

## Summary

Program LMI Endorsement	Endorsed: All LMI Criteria Met <input checked="" type="checkbox"/>	Endorsed: Some LMI Criteria Met <input type="checkbox"/>	Not LMI Endorsed <input type="checkbox"/>
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### Program LMI Endorsement Criteria

	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Supply Gap:	<i>Comments:</i> there is projected to be <b>697 annual job openings</b> throughout Los Angeles and Orange counties for <i>interpreters and translators</i> , which is <b>more than the 7 awards conferred by educational institutions</b> . However, the occupation <i>interpreters and translators</i> includes interpreters and translators for all languages, including American Sign Language (ASL), Spanish, Vietnamese, and numerous other languages. Therefore, demand for Spanish and Vietnamese interpreting is overstated.	
Living Wage: (Entry-Level, 25 <sup>th</sup> )	<i>Comments:</i> <b>Entry-level wages for interpreters and translators are \$20.70, which is just above the OC living wage of \$20.63.</b>	
Education:	<i>Comments:</i> The typical entry-level education for <i>interpreters and translators</i> is a <b>bachelor's degree. However, one-third of workers in the field have completed some college or an associate degree as their highest level of education.</b>	

Emerging Occupation(s)		
Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
<i>Comments:</i> N/A		

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/Orange County regional labor market related to one middle-skill occupation:

- Interpreters and Translators (27-3091)

It is important to note that this occupation includes interpreters and translators for all languages and not solely Vietnamese; therefore, demand is overstated. However, according to Census Bureau data, a significant percentage of the population in both Los Angeles and Orange counties primarily speaks Vietnamese at home.<sup>1</sup> Specifically within Orange County, 6% of the population speaks Vietnamese at home according to Census Bureau data.

In addition to an analysis of traditional labor market data, this report also includes an analysis of all online job postings that request Spanish-language and Vietnamese-language skills. Notably, this analysis

<sup>1</sup> <https://www.census.gov/acs/www/about/why-we-ask-each-question/language/>

shows that there is a significant number of job postings requesting these skills, particularly in healthcare-related occupations. Additional information is included in the job postings section of this report.

Based on the available data there appears to be a supply gap for *interpreters and translators*. However, *interpreters and translators* include all languages and not solely Vietnamese. Therefore, demand for Vietnamese interpreters and translators is overstated. Additionally, typical education requirements for this occupation align with a community college education and entry-level wages are just above the living wage. **Therefore, due to all 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 occupations included in this report.

### Exhibit 1: Occupational Demand and Supply in Los Angeles/Orange Counties

Occupation (SOC)	Demand (Annual Openings)	Supply (CC and Non-CC)	Entry-Level Hourly Earnings (25 <sup>th</sup> Percentile)	Typical Entry-Level Education	Community College Educational Attainment
Interpreters and Translators (27-3091)	LA: 541	LA: 2	OC: \$20.70	Bachelor's Degree	33%
	OC: 157	OC: 5			
<b>LA/OC Total</b>	<b>2,359</b>	<b>593</b>	<b>N/A</b>	<b>N/A</b>	<b>N/A</b>

#### Demand:

- The number of jobs related to *interpreters and translators* is projected to increase 17% through 2026, equating to 697 annual job openings.
- Hourly entry-level wages for *interpreters and translators* are \$20.70 in Orange County, which is slightly above the living wage of \$20.63.
- There were 1,012 online job postings for *interpreters and translators* over the past 12 months. The highest number of postings were for interpreters, sign language interpreters, and Spanish interpreters.
- The typical entry-level education for *interpreters and translators* is a bachelor's degree.
- Approximately 33% of workers in the field have completed some college or an associate degree as their highest level of educational attainment.

#### Supply:

- There was an average of 5 awards conferred by a single community college – Santa Ana College - in Los Angeles and Orange Counties from 2018 to 2021.
- Non-community college institutions conferred an average of 2 awards from 2017-2020. All awards were for a bachelor's degree or above.
- Due to a small number of students enrolled in legal and community interpretation programs in Orange County, there was insufficient data to determine the median wages for students exiting the program, the percentage of students that attained the living wage, and the percentage of students that reported being employed in their field of study.

## Demand

### Occupational Projections:

Exhibit 2 shows the annual percent change in jobs for interpreters and translators from 2016 through 2026. Though employment across all occupations declined 6% from 2019 to 2020 due to the COVID-19 Pandemic, employment for *interpreters and translators* increased 13% in Orange County during the same period. Employment for *interpreters and translators* is projected to grow at a slightly higher rate compared to all occupations through 2026.

**Exhibit 2: Annual Percent Change in Jobs for Interpreters and Translators, 2016-2026**

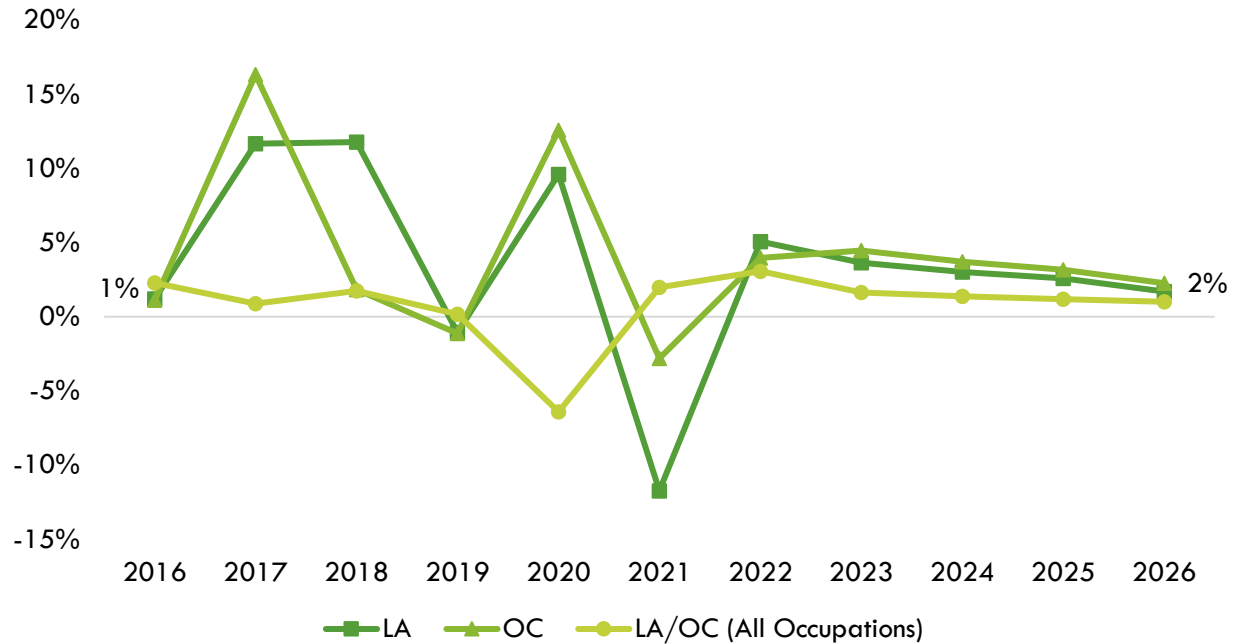


Exhibit 3 shows the five-year occupational demand projections for *interpreters and translators*. In Los Angeles/Orange County, the number of jobs for *interpreters and translators* is projected to increase by 17% through 2026. There is projected to be 697 jobs available annually.

**Exhibit 3: Occupational Demand in Los Angeles and Orange Counties<sup>2</sup>**

Geography	2021 Jobs	2026 Jobs	2021-2026 Change	2021-2026 % Change	Annual Openings
Los Angeles	3,742	4,380	637	17%	541
Orange	1,057	1,256	199	19%	157
<b>Total</b>	<b>4,799</b>	<b>5,636</b>	<b>836</b>	<b>17%</b>	<b>697</b>

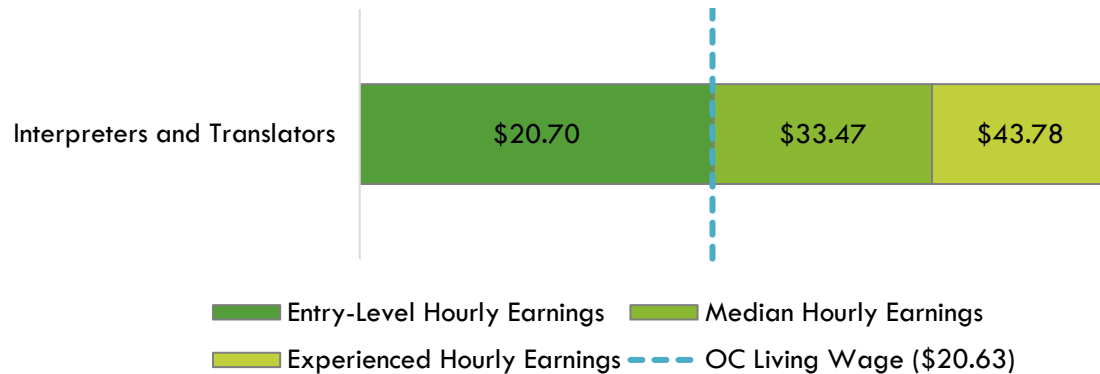
<sup>2</sup> Five-year change represents new job additions to the workforce. Annual openings include new jobs and replacement jobs that result from retirements and separations.

## Wages:

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

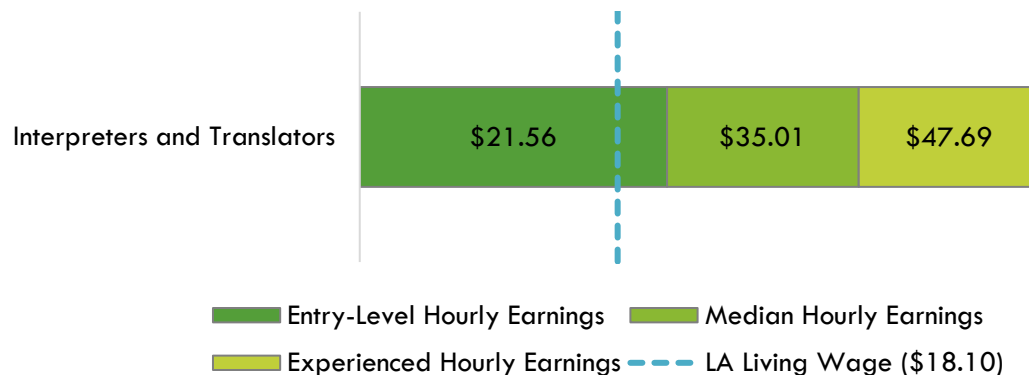
The typical entry-level hourly wages for *interpreters and translators* are \$20.70, which is just above the living wage for one adult (\$20.63 in Orange County). Orange County's average wages are slightly higher than the average statewide wage of \$40.86 for *interpreters and translators*. Exhibit 4 shows the wage range for *interpreters and translators* in Orange County and how it compares to the regional living wage.

Exhibit 4: Wages by Occupation in Orange County



The typical entry-level hourly wages for *interpreters and translators* are \$21.56, which is significantly above the living wage for one adult (\$18.10 in Los Angeles County). Los Angeles County's average wages are above the average statewide wage of \$40.86 for *interpreters and translators*. Exhibit 5 shows the wage range for *interpreters and translators* in Los Angeles County and how it compares to the regional living wage.

Exhibit 5: Wages by Occupation in Los Angeles County



## Job Postings:

**Important Online Job Postings Data Note:** Online job postings data is sourced from Lightcast, a labor market analytics firm that scrapes, collects, and organizes data from online job boards such as LinkedIn, Indeed, Glassdoor, Monster, GovernmentJobs.com, and thousands more. Lightcast uses natural language processing (NLP) to determine the related company, industry, occupation, and other information for each job posting. However, NLP has limitations that include understanding contextual words of phrases; determining differences in words that can be used as nouns, verbs, and/or adjectives; and misspellings or grammatical errors.<sup>3</sup> For these reasons, job postings could be assigned to the wrong employer, industry, or occupation within Lightcast’s database.

Additionally, there are several limitations when analyzing job postings. A single job posting may not represent a single job opening, as employers may be creating a pool of candidates for future openings or hiring for multiple positions with a single posting. Additionally, not all jobs are posted online, and jobs may be filled through other methods such as internal promotion, word-of-mouth advertising, physical job boards, or a variety of other channels.

There were 1,012 online job postings related to interpreters and translators listed in the past 12 months. Of those, 4% (38) were specifically for Vietnamese interpretation. Due to the limited number of Vietnamese interpreting job postings, the remainder of this section analyzes online job postings for the broader interpreters and translators occupation, which includes interpreting and translating for all languages.

**Exhibit 6: Number of Job Postings by Occupation (n=1,012)**

Occupation	Job Postings	Percentage of Job Postings
Interpreters and Translators	1,012	100%

The top employers in the region, by number of job postings, are shown in Exhibit 7.

**Exhibit 7: Top Employers by Number of Job Postings (n=1,012)**

Employer	Job Postings	Percentage of Job Postings
CIT	40	4%
VirtualVocations	30	3%
Hanna Interpreting Services	28	3%
Homeland Language Services	18	2%
Online Interpreters	16	2%
Children’s Health Orange County	15	1%
University of California	14	1%
Federal Bureau of Investigation	13	1%
Leidos	13	1%
Providence	11	1%

The top specialized, soft, and software/computer skills listed by those most frequently mentioned in job postings (denoted in parentheses) are shown in Exhibit 8.

<sup>3</sup> K. R. Chowdhary, Fundamentals of Artificial Intelligence (Basingstoke: Springer Nature, 2020), <https://link.springer.com/book/10.1007/978-81-322-3972-7>.

### Exhibit 8: Top Skills by Number of Job Postings (n=1,012)

Top Specialized Skills	Top Soft Skills	Top Computer Skills
Language Interpretation (284)	English Language (461)	Microsoft Office (102)
Language Translation (284)	Communications (395)	Microsoft Excel (76)
American Sign Language (ASL) (110)	Spanish Language (215)	Microsoft Outlook (52)
Bilingual (Spanish/English) (97)	Multilingualism (213)	Microsoft PowerPoint (44)
Medical Terminology (81)	Customer Service (154)	Microsoft Word (40)
Pronunciation (70)	Writing (144)	Zoom (Video Conferencing Tool) (13)
Sign Language Interpretation (62)	Grammar (116)	Google Workspace (12)
Localization (55)	Korean Language (116)	Microsoft Access (11)
Proofreading (46)	Microsoft Office (102)	Cisco WebEx (7)
Punctuation And Capitalization (44)	Detail Oriented (95)	Spreadsheets (7)

#### Supplemental Job Postings Info

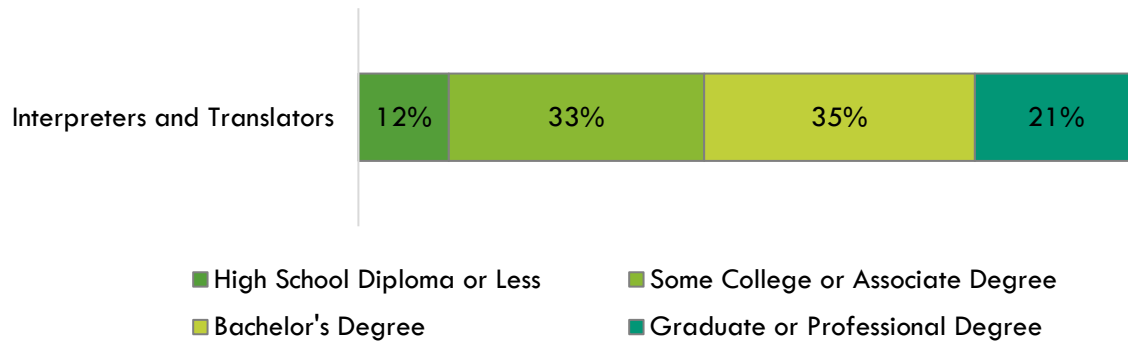
A supplemental job postings analysis was conducted for Santa Ana College’s existing Legal Interpreting Spanish/English and proposed Legal Interpreting Vietnamese/English program. Though a full labor market analysis for the occupation interpreters and translators was completed for both programs, the OC COE found that there were a significant number of online job postings that requested Spanish and Vietnamese language skills across all occupations and not solely those related to interpreters and translators. The supplemental analysis shows the top occupations and skills for these job postings, many of which are related to health, customer service, and sales occupations.

#### Educational Attainment:

The Bureau of Labor Statistics (BLS) lists a bachelor’s as the typical entry-level education for *interpreters and translators*. However, the national-level educational attainment data indicates 33% of workers in the field have completed some college or an associate degree as their highest level of education. Exhibit 13 shows the educational attainment for *interpreters and translators*.

Of the 48% of the cumulative job postings for *interpreters and translators* that listed a minimum education requirement in Los Angeles/Orange County, 53% (257) requested a high school diploma or an associate degree and 47% (373) requested a bachelor’s, master’s, or doctoral degree.

### Exhibit 13: National-level Educational Attainment for Occupations



## Educational Supply

### Community College Supply:

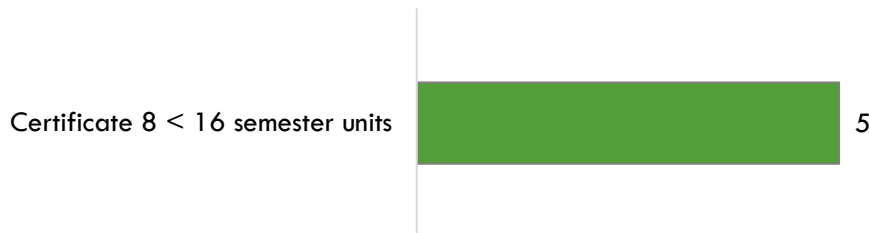
Exhibit 14 shows the three-year average number of awards conferred by community colleges in the related TOP code: Legal and Community Interpretation (2140.00). Currently, the only college throughout the region that offers legal and community interpretation programs is Santa Ana. Over the past 12 months, there were no other related program recommendation requests from regional community colleges.

**Exhibit 14: Regional Community College Awards (Certificates and Degrees), 2018-2021**

TOP Code	Program	College	2018-2019 Awards	2019-2020 Awards	2020-2021 Awards	3-Year Award Average
2140.00	Legal and Community Interpretation	-	-	-	-	-
		<b>LA Subtotal</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
		Santa Ana	1	3	10	5
		<b>OC Subtotal</b>	<b>1</b>	<b>3</b>	<b>10</b>	<b>5</b>
<b>Supply Total/Average</b>			<b>1</b>	<b>3</b>	<b>10</b>	<b>5</b>

Exhibit 11 shows the annual average community college awards by type from 2018-19 through 2020-21. Currently, Santa Ana College only offers a certificate of 8 to less than 16 semester units.

**Exhibit 11: Annual Average Community College Awards by Type, 2018-2021**



### Community College Student Outcomes:

Exhibit 15 shows the Strong Workforce Program (SWP) metrics for legal and community interpretation programs at Rancho Santiago Community College District (RSCCD) the Orange County Region, and California.

Currently, Santa Ana College is the only community college in Orange County that offers a legal and community interpretation program. Therefore, all metrics for the Orange County region are identical to those for RSCCD. Additionally, Santa Ana College's legal and community interpretation programs were approved in 2021. Since all years of outcome metrics begin in or prior to the 2020-21 academic year, there is currently insufficient data to determine nearly all outcomes for RSCCD and the Orange County region.



## Exhibit 15: Legal and Community Interpretation (2140.00) Strong Workforce Program Metrics, 2020-21<sup>4</sup>

SWP Metric	RSCCD	OC Region	California
SWP Students	Insufficient Data	Same as RSCCD	684
SWP Students Who Earned 9 or More Career Education Units in the District in a Single Year	Insufficient Data	Same as RSCCD	29%
SWP Students Who Completed a Noncredit CTE or Workforce Preparation Course	Insufficient Data	Same as RSCCD	72%
SWP Students Who Earned a Degree or Certificate or Attained Apprenticeship Journey Status	10	Same as RSCCD	93
SWP Students Who Transferred to a Four-Year Postsecondary Institution (2019-20)	Insufficient Data	Same as RSCCD	26
SWP Students with a Job Closely Related to Their Field of Study (2018-19)	Insufficient Data	Same as RSCCD	82%
Median Annual Earnings for SWP Exiting Students (2019-20)	Insufficient Data	Same as RSCCD	\$34,482 (\$16.58)
Median Change in Earnings for SWP Exiting Students (2019-20)	Insufficient Data	Same as RSCCD	25%
SWP Exiting Students Who Attained the Living Wage (2019-20)	Insufficient Data	Same as RSCCD	46%

### Non-Community College Supply:

For a comprehensive regional supply analysis, it is also important to consider the supply from other institutions in the region that provide training programs for *interpreters and translators*. Exhibit 16 shows the annual and three-year average number of awards conferred by these institutions in the related Classification of Instructional Programs (CIP) Code: Language Interpretation and Translation (16.0103). 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 2 awards annually in related training programs.

### Exhibit 16: Regional Non-Community College Awards, 2017-2020

CIP Code	Program	College	2017-2018 Awards	2018-2019 Awards	2019-2020 Awards	3-Year Award Average
16.0103	Language Interpretation and Translation	Biola University	3	1	3	2
		California State University-Long Beach	0	0	0	0
		University of Southern California	0	0	1	0
<b>Supply Total/Average</b>			<b>3</b>	<b>1</b>	<b>4</b>	<b>2</b>

<sup>4</sup> All SWP metrics are for 2019-20 unless otherwise noted.

## Regional Demographics

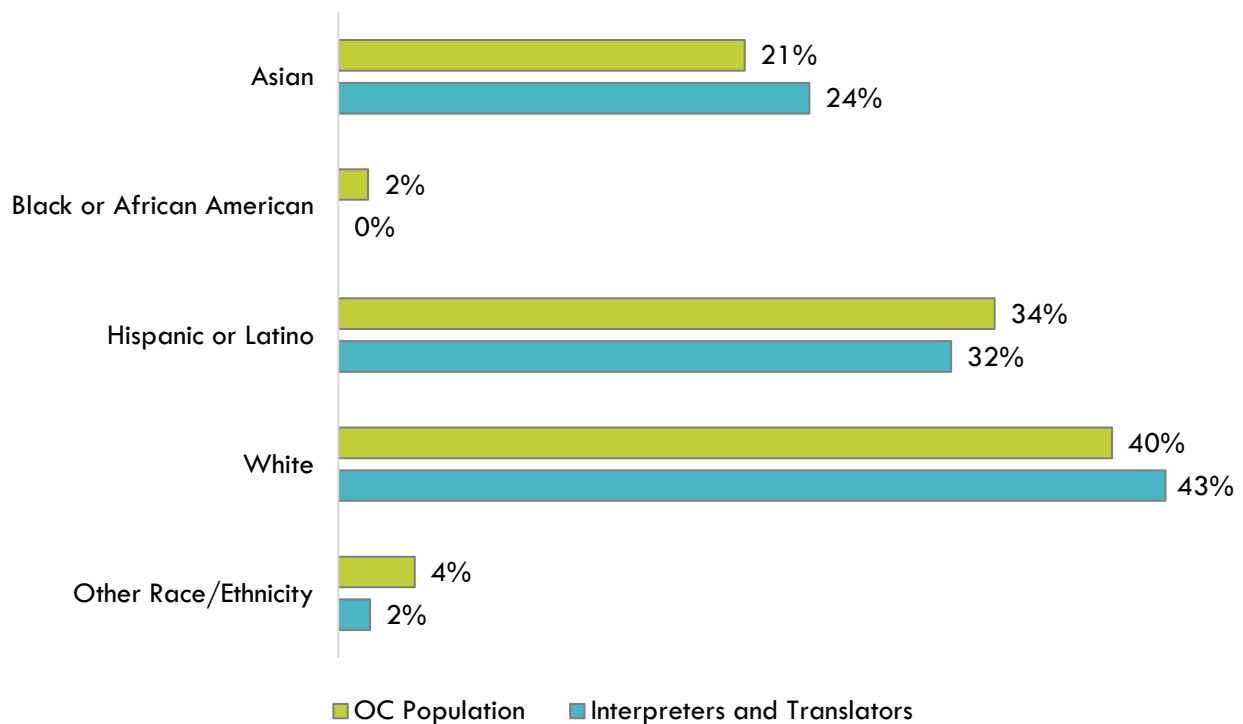
This section analyzes demographic data for Orange County community college students enrolled in legal and community interpretation programs compared to the OC population, as well occupational data, for the purpose of identifying potential diversity and equity issues that can be addressed by community college programs.

As noted in the student outcomes section, Santa Ana College is the only institution in Orange County that offers legal and community interpretation programs, all of which were approved in 2021. Since student demographic data in this section is representative of 2020-21 academic year, there is currently insufficient data to determine the demographics of students enrolled in these programs. Therefore, only Orange County population data and occupation data is analyzed in the following sections.

### Ethnicity:

Exhibit 17 shows the ethnicity of the overall Orange County population, as well as *interpreters and translators*. Notably, there is general alignment across all ethnicities when comparing the population and *interpreters and translators*.

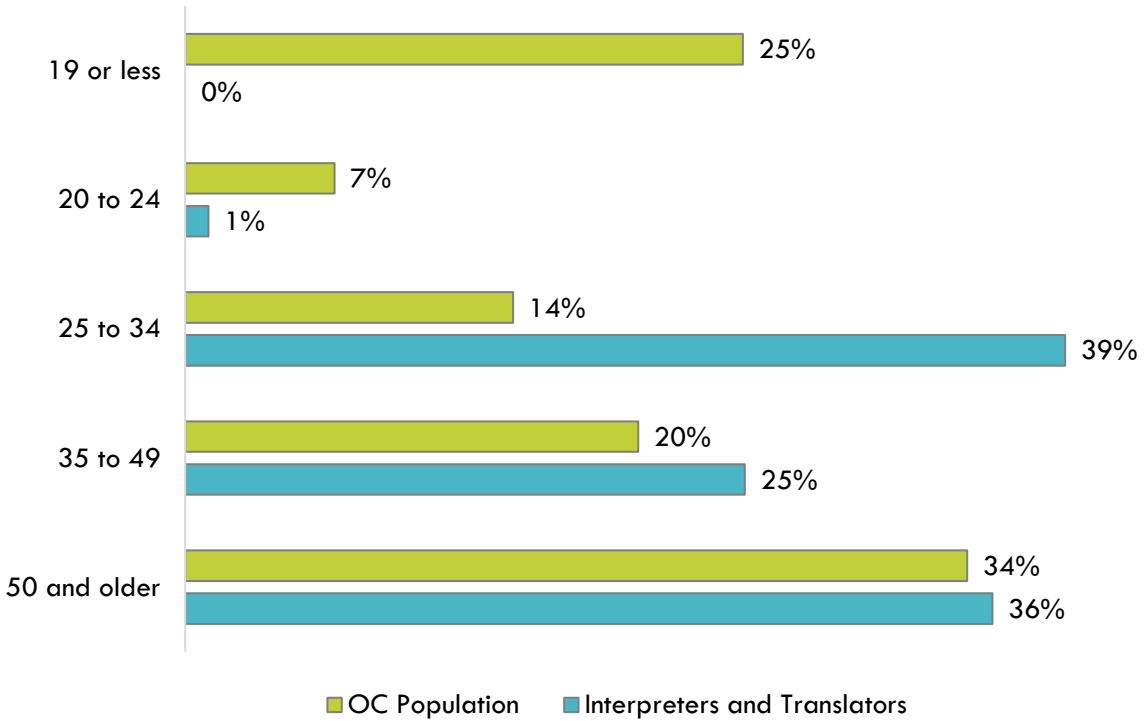
Exhibit 17: Program and County Demographics by Ethnicity



## Age:

Exhibit 18 shows the age of the overall Orange County population, as well as *interpreters and translators*. Notably, 39% of *interpreters and translators* are 25 to 34, which is significantly higher than the population (14%). Additionally, only 1% of *interpreters and translators* are 24 or less.

Exhibit 18: Program and County Demographics by Age

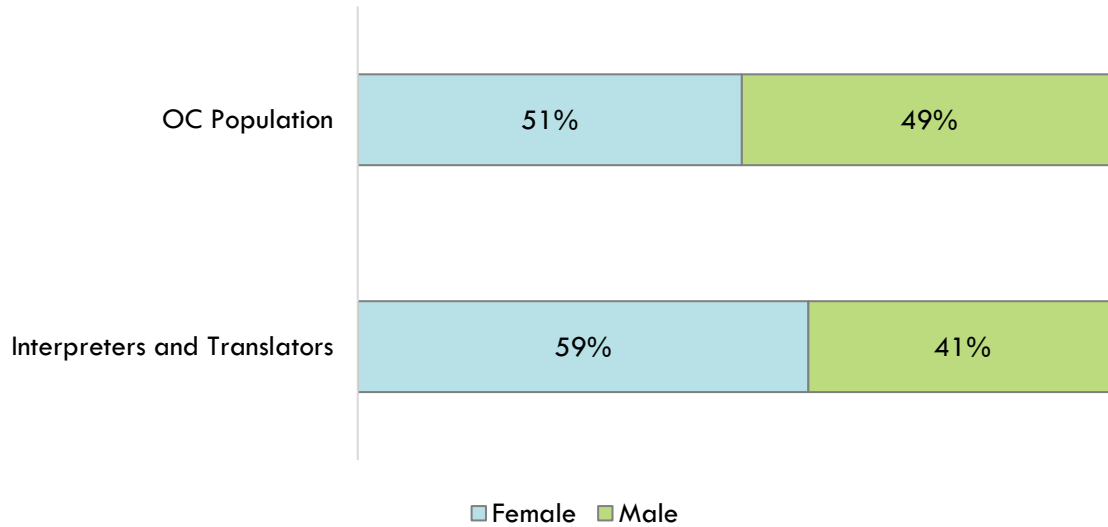


## Sex:

Exhibit 19 shows the sex of the overall Orange County population as well as *interpreters and translators*.

Though the Orange County population is split nearly evenly between men and women, there is a slightly higher percentage of are women (59%) employed as *interpreters and translators* compared to men (41%).

Exhibit 19: Program and County Demographics by Sex



## Appendix A: Methodology A

The OC COE prepared this report by analyzing data from occupations and education programs. Occupational data is derived from Lightcast, a labor market analytics firm that consolidates data from the California Employment Development Department (EDD), U.S. Bureau of Labor Statistics (BLS) and other government agencies. Program supply data is drawn from two systems: Taxonomy of Programs (TOP) and Classification of Instructional Programs (CIP).

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 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.

The OC COE determined labor market supply for an occupation or SOC code by analyzing the number of program completers or awards in a related TOP or CIP code. The COE developed a “supply table” with this information, which is the source of the program supply data for this report. TOP code data comes from the California Community Colleges Chancellor's Office MIS Data Mart ([datamart.cccco.edu](http://datamart.cccco.edu)) and CIP code data comes from the Integrated Postsecondary Education Data System ([nces.ed.gov/ipeds/use-the-data](http://nces.ed.gov/ipeds/use-the-data)), also known as IPEDS. 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 in the United States and Canada. Institutions outside of the California Community College system do not use TOP codes in their reporting systems.

Data included in this analysis represent the labor market demand for relevant positions most closely related to the proposed program as expressed by the requesting college in consultation with the OC COE. Traditional labor market information was used to show current and projected employment based on data trends, as well as annual average awards granted by regional community colleges. Real-time labor market information captures job post advertisements for occupations relevant to the field of study which can signal demand and show what employers are looking for in potential employees, but is not a perfect measure of the quantity of open positions.

All representations have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. The most recent data available at the time of the analysis was examined; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and findings; however, neither the Centers of Excellence for Labor Market Research (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.

## Appendix B: Data Sources

Data Type	Source
Occupational Projections, Wages, and Job Postings	<p>Traditional labor market information data is sourced from Lightcast, a labor market analytics firm. Lightcast occupational employment data are based on final Lightcast industry data and final Lightcast staffing patterns. Wage estimates are based on Occupational Employment Statistics and the American Community Survey. For more information, see <a href="https://lightcast.io/">https://lightcast.io/</a></p>
Living Wage	<p>The living wage is derived from the Insight Center’s California Family Needs Calculator, which measures the income necessary for an individual of family to afford basic expenses. The data assesses the cost of housing, food, child care, health care, transportation, and taxes. For more information, see: <a href="https://insightccd.org/family-needs-calculator/">https://insightccd.org/family-needs-calculator/</a></p> <p>The living wage for one adult in Orange County is \$20.63 per hour (\$42,910.40 annually). This figure is used by the CCCCCO to calculate the percentage of students that attained the regional living wage.</p>
Typical Education and Training Requirements, and Educational Attainment	<p>The Bureau of Labor Statistics (BLS) provides information about education and training requirements for hundreds of occupations. 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. For more information, see <a href="https://www.bls.gov/emp/documentation/education/tech.htm">https://www.bls.gov/emp/documentation/education/tech.htm</a></p>
Emerging Occupation Descriptions, Additional Education Requirements, and Employer Preferences	<p>The O*NET database includes information on skills, abilities, knowledge, work activities, and interests associated with occupations. For more information, see <a href="https://www.onetonline.org/help/online/">https://www.onetonline.org/help/online/</a></p>
Educational Supply	<p>The CCCCCO Data Mart provides information about students, courses, student services, outcomes and faculty and staff. For more information, see: <a href="https://datamart.cccco.edu">https://datamart.cccco.edu</a></p> <p>The National Center for Education Statistics (NCES) Integrated Postsecondary Integrated Data System (IPEDS) collects data on the number of postsecondary awards earned (completions). For more information, see <a href="https://nces.ed.gov/ipeds/use-the-data/survey-components/7/completions">https://nces.ed.gov/ipeds/use-the-data/survey-components/7/completions</a></p>
Student Metrics and Demographics	<p>LaunchBoard, a statewide data system supported by the California Community Colleges Chancellor's Office and hosted by Cal-PASS Plus, provides data on progress, success, employment, and earnings outcomes for California community college students. For more information, see: <a href="https://www.calpassplus.org/LaunchBoard/Home.aspx">https://www.calpassplus.org/LaunchBoard/Home.aspx</a></p>

Data Type	Source
Population and Occupation Demographics	<p>The Census Bureau's American Community Survey (ACS) is the premier source for detailed population and housing information. For more information, see: <a href="https://www.census.gov/programs-surveys/acs">https://www.census.gov/programs-surveys/acs</a></p> <p>Data is sourced from IPUMS USA, a database providing access to ACS and other Census Bureau data products. For more information, see: <a href="https://usa.ipums.org/usa/about.shtml">https://usa.ipums.org/usa/about.shtml</a></p>

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