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# Analysis and Economic Impact of the Film Industry in Northeast Ohio & Ohio

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# Analysis and Economic Impact of the Film Industry in Northeast Ohio & Ohio

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Report Prepared by  
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Center for Economic Development



Report prepared March 2012

Great things can happen when you're doing a movie.

~ James L. Brooks



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## **Executive Summary**

Greater Cleveland abounds with the buzz from Hollywood blockbuster movies that have borrowed the city in the last few years. Clevelanders flocked to catch a glimpse of Sandman being pummeled by Spider-Man or Samuel L. Jackson's Nick Fury roaming down East 9<sup>th</sup> Street. While these large-scale movies bring both excitement and money to the region, they represent just a small portion of the total film productions that have occurred in Ohio.

The Greater Cleveland Film Commission has received, on average, 277 inquiries into filming in Ohio annually over the past three years. While the main focus of the Greater Cleveland Film Commission is bringing projects to Northeast Ohio, they also emphasize the potential for the entire state. Since 2008, a total of 237 productions have been shot in Ohio, including commercials, documentaries, independent and studio feature films, music videos, public service announcements, photo shoots, television shows, and webseries. The majority of the projects were commercials and television shows. These projects included the television show *Diners, Drive-Ins and Dives* on the Food Network, the Rock and Roll Hall of Fame Induction Ceremony, independent films *What a Guy!* and *Sugar Wars*, and several major studio releases.

For smaller projects that did not receive state assistance, since 2008 there have been over 635 production days in the state which utilized Ohioans for 211 acting jobs and 341 crew jobs. For those projects with a known budget, an average of \$88,087 was spent per project for a total of \$7,434,500.

Ohio is one of 37 states currently offering tax incentives to the film industry. Thus far, 27 projects have received tax credit dollars from the state. These projects are expected to create over 9,000 jobs for Ohioans in everything from the production office to crew to cast. A total of \$73.1 million is expected to be spent in the state - \$19.5 million on wages and \$53.6 million on other spending to support filming.

Local businesses saw large increases in their revenues from the film industry. Retail shops, restaurants, hotels, contractors, real estate agents, and rental agencies all benefited from increased business during filming. Local unions also saw bumps in their members being put back to work. In the sample of companies surveyed for this report, an additional \$2.7 million in revenues were reported in conjunction with filming.

Occupations in the film industry include *Producers & Director; Actors; Set & Exhibit Designers; and Costume Attendants*. On average, these primary film occupations earn \$43,535 annually in Ohio, which is higher than the average wage for all industries in Ohio (\$40,890). Additionally, in Northeast Ohio alone, primary film occupations earn \$51,036 on average annually, while the average for all industries in Northeast Ohio is \$40,911.

Finally, the economic impact of the film industry in Ohio is estimated to account for 1,143 jobs due to the 27 projects that took advantage of the Ohio Motion Picture Tax Credit. Further, the

Ohio's film industry is estimated to account for \$35.5 million in household income, \$113 million in output, and \$64.2 million in value-added impact. In Northeast Ohio alone, the 16 projects that filmed exclusively in the region are estimated to account for 901 jobs, \$27.3 million in household income, \$87.1 million in output, and \$49.3 million in value-added impact. The cost to the state of Ohio is estimated at \$29.9 million. This yields a return on investment for the state of \$1.20 for the economy of Ohio, making this a positive program for the state to pursue.

Details on each of the aforementioned topics are in the chapters that follow. A concluding section at the rear of the report notes the final credits.

The author would like to thank the Ohio Film Office and the Ohio Department of Development for providing the applications and completed reports on the 27 projects that took advantage of the tax credit program. Thanks are also owed to the many people and companies who contributed to the local business analysis section. The author would like to thank Dr. Ziona Austrian and Dr. Iryna Lendel of the Center for Economic Development and three graduate research assistants for all of their work: Joan Chase, Matt Hrubey, and Tyler Thompson.

## Study Methodology

This report was ordered by the Greater Cleveland Film Commission in an effort to measure the effect of the film industry in Northeast Ohio and Ohio as a part of recent legislation that offers a tax credit for qualifying films shot in the state of Ohio. The objective is to gain a deeper understanding of the dynamics of the industry and the economic impact of the tax credit on the region and the state.

The Greater Cleveland Film Commission is a non-profit organization focused on growing an industry through aggressive business attraction, extensive workforce training, and statewide advocacy efforts. They work primarily in the 21-county Northeast Ohio region,<sup>1</sup> but also have efforts which focus on the state as a whole. Their vision is to achieve increased economic development in Northeast Ohio by using the artistic and culturally-enriching activities of film and other media production to strengthen the workforce, support the media production industry, and attract media production to the region. Their mission is to promote the increase of media production in Northeast Ohio using effective strategies for attraction and workforce development including building an artistic infrastructure through film.

The study was conducted by the Center for Economic Development (“Center”) of the Maxine Goodman Levin College of Urban Affairs at Cleveland State University. The Center for Economic Development provides research and technical assistance to government agencies, non-profit organizations, and private industry. The Center works with funders, partners, and clients at the national, state, regional, and local levels.

Beginning in September of 2011, the Center’s research team looked to answer four overarching questions about the film industry in Ohio:

1. What are the projects that have taken advantage of the Ohio Motion Picture Tax Credit?
2. What are the local businesses working in the industry?
3. Are film industry occupations good jobs?
4. What is the economic impact of the projects that have been filmed in Ohio because of the Ohio Motion Picture Tax Credit?

The executive summary includes highlights from each of these questions. The following four chapters each address one of these questions in detail.

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<sup>1</sup> Northeast Ohio includes the counties of: Ashland, Ashtabula, Carroll, Columbiana, Crawford, Cuyahoga, Erie, Geauga, Holmes, Huron, Lake, Lorain, Mahoning, Medina, Portage, Richland, Stark, Summit, Trumbull, Tuscarawas, and Wayne.



## **Chapter 1: The Ohio Motion Picture Tax Credit**

### **Introduction**

Ohio touts three reasons for shooting in the state: experience, hassle-free production in varied locations, and a low cost of living. The state has been host to many film and video productions and has the experience to meet the needs of the industry. Also, Ohio has a variety of close geographic locations ranging from a serene countryside to a downtown cityscape, no more than a few hours' drive apart. Finally, with costs far below traditional filming sites like Los Angeles or New York City, shooting in Ohio offers film studios a larger return for their investment.<sup>2</sup>

Specifically, Northeast Ohio, centered on the city of Cleveland, is centrally located in the Midwest and sits on the banks of where the Cuyahoga River meets Lake Erie. The region has four complete seasons and has varied shooting options including not only the lakefront, but also historic architecture, modern offices, industrial and warehouse facilities, farmland, and even Amish Country.

The Ohio Motion Picture Tax Credit, which began on July 1, 2009, offered \$30 million in tax credits in its first two years (fiscal years 2010 and 2011)<sup>3</sup> and \$10 million in yearly credits for fiscal years 2012 and 2013.<sup>4</sup> The program provides a refundable credit against the corporation franchise or income tax for motion pictures shot in Ohio. The tax credit is equal to 25% of non-wage and non-Ohio resident wage expenses and 35% of Ohio resident wage expenses for a value up to \$5 million per production. All studio feature films shot in Ohio since the inception of the program have utilized the Ohio Motion Picture Tax Credit.

### **Methodology**

This section looks at the 27 projects that received the Ohio Motion Picture Tax Credit since its inception three years ago. Copies of each project's "Application for Film Production Tax Credit" were obtained from the Ohio Film Office. For those projects that have been completed, copies of the CPA reports/audits were also obtained. Using estimates from the applications or completed figures from the reports and audits, this section analyzes the number of jobs, wages for Ohioans, total dollars spent in Ohio, and total credit value associated with the 27 projects.

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<sup>2</sup> <http://www.ohiofilloffice.com/PermitsProcedures.html>

<sup>3</sup> [http://image.exct.net/lib/feffa1772756c0c/d/1/Pages%20from%20128\\_HB\\_1\\_EN\\_N.pdf](http://image.exct.net/lib/feffa1772756c0c/d/1/Pages%20from%20128_HB_1_EN_N.pdf)

<sup>4</sup> <http://www.dispatch.com/content/stories/local/2011/04/23/tax-credits-bringing-hollywood-back-to-ohio.html>

## Analysis

Twenty-seven productions have taken advantage of the Ohio Motion Picture Tax Credit since its inception, including one commercial, one interactive game, two documentary series, two television series, and 19 feature films (Table 1). For the films noted with an asterisk, the total wages and spending is based on completed CPA audits and reports. Those without an asterisk are based on estimates provided by production companies on the Application for Film Production Tax Credit, submitted in advance of shooting.

The projects occurred throughout the metropolitan areas of the state; one project took place in Akron, one in Canton, four in Columbus, four in Cincinnati, eight in Cleveland, and nine in other general locations throughout the state. Canton and Mingo Junction saw Denzel Washington ride into town on an *Unstoppable* train. Columbus saw both a commercial and a documentary series. Akron enjoyed filming of *25 Hill* about the soap box derby, as well as an interactive game *Galaxy Command*. Cincinnati welcomed Val Kilmer for the film *Seven Below Zero* and brought George Clooney for the film *The Ides of March*. Cleveland was fortunate enough to see Tyler Perry in *I*, *Alex Cross*, Nickelodeon star Victoria Justice in *Fun Size*, and of course, some of America's favorite superheroes in *The Avengers*. These projects spent an estimated 2,493 production days in the state. The majority of each production was shot in Ohio with an average of 86%. Moreover, 16 projects were shot in their entirety in-state.<sup>5</sup>

## Credits in Other States

Ohio is one of several states offering tax incentives to film and television productions. The state of New York has \$420 million appropriated for tax credits. New Mexico caps credits at \$50 million; even California has \$100 million in credits available. The state of Louisiana currently has no limit on its tax credits. The 150 productions in Louisiana had budgets of \$1.9 billion, with \$1.3 billion remaining in the state. In 2011, the film industry in Louisiana contributed more than a billion dollars to the state's economy. Michigan recently reinstated its film incentive policy, now offering \$25 million for filming incentives, and just began receiving applications from potential projects once again. When Michigan's tax incentives lapsed last year, several productions including *The Avengers*, *I*, *Alex Cross*, and *Ides of March* relocated to Ohio because of Ohio's available credit.<sup>6</sup>

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<sup>5</sup> This data is based on the Application for Film Production Tax Credit documents.

<sup>6</sup> The Plain Dealer 12/18/2011

[http://www.cleveland.com/moviebuff/index.ssf/2011/12/movies\\_made\\_in\\_cleveland\\_and\\_o.html](http://www.cleveland.com/moviebuff/index.ssf/2011/12/movies_made_in_cleveland_and_o.html)

**Table 1: Productions Which Utilized the Ohio Motion Picture Tax Credit**

Year	Title	Location of Production	Production Type	Total OH Employment	Total OH Wages	Total OH Other Spend	Total OH Spend
2010	25 Hill*	Akron	Feature Film	145	\$510,906	\$866,528	\$1,269,256
2011	A Doll's House	Greater Cincinnati	Feature Film	194	\$789,348	\$3,452,980	\$742,883
2011	Boot Tracks*	Cleveland	Feature Film	142	\$540,538	\$1,118,098	\$503,560
2010	Extreme Home Makeover	Maple Heights	Series	5	\$13,650	NP	\$774,650
2011	Extreme Home Makeover*	Columbus	Series	5	\$13,491	\$682,223	\$237,723
2010	Flashback	Northeast	Feature Film	93	\$353,330	NP	\$230,912
2010	Freerunner*	Cleveland	Feature Film	133	\$310,005	\$777,419	\$544,806
2011	Fun Size	Cleveland	Feature Film	545	\$2,980,527	\$6,879,869	\$7,767,245
2011	Galaxy Command*	Summit County	Interactive Game	12	\$452,802	\$0	\$0
2010	Hollywood Auction*	Summit County	Series	6	\$122,587	NP	\$236,664
2011	I, Alex Cross*	Cleveland	Feature Film	1,924	\$1,783,357	\$11,431,181	\$3,986,189
2011	Liberal Arts*	Kenyon College	Feature Film	172	\$35,834	\$682,960	\$316,870
2010	Life After	Cincinnati	Feature Film	171	\$2,468,609	\$750,000	\$2,637,620
2010	Lilith*	Cleveland	Feature Film	52	\$117,943	\$100,174	\$164,570
2011	Old Fashioned*	Tuscarawas County	Feature Film	61	\$228,225	\$66,081	\$194,109
2010	One Born Every Minute (S1)*	Columbus	Series	13	\$83,831	\$630,987	\$635,266
2011	One Born Every Minute (S2)*	Columbus	Series	30	\$150,120	\$717,826	\$800,628
2011	Over the Wall*	Darke/Mercer County	Feature Film	576	\$1,585,419	\$2,060,804	\$2,224,966
2010	Safe Auto*	Central Region	Commercial	167	\$98,444	\$31,254	\$332,353
2012	Scorned	Scioto County	Feature Film	0	\$0	\$945,325	\$101,750
2011	Seven Below Zero	Goshen, Cincinnati	Feature Film	62	\$358,234	\$367,349	\$474,012

Continued on next page

Year	Title	Region of Production	Production Type	Total OH Employment	Total OH Wages	Total OH Other Spend	Total OH Spend
2010	Take Shelter*	Northeast	Feature Film	53	\$84,318	\$235,491	\$329,214
2011	The Avengers	Northeast & Southern	Feature Film	3,875	\$5,346,699	NP	\$25,068,239
2010	The Black Dove	Southern	Series	86	\$133,125	\$6,000	\$329,160
2011	The Ides of March*	Cincinnati	Feature Film	409	\$514,392	\$0	\$3,035,169
2011	The Yank	Cleveland	Feature Film	87	\$453,810	\$453,810	\$687,992
2009	Unstoppable	Canton	Feature Film	NP	S	S	S

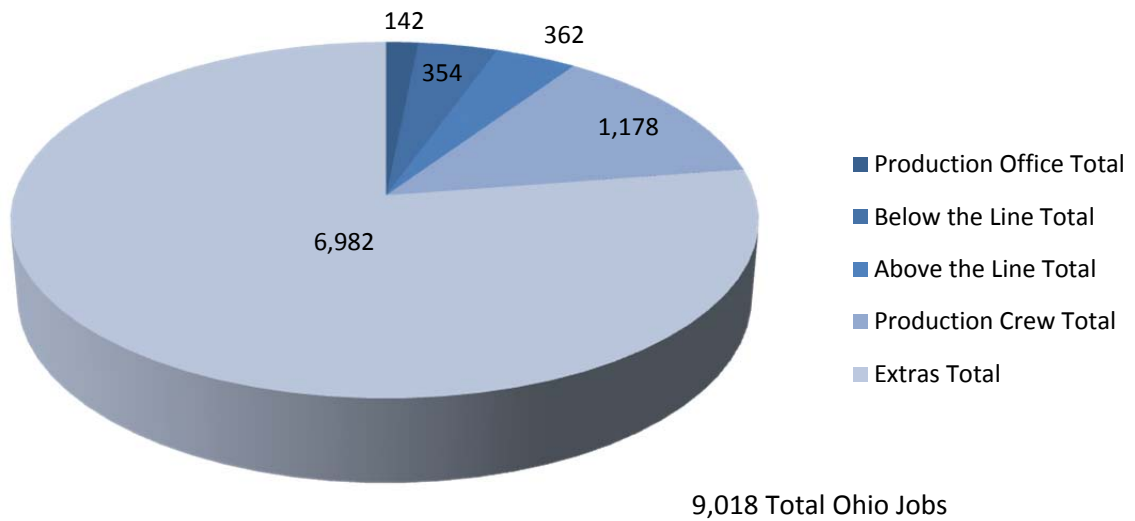
Notes on Table 1:

- a) Figures for Total Ohio Employment are based on the estimates provided in the Application for Film Production Tax Credit forms.
- b) Figures for Total Ohio Wages, Total Ohio Other Spend, and Total Ohio Spend are taken from two sources. For films which have not yet provided the Ohio Film Office a final CPA audit/report, these figures are based on the estimates provided in the Application for Film Production Tax Credit forms. For the projects with completed CPA audit/reports (noted with an asterisk), the figures come from the audited final reports submitted to the Ohio Film Office.
- c) "NP" signifies "not provided" as data was omitted from the forms.
- d) Data for *The Avengers* is based on the sums of two separate applications for tax credits.
- e) "S" signifies that the data is suppressed. These figures were not shared by the production company as it is considered a trade secret.

Based on the projections outlined in the Film Production Tax Credit Applications for the 27 projects that received financial assistance, the creation of 9,018 full-time, temporary Ohio jobs was expected (Figure 1). Most jobs created were projected to be as extras, which comprised 77% of estimated total local hiring (6,982 jobs). Thirteen percent of the expected total employment was as production crew (1,178) and 4% was as above-the-line labor – the creative talent, writers, directors, and producers (362). Below-the-line labor – consisting of technical crew employees – comprised 354 of the total Ohio jobs (4%).<sup>7</sup> Finally, only 142 jobs (2%) were expected to be created in the production office. Approximately 845 non-Ohio employees worked on the projects, meaning 91% of the expected total jobs reported went to Ohioans.



**Figure 1: Total Projected Ohio Jobs from the Ohio Motion Picture Tax Credit Productions**

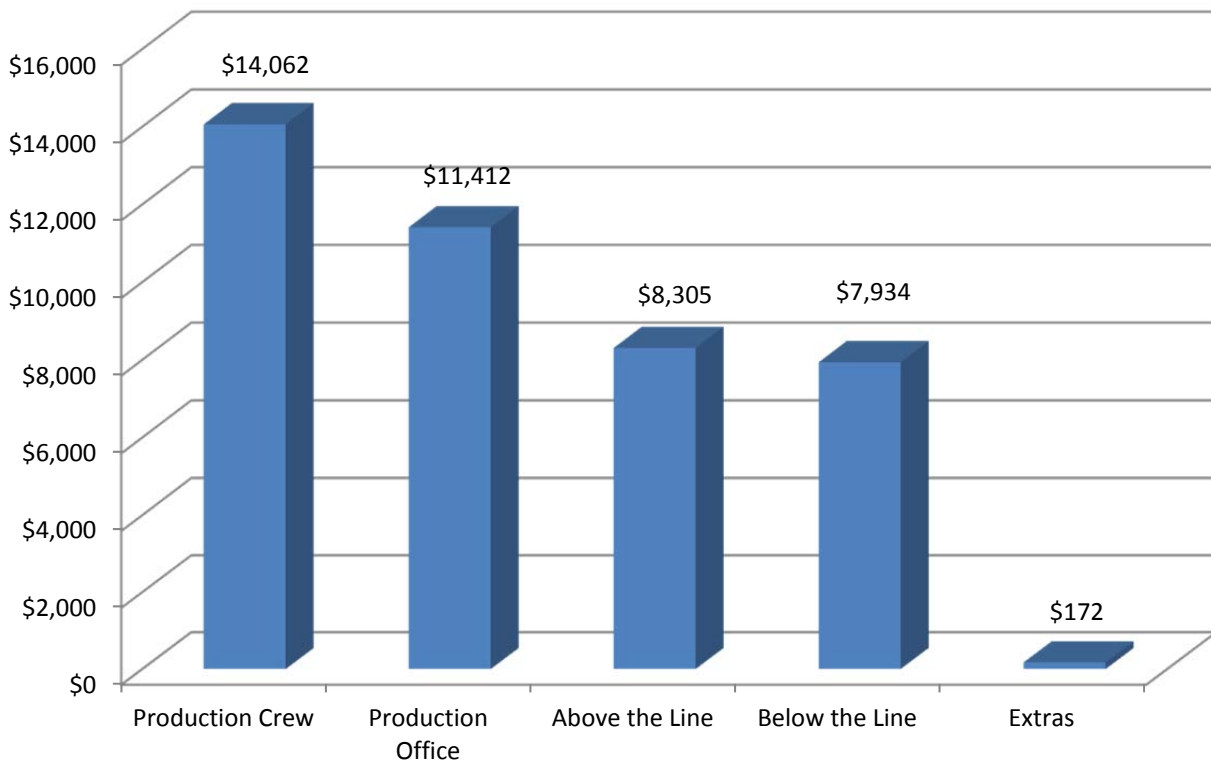


<sup>7</sup> <http://www.nmfilm.com/locals/faqs/index.php#1>

The payroll for the 27 projects that benefited from tax credit was estimated to be \$19.5 million.<sup>8</sup> The largest payroll was for production crew and the smallest payroll was, not surprisingly, for extras.

The largest Ohio average wage went to the production crew, which earned \$14,062 per person per movie during filming, while production office staff earned the second-highest wage with \$11,412 per movie (Figure 2).<sup>9</sup> Above-the-line talent earned \$8,305 on average. The below-the-line talent earned \$7,934 on average and the extras earned \$172. The average wage for Ohioans was \$2,795, which is likely due to the low rate of pay for extras; the average wage for non-Ohioans was \$37,127, which is likely skewed as it includes the payroll of high-priced Hollywood talent.

Figure 2: Average Wage by Job Category for Ohio Hires



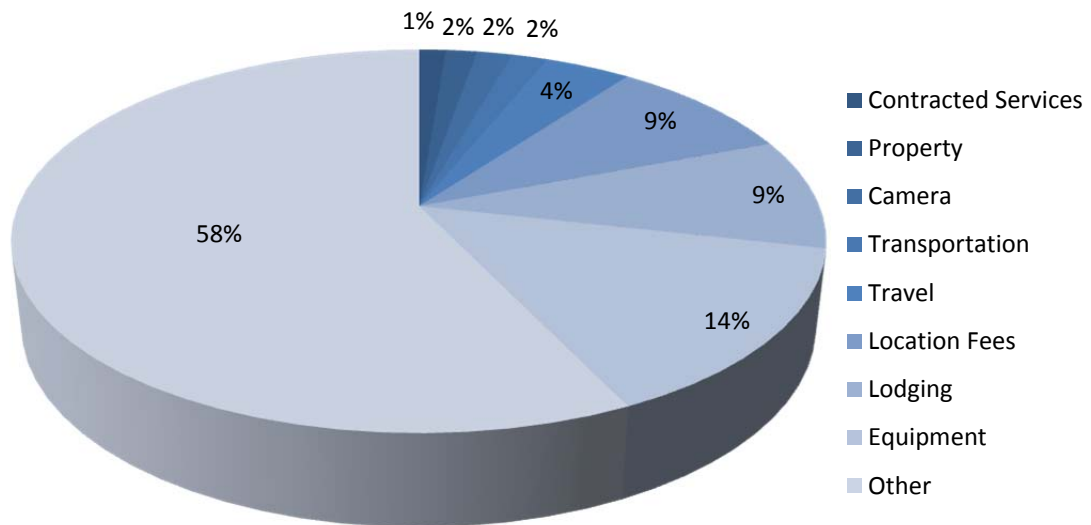
<sup>8</sup> The total payroll was based on completed CPA audit/reports, when available. Figures for projects without completed audit/reports were based on the estimates provided in the Application for Film Production Tax Credit forms.

<sup>9</sup> Average wage was calculated by taking the total payroll per employment category and dividing it by the total number of employees in that employment category. These data were pulled entirely from the Applications for Film Production Tax Credit.



Although the largest cost in producing a film is labor (\$19.5 million or 27% of the total money spent in Ohio), moviemakers face many other expenses as well. Fourteen percent of the projected production costs in Ohio were on equipment (\$7.7 million) (Figure 3). With over 56,000 projected hotel room nights, the cost of lodging was projected to be \$5 million (9% of Ohio spending). Nine percent of Ohio production costs were spent on location fees (\$4.8 million) and 4% was spent on travel (\$2.2 million). Transportation, camera, property, and contracted services all accounted for less than four percent of spending. Finally, over \$30.6 million (58%) was spent on various other expenses, for a total of \$53.6 million in other Ohio spending. Coupling this with the \$19.5 million spent on Ohio wages, the total spending in Ohio was \$73.1 million.

Figure 3: Breakdown of Ohio Expenditures from the Ohio Motion Picture Tax Credit Productions



## Summing the Credit

According to the Ohio Department of Development's 2010 Annual Report, nine projects received over \$9.18 million in tax credits during the first year of the Ohio Motion Picture Tax Credit program.<sup>10</sup> Currently, of the 27 productions that received the credit so far, \$19.5 million was allocated for Ohio resident wages and \$53.6 million was spent on other local expenditures.<sup>11</sup> Based on these figures, the tax credit for Ohio resident wages was valued at \$6.8 million (35% of allowable wages) and the tax credit for expenditures was valued at \$21.5 million (25% of allowable expenses), which yielded a total estimated credit of \$28.3 million.<sup>12</sup> This is an average of just over a million dollars in tax credits per production.

While those in Ohio are aware of its beauty, varied landscapes, low cost of living, and solid employment base, Hollywood failed to take notice of the Buckeye state until the passage of the Ohio Motion Picture Tax Credit. It is very likely that, of the 27 projects that received a tax credit, at least the 19 major motion pictures filmed in the state in the last three years were shot here because of the credit. Without the Ohio Motion Picture Tax Credit, the \$73.1 million projected to be spent on these productions and the 9,018 local jobs created would likely have occurred in a different state. After all, 37 states offered incentive programs for the film industry as of 2011, totaling \$1.3 billion in value.<sup>13</sup>



<sup>10</sup> <http://development.ohio.gov/departmentreports/documents/2010AnnualReport.pdf>

<sup>11</sup> Actual tax credit values are used when available. These figures are based on completed CPA audit/reports, when available. Figures for projects without completed audit/reports are based on the estimates provided in the Application for Film Production Tax Credit forms.

<sup>12</sup> This figure is based partly on estimates of the total credit per production and therefore does not equal the total tax credit amount legislated.

<sup>13</sup> <http://www.taxfoundation.org/blog/show/27336.html>



## Chapter 2: Local Businesses Booming from Filming

### Introduction

Lev-Ram of CNN Money notes that “[t]he Great Depression, the September 11 terrorist attacks, and the recessions of the early 1980s and 2001 all did wonders for Hollywood coffers. Turns out, in trying times we like things to be cheap and we like to be transported from the headlines - movies do both, say box-office analysts.”<sup>14</sup> In contrast to most other industries, the film industry tends to thrive even in tough economic times. This is good news for the economy of Northeast Ohio, which has been hit hard by recent downturns.

Locations which serve as settings for popular films have been linked to an increase in tourism. Hudson and Ritchie (2006) found that films can have a powerful influence on travel decisions.<sup>15</sup> Not only are people choosing to visit famous sites from their favorite films, but in addition, people are drawn to watch the excitement like Clevelanders that watched East 9<sup>th</sup> Street turned into a New York City Street full of blazing cars and exploding buildings.

Since the inception of Ohio Motion Picture Tax Credit, 27 projects shot in the state of Ohio took advantage of the program. As described earlier, these projects were slated to create over 9,000 on-set jobs and spend over \$73 million in Ohio, but these numbers are only a portion of the story. The real stories are the lives and livelihoods of the local people impacted by the industry. Interviews with local vendors and service providers highlighted the effects of the recent surge in film production in Northeast Ohio.

### Methodology

Beginning from a list of contacts provided by the Greater Cleveland Film Commission, the research team contacted many local vendors and service providers that worked on recent filming in Northeast Ohio. Through the interviews and additional research, more leads were gleaned and interviewed. The following data were collected from these interviews. This in no way represents the entirety of the breadth of work that was done locally on films as the list is not exhaustive and was limited by participation rates.

### Local Commerce

Local businesses in Northeast Ohio saw a lot of business associated with the influx of Hollywood films. Many service-oriented companies including **Aggreko** and **Oswald Group Insurance** supported the wave of movies that were shot in Northeast Ohio. Companies like **Vision Media and Marketing** are investing capital to support the major motion pictures. Here are their stories:

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<sup>14</sup> “The box office indicator” by Michael Lev-Ram, CNN Money, August 22, 2008, <http://money.cnn.com>.

<sup>15</sup> Hudson, Simon & Ritchie, J.R. Brent. (2006) *Film tourism and destination marketing: The case of Captain Corelli's Mandolin*. Journal of Vacation Marketing, July 2006, vol. 12 no. 3, 256-268.

Woman-owned **It's a Party** in Lakewood was able to provide one of the films with supplies needed for production. Owner Barbara Pennington not only made a profit from the sales, but is now working on a website and applying for a line of credit to bring in new products that cater to the film industry.

Cleveland's **Catanese Classic Seafood** saw increases in their business from both direct sales to the industry as well as increased sales from local restaurants that saw bumps in their business. If the film industry becomes a year-round activity for Northeast Ohio, Catanese Classic Seafood plans to hire additional staff.

**Big Fun**, a toy store located in Coventry, saw great sales to the crew and cast during the shooting of *Fun Size* in their neighborhood. While the filming was taking place, stores were paid to shut down and received a very fair price for the privilege. Owner Steve Presser said that the crew really loved Cleveland, noting that the social value is almost better than the economic one as the crews want to come back to Cleveland and will share their experience here with others in the movie industry.

The local female veteran-owned **Fast Signs** franchise saw a \$40,000 increase in revenue during filming which led to nine staff members working overtime. The company is prepared to work with the industry further, not only supporting the films that shoot in town, but connecting with other local businesses to support their needs as well.

**Commonwealth Lumber** met the challenge of working with the film industry directly by supplying lumber and materials for both *The Avengers* and *Fun Size*. The company saw an increase of \$120,000 in revenue from these two movies. The company is ready to support films by adjusting its stock to be prepared for anything that the industry needs.



**Jerold Optical** had \$500 worth of sales for the film *I, Alex Cross*. The staff was also happy to have increased local foot traffic in front of their store as people headed to East 9<sup>th</sup> Street to watch *The Avengers* shoot. This will hopefully lead to future sales. Although it may not be a huge increase in sales volume, they can now add Hollywood star Tyler Perry to the list of people sporting their eyewear.

Local filming boosted sales at **Dredger's Union**, a downtown boutique. Danielle DeBoe, a partner in the new venture, said that the store's all-time best customers were members of the cast and crew of the film productions. While the store had no official relationship with any of the productions, the boutique capitalized on its proximity to the shooting. Danielle and Dredger's Union catered to the cast and crew during their off hours and are paying close attention to any future projects.

Jonathan Andrews is the co-owner of **Alien Sound** and the secretary-treasurer for the International Alliance of Theatrical Stage Employees union. When his company was asked to mix the second unit on *The Avengers*, his gear was not sufficient. Because of this, Alien Sound is now investing \$30,000 to upgrade their equipment, a means to meet the needs of the industry and to be ready for the next film.



JT Diamond had been on unemployment after he could not find work in manufacturing maintenance and servicing. He then opened up his own environmental survey and cleanup business - **Diamond Services**. The company's full-time employment is only JT and his son, but they hire additional labor on an as-needed basis. Diamond Services is a perfect fit for the film industry. JT has 40 years of experience in emergency environmental cleanup which prepared him not only for the odd hours that the film industry keeps, but also for the complicated logistics they require. His first work in the industry locally was on environmental surveys of abandoned buildings that studios wanted to use to shoot. He also made small repairs, quickly becoming their "go-to guy." Industry representatives were so pleased with JT's work that they not only

kept finding work for him, but also took his recommendations on other contractors including **Josh Rental Company, Sunbelt, and Ontario Stone**. Diamond Services did \$130,000 worth of business over the three months the film industry was in town. JT has changed his marketing to reflect his services to the film industry and hopes to become the general contractor for all movies that come to town.

**NASA Plumbrook** is not the typical agent to serve the film industry, but in 2011, Plumbrook made \$158,000 in reimbursable costs when they rented out their testing facility to *The Avengers*. NASA sees their mission as increasing people's knowledge about what they do, and would be happy to rent space in the future to highlight the great work of their scientists.

**Willo Security** employed 75 people for purposes of crowd control and off-hour night watch for two movies and made approximately \$650,000. The company learned a lot working on these two films and is now well-prepared for future films in Cleveland.

**CD Enterprises** is a professional cleaning company that is both minority- and female-owned. Entrepreneur Cheryl Weems was able to hire two and a half additional staff members and her business increased each month filming occurred in Cleveland, increasing her revenue by almost \$38,000. Cheryl also was able to hire people that truly needed work; she noted that "there are some people who would have lost their homes without this."



Izzy Schachner bought and opened **StrEAT Mobile Bistro**, a food truck that caters to the film industry at a cost of \$50,000. Izzy is no stranger to the food industry, operating his own catering business for years. Utilizing StrEAT Mobile Bistro on sets, Izzy saw a 35% increase in revenue which required him to hire three full-time employees.



Various local restaurants also felt the effect from the filming in 2011. Favorites like **Barley House, Chinato, Dante's, Erie Island Coffee, Greenhouse Tavern, House of Blues, Lolita, Lola, Noodlecat,** and **Panini's** saw increases in business as film industry workers and locals hoping to glimpse the action stopped by. The **Starbucks** located in the Playhouse Square district saw an increase of about \$500 each day there was filming in the area. **Fahrenheit** in the Tremont neighborhood was thrilled to see about \$30,000 in catering sales. Restaurants owned by Chef **Michael Symon** saw about \$15,000 increased revenue, concentrated at **Lola**, and occasionally kept their doors open after hours to accommodate actors and production crews.

**Stunt Predators USA**, owned by local Richard Fike, has a team of professional stunt men and women that worked on six films in 2011 paying Screen Actors Guild union wages. Twenty-eight professionals worked on *Fun Size*, six on *Boot Tracks*, three on *I, Alex Cross*, and two on *Seven Below Zero*. Unfortunately, only four locals worked on *The Avengers* as all other stunt professionals came from out of town. Because of the increased activity locally, Richard is requiring more advanced and increased regular training for his staff members. Richard noted that professionals and companies in Ohio need to convince people in Los Angeles that Ohioans can do the job. He argues this is best done through skills and training, safety, and keeping costs low.

**The Monster Makers**, owned by Arnold Goldman and his wife, is one of the leading suppliers of three-dimensional special effects materials in the industry.<sup>16</sup> Make-up artists from *Fun Size* visited their shop often, increasing their sales by over \$5,000.

Many people that work in the film industry travel from across the country to work on projects. Because of this, many local hotels saw a surge in business; in fact, revenue increase by approximately \$1,270,000 between the five hotels that were contacted: **Embassy Suites, the Ritz Carlton, the Renaissance, the Marriot,** and the **Intercontinental**. While no additional staff was hired to meet the increased demand for an estimated 56,000 room nights, changes are being made in the hotel industry locally to meet this demand. Cleveland hotels are being more flexible with their rate structure, offering different services, changing the culture within the hotel to meet the needs of the film industry, and adjusting their sales structure, including working with sales people in Los Angeles to drive additional business to Northeast Ohio.

<sup>16</sup> Monster Makers 1/13/12 <http://www.monstermakers.com/content/aboutus.html>

**Enterprise Rent-A-Car** has a division that focuses solely on the entertainment industry. In the summer of 2011 alone, the company rented cars both for use on camera and for staff from out of town. Total Enterprise car rentals exceeded 10,000 days, which translates to over 2,000 worker hours and over 200 cars, vans, trucks, and specialty vehicles in Northeast Ohio. Working with the Greater Cleveland Film Commission, Enterprise is able to prepare for spikes in rentals and meet the needs of productions.

**Big Fly Aviation**, located in Cleveland, provides executive configured jets for professional athletes, golfers, agents, and the film industry. Big Fly provided eight flights for recent films and earned \$20,000 in revenue.

**The K & D Group** made a huge effort to attract actors and production crews to their housing units, giving them complimentary rooms and special pricing. They were happy to report a slight increase in revenue, and hope to be able to work closer with film companies in the future.

**Janice R. Wirt**, a minority entrepreneur and realtor with Keller Williams, rented homes to directors of some of the films and saw an increase in revenue of about \$4,000. She has since been networking with other people who have experience working with the film industry in order to better understand the services desired by the film industry. She has also built a relationship with a local attorney to assist with leasing and other legal matters.

**Aris Rentals**, provider of portable restroom services, hopes to see a lot more filming in the region as they saw an increase in revenue of about \$20,000 during 2011.

## Unions

Two local unions, the Teamsters and the International Alliance of Theatrical Stage Employees (IATSE), were integral to the success of the films that shot in Northeast Ohio. The **Teamsters** called over 100 members that were on unemployment back to work making union wages. One member was even able to save his house from foreclosure because of the new work.

The **International Alliance of Theatrical Stage Employees** reported that members saw their revenues double during shooting and membership itself more than doubled by engaging formerly non-union workers under their umbrella. IATSE had a representative filling every job position on the films, including hair and makeup, sound, grips, electric, video assists, construction, greens, and craft service. The union now represents 7 black females, 5 black males, 2 Hispanic males, 50 white females, and 160 white males; for many union members, the films shot in Ohio saved them financially.



## Local Government

The **city of Cleveland** began its work to support upcoming filming early by coordinating all departments to meet the needs of the productions and streamlining bureaucratic procedures. All costs to the city were reimbursed with an additional monetary benefit gained. **Cuyahoga County** also helped with permitting; all costs to the county were also reimbursed.

Cleveland was not the only city to see Hollywood types walking the street. For example, **Lakewood** was utilized by two local projects, including Nickelodeon's *Fun Size*. At no cost to the city, the media attention, extra visitors, and civic pride were noted benefits. In addition, *The Avengers* rented the former DHL facility from the **Clinton County Port Authority**. Finally, the city of **Cleveland Heights** saw action from both *Fun Size* and *I, Alex Cross* hitting their streets. Not only did the local police see a benefit when 30 off-duty officers were hired as security, but there was a great sense of excitement in the city due to the filming and beautiful set decorations.

*The Avengers* utilized the **Downtown Cleveland Alliance** Ambassadors to handle crowd control. The Ambassadors' friendly faces greeted visitors to the shoot, while maintaining the set boundaries and keeping everyone safe. There are 55 year-round Ambassadors who worked many hours of overtime while *The Avengers* shot in downtown Cleveland. Marvel Studios was so pleased with the Ambassadors that they made a \$10,000 donation to the Downtown Cleveland Alliance in excess of the fee charged.

## Ready for More

Local film production generated a lot of activity throughout Northeast Ohio. The owner of **Commonwealth Lumber** noted that the filming "seemed to put a spark in the whole area - it was exciting and everyone was talking about it." The **Downtown Cleveland Alliance** heard great feedback from filming spectators. Many visitors had not been downtown in years and were delighted by the city's vibrancy. Jonathan Andrews of the **International Alliance of Theatrical Stage Employees** union stated that 2011 had been a great year for their members and he hoped that the "politicians will up the incentive again and we will continue to get more work like this."

Clevelanders were not the only people excited about this new industry. On September 3, 2011, the *Plain Dealer* published an editorial written by one of *The Avengers* producers, Mark Webb. Webb lauded Cleveland as an incredible film location: "The collaborative effort of the population, government and businesses makes downtown Cleveland an amazing place to visit, photograph and just walk around."<sup>17</sup>

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<sup>17</sup> [http://www.cleveland.com/opinion/index.ssf/2011/09/cleveland\\_casts\\_its\\_own\\_magic.html](http://www.cleveland.com/opinion/index.ssf/2011/09/cleveland_casts_its_own_magic.html)

Of the 30 companies that provided employment and sales figures for this research, 259 additional employees were hired because of the film industry and \$2.7 million in sales were made. Northeast Ohio is prepared for the film industry as these companies are making more than \$130,000 in investments in their businesses.



## Chapter 3: Film Industry Occupations

### Introduction

The majority of the work that goes into making movies is done by hundreds of small businesses and independent contractors hired by studios. In addition, the film industry uses many contractors to fulfill supporting roles like caterers, electricians, makeup artists, and the like. Also, the majority of film industry establishments employ less than five people that tend toward younger generations. While formal training is an advantage and readily available, the industry relies on experience, talent, creativity, and professionalism for guidance.<sup>18</sup>

The film industry in Ohio is still in its infancy and is therefore hard to capture in its entirety by only examining the establishments specific to the industry. Also, the film industry touches so many other industries that an examination of Ohio employment data by occupation, as opposed to just the establishment side, is warranted. The Standard Occupational Classification (SOC) system is a system used to categorize occupational groups and classify employees into one of 840 detailed occupational categories. Occupations are grouped based on similar job duties and, in some cases, skills, education, and/or training.<sup>19</sup> The Bureau of Labor Statistics' Occupational Employment Statistics series, used to conduct the following analysis, utilizes the SOC system to capture employment by occupation.

### Methodology

For the purposes of this study, the SOC codes relevant to the film industry were identified, first, from a review of other studies on the film industry and, second, from a general search through the SOC codes to identify film occupations. Next, occupations relevant to the film industry were split into two categories: 1) those with **primary** functions in the industry and 2) those with **secondary** functions in the film industry, i.e., those occupations that contain people that work in the film industry, but are primarily in other industries. Category 1 will be referred to as "primary film occupations" and category 2 will be referred to as "supplemental film occupations." As a note, while occupations like *Electricians* and *Carpenters* are critical to the film industry, they were omitted from this analysis because their work cuts across so many industries and they are plentiful in Ohio. Also, as the film industry is still small in the state, this analysis does not show the entire capacity of Ohio workers that can work on films but are currently employed in other industries.

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<sup>18</sup> Bureau of Labor Statistics [www.bls.gov/oco/cg/cgs038.htm](http://www.bls.gov/oco/cg/cgs038.htm).

<sup>19</sup> Occupations based on May 2010 data, <http://bls.gov/soc/>.



## Occupational Analysis of the State of Ohio

In 2010, a total of 8,270 people worked in primary and secondary film occupations in Ohio, which represented 0.17% of the total state workforce.<sup>20</sup> In the primary occupations, there were a total of 4,380 employees (Table 2). The highest employment was in *Producers and Directors* (1,320 employees / 30% of primary film occupations) and *Audio and Video Equipment Technicians* (1,050 employees / 24% of primary film occupations). The smallest number of employees was found in *Costume Attendants* (80 employees / 2% of primary film occupations).

As for average wages, the highest average wage was attributed to *Media and Communication Equipment Workers* (\$62,140 annual / \$29.88 hourly), *Producers and Directors* (\$57,130 annual / \$27.47 hourly), and *Set and Exhibit Designers* (\$56,710 annual / \$27.27 hourly).<sup>21</sup> The lowest average wage (\$33,000 annual / \$15.86 hourly) was for *Costume Attendants*; also, this category had the smallest employment base in the state. Except for *Costume Attendants*, all other primary film occupations had a higher average wage than the state average (\$40,890 annual / \$19.66 hourly). The Bureau of Labor Statistics reports average wages above or near the average wage for all Americans for film industry employees nationally.<sup>22</sup>

**Table 2: Employment & Average Wages: Primary Film Occupations in Ohio, 2010**

Occupation	SOC Code	Employment	Hourly Average wage	Annual Average wage
<b>Producers &amp; Directors</b>	272012	1,320	\$27.47	\$57,130
<b>Audio &amp; Video Equipment Technicians</b>	274011	1,050	\$20.22	\$42,050
<b>Actors</b>	272011	500	S	S
<b>Camera Operators, Television, Video, &amp; Motion Picture</b>	274031	430	\$21.64	\$45,010
<b>Film &amp; Video Editors</b>	274032	330	\$20.18	\$41,970
<b>Media &amp; Communication Equipment Workers, All Other</b>	274099	240	\$29.88	\$62,140
<b>Sound Engineering Technicians</b>	274014	200	\$21.25	\$44,200
<b>Set &amp; Exhibit Designers</b>	271027	120	\$27.27	\$56,710
<b>Makeup Artists, Theatrical &amp; Performance</b>	395091	110	\$20.61	\$42,860
<b>Costume Attendants</b>	393092	80	\$15.86	\$33,000
<b>Total</b>		4,380	\$20.93	\$43,535

“S” indicates that data is suppressed from the BLS.

<sup>20</sup> Employment is the total estimated occupational employment (not including self-employed) <http://www.bls.gov/help/def/oes.htm>.

<sup>21</sup> Annual Mean Wage is the estimated total annual wages of an occupation divided by its estimated employment, i.e., the average annual wage <http://www.bls.gov/help/def/oes.htm>.

<sup>22</sup> Bureau of Labor Statistics, [www.bls.gov/oco/cg/cgs038.htm](http://www.bls.gov/oco/cg/cgs038.htm).

A total of 3,890 people were employed in supplemental film occupations in 2010 (Table 3). People in these occupations can work in the film industry, but are not necessarily doing so currently. The largest number of employees was in *Art Directors* (1,200 employees / 31% of supplemental film occupations) and *Writers and Authors* (1,020 employees / 26% of supplemental film occupations). The smallest occupations in Ohio were *Models* (80 employees / 2% of supplemental film occupations) and *Riggers* (60 employees / 2% of supplemental film occupations).

**Table 3: Employment & Average Wages: Supplemental Film Occupations in Ohio, 2010**

Occupation	SOC Code	Employment	Hourly Average wage	Annual Average wage
<b>Art Directors</b>	271011	1,200	\$38.33	\$79,730
<b>Writers &amp; Authors</b>	273043	1,020	\$25.97	\$54,010
<b>Music Directors &amp; Composers</b>	272041	570	\$22.82	\$47,460
<b>Media &amp; Communication Workers, All Other</b>	273099	430	\$22.18	\$46,130
<b>Fashion Designers</b>	271022	310	\$32.64	\$67,890
<b>Agents &amp; Business Managers Artists, Performers, &amp; Athletes</b>	131011	220	\$28.44	\$59,150
<b>Models</b>	419012	80	\$15.95	\$33,180
<b>Riggers</b>	499096	60	\$20.33	\$42,290
<b>Total</b>		3,890	\$29.28	\$60,901

The occupation with the highest average wage in the supplemental category was *Art Directors* (\$79,730 annual / \$38.33 hourly), which also had the highest employment. The next highest average wage was in *Fashion Designers* (\$67,890 annual / \$32.64 hourly). The lowest average wage went to *Models* (\$33,180 annual / \$15.95 hourly). Overall, in nearly all cases, the average wages in the primary film occupations and supplemental film occupations were higher than for all occupations in Ohio combined (\$40,890 annual / \$19.66 hourly) (Table 4).



**Table 4: Average Wages in Ohio, Primary Film, & Supplemental Film Occupations, 2010**

	Hourly Average wage	Annual Average wage
<b>Ohio All Industries Average Wages</b>	\$19.66	\$40,890
<b>Primary Film Occupation Average Wages</b>	\$20.93	\$43,535
<b>Supplemental Film Occupation Average Wages</b>	\$29.28	\$60,901

### Occupational Analysis in Northeast Ohio

Due to the emerging nature of the film industry in Ohio, the following regional analysis does not fully reflect the capacity that exists in Northeast Ohio’s film industry. Many people who could be working on films are instead working in other industries where work is more consistent. For this section of the report, Northeast Ohio (NEO) is defined as the five Metropolitan Statistical Areas found in NEO: Akron, Canton-Massillon, Cleveland-Elyria-Mentor, Mansfield, and Youngstown-Warren-Boardman (Ohio counties only). This includes the 12 counties of Carroll, Cuyahoga, Geauga, Lake, Lorain, Mahoning, Medina, Portage, Richland, Stark, Summit, and Trumbull.<sup>23</sup>

Table 5 shows the employment and average wages for primary film occupations in Northeast Ohio. Overall, there were 910 people employed in six occupations.<sup>24</sup> The largest group in terms of employment was *Producers & Directors* (440 employees / 48% of primary film occupations), followed by *Audio & Video Equipment Technicians* (270 employees / 30% of primary film occupations). The other four occupations each had less than 100 employees.

The highest average wage was also in the *Producers & Directors* category (\$55,005 annual / \$26.44 hourly). The second-highest average wage was in *Camera Operators, Television, Video, & Motion Picture* (\$54,590 annual / \$26.25 hourly). Each of the primary film occupations had an average wage higher than the average wage for all industries in the five metropolitan statistical areas in NEO (\$40,911 annual / \$19.67 hourly).

<sup>23</sup> Regional SOC data is only available at the MSA level, not by individual counties, so the definition of Northeast here is different.

<sup>24</sup> Some occupations that are shown in the state of Ohio data were suppressed in Northeast Ohio data and therefore not included in the table.

**Table 5: Employment & Average Wages: Primary Film Occupations in Northeast Ohio, 2010**

Occupation	SOC Code	Employment	Hourly Average wage	Annual Average wage
<b>Producers &amp; Directors</b>	272012	440	\$26.44	\$55,005
<b>Audio &amp; Video Equipment Technicians</b>	274011	270	\$22.26	\$46,299
<b>Camera Operators, Television, Video, &amp; Motion Picture</b>	274031	90	\$26.25	\$54,590
<b>Sound Engineering Technicians</b>	274014	60	\$21.66	\$45,060
<b>Film &amp; Video Editors</b>	274032	50	\$20.41	\$42,460
<b>Makeup Artists, Theatrical &amp; Performance</b>	395091	S	S	S
<b>Total</b>		910	\$24.54	\$51,036

“S” signifies that the data is suppressed. These figures were not shared by the production company as it is considered a trade secret.

A total of 790 people were employed in supplemental film occupations in Northeast Ohio in 2010 (Table 6). Two occupations had 300 or more employees: *Writers & Authors* (330 employees / 42% of supplemental film occupations) and *Art Directors* (300 employees / 38% of supplemental film occupations). These two occupations also had high employment in the state as a whole. The other two industries with unsuppressed data (*Media & Communication Workers, All Other* and *Agents & Business Managers Artists, Performers, & Athletes*) each had 80 employees.

**Table 6: Employment & Average Wages: Supplemental Film Occupations in Northeast Ohio, 2010**

Occupation	SOC Code	Employment	Hourly Average wage	Annual Average wage
<b>Writers &amp; Authors</b>	273043	330	\$25.81	\$53,687
<b>Art Directors</b>	271011	300	\$32.61	\$67,828
<b>Media &amp; Communication Workers, All Other</b>	273099	80	\$21.22	\$44,140
<b>Music Directors &amp; Composers</b>	272041	80	\$14.30	\$29,750
<b>Agents &amp; Business Managers Artists, Performers, &amp; Athletes</b>	131011	S	S	S
<b>Total</b>		790	\$26.76	\$55,666

The highest average wage in the supplemental film occupations in Northeast Ohio was in *Art Directors* (\$67,828 annual / \$32.61 hourly), which was also the highest paid occupation at the state level. Only *Music Directors & Composers* had a lower average wage than the average wage for all industries in Northeast Ohio (\$29,750 annual / \$14.30 hourly). Mirroring activity at



the state level, the average wages in the supplemental film occupations were higher than the average wage of all other occupations combined (Table 7). Also, the average wage of all primary film occupations was \$7,501 (\$3.61 hourly) higher in NEO than in Ohio.

**Table 7: Average Wages in Northeast Ohio, Primary Film, & Supplemental Film Occupations, 2010**

	Hourly Average wage	Annual Average wage
<b>Northeast Ohio All Average Wages</b>	\$19.67	\$40,911
<b>Primary Film Occupation Average Wages</b>	\$24.54	\$51,036
<b>Supplemental Film Occupation Average Wages</b>	\$26.76	\$55,666

### Career Conclusions

While the occupations examined here in no way cover the extent of the possibilities for employment in the movie business, a glimpse into the film industry is provided. In 2010, over 8,250 people were employed in primary and secondary film occupations in Ohio; of those, 1,700 alone were located in Northeast Ohio (21% of the state total). These jobs pay higher average wages than the total average wage for the state. Relying on the ability, imagination, and expertise in Ohio, the film industry will find a ready workforce in the state.

## **Chapter 4: The Economic Impact of the Ohio Motion Picture Tax Credit**

### **Introduction**

Spending from the 27 projects awarded the Ohio Motion Picture Tax Credit is linked to other industries through buy-sell relationships. In order to produce goods and services, companies buy intermediary goods and services from other companies both inside and outside the industry. The buy-sell relationships that occur within the state of Ohio contribute to the economic impact of the tax credit. The economic impact is based on the local employment, purchases, and services made by the production companies awarded the Ohio Motion Picture Tax Credit between 2010 and 2012.

### **Methodology<sup>25</sup>**

This section explores the economic impact of the Ohio Motion Picture Tax Credit on Northeast Ohio and the state of Ohio. This analysis uses IMPLAN Professional and IMPLAN Data Files. IMPLAN Professional® 3.0 is an economic impact assessment software system. The IMPLAN Data Files allow for the creation of sophisticated models of local economies in order to estimate a wide range of economic impacts. For the purposes of this impact, we assume that all 27 of the projects would not have shot here, but for the Ohio Motion Picture Tax Credit.

This report measures five impacts of the Ohio Motion Picture Tax Credit on Ohio: employment, output, value added, labor income, and taxes. *Employment* measures the number of jobs in Ohio due to the spending on productions. *Output* measures the total value of goods and services produced in the state as a result of the activities of the spending. *Value added* measures the value of goods and services less the intermediary goods and represents a portion of output. *Labor income* is payroll paid to employees plus proprietors' income. *Taxes* include federal, state, and local tax revenues.

Each of the impacts, except for taxes, is a summation of direct impact, indirect impact, and induced impact. *Direct impact* is the initial value of goods and services the sector purchases in the state. *Indirect impact* measures the jobs and production needed to manufacture goods and services required by the industry. *Induced impact* is the increase in spending of local households because of income received through their work on the productions and with its suppliers.

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<sup>25</sup> The economic impacts contained in this report are based on the Applications for Film Production Tax Credit prepared by the production companies and, when available, the CPA audits/reports submitted to the Ohio Film Office. The financial information is taken as datum and no attempt was made to verify or audit financial systems and procedures. This report does not include the economic value of intangible items such the impact of physical development that took place from any shoots or increased downtown tourism and civic pride. Every attempt was made to accurately measure and spatially place the relevant “real” economic impacts.

## Economic Impact of the Ohio Motion Picture Tax Credit in Ohio

### Employment Impact

The 27 projects shot in Ohio between 2009 and 2012 accounted for 1,143 total jobs (Table 8). Of these, 651 were directly involved in filming (57% of the total). These are the primary jobs that exist in the industry. Additionally, 142 employees (12%) worked for industries that supported the filming by selling goods and services to the film industry and its suppliers. Finally, 351 employees (31%) worked for industries that sell goods and services to Ohio households associated with the film industry and its suppliers.

The top industries in direct employment impact were *Motion picture and video industries; Hotels and motels, including casino hotels; Commercial and industrial machinery and equipment rental and leasing; and Travel arrangement and reservation services* – all industries utilized by film productions. The majority of the indirect employment impact was in *Motion picture and video industries, Real estate establishments, Employment services, and Food services and drinking places*. Finally, the largest portion of the induced employment impact was in *Food services and drinking places; Real estate establishments; Offices of physicians, dentists, and other health practitioners; and Private hospitals*, as spent by people working on the films.

**Table 8: Economic Impact of the Ohio Motion Picture Tax Credit Projects in Ohio, 2009-2012**

Type of Impact	Employment	Labor Income	Output	Value Added
<b>Direct</b>	651	\$15,736,498	\$55,199,271	\$29,857,035
<b>Indirect</b>	142	\$6,053,963	\$17,440,832	\$10,032,021
<b>Induced</b>	351	\$13,705,655	\$40,358,718	\$24,307,626
<b>Total</b>	<b>1,143</b>	<b>\$35,496,116</b>	<b>\$112,998,821</b>	<b>\$64,196,682</b>

All financial figures are reported in 2012 dollars.

### Labor Income

Over \$35 million of the economic impact was labor income, or household earnings, associated with the productions. Almost \$16 million is associated with the direct effect, \$6 million with the indirect effect, and \$13.7 million with the induced effect.

### Output and Value-Added Impacts

The estimated output impact of the film productions was \$113 million. This is the value of the goods and services that were produced in the state through the buy-sell relationships of the industry. The majority of the impact was in the direct effect (\$55.2 million or 49%); while 15% (\$17.4 million) was in the indirect effect and 36% (\$40.4 million) was in the induced effect. The value-added impact, which excludes intermediate goods and services, is the value added to the goods and services made in Ohio. The value-added effect was \$64.2 million. Forty-six percent



of that was in the direct effect, 16% was in the indirect effect, and 38% was in the induced effect.

### **Tax Impact**

Based on the IMPLAN model, there was \$12.9 million in tax revenue associated with the filming in Ohio. Of this, \$7 million was federal tax revenue (54%) and \$5.9 million was state and local tax revenue (46%).

## **Economic Impact of the Ohio Motion Picture Tax Credit in Northeast Ohio**

### **Employment Impact**

Sixteen projects shot in Northeast Ohio between 2009 and 2012 took advantage of the Ohio Motion Picture Tax Credit, which is 59% of the total projects shot in the state during that time period (Table 9). These projects accounted for 901 total jobs. The direct effect, those directly involved with the filming, was 525 jobs (58% of the total effect). Thirteen percent of the employment impact was in the indirect effect (115 jobs) and 29% was in the induced effect (261 jobs). The employment impact in Northeast Ohio represented 79% of the total employment impact in the state.

The majority of the direct employment impact was, not surprisingly, in *Motion picture and video industries*. Other industries affected included *Hotels and motels, including casino hotels; Commercial and industrial machinery and equipment rental and leasing; and Travel arrangement and reservation services*. The top industries benefiting from the indirect effect were *Motion picture and video industries, Real estate establishments, Employment services, Food services and drinking places, and Wholesale trade businesses*. The top industries benefiting from the induced effect were *Food services and drinking places; Real estate establishments; Offices of physicians, dentists, and other health practitioners; and Private hospitals* – all from the spending of households.

**Table 9: Economic Impact of the Ohio Motion Picture Tax Credit Projects in Northeast Ohio, 2009-2012**

Type of Impact	Employment	Labor Income	Output	Value Added
<b>Direct</b>	525	\$12,248,504	\$43,262,015	\$23,258,006
<b>Indirect</b>	115	\$4,879,105	\$14,069,420	\$8,090,048
<b>Induced</b>	261	\$10,131,698	\$29,784,794	\$17,975,183
<b>Total</b>	<b>901</b>	<b>\$27,259,306</b>	<b>\$87,116,229</b>	<b>\$49,323,238</b>

All financial figures are reported in 2012 dollars.



### **Labor Income**

The labor income (household earnings) impact in Northeast Ohio is \$27.3 million. Over \$12 million was in the direct effect, \$4.9 million was in the indirect effect and \$10.1 million was in the induced effect. The labor income in Northeast Ohio represented 77% of the total labor income impact in the state.

### **Output and Value Added Impacts**

The estimated output impact (value of goods and services produced in Northeast Ohio) of the film productions was \$87.1 million. The majority of the impact was in the direct effect (\$43.3 million or 50%). Sixteen percent of the total impact was in the indirect effect (\$14.1 million) and 34% was in the induced effect (\$29.8 million). The activity in Northeast Ohio represented 77% of the total impact in Ohio.

The value-added impact is the value which is added to goods and services made in Ohio. The total value-added effect in Northeast Ohio was \$49.3 million. Forty-seven percent of that was in the direct effect, 16% was in the indirect effect, and 36% was in the induced effect. Northeast Ohio's share was 77% of the state's total value-added impact.

### **Tax Impact**

Again based on the IMPLAN model, the tax impact in Northeast Ohio was \$9.9 million. Fifty-five percent (\$5.4 million) was in federal tax revenue and 45% (\$4.5 million) was in state and local tax revenue. Northeast Ohio accounted for 77% of the total taxes garnered in Ohio.

## Return on Investment

Return on investment measures the efficiency of an investment. It is calculated as the net benefit divided by the cost. Many studies have been performed that attempt to estimate the return on investment for film tax credit programs in various states. Table 10 shows summaries of five studies which report return on investment findings ranging from 1.04 (California, the place for movies) to 5.37 (Louisiana, a state with no cap on their incentive program).

**Table 10: Summary of Studies on the Return on Investment of Film Tax Credit Programs**

State	Author	Year	Total Employment	Total State Spending	Estimated Film Credits	Return
California	UCLA Institute for Research on Labor and Employment*	2012	19,038	NA	NA	1.04
Louisiana	BaxStarr Consulting	2010	7,991	\$1,057,700,000	\$196,800,000	5.37
Massachusetts	Massachusetts Department of Revenue	2011	222	\$110,000,000	\$82,400,000	1.33
Michigan	Michigan Film Commissioner	2011	NA	\$168,607,474	\$65,704,445	2.57
Pennsylvania	Department of Community & Economic Development	2010	2,285	\$209,808,534	\$52,150,438	4.02

\* This is an analytical review of the study conducted by the Los Angeles County Economic Development Corporation, which reduces the return on investment from \$1.13 to \$1.04.

\*\* Other than the California study which reports a return on investment, the return is calculated here as dollars spent divided by total credit to estimate the return when it is not given in the report.<sup>26</sup>

The state of Ohio's total investment on the Ohio Motion Picture Tax Credit between 2009 and 2012 was \$28,288,119 on 27 projects. Because the dollar does not hold an even value, the inflated total value of the credit, in 2012 dollars, was \$29,857,035.

<sup>26</sup> See the report evaluating Connecticut's tax credit and abatement programs: [http://www.ct.gov/ecd/lib/ecd/decd\\_sb\\_501\\_sec\\_27\\_report\\_12-30-2010\\_final.pdf](http://www.ct.gov/ecd/lib/ecd/decd_sb_501_sec_27_report_12-30-2010_final.pdf).

The return on investment is found first by taking the total indirect and induced value-added impact (\$34,339,647) of Ohio’s investment. This represents the production needed to support the industry (indirect) and the increased spending of local households (induced). Next, this statistic is divided by the total cost of Ohio’s investment in the film tax credit program (\$28,648,441<sup>27</sup>). Therefore, the total return for each dollar spent on the Ohio Motion Picture Tax Credit is \$1.20. For each \$1 spent by the state, not only is that dollar returned to the economy, but an additional 20¢ is returned on top of it (Table 11).<sup>28</sup>



**Table 11: Return on Investment of the Ohio Motion Picture Tax Credit**

Benefits	
Indirect	\$10,032,021
Induced	\$24,307,626
Total	\$34,339,647
Costs	
Credit Value	\$28,648,441
<b>ROI</b>	<b>\$1.20</b>

### The Big Finish: Impact & Returns

The economic impact in Ohio has a total effect of 1,143 full-time annual jobs, \$35.5 in labor income, \$113 million in output, and \$64.2 million in value-added effect. In Northeast Ohio alone, the employment effect was 901 jobs, \$27.3 million in labor income, \$87.1 million in output, and \$49.3 million in value-added effect.

Given the total indirect and induced benefit to the state of \$34.3 million and the \$29.9 million direct cost of the Ohio Motion Picture Tax Credit, the return to the state, again assuming that all of these projects would have filmed elsewhere but for the credit, is \$1.20. Each dollar the state spends on the tax credit returns \$1.20 to the economy, for a net gain of 20¢ per dollar spent. Given the positive return to the state, the Ohio Motion Picture Tax Credit can be considered a successful incentive.

<sup>27</sup> Inflated to 2012 \$.

<sup>28</sup> The method used to calculate the return on investment uses additional dollars brought in by the initial purchase. While there are various ways in the academic and practitioner literature to calculate the return on investment, this is one of the most popular and conservative measures.

## Final Credits

The way people spend their free time and disposable income is changing. Since the Great Recession, many people tend to stay local and spend local. But going to the movies offers more than just a night out – it offers a sort of escapism from the hardships of everyday life. For the price of a ticket and a bag of popcorn, one can be transported to a world with superheroes that will always swoop in and save the day, or to the unknowns in outer space, or to a wacky scenario that somehow seems beyond belief and keeps us laughing all the way home. Although the ways movies are made has changed—from film to digital, from the “talkies” to Dolby surround, from miniature sets to computer-generated imagery—one thing has not changed: society seeks to escape for 90 minutes to different worlds in a way that only a theater can provide.

Historically, Ohio has not been known as a hot location for the movie industry. The Greater Cleveland Film Commission is working, not only to bring film projects to the state, but to create an industry from the ground up. In order for the industry to succeed, however, people need to be able to work year-round on projects, not just on occasion when Hollywood blockbusters come to town. This will foster a community in Ohio that nurtures the industry, retains the young people that dream of working in film, and attracts other talent to the state.

The film industry does not exist in a bubble. In fact, few industries touch so many others as does the film industry. From beauty shops to retail, from cleaning companies to security firms, this industry hits them all. Myriad possibilities exist for Ohioans to work in the film industry, even from these ancillary businesses.

In conclusion, the Ohio Motion Picture Tax Credit and all of the filming that took place in the state thus far, with and without the credit, are seeding the film industry in Ohio. It is obvious that major motion pictures want to shoot in Ohio as the yearly tax credit cap is met quickly and those late in applying are left out of the program.<sup>29</sup>

A recent article on the comeback of Cleveland cited the growing film industry as one of the top nine inspiring things in town and one of the best ways to increase the city’s image and economics.<sup>30</sup> Positive financial returns, positive feedback from Hollywood, and positive civic pride are all helping poise the film industry to grow in both Northeast Ohio and Ohio as a low-cost alternative that offers all of the same amenities as much larger cities.

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<sup>29</sup> [http://www.newsnet5.com/dpp/entertainment/movies/local\\_films/Ohios-motion-picture-tax-credit-may-be-a-victim-of-its-own-success](http://www.newsnet5.com/dpp/entertainment/movies/local_films/Ohios-motion-picture-tax-credit-may-be-a-victim-of-its-own-success)

<sup>30</sup> <http://voices.yahoo.com/article/9408386/the-return-comeback-city-11048888.html?cat=7>

We want a story that starts out with an earthquake  
and works its way up to a climax.  
~ Samuel Goldwyn