

Program Endorsement Brief: 1006.00/Technical Theater

Technical Theater AA; Stage Management Certificate of Achievement

Orange County Center of Excellence, January 2020

Summary Analysis

The Orange County Center of Excellence for Labor Market Research (COE) prepared this report to provide Los Angeles/Orange County regional labor market supply and demand data related to two middle-skill occupations: Audio and Video Equipment Technicians (27-4011) and Sound Engineering Technicians (27-4014) and one above middle-skill occupation: Producers and Directors (27-2012). Middle-skill occupations typically require some postsecondary education, but less than a bachelor's degree.¹ This report is intended to help determine whether there is demand in the local labor market that is not being met by the supply from community college programs that align with the relevant occupations.

Based on the available data there appears to be a supply gap for these technical theater occupations in the region. However, 63% of the jobs available will be for Producers and Directors. When comparing the supply and demand for the two middle-skill occupations in this report, it appears that demand has been met. Furthermore, entry-level wages for the two middle-skill occupations are below the living wage for Orange County. **Therefore, the COE cautiously endorses this proposed program.** Reasons include:

Demand:

- Over the next five years, there is projected to be **3,896 jobs available annually** in the region due to new job growth and replacements, **which is more than the 1,639 awards conferred annually** by educational institutions in the region.
 - However, a **majority (63%) of the jobs available will be for Producers and Directors which are above middle-skill jobs**. There is projected to be **1,449 middle-skill jobs available for Audio and Video Equipment Technicians and Sound Engineering Technicians**.
 - The three-year average of awards conferred by educational institutions in related training programs for these middle-skill occupations is **1,192, suggesting that the labor supply has been met for these occupations**.
- **Both entry-level and median wages for the two middle-skill occupations, Audio and Video Equipment Technicians and Sound Engineering Technicians are above the California Family Needs Calculator hourly wage (living wage) for one adult in Los Angeles County (\$15.04).**

¹ The COE classifies middle-skill jobs as the following:

- 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.

- **Entry-level wages in Orange County for the two middle-skill occupations** are \$14.84 and \$16.52, which **are below the county’s living wage (\$17.36)**.
 - **Median hourly wages** for these middle-skill occupations are between **\$20.50 and \$28.91 in Orange County, which is above that county’s living wage.**
- The national-level educational attainment data indicates **44.1% of Audio and Video Equipment Technicians and Sound Engineering Technicians have completed some college or an associate degree as their highest level of education.**
- There were **1,047 online job postings related to Audio and Video Equipment Technicians and Sound Engineering Technicians listed in the past 12 months.** The highest number of job postings were for audio visual technician, stage manager, video technician, and sound director.

Supply:

- There are **20 community colleges** in the region that have technical theater programs, conferring an average of **648 awards annually** between 2015 and 2018.
- Between 2013 and 2016, there were an average of **991 awards conferred annually** in related training programs by non-community college institutions, all of which were generated by **11 individual colleges throughout** the region.
 - It is important to note that **Argosy University permanently closed its campuses in March 2019 and will not contribute to supply in future years.** The various Argosy University campuses **conferred a three-year average of 41 awards between 2013 and 2016.**

Occupational Demand

Exhibit 1, on the following page, shows the five-year occupational demand projections for these three occupations. In Los Angeles/Orange County, the number of jobs related to these occupations is projected to increase by 5% through 2023. There will be nearly 3,900 job openings per year through 2023 due to job growth and replacements. Of the 3,896 annual openings, 37% (1,449) will be for the middle skill occupations included in this report and the remaining 63% (2,447) will be for Producers and Directors, the sole above middle-skill occupation in this report.

Exhibit 1: Occupational demand in Los Angeles and Orange Counties²

Geography	2018 Jobs	2023 Jobs	2018-2023 Change	2018-2023 % Change	Annual Openings
Los Angeles	36,284	38,056	1,772	5%	3,622
Orange	2,540	2,746	206	8%	274
Total	38,824	40,802	1,978	5%	3,896

² 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—Typical entry-level hourly wages for middle-skill technical theater occupations throughout the region are between \$16.23 and \$27.20.³ Entry-level wages for these occupations are higher than the California Family Needs Calculator hourly wage (living wage) for one adult in Los Angeles County (\$15.04)⁴. In Orange County, entry-level wages for Producers and Directors are higher than the living wage, while entry-level wages for Audio and Video Equipment Technicians and Sound Engineering Technicians are below the living wage for the county (\$17.36). Median wages for these three occupations are between \$22.41 and \$46.11, which is higher than the living wage for both counties. Experienced workers can expect to earn between \$35.69 and \$69.09. Regional average wages are above the average statewide wage of \$42.75 for these occupations. Wage information, by county, is included in Appendix A.

Job Postings—There were 1,047 online job postings related to Audio and Video Equipment Technicians and Sound Engineering Technicians listed in the past 12 months. The highest number of job postings were for audio visual technician, stage manager, video technician, and sound director. The top skills were: repair, customer service, equipment operation, sales, and scheduling. The top three employers, by number of job postings, in the region were: PSAV Presentation Services, Live Nation Worldwide, and Freeman. Of the 1,047 online job postings, 37% listed a minimum education requirement.

Over the past 12 months, there were 419 online job postings for Producers and Directors. The highest number of job postings were for media manager, stage manager, and director. The top skills were budgeting, social media, project management, and scheduling. The top three employers, by number of job postings, were Disney, Sony Electronics, and Live Nation Worldwide. Of the 419 online job postings, 165 (39%) listed a minimum education requirement.

Educational Attainment—The Bureau of Labor Statistics (BLS) lists a postsecondary non-degree award for Audio and Video Equipment Technicians and Sound Engineering Technicians. The national-level educational attainment data indicates 44.1% of Audio and Video Equipment Technicians and Sound Engineering Technicians have completed some college or an associate degree. Of the 37% of middle-skill technical theater job postings listing a minimum education requirement in Los Angeles/Orange County, 87% (340) requested a high school diploma and 13% (51) requested an associate degree.

BLS lists a bachelor's degree as the typical entry-level education for Producers and Directors. The national-level educational attainment data indicates 18.1% of Producers and Directors have completed some college or an associate degree as their highest degree of education. Of the 39% of job postings listing a minimum education requirement, 80.6% (133) requested a bachelor's degree, 15.8% (26) requested a high school diploma or vocational training, and 3.6% (6) requested an associate degree.

Supply

Community College Supply—Exhibit 2 shows the three-year average number of awards conferred by community colleges in the related TOP codes: Film Production (0612.20),

³ Entry-level wage is defined as the twenty-fifth percentile hourly wage. Wages for experienced workers are defined as the seventy-fifth percentile hourly wage.

⁴ Living wage data was pulled from California Family Needs Calculator on 1/13/2020. For more information, visit the California Family Needs Calculator website: <https://insightcced.org/2018-family-needs-calculator/>.

Commercial Music (1005.00), and Technical Theater (1006.00). The colleges with the most completions in the region were: LA City, Citrus, and Orange Coast. Over the past 12 months, there were 24 other related program recommendation requests from regional community colleges.

Exhibit 2: Regional community college awards (certificates and degrees), 2016-2019

TOP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
0612.20	Film Production	Cerritos	5	6	0	6
		LA City	58	34	58	50
		LA Valley	12	10	41	21
		Long Beach	0	4	0	4
		Santa Monica	24	27	40	30
		West LA	29	37	26	31
		LA Subtotal	128	118	165	137
		Orange Coast	36	48	49	44
		Saddleback	7	9	7	8
		OC Subtotal	43	57	56	52
Subtotal/Average			171	175	221	189
1005.00	Commercial Music	Cerritos	4	9	-	7
		Citrus	40	58	55	51
		Glendale	-	3	-	3
		LA City	212	183	313	236
		LA Harbor	9	2	6	6
		LA Valley	18	21	7	15
		Long Beach	7	4	-	6
		LA Subtotal	290	280	381	317
		Cypress	13	15	9	12
		Fullerton	12	6	5	8
		Irvine	-	-	1	1
		Orange Coast	7	3	7	6
		Saddleback	1	11	7	6
		Santa Ana	2	5	6	4
		OC Subtotal	35	40	35	37
Subtotal/Average			325	320	416	354
1006.00	Technical Theater	Citrus	4	9	5	6
		East LA	-	10	6	8
		LA City	20	-	38	29
		LA Pierce	10	12	6	9

TOP Code	Program	College	2016-2017 Awards	2017-2018 Awards	2018-2019 Awards	3-Year Award Average
		LA Valley	6	2	4	4
		Long Beach	-	1	-	1
		Mt San Antonio	-	-	1	1
		Pasadena	-	2	4	3
		Santa Monica	11	16	17	15
		LA Subtotal	51	52	81	76
		Cypress	6	3	3	4
		Fullerton	22	10	11	14
		Golden West	3	-	-	3
		Irvine	5	2	3	3
		Orange Coast	-	-	1	1
		Saddleback	1	2	-	2
		Santa Ana	1	3	1	2
		OC Subtotal	38	20	19	29
		Subtotal/Average	89	72	100	105
		Supply Total/Average	585	567	737	648

Non-Community College Supply—It is important to consider the supply from four-year institutions in the region that provide training programs for occupations related to technical theater. Exhibit 3, on the following page, shows the annual and three-year average number of awards conferred by 11 institutions in the related Classification of Instructional Programs (CIP) Codes: Recording Arts Technology/Technician (10.0203), Technical Theatre/Theatre Design and Technology (50.0502), Cinematography and Film/Video Production (50.0602). Due to different data collection periods, the most recent three-year period of available data is from 2013 to 2016. Between 2013 and 2016, four-year colleges in the region conferred an average of 991 awards annually in related training programs.

It is important to note that Argosy University permanently closed its campuses in March 2019 and will not contribute to supply in future years.⁵ The various Argosy University campuses conferred a three-year average of 41 awards between 2013 and 2016.

⁵ <https://www.argosy.edu/closed-school-information>

Exhibit 3: Regional non-community college awards, 2013-2016

CIP Code	Program	College	2013-2014 Awards	2014-2015 Awards	2015-2016 Awards	3-Year Award Average
10.0203	Recording Arts Technology/ Technician	Argosy University-The Art Institute of California-Hollywood	-	1	16	6
		Argosy University-The Art Institute of California-Los Angeles	1	12	11	8
		Los Angeles Film School	611	320	214	382
		Musicians Institute	219	171	184	191
		SAE Institute of Technology-Los Angeles	96	166	120	127
		LA Subtotal	831	504	425	587
Subtotal/Average			831	504	425	587
50.0502	Technical Theatre/Theatre Design and Technology	Pepperdine University	-	2	5	2
		University of Southern California	11	6	7	8
		LA Subtotal	11	8	12	10
		Chapman University	-	-	1	1
		Vanguard University of Southern California	2	2	-	1
		OC Subtotal	2	2	1	2
Subtotal/Average			13	10	13	12
50.0602	Cinematography and Film/Video Production	Argosy University-The Art Institute of California-Los Angeles	23	32	25	27
		FIDM-Fashion Institute of Design & Merchandising-Los Angeles Total	23	21	10	18
		Los Angeles Film School	344	217	181	247
		New York Film Academy	81	108	113	101
		LA Subtotal	471	378	329	393
		Subtotal/Average	471	378	329	393
Supply Total/Average			1,315	892	767	991

Appendix A: Occupational demand and wage data by county

Exhibit 4. Los Angeles County

Occupation (SOC)	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Producers and Directors (27-2012)	23,246	24,540	1,294	6%	2,330	\$27.47	\$46.44	\$69.39
Audio and Video Equipment Technicians (27-4011)	9,044	9,488	444	5%	920	\$16.40	\$22.65	\$36.06
Sound Engineering Technicians (27-4014)	3,994	4,028	34	1%	372	\$17.73	\$31.03	\$51.42
Total	36,284	38,056	1,772	5%	3,622			

Exhibit 5. Orange County

Occupation (SOC)	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Producers and Directors (27-2012)	1,089	1,183	94	9%	117	\$22.21	\$39.11	\$60.33
Audio and Video Equipment Technicians (27-4011)	1,141	1,239	98	9%	126	\$14.84	\$20.50	\$32.64
Sound Engineering Technicians (27-4014)	309	324	15	5%	31	\$16.52	\$28.91	\$47.50
Total	2,540	2,746	206	8%	274			

Exhibit 6. Los Angeles and Orange Counties

Occupation (SOC)	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Producers and Directors (27-2012)	24,335	25,723	1,388	6%	2,447	\$27.20	\$46.11	\$69.09
Audio and Video Equipment Technicians (27-4011)	10,185	10,727	542	5%	1,046	\$16.23	\$22.41	\$35.69

Occupation (SOC)	2018 Jobs	2023 Jobs	5-Yr Change	5-Yr % Change	Annual Openings	Entry-Level Hourly Earnings (25 th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75 th Percentile)
Sound Engineering Technicians (27-4014)	4,304	4,352	48	1%	403	\$17.64	\$30.88	\$51.13
Total	38,824	40,802	1,978	5%	3,896			

Appendix B: Sources

- O*NET Online
- Labor Insight/Jobs (Burning Glass)
- Economic Modeling Specialists, International (Emsi)
- Bureau of Labor Statistics (BLS)
- Employment Development Department, Labor Market Information Division, OES
- Employment Development Department, Unemployment Insurance Dataset
- Living Insight Center for Community Economic Development
- California Community Colleges Chancellor’s Office Management Information Systems (MIS)
- California Family Needs Calculator, Insight Center for Community Economic Development
- Chancellor’s Office Curriculum Inventory (COCI 2.0)

For more information, please contact:

Jesse Crete, Director
Center of Excellence, Orange County
crete_jesse@rsccd.edu

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