

Commercial Pilots

Labor Market Analysis: San Diego County

August 2026

Summary

NEW PROGRAM RECOMMENDATION?	EVIDENCE OF A SUPPLY GAP?	AT OR ABOVE THE LIVING WAGE?	EXPECTED LEVEL OF EDUCATION
 Proceed	 	 	☐ Doctorate Degree ☐ Master's Degree ☐ Bachelor's Degree ☐ Associate Degree ☐ Some College or Certificate ☒ HS Diploma or Equivalent ☐ Less Than a HS Diploma ☐ Apprenticeship
SUPPORT FOR PROGRAM MODIFICATION?	NUMBER OF INSTITUTIONS THAT PROVIDE TRAINING	NUMBER OF ANNUAL JOB OPENINGS	
 	LOW 	MEDIUM 	

The San Diego & Imperial Center of Excellence (COE) developed this brief to assist the region's community colleges with strategic planning and program development. *Commercial Pilots* in San Diego County have 150 annual job openings (while average demand for a single occupation in San Diego County is 289 annual job openings), and two institutions supply 27 awards, suggesting a supply gap. Entry-level wages are above the living wage. This brief recommends that colleges proceed with developing a new program for this occupation and supports a program modification because 1) there is a supply gap; 2) only two institutions in San Diego County supply awards for this occupation; and 3) entry-level wages are above the living wage. Additionally, colleges should note that the expected level of education is a high school diploma or equivalent.

Introduction

This report provides labor market information in San Diego County for the following occupational code in the Standard Occupational Classification (SOC) system:¹

Commercial Pilots (SOC 53-2012): Pilot and navigate the flight of fixed-wing aircraft on nonscheduled air carrier routes, or helicopters. Requires a commercial pilot certificate. Includes charter pilots with similar certification, and air ambulance and air tour pilots. Sample reported job titles include:

- Air Interdiction Agents
- Persons-in-Charge
- Test Pilots
- Charter Pilots
- Helicopter Air Ambulance Pilots
- Maintenance Test Pilots
- Aviation Safety Inspectors
- Directors of Aviation
- Simulator Instructors
- Surveillance Agents

Projected Occupational Demand

Between 2025 and 2030, *Commercial Pilots* are projected to increase by 48 net jobs or four percent (Exhibit 1). Employers in San Diego County will need to hire 150 workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.²

Exhibit 1: Number of Jobs for Commercial Pilots (2025-2030)

Occupational Title	2025 Jobs	2030 Jobs	2025-2030 Net Jobs Change	2025-2030 % Jobs Change	Annual Job Openings (Demand)
Commercial Pilots	1,252	1,300	48	4%	150

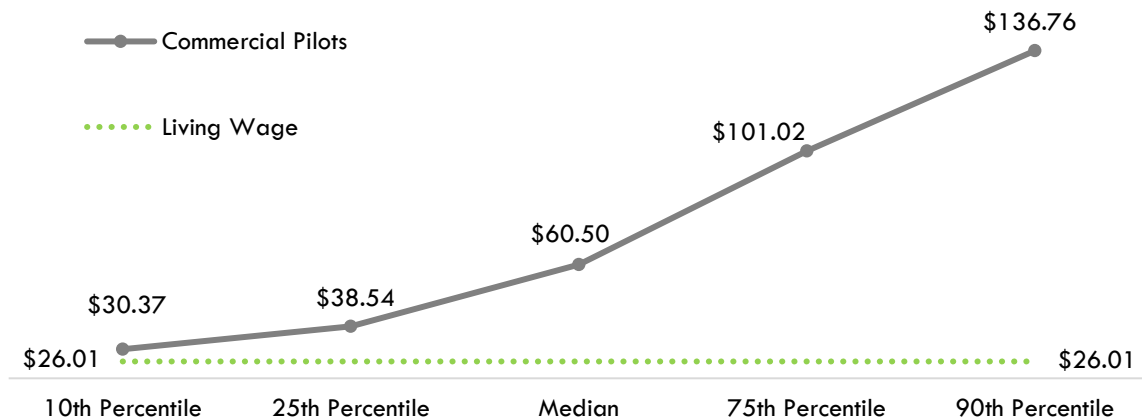
¹ The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. [bls.gov/soc](https://www.bls.gov/soc)

² Lightcast 2026.3; QCEW, Non-QCEW, Self-Employed.

Earnings

According to traditional³ labor market information (LMI), *Commercial Pilots* had entry-level hourly earnings of \$38.54—or \$80,163.20 annual salary⁴; this exceeds the living wage for a single adult in San Diego County, which is \$26.01⁵ per hour (Exhibit 2).

Exhibit 2: Hourly Earnings⁶ for Commercial Pilots in San Diego County⁷



³ Traditional LMI is generally historical data captured by the U.S. Bureau of Labor Statistics (BLS) or the California Employment Development Department (EDD). It does not account for recent technological, economic, or legislative changes that may affect labor market demand and wages.

⁴ Annualized salaries assume a full-time position with 2,080 hours. Multiplying the hourly wage with 2,080 yields the annual salary.

⁵ Center for Women's Welfare, University of Washington. (2024). The self-sufficiency standard for California 2024.

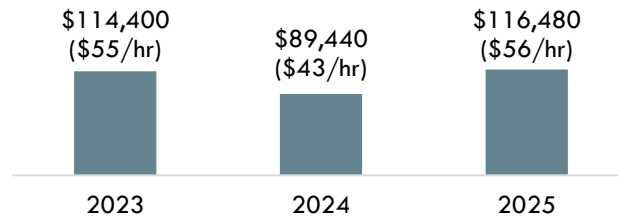
selfsufficiencystandard.org/california

⁶ 10th and 25th percentiles could be considered entry-level wages, and 75th and 90th percentiles could be considered experienced wages for individuals who may have been in the occupation longer, received more training than others, etc.

⁷ Lightcast 2026.3; QCEW, Non-QCEW, Self-Employed.

In online job postings, employers advertised between \$43 and \$56 per hour between January 1, 2023 and December 31, 2025 for *Commercial Pilots* in San Diego County (Exhibit 3). This suggests that employer-advertised wages in recent years are higher than traditional BLS estimates.⁸

Exhibit 3: Entry-Level Advertised Salaries in Online Job Postings for Commercial Pilots in San Diego County (2023-2025)*



*Hourly wages are rounded to the nearest dollar amount.

Expected Level of Education

According to traditional LMI (data reported to EDD and BLS), *Commercial Pilots* have a national educational attainment of a high school diploma or equivalent (Exhibit 4).⁹

Exhibit 4: National Educational Attainment for Commercial Pilots¹⁰

Occupational Title	Typical Entry-Level Education
Commercial Pilots	High school diploma or equivalent

⁸ Lightcast Q3 2026; "Job Posting Analytics." 2023-2025.

⁹ Lightcast 2026.3; QCEW, Non-QCEW, Self-Employed.

¹⁰ Lightcast 2026.3; QCEW, Non-QCEW, Self-Employed.

Similarly, online job postings between January 1, 2023 and December 31, 2025 in San Diego County had a [bachelor's degree](#) as the most requested educational requirement for *Commercial Pilots*; however, employers also expected the following certifications (Exhibit 5).¹¹

Exhibit 5: Top Certifications for Commercial Pilots in San Diego County in Online Job Postings (2023-2025)¹²

1. Multi-Engine Land (MEL)
2. FAA Instrument Rating
3. Airline Transport Pilot Licence
4. Certified Flight Instructor
5. Certified Benefits Professional

Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes. There is [one](#) TOP code and [one](#) CIP code related to *Commercial Pilots* (Exhibit 6).¹³

Exhibit 6: Related TOP and CIP Codes for Commercial Pilots

TOP or CIP Code	TOP or CIP Program Title
TOP 3020.20	Piloting
CIP 49.0102	Airline/Commercial/Professional Pilot and Flight Crew.

¹¹ Lightcast Q3 2026; "Job Posting Analytics." 2023-2025.

¹² Lightcast Q3 2026; "Job Posting Analytics." 2023-2025.

¹³ This brief includes awards from all TOP and CIP codes listed in Exhibit 6.

According to TOP data, [San Diego Miramar College](#) and [Southwestern College](#) supply the region with awards for this occupation; according to CIP data, [no](#) non-community-college institution supplies the region with awards (Exhibit 7).

Exhibit 7: Number of Awards Conferred by Postsecondary Institutions, PY2021-22 to PY2024-25

Average

TOP or CIP Code	TOP or CIP Program Title	3-Yr Annual Average CC Awards (PY22-23 to PY24-25)	Other Institutions 3-Yr Average Awards (PY21-22 to PY23-24)	Total Average Supply (PY21-22 to PY24-25)
3020.20	Piloting	27	0	27
	San Diego Miramar College	19	0	
	• Associate degree	15	0	
	• Certificate 16 < 30 units	4	0	
	Southwestern College	8	0	
	• Certificate 16 < 30 units	3	0	
	• Certificate 6 < 18 units	4	0	
49.0102	Airline/Commercial/Professional Pilot and Flight Crew.	0	0	0
			Total	27

Demand vs. Supply

Comparing labor demand (annual openings) with labor supply¹⁴ suggests that there is a **supply gap** for this occupation in San Diego County, with **150** annual openings and **27** awards. Comparatively, there are **927** annual openings in California and **241** awards, suggesting that there is a **supply gap** across the state¹⁵ (Exhibit 8).

Exhibit 8: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)

	Demand (Annual Openings)	Supply (Total Annual Average Supply)	Supply Gap or Oversupply
San Diego	150	27	123
California	927	241	686

Please note: This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly available data. This data should be used to discuss the potential gaps or oversupply of workers; however, it should not be the only basis for determining whether or not a program should be developed.

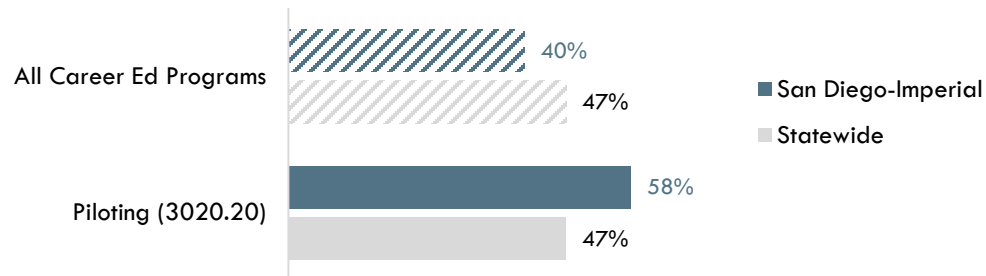
¹⁴ Labor supply can be found from two different sources: EMSI or the California Community Colleges Chancellor's Office MIS Data Mart. EMSI uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

¹⁵ California Community Colleges Centers of Excellence. Supply and Demand Tables. coeccc.net/our-resources

Student Outcomes and Regional Comparisons

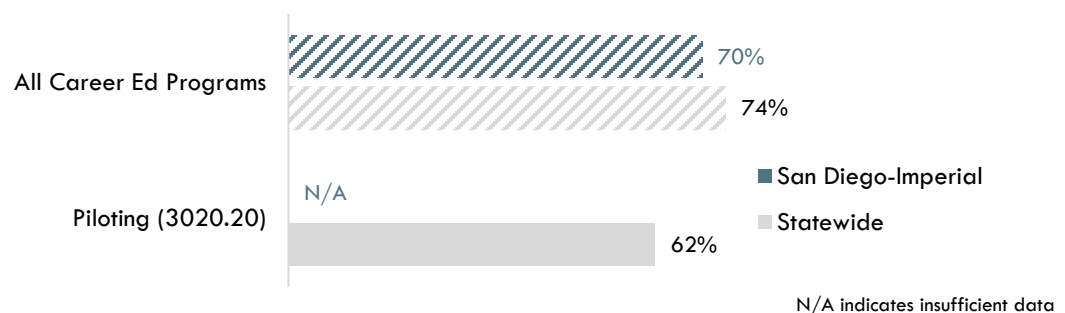
According to DataVista, living-wage rates for *Piloting* (TOP 3020.20) students were **58%** regionally and **47%** statewide, compared with Career Education rates of **40%** and **47%**, respectively (Exhibit 9).¹⁶

Exhibit 9: Percentage of Students Who Earned a Living Wage, PY2022-23¹⁷



According to DataVista, regional closely related job data was insufficient for this program, while **62%** statewide obtained a closely related job, compared with Career Education rates of **70%** and **74%**, respectively (Exhibit 10).¹⁸

Exhibit 10: Percentage of Students in a Job Closely Related to Field of Study, PY2021-22¹⁹



¹⁶ DataVista, California Community Colleges, datavista.cccco.edu

¹⁷ Most recent year with available data is Program Year 2022-23. Among completers and skills builders who exited, the percentage of students who attained a living wage.

¹⁸ DataVista, California Community Colleges, datavista.cccco.edu

¹⁹ Most recent year with available data is Program Year 2021-22. Percentage of Students in a Job Closely Related to Field of Study: Among students who responded to the CTEOS, the percentage reporting employment in the same or similar field as their program of study.

Employers

Between January 1, 2023 and December 31, 2025, the top five employers in San Diego County for *Commercial Pilots* were [United States Department of Homeland Security](#), [Jet Methods](#), [Latitude 33 Aviation](#), [General Atomics](#), and [KBR](#) based on online job postings (Exhibit 11).²⁰

Exhibit 11: Top Employers for Commercial Pilots in San Diego County

Top Employers	
• United States Department of Homeland Security • Jet Methods • Latitude 33 Aviation • General Atomics • KBR	• Air Methods • Shield Ai • Rampart Aviation • Avmac • Schubach Aviation

Skills

Exhibit 12 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2023 and December 31, 2025.²¹

Exhibit 12: Top Skills for Commercial Pilots in San Diego County

Specialized Skills	Soft Skills	Software Skills
• Unmanned Aerial Systems • Aviation • Contraband Detection And Control • Information Systems • American Institute Of Architects • Rotorcraft • Law Enforcement Operations • International Laws • Federal Aviation Administration • Data Analysis	• Operations • Management	• IBM MQ

²⁰ Lightcast Q3 2026; "Job Posting Analytics." 2023-2025.

²¹ Lightcast Q3 2026; "Job Posting Analytics." 2023-2025. Skills must populate in at least 10% of job postings to be listed.

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All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; 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 the report findings; however, neither the California Community Colleges Centers of Excellence (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.