

The Economic Impact and Related Community Benefits of the Film Industry on the Cincinnati Metropolitan Area

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Executive Summary

The Ohio Motion Picture Tax Credit Program brought a positive economic impact to the Cincinnati Metropolitan Statistical Area¹ (MSA) (Cincinnati Region) during fiscal years (FY) 2014 through 2018.² Ohio awarded approximately \$35.6 million in Ohio Motion Picture Tax Credits to 30 productions filmed in the Cincinnati area during this period. Filming of these productions resulted in a total economic impact of \$142.0 million, an earnings impact of \$30.7 million, and an employment impact of 1,054 jobs between FY 2014 and FY 2018

For the Cincinnati regional economy, every dollar that went to the Ohio Motion Picture Tax Credit program was recovered in tax credits awarded to Cincinnati-based productions plus an additional \$0.51 on average. Direct new spending in the local economy resulting from productions is on average \$3.69 for every dollar contributed by local taxpayers. In FY 2017, the State awarded an estimated \$40.9 million to productions throughout the entire state and leveraged the funds to produce \$81.2 million in additional direct spending. This means that for every dollar awarded as an Ohio Motion Picture Tax Credit resulted in \$1.98 in direct new spending in the state.

Ohio Motion Picture Tax Credit

In 2009, the State of Ohio signed the Ohio Motion Picture Tax Credit into law. As of 2018, Ohio, 30 other states, Washington D.C., Puerto Rico, and the U.S. Virgin Islands offered a movie production incentive. For the Ohio Motion Picture Tax Credit, eligible productions are required to spend at least \$300,000 in Ohio, and the tax credit is not only extended to feature films exclusively but other types of productions as well. The tax credit is equal to 30 percent of all wages and eligible expenditures related to film production.³ Filmmakers identify this as one of the attractions for deciding to film in the Cincinnati Region.

"Ohio is doing an incredible job of doing what it takes to attract filmmakers here – the tax credit is a major reason we decided to shoot here."

– Jay Davis, Producer, Blood Heist and Blood Ride⁴

¹ A Metropolitan Statistical Area (MSA) is an area with close economic ties to one another.

² The State of Ohio fiscal year is July 1 to June 30.

³ Eligible expenditures include, but are not limited to equipment rental or purchase, real or commercial property expenses, lodging, location fees, wardrobe, sound effects, post-production, catering, props, and transportation.

⁴ (Baker, 2016)

Between 2012 and 2014, Film Cincinnati reported the following breakdown in production types filmed in the Region: television series (38%), feature films (35%), commercials (11%), pilots (8%), videos (5%), and documentaries (3%). All feature films during this period utilized the state tax credits. Between FY 2014 and FY 2018, 30 productions, a mix of feature films and television shows, received tax credits from the State of Ohio and were filmed in the Cincinnati Region. These productions were evaluated to determine the economic impact and leveraging ability for each fiscal year, respectively.

Supply Chain and Occupations

The film industry in the Cincinnati MSA is highly integrated into many other major industries in the Region.

Measuring the expenditures that the film industry devotes to other sectors highlights the importance of the industry to the regional economy. The top five industries in which the film industry spends its money include motion picture and video production; independent artists, writers, and performers; motion picture theaters;

commercial banking; and lessors of residential buildings. Other major sectors in which the film industry spends money include advertising agencies, law offices, couriers, construction, and insurance carriers, among others.



The Economics Center determined that the following five occupations account for more than half of the jobs in the film industry in the Cincinnati MSA during 2017: ushers, lobby attendants, and ticket takers; cafeteria, food concession, and coffee shop counter attendants; cashiers; producers and directors; and film and video editors. General and operations managers; all other managers; and film and video editors have the highest median hourly earnings among film industry occupations within the Cincinnati MSA. Detailed employee and wage data can be found within Table 5.

Economic Impacts

The total economic impact represents the total dollar amount of economic transactions that occur because of an industry's expenditures. Utilizing local film production expenditure data, employment information, and tax credit data for FY 2014 through FY 2018 from Ohio Motion Picture Tax Credit applications, award letters, and CPA reports provided by the Ohio Development Services Agency for each year's respective productions, the Economics Center analyzed how many additional dollars circulated in the economy as a result of the film productions' choice to locate in the Ohio portion of the Cincinnati MSA. Additionally, where available, the Economics Center used the final CPA-audited expenditure reports, which show actual tax credits received instead of the awarded figures.

The Economics Center determined that the film industry in the Cincinnati MSA has an expenditures multiplier of 1.6372.⁵ This means that, on average, every \$1 million spent by the industry locally results in an additional \$637,200 in economic activity in the Region. The industry has an earnings multiplier of 0.3545, which means for every \$1 million spent by the industry locally, a further \$354,500 is earned by workers in the Cincinnati MSA economy. Lastly, the film industry has an employment multiplier of 12.0207. This means that for every \$1 million spent by the industry locally, an estimated 12 new jobs are added to the Region's economy. To adjust for inflation, all dollar values have been adjusted to 2017 dollars.

The total tax credits received by productions filmed in the Cincinnati area are shown in Table 1. Cincinnati-based productions received approximately 23.0 percent of the total tax credits awarded between FY 2014 and FY 2018. These tax credits are paid by Ohio taxpayers, of which local Cincinnati MSA taxpayers paid, on average 14.5 percent. The taxes paid in a given year are awarded as tax credits the following year. Therefore, the taxes paid in FY 2017 are used to award tax credits in FY 2018.

Table 1: Ohio Motion Picture Tax Credits to Productions in the Cincinnati MSA, FY2014-2018 (2017\$)

Fiscal Year	Number of Productions	Tax Credit to Cincinnati-based Films	Cincinnati Contribution to Tax Credit
2014	4	\$5,632,933	\$2,987,816
2015	6	\$4,144,852	\$2,876,238
2016	4	\$3,915,483	\$5,650,867
2017	11	\$13,601,198	\$6,027,434
2018	5	\$8,293,495	\$5,964,452
Total	30	\$35,587,961	\$23,506,807

Source: Ohio Development Services Agency and Economics Center calculations.

In FY 2014, the four productions filmed in the Cincinnati Region contributed to the creation of 2,250 jobs over the course of production, which is the equivalent of 114 jobs over the course of the entire year. These 114 direct jobs led to an additional 87 jobs being created for a total impact of 201 jobs. As shown in Table 2, productions in FY 2014 led to a total economic impact of \$26.4 million and earnings of \$5.7 million, based on the investment of the \$5.6 million awarded as Ohio Motion Picture Tax Credits to Cincinnati-based productions. Cincinnati taxpayers contributed \$3.0 million to all Ohio Motion Picture Tax Credits awarded in FY 2014. As Table 3 shows, these film productions led to increased income tax revenue of \$100,243 for the City of Cincinnati and nearby localities in Ohio.

⁵ All multipliers used in this report are derived from the Regional Industrial Multiplier System (RIMS). This report uses RIMS II multipliers, which includes induced economic impacts, which are the expenditures by households of those receiving money from the direct and indirect production expenditures. Induced impacts are included with indirect impacts in this report.

In FY 2015, six Cincinnati-area productions received tax credits totaling \$4.1 million. The productions directly employed 1,478 people during production, which equated to 102 direct jobs over the course of the entire year. These 102 direct jobs supported another 78 jobs in the local economy, for a total of 180 jobs created in FY 2015. These FY 2015 productions paid \$2.4 million in wages and indirectly supported another \$2.8 million in earnings, for a total of \$5.1 million in increased earnings. In terms of expenditures, the six productions spent \$14.4 million. That direct spending supported a further \$9.2 million in economic activity, for a total economic impact of \$23.6 million in FY 2015. Local governments received \$58,730 in increased income tax revenue.

Four films were awarded approximately \$3.9 million from the Ohio Motion Picture Tax Credit program in FY 2016. These films together contributed to the direct employment of 55 jobs, or 2,004 jobs during the course of production. In all, 97 full- and part-time jobs were created because of the films' production. These productions directly spent \$7.8 million in the Cincinnati MSA for their business operations, which led to further spending of \$5.0 million in the MSA for a total economic impact of \$12.8 million. In addition, direct employees of the films earned \$1.3 million in wages while indirect employees received approximately \$1.5 million. The City of Cincinnati and nearby localities received approximately \$62,254 in increased income tax revenue.



The eleven Cincinnati-based productions awarded Ohio Motion Picture Tax Credits in FY 2017 directly employed 4,407 people during production, which equated to 205 employees over the course of the year. An additional 156 jobs were created for a total impact of 361 jobs. Overall, productions in FY 2017 led to a total economic impact of \$49.1 million and earnings of \$10.6 million, based on the investment of \$13.6 million awarded as Ohio Motion Picture Tax Credits to these Cincinnati-based productions. Cincinnati taxpayers contributed \$6.0 million to all tax credits awarded in FY 2017. Local governments received \$173,843 in increased income tax revenue.

In FY 2018, five films shot in the Cincinnati area and were awarded \$8.3 million in Ohio Motion Picture Tax Credits. These films contributed to the direct employment of 2,099 people, or 122 jobs during the course of production. These 122 direct jobs led to the creation of an additional 93 jobs. The FY 2018 productions spent \$18.3 million in the Cincinnati MSA for their business operations, which led to further spending of \$11.7 million for a total economic impact of \$30.0 million. In addition, direct employees of the films earned \$3.0 million in wages while indirect employees received \$3.5 million. These film productions also led to increased income tax revenue of \$172,019 to the City of Cincinnati and nearby localities.

Table 2: Aggregate Economic Impacts of Productions in the Cincinnati MSA, FY2014-2018 (2017\$)

Fiscal Year	Impact Type	Expenditures	Earnings	Employment
2014	Direct	\$16,150,012	\$2,637,481	114
	Indirect	\$10,290,787	\$3,087,699	87
	Total	\$26,440,799	\$5,725,180	201
2015	Direct	\$14,421,175	\$2,355,142	102
	Indirect	\$9,189,172	\$2,757,165	78
	Total	\$23,610,347	\$5,112,307	180
2016	Direct	\$7,843,398	\$1,280,916	55
	Indirect	\$4,997,813	\$1,499,569	42
	Total	\$12,841,211	\$2,780,485	97
2017	Direct	\$29,998,952	\$4,899,170	205
	Indirect	\$19,115,332	\$5,735,458	156
	Total	\$49,114,284	\$10,634,628	361
2018	Direct	\$18,312,378	\$2,990,620	122
	Indirect	\$11,668,647	\$3,501,118	93
	Total	\$29,981,025	\$6,491,738	215
Total 2014-2018	Direct	\$86,725,915	\$14,163,329	598
	Indirect	\$55,261,751	\$16,581,009	456
	Total	\$141,987,666	\$30,744,338	1,054

Source: Economics Center calculations using RIMS II multipliers from data provided by the Ohio Development Services Agency.

Table 3: Local Earnings Tax Impact of Film Production in the Cincinnati MSA, FY2014-2018 (2017\$)

Fiscal Year	Local Earnings Tax Impact
2014	\$100,243
2015	\$58,730
2016	\$62,254
2017	\$173,843
2018	\$172,019
Total	\$567,089

Source: Economics Center calculations.

Local and State Leveraging

The Cincinnati MSA has seen increased spending throughout the regional economy as a result of the Ohio Motion Picture Tax Credit program. On average, local taxpayers contributed approximately \$2.9 million annually during FY 2014 and FY 2015 with the tax credit funding increasing to \$5.9 million annually from FY 2016 through FY 2018. Direct

new spending in the local economy was \$16.2 million, \$14.4 million, \$7.8 million, \$30.0 million, and \$18.3 million in FY 2014-2018, respectively.

The Ohio Motion Picture Tax Credit program allows the State of Ohio to leverage funds to create additional spending throughout the state. For FY 2017, Ohio awarded \$40.9 million in Ohio Motion Picture Tax Credits, which resulted in additional direct new spending of \$81.2 million within the State.

“Everybody has been super, super courteous. I knew we’d have cooperation with the local film community, but people on the streets have been more cooperative than they needed to be.”

– Kevin Connolly, Director, Gotti (Film Cincinnati Interview, August 2016)



Introduction

Film Cincinnati, formerly known as the Greater Cincinnati and Northern Kentucky Film Commission, is a not-for-profit organization dedicated to attracting, promoting, and cultivating film, television and commercial production throughout Greater Cincinnati and Northern Kentucky. Since its beginning in 1987, Film Cincinnati has brought thousands of films, commercials, music videos, documentaries, and industrial videos to Greater Cincinnati.



The creation of the Ohio Motion Picture Tax Credit in 2009 has the same underlying objective as Film Cincinnati – encourage and develop a strong film industry. The State of Ohio has shown its commitment to this objective by ensuring funding is available for these tax credits. Most notably, the Ohio State Legislature doubled the funding for the Ohio Motion Picture Tax Credit program from \$20 million annually to \$40 million annually during FY 2016.

The Economics Center’s analysis presented in this report examines the economic impacts and related community benefits of the film industry on the 15-county Cincinnati MSA.⁶ The report describes the nature of the industry’s impact on the community through its engagement with numerous businesses in the film industry, the industry’s supply chain, and local workforce.

The Economics Center recognizes that the benefits of the film industry extend beyond its economic impacts. In order to supplement the data analysis and uncover the qualitative effects of the film industry and the Ohio Motion Picture Tax Credit, the Economics Center included interviews conducted by Film Cincinnati with stakeholders of the productions filmed in the Cincinnati MSA.

Recent Activities

A variety of movie production incentives are offered by states to attract and boost in-state film production. Some state tax credits are transferable, and others are refundable. The State of Ohio offers transferable and refundable tax credits, which are paid to production companies by the State with taxpayer money. As of January 2018, 31 states, including Ohio, two U.S. territories, and Washington D.C. offered movie production incentives.⁷

⁶ The Cincinnati MSA encompasses five counties in Ohio: Brown, Butler, Clermont, Hamilton, and Warren; seven counties in Kentucky: Boone, Bracken, Campbell, Gallatin, Grant, Kenton, and Pendleton; and three in Indiana: Dearborn, Franklin, and Ohio.

⁷ (National Conference of State Legislatures, 2018)

Ohio Motion Picture Tax Credit

According to the National Conference of State Legislatures' State Film Production Incentives and Program report (2014), "On Friday, July 17, 2009, the governor signed into law Ohio budget bill (HB1) including Sec. 122.85 which creates a Film Tax Credit for Ohio. The bill provides for a refundable, non-transferable, tax credit against the corporation franchise or income tax for motion pictures produced in Ohio. The tax credit was equal to 25 percent of Ohio-based production expenditures and nonresident wages and 35 percent of Ohio resident wages. There was a per-project cap of \$5 million, and each episode of a TV series qualifies as a separate project. To earn the rebate, a production must have an audit performed."⁸

In 2016, the Ohio State Legislature amended the Motion Picture Tax Credit by doubling the total tax credit amount from \$40 million every two fiscal years to \$40 million each fiscal year. Further, the tax credit was amended to be equal to 30 percent of all wages and eligible Ohio-based expenditures. The \$5 million maximum tax credit per production was also removed. The amended Motion Picture Tax Credit went into effect September 28, 2016.⁹



The Ohio State Legislature amended the Motion Picture Tax Credit in 2017 as well, effective September 29, 2017. Each applicant for the Motion Picture Tax Credit is now required to pay a non-refundable application fee of the lesser of one percent of the estimated value of the tax credit or \$10,000. The applicant must provide documentation of secured funding for at least 50 percent of the total production budget. Tax credits not used will now rollover to the following fiscal year. Furthermore, tax credit priority will be given to applications for television series or miniseries.¹⁰

The Ohio Film Office reports that in order to be eligible for the Ohio Motion Picture Tax Credit, productions are required to spend at least \$300,000 in the State. The tax credit is not limited to only feature films. Other types of eligible productions include documentaries, interactive web sites, sound recordings, videos, music videos, interactive television, interactive games, video games, commercials, and any format of digital media. On its website, Film Cincinnati highlights the \$30 million in credits that were available in the FY 2013, and the \$20 million available in the FY 2014. The amount was increased to \$40 million for FY 2016-2018.

⁸ (National Conference of State Legislatures, 2014)

⁹ (Ohio Legislative Service Commission, 2016)

¹⁰ (132nd Ohio General Assembly, 2017)

"It's been fantastic filming in Cincinnati. The community, the locations are amazing to work with. We love making movies here."

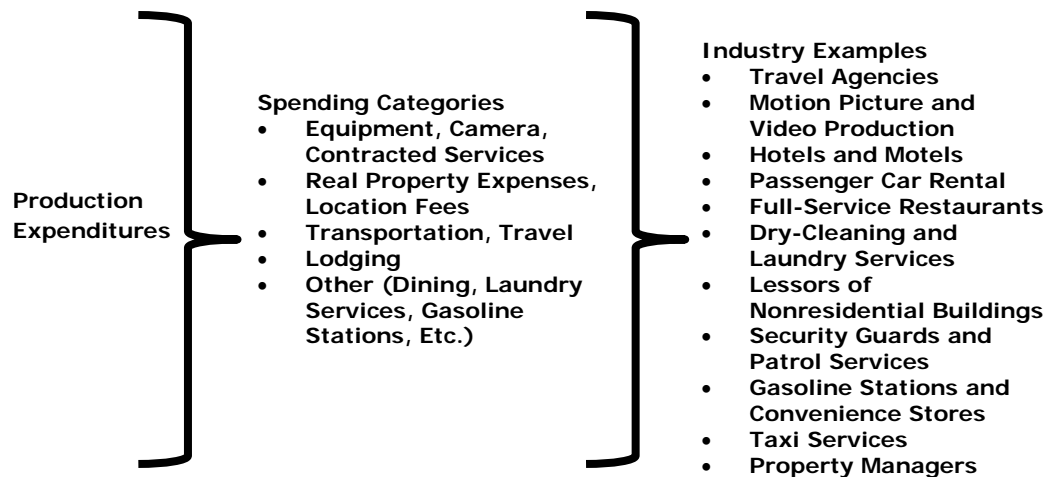
– Randall Emmett, Producer, Marauders, Gotti, Inconceivable, and Reprisal (Film Cincinnati Interview, July 2017)

Supply Chain and Occupations

Supply Chain

The film industry (classified as the Motion Picture and Video Industries, by NAICS)¹¹, is highly integrated into many other major industries in the Region. It is an inter- and intra-connected industry; it spends money both inside its own industry and in other industries. As a result, these industries witness increased business because of film productions. Figure 1, shows how production expenditures flow through the specific industries and through the economy as a whole.

Figure 1: Breakdown of Production Expenditures by Spending and Industry



The Economics Center utilized MSA-level industry data from the Economic Modeling Specialists Incorporated's (EMSI) multi-regional social account matrix model (MR-SAM) to estimate the film industry expenditures in the Cincinnati MSA and in which industries those expenditures were spent.

¹¹ The North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. economy.

The industries displayed in Table 4, below, are those in which the film industry spends greater than or equal to one percent of its total annual expenditures. In 2017, the top three industries in which the Cincinnati film industry spent its money were motion picture and video production (\$5.6 million); independent artists, writers, and performers (\$1.5 million); and motion picture theaters (\$1.5 million).

Table 4: Motion Picture and Video Industries Supply Chain in the Cincinnati MSA

NAICS	Industry	In-Region Purchases (2017\$)
512110	Motion Picture and Video Production	\$5,583,190
711510	Independent Artists, Writers, and Performers	\$1,492,702
512131	Motion Picture Theaters (except Drive-Ins)	\$1,469,331
522110	Commercial Banking	\$740,088
531110	Lessors of Residential Buildings and Dwellings	\$574,167
541810	Advertising Agencies	\$541,088
512191	Teleproduction and Other Postproduction Services	\$520,988
561320	Temporary Help Services	\$473,204
541990	All Other Professional, Scientific, and Technical Services	\$465,023
541110	Offices of Lawyers	\$450,358
711310	Promoters of Performing Arts, Sports, and Similar Events with Facilities	\$448,858
515120	Television Broadcasting	\$442,864
532490	Other Commercial and Industrial Machinery and Equipment Rental and Leasing	\$404,529
492110	Couriers and Express Delivery Services	\$378,442
532412	Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	\$356,109
524126	Direct Property and Casualty Insurance Carriers	\$344,113
531120	Lessors of Nonresidential Buildings (except Miniwarehouses)	\$288,182
531210	Offices of Real Estate Agents and Brokers	\$286,187
711320	Promoters of Performing Arts, Sports, and Similar Events without Facilities	\$279,869
541611	Administrative Management and General Management Consulting Services	\$255,705
551114	Corporate, Subsidiary, and Regional Managing Offices	\$254,200

Source: Economic Modeling Specialists Incorporated.

Occupations

The film industry directly employs a wide variety of occupations in its normal operations. EMSI lists 143 different occupation types employed by the motion picture and video industry in the Cincinnati MSA during 2018. Table 5 shows wage and employment details for the occupations that account for at least one percent of the total jobs within the Cincinnati MSA film industry by Standard Occupation Code (SOC). A detailed table including all occupations within the Cincinnati MSA film industry can be found in the Appendix. All wages are the equivalent of hourly wages.



Of these occupations, those that pay the greatest hourly median wage are general and operations managers; all other managers; film and video editors; and multimedia artists and animators. The hourly median wage of Cincinnati MSA workers is \$21.42. These four occupations within the film industry have hourly median wages exceeding the hourly median wage for all workers in the Cincinnati MSA.

Positive job growth was seen from 2014 to 2018 for 15 of the 21 occupations with an additional two occupations experiencing no growth. Nonrestaurant food servers and security guards both experienced positive growth of more than 100.0 percent from 2014 to 2018. No work experience is required for 15 of the 21 occupations, and an additional five occupations require less than five years of experience.

The typical entry level education for all occupations listed is at most a bachelor's degree. However, more than half of these 21 occupations typically need at most a high school diploma or equivalent for an entry level position. Entry level supervisors of personal service workers; all other media and communication workers; and supervisors of food preparation and serving workers typically need at most a high school diploma or equivalent. Additionally, no formal educational credential is typically needed for entry level positions as nonrestaurant food servers; motion picture projectionists; and laborers and freight, stock, and material movers.

Table 5: Motion Picture and Video Industry Occupations in the Cincinnati MSA

SOC	Description	2014 Jobs	2018 Jobs	% Change (2014 - 2018)	Median Hourly Earnings (2017\$)
39-3031	Ushers, Lobby Attendants, and Ticket Takers	202	316	56.4%	\$9.84
35-3022	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	200	282	41.0%	\$9.16
41-2011	Cashiers	102	128	25.5%	\$9.45
27-2012	Producers and Directors	89	90	1.1%	\$21.39
27-4032	Film and Video Editors	58	65	12.1%	\$24.02
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	30	59	96.7%	\$9.33
39-1021	First-Line Supervisors of Personal Service Workers	35	53	51.4%	\$17.52
27-3099	Media and Communication Workers, All Other	63	32	-49.2%	\$14.11
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	27	32	18.5%	\$15.17
11-1021	General and Operations Managers	25	30	20.0%	\$47.84
35-3041	Food Servers, Nonrestaurant	3	30	900.0%	\$10.01
27-4031	Camera Operators, Television, Video, and Motion Picture	23	27	17.4%	\$18.91
39-3021	Motion Picture Projectionists	27	23	-14.8%	\$11.09
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	22	22	0.0%	\$13.50
27-1014	Multimedia Artists and Animators	25	22	-12.0%	\$21.82
27-2011	Actors	47	21	-55.3%	\$12.65
27-4011	Audio and Video Equipment Technicians	21	21	0.0%	\$17.49
43-9061	Office Clerks, General	20	21	5.0%	\$15.26
11-9199	Managers, All Other	19	21	10.5%	\$29.77
27-3041	Editors	17	19	11.8%	\$20.40
33-9032	Security Guards	9	19	111.1%	\$10.97

Source: Economic Modeling Specialists Incorporated.

Recent Productions

Production Types

Feature films are not the only types of productions that are produced in and have an impact on the Cincinnati MSA. Film Cincinnati reports that of projects between 2012 and 2014, 38 percent have been television series, 35 percent have been feature films, 11

percent have been commercials, 8 percent have been pilots, 5 percent have been videos, and 3 percent have been documentaries. All completed feature films that have taken place in the Cincinnati MSA in that period utilized the state tax credits.

FY 2014 Evaluated Productions

The following productions applied for and were granted Ohio Motion Picture Tax Credits. These are the four productions whose expenditures were evaluated to determine the impact of the film industry on the Cincinnati MSA in FY 2014.

- *Carol*: This feature film, starring Cate Blanchett and Rooney Mara, was filmed in downtown Cincinnati in 2014, and was released in November 2015. It is based on the novel *The Price of Salt* by Patricia Highsmith, about a department store clerk in 1950s New York City who falls for an older married woman.
- *Chain of Command* (previously titled *The Echo Effect*): This action thriller stars Michael Jai White and Steve Austin, and was filmed in Hamilton.
- *Miles Ahead*: This feature film, a biography of jazz musician Miles Davis, was shot in downtown Cincinnati. The film stars Don Cheadle as Miles Davis.
- *Rowhouse Showdown* (previously titled *Renovation Row*): Ten episodes of this urban makeover reality show were filmed in East Price Hill by A&E Network. According to the show, "each episode of the series follows three teams as they battle it out through a transformation showdown of identical urban homes."¹²

"Discovering Cincinnati was the key to unlocking our production of Carol. I don't believe we could have made the film anywhere else. The city presented us with unparalleled period exterior and interior locations in both the rural and urban environs we needed . . . for the movie. We were able to film the whole production within a confined radius of our downtown office hub, which had a hugely positive impact on so many levels. In addition, we sourced excellent local crew and facilities and were welcomed by the city with open arms and a 'can do' film-friendly attitude."

– Elizabeth Karlsen, Producer, Carol (Film Cincinnati Interview, June 2014)

¹² (Kiesewetter, 2014)

FY 2015 Evaluated Productions

The following six productions applied for and were granted Ohio Motion Picture Tax Credits. These are the productions whose expenditures were evaluated to determine the impact of the film industry on the Cincinnati MSA in FY 2015.

- *A Kind of Murder* (previously titled *The Blunderers*): Starring Jessica Biel and Patrick Wilson, this film is another movie adaptation of a Patricia Highsmith novel. The story is a psychological drama about a husband who comes under suspicion for his wife's murder.
- *Goat*: An adaptation of a fraternity hazing memoir by Brad Land, the movie stars Ben Schentzer and Nick Jonas. The movie is produced by Killer Films, which brought the production of the movies *Carol* and *A Kind of Murder* to Cincinnati.
- *Lachey's: Raising the Bar*: Hometown celebrities Nick and Drew Lachey opened a bar in Over-the-Rhine, and the VH1 reality show documents its opening.
- *Marauders*: A major action thriller starring Bruce Willis, Dave Bautista, and Christopher Meloni in which an elite group of bank robbers is pursued by an FBI agent with suicidal tendencies.
- *Pro Football Focus Weekly Review* was filmed in the area in 2015, but no synopsis is available.
- *The Long Home*: This movie, filmed in Hamilton and other parts of Butler County, tells the story of a young contractor who unknowingly works for the man who murdered his father. Starring James Franco and Josh Hutcherson, this film is produced by Franco's production company, Rabbit Bandini.

"We had a great experience in Cincinnati on our films 'Carol' and 'The Blunderer' [later renamed A Kind of Murder] in 2014. The film commission, the rebate, locations, infrastructure and film-friendly people of Cincinnati have brought us back again."

– Christine Vachon, Producer, Carol, A Kind of Murder, and Goat¹³

FY 2016 Evaluated Productions

The following four films applied for and were granted Ohio Motion Picture Tax Credits. These productions were evaluated to determine the impact of the film industry on the Cincinnati MSA in FY 2016.

- *A Christmas Melody*: An original holiday movie for the Hallmark Channel, directed by and starring Mariah Carey.
- *Over the Rhine*: A Catholic-themed film produced by Saint Michael Movies.

¹³ (Wilkinson, 2015)

- *the public*: This film features a group of homeless people who refuse to leave Cincinnati's main downtown library at closing time due to emergency shelters being at capacity because of a brutally cold winter. The film is written and directed by Emilio Estevez, who also stars in it alongside Taylor Schilling and Alec Baldwin.¹⁴
- *Tiger*: Starring Mickey Rourke and Ashley Benson. The movie is the story of a boxer who must choose between his career and his principles.

"In the case of getting this film (the public) made; it took a city and that city is Cincinnati. Kristen Schlotman, who runs the Cincinnati film commission – we would not be here without her."

– Emilio Estevez, Writer, Director, Producer, and Star, the public (Santa Barbara International Film Festival, January 2018)

FY 2017 Evaluated Productions

The following productions applied for and were granted Ohio Motion Picture Tax Credits. These are the eleven productions whose expenditures were evaluated to determine the impact of the film industry on the Cincinnati MSA in FY 2017.

- *A Brand New Kitchen*: A film produced by Saint Michael Movies, which makes Catholic-themed films including *The Tribunal* and *Over the Rhine*.¹⁵
- *Blood Heist & Blood Ride* (previously titled *Blood on Wheels*): Both are low budget sci-fi cult horror thrillers involving James Franco along with filmmakers and Hamilton natives, Jay Davis and Vince Jolivet. They have been filmed back to back in Hamilton, specifically in the German Village/Third Street areas.¹⁶
- *Gotti* (previously titled *The Life and Death of John Gotti*): This movie is a biopic about New York mob boss John Gotti, who is played by John Travolta. Director Kevin Connolly felt that Cincinnati was great for portraying New York and even better than the real locations for showing the New York of the past.¹⁷
- *Inconceivable*: A film, starring Nicolas Cage, whose plot centers on a woman moving to another town to escape her abusive past. There, she befriends an



¹⁴ (Fast, 2017)

¹⁵ (St. Michael Movies, 2018)

¹⁶ (Baker, 2016)

¹⁷ (Mains & Stewart, 2016)

unstable mother. Christ Hospital's Spine Institute is one of the filming locations in Cincinnati.¹⁸

- *My Days of Mercy* (previously titled *Mercy*): The story of a woman, whose father is on death row and falls in love with a woman holding opposing political views towards her family's cause. This movie stars Ellen Page and Kate Mara. After *Carol*, *A Kind of Murder*, and *Goat*, this is the fourth movie shot in Cincinnati by production company Killer Films.¹⁹
- *Surviving Compton: Dre, Suge & Michel'le* (previously titled *Girl from Compton*): Movie chronicling the life of R&B artist Michel'le. In contrast to most movies that use Cincinnati to portray Chicago or New York, this movie filmed in streets of Hyde Park and Middletown to show scenes from California.²⁰
- *The Killing of a Sacred Deer*: Psychological drama starring Colin Farrell as a surgeon and Nicole Kidman as his wife.
- *The Old Man & the Gun*: Robert Redford portrays real-life bank robber Forrest Tucker, who escaped prison at age 70 and went on a string heists. According to a report from Entertainment Weekly, Redford alluded this will be his last film appearance as an actor.²¹
- *UFO*: A mystery film about a college student who becomes involved in a FBI investigation after looking into reports of UFOs at a nearby airport. The film features *X-Files* star Gillian Anderson.²²
- *WWE Raw 2016*: A live, professional wrestling television program airing on Monday nights.

"Coming to Cincinnati to make "Old Man & the Gun" has really been a fantastic experience. We've counted . . . [on] Kristen [Schlotman], the film office, and so many of the local folks for a lot of help and support. . . . We had a short prep schedule on this. Kristen, before I landed here on the ground, she was helping me put a lot of the ground game in place, whether it be from getting permits, making the right introductions to the city municipality and to the state film office, to making sure we filed our tax credit application correctly. It really has been a time and money saver. As a producer, that kind of level of assistance has really made making this movie a lot more successful."

*– Patrick Newall, Executive Producer, The Old Man & the Gun
(Film Cincinnati Interview, April 2017)*

¹⁸ (Mains, 2016)

¹⁹ (Mains, 2016)

²⁰ (Cunningham, 2016)

²¹ (Motsinger, 2018)

²² (Mains, 2018)

FY 2018 Evaluated Productions

The following films applied for and were granted Ohio Motion Picture Tax Credits. Expenditures were evaluated for these five productions to determine the impact of the film industry on the Cincinnati MSA in FY 2018.

- *Chance*: Based on a true story in Brown County, Ohio, this film depicts the story of a young boy who finds happiness through baseball but is unable to handle the pressures of life.²³
- *Donnybrook*: A film about a man who is hard pressed for cash to support his family so he competes in the Donnybrook, a bare-knuckled brawl with a \$100,000 prize for the last man standing.²⁴
- *Notzilla*: A spoof of 1950s and 1960s monster movies, this film focuses on a professor's attempt to save a Japanese monster accidentally set loose in the U.S.²⁵
- *Point Blank*: Starring Anthony Mackie and Frank Grillo, an emergency room nurse is forced to work together with a criminal to save his pregnant wife after she is kidnapped.²⁶
- *Reprisal*: This action-packed movie starring Bruce Willis and Frank Grillo focuses on an assistant bank manager tracking down the criminal responsible for a robbery at his bank.²⁷ This is the fourth film by the production company Emmett/Furla/Oasis Films to be filmed in Cincinnati, which also produced *Marauders*, *Gotti*, and *Inconceivable*.²⁸

"What's great is the hotels to the locations are four minutes, to the production office, five, six minutes. When you shoot in a bigger city or a more complex, laid-out city, you're dealing with traffic, you're dealing with problems – and it's two hours to get from one (location) to the next to get setup."

– Randall Emmett, Producer, Marauders, Gotti, Inconceivable, and Reprisal²⁹

²³ (Suckow, 2018)

²⁴ (Caproni, 2017)

²⁵ (Notzilla, 2018)

²⁶ (Caproni, 2018)

²⁷ (Mains, 2018)

²⁸ (Hart, 2017)

²⁹ (Hart, 2017)

Economic Impact

Introduction

An economic impact analysis measures the amount of economic transactions that occur because of an organization or industry's expenditures, providing a picture of economic activity. This analysis demonstrates how the choice made by film producers to locate in the Cincinnati area stimulates other industries in the area and how many additional dollars circulate in the economy due to every dollar that an organization or industry spends. This section communicates the economic impact of the film industry's expenditures for the Cincinnati MSA. The



report analyzes expenditures and employment of 30 productions filmed in the Cincinnati MSA between FY 2014 and FY 2018, and the resulting economic activity via sales and job creation.

Methodology

The Economics Center calculated the economic impacts of the film industry in the Cincinnati MSA for FY 2014 through FY 2018 by utilizing tax credit, expenditure, and employment data for each respective production. The Ohio Development Services Agency provided the Economics Center with the Ohio Motion Picture Tax Credit applications and award letters for each production within the Cincinnati area but noted that these are estimates. The actual tax credit certificate amount is determined after production is complete and the company submits a CPA-audited report of all production expenditures. Those CPA reports were received for 23 of the 30 reviewed productions and, therefore, reflect the actual tax credit amount and expenditures. The tax credits and expenditures for the remaining seven productions without CPA reports available were estimated based upon their respective applications and award letters.

The Economics Center identified the percent of total sales tax in Ohio that was contributed by the Ohio counties in the Cincinnati MSA. According to the Ohio Department of Taxation, the Ohio counties that comprise the Cincinnati MSA (Brown, Butler, Clermont, Hamilton, and Warren) contributed approximately 14.5 percent³⁰ of the total sales tax collected by the 88 Ohio Counties between FY 2013 and FY 2017. The contribution percentage in each fiscal year was utilized to estimate the contribution by local taxpayers to the Ohio Motion Picture Tax Credits awarded in the following fiscal year.

The total production budget of each production was factored for leakage and represents the direct expenditures of the film industry. Leakages refer to the percentage of demand for products and services that cannot be met immediately with the Cincinnati MSA, but rather imported from outside the MSA. The percentage of leakage is a figure obtained

³⁰ The Cincinnati MSA portion was 14.4, 13.9, 13.8, 15.1, and 15.2 percent, respectively in FY 2013-2017.

from EMSI.³¹ The leakage out of the local economy was accounted for when quantifying the economic impacts of the film industry. Therefore, the total impacts include only the money that is retained in the local economy.

The post-leakage production budget of each production was then used in the RIMS II input-output model to estimate the total impact of the productions in the Cincinnati MSA. Employment and earnings impacts were estimated using total expenditures of the productions in the Cincinnati MSA. The number of jobs created during production is also included.



The total economic impact is the sum of the direct impact and the indirect impact. In this analysis, the direct impact is the amount spent directly and locally by the productions. These expenditures also affect other industries by increasing demand, jobs, and income for the suppliers of the film industry. This is the indirect impact, the additional economic impact that is a result of inter-industry linkages. Direct impacts have ripple effects—induced impacts—due to increases in household income and spending.³²

Multipliers are used to determine the total economic impact when applied to the direct impact. These multipliers are industry and location specific and are provided by the Regional Industrial Multiplier System (RIMS). These multipliers are available at state, Metropolitan Statistical Area, and county levels in the United States. The film industry in the Cincinnati MSA has an expenditures multiplier of 1.6372, which means that, on average, every \$1 million spent by the industry locally results in an additional \$637,200 in economic activity in the Region. The industry has an earnings multiplier of 0.3545, which means for every \$1 million spent by the industry locally, a further \$354,500 is earned by workers in the metropolitan economy. Lastly, the film industry has an employment multiplier of 12.0207. This means that for every \$1 million spent by the industry locally, an estimated 12 new jobs are added to the Region's economy.

Regarding fiscal impact calculations, the Economics Center obtained historical and current income tax rates from the Ohio Department of Taxation. The fiscal impacts of the film industry were determined by applying the respective tax rates to Ohio resident earnings. To adjust for inflation, all dollar values have been adjusted to 2017 dollars.

"When I saw what the city of Cincinnati offered, I completely changed the script so that it would embody this city. The locations were just phenomenal."

– Jonathan Baker, Director, Inconceivable³³

³³ (Mains, 2016)

Impacts of Spending and Employment

Between FY 2014 and FY 2018, the 30 productions filmed in the Cincinnati area contributed to an increased spending of approximately \$142.0 million, increased earnings of more than \$30.7 million, and the equivalent of 1,054 jobs. The increased earnings also led to increased income taxes of approximately \$567,089 to Cincinnati and other localities in Ohio.

Expenditure Impacts

The direct expenditures of the 30 Cincinnati-based productions between FY 2014 and FY 2018 totaled \$86.7 million, which was spent on the wages, location fees, sound effects, catering, and equipment rental, among other things. This spending, in turn, led to the further spending of \$55.3 million for a total economic impact of approximately \$142.0 million.

Table 6: Economic Impacts of Film Production in the Cincinnati MSA, FY2014-2018 (2017\$)

Fiscal Year	Direct	Indirect	Total
2014	\$16,150,012	\$10,290,787	\$26,440,799
2015	\$14,421,175	\$9,189,172	\$23,610,347
2016	\$7,843,398	\$4,997,813	\$12,841,211
2017	\$29,998,952	\$19,115,332	\$49,114,284
2018	\$18,312,378	\$11,668,647	\$29,981,025
Total	\$86,725,915	\$55,261,751	\$141,987,666

Source: Economics Center calculations using RIMS II multipliers from data provided by the Ohio Development Services Agency.

Earnings Impacts

The film industry generated more than \$30.7 million in wages to residents of the Cincinnati MSA during FY 2014 through FY 2018. The wages earned by those directly employed by the film industry was \$14.2 million, which led to a further \$16.6 million in wages paid to those indirectly employed by the film industry. Between FY 2014 and FY 2018, the average annual earnings of those directly employed by the industry was \$23,684 while the average wages of those indirectly employed by the industry was approximately \$36,362.

³² Induced impacts are reported within indirect impacts for the entirety of this report.

³³ (Mains, 2016)

Table 7: Earnings Impact of Film Production in the Cincinnati MSA, FY2014-2018

Fiscal Year	Direct	Indirect	Total
2014	\$2,637,481	\$3,087,699	\$5,725,180
2015	\$2,355,142	\$2,757,165	\$5,112,307
2016	\$1,280,916	\$1,499,569	\$2,780,485
2017	\$4,899,170	\$5,735,458	\$10,634,628
2018	\$2,990,620	\$3,501,118	\$6,491,738
Total	\$14,163,329	\$16,581,009	\$30,744,338

Source: Economics Center calculations using RIMS II multipliers from data provided by the Ohio Development Services Agency.

Employment Impacts

The productions that filmed in the Ohio portion of the Cincinnati MSA because of the Ohio Motion Picture Tax Credit contributed to the employment of 1,054 people in total for FY 2014 through FY 2018. The direct employment impact of these 30 productions was 598 jobs, which supported an additional 456 jobs.

Table 8: Employment Impacts of Film Production in the Cincinnati MSA, FY2014-2018

Fiscal Year	Direct	Indirect	Total
2014	114	87	201
2015	102	78	180
2016	55	42	97
2017	205	156	361
2018	122	93	215
Total	598	456	1,054

Source: Economics Center calculations using RIMS II multipliers from data provided by the Ohio Development Services Agency.

While the employment numbers, above, illustrate the film industry's employment impact over the course of a year, the nature of film production means many individuals are employed for a relatively short period and will typically work on a number of different productions within a year. The jobs shown below in Table 9 show the direct employment during production. Whereas film production jobs³⁴ will last multiple months and perhaps years, the cast often works on the production only during filming, and extras may be working and receiving compensation for days or just one day. In all, 12,238 people received compensation from the Cincinnati-based productions between FY 2014 and FY 2018.

³⁴ Film production jobs include, but are not limited to writers, directors, producers, office workers, sound effects, and editors.

Table 9: Direct Jobs during Film Production in the Cincinnati MSA, FY2014-2018

Fiscal Year	OH Residents	Non-OH Residents	Total
2014	2,104	146	2,250
2015	1,290	188	1,478
2016	1,948	56	2,004
2017	3,647	760	4,407
2018	1,940	159	2,099
Total	10,929	1,309	12,238

Source: Ohio Development Services Agency.

Local Earnings Tax Impacts

In addition to the total economic impacts, earnings, and employment generated from the production of motion pictures in the Cincinnati Region, local municipalities collected income taxes based on the incomes earned during filming. The City of Cincinnati and other municipalities in Ohio received approximately \$567,089 in total from the 30 productions filmed in the area between FY 2014 and FY 2018.

Table 10: Local Earnings Tax Impact of Film Production in the Cincinnati MSA, FY2014-2018 (2017\$)

Fiscal Year	Local Earnings Tax Impact
2014	\$100,243
2015	\$58,730
2016	\$62,254
2017	\$173,843
2018	\$172,019
Total	\$567,089

Source: Economics Center calculations.

Local and State Leveraging

Local Leveraging

The Ohio Motion Picture Tax Credit program incentivizes productions to film in the State of Ohio. During FY 2014 through FY 2018, 30 productions filmed in the Cincinnati Region and received tax credits. Taxes collected in a given year are used to award tax credits the following year. Taxpayers within the Cincinnati MSA contribute on average 14.5 percent of the total sales tax collected within the State of Ohio. This means that the Cincinnati MSA contributed approximately \$2.9 million to the Ohio Motion Picture Tax Credit program during FY 2014 and FY 2015. Beginning in FY 2016, \$40.0 million was made available for the Ohio Motion Picture Tax Credit program, of which Cincinnati MSA taxpayers contribute \$5.9 million annually on average.

The Cincinnati area has been able to recoup their investment and then some during each fiscal year. For every dollar invested, productions filming in the Cincinnati MSA have been

awarded tax credits exceeding the contribution by local taxpayers. On average, the total tax credits awarded to Cincinnati-based productions in a given fiscal year were 1.5 times larger than the local tax contribution.

The local economy has consistently realized an increase in spending resulting from its tax contribution to the Ohio Motion Picture Tax Credit program. For FY 2014-2018, direct new spending of \$5.41, \$5.01, \$1.39, \$4.98, and \$3.07 resulted from every dollar contributed by local taxpayers, respectively. On average, every one dollar contributed by local taxpayers to the Ohio Motion Picture Tax Credit program resulted in \$3.69 in direct new spending in the Cincinnati MSA.

State Leveraging

The State of Ohio awarded \$40.9 million in Ohio Motion Picture Tax Credits to 30 productions during FY 2017. These tax credits were leveraged to produce \$81.2 million in direct new spending throughout the entire state. Every one dollar awarded as a tax credit resulted in an additional \$1.98 in direct spending.

“We are visitors here, but feel a special connection to Cincinnati and the local community. This is our home away from home, and we are so thankful and respectful that the community has welcomed us here as invited guests. And that all reflects back upon you as the Southern Ohio/Northern Kentucky Film Commissioner. As you well know, my producers can elect to film in any state, but we have settled on Ohio as our go-to place to bring our productions. . . . There is not a film commissioner that I have encountered anywhere who does as much to attract business to a state or community as you do. You are the most professional and pro-active film representative I have met in my career.”

– Bill Steakley, Line Producer, Marauders and Reprisal (Film Cincinnati Interview, September 2018)

Conclusion

Film Cincinnati and the Ohio Motion Picture Tax Credit program continue to promote and develop the film industry within the Cincinnati Region and State of Ohio. The Ohio Motion Picture Tax Credit provides an incentive for productions to film in the State of Ohio. However, Film Cincinnati provides the hands on assistance to productions filming in the Region. Film Cincinnati connects filmmakers with local cast and crew; facilitates permits, street closings, police, and fire safety; and assists in public and private location logistics.

Between FY 2014 and FY 2018, 30 productions were awarded Ohio Motion Picture Tax Credits to the tune of \$35.6 million and filmed in the Cincinnati Region. These productions directly spent \$86.7 million on their business operations, which led to further spending of



\$55.3 million. Wages of \$14.2 million were earned by the 598 direct employees of the film industry. Wages earned by the 456 indirect employees of the film industry totaled \$16.6 million. Local earnings taxes of approximately \$567,089 were received by the City of Cincinnati and nearby localities in Ohio during FY 2014-2018. For the Cincinnati Region, the local taxpayer contribution to the Ohio Motion Picture Tax Credit resulted in \$3.69, on average, in direct new spending for every one dollar contributed. For FY 2017, direct new spending of \$1.98 resulted in the State of Ohio for everyone one dollar contributed by taxpayers.

The Ohio Motion Picture Tax Credit is a contributing factor for productions choosing to film in Ohio. Without this tax credit, Ohio and the Cincinnati MSA would have less economic output, wages earned, jobs created, and earnings

taxes collected. The film industry and the Ohio Motion Picture Tax Credit brought a positive economic impact to the Cincinnati MSA during FY 2014-2018 and to the State of Ohio for FY 2017.

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Appendix

Table 11 provides the typical entry level education and median hourly earnings for all occupations within the film industry during 2018. More than half of the 143 occupations typically need at most a high school diploma or equivalent. A bachelor's degree or higher is the typical entry level education for only 52 occupations. No formal educational credential is typically required for 33.3 percent of the jobs within the film industry compared with 23.6 percent of the jobs with the Cincinnati MSA.

The median hourly earnings of film industry jobs and all jobs within the Cincinnati MSA are \$15.43 and \$17.31, respectively. Despite lower median hourly earnings for the film industry, 60.1 percent of occupations within the film industry have median hourly earnings greater than the median for the Region. Occupations such as electricians, costume attendants, and carpenters have median hourly earnings greater than the median of the Region and typically require at most a high school diploma or equivalent. Theatrical and performance makeup artists, sound engineering technicians, and audio and video equipment technicians typically require a postsecondary nondegree award but also have median hourly earnings greater than the median for the Region.

Table 11: Detailed Motion Picture and Video Industry Occupations in the Cincinnati MSA

SOC	Description	Typical Entry Level Education	Median Hourly Earnings (2017\$)
13-2011	Accountants and Auditors	Bachelor's degree	\$30.32
27-2011	Actors	Some college, no degree	\$12.65
11-3011	Administrative Services Managers	Bachelor's degree	\$42.30
11-2011	Advertising and Promotions Managers	Bachelor's degree	\$43.73
41-3011	Advertising Sales Agents	High school diploma or equivalent	\$24.61
13-1011	Agents and Business Managers of Artists, Performers, and Athletes	Bachelor's degree	\$18.33
39-3091	Amusement and Recreation Attendants	No formal educational credential	\$9.82
11-9041	Architectural and Engineering Managers	Bachelor's degree	\$63.08
25-4011	Archivists	Master's degree	\$24.37
27-1011	Art Directors	Bachelor's degree	\$33.80
27-1019	Artists and Related Workers, All Other	No formal educational credential	\$20.92
27-4011	Audio and Video Equipment Technicians	Postsecondary nondegree award	\$17.49
35-3011	Bartenders	No formal educational credential	\$9.24
43-3021	Billing and Posting Clerks	High school diploma or equivalent	\$18.43

43-3031	Bookkeeping, Accounting, and Auditing Clerks	Some college, no degree	\$18.77
27-4012	Broadcast Technicians	Associate's degree	\$19.23
13-1199	Business Operations Specialists, All Other	Bachelor's degree	\$30.65
13-1028	Buyers and Purchasing Agents	Bachelor's degree	\$29.36
27-4031	Camera Operators, Television, Video, and Motion Picture	Bachelor's degree	\$18.91
47-2031	Carpenters	High school diploma or equivalent	\$17.92
41-2011	Cashiers	No formal educational credential	\$9.45
11-1011	Chief Executives	Bachelor's degree	\$83.02
39-9011	Childcare Workers	High school diploma or equivalent	\$9.35
35-3021	Combined Food Preparation and Serving Workers, Including Fast Food	No formal educational credential	\$9.33
11-3021	Computer and Information Systems Managers	Bachelor's degree	\$58.77
15-1152	Computer Network Support Specialists	Associate's degree	\$26.89
15-1199	Computer Occupations, All Other	Bachelor's degree	\$37.71
15-1131	Computer Programmers	Bachelor's degree	\$30.49
15-1121	Computer Systems Analysts	Bachelor's degree	\$40.23
15-1151	Computer User Support Specialists	Some college, no degree	\$22.64
39-6012	Concierges	High school diploma or equivalent	\$11.35
47-2061	Construction Laborers	No formal educational credential	\$15.64
35-2019	Cooks, All Other	No formal educational credential	\$13.32
35-2012	Cooks, Institution and Cafeteria	No formal educational credential	\$12.46
35-2014	Cooks, Restaurant	No formal educational credential	\$11.00
35-2015	Cooks, Short Order	No formal educational credential	\$9.76
39-3092	Costume Attendants	High school diploma or equivalent	\$19.33
35-3022	Counter Attendants, Cafeteria, Food Concession, and Coffee Shop	No formal educational credential	\$9.16
23-2091	Court Reporters	Postsecondary nondegree award	\$25.70
27-1012	Craft Artists	No formal educational credential	\$5.32
43-4051	Customer Service Representatives	High school diploma or equivalent	\$15.42
43-9021	Data Entry Keyers	High school diploma or equivalent	\$16.05
27-1029	Designers, All Other	Bachelor's degree	\$22.21

35-9011	Dining Room and Cafeteria Attendants and Bartender Helpers	No formal educational credential	\$9.62
35-9021	Dishwashers	No formal educational credential	\$9.59
27-3041	Editors	Bachelor's degree	\$20.40
17-3023	Electrical and Electronics Engineering Technicians	Associate's degree	\$28.65
17-2071	Electrical Engineers	Bachelor's degree	\$38.15
47-2111	Electricians	High school diploma or equivalent	\$21.64
17-2199	Engineers, All Other	Bachelor's degree	\$35.54
27-2099	Entertainers and Performers, Sports and Related Workers, All Other	No formal educational credential	\$16.80
39-3099	Entertainment Attendants and Related Workers, All Other	High school diploma or equivalent	\$12.97
43-6011	Executive Secretaries and Executive Administrative Assistants	High school diploma or equivalent	\$26.23
27-1022	Fashion Designers	Bachelor's degree	\$24.12
27-4032	Film and Video Editors	Bachelor's degree	\$24.02
11-3031	Financial Managers	Bachelor's degree	\$57.82
27-1013	Fine Artists, Including Painters, Sculptors, and Illustrators	Bachelor's degree	\$7.63
47-1011	First-Line Supervisors of Construction Trades and Extraction Workers	High school diploma or equivalent	\$28.62
35-1012	First-Line Supervisors of Food Preparation and Serving Workers	High school diploma or equivalent	\$15.17
41-1012	First-Line Supervisors of Non-Retail Sales Workers	High school diploma or equivalent	\$27.93
43-1011	First-Line Supervisors of Office and Administrative Support Workers	High school diploma or equivalent	\$25.61
39-1021	First-Line Supervisors of Personal Service Workers	High school diploma or equivalent	\$17.52
51-1011	First-Line Supervisors of Production and Operating Workers	High school diploma or equivalent	\$28.90
41-1011	First-Line Supervisors of Retail Sales Workers	High school diploma or equivalent	\$16.60
53-1048	First-line Supervisors of Transportation and Material Moving Workers, Except Aircraft Cargo Handling Supervisors	High school diploma or equivalent	\$25.29
35-2021	Food Preparation Workers	No formal educational credential	\$10.07
35-3041	Food Servers, Nonrestaurant	No formal educational credential	\$10.01
13-1131	Fundraisers	Bachelor's degree	\$26.76
11-1021	General and Operations Managers	Bachelor's degree	\$47.84
27-1024	Graphic Designers	Bachelor's degree	\$20.52
39-5012	Hairdressers, Hairstylists, and Cosmetologists	Postsecondary nondegree award	\$10.90
29-2099	Health Technologists and Technicians, All Other	Postsecondary nondegree award	\$19.67

53-3032	Heavy and Tractor-Trailer Truck Drivers	Postsecondary nondegree award	\$20.30
51-9198	Helpers--Production Workers	High school diploma or equivalent	\$14.17
35-9031	Hosts and Hostesses, Restaurant, Lounge, and Coffee Shop	No formal educational credential	\$9.36
13-1071	Human Resources Specialists	Bachelor's degree	\$27.76
11-3051	Industrial Production Managers	Bachelor's degree	\$46.95
43-4199	Information and Record Clerks, All Other	High school diploma or equivalent	\$19.57
51-9061	Inspectors, Testers, Sorters, Samplers, and Weighers	High school diploma or equivalent	\$19.15
49-9099	Installation, Maintenance, and Repair Workers, All Other	High school diploma or equivalent	\$16.20
37-2011	Janitors and Cleaners, Except Maids and Housekeeping Cleaners	No formal educational credential	\$11.61
53-7062	Laborers and Freight, Stock, and Material Movers, Hand	No formal educational credential	\$13.50
23-1011	Lawyers	Doctoral or professional degree	\$43.05
53-3033	Light Truck or Delivery Services Drivers	High school diploma or equivalent	\$15.27
39-3093	Locker Room, Coatroom, and Dressing Room Attendants	High school diploma or equivalent	\$11.25
13-1081	Logisticians	Bachelor's degree	\$34.72
49-9071	Maintenance and Repair Workers, General	High school diploma or equivalent	\$19.42
39-5091	Makeup Artists, Theatrical and Performance	Postsecondary nondegree award	\$24.89
13-1111	Management Analysts	Bachelor's degree	\$32.74
11-9199	Managers, All Other	Bachelor's degree	\$29.77
13-1161	Market Research Analysts and Marketing Specialists	Bachelor's degree	\$28.99
11-2021	Marketing Managers	Bachelor's degree	\$54.21
27-4099	Media and Communication Equipment Workers, All Other	High school diploma or equivalent	\$31.20
27-3099	Media and Communication Workers, All Other	High school diploma or equivalent	\$14.11
13-1121	Meeting, Convention, and Event Planners	Bachelor's degree	\$21.78
39-3021	Motion Picture Projectionists	No formal educational credential	\$11.09
27-1014	Multimedia Artists and Animators	Bachelor's degree	\$21.82
27-2041	Music Directors and Composers	Bachelor's degree	\$29.52
27-2042	Musicians and Singers	No formal educational credential	\$15.96
15-1142	Network and Computer Systems Administrators	Bachelor's degree	\$36.15
31-1014	Nursing Assistants	Postsecondary nondegree award	\$13.23

43-9199	Office and Administrative Support Workers, All Other	High school diploma or equivalent	\$20.42
43-9061	Office Clerks, General	High school diploma or equivalent	\$15.26
53-7064	Packers and Packagers, Hand	No formal educational credential	\$11.11
47-2141	Painters, Construction and Maintenance	No formal educational credential	\$14.29
23-2011	Paralegals and Legal Assistants	Associate's degree	\$23.85
53-6021	Parking Lot Attendants	No formal educational credential	\$10.07
27-4021	Photographers	High school diploma or equivalent	\$12.93
51-9151	Photographic Process Workers and Processing Machine Operators	High school diploma or equivalent	\$17.45
27-2012	Producers and Directors	Bachelor's degree	\$21.39
51-9199	Production Workers, All Other	High school diploma or equivalent	\$16.51
43-5061	Production, Planning, and Expediting Clerks	High school diploma or equivalent	\$22.78
43-9081	Proofreaders and Copy Markers	Bachelor's degree	\$18.05
27-3031	Public Relations Specialists	Bachelor's degree	\$28.68
27-3011	Radio and Television Announcers	Bachelor's degree	\$17.58
43-4171	Receptionists and Information Clerks	High school diploma or equivalent	\$12.74
29-1141	Registered Nurses	Bachelor's degree	\$30.27
27-3022	Reporters and Correspondents	Bachelor's degree	\$18.52
41-2031	Retail Salespersons	No formal educational credential	\$10.89
49-9096	Riggers	High school diploma or equivalent	\$20.35
41-9099	Sales and Related Workers, All Other	High school diploma or equivalent	\$14.98
11-2022	Sales Managers	Bachelor's degree	\$62.91
41-3099	Sales Representatives, Services, All Other	High school diploma or equivalent	\$23.56
41-4012	Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	High school diploma or equivalent	\$29.81
43-6014	Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	High school diploma or equivalent	\$17.31
33-9032	Security Guards	High school diploma or equivalent	\$10.97
27-1027	Set and Exhibit Designers	Bachelor's degree	\$20.61
43-5071	Shipping, Receiving, and Traffic Clerks	High school diploma or equivalent	\$15.43
11-9151	Social and Community Service Managers	Bachelor's degree	\$30.60
15-1132	Software Developers, Applications	Bachelor's degree	\$42.45

15-1133	Software Developers, Systems Software	Bachelor's degree	\$44.81
27-4014	Sound Engineering Technicians	Postsecondary nondegree award	\$21.42
43-5081	Stock Clerks and Order Fillers	High school diploma or equivalent	\$12.00
51-6052	Tailors, Dressmakers, and Custom Sewers	No formal educational credential	\$11.30
53-3041	Taxi Drivers and Chauffeurs	No formal educational credential	\$10.90
25-3097	Teachers and Instructors, All Other	Bachelor's degree	\$16.03
41-9041	Telemarketers	No formal educational credential	\$12.17
13-1151	Training and Development Specialists	Bachelor's degree	\$26.97
39-3031	Ushers, Lobby Attendants, and Ticket Takers	No formal educational credential	\$9.84
35-3031	Waiters and Waitresses	No formal educational credential	\$9.17
15-1134	Web Developers	Associate's degree	\$23.44
43-9022	Word Processors and Typists	High school diploma or equivalent	\$18.23
27-3043	Writers and Authors	Bachelor's degree	\$14.58

Source: Economic Modeling Specialists Incorporated.