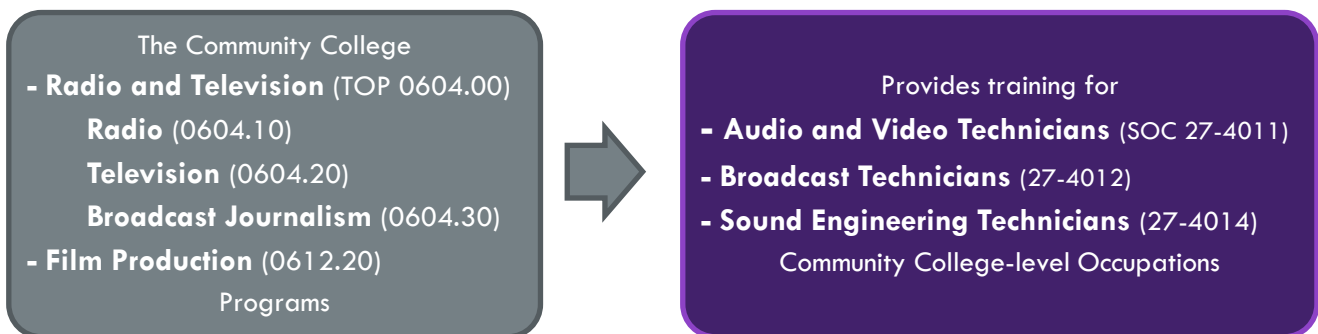


Broadcasting and Cinema

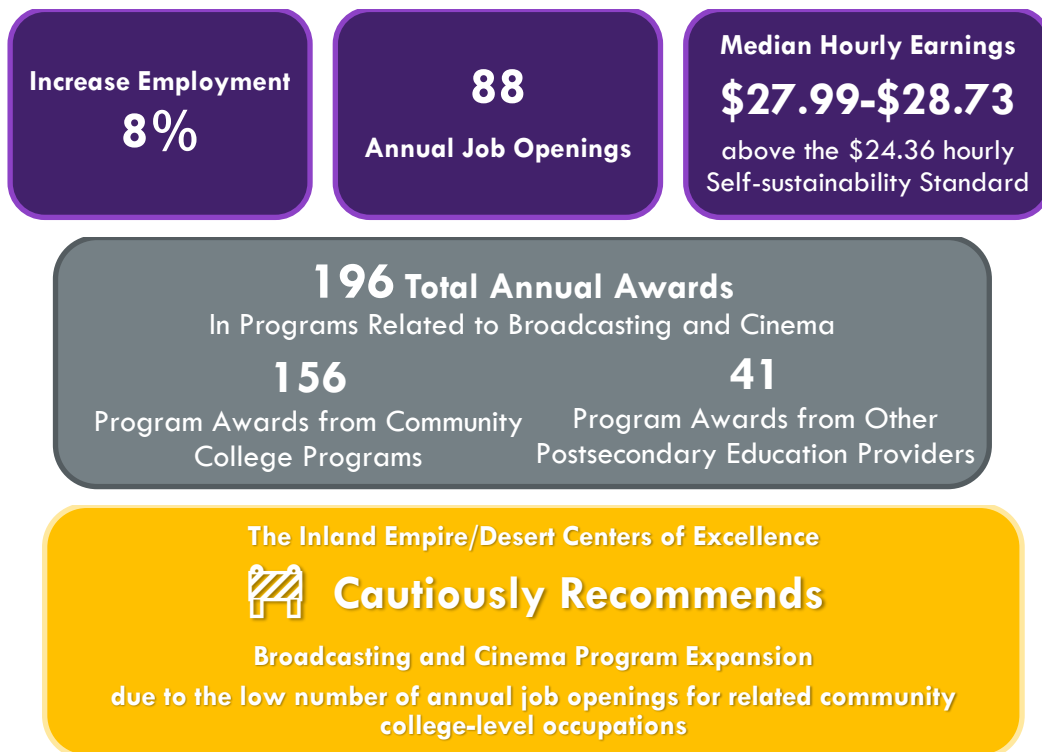
Inland Empire/Desert Region (Riverside and San Bernardino counties)

This workforce demand report uses state and federal job projection data developed before the economic impact of COVID-19. The COE is monitoring the situation and will provide more information as it becomes available. Please consult with local employers to understand their current employment needs.

Summary



Over the next five years (2020-2025), community college-level broadcasting and cinema employment is projected to



Introduction

This report provides labor market occupational demand and wage research and postsecondary programs outcomes related to broadcasting and cinema. Broadcasting and cinema workers may receive training from the following California Community College programs:

- Radio and Television (TOP 0604.00)
 - Radio (0604.10)
 - Television (including combined TV/Film/Video) (0604.20)
 - Broadcast Journalism (0604.30)
- Film Production (0612.20)

Descriptions for the programs listed above can be found in this report's student completions and program outcomes section. The knowledge, skills, and abilities trained by broadcasting and cinema programs lead to seven distinct occupations, collectively referred to as the broadcasting and cinema occupational group. The broadcasting and cinema occupational group is separated into community college-level and bachelor's degree-level occupations to illuminate job opportunities for individuals with varying education levels.

The **community college-level occupations** in this report require either a postsecondary nondegree award or an associate degree. Approximately 38% of incumbent workers in these occupations have a community college-level education, some college or an associate degree, as their highest level of educational attainment. The community college-level occupations included in the broadcasting and cinema occupational group are:

- Audio and Video Technicians (SOC 27-4011)
- Broadcast Technicians (27-4012)
- Sound Engineering Technicians (27-4014)

This report's **bachelor's degree-level occupations** typically require workers to obtain a four-year degree before entering employment. Between 19% and 32% of workers in these occupations have a community college-level education, some college or an associate degree, as their highest level of educational attainment. The bachelor's degree-level occupations included in the broadcasting and cinema occupational group are:

- Producers and Directors (SOC 27-2012)
- Broadcast Announcers and Radio Disc Jockeys (27-3011)
- Camera Operators, Television, Video, and Film (27-4031)
- Film and Video Editors (27-4032)

This report's educational supply and employment demand portions focus solely on the community college-level jobs students will likely obtain after completing a community college broadcasting and cinema program in the region.

Job Counts and Projections

In 2020, there were 1,887 total broadcasting and cinema jobs in the region. Employment for the community college-level broadcasting and cinema occupational group is projected to increase by 8% through 2025; 88 job openings are projected annually. The bachelor's degree-level occupations are expected to have 133 annual job openings, increasing employment by 7% over the next five years. Exhibit 1 displays the job counts, five-year projected job growth, job openings, and the share of incumbent workers aged 55 years and greater in the region.

Exhibit 1: Five-year projections for the broadcasting and cinema occupational group, 2020-2025

Occupation	2020 Jobs	2025 Jobs	5-Yr % Change	5-Yr Openings (New + Replacement Jobs)	Annual Openings (New + Replacement Jobs)	% of workers age 55+
Producers and Directors	548	609	11%	307	61	16%
Broadcast Announcers and Radio Disc Jockeys	205	152	(26%)	83	17	26%
Camera Operators, Television, Video, and Film	204	235	15%	134	27	~10%
Film and Video Editors	191	232	22%	141	28	~9%
Bachelor's Degree-level Total	1,148	1,229	7%	666	133	17%
Audio and Video Technicians	516	551	7%	297	59	16%
Sound Engineering Technicians	115	144	25%	93	19	Insf. Data
Broadcast Technicians	107	100	(6%)	52	10	~16%
Community College-level Total	738	796	8%	442	88	16%
Total	1,887	2,025	7%	1,108	222	16%

Source: Emsi 2022.1

Exhibit 2 shows the number of job ads posted during the last 12 months and the regional and statewide average time filling each occupation. Over the past 12 months, 130 total job advertisements were posted for the bachelor's degree-level occupational group and 143 job ads posted for the community college-level occupational group in the Inland Empire/Desert Region. The job advertisement search for the broadcasting and cinema occupational group, except audio and video technicians, was expanded to include all advertisements in California to ensure there were sufficient advertisements to obtain actionable job ad information.

Over the previous 12 months, there were 7,708 job ads posted for the broadcasting and cinema occupational group. On average, regional employers fill online job advertisements for audio and video technicians in 52 days, two days longer than the statewide average, indicating that regional employers face similar challenges filling open positions as other employers in California. On average, employers in California fill online job advertisements for the broadcasting and cinema occupational group in 45 days.

Exhibit 2: Job ads and time to fill

Occupation	Job Ads	Regional Average Time to Fill (Days)	Statewide Average Time to Fill (Days)
Producers and Directors*	4,443	-	47
Camera Operators, Television, Video, and Film*	983	-	31
Film and Video Editors*	738	-	43
Broadcast Announcers and Radio Disc Jockeys*	172	-	61
Bachelor's Degree-level Total	6,336	-	45
Audio and Video Technicians	113	52	50
Broadcast Technicians*	683	-	40
Sound Engineering Technicians*	576	-	42
Community College-level Total	1,372	52	46
Total	7,708	52	45

Source: Burning Glass – Labor Insights

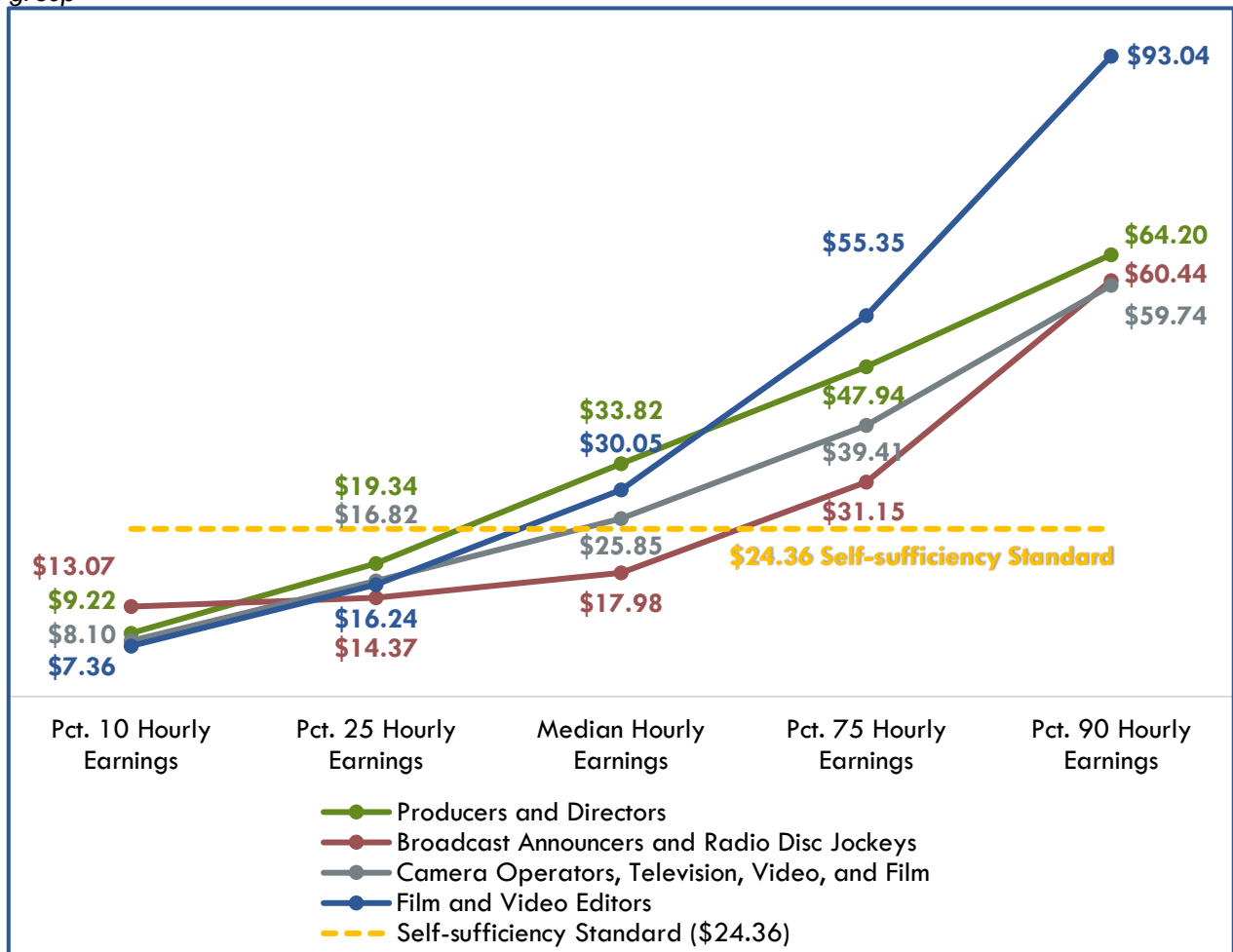
*California job advertisement information

Earnings and Benefits

Community colleges should ensure their training programs lead to employment opportunities that provide self-sustainable income. The University of Washington estimates that a self-sufficient hourly rate for a single adult with one school-age child is \$24.36 per hour or \$51,452 annually in Riverside County; \$23.73 per hour or \$50,119 annually in San Bernardino County (Pearce, 2021). For this study, the higher hourly earnings requirement in Riverside County is adopted as the self-sufficiency standard for the two-county region.

Exhibit 3 displays the hourly earnings for the bachelor's degree-level broadcasting and cinema occupational group. The median hourly earnings for camera operators, television, video, and film, film and video editors, and producers and directors surpass the regional self-sufficiency standard. The hourly earnings for broadcast announcers and radio disc jockeys do not surpass the regional self-sufficiency standard until the 75th percentile, indicating that only the top 25% of workers in this occupation earn a self-sustainable wage.

Exhibit 3: Hourly earnings by percentile for the bachelor's degree-level broadcasting and cinema occupational group

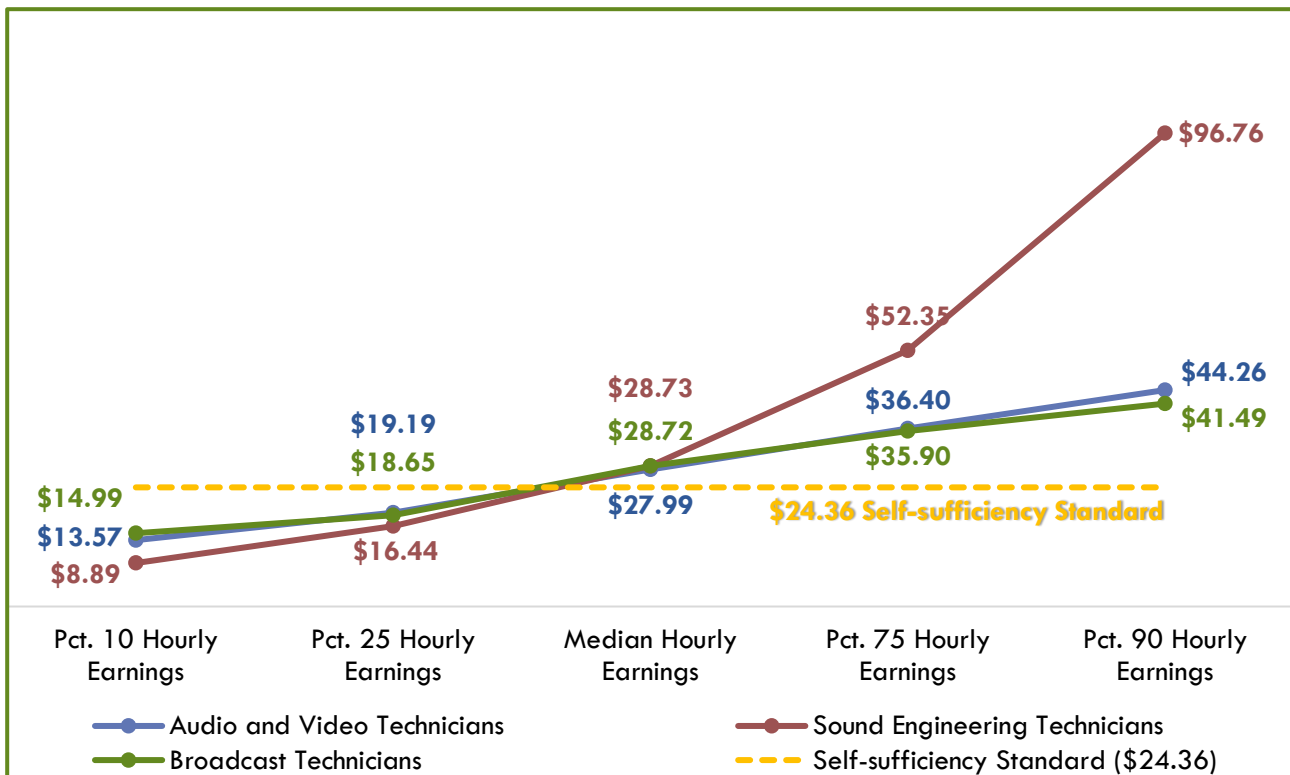


Source: Emsi 2022.1

Benefits information, typically provided by the occupational guides developed by the California Labor Market Information Division, is not available for the bachelor's degree-level broadcasting and cinema occupational group (Detailed Occupational Guides, 2022).

Exhibit 4 displays the hourly earnings for the community college-level broadcasting and cinema occupational group. The median hourly earnings for the community college-level broadcasting and cinema occupations are above the regional self-sufficiency standard, indicating that at least 50% of workers in this occupational group earn a self-sustainable wage.

Exhibit 4: Hourly earnings by percentile for the community college-level broadcasting and cinema occupational group



Source: Emsi 2022.1

Benefits information, typically provided by the occupational guides developed by the California Labor Market Information Division, is not available for the community college-level broadcasting and cinema occupational group (Detailed Occupational Guides, 2022).

Advertised Salary from Online Job Ads

Exhibit 5 displays online job ad salary data for the broadcasting and cinema occupational group over the last 12 months. Online job ad salary information reveals that employers are willing to pay the bachelor's degree-level broadcasting and cinema occupational group between \$54,000 and \$69,000 annually, above the region's \$51,452 annual (\$24.36 hourly) self-sufficiency standard. Job ad information reveals that employers are willing to pay the community college-level broadcasting and cinema occupational group between \$46,000 and \$57,000 annually. The advertised annual earnings for broadcast technicians are below the region's self-sufficiency standard. Consider the salary information with caution since only 31% (2,416 out of 7,708) of online job ads for these occupations provided salary information. The salary figures are prorated to reflect full-time, annual wage status.

Exhibit 5: Advertised salary information

Occupation	Number of job ads	Real-Time Salary Information				Average Annual Salary
		Less than \$35,000	\$35,000 to \$49,999	\$50,000 to \$74,999	More than \$75,000	
Bachelor's Degree-level						
Producers and Directors*	952	6%	17%	43%	34%	\$69,000
Camera Operators, Television, Video, and Film*	600	10%	36%	32%	22%	\$62,000
Film and Video Editors*	378	8%	40%	41%	11%	\$54,000
Broadcast Announcers and Radio Disc Jockeys*	51	16%	35%	39%	10%	\$59,000
Community College-level						
Audio and Video Technicians	53	17%	42%	26%	15%	\$54,000
Broadcast Technicians*	237	27%	44%	23%	6%	\$46,000
Sound Engineering Technicians*	145	12%	36%	33%	19%	\$57,000

Source: Burning Glass – Labor Insights

*California job advertisement information

Employers, Skills, Education, and Work Experience

Approximately 3% of statewide employer demand for the broadcasting and cinema occupational group is located in the Inland Empire/Desert Region. More than half (52%) of job advertisements for the broadcasting and cinema occupational group posted throughout the state were posted in the Los Angeles/Orange County Metropolitan Statistical Area (MSA). Job advertisements indicate that regional broadcasting and cinema workers willing to commute out of the local region may find greater employment opportunities.

Exhibit 6 displays the employers that posted the most job ads during the last 12 months. Showing employer names provides insight into where students may find employment after completing a program. NBC posted the most job advertisements for the bachelor's degree-level occupational group in California. Disney posted the most job advertisements for the community college-level occupational group in the state. In the Inland Empire/Desert Region, Yaamava, previously San Manuel Resort and Casino, posted the most job advertisements for the broadcasting and cinema occupational group, primarily seeking workers to produce live events hosted at the casino.

Exhibit 6: Employers posting the most job ads for the broadcasting and cinema occupational group

Occupation	Top Employers	
Bachelor's Degree-level		
Producers and Directors* (n=4,278)	<ul style="list-style-type: none">NBCDisneyAmazonApple, Inc.Tribune Company	<ul style="list-style-type: none">Nexstar Broadcasting GroupActivisionFacebookCBS BroadcastingSinclair Broadcast Group
Camera Operators, Television, Video, and Film* (n=983)	<ul style="list-style-type: none">NextProIgnite Now MediaYours Truly MediaHume Lake Christian Camp	<ul style="list-style-type: none">Touchline VideoAmazonNational Football League (NFL)Nickelodeon
Film and Video Editors* (n=738)	<ul style="list-style-type: none">eHomesNBCGolden HippoSinclair Broadcast Group	<ul style="list-style-type: none">Pretzel Logic ProductionsInfinite ViewsFlip Creative ConsultingDhar Mann Studios
Broadcast Announcers and Radio Disc Jockeys* (n=172)	<ul style="list-style-type: none">iHeartMediaAudacyNBC	<ul style="list-style-type: none">Bonneville San FranciscoCBS Broadcasting
Community College-level		
Audio and Video Technicians (n=113)	<ul style="list-style-type: none">YaamavaSwell DJ Productions	
Broadcast Technicians* (n=683)	<ul style="list-style-type: none">Tribune CompanyNexstar Broadcasting GroupGensleriHeartMedia	<ul style="list-style-type: none">Premiere Digital Services, Inc.Charter CommunicationsNBCDisney
Sound Engineering Technicians* (n=576)	<ul style="list-style-type: none">DisneyApple, Inc.Live Nation WorldwideFacebook	<ul style="list-style-type: none">Tribune CompanyAmazonGoogle

Source: Burning Glass – Labor Insights

*California job advertisement information

Exhibit 7 lists a sample of specialized, employability, and software and programming skills employers seek when looking for workers to fill positions in the broadcasting and cinema occupational group. Specialized skills are occupation-specific skills that employers request for industry or job competency. Employability skills are foundational skills that transcend industries and occupations; this category is often referred to as “soft skills.” The skills requested in job ads may be utilized to guide curriculum development.

Exhibit 7: Sample of in-demand skills from employer job ads

Occupation	Specialized skills	Employability skills	Software and Programming Skills
Bachelor's Degree-level			
Producers and Directors* (n=4,156)	<ul style="list-style-type: none"> Budgeting Scheduling Project Management Social Media Broadcast Industry Knowledge 	<ul style="list-style-type: none"> Creativity Communication Skills Teamwork/ Collaboration Editing Organizational Skills 	<ul style="list-style-type: none"> Adobe Creative Suite Microsoft Office Facebook YouTube
Camera Operators, Television, Video, and Film* (n=860)	<ul style="list-style-type: none"> Videography Video Editing Social Media Video Production Photography 	<ul style="list-style-type: none"> Creativity Communication Skills Teamwork/ Collaboration Organizational Skills Detail-Oriented 	<ul style="list-style-type: none"> Adobe Creative Suite YouTube Final Cut Pro Facebook
Film and Video Editors* (n=714)	<ul style="list-style-type: none"> Social Media Music Color Editing Motion Graphics Broadcast Industry Knowledge 	<ul style="list-style-type: none"> Editing Creativity Teamwork/ Collaboration Detail-Oriented Organizational Skills 	<ul style="list-style-type: none"> Adobe Creative Suite Final Cut Pro YouTube Facebook
Broadcast Announcers and Radio Disc Jockeys* (n=153)	<ul style="list-style-type: none"> Broadcast Industry Knowledge Social Media Music Scheduling Journalism 	<ul style="list-style-type: none"> Creativity Communication Skills Writing Meeting Deadlines Teamwork/ Collaboration 	<ul style="list-style-type: none"> Microsoft Office VoxPro Pro Tools
Community College-level			
Audio and Video Technicians (n=105)	<ul style="list-style-type: none"> Repair Customer Services Audio Mixing Audio Engineering Audio Systems 	<ul style="list-style-type: none"> Troubleshooting Communication Skills Self-Starter Detail-Oriented Teamwork/ Collaboration 	<ul style="list-style-type: none"> Microsoft Office Logic Pro
Broadcast Technicians* (n=649)	<ul style="list-style-type: none"> Scheduling Customer Service Music Audio Production Repair 	<ul style="list-style-type: none"> Communication Skills Organizational Skills Detail-Oriented Creativity Multi-Tasking 	<ul style="list-style-type: none"> Microsoft Office Adobe Creative Suite

Occupation	Specialized skills	Employability skills	Software and Programming Skills
Sound Engineering Technicians* (n=534)	<ul style="list-style-type: none"> Broadcast Industry Knowledge Repair Audio Engineering Music Audio Systems 	<ul style="list-style-type: none"> Communication Skills Troubleshooting Teamwork/ Collaboration Creativity Detail-Oriented 	<ul style="list-style-type: none"> Microsoft Office Python Pro Tools

Source: Burning Glass – Labor Insights

*California job advertisement information

Exhibit 8 displays the typical entry-level education, educational attainment, and minimum advertised education requirements for the broadcasting and cinema occupational group. According to the Bureau of Labor Statistics, between 19%-38% of incumbent workers in this field hold a community college-level of educational attainment; "some college, no degree," and an "associate degree."

Exhibit 8: Typical entry-level education, educational attainment, and minimum advertised education requirements

Occupation	Typical Entry-Level Education Requirement	CC-Level Educational Attainment*	Real-Time Minimum Advertised Education Requirement			
			Number of Job Ads	High school or vocational training	Associate degree	Bachelor's degree or higher
Bachelor's Degree-level						
Producers and Directors**	Bachelor's degree	19%	2,409	8%	2%	90%
Camera Operators, Television, Video, and Film**	Bachelor's degree	26%	560	54%	8%	38%
Film and Video Editors**	Bachelor's degree	26%	351	30%	10%	60%
Broadcast Announcers and Radio Disc Jockeys**	Bachelor's degree	32%	92	21%	2%	77%
Community College-level						
Audio and Video Technicians	Postsecondary nondegree award	38%	87	48%	40%	12%
Broadcast Technicians**	Associate degree	38%	349	53%	13%	34%
Sound Engineering Technicians**	Postsecondary nondegree award	38%	304	31%	7%	62%

Source: Emsi 2022.1, Burning Glass – Labor Insights

*Percentage of incumbent workers with a Community College Award or Some Postsecondary Coursework

**California job advertisement information

Exhibit 9 displays the work experience typically required to enter each occupation and the real-time work experience requirements from employer job ads. Between 37% and 62% of employers sought broadcasting and cinema workers with three to five years of previous work experience.

Exhibit 9: Work experience required and real-time work experience requirements

Occupation	Work Experience Typically Required	Real-Time Work Experience			
		Number of job ads	0 – 2 years	3 – 5 years	6+ years
Bachelor's Degree-level					
Producers and Directors*	Less than 5 years	3,219	26%	56%	18%
Camera Operators, Television, Video, and Film*	None	480	58%	37%	5%
Film and Video Editors*	None	430	46%	47%	7%
Broadcast Announcers and Radio Disc Jockeys*	None	108	36%	57%	7%
Community College-level					
Audio and Video Technicians	None	79	32%	58%	10%
Broadcast Technicians*	None	379	59%	39%	2%
Sound Engineering Technicians*	None	371	23%	62%	15%

Source: Emsi 2022.1, Burning Glass – Labor Insights

*California job advertisement information

Student Completions and Programs Outcomes

Broadcasting and cinema workers may receive training from a handful of California Community College programs, including radio and television (TOP 0604.00), radio (0604.10), television (including combined tv/film/video) (0604.20), broadcast journalism (0604.30), and film production (0612.20). Exhibit 10, on the next page, displays the broadcasting and cinema programs offered by regional colleges. Overall, programs related to broadcasting and cinema have issued 156 awards annually over the last three academic years.

California Community College radio and television (0604.00) programs prepare students for employment through the instruction of the history, theories, principles, techniques, functions, technologies, and creative processes of radio and television (including combined television/film/video programs) in reaching mass audiences (Taxonomy of Programs, 2012).

California Community College **radio (0604.10)** programs prepare students for employment through the instruction of the history, theories, principles, techniques, functions, technologies, and creative processes of radio (Taxonomy of Programs, 2012).

California Community College **television (including combined TV/Film/Video (0604.20))** programs prepare students for employment through the instruction of the history, theories, principles, techniques, functions, technologies, and creative processes of television and video. This program code includes programs that combine television with film and/or video (Taxonomy of Programs, 2012).

California Community College **broadcast journalism (0604.30)** programs prepare students for employment through the instruction of the theory and techniques of gathering and reporting news specifically for electronic media such as radio and television (Taxonomy of Programs, 2012).

California Community College **film production (0612.20)** programs prepare students for employment through the instruction of the communication of dramatic information, ideas, moods, and feelings through films and videos. These programs include film technology and equipment, directing, editing, planning, and management of film/video operations (Taxonomy of Programs, 2012).

Exhibit 10: Regional community college program offerings related to broadcasting and cinema

College	Radio and Television (0604.00)	Radio (0604.10)	Television (0604.20)	Broadcast Journalism (0604.30)	Film Production (0612.20)
Barstow					
Chaffey	X	X	X		X
Copper Mountain					
Crafton Hills					
College of the Desert	X		X		X
Moreno Valley					
Mt. San Jacinto			X		
Norco					
Palo Verde					
Riverside			X		
San Bernardino Valley	X	X	X	X*	X
Victor Valley					
Count of Programs	3	2	5	1	3
Average Annual Awards	22	4	93	0	36

Source: COE Program Inventory, COCI

*San Bernardino Valley College approved a broadcast journalism program for development on 3/14/2022

Exhibit 11 displays student completions for radio and television (TOP 0604.00) programs over the last three academic years (2018-21). Over the last three academic years, regional community colleges have issued 22 awards annually in radio and television programs. Program completion and student outcome methodologies are found in the appendix.

Exhibit 11: 2018-21, Annual average community college awards for radio and television programs in the region

TOP 0604.00 – Radio and Television	Academic Year 2018-19	Academic Year 2019-20	Academic Year 2020-21	Total CC Annual Average Awards, Academic Years 2018-21
Chaffey				14
Associate Degree	13	19	10	14
College of the Desert				1
Certificate 16 < 30 semester units	0	0	1	0
Certificate 6 < 18 semester units	0	1	0	0
San Bernardino				8
Associate Degree	2	8	2	4
Certificate 18 < 30 semester units	1	0	0	0
Certificate 16 < 30 semester units	0	1	1	1
Certificate 6 < 18 semester units	0	0	8	3
Total	16	29	22	22

Source: MIS Data Mart

California program outcome data may provide a useful insight into the likelihood of success for the proposed program. Community college student outcome information based on the selected TOP code and region is provided in Exhibit 12.

Exhibit 12: 0604.00 – Radio and television strong workforce program outcomes

Strong Workforce Program Metrics: 0604.00 – Radio and Television Academic Year 2018-19, unless noted otherwise	Inland Empire/Desert Region	California
Unduplicated count of enrolled students (2019-20)	515	8,032
Completed 9+ career education units in one year (2019-20)	37%	28%
Perkins Economically disadvantaged students (2019-20)	88%	74%
Students who attained a noncredit workforce milestone in a year (2019-20)	-	49%
Students who earned a degree, certificate, or attained apprenticeship (2019-20)	25	215

Strong Workforce Program Metrics: 0604.00 – Radio and Television Academic Year 2018-19, unless noted otherwise	Inland Empire/Desert Region	California
Transferred to a four-year institution (transfers)	32	812
Job closely related to the field of study (2017-18)	78%	57%
Median annual earnings (all exiters)	\$24,532	\$23,594
Median change in earnings (all exiters)	36%	38%
Attained a living wage (completers and skills-builders)	43%	27%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Exhibit 13 displays student completions for radio (TOP 0604.10) programs over the last three academic years. Over the last three academic years, one regional community college has issued four awards annually in radio programs.

Exhibit 13: 2018-21, Annual average community college awards for radio programs in the region

TOP 0604.10 - Radio	Academic Year 2018-19	Academic Year 2019-20	Academic Year 2020-21	Total CC Annual Average Awards, Academic Years 2018-21
Chaffey				4
Certificate (12 to < 18 units)	1	0	0	0
Certificate (8 to < 16 units)	0	10	1	4
Total	1	10	1	4

Source: MIS Data Mart

California program outcome data may provide a useful insight into the likelihood of success for the proposed program. Community college student outcome information based on the selected TOP code and region is provided in Exhibit 14.

Exhibit 14: 0604.10 – Radio strong workforce program outcomes

Strong Workforce Program Metrics: 0604.10 – Radio Academic Year 2018-19, unless noted otherwise	Inland Empire/Desert Region	California
Unduplicated count of enrolled students (2019-20)	25	388
Completed 9+ career education units in one year (2019-20)	48%	42%
Perkins Economically disadvantaged students (2019-20)	96%	78%
Students who earned a degree, certificate, or attained apprenticeship (2019-20)	-	28
Transferred to a four-year institution (transfers)	-	41
Job closely related to the field of study (2017-18)	75%	63%

Strong Workforce Program Metrics: 0604.10 – Radio Academic Year 2018-19, unless noted otherwise	Inland Empire/Desert Region	California
Median annual earnings (all exiters)	\$17,300	\$23,376
Median change in earnings (all exiters)	-	31%
Attained a living wage (completers and skills-builders)	-	28%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Exhibit 15 displays student completions for television (including combined tv/film/video) (TOP 0604.20) programs over the last three academic years. Over the last three academic years, regional community colleges have issued 93 awards annually in television (including combined tv/film/video) programs.

Exhibit 15: 2018-21, Annual average community college awards for television (including combined tv/film/video) programs in the region

TOP 0604.20 – Television (including combined TV/Film/Video)	Academic Year 2018-19	Academic Year 2019-20	Academic Year 2020-21	Total CC Annual Average Awards, Academic Years 2018-21
Chaffey				46
Associate for Transfer	12	26	21	20
Certificate (12 to < 18 units)	26	0	0	9
Certificate (8 to < 16 units)	0	40	12	17
Desert				13
Associate for Transfer	8	15	15	13
Mt. San Jacinto				4
Associate for Transfer	2	5	5	4
Riverside				25
Associate Degree	7	9	8	8
Certificate (30 to < 60 units)	0	16	10	9
Certificate (18 to < 30 units)	15	0	0	5
Certificate (6 to < 18 units)	5	3	2	3
San Bernardino				6
Associate Degree	2	0	2	1
Associate for Transfer	0	5	8	4
Total	77	119	83	93

Source: MIS Data Mart

California program outcome data may provide a useful insight into the likelihood of success for the proposed program. Community college student outcome information based on the selected TOP code and region is provided in Exhibit 16.

Exhibit 16: 0604.20 – Television (including combined tv/film/video) strong workforce program outcomes

Strong Workforce Program Metrics: 0604.20 – Television (including combined TV/Film/Video) Academic Year 2018-19, unless noted otherwise	Inland Empire/Desert Region	California
Unduplicated count of enrolled students (2019-20)	1,235	5,986
Completed 9+ career education units in one year (2019-20)	25%	32%
Perkins Economically disadvantaged students (2019-20)	83%	76%
Students who attained a noncredit workforce milestone in a year (2019-20)	-	86%
Students who earned a degree, certificate, or attained apprenticeship (2019-20)	80	688
Transferred to a four-year institution (transfers)	69	432
Job closely related to the field of study (2017-18)	61%	50%
Median annual earnings (all exiters)	\$22,208	\$23,872
Median change in earnings (all exiters)	19%	24%
Attained a living wage (completers and skills-builders)	34%	26%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Regional community colleges do not currently offer a broadcast journalism (TOP 0604.30) program. However, San Bernardino Valley College approved a broadcast journalism program for development on 3/14/2022, indicating that this program may confer awards in the future.

Exhibit 17 displays student completions for film production (TOP 0612.20) programs over the last three academic years. Over the last three academic years, regional community colleges have issued 36 awards annually in film production programs.

Exhibit 17: 2018-21, Annual average community college awards for film production programs in the region

TOP 0612.20 – Film Production	Academic Year 2018-19	Academic Year 2019-20	Academic Year 2020-21	Total CC Annual Average Awards, Academic Years 2018-21
Chaffey				30
Certificate (12 to < 18 units)	31	0	0	10
Certificate (8 to < 16 units)	0	46	13	20
Desert				1
Certificate (18 to < 30 units)	1	0	0	0
Certificate (16 to < 30 units)	0	0	3	1
San Bernardino				5

TOP 0612.20 – Film Production	Academic Year 2018-19	Academic Year 2019-20	Academic Year 2020-21	Total CC Annual Average Awards, Academic Years 2018-21
Associate Degree	4	4	5	4
Certificate (18 to < 30 units)	1	0	0	0
Certificate (16 to < 30 units)	0	0	1	0
Total	37	50	22	36

Source: MIS Data Mart

California program outcome data may provide a useful insight into the likelihood of success for the proposed program. Community college student outcome information based on the selected TOP code and region is provided in Exhibit 18.

Exhibit 18: 0612.20 – Film production strong workforce program outcomes

Strong Workforce Program Metrics: 0612.20 – Film Production Academic Year 2018-19, unless noted otherwise	Inland Empire/Desert Region	California
Unduplicated count of enrolled students (2019-20)	151	9,824
Completed 9+ career education units in one year (2019-20)	50%	26%
Perkins Economically disadvantaged students (2019-20)	90%	72%
Students who attained a noncredit workforce milestone in a year (2019-20)	-	69%
Students who earned a degree, certificate, or attained apprenticeship (2019-20)	29	264
Transferred to a four-year institution (transfers)	-	699
Job closely related to the field of study (2017-18)	-	53%
Median annual earnings (all exiters)	\$20,918	\$25,244
Median change in earnings (all exiters)	-	33%
Attained a living wage (completers and skills-builders)	-	27%

Sources: LaunchBoard Community College Pipeline and Strong Workforce Program Metrics

Exhibit 19 displays awards that other postsecondary education providers reported in radio and television (CIP 09.0701) programs. Completion data is compiled from the Integrated Postsecondary Education Data System (IPEDS) for the most recent three years available. La Sierra University issued two bachelor's degrees annually over the last three academic years in radio and television programs.

Exhibit 19: Non-community college educational provider radio and television programs, three-year annual average credentials in the region

09.0701 – Radio and Television	Academic Year 2016-17	Academic Year 2017-18	Academic Year 2018-19	Other Educational Providers Annual Average Credentials, Academic Years 2016-19
La Sierra University				2
Bachelor's Degree	0	3	2	2
Total	0	3	2	2

Source: IPEDS

Exhibit 20 displays awards that other postsecondary education providers reported in cinematography and film/video production (CIP 50.0602) programs. Two non-community college postsecondary education providers issued an average of 39 awards annually over the last three academic years in cinematography and film/video production programs.

Exhibit 20: Non-community college educational provider cinematography and film/video production, three-year annual average credentials in the region

50.0602 – Cinematography and Film/Video Production	Academic Year 2016-17	Academic Year 2017-18	Academic Year 2018-19	Other Educational Providers Annual Average Credentials, Academic Years 2016-19
La Sierra University				1
Bachelor's Degree	0	1	3	1
University of California-Riverside				38
Bachelor's Degree	21	45	47	38
Total	21	46	50	39

Source: IPEDS

Recommendation

The five community college programs that may prepare students for broadcasting and cinema employment are radio and television (TOP 0604.00), radio (0604.10), television (including combined tv/film/video) (0604.20), broadcast journalism (0604.30), and film production (0612.20). These programs provide the knowledge, skills, and abilities that prepare students for employment in three community college-level occupations and four bachelor's degree-level occupations. This report's educational supply and employment demand portions focus solely on the community college-level jobs students will likely obtain after completing a community college broadcasting and cinema program in the Inland Empire/Desert Region.

The community college-level broadcasting and cinema occupations are expected to have 88 annual job openings and increase employment by 8% over the next five years. The median hourly earnings for the community college-level broadcasting and cinema occupations are above the regional self-sufficiency

standard (\$24.36 per hour), indicating that at least 50% of workers in this occupational group earn a self-sustainable wage. Job advertisements indicate that regional broadcasting and cinema workers willing to commute out of the local region may find greater employment opportunities.

Combined, programs that prepare students for employment as broadcasting and cinema workers have issued 156 awards annually over the last three academic years. Non-community college postsecondary education providers in the region have issued 41 awards in programs related to broadcasting and cinema over the previous three academic years.

While community college-level broadcasting and cinema jobs offer self-sustainable earnings, the Centers of Excellence cautiously recommends expanding programs related to broadcasting and cinema due to the limited number of annual job openings for these workers in the region. Well qualified students may face strong competition from intraregional and commuting incumbent workers for relatively limited job opportunities. Colleges considering this program should have a strong partnership with local broadcasting and film employers and document their demand for workers and the skills needed for students to work in this field shortly after exiting the program.

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April 2022

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Appendix: Occupation definitions, sample job titles, five-year projections, and earnings for broadcasting and cinema occupations

Occupation Definitions (SOC code), Education and Training Requirement, Community College Education Attainment

Bachelor's Degree-level

Producers and Directors (27-2012)

Produce or direct stage, television, radio, video, or film productions for entertainment, information, or instruction. Responsible for creative decisions, such as interpretation of script, choice of actors or guests, set design, sound, special effects, and choreography.

Sample job titles: Artistic Director, Director, Executive Producer, News Producer, Newscast Producer, Producer, Radio Producer, Technical Director, Television News Producer, Television Producer (TV Producer)

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Work Experience: Less than five years

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 19%

Broadcast Announcers and Radio Disc Jockeys (27-3011)

Speak or read from scripted materials, such as news reports or commercial messages, on radio, television, or other communications media. May play and queue music, announce artist or title of performance, identify station, or interview guests.

Sample job titles: Anchor, Announcer, DJ (Disc Jockey), Host, Morning Show Host, News Anchor, Radio Announcer, Television News Anchor (TV News Anchor)

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Work Experience: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 32%

Camera Operators, Television, Video, and Film (27-4031)

Operate television, video, or film camera to record images or scenes for television, video, or film productions.

Sample job titles: Camera Operator, Cameraman, Master Control Operator (MCO), News Videographer, Production Technician, Studio Camera Operator, Television News Photographer, Videographer

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Work Experience: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 26%

Film and Video Editors (27-4032)

Edit moving images on film, video, or other media. May work with a producer or director to organize images for final production. May edit or synchronize soundtracks with images.

Sample job titles: Editor, Film Editor, News Editor, News Video Editor, News Videotape Editor, Non-Linear Editor, Online Editor, Tape Editor, Television News Video Editor, Video Editor

Entry-Level Educational Requirement: Bachelor's degree

Training Requirement: None

Work Experience: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 26%

Community College-level**Audio and Video Technicians (27-4011)**

Set up, maintain, and dismantle audio and video equipment, such as microphones, sound speakers, connecting wires and cables, sound and mixing boards, video cameras, video monitors and servers, and related electronic equipment for live or recorded events, such as concerts, meetings, conventions, presentations, podcasts, news conferences, and sporting events.

Sample job titles: Audio Technician, Audio Visual Specialist (AV Specialist), Audio Visual Technician (AV Technician), Media Technician, Operations Technician, Stagehand, Video Technician

Entry-Level Educational Requirement: Postsecondary nondegree award

Training Requirement: Less than one month on-the-job training

Work Experience: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 38%

Broadcast Technicians (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 job titles: Audio Engineer, Board Operator, Broadcast Engineer, Broadcast Maintenance Engineer, Broadcast Operations Engineer, Broadcast Technician, Control Operator, Production Engineer

Entry-Level Educational Requirement: Associate degree

Training Requirement: Less than one month on-the-job training

Work Experience: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 38%

Sound Engineering Technicians (27-4014)

Assemble and operate equipment to record, synchronize, mix, edit, or reproduce sound, including music, voices, or sound effects, for theater, video, film, television, podcasts, sporting events, and other productions.

Sample job titles: Audio Engineer, Audio Operator, Mastering Engineer, Mixer, Mixing Engineer, Recording Engineer, Sound Editor, Sound Engineer, Sound Technician, Studio Engineer

Entry-Level Educational Requirement: Postsecondary nondegree award

Training Requirement: Less than one month on-the-job training

Work Experience: None

Incumbent workers with a Community College Award or Some Postsecondary Coursework: 38%

Appendix: Methodology

Exhibits 11, 13, 15, and 17 display the average annual California Community College (CCC) awards conferred during the three academic years between 2018 and 2021 from the California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart. Awards are the combined total of associate degrees and certificates issued during the timeframe, divided by three in this case to calculate an annual average. This is done to minimize the effect of atypical variations that might be present in a single year.

Community college student outcome information is from LaunchBoard and based on the selected TOP code and region. These metrics are based on records submitted to the California Community Colleges Chancellor's Office Management Information Systems (MIS) by community colleges, which come from self-reported student information from CCC Apply and the National Student Clearinghouse. Employment and earnings metrics are sourced from California's Employment Development Department's Unemployment Insurance database records. When available, outcomes for completers are reported to demonstrate the impact that earning a degree or certificate can have on employment and earnings. For more information on the types of students included for each metric, please see the web link for LaunchBoard's Strong Workforce Program Metrics Data Element Dictionary in the References section (LaunchBoard, 2021 a). Finally, employment in a job closely related to the field of study comes from self-reported student responses on the CTE Employment Outcomes Survey (CTEOS), administered by Santa Rosa Junior College (LaunchBoard, 2021 a).

Job postings data is limited to the information provided by employers and the ability of artificial intelligence search engines to identify this information. Additionally, preliminary calculations by Georgetown Center on Education and the Workforce found that "just 30 to 40 percent of openings for candidates with some college or an associate degree, and only 40 to 60 percent of openings for high school diploma holders appear online" (Carnevale et al., 2014). Online job postings often do not reveal employers' hiring intentions; it is unknown if employers plan to hire one or multiple workers from a single online job posting or collecting resumes for future hiring needs. A closed job posting may not be the result of a hired worker.

Table 1. 2020 to 2025 job growth, wages, entry-level education, training, and work experience required for the broadcasting and cinema occupational group in the Inland Empire/Desert Region (Riverside and San Bernardino Counties combined)

Occupation (SOC)	2020 Jobs	5-Year Change (New Jobs)	5-Year % Change (New Jobs)	Annual Openings (New + Replacement Jobs)	Entry-Experienced Hourly Wage (10 th to 90 th percentile)	Median Hourly Wage (50 th percentile)	Average Annual Earnings	Entry-Level Education & On-The-Job-Training	Work Experience Required
Producers and Directors (27-2012)	548	62	11%	61	\$9.22 to \$64.20	\$33.82	\$87,500	Bachelor's degree & None	Less than five years
Broadcast Announcers and Radio Disc Jockeys (27-3011)	205	(53)	(26%)	17	\$13.07 to \$60.44	\$17.98	\$63,900	Bachelor's degree & None	None
Camera Operators, Television, Video, and Film (27-4031)	204	31	15%	27	\$8.10 to \$59.74	\$25.85	\$71,400	Bachelor's degree & None	None
Film and Video Editors (27-4032)	191	41	22%	28	\$7.36 to \$93.04	\$30.05	\$94,600	Bachelor's degree & None	None
Bachelor's Degree-level Total	1,148	81	7%	133	-	-	-	-	-
Audio and Video Technicians (27-4011)	516	35	7%	59	\$13.57 to \$44.26	\$27.99	\$60,000	Postsecondary nondegree award & One month	None
Sound Engineering Technicians (27-4014)	115	29	25%	19	\$8.89 to \$96.76	\$28.73	\$93,300	Postsecondary nondegree award & One month	None
Broadcast Technicians (27-4012)	107	(6)	(6%)	10	\$14.99 to \$41.49	\$28.72	\$60,700	Associate's degree & One month	None
Community College-level Total	738	58	8%	88	-	-	-	-	-
Total	1,887	138	7%	222	-	-	-	-	-

Source: Emsi 2022.1