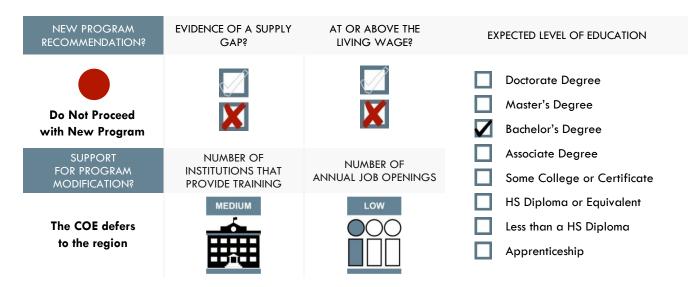


# Set and Exhibit Designers

Labor Market Analysis: San Diego County

February 2023

#### Summary



The Center of Excellence (COE) for the San Diego and Imperial Counties Community Colleges developed this brief to assist the region's community colleges with strategic planning and program development. According to available labor market information, Set and Exhibit Designers in San Diego County have a labor market demand of 12 annual job openings (while average demand for a single occupation in San Diego County is 242 annual job openings), and eight educational institutions in San Diego County supply 117 awards for this occupation, suggesting that there is an oversupply in the labor market. Entry-level wages for this occupation are below the living wage. This brief recommends to not proceed with developing a new program and defers to the region for a program modification because 1) there is an oversupply in the region; 2) entry-level wages are below the living wage; and 3) there is a low number of annual job openings. The colleges should note that the typical entry-level education for this occupation is a bachelor's degree.

#### 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:

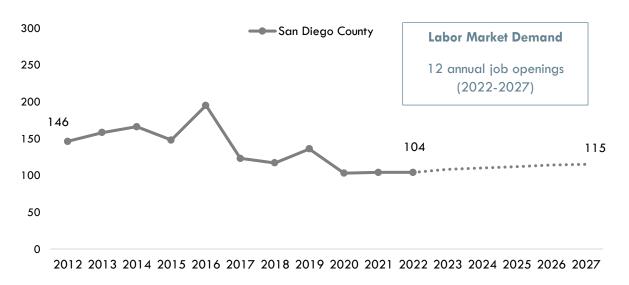
**Set and Exhibit Designers (SOC 27-1027):** Design special exhibits and sets for film, video, television, and theater productions. May study scripts, confer with directors, and conduct research to determine appropriate architectural styles. Sample reported job titles include:

- Set Decorator
- Stage Scenery Designer
- Set Designer
- Exhibits Manager
- Scenic Designer

- Exhibit Designer
- Designer
- Projection Designer
- Installations Designer
- Historical Society Window Dresser

#### **Projected Occupational Demand**

Between 2022 and 2027, Set and Exhibit Designers are projected to increase by 11 net jobs or 11 percent (Exhibit 1). Employers in San Diego County will need to hire 12 workers annually to fill new jobs and backfill jobs due to attrition caused by turnover and retirement, for example.



#### Exhibit 1: Number of Jobs for Set and Exhibit Designers (2012-2027)<sup>2</sup>

<sup>&</sup>lt;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. bls.gov/soc.

<sup>&</sup>lt;sup>2</sup> Lightcast 2022.04; QCEW, Non-QCEW, Self-Employed.

# **Earnings**

Set and Exhibit Designers receive entry-level hourly earnings of 16.12; this is less than the living wage for a single adult in San Diego County, which is 18.43 per hour (Exhibit 2).<sup>3</sup>

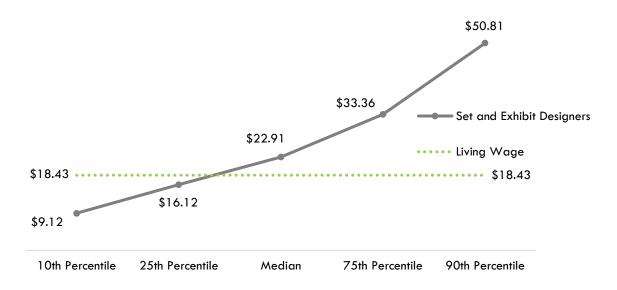


Exhibit 2: Hourly Earnings<sup>4</sup> for Set and Exhibit Designers in San Diego County<sup>5</sup>

<sup>&</sup>lt;sup>3</sup> "Family Needs Calculator (formerly the California Family Needs Calculator)," Insight: Center for Community Economic Development, last updated 2022. insightcced.org/family-needs-calculator.

<sup>&</sup>lt;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>&</sup>lt;sup>5</sup> Lightcast 2022.04; QCEW, Non-QCEW, Self-Employed.

## **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.<sup>6</sup> There are three TOP codes and three CIP codes related to Set and Exhibit Designers (Exhibit 3).

TOP or CIP Code	TOP or CIP Program Title
TOP 1006.00	Technical Theater
TOP 1009.00	Applied Design
TOP 1302.00	Interior Design and Merchandising
CIP 50.0401	Design and Visual Communications, General
CIP 50.0408	Interior Design
CIP 50.0502	Technical Theatre/Theatre Design and Technology

<b>Exhibit 3: Related TOP</b>	and CIP	Codes fo	or Set and	Exhibit Designers <sup>7</sup>
-------------------------------	---------	----------	------------	--------------------------------

According to TOP data, five community colleges supply the region with awards for this occupation: MiraCosta College, Palomar College, San Diego City College, San Diego Mesa College, and Southwestern College. According to CIP data, three non-community-college institutions supply the region with awards: Design Institute of San Diego, Newschool of Architecture and Design, and University of San Diego (Exhibit 4).

# Exhibit 4: Number of Awards (Certificates and Degrees) Conferred by Postsecondary Institutions (Program Year 2017-18 through Program Year 2020-21 Average)

TOP6 or CIP Code	TOP6 or CIP Program Title	3-Yr Annual Average CC Awards (PY18-19 to PY20-21)	Other Educational Institutions 3-Yr Annual Average Awards (PY17-18 to PY19-20)	3-Yr Total Average Supply (PY17-18 to PY20-21)
1006.00	Technical Theater	8	0	8
	MiraCosta	4	0	
	San Diego City	3	0	
	• Southwestern	1	0	

<sup>&</sup>lt;sup>6</sup> TOP data comes from the California Community Colleges Chancellor's Office MIS Data Mart (datamart.cccco.edu) and CIP data comes from the Integrated Postsecondary Education Data System (nces.ed.gov/ipeds/use-the-data).

<sup>&</sup>lt;sup>7</sup> This brief uses a conservative estimate of program supply and only calculates awards from the TOP code listed in Exhibit 3.

TOP6 or CIP Code	TOP6 or CIP Program Title	3-Yr Annual Average CC Awards (PY18-19 to PY20-21)	Other Educational Institutions 3-Yr Annual Average Awards (PY17-18 to PY19-20)	3-Yr Total Average Supply (PY17-18 to PY20-21)
1009.00	Applied Design	2	0	2
	MiraCosta	2	0	
1302.00	Interior Design and Merchandising	47	0	47
	Palomar	23	0	
	San Diego Mesa	24	0	
50.0401	Design and Visual Communications, General	0	19	19
	• University of San Diego	0	19	
50.0408	Interior Design	0	41	41
	<ul> <li>Design Institute of San Diego</li> </ul>	0	30	
	<ul> <li>Newschool of Architecture and Design</li> </ul>	0	11	
			Total	117

## Demand vs. Supply

Comparing labor demand (annual openings) with labor supply<sup>8</sup> suggests that there is an oversupply for this occupation in San Diego County, with 12 annual openings and 117 awards. Comparatively, there are 471 annual openings in California and 1,681 awards, suggesting that there is also an oversupply across the state<sup>9</sup> (Exhibit 5).

	<b>Demand</b> (Annual Openings)	<b>Supply</b> (Total Annual Average Supply)	Supply Gap or Oversupply
San Diego	12	117	-105
California	471	1,681	-1,210

**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>&</sup>lt;sup>8</sup> 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.

<sup>&</sup>lt;sup>9</sup> "Supply and Demand," Centers of Excellence Student Outcomes, coeccc.net/our-resources.

## **Student Outcomes and Regional Comparisons**

According to the California Community Colleges LaunchBoard, 34 percent of students in the San Diego-Imperial region earned a living wage after completing a program related to Set and Exhibit Designers, compared 21 to 38 percent statewide and 52 percent of students in Career Education programs in general across the state (Exhibit 6a).<sup>10</sup>

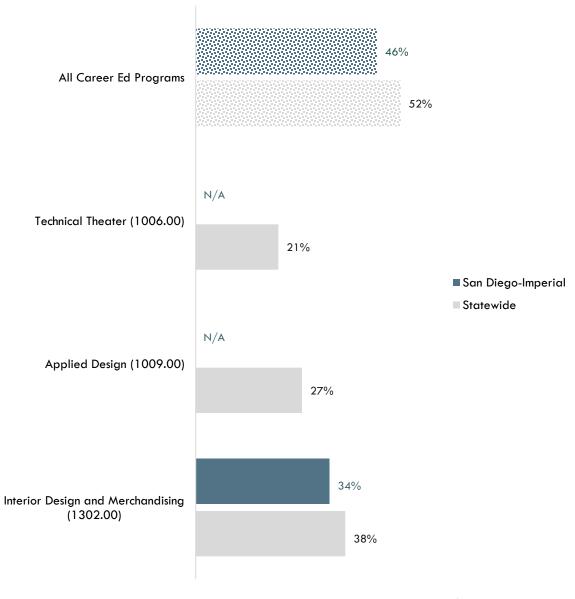
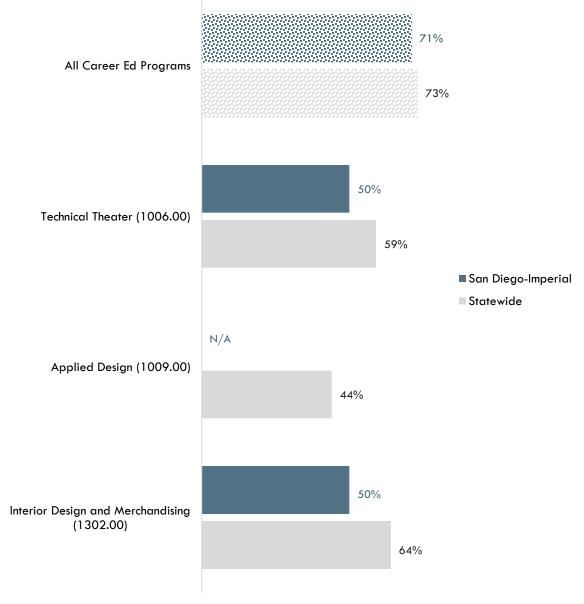


Exhibit 6a: Percentage of Students Who Earned a Living Wage by Program, PY2019-2011

"N/A" indicates insufficient data

<sup>&</sup>lt;sup>10</sup> "California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx. <sup>11</sup> Most recent year with available data is Program Year 2019-20. Among completers and skills builders who exited, the percentage of students who attained a living wage.

According to the California Community Colleges LaunchBoard, 50 percent of students in the San Diego-Imperial region obtained a job closely related to their field of study after completing a program related to Set and Exhibit Designers, compared to 44 to 64 percent statewide and 73 percent of students in Career Education programs in general across the state (Exhibit 6b).<sup>12</sup>



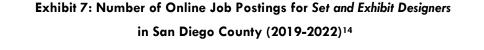


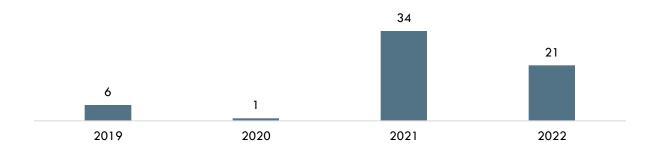
<sup>&</sup>quot;N/A" indicates insufficient data

<sup>&</sup>lt;sup>12</sup> "California Community Colleges Strong Workforce Program," California Community Colleges, calpassplus.org/LaunchBoard/SWP.aspx.
<sup>13</sup> Most recent year with available data is Program Year 2018-19. 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.

## **Online Job Postings**

This report analyzes not only historical and projected (traditional LMI) data, but also recent data from online job postings (real-time LMI). Online job postings may provide additional insight about recent changes in the labor market that are not captured by historical data. Between 2019 and 2022, there was an average of 16 online job postings per year for *Set and Exhibit Designers* in San Diego County (Exhibit 7). Please note that online job postings do **not** equal labor market demand; demand is represented by annual job openings (see Exhibit 1). While this brief includes online jobs postings data to help with curriculum development, the community colleges should note that this type of data is impacted by several variables: employers may post a position multiple times to increase the pool of applicants; a job posting to fill multiple positions, for example.





<sup>&</sup>lt;sup>14</sup> Lightcast; "Job Posting Analytics." 2019-2022.

## **Top Employers**

Between January 1, 2020 and December 31, 2022, the top five employers in San Diego County for Set and Exhibit Designers were SeaWorld Parks & Entertainment, Epic Entertainment, Marriott International, Kaleo Marketing, and Anheuser-Busch based on online job postings (Exhibit 8).

#### Exhibit 8: Top Employers for Set and Exhibit Designers in San Diego County<sup>15</sup>

#### **Top Employers**

- SeaWorld Parks & Entertainment
- Epic Entertainment
- Marriott International
- Kaleo Marketing
- Anheuser-Busch

- Los Willows
- Trademark Venues
- University of California San Diego
- San Diego Natural History Museum
- KnowledgeCity

## **Education, Skills, and Certifications**

Exhibit 9 indicates that the typical educational attainment for the occupation found currently in the national labor force is a bachelor's degree. The typical entry-level education is a bachelor's degree.<sup>16</sup>

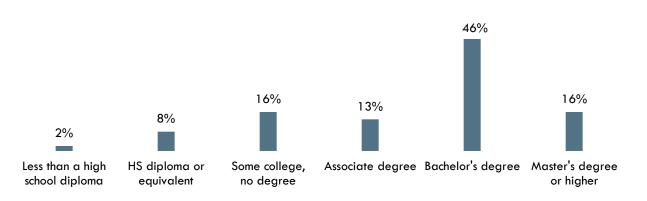


Exhibit 9: National Educational Attainment of Set and Exhibit Designers<sup>17</sup>

\*May not total 100 percent due to rounding

<sup>&</sup>lt;sup>15</sup> Lightcast; "Job Posting Analytics." 2020-2022.

<sup>&</sup>lt;sup>16</sup> Lightcast 2022.04; QCEW, Non-QCEW, Self-Employed.

<sup>&</sup>lt;sup>17</sup> "Educational Attainment for Workers 25 Years and Older by Detailed Occupation," Bureau of Labor Statistics, last modified September 8, 2022. bls.gov/emp/tables/educational-attainment.htm.

Exhibit 10 lists the top specialized, soft, and software skills that appeared in online job postings between January 1, 2020 and December 31, 2022.

Specialized Skills	Soft Skills	Software Skills
<ul> <li>Construction</li> <li>Hand Tools</li> <li>Power Tool Operation</li> <li>Bandsaws</li> <li>Carpentry</li> <li>Painting</li> <li>Mold Making</li> <li>Blueprint Reading</li> <li>Set Construction</li> <li>Business Coaching</li> <li>Fabrication</li> <li>Fiberglass</li> <li>Lead Generation</li> <li>Payment Processing</li> <li>Inventory Staging</li> </ul>	<ul> <li>Lifting Ability</li> <li>Positivity</li> <li>Cleanliness</li> <li>Verbal Communication Skills</li> <li>Communications</li> <li>Organizational Skills</li> <li>Detail Oriented</li> <li>Management</li> <li>Leadership</li> <li>Problem Solving</li> <li>Multitasking</li> <li>Time Management</li> <li>Quality Control</li> <li>Willingness To Learn</li> <li>Customer Service</li> </ul>	<ul> <li>Pinterest</li> <li>TikTok</li> <li>Microsoft Excel</li> <li>Bash</li> <li>BIOS</li> <li>Dell IDRAC</li> <li>Microsoft Outlook</li> <li>Windows Servers</li> <li>SketchUp</li> </ul>

#### Exhibit 10: Top Skills for Set and Exhibit Designers in San Diego County<sup>18</sup>

Exhibit 11 lists the top certifications that appeared in online job postings between January 1, 2020 and December 31, 2022.

#### Exhibit 11: Top Certifications for Set and Exhibit Designers in San Diego County<sup>19</sup>

Top Certifications in Online Job Postings

1. Food Handler's Card

<sup>&</sup>lt;sup>18</sup> Lightcast; "Job Posting Analytics." 2020-2022.
<sup>19</sup> Lightcast; "Job Posting Analytics." 2020-2022.

Prepared by: Tina Ngo Bartel, Director (<u>tngobartel@miracosta.edu</u>) John Edwards, Research Analyst (<u>jedwards@miracosta.edu</u>) Center of Excellence for the San Diego & Imperial Counties Community Colleges



#### **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.