








Broadcast Technicians

Labor Market Analysis: San Diego County

August 2025

Summary

NEW PROGRAM RECOMMENDATION?	EVIDENCE OF A SUPPLY GAP?	AT OR ABOVE THE LIVING WAGE?	EXPECTED LEVEL OF EDUCATION
<div> Do Not Proceed</div>	<div> </div>	<div> </div>	<div><input type="checkbox"/> Doctorate Degree</div> <div><input type="checkbox"/> Master's Degree</div> <div><input type="checkbox"/> Bachelor's Degree</div> <div><input checked="" type="checkbox"/> Associate Degree</div> <div><input type="checkbox"/> Some College or Certificate</div> <div><input type="checkbox"/> HS Diploma or Equivalent</div> <div><input type="checkbox"/> Less Than a HS Diploma</div> <div><input type="checkbox"/> Apprenticeship</div>
<div>SUPPORT FOR PROGRAM MODIFICATION?</div> <div>COE defers to the Region</div>	<div>NUMBER OF INSTITUTIONS THAT PROVIDE TRAINING</div> <div>LOW </div>	<div>NUMBER OF ANNUAL JOB OPENINGS</div> <div>LOW </div>	

The San Diego & Imperial Center of Excellence (COE) developed this brief to assist the region’s community colleges with strategic planning and program development. According to available data, *Broadcast Technicians* in San Diego County have a labor market demand of 17 annual job openings (while average demand for a single occupation in San Diego County is 289 annual job openings), and three institutions supply 88 awards for this occupation, suggesting that there is an oversupply in the labor market. Entry-level wages are below the living wage. This brief does not recommend proceeding with the development of a new program and defers to the region for a program modification because 1) there is an estimated oversupply in San Diego County; 2) entry-level wages are below the living wage; and 3) there is a low number of annual job openings.

## Introduction

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

**Broadcast Technicians** (SOC 27-4012): Set up, operate, and maintain the electronic equipment used to acquire, edit, and transmit audio and video for radio or television programs. Control and adjust incoming and outgoing broadcast signals to regulate sound volume, signal strength, and signal clarity. Operate satellite, microwave, or other transmitter equipment to broadcast radio or television programs. Sample reported job titles include:

- Control Operator
- Studio Engineer
- Radio Engineer
- Audio Engineer
- TV Technician
- Board Operator
- Radio Technician
- Broadcast Engineer
- Videotape Operator
- Remote Broadcast Engineer

## Projected Occupational Demand

Between 2023 and 2028, *Broadcast Technicians* are projected to decrease by **71** net jobs or **31%** (Exhibit 1). Employers in San Diego County will need to hire **17** employees annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.

**Exhibit 1: Number of Jobs for Broadcast Technicians (2023-2028)<sup>2</sup>**

Occupational Title	2023 Jobs	2028 Jobs	2023 - 2028 Net Jobs Change	2023 - 2028 % Net Jobs Change	Annual Job Openings (Demand)
Broadcast Technicians	226	155	<b>- 71</b>	<b>- 31%</b>	17

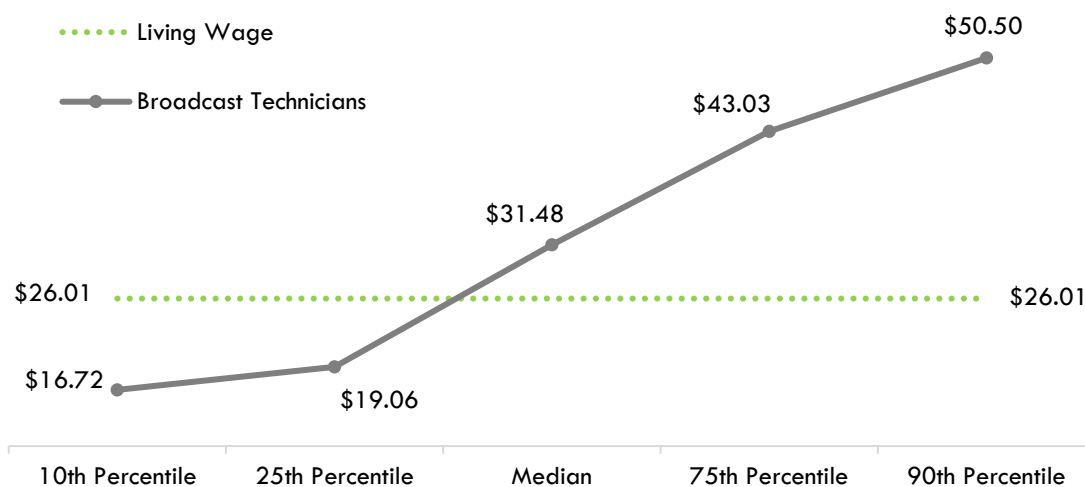
<sup>1</sup> The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for the purpose of collecting, calculating or disseminating data. <https://www.bls.gov/soc/>.

<sup>2</sup> Lightcast 2025.02; QCEW, Non-QCEW, Self-Employed.

## Earnings

According to traditional<sup>3</sup> labor market information (LMI), entry-level hourly earnings for *Broadcast Technicians* were **\$19.06**—or **\$39,644.80 annual salary**; this is less than the living wage for a single adult in San Diego County, which is **\$26.01** per hour (Exhibit 2).

**Exhibit 2: Hourly Earnings<sup>4</sup> for *Broadcast Technicians* in San Diego County<sup>5</sup>**



In online job postings, however, employers advertised between **\$20** to **\$29** per hour between January 1, 2022 and December 30, 2024 for *Broadcast Technicians* in San Diego County (Exhibit 3).<sup>6</sup> This suggests that employers in recent years are increasing wages due to labor market forces that may not be captured by traditional LMI.

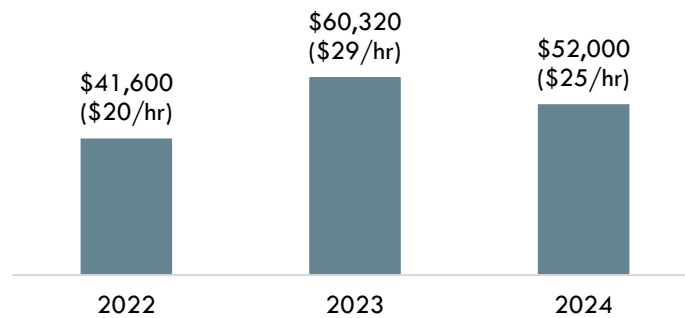
<sup>3</sup> Traditional LMI is generally historical data captured by the U.S. Bureau of Labor Statistics (BLS) or the California Employment Development Department (EDD). It does not account for recent technological, economic, or legislative changes that may affect labor market demand and wages.

<sup>4</sup> 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.

<sup>5</sup> Lightcast 2025.02; QCEW, Non-QCEW, Self-Employed.

<sup>6</sup> Lightcast 2025.02; "Job Posting Analytics." 2022-2024.

**Exhibit 3: Entry-Level Advertised Salaries in Online Job Postings for Broadcast Technicians  
in San Diego County (2022-2024)**



## Expected Level of Education

According to traditional LMI (data reported to EDD and BLS), *Broadcast Technicians* have a national educational attainment of an [associate degree](#) (Exhibit 4).<sup>7</sup>

**Exhibit 4: National Educational Attainment for Broadcast Technicians<sup>8</sup>**

Occupational Title	Typical Entry-Level Education
Broadcast Technicians	Associate degree

Online job postings between January 1, 2022 and December 31, 2024 in San Diego County had a [high school diploma or equivalent](#) as the most requested educational requirement for *Broadcast Technicians*; however, employers also expected the following certifications (Exhibit 5).<sup>9</sup>

**Exhibit 5: Top Certifications for Broadcast Technicians  
in San Diego County in Online Job Postings (2022-2024)<sup>10</sup>**

- |  |  |
|--|--|
| 1. Secret Clearance  | 6. CompTIA Certification                         |
| 2. Security Clearance  | 7. IAT Level II Certification                    |
| 3. CompTIA Security+   | 8. Top Secret Clearance                          |
| 4. Certified Professional Management Consultant                      | 9. GIAC Certifications                           |
| 5. Top Secret-Sensitive Compartmented Information (TS/SCI Clearance) | 10. American Society For Quality (ASQ) Certified |

<sup>7</sup> Lightcast 2025.02; QCEW, Non-QCEW, Self-Employed.

<sup>8</sup> Lightcast 2025.02; QCEW, Non-QCEW, Self-Employed.

<sup>9</sup> Lightcast 2025.02; "Job Posting Analytics." 2022-2024.

<sup>10</sup> Lightcast 2025.02; "Job Posting Analytics." 2022-2024

## 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 **two** CIP codes related to *Broadcast Technicians* (Exhibit 6).

**Exhibit 6: Related TOP and CIP Codes for Broadcast Technicians<sup>11</sup>**

TOP or CIP Code	TOP or CIP Program Title
TOP 0604.10	Radio
CIP 09.0701	Radio and Television
CIP 10.0202	Radio and Television Broadcasting Technology/Technician

According to TOP data, **two** community colleges supply the region with awards for this occupation, **Grossmont College** and **San Diego City College**. According to CIP data, **one** non-community-college institution supplies the region with awards, **San Diego State University** (Exhibit 7).

**Exhibit 7: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions (Program Year 2020-21 Through Program Year 2023-24 Average)**

TOP6 or CIP Code	TOP6 or CIP Program Title	3-Yr Annual Average CC Awards (PY21-22 to PY23-24)	Other Educational Institutions 3-Yr Annual Average Awards (PY20-21 to PY22-23)	Total Average Supply (PY20-21 to PY23-24)
0604.10	Radio	8	0	8
	Grossmont	8	0	
	• Associate Degree	4	0	
	• Certificate 30 < 60 units	4	0	
	San Diego City	0	0	
	• Associate Degree	0	0	
	• Certificate 6 < 18 units	0	0	
09.0701	Radio and Television	0	80	80

<sup>11</sup> This brief uses a conservative estimate of program supply and only calculates awards from the TOP code listed in Exhibit 7.

TOP6 or CIP Code	TOP6 or CIP Program Title	3-Yr Annual Average CC Awards (PY21-22 to PY23-24)	Other Educational Institutions 3-Yr Annual Average Awards (PY20-21 to PY22-23)	Total Average Supply (PY20-21 to PY23-24)
	San Diego State University	0	80	
	• Bachelor's	0	80	
	• Master's	0	0	
			<b>Total</b>	<b>88</b>

## Demand vs. Supply

Comparing labor demand with labor supply<sup>12</sup> suggests that there is an **oversupply** for this occupation in San Diego County, with 17 annual openings and 88 awards. Comparatively, there are 407 annual openings in California and 1,187 awards, suggesting that there is an **oversupply** across the state (Exhibit 8).<sup>13</sup>

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

	Demand (Annual Openings)	Supply (Annual Awards)	Supply Gap or Oversupply
San Diego	17	88	- 71
California	407	1,187	- 780

**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.

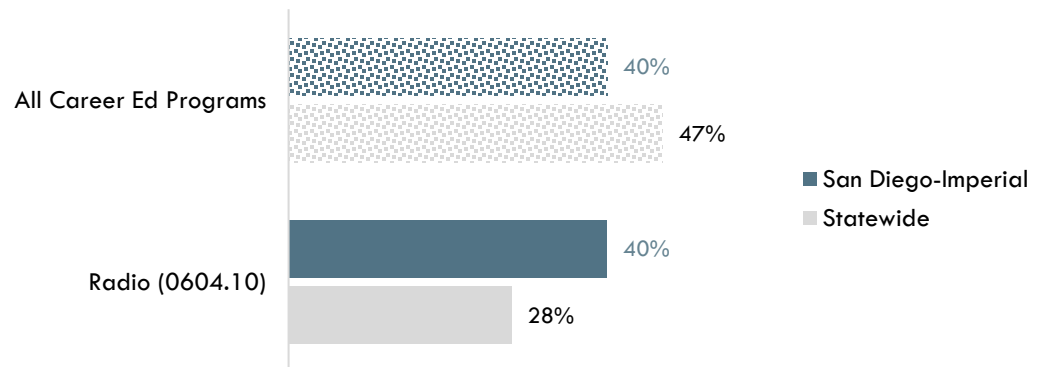
<sup>12</sup> Labor supply can be found from two different sources: Lightcast or the California Community Colleges Chancellor's Office MIS Data Mart. Lightcast uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

<sup>13</sup> "Supply and Demand," Centers of Excellence Student Outcomes, coecc.net/our-resources.

## Student Outcomes and Regional Comparisons

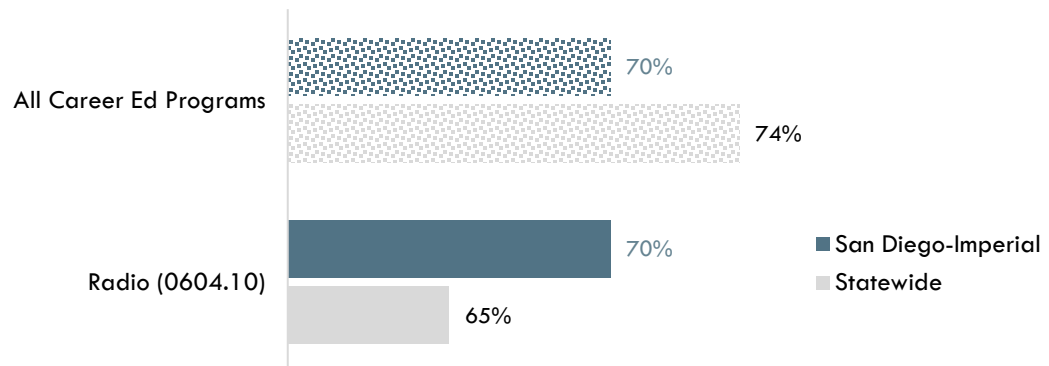
According to the California Community Colleges DataVista, 40% of students in the San Diego-Imperial region earned a living wage after completing a Radio (TOP 0604.10) program, compared to 28% statewide and 47% of students in Career Education programs in general across the state (Exhibit 9).<sup>14</sup>

**Exhibit 9: Percentage of Students Who Earned a Living Wage After Completing a Radio (TOP 0604.10) Program, PY2022-23<sup>15</sup>**



According to the California Community Colleges DataVista, 70% of students in the San Diego-Imperial region obtained a job closely related to their field of study after completing Radio (TOP 0604.10) program, compared to 65% statewide and 74% of students in Career Education programs in general across the state (Exhibit 10).<sup>16</sup>

**Exhibit 10: Percentage of Students in a Job Closely Related to Field of Study After Completing a Radio (TOP 0604.10) Program, PY2021-22<sup>17</sup>**



<sup>14</sup> DataVista, California Community Colleges, [datavista.cccco.edu/](https://datavista.cccco.edu/).

<sup>15</sup> 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.

<sup>16</sup> DataVista, California Community Colleges, [datavista.cccco.edu/](https://datavista.cccco.edu/).

<sup>17</sup> 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, 2022 and December 31, 2024, the top five employers in San Diego County for *Broadcast Technicians* were [Nexstar Media Group](#), [Dish](#), [San Diego State University](#), [Randstad](#), and [Actalent](#) based on online job postings (Exhibit 11).

**Exhibit 11: Top Employers for Broadcast Technicians in San Diego County<sup>18</sup>**

Top Employers	
<ul style="list-style-type: none"><li>• Nexstar Media Group</li><li>• Dish</li><li>• San Diego State University</li><li>• Randstad</li><li>• Actalent</li></ul>	<ul style="list-style-type: none"><li>• University of California-San Diego</li><li>• Northrop Grumman</li><li>• NBC</li><li>• Genesis10</li><li>• Day Wireless Systems</li></ul>

## Skills

Exhibit 12 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2022 and December 31, 2024.

**Exhibit 12: Top Skills for Broadcast Technicians in San Diego County<sup>19</sup>**

Specialized Skills	Soft Skills	Software Skills
<ul style="list-style-type: none"><li>• Radio Frequency</li><li>• Electronics</li><li>• Test Equipment</li><li>• Signal Generators</li><li>• Telecommunications</li><li>• Automation</li><li>• Television Production</li><li>• Technical Support</li><li>• Network Routing</li><li>• Oscilloscope</li><li>• Antenna</li><li>• Microwaves</li><li>• Soldering</li><li>• Broadcast Engineering</li><li>• Communications Systems</li></ul>	<ul style="list-style-type: none"><li>• Communication</li><li>• Troubleshooting</li><li>• Operations</li><li>• Management</li><li>• Customer Service</li><li>• Writing</li><li>• Coordinating</li><li>• Lifting Ability</li><li>• Detail Oriented</li><li>• Sales</li><li>• Interpersonal Communications</li><li>• Problem Solving</li><li>• Leadership</li><li>• Verbal Communication</li><li>• Multitasking</li></ul>	<ul style="list-style-type: none"><li>• Microsoft Office</li></ul>

<sup>18</sup> Lightcast 2025.02; "Job Posting Analytics." 2022-2024.

<sup>19</sup> Lightcast 2025.02; "Job Posting Analytics." 2022-2024.



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### Important Disclaimers

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 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.