WORKFORCE NEEDS ASSESSMENT



IN CALIFORNIA



October 2021



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Acknowledgements

A collaboration between the California Board of Occupational Therapy (CBOT), and the California Community Colleges' Centers of Excellence for Labor Market Research (COE) and Health Workforce Initiative (HWI), this report profiles the licensed occupational therapy assistant workforce with a focus on employment and educational opportunities.

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Executive Summary

In collaboration with the California Board of Occupational Therapy, the California Community College Centers of Excellence conducted the 2019 California Occupational Therapy Assistant Workforce Survey, the only survey focused on the Occupational Therapy Assistant (OTA) workforce in California. This report combines original survey data with recent educational and employment statistics and projections to describe the current OTA workforce, the educational programs that train OTAs, and the growing employer demand for OTAs in California. The findings generate critical insights to support the growing healthcare needs of the state and the future of the OTA profession.

Key Takeaway: Recent OTA graduates are younger and more racially and ethnically diverse than the current OTA workforce as a whole.

• Recommendation: Support and invest in equity and inclusion initiatives at the regional and state level to ensure that employers retain new program graduates. Education programs for OTAs might focus on recruiting more Hispanic/Latino OTAs, who are currently underrepresented in the profession relative to the population of California.

Key Takeaway: While wages were good on average (\$51,200 for those with one job), wages are lower for OTAs with less experience. For those who had been licensed for two years or fewer, almost half (49%) earned less than \$50,000 annually.

Recommendation: It is critical to keep wages high, especially for new entrants to the profession. High entry-level wages are one way to safeguard against occupational separations – workers who leave an occupation for other types of work. Additionally, as many OTAs come to the field from another health profession, high wages will encourage more workers with allied health backgrounds to consider becoming an OTA.

Key Takeaway: There is significant interest in continued education – of the OTAs surveyed, many expressed interest in pursuing higher education to advance in the field of occupational therapy.

• Recommendation: Before expanding educational offerings, the labor market value of advanced degrees as well as changes to occupational competencies (such as knowledge, skills and abilities) related to positions requiring more education should be substantiated by industry employers.

Key Takeaway: In an average year, about 310 OTAs graduate from training programs in California. Occupational demand is estimated to be about 340 jobs annually.

• Recommendation: To meet employer demand through 2024, educational programs could moderately increase the number of OTA graduates. Given that close to 40% of the surveyed OTAs reported holding multiple OTA positions, the ratio of new entrant (defined here as average annual completers) to job opening (defined here as average job growth plus replacement needs) is not necessarily a one-to-one relationship. When considering expanding program capacity, demand should be validated by local employers, including the type of positions they are recruiting for – full-time versus part-time, per diem, etc.

Occupational Therapy Assistants in California

To better understand the labor market conditions for OTAs, the composition of the current OTA workforce, and the potential supply of new entrants to the profession, this study compiled data from multiple sources. The data includes information collected directly from licensed OTAs, from OTA training programs (where available), and current and projected occupational employment data for OTAs.

In collaboration with the California Board of Occupational Therapy (CBOT), the California Community College Centers of Excellence for Labor Market Research (COE) conducted the 2019 California Occupational Therapy Assistant Workforce Survey. In July 2019, 3,500 OTAs — every OTA in the state with an active license at the time — received a letter inviting them to complete an online survey in exchange for a participation incentive. Participants were able to submit responses online until August 2019. In total, over 550 OTAs, representing 16% of all active licensees, completed the survey. Their responses provide insight into the demographic composition of OTAs in California, their education, licensure, job characteristics such as work tasks, scheduling, and compensation, and the future of the OTA profession, including retirement and potential policy changes.

Current OTA Workforce

This section includes a demographic profile of the existing OTA workforce, where OTAs are typically employed, how much they earn and the pipeline of community college students.

Size of the OTA Workforce

In 2019, there were 2,917 OTAs employed in the state of California¹. This is an increase of more than 1,000 OTAs in the last ten years; OTAs numbered 1,246 in 2009. By the year 2024, California is forecasted to employ 3,643 OTAs, an increase of 726 workers.

According to state licensure data², out of an estimated 3,500 individuals who held an active OTA license in the state, nearly 600 were not employed in the profession. Based on survey responses, a quarter of respondents (25%) were new licensees, while 39% had held a license for 3-10 years and 36% had held a license for more than a decade (See Exhibit 1).

Exhibit 1: Years with License

Licensed for:	Responses	% Responses
0-2 years	138	25%
3-5 years	127	23%
6-10 years	91	16%
11-20 years	103	18%
21 or more years	100	18%
Totals	559	100%

In 2019
3,500 OTA licenses
2,917 OTAs employed

¹ Economic Modeling Specialists, Inc. 2020.1

² License count as of July 2019. Source: Department of Consumer Affairs, Licensee Lists. Accessed online at https://www.dca.ca.gov/consumers/public_info/index.shtml.

Demographics

Gender

According to survey responses, women make up a larger proportion of OTAs (82%) than men (17%) and a small number of OTAs (1%) were transgender. This percentage is consistent with data reported by the California Board of Occupational Therapy, who reported that 79% of OTAs were female.³

Exhibit 2: Gender Distribution of OTAs

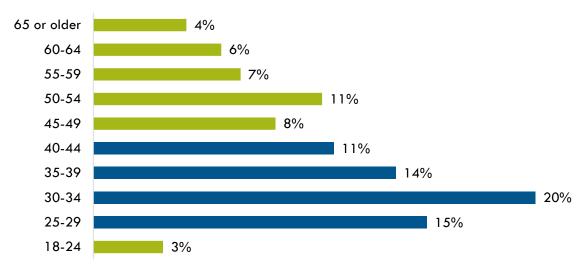
	Responses	% Responses
Female	459	82%
Male	96	17%
Transgender	3	1%
Total	558	100%

The prevalence of more women working as OTAs is mirrored in the current pipeline of students in OTA training programs. In the CCC system, 81% of students in the 2018-2019 academic year were female and 17% were male. This gender composition has been consistent over the last three academic years (2016-2017 and 2017-2018, and 2018-2019).

Age

Most survey respondents (60%) were age 25 to 44 years old as indicated in blue in Exhibit 3. Another 36% of respondents were 45 years of age and older. OTAs ages 18 to 24 years represented three percent of respondents.

Exhibit 3: Age Distribution



Community college students, representing future OTAs, will increase the number of younger OTAs. Nearly half (46%) of students enrolled in OTA programs in the community colleges are between the ages of 25 and 34. The proportion of students just out of high school (ages 20-24) is 18%. This translates to a younger OTA workforce in the next two to three years if students secure employment post program completion.

Race/Ethnicity

More than half of respondents (55%) were white, while underrepresented minority groups accounted for 45% of respondents (Exhibit 4). When compared to the state's racial/ethnic composition, minority groups represented a

³ California Board of Occupational Therapy, 2019 licensee data.

smaller proportion of the OTA workforce than in the state's population as a whole.⁴ When comparing across age groups, OTAs over the age of 40 were significantly more likely to be white than respondents under age 40. This suggests that racial and ethnic minorities are better represented in younger age groups. This also implies that as OTAs retire, the OTA workforce may become more racially/ethnically diverse.

A breakdown of students enrolled in OTA training programs in 2018-19 reveals the racial and ethnic makeup is primarily white (32%), Latino or Hispanic (29%) and Asian (13%). The remaining 26% of respondents identified as Black, two or more races, or another race.

Exhibit 4: Race/Ethnicity of Surveyed OTAs and California Population⁵

	OTA Wo	orkforce	California Residents
	Responses	% Responses	% Population
White	305	55%	37%
Asian	106	19%	15%
Latino or Hispanic	68	12%	39%
Black	28	5%	7%
Other	22	4%	2%
Two or more races	30	5%	4%

Employment and Compensation

The survey measured the number of licensed OTAs working in their field, their employment status, and their earnings. Overall, licensed OTAs were employed in their profession and a significant number of them held multiple jobs as an OTA (39%). Data collected from survey respondents revealed that 91% of OTA licensees were actively employed in occupational therapy (Exhibit 5), and of those, 70% worked full time. While most OTAs (61%) reported being employed in one position, it was common to hold multiple OTA positions (39%). Employment in multiple OTA jobs may compensate for part-time employment or fluctuations in work hours, help to build savings, and compensate for low wages, according to the findings of this study.

Exhibit 5: Current Employment Status

	Responses	% Responses
Employed in Occupational Therapy only	440	79%
Employed in Occupational Therapy and another field	65	12%
Employed in another field only	13	2%
Unemployed	36	6%
Retired	5	1%

Exhibit 6:Number of OTA positions held



Respondents were also asked how long they had been employed in their current occupational therapy position. In their primary job, 29% of OTAs had two to five years of experience with their current employer, with an additional 26% having six or more years of experience.

⁴ Source: US Census Bureau, 2018.

⁵ For the race/ethnicity question, survey respondents were asked to select all that apply. The responses were subsequently recoded to ensure that the categories were mutually exclusive. Respondents selecting multiple categories were reclassified into 'Two or more races' category. For the California data, those selecting 'Two or more races' are counted separately than the other race/ethnicity categories. Subsequently, percentages will not sum to 100.

Exhibit 7: Employer Tenure

	Prima	ıry Job	Second	lary Job
	Responses	% Responses	Responses	% Responses
Less than 6 months	77	15%	54	27%
6 months - 11 months	60	12%	27	14%
1 year - up to 2 years	93	18%	46	23%
2 years - 5 years	146	29%	46	23%
6 years or more	129	26%	25	13%
Total	505	100%	198	100%

In the year prior to the survey, one-fifth (21%) of OTAs were working in a part-time or temporary position when they would have preferred a full-time position. Nearly half (47%) of surveyed OTAs reported they had taken on additional work in the past year (Exhibit 8). While taking on additional work within the profession was common (39%), few respondents (8%) worked a secondary job outside the profession.

Exhibit 8: OTAs and additional work (47% of survey respondents)

	Responses	% Responses
Took additional OTA work in the last year	197	39%
Worked PT but preferred FT	107	21%
Worked outside the profession for additional income	39	8%

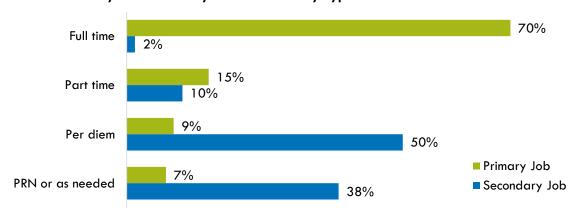
Note: Respondents were asked to select all that apply.

Scheduling

The survey asked respondents to describe how their work hours were typically scheduled. OTAs with only one position generally worked full-time hours while those with more than one position were generally scheduled on a per-diem basis.

- For respondents who held only one OTA position, 70% were scheduled full time while 16% were scheduled either per diem or as needed (PRN). (Exhibit 9).
- These trends were reversed for OTAs who had a second occupational therapy position. In their secondary job, 88% of OTAs were scheduled as per diem or as needed (PRN) while only 2% were scheduled full-time.

Exhibit 9: Primary and Secondary OTA Positions by Type



Earnings

The average reported income (Exhibit 10) for OTAs was \$51,200 for those with one job and \$65,900 for respondents holding two OTA jobs. These figures are consistent with wage estimates for OTAs in California. Wage data on OTAs in California show the median wage (50th percentile) for OTAs is \$74,360 with the lowest 10% (10th percentile) earning about \$55,200 and the highest 10% (90th percentile) earning more than \$96,000 annually.

Survey responses showed that 87% of OTAs received an hourly wage at their primary work location, while 13% were compensated by salary.

Exhibit 10: Reported Earnings

	Responses	% Responses	OTA Wages in California
Less than \$30,000	67	13%	
\$30,000-\$49,999	90	18%	
\$50,000-\$59,999	72	14%	10 th Percentile
\$60,000-\$69,999	91	18%	
\$70,000-\$79,999	78	15%	Median (50th)
\$80,000-\$99,999	44	9%	90 th Percentile
\$100,000 or more	24	5%	
Prefer not to say	39	8%	
Totals	505	100%	

Survey findings also indicated more years of experience was correlated with higher earnings (Exhibit 11). Respondents who had been licensed as an OTA for less than two years had significantly lower median earnings than OTAs licensed 3-10 years or OTAs licensed more than 10 years. However, there was not a significant salary increase between OTAs licensed 3-10 years and OTAs licensed more than 10 years, which could warrant further exploration into wages paid and years of work experience.

Exhibit 11: Income by Number of Years with an OTA License

	0-2	Years	3-10	Years .	More tha	n 10 Years
	Responses	% Responses	Responses	% Responses	Responses	% Responses
Less than \$30,000	37	30%	18	9%	13	7%
\$30,000-\$49,999	23	19%	38	18%	29	16%
\$50,000-\$59,999	19	16%	28	14%	25	14%
\$60,000-\$69,999	9	7%	45	22%	37	21%
\$70,000-\$79,999	6	5%	38	18%	34	19%
\$80,000-\$99,999	9	7%	18	9%	17	10%
\$100,000 or more	1	1%	13	6%	10	6%
Prefer not to say	18	15%	8	4%	13	7%
Total	122	100%	206	100%	178	100%

⁶ Source: Economic Modeling Specialists, Inc., 2021.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed

Work Environment

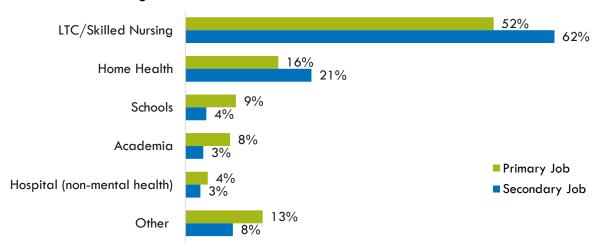
In addition to understanding employment status and compensation, the survey also identified where OTAs were employed, what tasks they completed on the job, and other work environment factors.

Industry Employers

Our analysis of labor market data indicated Ambulatory Health Care Services, Nursing and Residential Care Facilities, and Hospitals were the largest industry employers of the occupation. Results of a 2015 national salary and workforce survey by the American Occupational Therapy Association (AOTA) confirmed that a majority of OTAs worked in Long-Term Care or Skilled Nursing facilities (56%), followed by schools and hospitals at 15% and 11% respectively.

- According to survey responses, the primary job for 52% of OTAs and the secondary job for 62% of those who reported holding multiple OTA positions was in Long-Term Care or Skilled Nursing facilities.⁷
- Home health settings accounted for employment for 16% of working OTAs as the primary job and 21% of secondary jobs for those who reported holding multiple OTA positions (Exhibit 12).

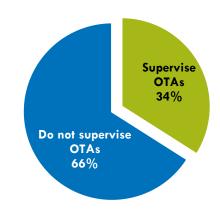
Exhibit 12: Practice Setting



Supervision Role of OTs

In addition to the OTA survey, the COE fielded a companion survey of Occupational Therapists. Over 450 licensed OTs participated in the survey which examined the educational and employment experiences of OTs, including their work with OTAs. Only a third (34%) of OTs reported supervising OTAs, suggesting that many OTs work independently (Exhibit 13). OTs typically supervised no more than two OTAs. Fewer than 10% of OTs supervised more than two OTAs.

Exhibit 13: OT Supervision of OTAs

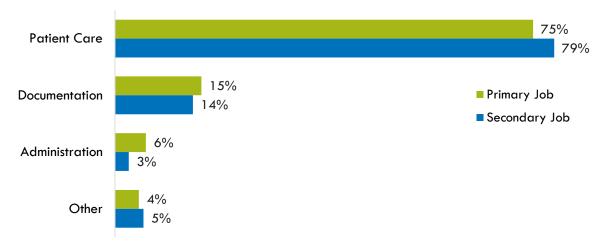


⁷ In labor market data, long-term care or skilled nursing facilities are reported as a subindustry under Hospitals.

Work Activities

OTAs generally worked in healthcare settings (hospitals and care facilities) where they reported spending much of their time on patient care in both their primary and secondary jobs (Exhibit 14). Other OTA work tasks included documentation (which accounted for 15% of their time) and, to a much lesser degree, administration (6%).

Exhibit 14: Percent Time on Work Activities



Prior Work Experience and Education

Work Experience

Based on information reported from the licensee survey, a significant number of OTAs obtained work experience primarily in other health professions prior to obtaining a license (43%). Nearly one-fifth were previously employed as a certified nurse assistant (18%) and another 10% were previously employed as rehabilitation aides.

Exhibit 15: Employment in Health Field Prior to OTA Licensure

	Responses	% Responses
Other Health Profession	67	43%
Certified Nurse Assistant	28	18%
Rehabilitation Aide	16	10%
Physical Therapy Aide	10	6%
Other Nursing	8	5%
Medical Billing or Records	8	5%
Behavior Therapist	7	5%
Caregiver	6	4%
Personal Trainer	6	4%
Totals	156	100%

Education

The majority of OTAs licensed in California completed their OTA education in the state (69%), while 27% completed their education at a college out of state and another 3% completed an online program. Of those who completed their education in California, the most common programs attended were Santa Ana College (attended by 17% of respondents) and Stanbridge College (13%). None of the surveyed OTAs completed their OTA education abroad, suggesting that California's labor market relies on in-state educational providers to supply seven out of 10 OTA professionals.

Surveyed OTAs were asked how likely they would be to recommend the college they attended to a friend (Exhibit 16). Overall, OTAs reported a positive college experience with 78% extremely or somewhat likely to recommend the college they attended to a friend.

Exhibit 16: Likelihood of Recommending

	Responses	% Responses
Extremely/Somewhat Likely	438	78%
Neither likely nor unlikely	75	13%
Extremely/Somewhat Unlikely	46	8%
Totals	559	100%

College Experience

OTA respondents completed an open-ended question asking them to reflect on what they liked about the college where they completed most of their OTA coursework. It is important to keep in mind that these comments reflect years of experiences and a variety of educational institutions. Qualitative data analysis of the open-ended responses revealed students most appreciated competent instructors, flexible timing, convenient location, positive reputation of the academics at the college, quality advising, and low cost. Exhibit 17 displays positive aspects of the colleges that were most referenced along with a key quote that reflects a typical response.

Exhibit 17: Positive Aspects of College Experience



Respondents were also asked about the qualities of the college that they disliked. Curriculum, poor advising, instructors, cost, and location were common themes when students reflected on both positive and negative aspects of their college experience. In addition, students also disapproved of the program organization and curriculum choices which deprioritized important aspects of their work.

Exhibit 18: Negative Aspects of College Experience



Education Debt

The cost of education was one negative attribute of OTA education as indicated by respondents. Over half (58%) of responding OTAs used student loans to pay for education expenses, including a quarter (25%) of respondents who took out significant debt (\$30,000 more) to finance their education.⁸ Exhibit 19 displays the amount of student debt accumulated by respondents.

The amount of debt students carried was correlated with the type of institution they attended for their OTA coursework (Exhibit 20). Overall, students who attended private colleges were significantly more likely than public college attendees to have any education-related debt. Of the students who attended private colleges, the majority (78%) took out \$30,000 or more in loans compared to just 16% of students who attended public colleges.

Exhibit 19: Student Loan Debt

	Responses	% Responses
No Debt	237	42%
Under \$5,000	18	3%
\$5,000 - \$9,999	27	5%
\$10,000 - \$14,999	31	6%
\$15,000 - \$19,999	29	5%
\$20,000 - \$24,999	31	6%
\$25,000 - \$29,999	37	7%
\$30,000 or more	141	25%
I don't know	8	1%
Totals	559	100%

⁸ Respondents were not asked to clarify how the education debt was accrued – whether in pursuit of an OTA education, other non-OTA education, or possibly a combination of both.

Exhibit 20: Student Loan Debt by College Type

	Attended P	ublic College	Attended Pr	ivate College
	Responses	% Responses	Responses	% Responses
Under \$5,000	8	15%	1	1%
\$5,000 - \$9,999	12	22%	0	0%
\$10,000 -\$14,999	6	11%	0	0%
\$15,000 -\$19,999	6	11%	2	2%
\$20,000 -\$24,999	5	9%	3	3%
\$25,000 -\$29,999	7	13%	13	15%
\$30,000 or more	9	16%	69	78%
I don't know	2	4%	1	1%
Totals	55	100%	89	100%

Education Attainment

When asked to indicate their highest level of education, 55% of respondents indicated that they held an associate degree while 45% held a bachelor's degree or higher (Exhibit 21). OTAs in California have higher levels of educational attainment compared to OTAs across the United States. Nationally, only 18% of OTAs hold a bachelor's degree and for the vast majority of OTAs (82%) an associate degree is their highest level of education.⁹

Exhibit 21: Educational Attainment

	Responses	% Responses
Associate degree	310	55%
Bachelor's degree	225	40%
Master's or Doctoral degree	24	4%
Totals	559	100%

Additionally, according to survey responses, associate degree holders were more likely than those with a bachelor's degree or higher to have obtained a degree in a health field. Nearly all associate degree holders (96%) indicated that their program of study was in a health field, compared to only 37% of bachelor's degree holders. This may suggest that students are earning bachelor's degrees in other fields, then moving into the occupational therapy field. In addition, data from OTA programs at California community colleges indicates that 32% of students taking OTA courses in 2018-19 had previously earned a bachelor's degree.

Survey responses indicated OTAs over the age of 40 were more likely to report an associate degree as their highest degree earned (60%) as compared to 51% for OTAs under 40 years of age. A baccalaureate was significantly more common for younger OTAs, with 45% of respondents under 40 holding a bachelor's degree compared with 35% for those over 40. This indicates that the workforce is becoming more educated as younger OTAs enter the profession.

This trend is supported by data from a subsequent survey question about the length of licensure. OTAs with more than 10 years of experience were less likely to have a bachelor's degree compared to OTAs with 0-2 years of experience (see Exhibit 22).

⁹ O*NET Online https://www.onetonline.org/link/summary/31-2011.00#Education

Exhibit 22: Educational Attainment by Years Licensed

	0-2 Years		3-10 Years		More than 10 years	
	Responses	% Responses	Responses	% Responses	Responses	% Responses
Associate degree	71	51%	107	49%	132	65%
Bachelor's degree	66	48%	98	45%	61	30%
Master's or Doctoral degree	1	1%	13	6%	10	5%
Totals	138	100%	218	100%	203	100%

Key Takeaways - Current OTA Workforce

- In California, the OTA workforce was predominantly white and female. Similarly, the pipeline of OTAs as represented by current community college students in OTA programs was also majority white and female.
- Most licensed OTAs were employed in a single, full-time OTA position. However, close to 40% of the current workforce reported holding multiple OTA jobs, generally on a per-diem basis.
- Income reporting indicated that most OTAs earned above the living wage threshold for a single adult. Fifty-five percent (55%) reported earning more than \$30,000 in annual income from OTA work, exceeding the living wage threshold for a single adult in California (\$27,123).
- Most of the OTAs surveyed completed their OTA-specific education in California (69%), while 27% completed their education out of state and another 3% completed an online program.
- Over half (58%) of surveyed OTAs used student loans to pay for education expenses, including a quarter (25%) of respondents who incurred significant debt (\$30,000 more) to finance their education.
- Overall, students who attended private colleges were significantly more likely than public college attendees to have any education-related debt.
- More than half of OTAs surveyed held an associate degree as their highest level of education attained.

Workforce Outlook

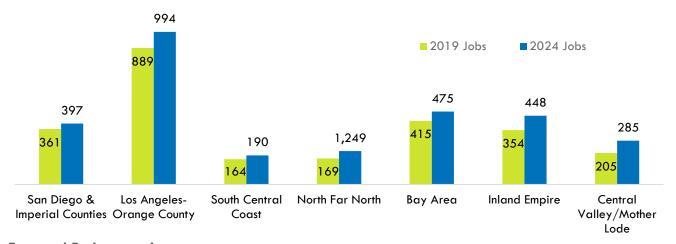
Survey responses from occupational therapy assistants (OTAs) provide real-time, detailed information about their current jobs, earnings, job schedule, education pathway and more. This section of the study describes characteristics of the OTA workforce using a combination of traditional employment data and workforce survey responses.

In 2019, there were approximately 2,500 OTA jobs in California, accounting for five percent (5.5%) of all OTA employment in the United States. Within California, OTA employment is a relatively small piece of a much larger puzzle — the overall number of jobs in California totaled close to 20 million in 2019. However, occupational projections for OTAs forecast growth of 17% or an additional 440 jobs over the next few years, bringing the number of OTA jobs to closer to 3,000 by 2024.

The greatest growth will be in the Los Angeles/Orange County region which is expected to add 105 new positions over the next five years (Exhibit 23). The fastest rate of growth is expected in the Central Valley/Mother Lode region (close to 40% growth or about 80 jobs).¹⁰

Exhibit 23: Projected Employment by Region for Occupational Therapy Assistants, 2019-2024

Region	Job Change	% Job Change
Los Angeles/Orange County	105	11.8%
Inland Empire	95	26.7%
Central Valley/Mother Lode	80	38.9%
Bay Area	60	14.5%
North Far North	48	28.6%
San Diego & Imperial Counties	35	9.7%
South Central Coast	26	15.6%



Expected Retirement Age

In addition to the growth of new jobs for OTA, retirements of OTAs are also important for understanding future workforce needs. Approximately half (51%) of current OTAs expected to retire at age 65 or earlier, 45% expected to retire between the ages of 66 and 75, and a few (5%) intended to not retire at all (4%).

¹⁰ Industry and occupational employment data provided by Emsi Burning Glass, 2021.3 – QCEW Employees, Non-QCEW Employees, and Self-Employed. There are an estimated 46,138 OTA jobs in the United States. Regional totals may not add to state estimates.

Exhibit 24: Expected Retirement Age

	Responses	% Responses
Age 55 or younger	34	7%
56-65	221	44%
66-75	205	41%
76 or older	24	5%
I do not intend to retire	21	4%
Totals	505	100%

Exhibit 25 provides a closer look at retirement of OTAs. Survey respondents under age 40 were significantly more likely than those over age 40 to suggest retiring at age 65 or younger (58% and 42%, respectively). Additionally, nearly half (49%) of respondents age 40 or older indicated they expected to retire between the ages of 66 and 75.

Exhibit 25: Expected Retirement Age by Current Age of Respondents

	Age: l	Jnder 40	Age: 40+		
	Responses	% Responses	Responses	% Responses	
Age 55 or younger	26	10%	8	3%	
56-65	129	48%	92	39%	
66-75	89	33%	116	49%	
76 or older	14	5%	10	4%	
I do not intend to retire	11	4%	10	4%	
Totals	269	100%	236	100%	

Planning for Future Occupational Therapy Professionals

Changes in the healthcare environment are especially relevant for OTAs, where there have been calls for higher levels of education than currently required. Recently, there has been robust discussion about whether AOTA should mandate or recommend increasing the OTA degree requirement from associate to bachelor's degree. To assess how the current workforce might respond, this study asked respondents about hypothetical education pathways. Overall, there was support for increasing the educational requirement to a bachelor's degree by 2027. However, at this time, guidance from the American Occupational Therapy Association (AOTA) has not changed – confirming that occupational therapy assistants may enter the profession at either the associate or bachelor's degree level.^{11,12}

Based on survey responses, 46% of OTAs expected to pursue additional years of education. Current OTAs under the age of 40 reported they planned to pursue additional educational opportunities at a rate significantly higher (62%) than OTAs over the age of 40 (28%).

¹¹ American Occupational Therapy Association. 2019. "Results from RA 2019 Spring Meeting: Motions Include OT and OTA Entry-Level Mandates." Accessed at: https://www.aota.org/Publications-News/AOTANews/2019/Results-RA-Spring-Meeting-Motions-Include-Entry-Level-Mandates.aspx.

¹² Additional information about education mandates for OTAs is available at: https://www.aota.org/Education-Careers/entry-level-mandate-doctorate-bachelors.aspx

Exhibit 26: Plans to Pursue Future Educational Opportunities

	Under 40	years of age	Over 40 years of age		
	Responses % Responses		Responses	% Responses	
Yes	166	62%	65	28%	
No	103	38%	1 <i>7</i> 1	72%	
Totals	269	100%	236	100%	

To further inform the conversation regarding incumbent OTAs, the survey asked respondents to consider hypothetical education pathways. First, they were asked their level of interest in pursuing a bachelor's degree in occupational therapy, and second, their interest in completing a bridge program from OTA to Occupational Therapist (OT).

Exhibit 27: Interest in Pursuing Education Pathways

	I	or's Degree ional Therapy	OTA to OT Bridge		
	Responses % Responses		Responses	% Responses	
Definitely yes	112	22%	207	41%	
Probably yes	72	14%	96	19%	
Might or might not	115	23%	109	22%	
Probably not	111	22%	50	10%	
Definitely not	95 19%		43	9%	
Totals	505	100%	505	100%	

As shown in Exhibit 27, nearly two thirds (60%) of respondents were definitely or probably interested in an OTA to OT bridge, if one were available, as compared to just over a third (36%) of responding OTAs who were definitely or probably interested in a stand-alone bachelor's degree in occupational therapy. Newly licensed OTAs expressed significantly more interest in pursuing an OTA to OT bridge program as compared to experienced licensees (74% and 53% respectively), see Exhibit 28.

Exhibit 28: Interest in Pursuing OTA to OT Bridge

	Responses	0-2 Years	10+ Years
Definitely/Probably Yes	303	74%	53%
Might or might not	109	18%	21%
Definitely Not/Probably Not	93	7%	26%
Totals	505	100%	100%

Overall, when asked about the possibility of obtaining a bachelor's degree in occupational therapy, 36% definitely or probably would. However, this number was significantly higher (44%) for those whose highest level of education was an associate degree, as compared to those with a bachelor's degree or higher (27%). Interest also varied according to the type of college OTAs previously attended. Those who attended private colleges for their OTA coursework were significantly more interested in earning a bachelor's degree in occupational therapy than those who attended public colleges (49% and 30% respectively).

Exhibit 29: Interest in Pursuing a Bachelor's Degree in OT by College Type

	Public	College	Private College		
	Responses	% Responses	Responses	% Responses	
Definitely/Probably Yes	53	30%	46	49%	
Might or might not	45	25%	20	21%	
Definitely Not/Probably Not	81	45%	28	30%	

Survey data indicated that most (59%) OTAs were in support of the increased education requirement for licensure. However, associate degree holders were less likely (53%) to support this change as compared to OTAs with a bachelor's degree or higher (67%).

Given their supervisory role, occupational therapists (OTs) were asked what benefits, if any, might result from requiring OTAs to attain a bachelor's degree in occupational therapy. While many OTs felt the bachelor's degree would result in better quality of care (28%) and a more well-rounded professional (21%), more than one-third (35%) did not see a benefit to requiring the degree.

Key Takeaways - Workforce Outlook

- Jobs for OTAs are expected to increase in number over the next few years. The largest growth in new jobs
 is forecasted for the Los Angeles/Orange County region while the Central Valley/Mother Lode region
 may experience the fastest growth for the profession.
- The growth in OTA jobs is the result of the creation of new positions and retirements. According to the survey, OTAs who were aged 40 or younger anticipated retiring before the age of 65. Combined, these two factors represent an ongoing need for trained, skilled OTAs to fill job vacancies.
- Considering the potential for a higher level of educational attainment for licensure as an OTA, the survey asked respondents about the likelihood that they would pursue additional education, and 62% of respondents age 40 or younger indicated yes.
- Overall, respondents indicated more interest in an Occupational Therapist Assistant to Occupational
 Therapist bridge program than completing a bachelor's degree in occupational therapy. Those most
 interested in an OTA to OT bridge program were current OTAs who had been employed in their position
 less than two years.

Occupational Therapy Technology Programs

Community Colleges

Four community colleges offer training and education programs to prepare future OTAs. These are Clovis College, Grossmont College, Sacramento City College, and Santa Ana College. ¹³ Clovis College is the newest OTA program; Clovis received accreditation candidacy status in 2020 and welcomed its first cohort of students in the spring of 2021. On an annual basis, there are about 421 students taking courses in Occupational Therapy Technology. ¹⁴ These programs share many characteristics of successful CE programs:

- 98% course retention rates on average
- 92% course success rates on average
- In the most recent three years for which data is available, these programs have collectively awarded bachelor's and associate degrees to 316 students
- 90% passing rate for graduates who took the COTA exam in the most recent three years
- 88% of graduates reported obtaining a third-party credential after college

A close look at the most recent available data of student employment outcomes for OTA programs found that community college students who complete their studies in this field:

- Found a job closely related to their field of study 92%
- Reported median annual earnings of \$35,232
- Reported median change (gain) in earnings of 31%
- Most (58%) met or exceeded the single-adult living wage threshold within one year of exit

Exhibit 30: Community College Awards

Community College	Award	201 <i>7</i> -18	2018 -19	2019-20	3 Year Average
Grossmont	Associate	21	20	23	21
Sacramento City	Associate	28	27	25	27
Santa Ana	Associate	51	50	36	46
Santa Ana	Bachelor's		23	11	17
Clovis	Associate				
Total, All		100	120	95	111

Private Postsecondary Institutions

Three private colleges currently graduate future OTAs. These are American Career College (Anaheim), CBD College, and Stanbridge University. American Career College in Los Angeles is the newest OTA program but has not yet graduated students. Ninety percent (90%) of graduates from these institutions passed the COTA exam (average across most recent three years of pass rates available).

¹³ Sources of information on active OTA programs in California included CCCCO Datamart, CCCCO Launchboard, CCCCO Curriculum Inventory System (COCI), and the National Board for Certification in Occupational Therapy (NBCOT).

¹⁴ CalPass Plus Launchboard, 2016-2019 data for California Community Colleges. Does not include the program at Clovis as data is insufficient for the time frame. Total, All average excludes missing data.

Exhibit 31: Private Institutions Awards 15

Community College	Award	2016-17	2017 -18	2018-19	3 Year Average
American Career College (Anaheim)	Associate	26	36	25	29
CBD College	Associate	53	51	51	52
Stanbridge University (Irvine)	Associate	150	88	122	120
Total, All		229	175	198	201

Pipeline of Graduates

Based on the award data for the most recent three years, and including bachelor's degree recipients from Santa Ana, OTA programs across the state successfully graduated about 312 students each year. Assuming that all OTA students apply post-graduation to take the COTA exam, and that of those 90% will pass, approximately 281 students enter the workforce as new OTAs each year.

Key Takeaways - Occupational Technology Programs

- Although few in number, both public and private occupational technology programs consistently conferred awards and prepared students to successfully pass the COTA exam.
- Considering the current completion rate and new accredited programs, the number of eligible entrants to the OTA workforce could grow from 281 to more than 300 within the next two to five years.

¹⁵ Program and completion data for other postsecondary institutions was compiled using the Integrated Postsecondary Education Data System (IPEDS).

Conclusion

Combining data from the workforce survey, available educational outcomes, and employer demand projections, this report provides a detailed profile of OTA employment in California.

Findings from a unique set of survey questions about employment showed that most OTAs work in Long Term Care or Skilled Nursing facilities and earn good wages - \$51,200 a year on average. Surprisingly, a significant minority of OTAs (39%) reported working multiple jobs and an additional 21% were underemployed, working part time when they when they would have preferred full-time work. These findings suggest that while the OTA profession offers high wages and employment, some workers may not realize these benefits, especially those with fewer years of experience in the profession.

A look at the demographics of current and future OTAs revealed an unequal composition of the workforce. More women than men were employed as OTAs and the same is true for the pipeline of community college programs. White OTAs were overrepresented in relation to California's workforce and Hispanic OTAs were underrepresented. The demographics of students in community college programs reflected a similar distribution amongst these two racial/ethnic groups.

Using occupational projections, it is estimated that more than 440 new jobs will be created by 2024, growth of 17% over a five-year period, an average of 88 jobs annually. In addition, the replacement rate for OTAs is about 9.6% annually – meaning that each year about 250 workers will vacate their position for another type of work or leave for personal reasons (including retirement). All told, annual employer demand could generate close to 340 opportunities for new entrants to the OTA field through 2024.

There are currently five public and three private postsecondary programs in California that train OTAs. Community colleges award, on average, 111 degrees annually, including 94 associate degrees, and 17 bachelor's degrees; according to the most recent three program years of data available, about 200 associate degrees are conferred by private postsecondary programs.

As discussed previously, there are 340 annual job openings in California. On average, approximately 312 students at both community colleges and private postsecondary institutions are awarded an associate or bachelor's degree annually. Comparing the occupational demand and recent degrees conferred, California will face an undersupply of about 9% or 28 OTAs annually. In other words, anticipated job openings for OTAs slightly exceeds the projected number of graduating OTAs.

Looking forward to the future of the OTA occupation, it is possible that changes in licensing or employer requirements for education may encourage current or future OTAs to obtain a bachelor's degree. The workforce survey found that many OTAs were interested in pursuing additional education and believed a bachelor's degree would be valuable to their career. Future research could explore how educational and other changes shift the demographic composition of the workforce and the educational choices and job opportunities of OTAs.

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