Utah's Film & Digital Entertainment Industry

Authored by: Jennifer Leaver, M.A., and D.J. Benway, M.P.P.

October 2016

Kem C. Gardner
POLICY INSTITUTE
THE UNIVERSITY OF UTAH

Utah's Film & Digital Entertainment Industry

TABLE OF CONTENTS

INTRODUCTION

In 2015, the Utah Film Commission enlisted the Kem C. Gardner Policy Institute at the University of Utah to conduct a baseline assessment of Utah's film and digital entertainment industry.[1] Between October 2015 and June 2016, Gardner Policy Institute staff completed data analysis and facilitated eight film and digital entertainment related technical advisory meetings across the state. In addition, Gardner Policy Institute staff conducted personal interviews with producers and digital entertainment leaders in both Utah and Los Angeles to better understand the industry, including its historical context, economic sectors, challenges, strengths, weaknesses, and opportunities. By compiling this comprehensive Utah film and digital entertainment industry data, the Gardner Policy Institute has generated an industry baseline assessment to assist the Utah Film Commission in future policy and action through informed decision making.

METHODOLOGY

Between October 2015 and June 2016, the Gardner Policy Institute conducted research to assess the recent history and current state of Utah's film and digital entertainment industry. The Gardner Policy Institute held seven technical advisory committee meetings around the state involving 42 film and digital entertainment industry experts who were identified by the Utah Film Commission. The seven meetings included the initial project introduction meeting, followed by groups focused on film (both urban and rural), postproduction, game design, animation and visual effects (VFX), and content creation. The Gardner Policy Institute also completed supplemental one-on-one interviews with two Los Angeles filmmakers, one local Utah filmmaker, and two local film exhibition and/or film culture experts.

At the conclusion of the technical advisory meetings, the Gardner Policy Institute convened a group of six economic development experts in Utah. At this final meeting, group participants discussed the topics of collaboration, business startups, talent/education, and attracting new business to Utah. They also discussed current challenges, ways state government could assist with challenges, ways to better utilize Utah's existing assets for digital entertainment industry pursuits, and ideas on how to cultivate collaboration between Utah's creative industries, startup businesses, and academia.

Additionally, the Gardner Policy Institute explored the historical context of both Utah's film industry and the Utah Film

Commission's Motion Picture Incentive Program. Gardner Policy Institute staff gathered data on current film and digital entertainment-related educational opportunities in Utah, identified recent statewide production locations based on the number film permits issued on select state and federal public lands, and conducted a review of other states' film incentive programs.

Finally, in addition to culling the insights of experts and analyzing available data, the Gardner Policy Institute advised the Utah Film Commission on the development of three online surveys used by the film commission to gather supplemental information on Utah's film and digital entertainment workforce. On May 2, 2016, the Utah Film Commission emailed surveys to a workforce mailing list as follows: Utah's film/postproduction workforce (n=1,863), game design/animation (n=105), and content creation/social media influencer (n=18). The film commission allowed three weeks for survey completion and received the following number of responses: film/postproduction (n=394), game design/animation (n=53), and content creation/social media influencer (n=20).[2]

HISTORICAL CONTEXT

The film industry has had a presence in Utah for nearly 100 years.[3] Utah's film industry was born in 1923 with the southern Utah production of a silent Western titled *The Covered Wagon*. By the late 1940s, the southern Utah landscape became the backdrop to several John Ford Westerns starring American actor John Wayne. In fact, the southern Utah town of Kanab has been dubbed "Little Hollywood" due to the many films shot in and around town. Utah also touts the world's oldest film commission, the Moab to Monument Valley Film Commission. Over the past 93 years, more than 900 films and TV series have been filmed in Utah.[4]

According to a presentation given by a knowledgeable Utah film industry veteran, in the early 1970s, Utah's film industry was composed of little more than a handful of filmmakers working together. In 1974, the Utah Film Commission was formed to support Utah filmmaking. Around this same time, Sunn Classic Pictures, which produced *The Life and Times of Grizzly Adams* TV series, opened in Park City, Utah. Sunn Classic Pictures had two production companies, over a hundred vehicles, made 15-20 films a year in Utah, and trained around 200 people between 1975 and 1980. In September of 1978, Utah's first film festival—the US/Utah Film Festival—was held in Salt Lake City as a way to attract filmmakers to Utah. Two years later, the festival relocated to its current home of Park City and switched its screening dates from September to January to better highlight Park City's winter recreation opportunities. In 1985, the Sundance Institute took over the film festival, which has since grown from an event that screened 86 films at two theaters (1986) to an event that screens around 200 films at 16 theaters (2016). Today, Utah's Sundance Film Festival attracts over 30,000 nonresident visitors to Utah each winter.

In 1978, the concept of film tax incentives emerged in Montreal, Canada. After hearing about this concept, Utah Film Commission employee John Earle traveled to Canada to learn more. Upon his return, Earle introduced the film tax incentive concept to Utah's State Legislature; however, Utah's legislature was not quite ready to implement the idea. Shortly thereafter, in the early 1980s, Utah's film industry's momentum slowed as Sunn Classic Pictures was purchased by another company. It wasn't until 1986 that Utah's film industry reemerged and reestablished itself.

Various significant network TV series, including *Promised Land, Touched by an Angel*, and *Everwood*, began production in Utah in the mid-1990s and early 2000s. However, when these series went out of production (1999, 2003, and 2006, respectively), Utah's film industry contracted once again.

Utah's Motion Picture Incentive Program

In 2003 – about 25 years after the introduction of Montreal's film tax incentive – Utah's legislature granted $1 million to the Film Commission director to test an incentive to attract filmmakers to Utah. In 2005, Utah's official cash rebate incentive program for motion picture companies was established and, five years later, in 2010, a tax credit component was added. The following year, digital media companies became eligible to apply for an incentive as well.

The Motion Picture Incentive Program (MPIP) is authorized by Utah Code Title 63N, Chapter 8, *Motion Picture Incentives*.[5] In its current form, the MPIP provides for a refundable tax of up to 25 percent of in-state spending by a motion picture company, and up to 100 percent of new state revenue generated by a digital media company (not to exceed 20 percent of in-state spending). Motion picture projects are eligible for an equivalent cash rebate, not to exceed $500,000. Motion picture projects that are eligible for the MPIP include live action or animated feature films, documentaries, television films, pilots or series, reality shows, and webisodes. Digital media projects that are eligible for the MPIP, as defined by statute, include "all or part of a production of interactive entertainment or animated production that is produced for distribution in commercial or educational markets, which shall include projects intended for Internet or wireless distribution."

To qualify for the MPIP, a potential recipient must complete a comprehensive application. The Governor's Office of Economic Development (GOED) Board reviews all MPIP applications on a monthly basis and delivers a letter of acceptance (or rejection) within a few days of making their decision. If a film is accepted into Utah's MPIP, the filmmaker must keep a detailed account of production spending. In most cases, filmmakers hire a certified

public accountant to track and record spending. After wrapping up production, filmmakers submit spending data to the GOED for review. If a film meets all MPIP criteria, the GOED approves the appropriate tax credit or cash rebate.

Between 2005 and 2015, Utah's MPIP has granted $44 million in cash and tax rebates to 146 completed films that contributed $239 million to the Utah economy, creating an average of 1,189 annual Utah jobs (see Table 1). For incentives distributed between 2005 and 2015, every $1 million in incentives was associated with an average of 295 direct Utah jobs and an average Utah spend (production spending on Utah goods and services) of $5.4 million.

At the time of publication, 35 states and the District of Columbia offer film project incentives. Additionally, nine cities and counties in California, Florida, Georgia, Louisiana, and Texas have an incentive program. Compared to programs across the nation, Utah's MPIP is "middle of the road" and similar to other programs in the region. Nationwide, Louisiana and Georgia's programs are considered to be the most generous. Louisiana currently offers a 30 percent creditable base and a 10 percent payroll credit for in-state labor. Georgia offers a 30 percent tax credit incentive with up to 20 percent of expenses transferred as a base rate and a 10 percent allowance to include a Georgia logo and tourism promotion. Maine's program is considered to be the least generous, offering a 12 percent rebate for in-state resident production wages and 10 percent for non-resident.[6] On a regional basis, Wyoming offers a cash rebate of 12 to 15 percent of in-state expenditures, Colorado and Idaho offer 20 percent, Nevada offers 15 to 25 percent, and New Mexico and California offer 25 percent. Both Nevada and New Mexico allow for a smaller incentive based on nonresident labor. Alberta, Canada, another scenic competitor for film backdrops, offers a grant of up to 26 percent of expenditures for qualifying productions.[7]

Over the past five fiscal years, Utah's MPIP has attracted between 12 and 26 productions per year. Of the 97 total completed productions over that period, nearly two-thirds (62) were in-state productions (see Figure 1). On average, out-of-state productions have hired slightly more Utah cast and crew than in-state productions (annual 892 versus 811 hires) (see Table 2). In-state productions have, on average, spanned more production days than out-of-state productions (566 versus 219 days) (see Table 3). While out-of-state productions composed only one-third of all MPIP-approved projects over the past five years, they contributed half of all Utah expenditures – a total of $60.1 million (see Figure 2).[8]

The share of in-state and out-of-state production spending in Utah fluctuates based on the mix of projects in any given year. For instance, one large multi-million dollar project will affect the value share of production spending. During the past five fiscal years, out-of-state productions accounted for as low as 33 percent of all MPIP-qualified spending (2015) and as high as 61 percent (2012). Consistently, in-state productions accounted for the majority of production days and postproduction spending.[9] While there are a number of influencing factors, a large component is the relative low cost of completing production and postproduction close to home.

Figure 3 compares in-state spending for three projects receiving an MPIP incentive: a low budget in-state production ($300K), a medium budget out-of-state production ($1.3M), and a large budget out-of-state production ($4.1M). In all three cases, filmmakers spent at least one-third of their budget on cast and crew payroll.[10] In fact, payroll accounted for over half of total Utah ex-

Table 1: Motion Picture Incentive Program Incentive Summary

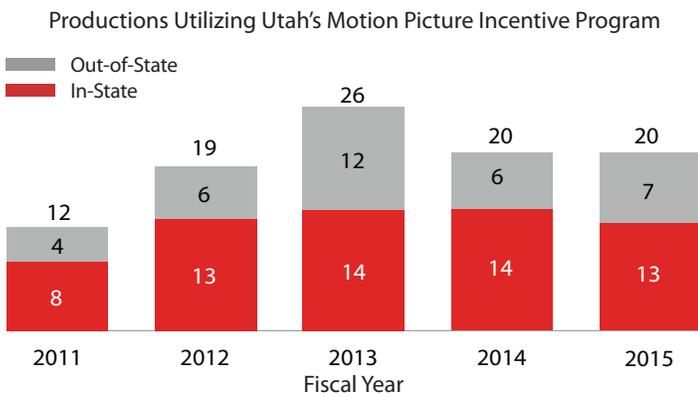| Fiscal Year	Board Approved Encumbered Incentive	Total Incentive Paid	# Films Approved	# Films Completed	Utah Cast & Crew**	Utah Spend
2005	$1,048,000	$810,375	4	4	254	$7,223,205
2006	$1,680,191	$1,427,314	7	7	585	$7,383,722
2007	$1,327,000	$798,427	4	4	574	$13,900,813
2008	$6,111,000	$4,239,314	13	13	1,256	$40,964,586
2009	$6,836,612	$7,033,631	5	5	825	$26,994,459
2010	$4,943,291	$3,757,967	16	16	1,071	$20,648,337
2011	$3,700,075	$3,173,438	12	12	787	$17,219,960
2012	$7,142,767	$5,065,840	19	19	1,894	$25,005,202
2013	$9,821,638	$8,083,805	26	26	2,512	$35,775,225
2014	$8,777,052	$5,759,246	21	20	1,855	$24,882,761
2015	$13,832,271	$4,152,195	24	20	1,470	$19,349,530
TOTAL	**$65,219,897**	**$44,301,552**	**151**	**146**	**13,083**	**$239,347,800**

*2014 and 2015 totals are preliminary; not all completed films were paid out by the publication date.
**Does not include extras
Note: The MPIP offered only a cash rebate through 2009; a refundable tax rebate was introduced in 2010.
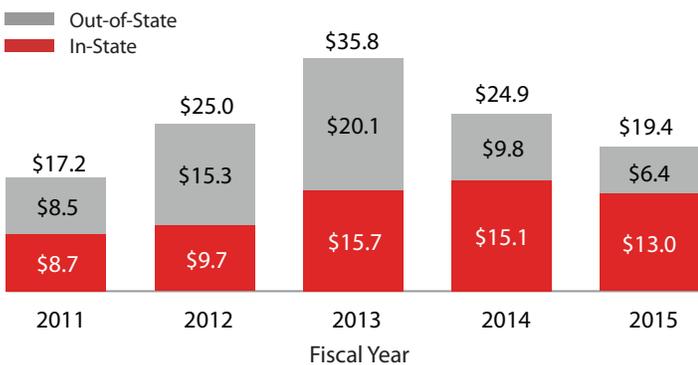Source: Utah Governor's Office of Economic Development

Figure 1: In-State and Out-of-State MPIP Projects

Productions Utilizing Utah's Motion Picture Incentive Program

Legend:
- Out-of-State (gray)
- In-State (red)

Fiscal Year	Total	Out-of-State	In-State
2011	12	4	8
2012	19	6	13
2013	26	12	14
2014	20	6	14
2015	20	7	13

Fiscal Year

Note: 2014 and 2015 totals are preliminary; not all completed films were paid out by the publication date.

In-state projects are those projects where the producer is a Utah resident and/or the production company is based in Utah.

Source: Kem C. Gardner Policy Institute's Analysis of Utah Governor's Office of Economic Development data

Figure 2: MPIP Project Expenditures in Utah ($ millions)

Legend:
- Out-of-State (gray)
- In-State (red)

Fiscal Year	Total	Out-of-State	In-State
2011	$17.2	$8.5	$8.7
2012	$25.0	$15.3	$9.7
2013	$35.8	$20.1	$15.7
2014	$24.9	$9.8	$15.1
2015	$19.4	$6.4	$13.0

Fiscal Year

Note: 2014 and 2015 totals are preliminary; not all completed films were paid out by the publication date.

In-state projects are those projects where the producer is a Utah resident and/or the production company is based in Utah.

Source: Kem C. Gardner Policy Institute's Analysis of Utah Governor's Office of Economic Development data
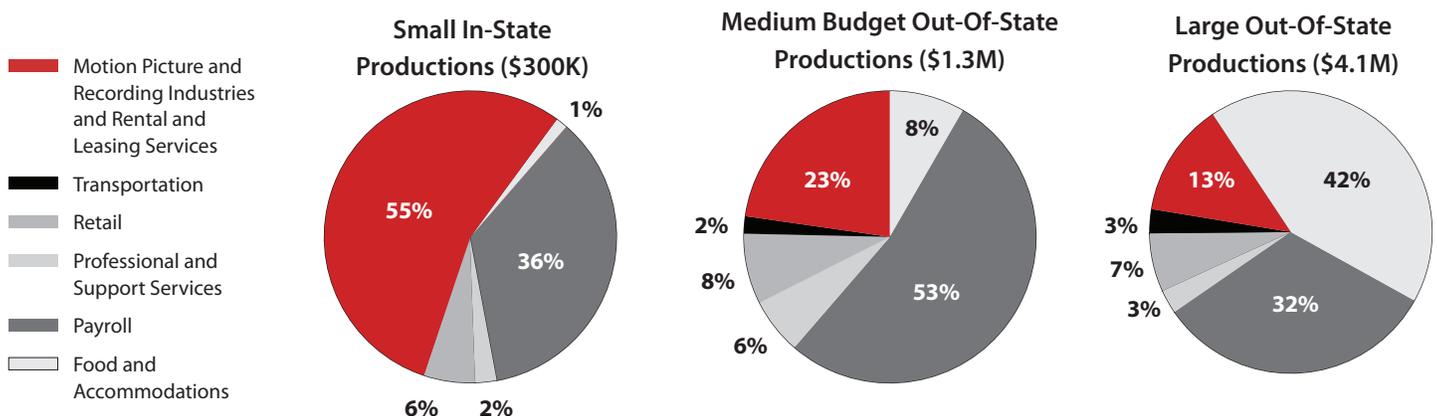
Table 2: Cast and Crew Hired by Productions Receiving an MPIP Incentive

Fiscal Year*	In-State Projects		Out-of-State Projects	
	Utah Cast and Crew	Avg. per Project	Utah Cast and Crew	Avg. per Project
2011	409	51	378	95
2012	787	61	1,107	185
2013	974	70	1,538	128
2014	1,127	81	728	121
2015	759	58	711	102
Average	811	64	892	126

*2014 and 2015 totals are preliminary; not all completed films were paid out by the publication date.

Note: In-state projects are those projects where the producer is a Utah resident and/or the production company is based in Utah. Cast and crew does not include extras.

Source: Kem C. Gardner Policy Institute Analysis of Utah Governor's Office of Economic Development Data

Table 3: Production Days for Productions Receiving an MPIP Incentive

Fiscal Year*	In-State Projects		Out-of-State Projects	
	Production Days	Avg. per Project	Production Days	Avg. per Project
2011	370	46	122	31
2012	624	48	247	51
2013	571	41	396	33
2014	745	53	114	19
2015	516	40	154	22
Avg.	565	46	207	29

*2014 and 2015 totals are preliminary; not all completed films were paid out by the publication date.

Note: In-state projects are those projects where the producer is a Utah resident and/or the production company is based in Utah.

Source: Kem C. Gardner Policy Institute Analysis of Utah Governor's Office of Economic Development Data

Figure 3: Examples of Spending Distributions for Projects Receiving an MPIP Incentive

Legend:
- Motion Picture and Recording Industries and Rental and Leasing Services (red)
- Transportation (black)
- Retail (medium gray)
- Professional and Support Services (light gray)
- Payroll (dark gray)
- Food and Accommodations (lightest gray)

Small In-State Productions ($300K)
- 55%
- 36%
- 6%
- 2%
- 1%

Medium Budget Out-Of-State Productions ($1.3M)
- 23%
- 8%
- 53%
- 6%
- 8%
- 2%

Large Out-Of-State Productions ($4.1M)
- 13%
- 42%
- 32%
- 3%
- 7%
- 3%

Note: In-state projects are those projects where the producer is a Utah resident and/or the production company is based in Utah.
Source: Kem C. Gardner Policy Institute Analysis of Utah Governor's Office of Economic Development Data

penditures for the medium budget production. Both the small and medium budget films spent under 10 percent on food and accommodations, whereas the largest production spent over 40 percent of its in-state budget on food and accommodations. More than half of the in-state small budget production's spending was on motion picture and recording industry services; this category accounted for 23 percent and 13 percent of the medium and large budget project spending, respectively. It is important to note that some personal kit and gear rentals may be included with cast and crew wages, so the actual amount spent on equipment designed solely for the motion picture and recording industry is likely higher for all films.

EDUCATIONAL OPPORTUNITIES

There are many pathways that lead to a career in the film and digital entertainment industries, one of which is postsecondary education. A technical or traditional higher education route provides students with general education, theory, technical skills, networking opportunities, and access to the latest industry-related equipment. As mentioned by advisory group participants, there is no shortage of programs and prospective students in digital-entertainment-related degree programs in Utah. Students from BYU's animation department are highly sought-after job candidates, and the University of Utah's Entertainment Arts & Engineering program for game designers continues to earn high accolades. Utah educational institutions provide a clear stepping stone into film and digital entertainment industry careers inside and outside of Utah.

Utah has eight public colleges and universities and four private universities. Although Utah's Brigham Young University, Salt Lake Community College, and the University of Utah have accredited film schools, nearly every Utah institution has a film program, often coupled closely with animation, game design, or other digital media studies.[11] In addition, at the time of publication, Dixie State University was in the process of proposing a bachelor's degree in Digital Film.[12]

For students hoping to get an earlier start, Utah is home to film and media-centered East Hollywood High School in West Valley City and Spy Hop Productions in Salt Lake City. Most recently, Salt Lake City startups have also begun to bridge the gap between film and media education and real world application and jobs. Avrec Art House in Salt Lake City leads this charge in providing resources, space, and support for recent film graduates to better retain them in both the industry and the state.

The Utah System of Higher Education reported that, in the 2014-2015 academic year, 1,783 students were awarded degrees in visual and performing arts and 1,585 degrees were awarded in computer information system (CIS) fields. While not all degree programs in these two fields are directly related to the digital entertainment industry, a majority of students in-

terested in a digital entertainment career would study under one of these two programs. In the past five years, CIS graduate numbers have steadily increased each year from 1,334 awards in the 2010-2011 academic year to 2,341 degrees awarded in 2014-2015, or a 76 percent increase. The exact number of visual and performing arts degrees granted each year has remained steady over the last five years with a low of 1,699 degrees in 2011-12 to a high of 1,890 degrees in 2014-15.[13]

In March of 2016, the University of Utah's undergraduate Entertainment Arts & Engineering (game design) program was ranked number one in the country by the *Princeton Review*, followed by a number three ranking of its graduate program.[14] In April of 2016, the *Animation Career Review* ranked Brigham Young University's undergraduate animation program sixth in the nation.[15]

For purposes of this study, the Gardner Policy Institute identified each Utah college's and university's degree programs that most closely aligned with the technical and theoretical skills required for jobs in the digital entertainment industry. These programs included digital entertainment programs and theater and stage programs. Table 4 shows 2015-2016 student enrollees and the number of Spring 2016 graduates. In 2015-2016, there were a total of 3,426 enrollees, 628 of whom intended to graduate in the spring. While it is improbable that every student pursuing studies in one of these programs is seeking a career in the digital entertainment industry, or that these programs comprehensively capture every student seeking a career in the industry, the significant number of both programs and students represented suggests substantial opportunities for a growing industry in Utah.

ECONOMIC SECTORS

In the U.S., the North American Industry Classification System (NAICS) assigns two- to six-digit codes to economic sectors. On a quarterly basis, the Utah Department of Workforce Services reports job and wage data organized by NAICS code to the U.S. Bureau of Labor Statistics.[16] Labor statistics data informs policymakers about the economic significance of industries in a state or region. The NAICS, however, is not without problems, especially when utilized to track film and digital entertainment employment. In fact, oftentimes appropriate NAICS job descriptions are too broad, outdated, or nonexistent, making industry sector analysis difficult, if not impossible.

To help identify economic sectors in Utah's film and digital entertainment industry, the Gardner Policy Institute utilized the Utah Film Commission's film, digital entertainment, and content creation workforce survey results from May of 2016. Responses to all three workforce surveys uncovered the complexities of trying to capture the entire industry and perform a comprehensive analysis of its employment and wage data.

Table 4: Digital Entertainment Degrees and Enrollment at Utah Higher Education Institutions

Institution	Degree	Enrollees (2015/2016)	Number of Spring 2015 Graduates
University of Utah	Total Film and Theater and Digital Media Degrees	889	139
	Film and Theater Degrees	768	113
	Digital Entertainment Degrees	121	26
Southern Utah University	Total Film and Theater and Digital Media Degrees	170	43
	Film and Theater Degrees	170	43
	Digital Entertainment Degrees	0	0
USU Eastern	Total Film and Theater and Digital Media Degrees	0	0
	Film and Theater Degrees	0	0
	Digital Entertainment Degrees	0	0
Utah College of Applied Technology	Total Film and Theater and Digital Media Degrees	32	36
	Film and Theater Degrees	1	0
	Digital Entertainment Degrees	31	36
Utah State University	Total Film and Theater and Digital Media Degrees	64	14
	Film and Theater Degrees	52	8
	Digital Entertainment Degrees	12	6
Utah Valley University	Total Film and Theater and Digital Media Degrees	976	116
	Film and Theater Degrees	322	43
	Digital Entertainment Degrees	654	73
Weber State University	Total Film and Theater and Digital Media Degrees	229	39
	Film and Theater Degrees	158	20
	Digital Entertainment Degrees	71	19
Dixie State University	Total Film and Theater and Digital Media Degrees	125	13
	Film and Theater Degrees	125	13
	Digital Entertainment Degrees	0	0
SLCC	Total Film and Theater and Digital Media Degrees	296	28
	Film and Theater Degrees	101	10
	Digital Entertainment Degrees	195	18
BYU	Total Film and Theater and Digital Media Degrees	561	132
	Film and Theater Degrees	181	47
	Digital Entertainment Degrees	380	85
Westminster	Total Film and Theater and Digital Media Degrees	54	7
	Film and Theater Degrees	54	7
	Digital Entertainment Degrees	0	0
Broadview University	Total Film and Theater and Digital Media Degrees	25	25
	Film and Theater Degrees	15	15
	Digital Entertainment Degrees	10	10
Neumont University	Total Film and Theater and Digital Media Degrees	5	5
	Film and Theater Degrees	0	0
	Digital Entertainment Degrees	5	5
The Art Institute of SLC (Being phased out in next 3 years)	Total Film and Theater and Digital Media Degrees	NA	31
	Film and Theater Degrees	NA	8
	Digital Entertainment Degrees	NA	23
Statewide Total	**Total Film and Theater and Digital Media Degrees**	**3,426**	**628**
	Film and Theater Degrees	**1,947**	**327**
	Digital Entertainment Degrees	**1,479**	**301**

NA = No Longer Accepting Enrollments
For instances where <10 students/graduates were reported, the number is estimated to be five.
Source: Kem C. Gardner Policy Institute Primary Data Collection

Film Production and Postproduction

Utah's film industry is typically defined by NAICS supersector 5121, which includes Motion Picture and Video Production (51211), Distribution (51212), Exhibition (51213), and Postproduction & Other Motion Picture Industries (51219). However, based on study findings, defining Utah's film industry using this set of NAICS codes presents problems. For instance, film workforce surveys asked participants, "Which one of the following industry sectors best describes the nature of your film industry-related employment?" Respondents could either select from a populated drop-down list of 11 NAICS codes or select "Other" and list their response. While less than half of film workforce survey respondents (45 percent) selected a film industry-related NAICS drop-down option, 33 percent of respondents selected a non-film-industry-related NAICS option, and 22 percent simply selected "Other" (Table 5). Upon further analysis, the majority of respondents who selected "Other" described a variety of film-related jobs that they performed in the past year (Table 6).

In addition, 22 percent of all film workforce survey respondents described themselves as "1099 Employees"—otherwise known as "independent contractors" or "freelancers." Although 1099 employees are required to select a NAICS industry on their official self-employment paperwork, there is no guarantee that

Table 5: Utah Film Commission Film Workforce Survey – NAICS Sectors

Utah Film Commission Film Workforce Survey - NAICS Sectors	#	%
Motion Picture and Video Production (51211)	147	38.5%
Other**	82	21.5%
Artist, Writer, Performer, Actor, Set Designer, Art Director (71151)	74	19.4%
Motion Picture Postproduction (512191)	24	6.3%
Advertising Related Services (5418)	12	3.1%
Construction (236)	9	2.4%
Formal Wear & Costuming (53222)	9	2.4%
Personal Care, Hair, Makeup (812199)	7	1.8%
Sound Recording (51224)	6	1.6%
Accounting, Tax Preparation, Bookkeeping, and Payroll (5412)	5	1.3%
Special Food Services/Catering (7223)	3	0.8%
Agents for Artists, Athletes, Entertainers, & Other (71141)	2	0.5%
Motion Picture Distribution (51212)	1	0.3%
Office Machinery & Equipment Rental & Leasing (53242)	1	0.3%

Source: Kem C. Gardner Policy Institute analysis of Utah Film Commission data.

Table 6: Utah Film Commission Film Workforce Survey – Unidentified NAICS Sector

Utah Film Commission Film Workforce Survey - Unidentified NAICS Sectors	#	%
Producer/Production Assistant/Line Producer	33	21.3%
Actor/Extra	27	17.4%
Director/Assistant Director	13	8.4%
Art Director/Production Designer/ Set Designer	11	7.1%
Transportation/Driver	10	6.5%
Location/Scout	9	5.8%
Grip/Gaffer/Electrician	9	5.8%
Editor	6	3.9%
Wardrobe/Costuming	6	3.9%
DP (Director of Photography)	4	2.6%
Writer	4	2.6%
Photography (Photo Editor, Photojournalist, etc.)	4	2.6%
Postproduction/Special Effects	4	2.6%
Food Services/Catering	3	1.9%
Animal Trainer/Wrangler	2	1.3%
Construction	1	0.6%
Buyer	1	0.6%
Nonfiction	1	0.6%
Video Assist/DIT	1	0.6%
Composer	1	0.6%
Distribution	1	0.6%
Personal Care (Hair, Makeup)	1	0.6%
Rental/Management	1	0.6%
Props	1	0.6%
Casting	1	0.6%

Source: Kem C. Gardner Policy Institute analysis of Utah Film Commission data.

they will select a film industry-related NAICS code, especially considering that a majority of freelancers often perform several different jobs—with completely different NAICS codes—throughout the year.

Even though using NAICS sectors to estimate direct jobs and wages does not paint a complete picture of Utah's film industry, looking at direct job, wage, and establishment data for Motion Picture Production (NAICS 51211), Distribution (51212), Exhibition (51213), and Postproduction (51219) helps assess general industry trends.

According to U.S. Bureau of Labor Statistics data, from 2011 to 2015, Utah's film industry added around 800 average annual jobs—a 23 percent increase (see Figure 4). When adjusted for inflation, annual average wages increased at more than twice that rate (48 percent), while there was a 39 percent increase in the number of Utah film industry establishments (or businesses) from 2011 to 2015 (see Figure 5 and Figure 6).

Digital Entertainment and Content Creation

Digital entertainment and content creation workforce survey responses highlighted additional challenges with identifying appropriate economic industry sectors. Table 7 shows the breakdown of digital entertainment workforce survey respondents' self-selected economic industry sectors. Of the 53 digital entertainment survey respondents, 32 (60 percent) described their industry as "Computer Programming and Software Development."[17] When looking at Utah's "Computer Programming" (54151) or "Software Development" (51121) industry sectors, there is no way to distinguish employees that program or develop software specifically for entertainment from those who program or develop software for commercial, educational, public sector, or other non-entertainment purposes. In addition, six respondents (11 percent) did not choose from the populated dropdown list of NAICS sectors, but rather described their industry in their own words. The fact that not one of these self-described industry descriptions corresponded directly to a NAICS code illustrated the shortfalls of utilizing the NAICS to accurately track digital entertainment jobs and wages. In addition, one out of 10 respondents noted that they worked as a freelancer, making them more difficult to track using employment data.

Table 7: Utah Film Commission Digital Entertainment Workforce Survey—NAICS Sectors and Unidentified NAICS Sectors

Game Design / Animation Workforce Survey - NAICS Sectors	#	%
Computer Programming (54151) or Software Development (51121)	32	60.4%
Motion Picture Animation / Postproduction (512191)	8	15.1%
Other (Video Game Developer-2, Game Artist/Designer-1, Game, Apps, and Digital Industry Consultant-1, Interactive Producer & Designer-1, Digital Media Producer-1)	6	11.3%
Motion Picture and Video Production (51211)	4	7.5%
Artist, Writer, Actor, Voice Actor (71151)	2	3.8%
Internet Publishing & Broadcasting/Game Sites (51913)	1	1.9%

Source: Kem C. Gardner Policy Institute analysis of Utah Film Commission data.

It was equally challenging trying to identify Utah employees who worked in the new and quickly evolving area of social media content creation. First, a significant number of content creator survey respondents indicated that they worked in jobs outside of digital entertainment while producing their social media content on the side. Second, a majority of respondents (60 percent) indicated that they either worked for established businesses or owned their own business separate from their

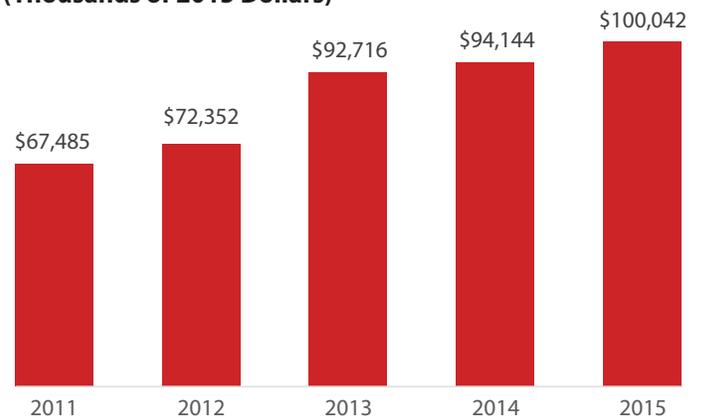**Figure 4: Utah Film Industry Average Annual Employment***
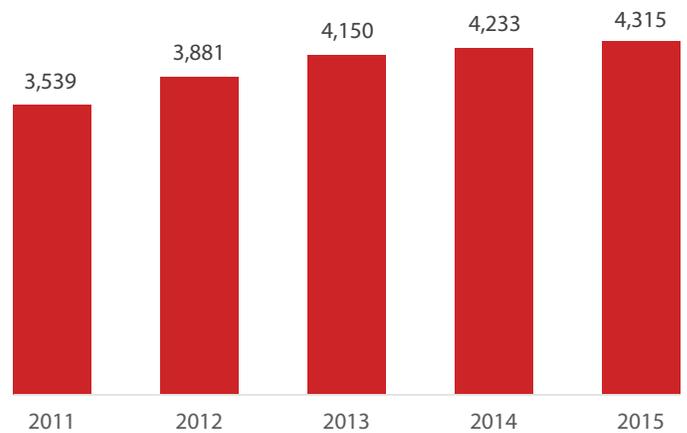
*Includes NAICS 51211, 51212, 51213, and 51219
Note: 2015 BLS data is preliminary
Source: U.S. Bureau of Labor Statistics

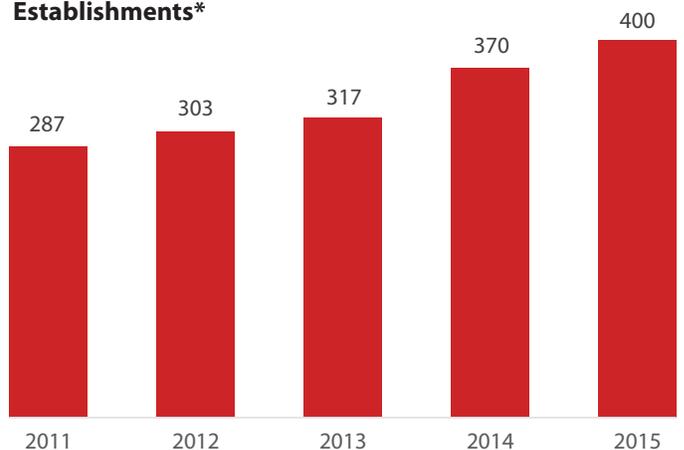**Figure 5: Utah Film Industry Average Annual Wages (Thousands of 2015 Dollars)**

*Includes NAICS 51211, 51212, 51213, and 51219
Note: 2015 BLS data is preliminary
Source: U.S. Bureau of Labor Statistics

Figure 6: Utah Film Industry Average Annual Establishments*

*Includes NAICS 51211, 51212, 51213, and 51219
Note: 2015 BLS data is preliminary
Source: U.S. Bureau of Labor Statistics

content creation endeavors. Third, content creators suggested they either had a broad range of skills, or simply specialized in one particular area. Content genres reported by respondents included action, sports, dance, entertainment/comedy, narrative, music, science/discovery, DIY/tutorials, special effects, and vlogging. Like digital entertainment survey respondents, content creation workforce survey respondents described their unique industry sector in a variety of ways (see Table 8).

Table 8: Utah Film Commission Content Creation Workforce Survey—NAICS Sectors

Content Creation Workforce Survey - NAICS Sectors	#	%
Independent Artists, Writers, Performers (71151)	6	30.0%
Motion Picture Production (51211)	5	25.0%
Advertising Related (5418)	3	15.0%
Internet Publishing & Broadcasting (51913)	2	10.0%
Postproduction (512191)	2	10.0%
Fitness (81299)	1	5.0%
Music/Sound Production (51224)	1	5.0%

Source: Kem C. Gardner Policy Institute analysis of Utah Film Commission data.

FILM LOCATION ACTIVITY

Utah is known for its great geographical diversity, from 11,000 foot peaks in the north, Great Basin salt flats in the west, and a variety of unique geological assets in the south and east. As a result, many film, digital entertainment, and digital media (commercials, advertising) producers choose Utah as the backdrop for their content. While local authorities and private entities permit filming activities, comprehensive film permit data is most readily available from state and federal permitting agencies. Data in Figure 7 represents the locations and concentrations of commercial filming activities in the state of Utah.[18]

Not surprisingly, the populated and easily accessible locations of the Wasatch Front, as well as the famous red rock backdrops of Moab and southern Utah, had the highest film permit issuance. Relatively larger film permit issuance along the Wasatch Front reflects the benefits of access to both urban infrastructure and undeveloped land (national forests to the east and salt flats/basin and range desert to the west). The popularity of filming on location in Moab and southeastern Utah is most likely due to southern Utah's unique and iconic geological assets and its friendly film culture. The popularity of rural filming activity in Utah is unique to the southern counties of the state. For instance, northern rural counties, with an equal or greater amount of public land, experienced significantly less filming activity than Grand, Kane, San Juan, and Washington counties in 2015 and years prior.
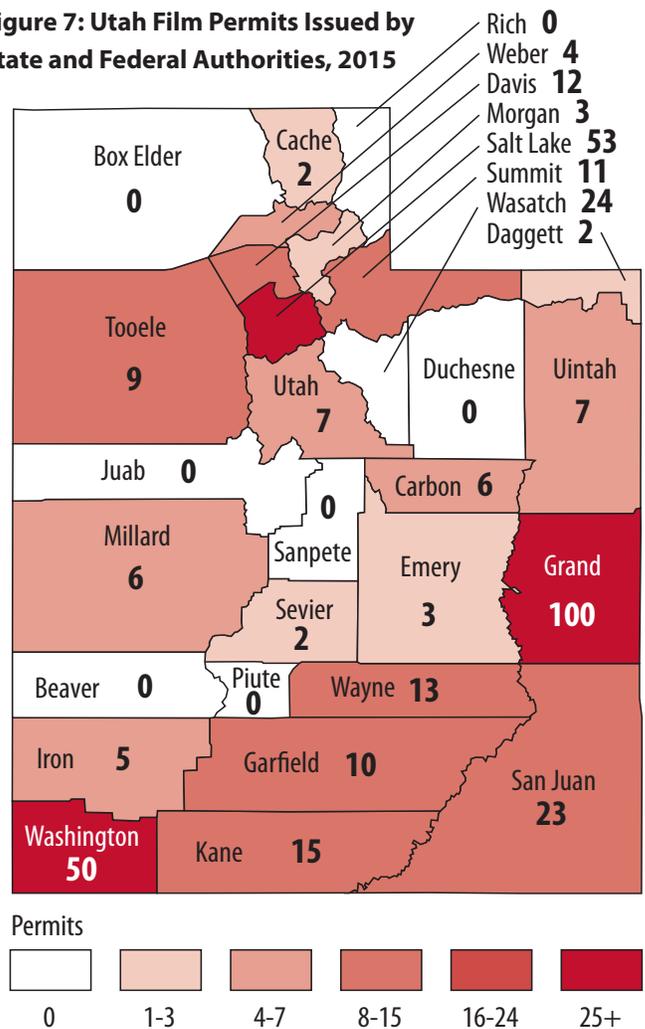
FILM AND DIGIITAL ENTERTAINMENT TODAY

A recurring and resounding theme that surfaced in this study was that the film and digital entertainment industry has significantly changed, even from five to ten years ago, and continues to evolve at a rapid pace as technology advances and audience preferences diversify. Participants described several global industry changes, as follows:

1099 Employment. Due to a combination of technological advances and cost-saving measures employed by traditional entertainment studios (in a rapidly changing and ever fickle industry), there has been a gradual, global shift from traditional "brick and mortar" W-2 employment to 1099 freelance employment in the film and digital entertainment industry. Advances in technology allow more employees to work from home offices or home studios, while businesses save money by decreasing overhead and employee benefit costs.

Accessibility of Technology. Technological advances make

Figure 7: Utah Film Permits Issued by State and Federal Authorities, 2015

Rich 0
Weber 4
Davis 12
Morgan 3
Salt Lake 53
Summit 11
Wasatch 24
Daggett 2

Box Elder 0
Cache 2
Tooele 9
Utah 7
Duchesne 0
Uintah 7
Juab 0
Millard 6
Sanpete 0
Carbon 6
Emery 3
Grand 100
Sevier 2
Beaver 0
Piute 0
Wayne 13
Iron 5
Garfield 10
San Juan 23
Washington 50
Kane 15

Permits
0   1-3   4-7   8-15   16-24   25+

The film permitting agencies included are from the U.S. National Park Service (excluding Bryce Canyon National Park, Rainbow Bridges National Monument, and all National Recreation Areas and Historic Sites/Trails), U.S. Forest Service, The Bureau of Land Management, Utah DNR - State Parks, Utah Division of Forestry, Fire & State Lands, State of Utah School and Institutional Trust Lands Administration, and the Utah Department of Transportation.

film and digital entertainment equipment more affordable and filmmaking more accessible to everyone. While having access to better equipment at a lower cost is generally positive, the result is an entertainment market flooded with low-budget, independent films. The oversupply of films can hinder successful marketing and distribution efforts, especially for low-budget and independent filmmakers.

New Distribution Model. The film and digital entertainment distribution model has drastically changed over the course of the past five to ten years. Whereas it was once common to hire a professional distribution company to handle film marketing and distribution, it is now more common for filmmakers to utilize Vimeo and other digital "do-it-yourself" marketing and distribution resources.

Skills Crossover. Historically, the art of film has required a distinct set of technical skills, from camera equipment operation to lighting and sound. The digital revolution has produced the need for a new set of technological skills, including computer animation, visual effects, digital sound mixing, 3D modeling, digital lighting, and virtual reality. Many of these new skill sets readily "cross-over" to a variety of digital media, including live action and animated films, game design, social media, education, and advertising. TV/Web Series. There has been a significant rise in the popularity of TV/web series produced by companies like Amazon, HBO, and Netflix. This trend marks a shift from traditional, Hollywood studio-produced TV shows to nontraditional, non-Hollywood, multi-season, digital series that are readily available via internet download.

INDUSTRY EXPERT PERSPECTIVES

FILM PRODUCTION AND POSTPRODUCTION

Between October 2015 and June 2016, the Gardner Policy Institute performed extensive data analysis, facilitated three film-specific technical advisory committee meetings with 27 experts in film and postproduction (selected by the Utah Film Commission), and conducted three one-on-one interviews with both in-state and out-of-state filmmakers to gauge the strengths and challenges facing the Utah film industry.[19]

Strengths

Technical advisory committee participants and interviewees had no trouble listing Utah's film industry's competitive advantages:

Cost of Living. Group participants repeatedly emphasized that Utah's relatively low cost of living was a huge advantage. Table 9 compares the cost of essential life commodities in the western region cities of Los Angeles (CA), Vancouver (BC), Austin (TX), Atlanta (GA), Albuquerque (NM), and Salt Lake City (UT). In comparison to the five selected cities, Salt Lake City had—as of May 2016—the lowest or second lowest average cost of rent, utilities, groceries, dining out, movie tickets, theater tickets, and gym memberships. Known for its generous film tax incentive, Atlanta's cost of living was approximately 15 to 20 percent higher than Salt Lake City's. Likewise, Los Angeles's average prices were significantly higher than Salt Lake City's. Labor, film permits, transportation, and parking were also more expensive in Los Angeles than in Salt Lake City. As a right-to-work state, Utah labor and film crew costs are much lower than in labor union states, such as California.[20] Thus, because more can be accomplished with the same amount of money in Utah than in states with more attractive film incentives, Utah's total production costs are perceived to offset its incentive. The low cost of film permits and salaries in Utah are especially advantageous to filmmakers, as are discounts from "film-friendly" Utah vendors (e.g. hotels and car rentals).

Education. Participants considered Utah's educational opportunities a competitive advantage. Not only do Utah educational establishments offer a variety of strong film and digital education programs for high school age students, but they also offer some of the top ranking higher education programs in the nation. Aside from recognized, cutting-edge high school and college programs, participants perceived Utah as having a strong pool of youth with ever-increasing digital entertainment interest, talent, and technological skills.

Film Culture. Hosting the annual Sundance Film Festival in Park City, Utah, was listed as an advantage because it draws national and international filmmakers and film audiences to Utah every year. Utah's film community was described as friendly and "proactive." One participant believed that the Salt Lake Film Society nurtures local filmmakers. Another participant felt Utah has a particularly strong documentary film culture, which is led by influential local "mogul" Geralyn Dreyfous.

Film Incentive. Although Utah's film incentive is not the largest in the nation, nor the smallest, the fact that Utah has a film incentive program was repeatedly listed as an advantage, particularly in regards to low-budget (under $1 million) films. One local filmmaker, who has utilized Utah's film incentive in the past, said that Utah's film tax incentive process went smoothly when he used it; he had no complaints.

Geography. Every technical advisory group mentioned Utah's geography as an asset. Participants believed Utah's diverse geographic regions (i.e. mountains, forest, red rock, salt flats, and canyons) are a great advantage, especially the variety of landscapes within hours of Salt Lake City. There are also many small, historic, pioneer towns across Utah that might serve as unique backdrops or film settings.

You can film in the mountains, you can be at the [Park City] Film Studio, you can be in the desert, and you can go out west from Salt Lake and be on the salt flats. [Utah filmmaker]

Table 9: Cost of Living Profiles for Popular Film and Digital Entertainment Cities, May 2016

	L.A.	Vancouver, BC	Austin	Atlanta	Albuquerque	Salt Lake
Rent (High) 900 sq feet	$2,441	$1,898	$1,931	$1,558	$1,561	$1,389
Rent (Low) 900 sq feet	$1,764	$1,473	$1,343	$1,193	$888	$1,028
Utilies for two (1 month)	$165	$72	$184	$187	$195	$130
Gasoline (Regular/10 gallons)	$29	$37	$21	$22	$21	$23
Groceries	$46	$50	$43	$44	$38	$43
Dining Out (Lunch)	$14	$12	$14	$13	$10	$11
Movie tickets (2)	$26	$21	$22	$22	$21	$18
Theater tickets (2 - best seats)	$182	$109	$121	$86	$118	$89
Gym membership (1 month)	$47	$41	$59	$41	$42	$27

Source: Expatistan: Cost of Living Index (see https://www.expatistan.com/cost-of-living/)

Infrastructure. Utah's new Park City Film Studio was mentioned in several meetings as an advantage for filming movies and series in Utah, especially considering it has, to paraphrase one committee member, "a UVS1 Smart Stage from Universal Studios…super computers and…technology that advances prevision and rendering and algorithms that have significant impact on lighting." The recent installation of Google Fiber in Salt Lake County and Utah County was also listed as a technological advantage if, for example, Utah leaders pursued developing and supporting virtual reality technology. Participants listed additional facilities like Salt Lake Community College's virtual reality classrooms and the Avrec Art House as existing physical spaces that could be utilized to generate film and digital entertainment projects. They also named a number of professional and qualified postproduction facilities in Utah, including BluFire Studios, Cosmic Pictures, and Metcom Studios. It was agreed that a sufficient amount of film equipment and gear is available along the Wasatch Front as well.

Location. Study participants frequently touted Utah's location and physical proximity to Los Angeles as a competitive advantage. Flights between Salt Lake City and Los Angeles are quick (under two hours), accessible, and relatively inexpensive, which saves on the cost of travel between the two cities. In addition, participants noted that the convenience of road travel between the two cities (along I-15) makes driving film equipment or crew a reasonable option as well. However, while convenience and cost are particularly true of travel between Los Angeles and Utah towns located along the I-15 corridor, this is not necessarily true of travel between Los Angeles and rural eastern Utah towns (e.g. Moab), which can be more time-consuming and costly to access.

Quality of Life Assets. An overwhelming number of participants praised Utah's high quality of life as something that could attract future films and productions. For instance, in 2014, the U.S. Census Bureau estimated Los Angeles's mean travel time to work to be 29.6 minutes and Salt Lake City's to be 19.6 min-

utes.[21] A ten minute difference in average one-way commute time translates into approximately 100 extra hours of commuting each year for full time employees. Air quality is another quality of life consideration. Although Salt Lake City struggles with short-term particulate pollution during the winter months, the American Lung Association ranked Los Angeles as the number one most polluted U.S. city for ozone, the fifth most polluted city for year-round particulate matter, and the fifth most polluted city for short-term particulate matter (Salt Lake City ranked seventh in short-term particulate matter—the only area where Salt Lake ranked in the top ten).[22] Winter air pollution is specific to the cities along Utah's Wasatch Front and does not affect other popular Utah film cities like Moab, Park City, or St. George. Other reasons participants listed for choosing to live and work in Utah included Utah's family-friendly atmosphere, low work-related stress (compared to L.A.), nice people, and access to outdoor recreational opportunities. One local filmmaker summed it up as follows:

Utah is a really easy place. There's no traffic. You're dealing with mostly good weather. So it's an advantage. You're not dealing with a lot of crowds and people who are going to make things difficult.

Workforce. Study participants agreed that Utah's film crews, described by one participant as "three good crews deep," are friendly, qualified, capable, and multi-talented. Another advantage mentioned was that Utah is a non-union, right-to-work state, which saves on salaries and, thus, total production costs. There was also a general consensus that Utah has a solid pool of talented writers, actors, and other

I've heard from a lot of people that come film here that Utah crews are really, really well-received. Those that don't have the budget to fly in a whole LA crew are really pleasantly surprised. [Utah filmmaker]

You have great crew. The quality of crew here is fantastic. You actually have a good acting base, too. [Utah filmmaker]

Challenges

Study participants and interviewees noted several disadvantages of film and postproduction work in Utah, as well as current challenges:

Content. Group participants acknowledged that there seems to be a lack of original Utah-generated content. A few participants in the film and postproduction groups expressed that Utah-generated content is commonly produced for a Utah-specific audience (i.e. Mormon genre, family genre). Lively discussions ensued about the subjectivity of what makes a "quality" film versus what makes a "successful" film (noting that they can be two completely different things). Personal opinions aside, both groups agreed that sufficient creative talent exists in Utah. However, the perceived lack of original content was regarded as a barrier to growing both film and postproduction jobs in Utah. In fact, postproduction group participants felt that more locally-generated, original content would better support their sector by helping to alleviate the competition that currently exists between local studios. In other words, the postproduction community, which is currently perceived as "siloed," might form a stronger community and friendlier collaboration if jobs were not as scarce.

Expanding Utah's Motion Picture Incentive Program (MPIP). Although Utah's MPIP seems to work well for feature-length films, participants agreed that Utah's current film incentive model is not a great fit for series or documentary films. The current MPIP is designed for one-time, relatively short-lived feature productions, whereas series productions can be ongoing for months or years. Likewise, documentaries can take years to produce, which also makes upfront film budgeting a challenge (and film budgets must be submitted to qualify for the MPIP). The postproduction group also wanted to see an incentive specifically created to support Utah's postproduction industry due to current national and global incentive competition. For instance, New Mexico offers a "Stand-Alone Post Production" incentive, which offers a 25 percent refundable tax credit to qualifying postproduction work conducted in-state, regardless of whether or not the film was made in New Mexico.[23]

Film Permits. A couple of filmmakers noted that applying for film permits can be a "nightmare" depending on the location. One local filmmaker commented that Park City is not a "friendly" place to film due to the relatively high cost of film permits and the "NIMBY" (Not in My Back Yard) attitude of local residents.

Financing. Time and time again, meeting participants brought up the lack of financing options, particularly for filmmakers interested in producing low-budget or independent films. The groups acknowledged that investing in a film is a risky business; it is different than investing in real estate or venture capital, and is not fully understood by Utah investment agencies and banks. One filmmaker commented that financially supporting a documentary or independent film is a "passion" and is not about making a return on investment. However, filmmakers agreed that up-front capital is crucial to initiate any film production. One participant noted that investors can get territorial and may try to make creative decisions when their money is involved in a project, which can hamper the process. Another participant talked about starting a film funding cooperative. There was even a discussion about the possibility of temporarily hiring a professional from the Los Angeles entertainment industry to educate Utah banks and investors about film investment.

Organization and Collaboration. The film and postproduction groups felt that industry-specific community and organization is lacking because there is a general resistance among peers to share information. The postproduction group, in particular, felt there were not enough resources to promote industry-wide organization and a general lack of knowledge about fellow Utahns engaged similar work. To address this issue, one participant suggested the creation of a "master list" that contained qualified postproduction company and freelancer contact information, and which could be shared among the industry workforce.

Perception. Committee members believed that Los Angeles filmmakers perceive Utah film crews as deficient in number and/or ability, or Utah's postproduction professionals lack the technological infrastructure or skill set necessary to work on their films. They believed this "misperception" prevents out-of-state producers from utilizing Utah's workforce. Some participants expressed that Utah is "out of the L.A. loop" and questioned the possibility of the Film Commission hiring a professional film representative who could act as a liaison between the Sal Lake City and L.A. film communities.

Workforce. Participants brought up several issues related to Utah's film and postproduction workforce, notably the perception that Utah's film and postproduction industries are unstable, if not contracting. Participants commented about the film industry's aging workforce and the lack of available crew in the "skilled crafts" (e.g. grip, gaffer, etc.).[24] Postproduction industry experts raised similar concerns about entry-level employees lacking real-world skills. It was agreed among postproduction and visual effects participants that spending a few years working in Los Angeles to learn the trade before moving back to Utah for either freelance or smaller studio employment was not only beneficial, but usually necessary. Finally, the lack of health insurance and benefits was another disadvantage mentioned in regard to working freelance in film and postproduction today.

MOAB FILM INDUSTRY

In addition to the technical advisory groups held along the Wasatch Front, the Gardner Policy Institute convened a group of Moab film industry experts to discuss rural film industry-related issues. The Moab to Monument Valley Film Commission (located in Moab) identified focus group participants based on their film-related expertise, which included lighting design, cinematography, wardrobe, film production, production assisting, film editing, and film permitting. Please note that Moab was chosen because of its long and diverse film history and not because it is necessarily representative of rural Utah.

Historical Context

Established in 1949, the Moab to Monument Valley Film Commission is the longest running film commission in the world. Popular features filmed in the Moab area include *Thelma & Louise* (1990), *City Slickers II* (1993), *Mission Impossible II* (1999), *127 Hours* (2010), and *The Lone Ranger* (2013). Several series' episodes and commercials have also been filmed in Moab over the years.

Focus group participants said that Moab's film industry was "rocking" in the 1990s and could support full-time gaffers and film crews, but they felt like the local industry had "run its course" by the late 1990s, and admitted that even though it is still "steady" and "plugging along," full-time film positions no longer exist in the Moab area. When Moab's film industry "evaporated" in the late 1990s, so did its film-related equipment, meaning Moab no longer had locally-available film services (grip, lighting, generators). The general consensus of focus group participants was that Moab's film industry has significantly changed due to digital media. For instance, participants commented that a company can use Moab scenery "plates" (i.e. stock footage) from 20 years ago to create new ads, essentially eliminating the need to visit Moab to film the red rocks. Moab locals believed —and hoped—there would be a renewed interest in red rocks once JJ Abrams' HBO series *Westworld* (filmed partially in Moab) was released in October of 2016.

Strengths

Similar to the Wasatch Front film advisory committees, the Moab technical advisory committee listed their strengths as talented local film crews, lower labor costs, access to film industry moguls like Geralyn Dreyfous, unique and diverse geography, "cachet of Moab," and less expensive film permitting. Additional strengths included:

Environmental Impacts. One group member commented that film production not only generates economic benefits, but also creates fewer environmental impacts than tourism because filmmakers are required to "leave no trace" upon production completion.

Extreme Sports. Due to Moab's unique landscape and the growing popularity of extreme sports (aka "action sports" or "adventurous sports"), participants said there is a market for films showcasing extreme athletes. Extreme sports popular in and around the Moab area include BASE jumping, mountain biking, rock climbing, skydiving, and white water rafting. In March of 2016, Moab hosted the renowned Banff Mountain Film Festival, which showcased outdoor action sports films.[25]

Challenges

The Moab group discussed global changes in digital media, the general instability of the industry in Moab ("Working in the Moab film industry is a total crapshoot"), and the lack of collaboration and networking among film industry workers ("There is so little work that people stay in their own holes"). One participant noted that advances in digital technology have made it possible to showcase Moab's redrock geology without the need to physically film in Moab (i.e. green screen, computer generation, etc.). Group participants complained that often outside productions will bring their own crews with them, creating another roadblock to keeping Moab's film workforce busy. They also believed that films and jobs are lost to New Mexico because of New Mexico's more attractive film incentives. [26]

Aging Industry. Similar to film industry groups along the Wasatch Front, Moab group participants described the film industry as an aging industry. As one participant commented, "If you are looking around the table, it is an aging table." Another participant wanted to see film and digital entertainment educational opportunities offered in Moab in order to train a new generation in the digital arts: "We need to develop young people because the film business is changing dramatically."

Film Studio. Moab does not have an indoor film studio with a soundstage or green screen. Although participants did not believe an indoor studio was essential, they felt it would definitely add benefit.

Lack of Local Support. Group members believed that Moab's film industry lacked support from conservative local government officials because the film industry is perceived as liberal.

Small Town Challenges. Although Moab's surrounding landscape is attractive to filmmakers, its small town aspects and geographical remoteness create obstacles, extra costs, and inconveniences. For instance, Moab's airport's runway is not long enough to support commercial airline flights, making access to Moab more difficult and costly. In addition, Moab does not have big box retailers like Costco (the closest Costco is two hours away in Grand Junction, Colorado), film regulations can be strict around the parks (e.g. drone filming), and Moab's hotels, which cater to its tourism economy, are not as "friendly" or willing to offer discounts to film production crews.

Website Issues. There was a lengthy discussion about the Moab to Monument Film Commission website. The website was described by participants as outdated, confusing, and in need of redesigning as a stand-alone site. Group members also discussed the Utah Film Commission's website and described desirable updates that might benefit Moab's film industry (see "Opportunities," below).

Opportunities

In general, group participants felt the Moab film industry must reinvent itself, band together, and seek local and state support. The Moab to Monument Film Commission also needs to work on referrals because, as one participant noted, "referrals are the main ways of getting films done here." Other ideas included creating a Moab film festival (described as a "mini-Sundance") or building a soundstage/full production house similar to the Park City Film Studio. Moving forward, participants wanted to see strengthened connections and enhanced collaboration between the Moab to Monument Valley Film Commission and the Utah Film Commission ("I think there has to be more connectedness with what's going on in Salt Lake City"). One participant even suggested the creation of a local Moab film incentive, which would be supplemental to the state's MPIP.[27] One participant wanted to see the Utah Film Commission restructure its website to remove inherent biases, such as listing film industry companies in alphabetical order, improving the website's search engine to allow for search by area/region, and adding a list of film-related specializations and experts by area/region. In addition to revamping the Moab to Monument Valley Film Commission website, participants suggested linking it to the Utah Film Commission's website. The group also mentioned exploring film and digital entertainment educational and training programs in Moab.[28]

> *I understand that because of the location [Moab] and the age of the film community, the emphasis has always been on production. But I don't necessarily think that's a good thing long term. I think we have to broaden how Utah thinks about film and works in film and part of that is education and what technological services go into film. [Moab film industry participant]*

ANIMATION/VFX AND GAME DESIGN

Due to the technological nature of animation/VFX (visual effects) and game design, the Gardner Policy Institute and the Utah Film Commission chose to group these areas of digital entertainment together for purposes of this study. With the Utah Film Commission's recommendations, Gardner Policy Institute staff convened and spoke with experts in all areas of animation/VFX and game design. Additionally, the Utah Film Commission distributed digital entertainment workforce surveys to 105 Utahns currently working in these fields. Over the course of this study, the Gardner Policy Institute held two animation/VFX and game design meetings (one in Salt Lake City and one in Provo) with experts in diverse areas.

Group participants described animation/VFX and game design industries as "half art, half technology." One participant estimated that half of Utah game development companies are creatives while the other half are programmers. Similar to game design, animators/VFX specialists create art in a highly technological medium and there are many technical skill sets that crossover between the animation/VFX and game design fields. For instance, an animator might design characters for both a feature length film and a video game. In fact, one out of four digital entertainment workforce survey respondents (n=53) indicated that they worked on both animation/VFX and game development projects during the past year. Table 10 lists the variety of jobs Utah's digital entertainment industry workforce survey respondents performed over the past year.

Strengths

Participants in the animation/VFX and game design groups echoed local advantages discussed in film and postproduction groups, such as:

Cost of Living. As one local animator/game designer commented when referring to Utah's relative low cost of living: "People don't want to go to Washington or L.A. where they can make more money because more money doesn't go as far as it does in Utah."

Education and Talent. Utah is home the University of Utah's highly ranked Entertainment Arts & Engineering program and Brigham Young University's well-respected animation program. In fact, graduates of BYU's animation program often land jobs with the biggest names in the industry, including Disney, Dreamworks, and Pixar. Utah Valley University also has a reputation for a strong digital media school with programs in animation, cinema, digital audio, and game design. Participants agreed that there is no lack of technical or artistic talent in Utah and several commented about the increasing technological skills of students entering Utah's colleges and universities. They believed there are now more high school course options, cutting-edge programs like Spy Hop Productions, open source/free online development tools (e.g. Steam), and coding places for kids (e.g. Zaniac). Many viewed game design as attractive educational field to kids and teens because of its "fun factor," and noted that it teaches kids computer programming skills, which might be beneficial later in life. Participants also agreed that there is currently no lack of interest in animation and game design programs in Utah. A few commented that the game design industry, in particular, was definitely growing in Utah, "just not *super* fast."

Table 10: Self-Reported Jobs by Digital Entertainment Workforce Survey Respondents

Animation/VFX Project Jobs	Game Design Project Jobs
3D Modeling	3D Modeling
Animation	Animation
Animation/VFX	Audio Design
Concept Art	Concept Art
Director	FX
FX	Game Designer
Lighting/Compositing	Game Producer
Match Moving	Game Programmer
Matte Painting	Level Designing
Producer	Live Support
Rigging	Matte Painting
Shading/Texturing	Music Composition
Storyboards	QA/Game Testing
Tools Development	Rigging
Voice Over	Shading/Texturing
Writer	Storyboards
	Studio Management
	Tools Development
	UI/UX
	VFX Producer of Environments
	Writer

Source: Kem C. Gardner Policy Institute analysis of Utah Film Commission data.

Location. Group participants had only good things to say about living and working in Utah: "Salt Lake City is getting better and better. It's becoming a much more exciting city to live in than it used to be." [Local animator/game designer] "It feels like people in the industry are recognizing that you don't have to be in L.A." [Local animator/game designer]

Challenges

In general, animation/VFX and game design participants commented that there are currently more game design job opportunities in Utah than there are animation jobs.[29] However, Utah still does not have the "critical mass" of game design businesses needed to attract out-of-state companies or to maintain a sustainable industry. This is likely due to the instability of the industry as a whole (i.e. fickle customers) or the fact that it takes substantial resources to launch a new game design startup.

Employment. It is difficult to find Utah internships and jobs in animation and game design. One participant admitted, "I kind of assume that there's a lot more people trying to get jobs than the jobs that are available." In fact, most BYU animation graduates leave Utah for internships and employment in other states. As one animation professor noted, "Right now there's

just a ton of opportunities, but almost none of that in Utah." Finally, it's impossible to track digital entertainment jobs—game design jobs in particular—due to limited sector information (NAICS) and the growing number of freelancers.

Globalization. Live action visual effects, animation films, and digital games are time-consuming and extremely expensive to create. Low labor costs and competitive incentives overseas attract many jobs where ten foreign employees can be hired for the cost of one American employee.[30] Technology also assists in the globalization of these jobs. As one participant pointed out, "You'd think it would be easier because we're only an hour from L.A., but in a way, we're an hour from L.A., and if you're going to do a video conference, you might as well do it from China."

Incentives. According to stakeholders, there is not an adequate game design incentive in Utah to compete nationally or globally. While Utah has a digital media company incentive, any digital media company that utilizes the incentive qualifies for the 20 percent tax credit only if the total amount requested does not exceed the company's new state revenue.[31] Because of the incentive's stringent criteria, no digital media company has applied for it since its inception in 2011.

Lack of Collaboration. In regards to the game design industry—and similar to perceptions expressed in the postproduction group—game design participants mentioned a lack of sharing information/collaboration, a lack of "connections," and that networking is "difficult."

SOCIAL MEDIA CONTENT CREATION

Social media content creation is a relatively new area of digital entertainment. Content creation includes anything conversational, educational, funny/clever, promotional, or thoughtful/inspirational that is available to view online. Creators are referred to as many things, including "content creators," "digital influencers," "social media influencers," or simply "influencers." Creators, as they will be referred to in this report, entered the digital entertainment marketplace with the launch of the YouTube platform in 2005. Creators described that what once began as a "free and fun" platform that allowed anyone to upload their videos (YouTube) has turned into a business platform. According to one participant, the shift came around 2012 when creators began receiving sponsorships and placing brands in their videos as a way to generate income:

> Things that used to trend from 2005 to 2009 weren't all sponsored by Red Bull, Go Pro, and Coke. Things that trended from 2012 on… there's a formula, there's a company behind it, they're funded, they're not accidents.

Marketing agencies and Hollywood studios are well aware of the success and relatively high viewership of social media platforms. Not only are the number of social media viewers easier to track digitally (i.e. by the number of views, "likes," and

subscribers), but there is also a general acknowledgement of the cultural shift away from traditional entertainment programming (cable and TV) to digital entertainment platforms (Amazon, Netflix, and YouTube). This shift highlights the current significance of social media in the digital entertainment world.

Also, the social media industry is unique due to its "low barrier to entry." This means that anyone who lives anywhere—even with limited resources—can become a successful creator. As this digital entertainment industry segment grows and gains more power, it creates additional business opportunities in the community. Social media platforms, including Facebook, Instagram, Periscope, Pinterest, Snapchat, Twitter, Vimeo, Vine, and YouTube allow for the proliferation of niche content that has the potential to attract highly diverse audiences. "There's something for everyone [on YouTube]," pointed out one participant.

Interestingly, Utah has a healthy number of creators, many of whom are well-known on the YouTube platform and the majority of which live in Utah County. Utah creators that have made a name for themselves in the social media world include Devin Graham (devinsupertramp), the Roberts brothers (Bored Shorts TV), the McKnight family (Cute Girl Hairstyles), Scott Winn (ScottDW), and Casen Sperry (Dark Pixel). With the help of the Utah Film Commission, we were able to gather a Utah County content creation group consisting of successful creators or their representatives, as well as a few social media marketing strategists.

Strengths

Collaboration. In contrast to all of the other technical advisory groups, the Utah content creation group expressed a strong sense of cohesiveness and viewed their interconnectedness as one of their biggest strengths.[32] One participant admitted that this strong sense of collaboration and cohesiveness does not exist outside of Utah (e.g. California). Utah is home to UTuber Nation, a creator group run by Anthony Ambriz in Utah County, which helps to connect Utah creators through organized, monthly meetups. According to participants, UTuber Nation membership has been growing on a monthly basis. Ambriz mentioned plans to expand UTuber events to other parts of Utah in the near future and had even recently considered the idea of creating group chapters.

Quality of Life. As previous groups mentioned, Utah is geographically scenic and has a relatively low cost of living. To illustrate the visual impact of Utah's dramatic scenery, a Utah County creator said that one of his fans believed the Wasatch Mountains in the background of his video was a projection of mountains on a green screen. Another group participant commented on the comfortable size of Utah County: "It is not too small that you don't get a variety, but it's not too big that you get lost."

Job Creation. The success of social media content has led to the development of new jobs. Due to the success of YouTube celebrities, social media analytics companies have sprung up in Utah with in-house "influence marketing managers." As Utah's creators grow more successful and their desire to produce more quality content intensifies, their need for additional staff and crew increases.

Challenges

Education. It was mentioned in our group that Utah universities and colleges focus too heavily on traditional filmmaking techniques and need to teach more relevant skills, including digital content generation for social media platforms. In addition, there was a perception of entitlement among new film graduates who do not want to work their way up in the industry, but would rather go directly into film production. This was brought up because it is often difficult for creators to find entry-level employees to assist them with production.

Infrastructure. A few participants commented about the lack of a studio space available for content creation in Utah County. When Avrec Art House was mentioned as a possible usable space in Salt Lake County, creators perceived the Avrec Art House as a space that caters to traditional filmmaking and does not look fondly upon supporting social media content production.

Job Tracking. Similar to the animation/VFX and game design groups, tracking jobs in content creation is nearly impossible due to limited sector information (NAICS), the fact that content creation is a side job for many, and the growing number of freelancers. One participant even referred to his role as a content producer as a "no man's land," stating that it's such a new area that there's no official way to classify it.

Lack of Integration. Along the lines of a deficient workforce able to handle the growing demand, group participants felt like a lack of integration exists with the more traditional film community. Some viewed this as generational—a discordance between the aging, traditional film workforce and the younger, up-and-coming generation of creators and digital producers. One creator described it as, "I think we are in different worlds, even though our worlds are very similar." Group members expressed hope that the worlds of "film" and "content creation" would mesh more easily in the future in order to build a cohesive and sustainable digital entertainment industry.

Permits. In the social media arena, things move quickly, which means that it is important to produce new content on a short schedule. Group members complained about delays in securing film permits, which can hamper creators' ability to produce new content in a timely and competitive manner.

Role of Utah Film Commission. Participants seemed uncertain of the Utah Film Commission's role and/or involvement in their industry, signaling a need for education and better communication between the two groups.

Workforce. A resounding complaint in the content creation group was that Utah does not have enough production crew and is lacking in the areas of postproduction (e.g. special effects and coloring), as well as gaffers and grips. As one participant pointed out, "I look at the future of the industry and there are going to be more content creators and they're going to need more resources to help them. And I don't think Utah has them." Another participant agreed that, "There's not enough skilled workers to handle the demand that's coming." Not only was the consensus that there is a growing demand for skilled production workforce, but also that there is an urgency for it: "Support should come quick because the rate of influencers that are being added to this community just makes us more of a powerhouse, just like L.A."

FILM EXHIBITION

According to interviews with experts in Utah's film exhibition industry, the film exhibition ("movie theater") business model has not changed since the first movie theater opened in the U.S. in 1905. What has changed, however, are a movie theater's "competing forces." Examples of competing forces, or threats, to the film exhibition industry include the television, sales of which began in the 1940s, followed by the advent of video rental businesses in the late 1970s, and currently, the conveniences of instant digital video download. One interviewee felt that soon moviegoers would be able to download a movie to their digital device the same day as the film's theatrical premiere. Interviewees felt the basic exhibition model would not change drastically in the near future, but would continue to respond to competing forces by adding accoutrements such as larger, multi-screen "cineplexes," which offer audiences a wider variety of films in one location, as well as luxury seating and full in-theater dining aimed at simulating the comforts of home.

As to why Utah's film exhibition industry is important, interviewees said that it provides the community with entertainment opportunities, particularly the opportunity to introduce people to new ideas, stories, cultures, and concepts. One interviewee pointed out that films not only entertain, but they educate, inspire, and challenge people:

[Independent film exhibition] is the new town hall. It is the only collective place that people can go to share ideas and you'll see the diversity that you see because the content—and how fast the content slides through compared to other art organizations—allow for that diversity.

On the commercial side, film and moving-image mediums are pervasive in our culture. Movies are "communal experiences" that humans yearn for and, as one interviewee noted, "People don't always want to sit on the couch, which helps sustain the [exhibition] industry."

In Utah, nonprofit cinemas like the Salt Lake Film Society and the Utah Film Center attract over hundreds of thousands of moviegoers each year. In fact, the Salt Lake Film Society's nonprofit sales were over $1 million in 2015, which does not account for additional moviegoer spending at local restaurants and shops. As one interviewee explained:

The diversity is just palpable in our facilities and that keeps our city alive, keeps feeding the foot traffic, keeps feeding the restaurants and the area shops and the other small businesses that surround our facilities.

According to the U.S. Bureau of Labor Statistics, Utah film exhibition jobs have steadily increased over the past five years (Figure 8), while wages—after adjusting for inflation—have fluctuated (Figure 9). From the end of the recession in 2011 to 2015, film exhibition jobs and wages increased 11 and five percent, respectively. Utah State Tax Commission data on film exhibition taxable sales in Utah from 2011 to 2015 shows an upward trend over the past five years. In fact, when adjusted for inflation, taxable sales in film exhibition increased 17 percent from $165.0 million in 2011 to $193.2 million in 2015. It is important to note, however, that film exhibition numbers are influenced by general population growth. That said, during the same time frame (2011 to 2015), Utah's population increased seven percent, making film exhibition sales growth 10 percent above general population growth.[33] In addition to economic factors and general population growth, film exhibition industry growth is also influenced by the popularity and availability of films in theaters across the state.

Strengths

The film exhibition industry was well-described by one participant as "a steady workhorse"—a business that is open 365 days a year, generates revenue, and anchors community development. Utah's competitive advantages in regards to film exhibition are the very clear purposes of its art houses (Salt Lake Film Society and Utah Film Center) and, in the commercial realm, the fact that movie going is a popular leisure pastime of Utahns. According to one interviewee, "no other state has a film exhibition industry like Utah."

Utah has the Salt Lake Film Society, which curates independent and culturally diverse films and hosts public events, and the Utah Film Center, which operates much like a free, year-round film festival. In addition to the Salt Lake Film Society and the Utah Film Center, Utah is fortunate to host the Sundance Film Festival. The Sundance Film Festival attracts top-notch independent film productions and nonresident festival attendees that generate economic contributions in the state. On the commercial exhibition side, Utah-based Larry Miller Group owns and operates at least 16 Megaplex Theatres in at least eight cit-

ies in Utah. Overall, interviewees expressed the belief that Utah has a healthy local film culture that includes filmmaking and film-viewing, but also video game design and other forms of digital entertainment creation.

Challenges

A perception exists that Utah does not provide as broad a range of films as other states due to Utah audiences' interests. One interviewee felt that Utah's film exhibition industry does not get a lot of support from the local film industry, including local production companies or filmmakers:

I'd like to see more collaboration, not only with the film community, but with the moving image community, digital media, TV, film, animation, 3D, and game design. All that kind of stuff is so intertwined that I'd like to see more engagement with each other's activities and not have it be what seems to be so siloed.

Another challenge facing Utah's film exhibition industry was the perceived lack of support from the Utah State Legislature. One interviewee summed it up as follows:

Figure 8: Motion Picture Exhibition Average Annual Jobs in Utah
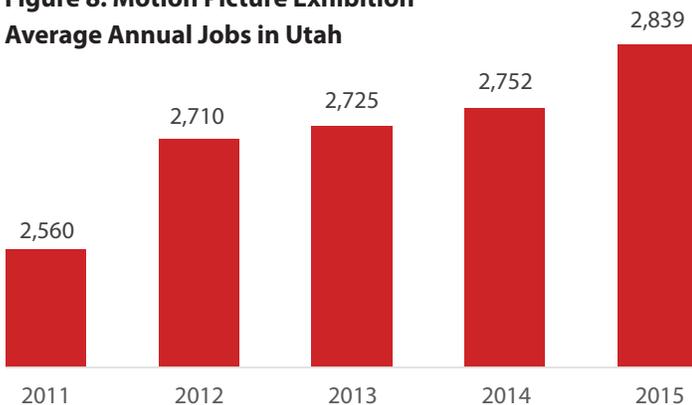
Note: 2015 BLS data is preliminary
Source: U.S. Bureau of Labor Statistics

Figure 9: Motion Picture Exhibition Average Annual Wages in Utah (Thousands of 2015 Dollars)
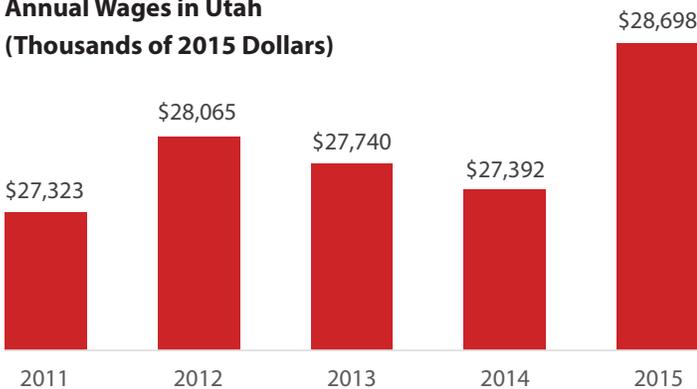
Note: 2015 BLS data is preliminary
Source: U.S. Bureau of Labor Statistics

The first thing [the State Legislature] needs to do is to recognize [the film exhibition industry], to understand it in terms of the economic driver that it is for community development and for arts and culture place-making and impact on the cultural core.

ECONOMIC DEVELOPMENT

At our study's final technical advisory committee meeting, we met with six economic development experts to specifically talk about Utah's digital entertainment industry. This economic development group was intentionally convened towards the end of the study in order to discuss issues raised in previous groups. While Utah's competitive advantages were not an area of focus for this group, the committee instead centered on challenges and future steps in regards to Utah's digital entertainment industry. Participants generally agreed that while Utah has a sufficient pool of educated, talented, and employable individuals in the digital entertainment realm, Utah's industry is instable, siloed, and lacks local job opportunities.

Challenges

The economic development group echoed many of the same challenges discussed in prior groups in regards to Utah's digital entertainment sector, but offered several new insights as well:

Academia vs. Industry. While the group agreed that there are sufficient educational digital entertainment opportunities in Utah, participants perceived a disconnect between the academic and professional sides of the industry, or rather between current curriculum and industry needs. The group wanted to see more collaboration between representatives from the academic side and representatives from the industry side in order to bridge existing gaps and enhance communication.

Critical Mass. Utah's digital entertainment industry is not large enough and the critical mass needed to accommodate local talent or attract out-of-state businesses to the area does not exist. Advisory participants expressed concerns about efforts to grow Utah's base of postproduction, animation/VFX, and game design companies so that Utah graduates remain in the state for employment.

Employment & Internships. Participants said there are a lack of paid, industry-specific internships for college students, as well as an overall lack of jobs in digital entertainment for new graduates. Without knowledge of, or access to, internships and entry-level jobs for students and recent graduates, Utah loses talent to other states or to other economic sectors.

Funding. The group said challenges exist for digital entertainment businesses to access grants and funding that would help develop internships; currently, stringent guidelines make accessing grant money difficult.

Industry Tracking. As mentioned throughout this memo, digital industry tracking is challenging for reasons that include insufficient NAICS codes, diverse workforce talents and roles, and the relatively large number of freelancers.

Lack of Industry Support. Participants felt there is a general lack of industry interest, awareness, and support, especially when compared to Utah's tech industry (i.e. "silicon slopes"). There was a consensus that no one is paying attention to Utah's entertainment industry and that "its story falls on deaf ears."

Siloed Industry. Participants agreed that Utah's digital entertainment industry lacks cohesion. It was noted that the workforce in this industry tends to be introverted by nature and hard to "access" even through professional connections and relationships. The Utah Digital Entertainment Network (UDEN) itself was perceived as a relatively homogenous group consisting predominantly of game designers (estimated at 85 percent). The group pondered on what could be done to unify Utah's diverse and segmented workforce.

Opportunities

Group participants offered the following ideas in regards to opportunities for improvement:

Assess Funding Sources. Assist digital entertainment industry employees and businesses with finding and applying for applicable and appropriate grants. In addition, review existing grants' criteria and consider updating, or help develop new grant opportunities for digital entertainment employees and businesses in order to facilitate job creation. Participants brought up the Governor's Office of Economic Development's TCIP (Technology, Commercialization and Innovation Program) grant, suggesting it should be made more accessible to digital entertainment industries. They also discussed the "stringency" of the Department of Workforce Services' UCAP (Utah Cluster Association Partnership) for digital entertainment educational development, making it highly inaccessible.

Develop Internships. Develop internships, apprenticeships, trainings, and mentorship programs for students in digital entertainment studies via state support and funding. There is a large need for paid higher education internship programs in all digital entertainment areas. Utah students have very few internship options, so many students must work in jobs outside of their career area to pay the bills.[34] Therefore, new graduates in the digital entertainment sector leave school with little or no hands-on, real-world training or mentoring. Meanwhile, digital entertainment businesses prefer hiring employees with real world experience, which creates a "catch-22" scenario.

Enhance Collaboration & Communication. Help foster collaboration and communication between digital entertainment industries in Utah (film, postproduction, animation/VFX, game design, and content creation), and work towards forming one cohesive digital entertainment group.

Improve Industry Reporting. Create more specific and more appropriate job classifications at the state level (although still under the umbrella of the federal NAICS) to enhance digital entertainment job tracking and economic industry contributions. For example, games make more money than films and employ more people, but it's impossible to track game design jobs due to the unavailability of appropriate NAICS employment categories and the growing number of freelancers. Thus, creating a subsector under "Computer Software" such as "Computer Game Software," and encouraging digital entertainment companies to hire W-2 employees are two ways to make job tracking easier.

Offer Training. Educate and assist individuals interested in the digital entertainment industry with startup business development. It was mentioned that it would help if the Utah Film Commission hired or contracted with a strategic business expert to work as an educator, trainer, and/or liaison to digital entertainment industry graduates and startup companies. Game design participants felt like even though it is difficult to attract new game design businesses to Utah, "startups can make a go."

Predict Employment Needs. Recognize and proactively address the need for highly technological jobs in the digital entertainment industry in the future. One participant who works in digital entertainment education said there will be a "2 million job gap" in the "really technical" areas of game design in the coming years.

Rebrand the Industry. There is a "broad cross-spectrum of like crafts" and "transferable skills" in the film and digital entertainment industries today. It is time to reassess and redefine film and digital entertainment, which may include the rebranding of the "Utah Film Commission" to something more appropriate for the digital age. Participants felt it is time to create an awareness campaign, tell a new story, and generate local demand and interest in this new "digital entertainment industry."

> *We have all the pieces here, but we're not telling the story, and so it doesn't appear that we're communicating enough and making enough connections. [Digital Entertainment Educator]*

> *How do we reach the market on the capital and business side? How do we reach the employment side? How do we engage the community as consumers and just blow it [new digital entertainment brand] up? [Digital Entertainment Educator]*

The success of Utah's "Silicon Slopes" story was mentioned by participants as something to strive for and replicate in the rebranding endeavor. They brought up exploring ways that local businesses and programs can assist in telling the new digital entertainment story. Also, they suggested that the name and placement of the Utah Film Commission be revisited. Does

it belong under the umbrella of the Utah Office of Tourism? Should it be the "Utah Digital Entertainment Commission" as a stand-alone agency?

Utilize Community Assets. Over the course of the study, several participants discussed existing Utah infrastructure and assets that could be better utilized in the digital entertainment realm. For instance, Salt Lake Community College's virtual reality studio (South Salt Lake campus) currently serves as a storage room. Why is it not being utilized? How much would it cost to make it operational/functional? Who could use it and benefit from it? Several participants mentioned using the unutilized studio as a virtual reality training center for local businesses, or integrating its use with the Entertainment Arts & Engineering (EAE) graduate program at the University of Utah. According to one participant, Salt Lake Community College leaders are looking at better utilization of this space. It also helps that Salt Lake City is one of Google's first few chosen cities for Google Fiber infrastructure. As one participant pointed out, "The nice thing about Google being here is it just shows it's a competitive marketplace. You're seeing a very competitive internet space in Utah, which is great." Additional assets that could be better utilized by the film and digital entertainment industries include the Park City Film Studio (UVS1 Smart Stage), UVU research and development (super computers), the Avrec Art House, and the Miller Motorsports Park (where Utah's digital entertainment workforce can produce live event coverage). As one participant stated, "Let's put the money in the right place."

CONCLUSION

In conclusion, our baseline assessment of Utah's film and digital entertainment industry examined Utah's century-long film history and explored Utah's burgeoning digital entertainment sectors. We found that Utah's film and digital entertainment industry has many strengths, including a film tax incentive program that attracts a balance of in-state and out-of-state film production, quality youth and adult educational programs, diverse film production landscapes and locations, skilled crews and substantial workforce, available high-tech infrastructure, relatively low cost of living, multiple quality of life aspects, and a healthy local film culture. In addition, Utah's film and digital entertainment industry creates jobs, which diversify and strengthen Utah's economy. Based on our review of Utah's motion picture incentive program since its inception, film production spending in the local economy is about five times that of total paid incentive, which generates a ripple effect throughout Utah's businesses and communities.

During this study, we also identified industry challenges that are ultimately opportunities for growth. First of all, we learned that accurately capturing the full scope of Utah's film and digital entertainment industry is difficult due to the industry's unique nature and employment tracking inefficiencies. Second, we learned that there are industry-wide employment gaps, which involve either a shortage of skilled workers in specific areas (e.g. grips, gaffers) or else a solid pool of skilled workers (e.g. animation, game design) faced with a lack of available internships, apprenticeships, and jobs. In addition, we noted the perception that there is a disconnect between academia and industry that calls for enhanced future communication and collaboration in order to bridge the divide. Finally, the film and digital entertainment industry is rapidly changing, not only from a media/craft perspective, but also from an employment standpoint. Traditional film production backed by Hollywood's brick-and-mortar studios of the past have quickly given way to digital media created by a global, freelance workforce that often relies on the home studio for production—something that creates as many challenges as it does opportunities for Utah's digital entertainment workforce.

In sum, as digital fluency becomes paramount in today's industry, there is greater crossover between positions in digital film, postproduction, animation, VFX, game design, and social media content creation. These changes point to a new era in film and digital entertainment—a new era that could benefit from a cohesive rebranding of the industry, greater organization and collaboration among digital entertainment subgroups, and an expanded tax incentive program that encompasses and supports a wider range of digital entertainment projects.

APPENDIX - POSSIBLE AREAS OF FURTHER STUDY

Due to the limited scope of this study, we have compiled a list of items the Utah Film Commission might consider for future study:

Asset Inventory. A study that maps out existing infrastructure and community assets in Utah that might be utilized by the digital entertainment industry, alleviating the need to generate funding for new infrastructure.

Content Creation. Future studies that focus on the growing digital entertainment area of social media and content creation in Utah. The scope of this research would expand to include all areas of Utah (not just Utah County), and compare different platforms, different types of content, and different types of economic contributions across the state.

Economic Impact Data. The current methods for collecting expenditure data for projects receiving an incentive could be streamlined to more consistently and fully capture how this spending flows into the Utah economy. For example, even though the incentive is only based on taxable expenditures, the Film Commission might consider also collecting data on non-taxable expenditures to more fully illustrate economic impacts. Also, the Film Commission might consider asking incentive recipients to categorize non-payroll expenditures into 3-digit NAICS codes. In addition to allowing for simpler review and reporting of the direct economic impacts of the spending, these data could be used as inputs to an economic modeling system like IMPLAN or REMI to assess full economic impacts.

Film and Digital Entertainment Investment. Explore ideas surrounding the creation of private film and digital entertainment investment funds or public-private funding partnerships, as well as the role of Utah bank investment opportunities.

In-depth Incentive Assessment. This report describes some of the variation in MPIP projects; for example, in-state productions span more production days while out-of-state productions hire more Utah cast and crew, which may be a function of budget size. A more in-depth assessment could provide insight into how the mix of project types receiving incentives impacts total economic activity.

Industry Survey Data. In conjunction with workforce surveys, the Utah Film Commission might consider seeking assistance with the development and distribution of Utah digital entertainment industry proprietor surveys in order to inform an economic impact assessment.

Rural Studies. Investigating aspects of film and digital entertainment in rural Utah, as well as investigating digital entertainment-related educational and economic opportunities in different rural areas of the state.

Workforce Survey Data. A future study may include an analysis of the Utah Film Commission's film, digital entertainment, and content creation workforce survey results. The Film Commission might also consider conducting a survey annually or biannually as the industry seems to be continually changing.

ENDNOTES

1. In this study, "digital entertainment" includes digital content created for entertainment purposes (films, series, shorts, social media content, games, apps, etc.) and excludes digital content produced for business- or education-related purposes.

2. Online workforce survey response data was only used by the Gardner Policy Institute to inform the study and was in no way used in the context of statistically significant or scientifically sound, stand-alone data. The Utah Film Commission encouraged survey respondents to forward the survey link to others in their field, which explains why there may be more respondents than distributed surveys.

3. "Welcome to and Engaged Community." *City of Moab, Utah*. Moab to Monument Valley Film Commission, n.d. Retrieved from http://www.moabcity.org/index. aspx?nid=228

4. Filmed in Utah – Utah Film Commission. (n.d.). Retrieved from http://film.utah.gov/filmed-in-utah/

5. UCA 63N-8-104 authorizes the incentives. The base maximum incentive that a motion picture company is eligible for is 25 percent of in-state spending; a company that employs a "significant percentage of cast and crew from Utah," highlights "the state of Utah and the Utah Film Commission in the motion picture credits," or undertakes "other promotion activities as agreed upon by the office and the motion picture company" is eligible for an additional amount equal to five percent of in-state spending.

6. *Media Society Reviews: The Best and Worst States for Tax Friendly Funding*. (2016) https://mediasociety.com/the-best-and-worst-states-for-tax-friendly-movie-funding

7. *The Incentives Program*. (2016). Burbank, CA: Cast & Crew Entertainment Services. http://taxes.castandcrew.com/forms/TIP_Guide_April_2016.pdf

8. Not every film that has utilized the MPIP has submitted complete and itemized data on expenditures to the state, resulting in data gaps.

9. Postproduction data was provided to the Gardner Policy Institute by the Governor's Office of Economic Development.

10. The amount spent on labor may be higher than what is reported in "wages, benefits, etc." as some categorization of production spending is ambiguous as to its exact purpose.

11. There were four accredited film schools in Utah before the Art Institute of Salt Lake City closed in 2015.

12. The school hopes to initiate the new program within the next academic year, but is still undergoing the review and approval process. The program is described as "comprehensive," with a focus on hands-on production skills. Based on personal correspondence between DJ Benway, M.P.P. and Jeffery Jarvis Dean, School of Visual & Performing Arts at Dixie State University, on April 17th, 2016.

13. "Degrees and Certificates Awarded." *Utah System of Higher Education*. Retrieved from http://higheredutah.org/data/degrees/

14. "U. Game Design Program Ranked No. 1." *UNews*. University of Utah, 15 Mar. 2016. Retrieved from http://unews.utah.edu/u-game-design-program-ranked-no-1/

15. "Top 50 Animation Schools and Colleges in the U.S. – 2015." Animation School, College & Program Profiles and Animation Career, Salary & Employment Statistics. *Animation Career Review*, 15 Apr. 2015. Retrieved from http://www.animationcareerreview.com/articles/top-50-animation-schools-and-colleges-us-–-2015

16. Does not include proprietors.

17. "Computer Programming" and "Software Development" fall under two distinct NAICS codes: 54151 and 51121, respectively.

18. Please note that Figure 7 does not include local or private film permit issuance; therefore, statewide film activity was higher than what is represented. For example, in 2015, Salt Lake City issued 123 film permits and Park City issued 15.

19. It should be noted that film exhibition has been given its own section in this study; and although film distribution has not been included as a specific focus area, a significant amount of information about film distribution trends has been included. In addition, commercials, which are ineligible for Utah's Motion Picture Incentive Program and are thus beyond the scope of this report, play a significant role in Utah's film industry by generating film industry jobs, wages, and Utah expenditures.

20. According to the National Right to Work Legal Defense Fund, Inc., a "Right to Work law guarantees that no person can be compelled, as a condition of employment, to join or not to join, nor to pay dues to a labor union." http://www.nrtw.org/b/rtw_faq.htm

21. "Mean travel time to work (minutes), workers age 16 years, 2010-2014." *QuickFacts*. United States Census Bureau (n.d.). Retrieved from http://www.census.gov/quickfacts/table/LFE305214/49035

22. American Lung Association. (2016, April 20). *2016 'State of the Air' Report Finds More than Half of Americans Live with Unhealthful Levels of Air Pollution* [Press release]. Retrieved from http://www.lung.org/about-us/media/press-releases/2016-state-of-the-air.html?referrer=https://www.google.com/

23. "Post Production Overview." New Mexico Film Office. N.p., n.d. Web. Retrieved from http://www.nmfilm.com/Post_ Production.aspx

24. It is interesting to note that the Utah Film Commission's film workforce survey's demographic data seemed to reinforce this statement that film is an "aging industry."

25. Part of the Banff Centre for Arts and Creativity's "Radical Reels Tour."

26. New Mexico offers a 25 percent or 30 percent refundable film production tax credit and a film crew advancement program, as well as 25 percent refundable tax credit for New Mexico postproduction services (even if the film was shot elsewhere).

27. See California's local film incentive programs for examples.

28. According to meeting participants, about five years ago, Utah State University considered Moab as the future home of a new USU extension program, which would include film and digital entertainment educational opportunities. The University of Utah also looked into Moab as the potential home for a postproduction program.

29. Based on personal communication between Jennifer Leaver, M.A., and a BYU animation professor on March 14, 2016, an estimated 90 percent of BYU animation graduates leave the state for employment.

30. Based on personal communication between Jennifer Leaver, M.A., and an animation professional on March 14, 2016.

31. UCA 63N-8-105 authorizes Utah's digital media incentive.

32. It must be noted that our group consisted of Utah County creators only.

33. "Salt Lake County, Utah Population Estimates." *QuickFacts*. United States Census Bureau, n.d. Web. Retrieved from http://www.census.gov/quickfacts/table/PST045215/49035

34. One participant mentioned that very few Sundance Film Festival interns are from Utah universities.