



HAWAI'I CREATIVE INDUSTRIES WORKFORCE ANALYSIS



NOVEMBER 2023



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EXECUTIVE SUMMARY

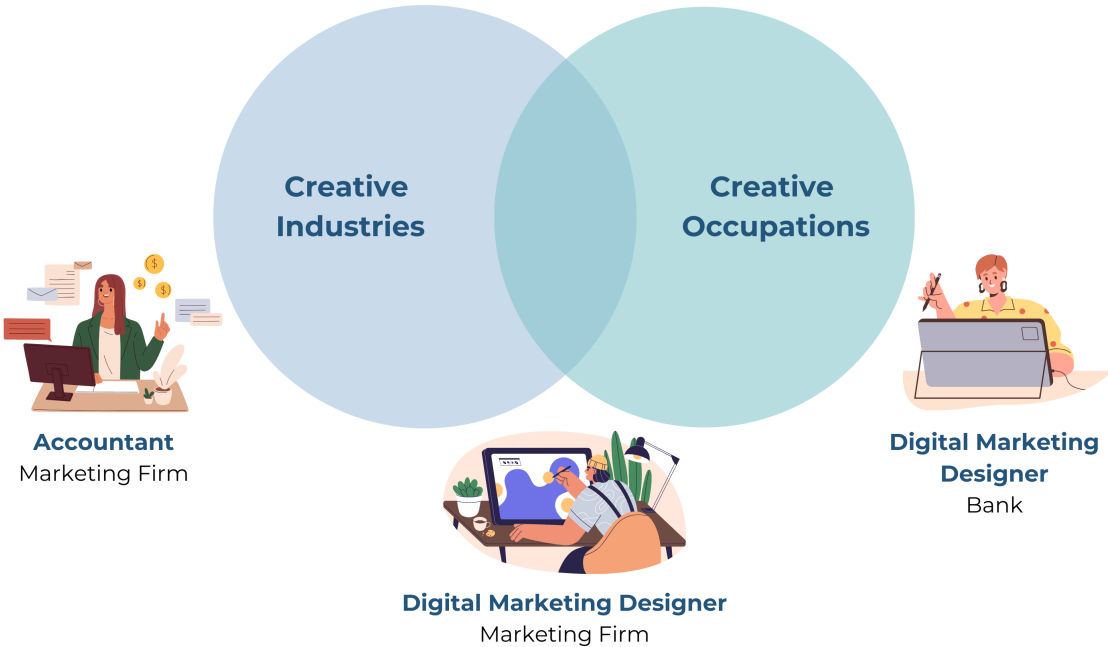
The creative industries in Hawai'i are poised as a dynamic platform for career diversity and growth in the state. With a significant 4,747 businesses in the sector, these industries play a pivotal role in shaping Hawai'i's economic landscape.¹

Within the state's creative industries, there is an incredible variety of occupations across a breadth of subsectors. Subsectors in creative industries include Film, Television, News & Live Events; Marketing, Communications & Sales; Technology & Digital Media; Visual Arts & Fashion; Architecture & Trades; Music & Performing Arts; Education & Library, as well as emerging industries like Esports.

Hawai'i's creative workforce also takes center stage in many other sectors within the state, including technology and knowledge-based industries, which are increasingly gaining prominence in the state's economic landscape.

As shown below, creative industries are supported by workers in all types of occupations, including roles like accountants, human resources professionals, and food service workers. While these occupations are essential to supporting creative industries, their training and skillsets can be broadly applicable across various industry sectors (left). Conversely, there are many creative occupations that lie outside of the creative industries, such as a creative role designing marketing materials for a bank (right). This report focuses on creative occupations or "jobs that use creative skills and produce creative results," within and outside of the creative industries.

Figure 1: Creative Industries and Creative Occupations



¹ Hawai'i's Creative Industries – Update Report 2023, Department of Business, Economic Development and Tourism. May 2023. https://files.hawaii.gov/dbedt/economic/data_reports/hawaii-creative-report/HI_Creative_Ind_2022.pdf

These creative occupations, within and outside of creative industries, encompass at least 17,440 wage and salary jobs throughout the state, with 2,070 annual openings and a median salary of \$63,186. The majority (89%) of these creative occupations are projected to experience job growth between 2020 and 2030.

CREATIVE OCCUPATIONS IN HAWAI'I

47
CREATIVE
OCCUPATIONS

17,440 WAGE & SALARY JOBS
STATEWIDE 2022



89%
OF CREATIVE
OCCUPATIONS
ARE GROWING
STATEWIDE 2020-30

\$63,186 AVERAGE ANNUAL WAGE
COMPARED TO 2023 ALICE AVERAGE INDIVIDUAL
SURVIVAL BUDGET: \$36,912



The creative occupations representing the greatest number of wage and salary jobs in Hawai'i include Software Developers, Quality Assurance Analysts & Testers; Market Research Analysts and Marketing Specialists; Actors; Public Relations Specialists; and Audio & Video Equipment Technicians. These opportunities lead the way in terms of significant statewide employment, providing numerous well-paying career opportunities within many of the creative subsectors and beyond.

To cultivate Hawai'i's creative workforce, key areas of opportunity include **building awareness** of creative careers, investing in **local training programs**, and strengthening **alignment and collaboration** between education, industry professionals, and government entities. These themes underscore the significant opportunity to harness the potential of Hawai'i's creative industries, which offer both diverse career prospects and robust job growth in the state. Implementing the recommendations outlined in this report can further enhance the state's creative industry landscape and cultivate a vibrant and resilient creative workforce.

INTRODUCTION

Hawai'i's creative industries, much like other sectors in the state, have recognized the importance of cultivating a skilled and dynamic workforce. The state remains steadfast in its commitment to prioritizing the growth and sustainability of the creative sector, which relies on access to a workforce with a diverse range of talents, including artists, designers, performers, professionals, and trades support. The creative industries were also identified as a priority sector for the state's Good Jobs Hawai'i grant initiative and this funding is currently supporting short-term training opportunities in the sector. To further this objective, it is essential to conduct a comprehensive assessment of the current state of the creative industries workforce demand in Hawai'i.

As Hawai'i seeks to set itself apart in an increasingly competitive global economy, the local creative workforce assumes a pivotal role in upholding a vibrant and resilient creative economy. Hawai'i's rich cultural diversity and uniqueness serve as distinct brand differentiators, drawing millions of visitors to the islands and nurturing a thriving creative community. Hawai'i's beautiful natural environment and its people not only grant a competitive advantage to its creative products in global markets but also bolster visitor interest and external investments. Hawai'i has the opportunity to leverage these unique advantages.

The creative workforce also supplies the creative talent that supports the success and growth of other sectors, and this convergence of creativity, technology, and cultural heritage underscores the profound impact of Hawai'i's creative workforce, reaffirming its pivotal role in driving prosperity and sustainable growth for our communities.

In support of the Creative Industries Sector Partnership, convened by the Creative Industries Division of the Hawai'i Department of Business, Economic Development and Tourism, and the Good Jobs Hawai'i grant initiative, this report is designed to clarify workforce demand for creative occupations within and outside of creative industries, review employment qualifications, inventory training opportunities, and summarize challenges within Hawai'i's creative sector. It has engaged stakeholders from various subsectors across the creative industries to collect invaluable insights while analyzing publicly available labor market data on industry trends, workforce demand, and educational landscapes. By presenting a comprehensive overview of the creative workforce in Hawai'i, this report aims to provide actionable recommendations to support and foster its continuous growth.



PROJECT TEAM

The project team for the Hawai'i Creative Industries Workforce Analysis included strategic leadership and financial backing from the Chamber of Commerce Hawaii, with support and guidance from the Creative Industries Division of the Hawai'i Department of Business, Economic Development and Tourism. The data collection and reporting were managed and executed by Hawai'i-based SMS Research as consulting partners.



CREATIVE INDUSTRIES IN HAWAII

Creative industries are essential to Hawaii's economy and workforce. An analysis by the Hawaii Department of Business, Economic Development and Tourism, Research & Economic Analysis Division (DBEDT READ) found that creative industries, comprising 13 sub-sector groups defined using the North American Industrial Classification System (NAICS), accounted for 5.3% of the State of Hawaii GDP in 2021, valued at \$4.5 billion.² In 2022, creative industries represented 4,747 business and 51,231 jobs in Hawaii, or 6.2% of the state's total civilian jobs.

Table 1: Creative Industry Production Groups

Industry Group	2022 Jobs
Marketing, Photography & Related	11,186
Performing and Creative Arts	9,284
Business Consulting	6,095
Engineering and Research & Development	5,999
Computer and Digital Media Products	5,570
Cultural Activities	2,684
Film, TV, Video Production/Distrib	2,095
Design Services	1,958
Architecture	1,868
Publishing & Information	1,568
Music	1,229
Radio and TV Broadcasting	972
Art Education	722
Total Creative Industry	51,231

Source: Hawaii's Creative Industries Report, DBEDT READ (2023)

The DBEDT READ analysis highlighted job growth for all employment opportunities in creative industries. Overall, creative industry jobs increased by 7.1% from 2012-2022, contributing an additional 3,403 jobs to the state. The highest-performing industry group was Film, TV, and Video Production/Distribution, which saw 37.3% job growth in the last decade. The declining industry groups, in which jobs decreased from 2012-2022, were Architecture, Cultural Activities, Radio and TV Broadcasting, and Publishing & Information. The other 8 creative industry groups have remained constant or increased steadily in job count.

These creative industry job counts, however, represent diverse opportunities for employment in the creative industries, not only roles requiring a creative skillset.

² Hawaii's Creative Industries – Update Report 2023, Department of Business, Economic Development and Tourism. May 2023. https://files.hawaii.gov/dbedt/economic/data_reports/hawaii-creative-report/HI_Creative_Ind_2022.pdf

CREATIVE OCCUPATIONS IN HAWAI‘I

This report builds upon the 2023 Hawaii’s Creative Industries report by examining *creative occupations* in Hawaii‘i and their associated education, training, and skillsets. Creative occupations are “jobs that use creative skills and produce creative results across all industries.”³ A set of 80 Standard Occupational Classifications (SOC) codes identified in similar creative occupation analyses were utilized to gather baseline employment data on creative occupations in Hawaii‘i.⁴ State employment data was available for 47 of those 80 SOC codes.⁵

In total, the 47 creative occupations in Hawaii‘i represented at least 17,440 wage and salary jobs statewide in 2022, with 2,070 annual openings and a median salary of \$63,186. The majority (89%) of these creative occupations are projected to grow between 2020 and 2030. Only 3 of the occupations had a median salary below the ALICE annual household survival budget for a single adult in Hawaii‘i (\$36,912).⁶

Table 2 lists the 36 creative occupations in Hawaii‘i that ranked in the top 20 creative occupations according to at least one of the following criteria:

- Statewide Employment (2022)
- Median Salary (2022)
- Projected Job Growth (2020-2030)
- Annual Openings

Table 2: Top Creative Occupations in Hawaii‘i

Occupation	Employment Statewide (2022)	Median Salary (2022)	Percent Growth (2020-30)	Annual Openings
Software Developers, Quality Assurance Analysts & Testers	2,380	\$103,210	25.50%	220
Market Research Analysts and Marketing Specialists	1,940	\$55,090	36.60%	250
Actors	1,400 ⁷	\$35,880 ⁸	*	*
Public Relations Specialists	1,290	\$61,190	14.50%	110
Audio and Video Equipment Technicians	600 ⁹	\$62,080	29.50%	40
Architects, Except Landscape and Naval	560	\$84,150	1.40%	50
Producers and Directors	550	\$60,900	42.50%	50
Graphic Designers	510	\$53,700	7.70%	70
Tile and Marble Setters	500	\$79,930	10.4%	50

³ Creative Economy Report, City of Seattle. 2019.

<https://www.seattle.gov/documents/Departments/FilmAndMusic/Creative%20Economy%20Report%20Final.pdf>

⁴ See Appendix B: Methodology

⁵ Labor market data for all creative occupations can be found in Appendix A, Table 23.

⁶ ALICE in the Crosscurrents 2023 Report, Aloha United Way.

https://www.auw.org/sites/default/files/pictures/23UFA_Report_Hawaii_5.18.23_FINAL.pdf.

See Appendix A, Table 28 for creative occupations in Hawaii‘i with median salaries lower than the ALICE individual survival budget.

⁷ Membership estimate from SAG-AFTRA Hawaii‘i.

⁸ National median salary estimate from O*NET OnLine.

⁹ Employment estimate from IATSE Local 665.

Musicians and Singers	490	*	25.90%	140
Public Relations and Fundraising Managers	390	\$105,980	19.20%	40
Architectural and Civil Drafters	380	\$61,110	-1.5%	40
Advertising Sales Agents	360	\$56,340	5.5%	40
Photographers	340	\$41,840	18.20%	120
Art, Drama, and Music Teachers, Postsecondary	340	\$63,510	11.60%	30
Marketing Managers	330	\$109,260	19.90%	70
Lighting Technicians & Media & Comm Equip Workers, All Other	320	\$88,280	5.00%	40
Dancers	290	*	37.30%	60
Librarians and Media Collections Specialists	280	\$58,910	7.30%	50
Web Developers and Digital Interface Designers	270	\$75,650	15.90%	30
Music Directors and Composers	260	\$49,340	30.80%	10
News Analysts, Reporters, and Journalists	220	\$71,940	11.80%	30
Interior Designers	200	\$61,780	0.00%	30
Editors	180	\$55,010	21.00%	40
Misc. Entertainers, Performers, Sports & Related Workers	170	*	43.20%	20
Camera Operators, Television, Video, and Motion Picture	130	*	24.40%	20
Computer Programmers	130	\$98,650	-8.50%	30
Plasterers and Stucco Masons	80	\$91,090	5.9%	10
Film and Video Editors	50	\$39,230	48.70%	20
Museum Technicians and Conservators	50	\$44,740	32.10%	10
Advertising and Promotions Managers	50	\$107,190	23.30%	10
Writers and Authors	40	\$61,860	20.10%	20
Multimedia Artists and Animators	*	\$62,080	26.80%	10
Art Directors	*	\$80,830	21.50%	30
Curators	*	\$63,520	18.20%	10

Sources: 2022 Occupational Employment & Wage Statistics, DBEDT READ
 Long-term Occupational Employment Projections to 2030, HireNet Hawai'i
 *State data unavailable.

CREATIVE OCCUPATIONS BY SUBSECTOR

Creative occupations in Hawai'i are incredibly diverse, and can be categorized according to the following subsectors:

- Film, Television, News & Live Events
- Marketing, Communications & Sales
- Technology & Digital Media
- Visual Arts & Fashion
- Architecture & Trades
- Music & Performing Arts
- Education & Library
- Esports & Game Development

SMS conducted one-on-one interviews with 12 creative industry stakeholders in Hawai'i to identify the in-demand, entry-level roles in their respective subsectors, as well as the associated education, training and certifications, and skillsets.

Throughout the stakeholder feedback process, four categories of creative occupations emerged based on their primary job function:

- Artistic & Craft
- Trade
- Technical
- Professional

Artistic and craft occupations are those that directly produce creative products, whether they be visual, written, or performances. Technical and trade occupations either produce creative products or support their production. *Technical occupations* rely primarily on specialized technological skillsets, while *trade occupations* are manual labor-intensive and often associated with apprenticeships or on-the-job training. *Professional occupations* provide essential business or administrative support to the creative production process.

State employment data for occupations in each of the creative subsectors are reported below, along with relevant in-demand, entry-level employment opportunities identified by industry stakeholders. These entry-level employment opportunities are further categorized according to their occupation type: Artistic and Craft, Trade, Technical, or Professional.

FILM, TELEVISION, NEWS & LIVE EVENTS

Hawai'i's film, television, news, and live events subsector includes a diverse workforce of performers, producers, managers, and general crew. It should be noted that state employment estimates for several occupations in film and television production are unavailable, given that many are based on contract employment.

Table 3: Film, Television, News & Live Events Occupations and Employment

Occupation	State Employment
Actors	1,400 SAG-AFTRA Hawai'i Members ¹⁰

¹⁰ Membership estimate from SAG-AFTRA Hawai'i.

Audio and Video Equipment Technicians	600 ¹¹
Producers and Directors	550
Lighting Technicians & Media & Comm Equip Workers, All Other	320
News Analysts, Reporters, and Journalists	220
Camera Operators, Television, Video, and Motion Picture	130
Radio and Television Announcers	110
Film and Video Editors	50
Talent Directors	*
Agents and Business Managers of Artists, Performers, and Athletes	*
Media Programming Directors	*
Media Technical Directors/Managers	*
Costume Attendants	*
Broadcast Technicians	*
Set and Exhibit Designers	*
Makeup Artists, Theatrical and Performance	*

Source: 2022 Occupational Employment & Wage Statistics, DBEDT READ

*State employment estimates unavailable.

Table 4 lists the in-demand, entry-level creative employment opportunities in Hawai'i identified by industry stakeholders in the film, television, news & live events subsector.

Table 4: Film, Television, News & Live Events Entry-Level Employment Opportunities

Occupation Type	Entry-Level Employment Opportunities
Artistic and Craft	<ul style="list-style-type: none"> - Associate News Producers - Background Actors - Radio DJs - Voice Actors
Professional	<ul style="list-style-type: none"> - Production Assistants - Location Assistants - Casting Associates - Set Coordinators
Trade	<p><u>General Crew:</u></p> <ul style="list-style-type: none"> - Grips - Electrics - Rigging - A/V Technicians - Cameras - Hair and Makeup - Wardrobe - Props

¹¹ Employment estimate from IATSE Local 665.

MARKETING, COMMUNICATIONS & SALES

Occupations in the marketing, communications, and sales subsector range from writers and editors to specialists, salespersons, and managers.

Table 5: Marketing, Communications & Sales Occupations and Employment

Occupation	State Employment
Market Research Analysts and Marketing Specialists	1,940
Public Relations Specialists	1,290
Public Relations and Fundraising Managers	390
Advertising Sales Agents	360
Marketing Managers	330
Editors	180
Advertising and Promotions Managers	50
Writers and Authors	40
Search Marketing Strategists	*
Poets, Lyricists and Creative Writers	*

Source: 2022 Occupational Employment & Wage Statistics, DBEDT READ

*State employment estimates unavailable.

Table 6 lists the in-demand, entry-level employment opportunities identified by industry stakeholders in the marketing, communications, and sales subsector.

Table 6: Marketing, Communications & Sales Entry-Level Employment Opportunities

Occupation Type	Entry-Level Employment Opportunities
Artistic and Craft	<ul style="list-style-type: none"> - Marketing Strategists - Digital Marketing Designers - Web Copywriters - Search Engine Optimization (SEO) Copywriters
Professional	<ul style="list-style-type: none"> - Account Executives - Account Coordinators - Sales Assistants - Project Managers

TECHNOLOGY & DIGITAL MEDIA

Occupations in the technology and digital media subsector rely primarily on technological skillsets, but are fundamental to all creative subsectors.

Table 7: Technology & Digital Media Occupations and Employment

Occupation	State Employment
Software Developers, Quality Assurance Analysts & Testers	2,380
Web Developers and Digital Interface Designers	270
Computer Programmers	130
Multimedia Artists and Animators	*

Video Game Designers	*
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Source: 2022 Occupational Employment & Wage Statistics, DBEDT READ

*State employment estimates unavailable.

Table 8 lists the in-demand, entry-level creative employment opportunities identified by industry stakeholders in the technology and digital media subsector. Stakeholders noted that the emergence of new technologies, such as artificial intelligence and augmented/virtual reality, are expected to bolster continued job growth in this sub-sector.

Table 8: Technology & Digital Media Entry-Level Employment Opportunities

Occupation Type	Entry-Level Employment Opportunities
Technical	<ul style="list-style-type: none"> - User Experience (UX) Designers - User Interface (UI) Designers - Junior Game Designers - Tech Media Producers - Stack Developers - C++ Developers

VISUAL ARTS & FASHION

Occupations in visual arts and fashion include fine artists, designers, photographers, and apparel production workers.

Table 9: Visual Arts & Fashion Occupations and Employment

Occupation	State Employment
Graphic Designers	510
Photographers	340
Art Directors	*
Fine Artists, Including Painters, Sculptors, and Illustrators	*
Fashion Designers	*
Fabric and Apparel Patternmakers	*
Sewers, Hand	*

Source: 2022 Occupational Employment & Wage Statistics, DBEDT READ

*State employment estimates unavailable.

Table 10 lists the in-demand, entry-level creative job opportunities identified by industry stakeholders in the visual arts and fashion subsector.

Table 10: Visual Arts & Fashion Entry-Level Job Opportunities

Occupation Type	Entry-Level Employment Opportunities
Artistic and Craft	<ul style="list-style-type: none"> - Graphic Designers - Assistant Technical Designers
Trade	<ul style="list-style-type: none"> - Seamstresses - Patternmakers - Fabric Cutters

ARCHITECTURE & TRADES

In addition to architecture and interior design, this subsector includes several occupations that are considered both creative and “skilled trades” occupations, such as tile and marble setters.¹²

Table 11: Architecture & Trades Occupations and Employment

Occupation	State Employment
Architects, Except Landscape and Naval	560
Tile and Marble Setters	500
Architectural and Civil Drafters	380
Interior Designers	200
Cabinetmakers and Bench Carpenters	160
Plasterers and Stucco Masons	80
Commercial and Industrial Designers	*

Source: 2022 Occupational Employment & Wage Statistics, DBEDT READ

*State employment estimates unavailable.

Table 12 lists the in-demand, entry-level employment opportunities identified by industry stakeholders in the architecture and trades subsector.

Table 12: Architecture & Trades Entry-Level Job Opportunities

Occupation Type	Entry-Level Employment Opportunities
Artistic and Craft	<ul style="list-style-type: none"> - Architects - Drafters
Trade	<p>Apprentices:</p> <ul style="list-style-type: none"> - Tile Setter Apprentice - Plasterer Apprentice - Woodworking Apprentice

MUSIC & PERFORMING ARTS

This subsector comprises musicians and dancers, as well as music directors and choreographers. Industry stakeholders noted that many local job opportunities in the performing arts are primarily part-time roles in community theaters. However, there are many general crew job opportunities for live events, including musical and theatrical performances (see Table 4).

Table 13: Music & Performing Arts Occupations and Employment

Occupation	State Employment
Musicians and Singers	490
Music Directors and Composers	260
Dancers	*
Choreographers	*

Source: 2022 Occupational Employment & Wage Statistics, DBEDT READ

*State employment estimates unavailable.

¹² Hawaii Skilled Trades Analysis, SMS Research (2023).

<https://www.smshawaii.com/posts/2023/10/17/hawaii-skilled-trades-workforce-analysis>

EDUCATION & LIBRARY

This subsector highlights occupations that are critical to teaching creative subjects and preserving creative works.

Table 14: Education & Library Occupations and Employment

Occupations	State Employment
Art, Drama, and Music Teachers, Postsecondary	340
Librarians and Media Collections Specialists	280
Library Technicians	110
Museum Technicians and Conservators	50
Curators	*
Archivists	*

Source: 2022 Occupational Employment & Wage Statistics, DBEDT READ

*State employment estimates unavailable.

Art teachers and archivists were identified as the primary in-demand, entry-level employment opportunities in the education and library subsector.

Table 15: Education & Library Entry-Level Employment Opportunities

Occupation Type	Entry-Level Employment Opportunities
Professional	<ul style="list-style-type: none"> - Art Teachers - Art Archivists

EMERGING SUB-SECTOR: ESPORTS & GAME DEVELOPMENT

Stakeholders in Hawai'i's game industry shared that there is significant potential for job growth in the rapidly evolving fields of Esports and game development in Hawai'i. Many jobs in these industries can be remote, presenting a unique opportunity for Hawai'i residents to work for companies based anywhere in the world.

Esports is a unique and fast-growing segment of the game industry that merges gaming with live events. With Hawai'i's strategic advantage as a bridge between Asia and the continental U.S., Hawai'i has significant growth potential for Esports competitions and events.

Table 16 lists the in-demand, entry-level employment opportunities identified by industry stakeholders in Esports. These opportunities include technical and professional roles, requiring specialized skillsets that are highly transferrable to other career fields in creative industries.

Table 16: Esports Entry-Level Employment Opportunities

Occupation Type	Entry-Level Employment Opportunities
Technical	<ul style="list-style-type: none"> - Software Engineer/Programmer - Data Engineer - UX Designer - System Administrator - Technical Support
Professional	<ul style="list-style-type: none"> - Team Manager - Production Assistant - Marketing Associate

	<ul style="list-style-type: none"> - ShoutCasting (Broadcasting) - Analyst - Moderator - Customer Support - Inside/Outside Sales - Business Development
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The top entry-level employment opportunities in the game industry are shown in Table 17 below. Stakeholders emphasized that game design requires a mix of artistic skills, such as map and level design, as well as technical development skills, like scripting, network engineering, and software development. These artistic and technical skills can be specific to the game industry, but are also highly transferrable to various in-demand jobs in fields such as marketing and IT.

The game industry also includes business professional roles, such as community managers, game production managers, and game economists. These professionals require a background in game development to understand the workings of this unique and dynamic industry.

Table 17: Game Development Entry-Level Employment Opportunities

Occupation Type	Entry-Level Employment Opportunities
Artistic & Craft, Technical	<ul style="list-style-type: none"> - Junior Game Designers - Junior Game Artists - Quality Assurance Testers
Professional	<ul style="list-style-type: none"> - Community Managers - Game Production Managers - Game Economists

EDUCATION & TRAINING

Creative industry stakeholders were asked to identify the education, training, and skillsets associated with the in-demand, entry-level employment opportunities in their respective subsectors. Table 18 lists all of the postsecondary training needs identified by stakeholders, excluding 4-year college degree programs.

Table 18: Postsecondary Training for Creative Occupations

Training or Certification	Local Training Availability
*Acting	SAG-AFTRA workshops
Adobe Software	- Kapi‘olani CC New Media Arts - Adobe online courses
Aerial Lifts/Mobile Elevated Work Platforms	3 rd party training
Animation	- Kapi‘olani CC New Media Arts - Leeward CC Digital Media - Kaua‘i CC Creative Media
*Apparel Manufacturing	Honolulu CC Fashion Technology
Architectural Drawing	- Honolulu CC Architecture, Engineering & Construction Technologies
A/V Readiness	IATSE
AWS Certified Developer Associate	AWS (Online)
Business Technology & Administration	- Hawai‘i CC Business Technology - Kaua‘i CC Business - Leeward CC Business Technology
CompTIA Security+	Good Jobs Hawai‘i
Copywriting	- Digital Marketing Certificate – Hawai‘i Community College EDvance - UH Mānoa Certificate in Professional Writing
*Game Design	- Kapi‘olani CC New Media Arts - Leeward CC Digital Media - Windward CC Creative Media - 3 rd party training
Google Analytics	Google Certificates (Online)
Google Suite	Good Jobs Hawaii – Google at Work
Graphic Design	- Good Jobs Hawaii – Graphic Design for Business - Honolulu CC Communication Arts - Kapi‘olani CC New Media Arts - Kaua‘i CC Creative Media - Maui College Creative Media - Hawai‘i CC Creative Media
HubSpot	HubSpot Academy (Online)
Human Factors for UX/UI	Nielsen Norman Group (Online course)
Huthwaite	Huthwaite Sales Academy (Online)

Java Programming	Good Jobs Hawai'i
Journalism	Windward Community College Journalism
Marketing	- Kapi'olani CC Marketing - UH Maui College Business Program - Hawai'i Community College Marketing
Microsoft Azure Developer Associate	Microsoft (Online)
Microsoft Office	Good Jobs Hawaii – Microsoft Word and PowerPoint Office Applications
OSHA-10	- Good Jobs Hawaii - 3 rd party training
Python	Good Jobs Hawai'i
Rigging 101	3 rd party training
Salesforce	- Purple Mai'a Hiapo Workforce Development - UH Maui College - 3 rd Party Training
Search Engine Optimization	- Digital Marketing Certificate – Hawaii Community College EDvance - 3 rd party training (Online)
Trade Apprenticeships	Registered apprenticeships (DLIR)
UX/UI Design	- Hawai'i CC (Online course) - Kapi'olani CC New Media Arts - Various bootcamps
Video Editing	- Hawai'i CC Creative Media - Kaua'i CC Creative Media - Leeward CC Digital Media - Maui College Creative Media - Windward CC Creative Media
*Voice Acting	SAG-AFTRA workshops
Web Design	- Good Jobs Hawaii – Introduction to Web Design - Hawai'i CC Creative Media - Kapi'olani CC New Media Arts - Kaua'i CC Creative Media - Leeward CC Digital Media - Maui College Creative Media - Windward CC Creative Media
3D Modeling	Kapi'olani CC New Media Arts - Animation track

*Indicates training associated with an occupation that did not have state labor market data available but was identified by industry stakeholders as relevant to an in-demand, entry-level creative occupation.

The education and training, certifications, and skillsets associated with entry-level creative employment opportunities vary widely depending on the occupation type. The following stakeholder input on education and training needs are categorized according to four primary creative occupation types: Artistic and Craft, Trade, Technical, or Professional.

ARTISTIC AND CRAFT OCCUPATIONS

Artistic and craft occupations are those that directly produce creative products, whether visual, written, or performances. In-demand, entry-level roles in this category include actors, film and television producers, graphic designers, marketing designers, and copywriters.

Stakeholders emphasized that for artistic and craft occupations in film, television, news, marketing, and design, **culturally competent storytelling** is an essential, transferable skillset. For many of these roles, such as graphic design and copywriting, having a **strong portfolio** is key for candidates to demonstrate their skills to employers. Students in these fields often develop a portfolio as part of their coursework or degree program. Other transferable skillsets for artistic and craft roles include “**soft skills**,” like communication and critical thinking, as well as **basic computer skills**. On film and television sets in particular, **internships** and **on-the-job training** are key to preparing candidates for the workplace environment and learning set etiquette.

Strong **writing and research skills** are essential for entry-level employment in both news and marketing. For news roles, an educational background in journalism or communications is preferred, and candidates often have a bachelor’s degree. Basic **graphic design skills** and proficiency with **video editing software**, such as Adobe Premiere or Final Cut Pro, are also highly desired for news producers.

For entry-level roles in marketing, proficiency in various **design and photo editing software**, including Adobe products and Sigma, are desired. Candidates for digital marketing and web copywriting roles can benefit from experience with **front-end web design** (e.g., Squarespace and WordPress) as well as knowledge of **Search-Engine Optimization**.

In architecture, a bachelor’s degree or higher is typically expected for entry-level employment. However, training in **architectural drawing** may lead to entry-level drafting opportunities in the field.

Table 19: Artistic and Craft Training for Entry-Level Employment

Training or Certification	Local Training Availability
*Acting	SAG-AFTRA workshops
Adobe Software	- Kapi’olani CC New Media Arts - Adobe online courses
Architectural Drawing	- Honolulu CC Architecture, Engineering & Construction Technologies
Copywriting	- Digital Marketing Certificate – Hawai’i Community College EDvance - UH Mānoa Certificate in Professional Writing
Graphic Design	- Good Jobs Hawaii – Graphic Design for Business - Honolulu CC Communication Arts - Kapi’olani CC New Media Arts - Kaua’i CC Creative Media - Maui College Creative Media - Hawai’i CC Creative Media
Journalism	- Windward Community College Journalism

Marketing	<ul style="list-style-type: none"> - Kapi'olani CC Marketing - UH Maui College Business Program - Hawai'i Community College Marketing
Search Engine Optimization	<ul style="list-style-type: none"> - Digital Marketing Certificate – Hawaii Community College EDvance - 3rd party training (Online)
Video Editing	<ul style="list-style-type: none"> - Hawai'i CC Creative Media - Kaua'i CC Creative Media - Leeward CC Digital Media - Maui College Creative Media - Windward CC Creative Media
*Voice Acting	SAG-AFTRA workshops
Web Design	<ul style="list-style-type: none"> - Good Jobs Hawaii – Introduction to Web Design - Hawai'i CC Creative Media - Kapi'olani CC New Media Arts - Kaua'i CC Creative Media - Leeward CC Digital Media - Maui College Creative Media - Windward CC Creative Media

*Indicates training associated with an occupation that did not have state labor market data available but was identified by industry stakeholders as relevant to an in-demand, entry-level creative occupation.

TRADE OCCUPATIONS

Creative trade occupations either directly produce creative products or support their production. These occupations are manual labor-intensive and are often associated with apprenticeships or on-the-job training. Entry-level roles in this category include general crew for film and TV production and live events, as well as apprentices in skilled trades.

For general crew and skilled trades workers more broadly, **OSHA-10** is a commonly required workplace safety training. Other desired trainings for general crew workers include **A/V Readiness, Aerial Lifts/Mobile Elevated Work Platforms, and Rigging 101**.

For skilled trades craftspeople, such as tile setters or woodworkers, **apprenticeships** are the typical pathway to attaining on-the-job training and work hours.

In apparel manufacturing, for entry-level roles such as seamstresses, patternmakers, and fabric cutters, candidates need **training in fashion industry techniques, tools, and equipment**.

Table 20: Trade Training for Entry-Level Employment

Training or Certification	Local Training Availability
Aerial Lifts/Mobile Elevated Work Platforms	3 rd Party Training
*Apparel Manufacturing	Honolulu CC Fashion Technology
A/V Readiness	IATSE
OSHA-10	<ul style="list-style-type: none"> - Good Jobs Hawaii - 3rd Party Training

Rigging 101	3 rd Party Training
Trade Apprenticeships	Registered apprenticeships (DLIR)

*Indicates training associated with an occupation that did not have state labor market data available but was identified by industry stakeholders as relevant to an in-demand, entry-level creative occupation.

TECHNICAL OCCUPATIONS

Creative technical occupations rely primarily on specialized technological skillsets to produce creative products or support their production. Entry-level roles in this category include user experience (UX) designers, junior game designers, and programmers.

For user experience (UX), user interface (UI), and game designer roles, candidates’ skills are often evaluated based on their **portfolio**. Various **design bootcamps** are available for UX and UI designers to develop their technical skillsets and build their portfolio. Proficiency in **Adobe software** and **Google Analytics** is also beneficial for UX and UI designers.

For junior game designers, postsecondary programs and third-party training are available for candidates to learn the relevant software and technical skills, as well as develop their portfolio.

Software engineers, system administrators, and technical support are some of the entry-level, technical roles that are relevant in the Esports arena. Commonly requested **IT certifications** for these roles include AWS Certified Developer Associate, Microsoft Azure Developer Associate, CompTIA Security+, Python, and Oracle Certified Associate Java Programmer. Many of these trainings are already available through Good Jobs Hawai‘i at various UH Community Colleges.¹³

Table 21: Technical Training for Entry-Level Employment

Training or Certification	Local Training Availability
Adobe Software	- Kapi‘olani CC New Media Arts - Adobe online courses
Animation	- Kapi‘olani CC New Media Arts - Leeward CC Digital Media - Kaua‘i CC Creative Media
AWS Certified Developer Associate	AWS (Online)
CompTIA Security+	Good Jobs Hawai‘i
*Game Design	- Kapi‘olani CC New Media Arts - Leeward CC Digital Media - Windward CC Creative Media - 3 rd party training
Google Analytics	Google Certificates (Online)
Human Factors for UX/UI	Nielsen Norman Group (Online course)
Java Programming	Good Jobs Hawai‘i
UX/UI Design	- Hawai‘i CC (Online course) - Kapi‘olani CC New Media Arts - Various bootcamps
Microsoft Azure Developer Associate	Microsoft (Online)

¹³ <https://uhcc.hawaii.edu/goodjobshawaii/>

Python	Good Jobs Hawaii
3D Modeling	Kapi'olani CC New Media Arts - Animation track

*Indicates training associated with an occupation that did not have state labor market data available but was identified by industry stakeholders as relevant to an in-demand, entry-level creative occupation.

PROFESSIONAL OCCUPATIONS

Creative professional occupations provide business or administrative support that is integral to the creative production process. Entry-level roles include assistants, coordinators, customer support staff, and arts educators.

Highly desired transferable skills for entry-level, creative professional roles include **business communication**, the ability to **work with clients**, **project management**, **basic computer skills**, and **basic accounting**. For professionals on film or television sets, **internships or on-the-job training** are often the best way to get familiar with the industry terminology and set etiquette.

For sales-related roles, training in platforms such as **Salesforce**, **HubSpot**, and **Huthwaite** are desired. Experience with **Google Suite**, **Microsoft Office**, and **LinkedIn** is also beneficial.

For Esports team professionals, such as team managers or analysts, there is no formal training program, but 10 or more years of **gaming experience** and strong **knowledge of game titles** are essential.

In education and library professions, a bachelor’s or advanced degree is typically a minimum educational requirement. Art educators in Hawaii are generally required to have a bachelor’s degree and complete a State Approved Teacher Education Program (SATEP) for licensure, and librarians/archival specialists often have a master’s degree in library science.

Table 22: Professional Training for Entry-Level Employment

Training or Certification	Local Training Availability
Business Technology & Administration	- Hawaii CC Business Technology - Kauai CC Business - Leeward CC Business Technology
Google Analytics	Google Certificates (Online)
Google Suite	Good Jobs Hawaii – Google at Work
HubSpot	HubSpot Academy (Online)
Huthwaite	Huthwaite Sales Academy (Online)
Marketing	- Kapi'olani CC Marketing - UH Maui College Business Program - Hawaii Community College Marketing
Microsoft Office	Good Jobs Hawaii – Microsoft Word and PowerPoint Office Applications
Salesforce	- Purple Mai'a Hiapo Workforce Development - UH Maui College - 3 rd Party Training

WORKFORCE CHALLENGES & STRATEGIES

In addition to providing feedback on entry-level job opportunities, education, and training, creative industry stakeholders discussed the ongoing workforce development challenges in their respective subsectors, as well as their current workforce development strategies.

WORKFORCE DEVELOPMENT CHALLENGES:

Arts Education Funding: Sustained funding for art education in local elementary, middle, and high schools is needed to ensure students have access to creative subjects and skill development.

Career Awareness: Many local students may be unaware of the diversity of creative career paths in Hawai'i and how to pursue them.

Industry Expertise in CTE: Career & Technical Education (CTE) teachers in the Hawai'i Department of Education system typically do not have industry experience, so professional development opportunities like teacher externships are essential to providing industry exposure. There is also potential to have more creative industry professionals teach CTE in HIDOE schools, although many do not meet the education and training requirements for licensure.

Finding Candidates with Diverse Skillsets: It can be difficult for local employers to find candidates that have a diverse portfolio of skillsets, including both soft skills and technical skills, that makes them adaptable to ever-changing business needs.

Local Training Availability: Some job roles, such as camera operators, are more difficult to fill with local candidates due to the lack of specialized, local training.

Support for Local Entrepreneurship: Creatives in Hawai'i who want to start their own companies often need business support in areas such as accounting or legal services. The lack of local manufacturing facilities is another barrier for local entrepreneurs, especially apparel companies, who often need to outsource their production.

Community Access to the Arts: More public venues for local communities to engage with art, such as maker spaces, murals, and galleries, would help to nurture Hawai'i's local creatives.

Financial Investment: Local job growth in the creative industries is largely tied to the state's financial policies and investments, such as the film tax incentive.

WORKFORCE DEVELOPMENT STRATEGIES:

Hawai'i Department of Education Partnerships: Several industry stakeholders are already working with Hawai'i high schools that offer relevant Career & Technical Education (CTE) pathways to provide work-based learning experiences for students and externships for educators.

University of Hawai'i Partnerships: Industry stakeholders are forming partnerships with programs in the University of Hawai'i system, including both 2-year and 4-year colleges, to share their industry expertise and source local talent.

Developing New Trainings: Some industry stakeholders have identified new, local training needs in their field and are working with partners to fill these gaps.

Paid Internships: Several industry stakeholders offer paid internships programs for high school or college students at their companies that may lead to full-time employment.

RECOMMENDATIONS

Recommendation 1: Enhance Career Awareness

Efforts should be made to increase awareness of the variety of creative career opportunities within and outside of the creative subsectors. This involves introducing students and teachers to the numerous promising job possibilities in the industry. In turn, individuals can make informed career and training decisions, contributing to a more diverse and dynamic creative workforce.

Recommendation 2: Sustain and Increase Funding for Arts Programs in Schools

Sustain school arts program funding to nurture future creative talent, igniting enthusiasm for creative careers and supporting a creative professional pipeline. Increased funding may help reduce barriers to gaining engagement from creative industry professionals in schools.

Recommendation 3: Prioritize and Develop Training for In-Demand Creative Occupations

Prioritize new and existing training for high-demand or growth creative professions, focusing on skillsets more suitable for short-term training program development, such as the support trades and creative technologies.

Recommendation 4: Expand Internship Opportunities in the Creative Sector

Broaden internships in the creative sector to expose potential creative professionals to the diverse job roles on-site and which can provide a more holistic approach to training that combines technical and soft skill development, enhancing student adaptability and flexibility.

Recommendation 5: Strengthen Industry-Education Partnerships

Improving partnerships between industry professionals and the Hawai'i Department of Education (DOE) is paramount. Collaborative efforts can lead to the development of a curriculum that aligns with industry standards, allowing students to learn from those with practical experience.

Recommendation 6: Align Secondary and Postsecondary Education

Improve alignment and collaboration between secondary and postsecondary education, creating clear pathways for students pursuing creative careers, and facilitating a seamless transition from education to the workforce.

Recommendation 7: Promote Growth through Infrastructure and Support

Support creative sector growth with a comprehensive strategy, including tax incentives and essential infrastructure for entrepreneurship, such as community manufacturing facilities and mentorship programs. This approach would foster small business growth, diversification, and innovation, and elevate Hawai'i's creative profile.

Recommendation 8: Enhance Data Collection and Collaboration

Improve data collection and collaboration regarding creative sector occupations, including those consisting of contract and gig work. This would deepen understanding of labor trends, aiding in informed decision-making to support industry growth.

APPENDIX A: TABLES

Table 23 includes labor market data on the 80 occupations that were identified as creative occupations for the purpose of this analysis.¹⁴ Statewide employment data was available for 47 creative occupations. Highlighted cells indicate national data growth and salary data sourced from O*NET OnLine. Additional information, including sample job titles, are linked for each occupation.

Table 23: Creative Occupations Employment Data

SOC	Occupation	State Employment (2022)	Projected State Employment (2030)	Percent Job Change (2020-30)	Annual Openings	Median Salary (2022)
27-2011	Actors	1,400 ¹⁵		3.20%		\$35,880
11-2011	Advertising and Promotions Managers	50	130	23.30%	10	\$107,190
41-3011	Advertising Sales Agents	360	310	5.5%	40	\$56,340
13-1011	Agents and Business Managers of Artists, Performers, and Athletes			8.20%		\$82,530
17-1011	Architects, Except Landscape and Naval	560	670	1.40%	50	\$84,150
17-3011	Architectural and Civil Drafters	380	390	-1.5%	40	\$61,110
25-4011	Archivists		40	17.70%	10	
27-1011	Art Directors		280	21.50%	30	\$80,830
25-1121	Art, Drama, and Music Teachers, Postsecondary	340	340	11.60%	30	\$63,510
27-4011	Audio and Video Equipment Technicians	600 ¹⁶	390	29.50%	40	\$62,080
27-4012	Broadcast Technicians	60	80	8.10%	10	\$41,870
51-7011	Cabinetmakers and Bench Carpenters	160	230	9.4%	20	\$49,140
49-9061	Camera and Photographic Equipment Repairers			1.10%		\$44,060
27-4031	Camera Operators, Television, Video, and Motion Picture	130	140	24.40%	20	
27-2032	Choreographers			5%		\$50,990
27-1021	Commercial and Industrial Designers		60	7.70%	10	
15-1251	Computer Programmers	130	440	-8.50%	30	\$98,650
39-3092	Costume Attendants			5%		\$48,470
27-1012	Craft Artists			3.90%		\$38,150
25-4012	Curators		40	18.20%	10	\$63,520
27-2031	Dancers	290	380	37.30%	60	

¹⁴ See Appendix B: Methodology

¹⁵ SAG-AFTRA Hawai'i membership.

¹⁶ State employment estimate from IATSE Local 665.

43-9031	Desktop Publishers			-13.50%		\$47,910
27-3041	Editors	180	350	21.00%	40	\$55,010
51-9194	Etchers and Engravers			-0.20%		\$37,980
51-6092	Fabric and Apparel Patternmakers			-7.40%		\$60,320
27-1022	Fashion Designers			3.30%		
27-4032	Film and Video Editors	50	170	48.70%	20	\$39,230
27-1013	Fine Artists, Including Painters, Sculptors, and Illustrators			5.20%		
27-1023	Floral Designers	200	200	-17.50%	20	\$34,530
51-9051	Furnace, Kiln, Oven, Drier, and Kettle Operators and Tenders			0.40%		\$44,530
51-7021	Furniture Finishers			-0.70%		\$37,960
27-1024	Graphic Designers	510	770	7.70%	70	\$53,700
27-1025	Interior Designers	200	370	0.00%	30	\$61,780
51-9071	Jewelers and Precious Stone and Metal Workers	180	190	2.2%	20	\$57,710
25-4022	Librarians and Media Collections Specialists	280	490	7.30%	50	\$58,910
25-4031	Library Technicians	110	170	2.40%	20	\$46,800
27-4015	Lighting Technicians & Media & Comm Equip Wrks, All Other	320	380	5.00%	40	\$88,280
39-5091	Makeup Artists, Theatrical and Performance			8.60%		
13-1161	Market Research Analysts and Marketing Specialists	1,940	2,290	36.60%	250	\$55,090
11-2021	Marketing Managers	330	760	19.90%	70	\$109,260
27-2012	Media Programming Directors					\$60,900
27-2012	Media Technical Directors/Managers					\$60,900
27-1026	Merchandise Displayers and Window Trimmers	1,060	1,060	11.3%	100	\$35,880
27-2099	Misc. Entertainers, Performers, Sports & Related Workers	170	210	43.20%	20	
51-7031	Model Makers, Wood			-3.60%		\$46,940
51-9195	Molders, Shapers, and Casters, Except Metal and Plastic	60	70	12.1%	10	\$44,100
39-3021	Motion Picture Projectionists			-9.60%		\$33,360
27-1014	Multimedia Artists and Animators		90	26.80%	10	\$62,080
25-4013	Museum Technicians and Conservators	50	40	32.10%	10	\$44,740
27-2041	Music Directors and Composers	260	100	30.80%	10	\$49,340
49-9063	Musical Instrument Repairers and Tuners			-9.40%		\$38,150
27-2042	Musicians and Singers	490	1,100	25.90%	140	

27-3023	News Analysts, Reporters, and Journalists	220	230	11.80%	30	\$71,940
51-9123	Painting, Coating, and Decorating Workers			0.10%		\$38,270
27-4021	Photographers	340	1,240	18.20%	120	\$41,840
51-9151	Photographic Process Workers and Processing Machine Operators			-12.50%		\$36,280
47-2161	Plasterers and Stucco Masons	80	130	5.9%	10	\$91,090
27-3043.05	Poets, Lyricists and Creative Writers					\$73,150
51-5111	Prepress Technicians and Workers			-17.10%		\$43,560
51-5113	Print Binding and Finishing Workers	70		-16.40%		\$38,430
51-5112	Printing Press Operators	310	190	-10.00%	20	\$31,890
27-2012	Producers and Directors	550	530	42.50%	50	\$60,900
43-9081	Proofreaders and Copy Markers			-3.90%		\$45,410
11-2032	Public Relations and Fundraising Managers	390	470	19.20%	40	\$105,980
27-3031	Public Relations Specialists	1,290	1,150	14.50%	110	\$61,190
27-3011	Radio and Television Announcers	110	290	11.70%	30	\$41,200
13-1161	Search Marketing Strategists					\$57,880
27-1027	Set and Exhibit Designers			7.30%		\$34,650
51-6051	Sewers, Hand			-15.80%		\$31,530
51-6041	Shoe and Leather Workers and Repairers			-11%		\$32,460
15-1252	Software Developers, Quality Assurance Analysts & Testers	2,380	2,540	25.50%	220	\$103,210
27-4014	Sound Engineering Technicians	40		-1.20%		\$60,670
27-2012	Talent Directors					\$60,900
47-2044	Tile and Marble Setters	500	560	10.4%	50	\$79,930
15-1255	Video Game Designers					\$71,990
49-9064	Watch and Clock Repairers			-29.80%		\$48,370
15-1254	Web Developers and Digital Interface Designers	270	340	15.90%	30	\$75,650
27-3043	Writers and Authors	40	190	20.10%	20	\$61,860

Sources: 2022 Occupational Employment & Wage Statistics, DBEDT
 Long-term Occupational Employment Projections to 2030, HireNet Hawai'i
 O*NET OnLine, U.S. Department of Labor

Table 24: Creative Occupations with Highest Statewide Employment Volume

Occupation	Employment Statewide	Median Salary	Percent Growth (2020-30)	Annual Openings
Software Developers, Quality Assurance Analysts & Testers	2,380	\$103,210	25.50%	220
Market Research Analysts and Marketing Specialists	1,940	\$55,090	36.60%	250
Actors	1,400 ¹⁷			
Public Relations Specialists	1,290	\$61,190	14.50%	110
Audio and Video Equipment Technicians	600 ¹⁸	390	29.50%	40
Architects, Except Landscape and Naval	560	\$84,150	1.40%	50
Producers and Directors	550	\$60,900	42.50%	50
Graphic Designers	510	\$53,700	7.70%	70
Tile and Marble Setters	500	\$79,930	10.4%	50
Musicians and Singers	490		25.90%	140
Public Relations and Fundraising Managers	390	\$105,980	19.20%	40
Architectural and Civil Drafters	380	\$61,110	-1.5%	40
Advertising Sales Agents	360	\$56,340	5.5%	40
Photographers	340	\$41,840	18.20%	120
Art, Drama, and Music Teachers, Postsecondary	340	\$63,510	11.60%	30
Marketing Managers	330	\$109,260	19.90%	70
Lighting Technicians & Media & Comm Equip Workers, All Other	320	\$88,280	5.00%	40
Dancers	290		37.30%	60
Librarians and Media Collections Specialists	280	\$58,910	7.30%	50
Web Developers and Digital Interface Designers	270	\$75,650	15.90%	30

Sources: 2022 Occupational Employment & Wage Statistics, DBEDT
 Long-term Occupational Employment Projections to 2030, HireNet Hawai'i

Table 25: Creative Occupations with Most Annual Openings in Hawai'i

Occupation	Annual Openings	Employment Statewide	Median Salary	Percent Growth (2020-30)
Market Research Analysts and Marketing Specialists	250	1,940	\$55,090	36.60%
Software Developers, Quality Assurance Analysts & Testers	220	2,380	\$103,210	25.50%
Musicians and Singers	140	490		25.90%
Photographers	120	340	\$41,840	18.20%
Public Relations Specialists	110	1290	\$61,190	14.50%
Graphic Designers	70	510	\$53,700	7.70%

¹⁷ SAG-AFTRA Hawai'i membership.

¹⁸ State employment estimate from IATSE Local 665.

Marketing Managers	70	330	\$109,260	19.90%
Dancers	60	290		37.30%
Architects, Except Landscape and Naval	50	560	\$84,150	1.40%
Producers and Directors	50	550	\$60,900	42.50%
Tile and Marble Setters	50	500	\$79,930	10.4%
Librarians and Media Collections Specialists	50	280	\$58,910	7.30%
Public Relations and Fundraising Managers	40	390	\$105,980	19.20%
Architectural and Civil Drafters	40	380	\$61,110	-1.5%
Advertising Sales Agents	40	360	\$56,340	5.5%
Lighting Technicians & Media & Comm Equip Wrkrs, All Other	40	320	\$88,280	5.00%
Editors	40	180	\$55,010	21.00%
Audio and Video Equipment Technicians	40	600	\$62,080	29.50%

Sources: 2022 Occupational Employment & Wage Statistics, DBEDT
 Long-term Occupational Employment Projections to 2030, HireNet Hawai'i

Table 26: Highest Growth Creative Occupations in Hawai'i

Occupation	Percent Growth (2020-30)	Employment Statewide	Median Salary	Annual Openings
Film and Video Editors	48.70%	50	\$39,230	20
Misc. Entertainers, Performers, Sports & Related Workers	43.20%	170		20
Producers and Directors	42.50%	550	\$60,900	50
Dancers	37.30%	290		60
Market Research Analysts and Marketing Specialists	36.60%	1940	\$55,090	250
Museum Technicians and Conservators	32.10%	50	\$44,740	10
Music Directors and Composers	30.80%	260	\$49,340	10
Audio and Video Equipment Technicians	29.50%	600 ¹⁹	\$62,080	40
Multimedia Artists and Animators	26.80%		\$62,080	10
Musicians and Singers	25.90%	490		140
Software Developers, Quality Assurance Analysts & Testers	25.50%	2380	\$103,210	220
Camera Operators, Television, Video, and Motion Picture	24.40%	130		20
Advertising and Promotions Managers	23.30%	50	\$107,190	10
Art Directors	21.50%		\$80,830	30
Editors	21.00%	180	\$55,010	40
Writers and Authors	20.10%	40	\$61,860	20
Marketing Managers	19.90%	330	\$109,260	70
Public Relations and Fundraising Managers	19.20%	390	\$105,980	40

¹⁹ State employment estimate from IATSE Local 665.

Photographers	18.20%	340	\$41,840	120
Curators	18.20%		\$63,520	10

Sources: 2022 Occupational Employment & Wage Statistics, DBEDT
 Long-term Occupational Employment Projections to 2030, HireNet Hawai'i

Table 27: Highest Paying Creative Occupations in Hawai'i

Occupation	Median Salary	Employment Statewide	Percent Growth (2020-30)	Annual Openings
Marketing Managers	\$109,260	330	19.90%	70
Advertising and Promotions Managers	\$107,190	50	23.30%	10
Public Relations and Fundraising Managers	\$105,980	390	19.20%	40
Software Developers, Quality Assurance Analysts & Testers	\$103,210	2380	25.50%	220
Computer Programmers	\$98,650	130	-8.50%	30
Plasterers and Stucco Masons	\$91,090	80	5.9%	10
Lighting Technicians & Media & Comm Equip Workers, All Other	\$88,280	320	5.00%	40
Architects, Except Landscape and Naval	\$84,150	560	1.40%	50
Art Directors	\$80,830		21.50%	30
Tile and Marble Setters	\$79,930	500	10.4%	50
Web Developers and Digital Interface Designers	\$75,650	270	15.90%	30
News Analysts, Reporters, and Journalists	\$71,940	220	11.80%	30
Curators	\$63,520		18.20%	10
Art, Drama, and Music Teachers, Postsecondary	\$63,510	340	11.60%	30
Audio and Video Equipment Technicians	\$62,080	600 ²⁰	29.50%	40
Multimedia Artists and Animators	\$62,080		26.80%	10
Writers and Authors	\$61,860	40	20.10%	20
Interior Designers	\$61,780	200	0.00%	30
Public Relations Specialists	\$61,190	1290	14.50%	110
Architectural and Civil Drafters	\$61,110	380	-1.5%	40

Sources: 2022 Occupational Employment & Wage Statistics, DBEDT READ
 Long-term Occupational Employment Projections to 2030, HireNet Hawai'i

²⁰ State employment estimate from IATSE Local 665.

Table 28: Creative Occupations in Hawai'i with Salary Below ALICE Survival Budget

Table 28 lists the creative occupations in Hawai'i with a median salary lower than the 2023 ALICE annual household survival budget for a single adult in Hawai'i (\$36,912).²¹

Occupation Title	Median Salary (2022)	State Employment (2022)	Projected State Employment (2030)	Percent Job Change (2020-30)	Annual Openings
Printing Press Operators	\$31,890	310	190	-10.00%	20
Floral Designers	\$34,530	200	200	-17.50%	20
Merchandise Displayers and Window Trimmers	\$35,880	1,060	1,060	11.30%	100

Sources: 2022 Occupational Employment & Wage Statistics, DBEDT READ Long-term Occupational Employment Projections to 2030, HireNet Hawai'i

²¹ ALICE in the Crosscurrents 2023 Report, Aloha United Way. https://www.auw.org/sites/default/files/pictures/23UFA_Report_Hawaii_5.18.23_FINAL.pdf

APPENDIX B: METHODOLOGY

Labor Market Data Collection

SMS began data collection by referencing the 2023 Hawaii's Creative Industries report by the Hawaii Department of Business, Economic Development and Tourism, Research & Economic Analysis Division (DBEDT READ).²² The DBEDT READ report identified the economic impact, number of jobs, and industry growth for the state's creative industries based on North American Industry Classification System (NAICS) codes. For the purposes of this report, which is focused on creative industry workforce development needs, SMS determined that data on creative occupations was necessary to identify in-demand jobs, education, and training.

SMS consulted with the project team, including Hawaii's DBEDT Creative Industries Division, to determine the creative subsectors to be included in the report. SMS also reviewed creative sector reports from various U.S. cities and states to identify the Standard Occupational Classification (SOC) system codes for creative occupations. The City of Seattle Creative Economy Report (2019) was the primary reference for this report.²³

Based on feedback from the project team and a list of SOC codes that were included in similar reports, SMS sourced statewide employment, pay, and growth data for 47 creative occupations (see Appendix C: Primary Data Sources). Thirty-three (33) other creative occupations were not found in the state data; this may be related to the prevalence of contract employment in the creative industries, particularly in film and television. Wherever state data was not available, national data on pay and projected growth were collected (see Appendix A, Table 22).

Stakeholder Outreach

SMS participated in 2 stakeholder meetings with various industry stakeholders in Hawaii representing the creative subsectors included in this report. Stakeholders reviewed the state labor market data collected by SMS and provided insight into any gaps. They were also asked to identify the top entry-level employment opportunities in their subsectors, and associated education and training requirements that should be prioritized for workforce development.

SMS also conducted 12 one-on-one interviews with industry stakeholders in the creative subsectors to collect in-depth insights on hard-to-fill positions, education and training needs, and workforce development initiatives and challenges.

²² Hawaii's Creative Industries – Update Report 2023, Department of Business, Economic Development and Tourism. May 2023. https://files.hawaii.gov/dbedt/economic/data_reports/hawaii-creative-report/HI_Creative_Ind_2022.pdf

²³ Creative Economy Report, City of Seattle. 2019. <https://www.seattle.gov/documents/Departments/FilmAndMusic/Creative%20Economy%20Report%20Final.pdf>

APPENDIX C: PRIMARY DATA SOURCES

DBEDT Research & Economic Analysis Division

[Occupational employment and wage statistics](#) for the creative occupations in this report were sourced from the Research & Economic Analysis Division of the Hawai'i Department of Business, Economic Development, and Tourism (DBEDT READ).

HireNet Hawai'i

Data on long-term occupational growth and annual openings for the creative occupations in this report were sourced from [HireNet Hawai'i](#).

O*NET OnLine

[O*NET OnLine](#), an resource provided by the U.S. Department of Labor, was used to collect national labor market data, including median salary and projected job growth, for creative occupations that did not appear in state data sources.