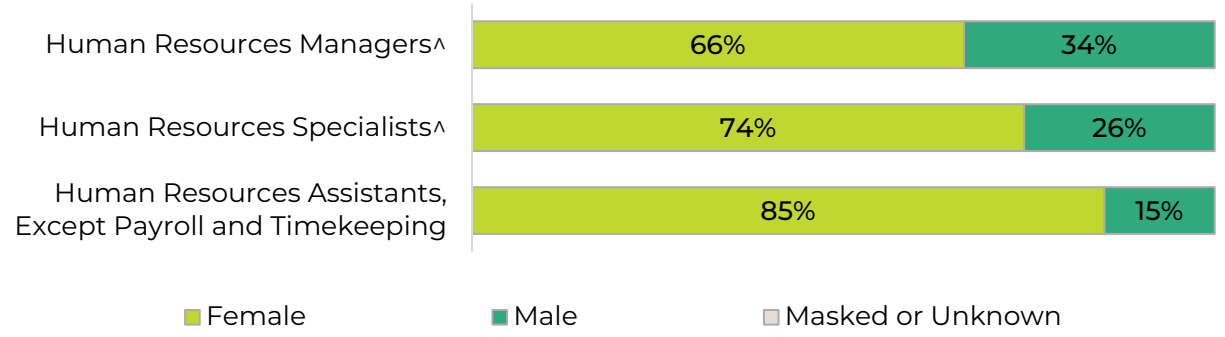


Exhibit 26 shows the disaggregated sex data for each occupation, revealing potential disparities in entry into well-paying occupations or career advancement.

While women have greater representation in these occupations, the proportion of women and men in the lower wage ($22.64), lower educational requirement (associate's degree) occupation *human resources assistance, except payroll and timekeeping* stands in contrast to the much higher wage ($59.77), higher educational requirement (bachelor's degree) occupation *human resources managers^*. Specifically, more *human resources assistance, except payroll and timekeeping* are women (85%) compared to *human resources managers^* (66%), alluding to gender pay and career advancement gaps in this industry.

Exhibit 26: Disaggregated Sex Distribution by Occupation



Appendix A: Methodology

OC COE prepared this report by analyzing occupational and educational program data. Occupational data comes from Lightcast, a labor market analytics firm which compiles information from the California Employment Development Department (EDD), U.S. Bureau of Labor Statistics (BLS), and other agencies. Analysis of emerging occupations is predicated on online job postings data combined with Occupational Information Network (O*NET) profile descriptions. Program supply data was sourced from the California Community Colleges Chancellor's Office Data Mart (MIS Data Mart) (datamart.cccco.edu) and the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data), also known as IPEDS, which was integrated into the COE's Supply Table. (IPEDS).

Using a TOP-SOC crosswalk, the OC COE identified middle-skill jobs for which programs within these TOP codes train. Middle-skill jobs include:

- All occupations that have an educational requirement of some college, associate degree or apprenticeship;
- All occupations that require 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
- All occupations that require 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.

The OC COE determined labor market supply for each occupation (SOC code) by analyzing the number of 3-year average program completers or awards in related TOP and CIP codes. TOP code data comes from MIS Data Mart and CIP code data comes from the IPEDS. The TOP is a system of numerical codes used at the state level to collect and report information on California community college programs and courses throughout the state that have similar outcomes. CIP codes are a taxonomy of academic disciplines at institutions of higher education throughout the United States and Canada. The California Community Colleges are the only system that use TOP codes.

The analysis reflects labor market demand for occupations closely related to the proposed program as expressed by the requesting college in consultation with the OC COE. Traditional labor market data was used to assess current and projected employment based on data trends for detailed occupations, as well as annual average awards granted by regional postsecondary educational institutions. Real-time labor market information (online job postings) assesses employer preferences but cannot be used to measure the quantity of open positions, number of jobs, or annual openings.

All findings are based on the most current available data and a combination of primary and secondary sources. While care was taken to ensure accuracy, the OC COE, its host district, and the California Community Colleges Chancellor's Office are not responsible for individual decisions made based on this report.

Appendix B: Data Sources

Data Type	Source
Occupational Projections, Wages, and Job Postings	Traditional and real-time labor market information are captured using data from Lightcast (v.2026.3), a labor market analytics firm.
Living Wage	Per the CCCCO's this report's endorsement criteria uses the University of Washington's Center for Women's Welfare Self-Sufficiency Standard last updated in March 2024, which is $27.13 per hour ($57,294 annually) in Orange County. The MIT Living Wage, updated on February 15, 2026, is a nationally recognized living wage metric and is provided for reference. The current MIT Living Wage in Orange County is $36.53.
Typical Education and Training Requirements, and Educational Attainment	The Bureau of Labor Statistics (BLS) uses a system to assign categories for entry-level education, work experience in a related occupation, and typical on-the-job training to each occupation for which BLS publishes projections data.
Emerging Occupation Descriptions, Additional Education Requirements, and Employer Preferences	The O*NET database includes information on skills, abilities, knowledges, work activities, and interests associated with occupations.
Educational Supply	The CCCCO Data Mart provides information about students, courses, student services, outcomes and faculty and staff. The National Center for Education Statistics (NCES) Integrated Postsecondary Integrated Data System (IPEDS) collects data on the number of postsecondary awards earned (completions).
Student Metrics and Demographics	Data Vista, a statewide data system supported by the California Community Colleges Chancellor's Office provides data on progress, success, employment, and earnings outcomes for California community college students.
Population and Occupation Demographics	The Census Bureau's American Community Survey (ACS) is the premier source for detailed population and housing information. Data is sourced from IPUMS USA, a database providing access to ACS and other Census Bureau data products.

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FOR LABOR MARKET RESEARCH
ORANGE COUNTY