

Labor Market Analysis: 0502.00/Accounting
Accounting (Associate of Arts (A.A.) degree; Certificate requiring 30 to <60 semester units)

Los Angeles Center of Excellence, February 2023

Summary

| | | | |
|---|---|---|--|
| Program Endorsement: | Endorsed: All Criteria Met <input type="checkbox"/> | Endorsed: Some Criteria Met <input checked="" type="checkbox"/> | Not Endorsed <input type="checkbox"/> |
| Program Endorsement Criteria | | | |
| Supply Gap: | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Living Wage: (Entry-Level, 25 th) | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |
| Education: | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Emerging Occupation(s) | | | |
| | Yes <input type="checkbox"/> | No <input checked="" type="checkbox"/> | |

The Los Angeles Center of Excellence for Labor Market Research (LA COE) prepared this report to provide regional labor market supply and demand data related to five middle-skill occupations:

- **Tax Examiners and Collectors, and Revenue Agents (13-2081)** Determine tax liability or collect taxes from individuals or business firms according to prescribed laws and regulations.¹
- **Tax Preparers (13-2082)** Prepare tax returns for individuals or small businesses.²
- **Bookkeeping, Accounting, and Auditing Clerks (43-3031)** Compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records. May also check the accuracy of figures, calculations, and postings pertaining to business transactions recorded by other workers.³
- **Payroll and Timekeeping Clerks (43-3051)** Compile and record employee time and payroll data. May compute employees' time worked, production, and commission. May compute and post wages and deductions, or prepare paychecks.⁴
- **Brokerage Clerks (43-4011)** Perform duties related to the purchase, sale, or holding of securities. Duties include writing orders for stock purchases or sales, computing transfer taxes, verifying stock transactions, accepting and delivering securities, tracking stock price fluctuations, computing equity, distributing dividends, and keeping records of daily transactions and holdings.⁵

¹ [Tax Examiners and Collectors, and Revenue Agents : Occupational Outlook Handbook \(bls.gov\)](#)

² [Tax Preparers \(bls.gov\)](#)

³ [Bookkeeping, Accounting, and Auditing Clerks: Occupational Outlook Handbook \(bls.gov\)](#)

⁴ [Payroll and Timekeeping Clerks \(bls.gov\)](#)

⁵ [Brokerage Clerks \(bls.gov\)](#)

Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.⁶ Although one of the occupations in this report typically requires a bachelor's degree, it is considered middle-skill because approximately one-third of workers in the field have completed some college or an associate degree. This report is intended to help determine whether there is demand in the local labor market that is not being met by the supply from community college programs that align with the relevant occupations.

Based on the available data, there appears to be a supply gap for these middle-skill accounting occupations in the region. While the majority of annual openings in Los Angeles and Orange counties have entry-level wages that are lower than the self-sufficiency standard wage, the majority of annual openings typically require some college, but no degree. **Therefore, due to some of the criteria being met, the LA COE endorses this proposed program.** Detailed reasons include:

Demand:

- **Supply Gap Criteria** – Over the next five years, **11,984 jobs are projected to be available annually** in the region due to new job growth and replacements, **which is more than the three-year average of 2,780 awards conferred** by educational institutions in the region.
- **Living Wage Criteria** – Within Los Angeles County, the **majority (90%) of annual job openings** for these middle-skill accounting occupations have entry-level wages **below the self-sufficiency standard hourly wage** (\$18.10/hour).⁷
- **Educational Criteria** – Within the greater LA/OC region, **84% of the annual job openings** for middle-skill occupations related to accounting **typically require some college, but no degree.**
 - Furthermore, the national-level educational attainment data indicates **between 32% and 49% of workers in the field have completed some college or an associate degree.**

Supply:

- There are **28 community colleges** in the greater LA/OC region that issue awards related to accounting, conferring an average of **1,953 awards annually** between 2018 and 2021.
- Between 2017 and 2020, there was an average of **827 awards conferred annually** in related training programs by non-community college institutions throughout the greater LA/OC region.

⁶ The COE classifies middle-skill jobs as the following:

- All occupations that require 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.

⁷ Self-Sufficiency Standard wage data was pulled from The Self-Sufficiency Standard Tool for California. For more information, visit: <http://selfsufficiencystandard.org/california>.

Occupational Demand

Exhibit 1 shows the five-year occupational demand projections for these middle-skill accounting occupations. In the greater Los Angeles/Orange County region, the number of jobs related to these occupations is projected to increase by 2% through 2026. There will be nearly 12,000 job openings per year through 2026 due to job growth and replacements.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties⁸

| Geography | 2021 Jobs | 2026 Jobs | 2021-2026 Change | 2021-2026 % Change | Annual Openings |
|--------------|---------------|---------------|------------------|--------------------|-----------------|
| Los Angeles | 67,680 | 69,376 | 1,696 | 3% | 8,719 |
| Orange | 25,376 | 26,002 | 625 | 2% | 3,265 |
| Total | 93,056 | 95,377 | 2,321 | 2% | 11,984 |

Wages

The labor market endorsement in this report considers the entry-level hourly wages for these middle-skill accounting occupations in Los Angeles County as they relate to the county's self-sufficiency standard wage. Orange County wages are included below in order to provide a complete analysis of the greater LA/OC region. Detailed wage information, by county, is included in Appendix A.

Los Angeles County—The majority (90%) of annual openings for middle-skill accounting occupations have entry-level wages below the self-sufficiency standard wage for one adult (\$18.10 in Los Angeles County). Typical entry-level hourly wages are in a range between \$16.86 and \$38.57. Three occupations in this report have entry-level wages above the county's self-sufficiency standard wage: *tax examiners and collectors, and revenue agents* (\$38.57), *brokerage clerks* (\$23.98), and *payroll and timekeeping clerks* (\$22.15). Experienced workers can expect to earn wages between \$29.69 and \$55.94, which are higher than the self-sufficiency standard.

Exhibit 2: Hourly Earnings for Occupations in LA County

| Occupation | Entry-Level Hourly Earnings (25 th Percentile) | Median Hourly Earnings | Experienced Hourly Earnings (75 th Percentile) |
|--|---|------------------------|---|
| Tax Examiners and Collectors, and Revenue Agents (13-2081) | \$38.57 | \$47.33 | \$55.94 |
| Tax Preparers (13-2082) | \$16.86 | \$29.23 | \$42.33 |
| Bookkeeping, Accounting, and Auditing Clerks (43-3031) | \$17.95 | \$23.02 | \$29.69 |
| Payroll and Timekeeping Clerks (43-3051) | \$22.15 | \$28.87 | \$30.46 |
| Brokerage Clerks (43-4011) | \$23.98 | \$24.14 | \$30.73 |

⁸ Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

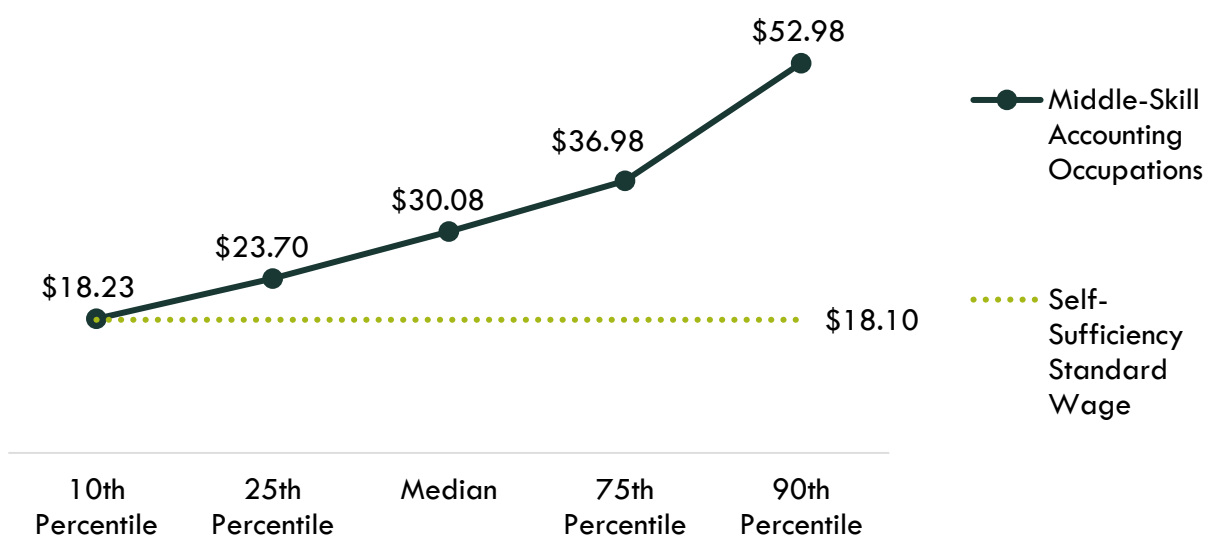
Orange County—The majority (91%) of annual openings for middle-skill accounting occupations have entry-level wages below the self-sufficiency standard wage for one adult (\$20.63 in Orange County). Typical entry-level hourly wages are in a range between \$15.61 and \$36.07. Two occupations in this report have entry-level wages above the county’s self-sufficiency standard wage: *tax examiners and collectors, and revenue agents* (\$36.07), and *payroll and timekeeping clerks* (\$21.54). Experienced workers can expect to earn wages between \$26.15 and \$52.31, which are higher than the self-sufficiency standard.

Exhibit 3: Hourly Earnings for Occupations in Orange County

| Occupation | Entry-Level Hourly Earnings (25 th Percentile) | Median Hourly Earnings | Experienced Hourly Earnings (75 th Percentile) |
|--|---|------------------------|---|
| Tax Examiners and Collectors, and Revenue Agents (13-2081) | \$36.07 | \$44.26 | \$52.31 |
| Tax Preparers (13-2082) | \$15.61 | \$26.39 | \$37.72 |
| Bookkeeping, Accounting, and Auditing Clerks (43-3031) | \$17.97 | \$22.84 | \$29.22 |
| Payroll and Timekeeping Clerks (43-3051) | \$21.54 | \$27.84 | \$29.42 |
| Brokerage Clerks (43-4011) | \$20.44 | \$20.58 | \$26.15 |

On average, the entry-level earnings for the occupations in this report are \$23.70; this is above the living wage for one single adult in Los Angeles County (\$18.10). Exhibit 4 shows the average wage for the occupations in this report, from entry-level to experienced workers.

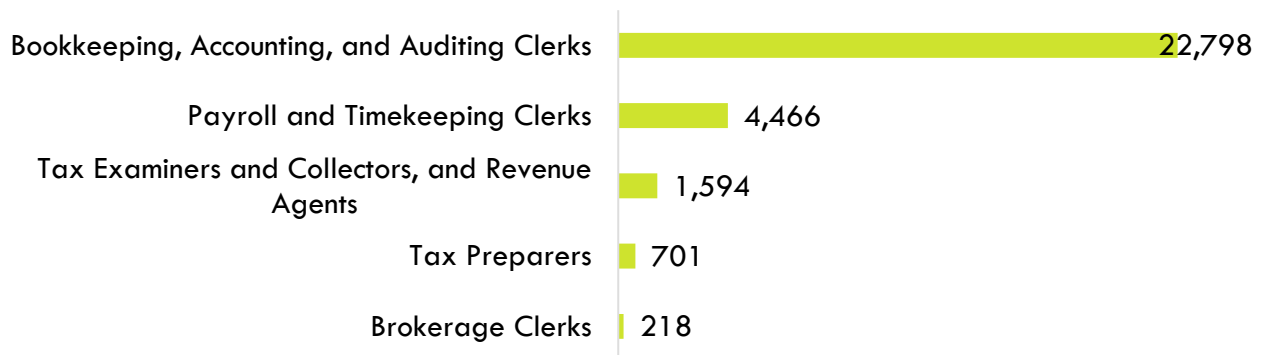
Exhibit 4: Average Hourly Earnings for Middle-Skill Accounting Occupations in LA/OC



Job Postings

There were 29,777 online middle-skill job postings related to accounting listed in the past 12 months. Exhibit 5 displays the number of job postings by occupation. The majority of job postings (77%) were for *bookkeeping, accounting, and auditing clerks*, followed by *payroll and timekeeping clerks* (15%) and *tax examiners and collectors, and revenue agents* (5%). The highest number of job postings were for accounting clerks, accounts payable specialists, bookkeepers, accounts payable clerks, and payroll specialists. The top skills were accounting, accounts payable, invoicing, accounts receivable, and bookkeeping. The top three employers, by number of job postings, in the region were all staffing companies: Robert Half, AppleOne, and Aston Carter. The top three non-staffing companies listing job postings were KPMG, Intuit, and Rice Gorton Pictures.

Exhibit 5: Job postings by occupation (last 12 months)



Educational Attainment

The Bureau of Labor Statistics (BLS) lists the following typical entry-level education levels for the occupations in this report:

- **Bachelor's degree:** *Tax examiners and collectors, and revenue agents*
- **Some college, no degree:** *Bookkeeping, accounting, and auditing clerks*
- **High school diploma or equivalent:** *Tax preparers; payroll and timekeeping clerks; brokerage clerks*

In the greater LA/OC region, the majority of annual job openings (84%) typically require some college, but no degree. Furthermore, the national-level educational attainment data indicates between 32% and 49% of workers in the field have completed some college or an associate degree. Of the 58% of middle-skill accounting job postings listing a minimum education requirement in the greater Los Angeles/Orange County region, 38% (6,488) requested high school or vocational training, 18% (3,125) requested an associate degree, and 44% (7,568) requested a bachelor's degree.

Educational Supply

Community College Supply—Exhibit 6 shows the annual and three-year average number of awards conferred by community colleges in the related TOP codes: Accounting (0502.00), and Tax Studies (0502.10). The colleges with the most completions in the region are East LA, Irvine, and Mt. San Antonio.

Exhibit 6: Regional community college awards (certificates and degrees), 2018-2021

| TOP | Program | College | 2018-19 Awards | 2019-20 Awards | 2020-21 Awards | 3-Year Average | | |
|---------|------------|--------------------|----------------|----------------|----------------|----------------|--------------|--------------|
| 0502.00 | Accounting | Cerritos | 29 | 49 | 22 | 33 | | |
| | | Citrus | 18 | 18 | 22 | 19 | | |
| | | Compton | 1 | - | - | 0 | | |
| | | East LA | 635 | 577 | 335 | 516 | | |
| | | El Camino | 16 | 13 | 15 | 15 | | |
| | | Glendale | 63 | 63 | 79 | 68 | | |
| | | LA City | 5 | 7 | 16 | 9 | | |
| | | LA Harbor | 8 | 15 | 33 | 19 | | |
| | | LA Mission | 8 | 26 | 33 | 22 | | |
| | | LA Pierce | 29 | 39 | 35 | 34 | | |
| | | LA Southwest | 1 | - | 2 | 1 | | |
| | | LA Trade-Tech | 21 | 12 | 10 | 14 | | |
| | | LA Valley | 34 | 46 | 51 | 44 | | |
| | | Long Beach | 42 | 63 | 49 | 51 | | |
| | | Mt San Antonio | 174 | 187 | 186 | 182 | | |
| | | Pasadena | 23 | 16 | 23 | 21 | | |
| | | Rio Hondo | 14 | 18 | 30 | 21 | | |
| | | Santa Monica | 78 | 217 | 195 | 163 | | |
| | | West LA | 15 | 6 | 16 | 12 | | |
| | | LA Subtotal | | | 1,214 | 1,372 | 1,152 | 1,246 |
| | | | | Coastline | 49 | 40 | 51 | 47 |
| | | | | Cypress | 8 | 6 | 3 | 6 |
| | | | | Fullerton | 17 | 9 | 25 | 17 |
| | | | | Golden West | 36 | 17 | 30 | 28 |
| | | | | Irvine | 201 | 316 | 208 | 242 |
| | | | | Orange Coast | 104 | 124 | 94 | 107 |
| | | | | Saddleback | 38 | 36 | 19 | 31 |
| | | | | Santa Ana | 198 | 125 | 104 | 142 |
| | | Santiago Canyon | 7 | 6 | 46 | 20 | | |

| TOP | Program | College | 2018-19 Awards | 2019-20 Awards | 2020-21 Awards | 3-Year Average |
|--------------------------------|-------------|--------------------|----------------|----------------|----------------|----------------|
| | | OC Subtotal | 658 | 679 | 580 | 639 |
| Supply Subtotal/Average | | | 1,872 | 2,051 | 1,732 | 1,885 |
| 0502.10 | Tax Studies | East LA | - | - | 2 | 1 |
| | | Glendale | - | 2 | 2 | 1 |
| | | LA City | - | - | 3 | 1 |
| | | LA Pierce | 20 | 17 | 18 | 18 |
| | | Mt San Antonio | 7 | 9 | 5 | 7 |
| | | Santa Monica | - | - | 3 | 1 |
| | | LA Subtotal | 27 | 28 | 33 | 29 |
| | | Irvine | 26 | 33 | 11 | 23 |
| | | Orange Coast | - | 9 | 16 | 8 |
| | | Saddleback | 3 | 12 | 5 | 7 |
| | | OC Subtotal | 29 | 54 | 32 | 38 |
| Supply Subtotal/Average | | | 56 | 82 | 65 | 68 |
| Supply Total/Average | | | 1,928 | 2,133 | 1,797 | 1,953 |

Non-Community College Supply—For a comprehensive regional supply analysis, it is important to consider the supply from other institutions in the region that provide training programs for accounting. Exhibit 7 shows the annual and three-year average number of awards conferred by these institutions in relevant programs. Due to different data collection periods, the most recent three-year period of available data is from 2017 to 2020. Between 2017 and 2020, non-community college institutions in the region conferred an average of 827 awards.

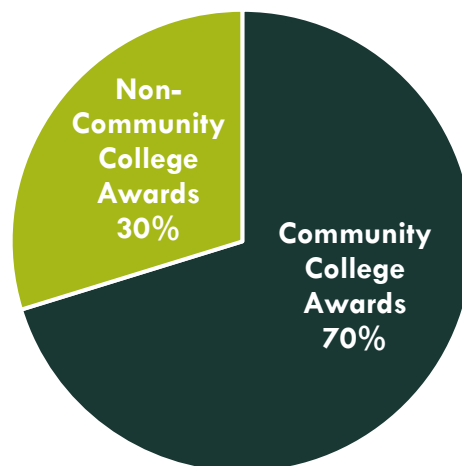
Exhibit 7: Regional non-community college awards, 2017-2020

| CIP | Program | Institution | 2017-18 Awards | 2018-19 Awards | 2019-20 Awards | 3-Year Average |
|---------|------------|-----------------------------|----------------|----------------|----------------|----------------|
| 52.0301 | Accounting | Abraham Lincoln University | - | - | 1 | 0 |
| | | Azusa Pacific University | 27 | 32 | 32 | 30 |
| | | Biola University | 37 | 33 | 17 | 29 |
| | | CSU-Northridge | 319 | 247 | 304 | 290 |
| | | Chapman University | 43 | 53 | 58 | 51 |
| | | Claremont McKenna College | 22 | 25 | 6 | 18 |
| | | Los Angeles Pacific College | - | 10 | 7 | 6 |
| | | Loyola Marymount University | 53 | 63 | 43 | 53 |
| | | Marymount California Univ. | - | - | 3 | 1 |
| | | Mount Saint Mary's Univ. | 14 | 20 | 18 | 17 |

| CIP | Program | Institution | 2017-18 Awards | 2018-19 Awards | 2019-20 Awards | 3-Year Average |
|-----------------------------|---|---------------------------------------|----------------|----------------|----------------|----------------|
| | | Pepperdine University | 23 | 14 | 16 | 18 |
| | | Pitzer College | 1 | 4 | - | 2 |
| | | Pomona USD Adult and Career Education | 3 | - | - | 1 |
| | | Scripps College | 2 | 3 | 2 | 2 |
| | | University of La Verne | 47 | 37 | 38 | 41 |
| | | USC | 236 | 187 | 189 | 204 |
| | | Vanguard Univ. of So. Cal. | 6 | 6 | 7 | 6 |
| | | Woodbury University | 13 | 12 | 13 | 13 |
| 52.0302 | Accounting Technology/ Technician and Bookkeeping | ABC Adult School | 19 | 22 | 21 | 21 |
| | | Advanced College | 2 | 1 | - | 1 |
| | | Hacienda La Puente Adult Education | 24 | 20 | 10 | 18 |
| | | InterCoast Colleges-Santa Ana | 1 | 1 | - | 1 |
| | | Los Angeles Pacific College | - | - | 4 | 1 |
| | | Premiere Career College | 4 | 2 | - | 2 |
| | | Trident Univ. International | - | 5 | - | 2 |
| Supply Total/Average | | | 896 | 797 | 789 | 827 |

Exhibit 8 shows the proportion of community college awards conferred in LA/OC compared to the number of non-community college awards for the programs in this report. More than two-thirds of awards conferred in these programs are awarded by community colleges in the LA/OC region.

Exhibit 8: Community College Awards Compared to Non-Community College Awards in LA/OC Region, 3-Year Average



Appendix A: Occupational demand and wage data by county

Exhibit 9. Los Angeles County

| Occupation (SOC) | 2021 Jobs | 2026 Jobs | 5-Yr Change | 5-Yr % Change | Annual Openings | Entry-Level Hourly Earnings (25 th Percentile) | Median Hourly Earnings | Experienced Hourly Earnings (75 th Percentile) |
|--|---------------|---------------|--------------|---------------|-----------------|---|------------------------|---|
| Tax Examiners and Collectors, and Revenue Agents (13-2081) | 1,093 | 1,084 | (9) | (1%) | 96 | \$38.57 | \$47.33 | \$55.94 |
| Tax Preparers (13-2082) | 4,632 | 4,955 | 323 | 7% | 616 | \$16.86 | \$29.23 | \$42.33 |
| Bookkeeping, Accounting, and Auditing Clerks (43-3031) | 55,619 | 57,036 | 1,417 | 3% | 7,273 | \$17.95 | \$23.02 | \$29.69 |
| Payroll and Timekeeping Clerks (43-3051) | 5,343 | 5,326 | (17) | (0%) | 618 | \$22.15 | \$28.87 | \$30.46 |
| Brokerage Clerks (43-4011) | 992 | 975 | (17) | (2%) | 116 | \$23.98 | \$24.14 | \$30.73 |
| Total | 67,680 | 69,376 | 1,696 | 3% | 8,719 | - | - | - |

Exhibit 10. Orange County

| Occupation (SOC) | 2021 Jobs | 2026 Jobs | 5-Yr Change | 5-Yr % Change | Annual Openings | Entry-Level Hourly Earnings (25 th Percentile) | Median Hourly Earnings | Experienced Hourly Earnings (75 th Percentile) |
|--|---------------|---------------|-------------|---------------|-----------------|---|------------------------|---|
| Tax Examiners and Collectors, and Revenue Agents (13-2081) | 232 | 235 | 3 | 1% | 21 | \$36.07 | \$44.26 | \$52.31 |
| Tax Preparers (13-2082) | 1,470 | 1,572 | 102 | 7% | 195 | \$15.61 | \$26.39 | \$37.72 |
| Bookkeeping, Accounting, and Auditing Clerks (43-3031) | 21,161 | 21,752 | 591 | 3% | 2,768 | \$17.97 | \$22.84 | \$29.22 |
| Payroll and Timekeeping Clerks (43-3051) | 2,026 | 1,979 | (47) | (2%) | 225 | \$21.54 | \$27.84 | \$29.42 |
| Brokerage Clerks (43-4011) | 487 | 463 | (24) | (5%) | 55 | \$20.44 | \$20.58 | \$26.15 |
| Total | 25,376 | 26,002 | 625 | 2% | 3,265 | - | - | - |

Exhibit 11. Los Angeles and Orange Counties

| Occupation (SOC) | 2021 Jobs | 2026 Jobs | 5-Yr Change | 5-Yr % Change | Annual Openings | Typical Entry-Level Education |
|--|---------------|---------------|--------------|---------------|-----------------|-----------------------------------|
| Tax Examiners and Collectors, and Revenue Agents (13-2081) | 1,326 | 1,319 | (6) | (0%) | 117 | Bachelor's degree |
| Tax Preparers (13-2082) | 6,103 | 6,527 | 425 | 7% | 810 | High school diploma or equivalent |
| Bookkeeping, Accounting, and Auditing Clerks (43-3031) | 76,780 | 78,787 | 2,008 | 3% | 10,041 | Some college, no degree |
| Payroll and Timekeeping Clerks (43-3051) | 7,369 | 7,305 | (64) | (1%) | 844 | High school diploma or equivalent |
| Brokerage Clerks (43-4011) | 1,479 | 1,438 | (41) | (3%) | 171 | High school diploma or equivalent |
| Total | 93,056 | 95,377 | 2,321 | 2% | 11,984 | - |

Appendix B: Sources

- O*NET Online
- Lightcast (formerly Emsi)
- Bureau of Labor Statistics (BLS)
- California Employment Development Department, Labor Market Information Division, OES
- California Community Colleges Chancellor's Office Management Information Systems (MIS)
- Self-Sufficiency Standard at the Center for Women's Welfare, University of Washington
- Chancellor's Office Curriculum Inventory (COCI 2.0)

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