In the Spotlight: Evaluating the Economic Influence of Montana's Film Industry

An Analysis of the Impact of the MEDIA Act, July 2022-Mid-May 2024

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economics | strategy | insight

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FILM IN MONTANA

Evaluating the Impacts of Film Production and the MEDIA Act on the Montana Economy 2022–2024

Film productions in Montana attract substantial external investment, which strengthens the state economy by supporting local industries and creating jobs for residents. In 2019, the Montana State Legislature enacted the Montana Economic Development Industry Advancement Act (MEDIA Act), providing income tax incentives to attract film, television, and other media productions. This report examines the economic and fiscal effects of film and television production in Montana, with a particular focus on the MEDIA Act Tax Credit Program and its subsequent positive impact to the state's economy.

Film Production in Montana by the Numbers

Productions that have Filmed, July 2022 through Mid-May 2024

167	$334.0M	$149.9M	$312.2M	1,320 FTE*	$95.8M	$22.2M
Number of Productions	Total Direct Spending	Total Local Direct Spending	Total Local Economic Impact	Total Jobs	Employee Compensation	Total Tax Revenue incl'd non-resident wage tax

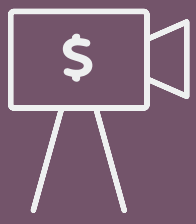
	All Productions	MEDIA Act Tax Credit Productions	Other Productions
Direct Output ($M)	$149.9	$116.8	$33.1
Indirect and Induced ($M)	$162.3	$120.7	$41.6
Total Impact ($M)	**$312.2**	**$237.5**	**$74.7**
Direct Jobs Supported (FTE*)	510	400	110
Indirect and Induced Jobs Supported (FTE*)	810	600	210
Total Jobs Supported (FTE*)	**1,320**	**1,000**	**320**
Total Employee Compensation Supported ($M)	**$95.8**	**$65.3**	**$30.6**

Source: IMPLAN (2022)

*FTE is full-time job equivalents

Impact of the MEDIA Act

Direct Spending on Film Productions



Indirect Economic Activity

- Small & Local Business Spending
- Hotel & Hospitality Industry
- Production-Related Businesses

Induced Economic Benefits

- Cast and Crew Spending
- Increased Tourism

Related Indirect Benefits

- Attracts Outside Investment in Montana Communities
- Draws Interest in Studio Development

Related Workforce Benefits

- Training & Skill Building for Film Production Trades
- Reduces Brain Drain



MEDIA Act stimulates a competitive film industry that attracts further outside investment and additional local job support.

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FILM IN MONTANA

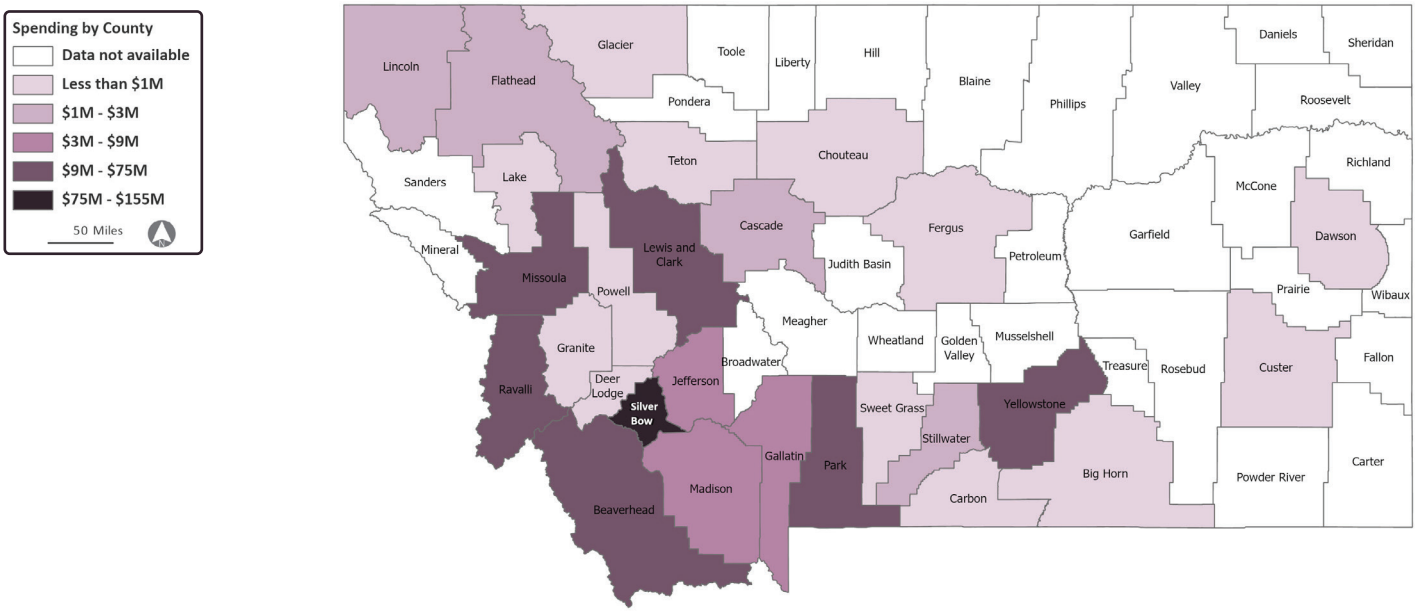
Evaluating the Impacts of Film Production and the MEDIA Act on the Montana Economy 2022-2024

The film and entertainment industry brings considerable benefits to local communities. Film productions frequently hire local businesses to support their operations, from equipment suppliers and florists, to printing and security services. Furthermore, successful on-screen productions often lead to increased tourism, further stimulating the local community and economy.

Montana's statewide workforce development efforts have strategically targeted the film industry as a key industry crucial for economic growth. Recognizing the film industry's potential to drive economic development and enrich the cultural landscape, Montana has launched targeted programs to attract more film productions and cultivate a skilled local talent pool. These initiatives ensure the workforce is well-prepared to meet current and future demands, making Montana an attractive location for film projects. By focusing on the film industry, Montana not only boosts job creation and stimulates local economies but also promotes high-quality, locally produced content that highlights the state's rich cultural heritage on a national and international stage.

Localized Impacts of Film Production in Montana

Productions that Have Filmed, July 2022 through Mid-May 2024



Film Production Impacts Tourism in Montana

Research shows that film and TV can influence travel decisions and help to market and grow local visitor economies.

12.5M Total Annual Tourists

2.2M Annual Film-Induced Tourists

$1.345B Total Economic Impact due to Film Induced Tourism

13,100 Total FTE Jobs

$431M Employee Compensation

$59.7M State & Local Tax Revenue

State of Montana

MEDIA Act

The Montana Legislature passed the Montana Economic Development Industry Advancement Act (MEDIA Act) to provide an income tax incentive applicable to expenditures related to film, television, other media production, and post-production activities that take place in the state, effective July 1, 2019 through 2029. The program provides a 20 percent transferable tax credit on expenditures within the state with additional incentives that can increase the credit up to 35 percent of the production company's base investments in the tax year.

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1. Setting the Scene: An Overview of Montana's Film Industry and the MEDIA Act

1.1. About the MEDIA Act and the Purpose of this Study

In 2019, The Montana Economic Development Industry Advancement Act (MEDIA Act) was passed by the Montana Legislature to provide an income tax incentive applicable to expenditures related to film, television, other media production, and post-production activities for eligible productions that take place in Montana. The legislation became effective July 1, 2019 and extends through 2029. The MEDIA Act incentive is a transferable tax credit program which enables productions to both use the credit and sell any excess credits to another taxpayer. There is a five-year carry forward provision for this tax incentive program.

One of the requirements of the MEDIA Act Tax Credit Program is a third-party evaluation of the economic profile of the program and the film industry more broadly. This report provides that evaluation and covers the following metrics required by the MEDIA Act:

- The overall impact of the tax credits;
- The dollar amount of tax credits issued;
- The number of net new jobs created;
- The amount of compensation paid;
- The economic impact of the film industry in the State;
- The names of all State-certified productions eligible to claim tax credits; and,
- Any other information that describes the impact of the tax credits.

In June 2020 and June 2022, Econsult Solutions, Inc. (ESI) provided analyses of the economic, fiscal, and societal impacts from film and television production in the State and specifically evaluated the impacts associated with the MEDIA Act Tax Credit Program as required by the Act.[1] This first study ("2020 study") covered film production activity over an 18-month period, from January 2019 to June 2020 and the second study ("2022 study") covered film production activity over a 24-month period, from July 2021 to June 2022.

This report is an update to these original analyses. The time frame of the productions modeled in this report include those filmed from July 2022 to mid-May 2024.[2] Because only some credits have been formally awarded, the analysis of productions receiving MEDIA Act Tax Credits is based on both those that have been awarded as well as those that have been certified to receive the credits and the

[1] The Economic Impact of Montana Film Production (June 2020)
[2] Due to the timing requirements in the MEDIA Act for this analysis required, productions that have filmed until May 2024 are included in the analysis.

preliminary estimates of how much tax benefit that they would receive based on anticipated spending activity.

Provisions of the MEDIA Act[3,4]

The act provides a tiered incentive system with a base 20 percent transferable income tax credit on in-state production expenditures, with additional incentives potentially increasing the credit up to 35 percent of the production company's base investment in the tax year. Additional incentives include:

- 25 percent credit on compensation for Montana resident crew, Not To Exceed (NTE) $150K per person;
- 15 percent credit on compensation for non-Montana resident crew, Not To Exceed (NTE) $150K per person;
- 20 percent credit on above-the-line compensation[5] for principal creative roles such as actors, directors, producers, and writers, Not To Exceed (NTE) $1.5M per production;
- 30 percent credit on compensation paid to Montana college or university students working on the production for college credit, Not To Exceed (NTE) $50K per student;
- 10 percent credit on payments to Montana colleges or universities for usage of stages, equipment rentals, or location fees for filming on campus;
- 10 percent credit on expenditures related to renting in-state studio facilities/equipment for 20 days or more;
- 5 percent credit for expenditures made in an underserved area;[6]
- 5 percent bonus for using the "Filmed in Montana" screen credit logo;

The MEDIA Act is administered by the Film Office at the Montana Department of Commerce and the Montana Department of Revenue. The act is underpinned by key pieces of legislation, including House Bill 293 (66th Legislature, 2019), the original MEDIA Act, House Bill 340 (67th Legislature, 2021), and Senate Bill 27 (68th Legislature, 2023), which contain revisions and additional details. Commerce has also established a series of administrative rules (8.119.301 – 8.119.309) detailing the application and certification processes.

1.2. About the Film Office at the Montana Department of Commerce

The Film Office at the Montana Department of Commerce ("Commerce") is dedicated to promoting economic growth in Montana. Commerce works alongside private industry, local government, and nonprofit organizations to create jobs, grow businesses, develop affordable housing, and support the

[3] "MEDIA Tax Credit," Montana Film Office. https://www.montanafilm.com/tax-credit/.
[4] Montana Code Annotated 2023, Title 15, chap. 31, pt. 10, sec. 1007. https://leg.mt.gov/bills/mca/title_0150/chapter_0310/part_0100/section_0070/0150-0310-0100-0070.html.
[5] "Above-the-line compensation" refers to compensation of personnel in charge of the creative direction. This category encompasses roles such as the screenwriter, producer, director, and leading actors, among others.
[6] The MEDIA Act (HB0293) defines an "underserved area" as any county within Montana where the poverty rate reaches or exceeds 14 percent of the population across all age groups per the most recently available estimates from the U.S. Census Bureau. Refer to Figure 2.6 for the latest Census data and corresponding map identifying the state's underserved areas.

development of vibrant communities. Commerce programs promote Montana as a destination for travel and film production, supports the growth and development of small businesses through technical assistance and grants, supports the development of critical infrastructure, and provides access to affordable homes through homeownership and rental assistance programs.

Prior to the formation of the Department of Commerce, the Film Office was established in 1974 with the mission to market Montana as a business destination for film production companies and to ensure the state is film friendly. The purpose of the Office is to build and support Montana's economy through partnerships with filmmakers and by promoting the creation and expansion of Montana film industry jobs.

The Film Office strives to enhance Montana's economy by:

- expanding film production in the state;
- advertising Montana as open for business;
- increasing job opportunities;
- promoting the growth of small businesses;
- promoting tourism.

1.3. Scope and Methodology

ESI uses data provided by Commerce, the Montana Department of Revenue, information collected through outreach to the Montana production community, and spending details from independent producers on production activity within the State during the July 2022 to mid-May 2024 timeframe.

Commerce provided projected spend amounts collected from 2022 and 2023 tax credit applicants from their initial submission to the State. The data detailed the aggregate production spend by production category, resident and non-resident earnings, and location of spending (including underserved county spend). ESI completed additional research and outreach to applicants to confirm spending projections. This data allowed for a detailed economic impact analysis.

When possible, data from specific non-MEDIA act productions were also utilized. When no production spending or wage data was available for a specific production, call sheets were used to garner the number of shooting days. An estimate of production spend was projected based on shooting days and spending patterns of similar projects in which data was available.

This production information was used to calculate the direct activity occurring in Montana and the impacts of film-induced tourism. Economic impact results are calculated for the State of Montana, using the industry-standard input-output model IMPLAN. Key outputs include total economic output, employment (FTE) supported, and earnings supported. County-specific impacts were calculated for 11 counties in Montana with greater than $1 million in direct spending. These impacts can be found in the Appendix.

Figure 1.1: Economic Impact Methodology



Source: Econsult Solutions, Inc. (2024)

In addition to economic impact outputs, tax revenue impacts are calculated for both the counties in which production took place as well as the State of Montana. Fiscal modeling accounts for which types of economic activity are and are not subject to taxation specific to the taxing jurisdiction.[7] The direct economic activity generated by film production, in addition to its indirect and induced impacts, generates taxable activity (for example, jobs and retail development) for Montana. The Appendix to this report describes this approach and methodology in detail.

1.4. Report Outline

ESI was commissioned through a Request for Proposal process initiated by Commerce, in compliance with the requirements of the MEDIA Act, to conduct an analysis of the economic impacts of the MEDIA Act Tax Credit program in Montana. This analysis aims to estimate the direct economic footprint and indirect and induced activity related to spending from these productions. Additionally, it examines some of the intangible impacts of the MEDIA Act on local Montanans and business owners through qualitative data. The report is organized as follows:

- **Section 1. Setting the Scene: An Overview of Montana's Film Industry and the MEDIA Act** is an overview of the report, including the MEDIA Act passed by the Legislature, the role of Commerce, the study's scope, and methodology.
- **Section 2. Montana's Film Industry Landscape: Trends, Incentives, and Impact** provides an examination of the national and local context of the film industry, including trends, tax credit programs, workforce development, rural economic development, film tourism, and stakeholder engagement in Montana.
- **Section 3. Economic and Fiscal Impact of Film Production in Montana** presents an analysis of the size of the film industry in Montana, its direct economic footprint, the impact of the MEDIA Act tax credit program, job distribution, local economic impacts, and tax contributions.

[7] Tax revenue generation was produced utilizing IMPLAN'S tax impact results. These results capture all tax revenue in the study area across all levels of government that exist in that study area for the specific Industries and Institutions affected by production spend.

Additional analysis includes impacts of film-induced tourism and its contributions to Montana's economy.

- **Section 4. Conclusions** includes consolidated overall economic and fiscal impacts of film production and film tourism, a comprehensive view of the film industry's contribution to Montana's economy, and key findings, implications for policy and practice, and potential areas for future research.
- **Appendix** contains supplementary information, data tables, methodology details, and other relevant material supporting the report's analyses and conclusions.

2. Montana's Film Industry Landscape: Trends, Incentives, and Impact

To analyze the existing conditions and perceptions of the film industry within Montana, ESI conducted research and analysis of economic data related to the film industry, including occupational, wage, and sector trends among other metrics from key state and federal economic data sources, including the U.S. Bureau of Labor Statistics and the Montana Department of Labor & Industry. ESI also conducted focus group meetings and stakeholder interviews to gain a better understanding of the on-the-ground experience of those working within the industry and the opportunities and challenges for statewide economic growth for this industry. This section provides an overview of key findings.

2.1. The Big Picture: U.S. Film Industry

The production of feature films, television series, and commercials can generate significant direct and indirect economic activity for their host communities, drawing out-of-town spending, generating jobs, and supporting local businesses. Because of this potential boost to local economies, 37 states provide incentives to attract productions as an economic development initiative.

Support for these types of tax incentives for media companies has increased with many states looking for more revenue following the economic impacts of the COVID-19 pandemic. With the nation's economy expected to see a slow but steady recovery, existing film tax incentives are expanding, and more states are implementing film tax incentive programs of their own. Pioneering after Louisiana, which was the first state in the country to develop and implement a tax incentive program for film and television production in 1992, other states have and continue to follow suit with varied success. According to a 2022 report from the National Conference of State Legislature (NCSL), as of 2021, 10 additional states have begun to adopt and or expand such programs, with the hopes of reaping economic benefits.[8] Some states are adapting to the industry by expanding their incentives. For example, Indiana recently increased the cap on qualified resident and non-resident wages while Washington increased the overall amount of film tax credits awarded annually. Taking it a step further, West Virginia has eliminated the cap on the amount of tax credits that can be awarded annually altogether.

Defining the Film Industry

The film industry encompasses the businesses and individuals involved in the creation, production, distribution, and exhibition of film and video, which include motion pictures, documentaries, television series, music videos, and commercials. The industry employs a wide range of professionals including filmmakers, directors, producers, actors, screenwriters, cinematographers, editors, distributors, exhibitors (theaters), and numerous other support personnel. Active filming—either on location or in a studio setting—typically has the most onsite personnel at a physical location at a given time, but the post-production work, including film editing, visual effects, sound, and music, is also an important

[8]"Film Tax Incentives Back in the Spotlight". National Conference of State Legislatures, May 5, 2022. Film Tax Incentives Back in the Spotlight (ncsl.org)

aspect of the production process with activities less dependent on the filming location. Post-production activities can effectively be conducted anywhere nationally or internationally regardless of film location. For example, Montana-based post-production facilities can support local employment even if the production was filmed out of state or internationally.

Major Disruptions: COVID-19 and WGA and SAG Strikes

National trends within the industry vary from state to state and are always changing and adapting from cultural shifts, technological advancements, and local policies. However, the COVID-19 pandemic, shortly followed by the Writers Guild of America (WGA) Strike and the Screen Actors Guild (SAG) Strike have had the most significant disruptions to the industry in more than a decade.

During the height of the COVID-19 pandemic in 2020, the film industry faced unprecedented challenges, including widespread production shutdowns, travel restrictions, and safety protocols; however, these disruptions were relatively short-lived. By 2021, signs of recovery became apparent as social distancing mandates were relaxed and production activities returned. Notably, many out-of-state productions gravitated toward Montana given its open spaces and relatively fewer restrictions compared to some other filming locations.

Shortly after the industry was stabilized in 2022, the SAG Strike began in July 2023, largely convened by the Screen Actors Guild and American Federation of Television and Radio Artists (SAG-AFTRA). The dispute was between actors in the labor union SAG-AFTRA and the Alliance of Motion Picture and Television Producers (AMPTP). The strike was a result of changes in the industry caused by streaming, and the use of artificial intelligence as well as its associated technologies. The strike lasted 118 days, running from July to November 2023, and included picketing, work stoppages, and strike action.

During that time, a separate but related strike was occurring. The 2023 Writers Guild of America strike was convened by two labor unions, the Writer's Guild of America East (WGAE) and West (WGAW). The causes for the strike are very similar to the SAG-AFTRA strike. The strike started in March and ended 148 days later in late September 2023. The WGA Strike not only impacted larger film production activity, but it also forced many independent and freelance film production workers to leave the industry altogether and find alternative employment opportunities.[9]

Both strikes were impactful, demonstrating the critical importance of fair compensation for screenwriters and actors. The strikes and negotiations effectively halted all aspects of film production. However, the SAG-AFTRA strike had bigger implications for the film industry in Montana, where production of film, television, and other content was delayed or cancelled. Preliminary estimates indicated approximately $6 billion nationally in lost wages and economic impacts.[10]

[9] "A Deep Dive into the Economic Ripples of the Hollywood Strike". Michigan Journal of Economics, December 6, 2023. A Deep Dive into the Economic Ripples of the Hollywood Strike.
[10] "Hollywood strikes sap economy as industry readies for revamp". Reuters, November 15, 2023. Hollywood strikes sap economy as industry readies revamp.

New Film Technology

Over the past few decades, technology has revolutionized the filming industry, fundamentally altering the way films are made, distributed, and experienced. From the advent of digital cameras to the rise of computer-generated imagery (CGI), and sophisticated editing software, technological advancements have reshaped every aspect of filmmaking.

More recently, artificial intelligence (AI) tools have been used to gain a competitive advantage in all stages of the production process. In the screenwriting stage, AI algorithms are being used in script analysis and generation to predict audience preferences and even generate screenplay ideas. Although this may not be widely used at the highest level of writing, the continuous development of artificial intelligence may make algorithms produce better content, changing the landscape of the industry. At the production stage, text to video models such as Sora, can generate videos up to a minute long based on text prompts. This is not popular at the highest levels in the industry, but more popular for small and freelance producers. Such technologies can be used to test out different content ideas, particularly for low budget productions.

While it is true that these models come with limitations, the rapid pace of development in artificial intelligence technologies positions them to play a central role in all aspects of filmmaking in the near future. However, it is important to acknowledge that this very acceleration was one of the factors contributing to the strikes in 2023. In addition, potential shifts in legislative restrictions regarding the use of AI would necessitate careful navigation.

Virtual production is another one of the many technological developments that may grow across the industry. Virtual production combines physical and virtual filmmaking techniques to create media. Teams use real-time 3D engines to create photorealistic sets, then display them on large LED walls behind physical sets using the real-time rendering capabilities.[11] Now visual effects can be utilized during the production phase instead of only post-production.

The Industry's Continual Evolution

Along with the impacts of the WGA and SAG strikes and AI on the short- and long-term outlook for the industry, there remain uncertainties as traditional studios and streaming giants are increasingly competing for viewership and control over content distribution. Paramount recently struck a deal with Charter Communications, a major cable operator, granting Charter access to Paramount's film library for streaming on its platform. However, Disney has opposed this deal, arguing that it undermines existing agreements and could potentially affect the availability of Paramount's content on Disney-owned platforms like Disney+. The dispute underscores the complexities and tensions that arise as streaming services become increasingly dominant in the market.

Mergers and acquisitions add an extra layer of complexity to the industry, influencing everything from distribution strategies to content creation. Recent examples illustrate this dynamic landscape; for instance, the acquisition of MGM studios by Amazon has the potential to reshape the competitive landscape. Additionally, the consolidation of media conglomerates, such as the merger between Disney

[11] "What is Virtual Production?" Perforce, November 21, 2022. What is Virtual Production.

and 21st Century Fox, has led to shifts in market power and content ownership. These developments not only impact the business side of filmmaking but also have cultural and creative implications, as industry players navigate the evolving terrain of content production and distribution.

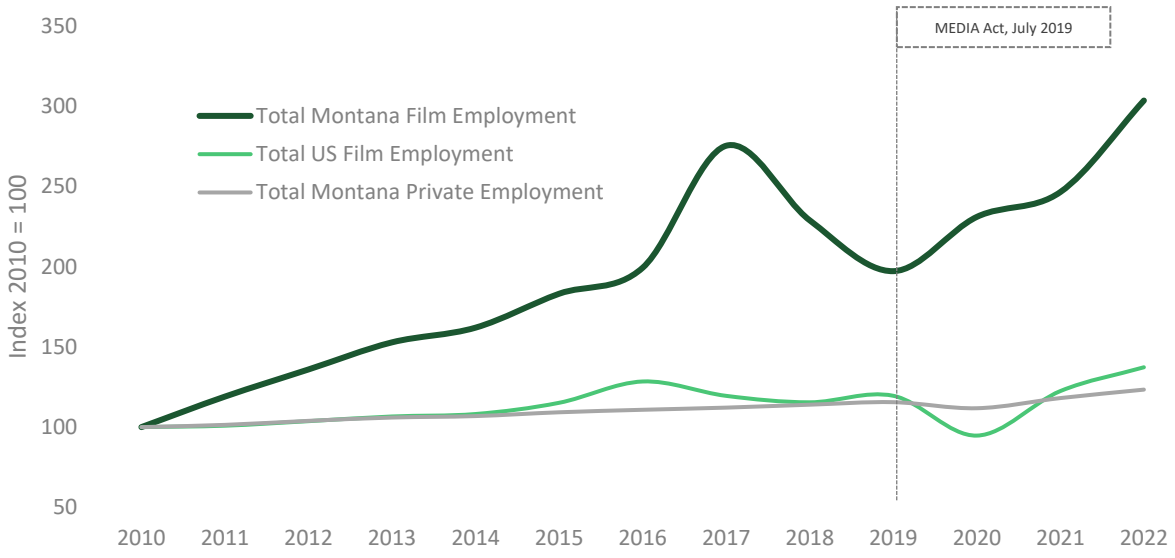
The rise of streaming platforms has transformed the way audiences consume content, leading to changes in distribution models and competition for traditional theatrical releases. The rise of streaming services has led to a decline in both theatre attendance and cable viewership, changing the ways content is consumed. They provide a platform for niche and independent films, who would not have been able to otherwise secure theater releases.[12] Streaming services accounted for approximately 36 percent of total viewership, while cable viewership accounted for about 30 percent on average throughout 2023.[13] The changing landscape has also impacted the supply and demand of serialized content as opposed to standalone films. Such content is filmed over a long time period and may be able to support stable employment opportunities over many years, like *Yellowstone*.

[12] "The Impact of Streaming Services on the Movie Industry," Motion Picture Institute. https://motionpicture.edu/socialcinema/2023/06/19/the-impact-of-streaming-services-on-the-movie-industry/.
[13] TV Viewing trends in the U.S., Nielsen.

2.2. Montana Film Industry Employment Trends

Since the passage of the MEDIA Act in 2019, Montana has had a notable increase in film production activity as reflected by the increase in employment and wages. According to data from the Bureau of Labor Statistics (BLS), in 2022 there were 431 workers within the Motion Picture and Video Production ("film production") industry statewide,[14] up from 280 workers in 2019 for an increase of 54 percent. This rate of growth outpaced national growth within the industry of only 15 percent. The increase in statewide film employment in 2017 could be partially attributed to the production of Yellowstone's first season. From 2019 to 2020, there was a drop in film employment nationwide due to disruption from the COVID-19 pandemic. However, Montana still experienced growth during this time period. Employment growth within Montana's film industry also outpaced overall private employment growth within the state of only seven percent since 2019. The relative change in film production employment compared to overall private employment from 2010 to 2022 is presented in Figure 2.1.

Figure 2.1: Relative Employment Change for Motion Picture and Video Production Employment, 2010-2022



Source: U.S. Bureau of Labor Statistics (2023)

Wage trends in the industry between 2010 and 2022 demonstrate statewide growth as well.

- **In 2022, Montana's average film industry wage of $86,666 was substantially higher than the overall average for private employment across all sectors of $54,232.**
- **Statewide, average film industry wage growth was 89 percent between 2010 and 2022, faster than the national industry growth rate of 29 percent.** Part of this increase can be attributed to

[14] Based on the North American Industry Classification System (NAICS) code 51211; https://www.naics.com/naics-code-description/?code=51211.

the growth of the film industry ecosystem as a whole and the creation of more full-time and higher-paying employment opportunities, especially after the passage of the MEDIA Act.

- **Average film industry wage growth in Montana from 2010 to 2022 has also outpaced average wage growth for all sectors at a rate of 89 percent compared to 63 percent.**
- Finally, given the increase in average wages and employment, from 2010 to 2022, **the film industry in Montana has had a net increase of $30.8 million in total wages for total growth of 473 percent.**

While the national average wage for film industry employment is nearly 24 percent more than the state average, this differential indicates a cost advantage for film production within the state, especially from out-of-state producers. At the same time, the dynamic also presents challenges with wages keeping pace with the increasing cost of living in the state's major population centers.

Figure 2.2: Average Wage Trends for Motion Picture and Video Production, State of Montana and Nationally, 2010-2022

Geography/Industry	2010	2022	% Change
Montana/Film Industry	$45,891	$86,666	89%
Montana/All Private Employment	$33,244	$54,232	63%
National/Film Industry	$85,050	$110,027	29%
National/All Private Employment	$46,455	$70,346	51%

Source: Bureau of Labor Statistics (2024)

Figure 2.3: Total Wage Trends for Motion Picture and Video Production, State of Montana, 2010-2022

Description	2010	2022	% Change
Total Employment	142	431	204%
Average Wages	$45,891	$86,666	89%
Total Estimated Wages based on Average Wage (rounded)	$6,517,000	$37,353,000	473%

Source: Bureau of Labor Statistics (2024)

Competitive Assets

For decades, filmmakers have been drawn to Montana because of its rich landscapes, natural beauty, and open spaces that are truly unique in the American West; however, the state's competitiveness as a film location continued to be enhanced by the expanding ecosystem of studios, production facilities, and iconic man-made film locations. For example, the Yellowstone Film Ranch is a Goldrush-era town film set that was built in 2020 consisting of around 30 structures as well as on-site production services, office space, and studio space. Its positioning as a film location is also supported by the MEDIA Act, which is prominently advertised on its website. To date, four full length motion pictures have been filmed at the

location, in addition to commercials.[15] Other locations such as Gunslinger Gulch and Nova Vento have further bolstered Montana as a place with the assets needed to support production activity.

Investment in additional production facilities has varied in recent years. As with all development, various market forces are involved in the successful completion of a project from conception to construction and delivery. With increasing interest rates, rising construction costs, and ongoing uncertainty about the long-term future of the MEDIA Act (that is, if the program ultimately sunsets without extension in 2029), the development of significant studio space and other production facilities has not yet happened in Montana.

Tech Hub Designation

Technological developments, such as those in the film industry, can be sped up by holistic growth in the tech industry across Montana. In 2023, the state was selected from nearly 200 applicants to receive a Tech Hub Designation from the Economic Development Administration (EDA). The Headwaters Regional Technology and Innovation Hub is specifically targeted toward the research, development, and commercialization of photonics and sensors. The designation will allow the state to compete for private and federal investment in this sector, strengthening competitiveness and capacity in strategic technology sectors. Along with the designation, Montana was also awarded $450,000 in Strategy Development funding for immediate use to help launch the Hub's activities.[16]

While the specific technology sector focus of the Headwaters Hub is adjacent to the technology needs of the film industry, this program and future investments in technology set the stage for growth in the tech sector. Moreso, these benefits will also be felt in the film industry through AI, Virtual Reality (VR), and other technologies.

2.3. Overview of Film Tax Incentives in the U.S.

The landscape of film tax incentives in the United States is highly varied, reflecting a patchwork of policies designed to attract film and television production companies to different states. Introduced in the 1990s, these film tax incentives were created as a response to the relocation of film productions to countries offering more favorable economic conditions.[17] The primary goal of these incentives is to stimulate local economies through job creation, increased revenue, the development of related infrastructure, and direct/indirect economic impacts.

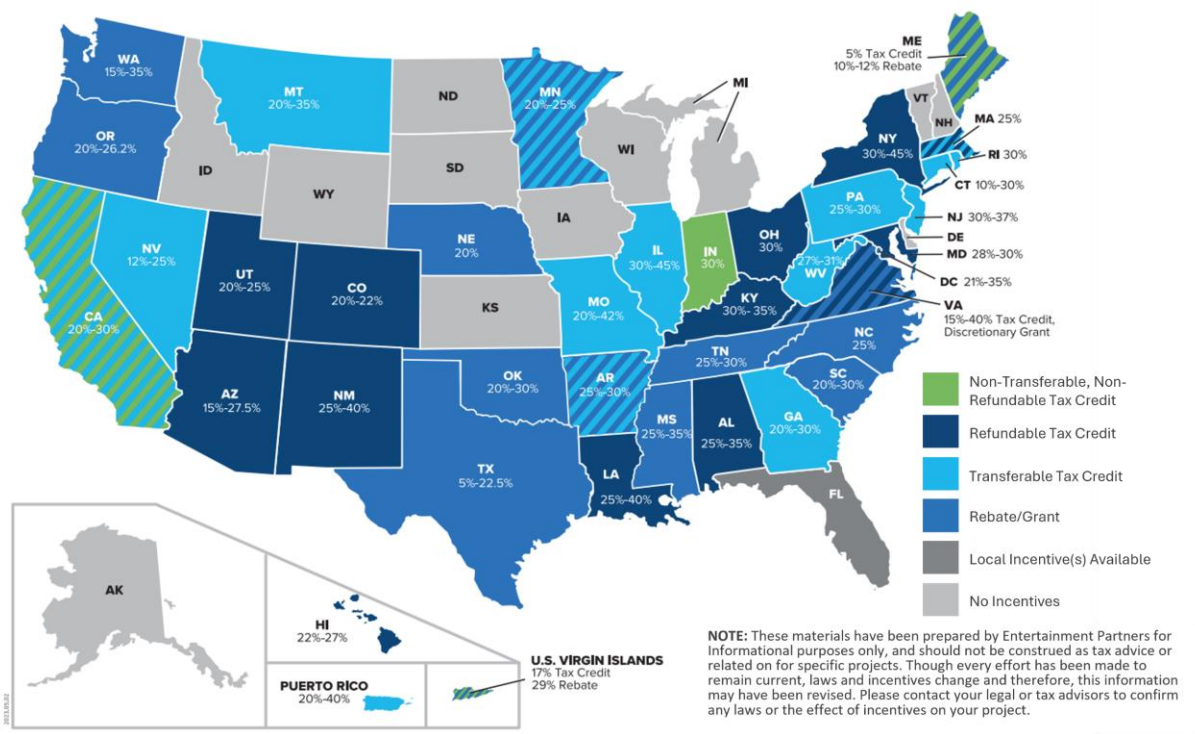
For producers, film tax incentives can be critical to the financial return on a production due to the significant costs associated with shooting projects. When successfully implemented, incentives play a crucial role in the decision-making process for producers by offering financial benefits that can significantly impact the budget and logistics of film and television projects.

The types of film tax incentives vary from state to state, each designed to attract production companies by offering unique advantages. The most common types of incentives include:

[15] https://www.yellowstonefilmranch.com/.
[16] https://www.eda.gov/news/press-release/2023/10/23/Headwaters-Hub.
[17] Jackson Brainerd and Andrea Jimenez, "Film Tax Incentives Back in the Spotlight," National Conference of State Legislatures, May 5, 2022, https://www.ncsl.org/fiscal/film-tax-incentives-back-in-the-spotlight.

- **Transferable Tax Credit:** Allows production companies to sell or transfer their tax credits. This can be particularly advantageous for productions that do not owe state taxes directly, as it enables them to monetize their credits by selling them to entities with tax liabilities.
- **Refundable Tax Credit:** A direct financial benefit where the state refunds any excess production credits to the production company after all applicable income taxes have been paid. This can result in a cash payment if the credits exceed the tax liability.
- **Grants:** Direct payments made to production companies for undertaking filming within the state. These are non-repayable support funds provided to support production financially.
- **Film Tax Rebates:** A return of a portion of the expenses incurred by the production company, usually calculated as a percentage of the company's qualified spending within the state. These rebates are taxable.
- **Bonuses:** Additional benefits provided to encourage specific actions or choices, such as filming in particular locations, hiring local staff, or purchasing from local businesses. These perks can include free location access, special filming permissions, and discounts.

Figure 2.4: U.S. States with Film Production Incentives, 2023



Source: Entertainment Partners (2024) [18]

As the map above illustrates, Montana is the only state within the five-state region that offers the tax credit incentive or any incentive. In the U.S. alone, 37 states have at least one film production incentive

[18] "U.S. Production Incentives," Entertainment Partners. https://www.ep.com/production-incentives/us/.

in place, reflecting a growing interest in realizing the economic advantages of a robust film and television industry and the growing interest in attracting and maintaining production projects.[19] The implementation of such incentives has supported the emergence of production hubs, like Georgia which gave out credits totaling $1.2 billion in 2023.[20] The rise of film production incentives is not isolated to the United States. A recent analysis determined that, since 2017, the availability of incentives has grown by 31 percent, with 113 different incentives offered worldwide as of 2023.[21] This expansion reflects not only the introduction of new programs but also the continuous evolution of existing ones to meet the dynamic requirements of the film and television production industry, as well as the cultural and economic aspirations of their respective jurisdictions.

2.4. Film Production Incentives in Montana and Competitive Set

Montana's implementation of the MEDIA Act has established a proactive framework from which the state can attract and grow its film industry. The program offers a base credit of 20 percent on qualified production expenditures, with additional incentives for hiring Montana residents, and for productions in underserved counties, potentially increasing the total credit to 35 percent of the production company's base investment.[22] These incentives are designed not just to attract film projects to Montana but also to spread economic benefits throughout the state, emphasizing support for local communities and rural areas.

Comparative Analysis: New Mexico, Oklahoma, Texas, Utah, and Washington

As states across the region continue to adopt and refine their film production incentives, Montana's strategic positioning within this competitive landscape is crucial. Insights from industry focus groups, elaborated upon in Section 2.8, highlight the appeal of other Western states (New Mexico, Oklahoma, Utah, Texas, and Washington) as alternative filming locations due to their robust film production incentives.

[19] "United States Production Incentives," Entertainment Partners. https://www.ep.com/production-incentives/us/.
[20] Gene Maddaus, "Georgia Lawmakers Move to Limit Nation's Largest Film Incentive," *Variety,* February 8, 2024, https://variety.com/2024/biz/news/georgia-tax-credit-limit-proposed-1235902683/.
[21] "Economic impact of the Georgia Entertainment Industry Tax Credit," Olsberg SPI, November 2023, https://www.gsecoalition.com/_files/ugd/18ed45_c5ca9791ffde4f36a4ac705491f56538.pdf.
[22] "MEDIA Tax Credit," Montana Film Office. https://www.montanafilm.com/tax-credit/.

Figure 2.5: Overview of Film Production Incentives in Montana and Competitive Set, FY 2024

State	Incentive Type	Annual Cap ($M)	Project Cap	Incentives Range	Compensation Cap
New Mexico	Refundable Tax Credit	$120	None	25% – 40%	$10M (Non-resident principal performers)
Oklahoma	Rebate	$30	Variable	20% – 30%	None
Texas	Grant	$200	None	5% – 22.5%	$1M
Utah	Refundable Tax Credit & Rebate	$8.3/$12 (for rural production)	None	20% – 25%	None
Washington	Rebate	$15	None	15% – 45%	$50K (Non-resident labor)
Montana	**Transferable Tax Credit**	**$12**	**None**	**20% – 35%**	**$7.5M; $500K (For any single crew member)[23]**

Sources: Entertainment Partners (2024) and Wrapbook (2024)

New Mexico's tax credit program offers a refundable credit of 25 to 40 percent for all direct production and post-production expenditures taxable by the state.[24] This generous incentive has made New Mexico a top choice for film and television productions, with notable projects like *Breaking Bad* and *Better Call Saul* filmed there. The state has no minimum spend requirements, making it accessible for a wide range of projects. Additional bonuses include a 5 percent uplift for TV series and productions filming at certain approved facilities, enhancing its attractiveness as a filming destination**.**

Oklahoma's program, **"**Filmed in Oklahoma Act", incentivizes film production in the state by offering up to a 30 percent rebate, capped annually at $30 million.[25] Oklahoma divides its $30 million annual cap into two pools: $22.5 million for projects with budgets of at least $7.5 million and $7.5 million for smaller projects, ensuring support across a spectrum of production sizes. It is designed to attract talent from both within and outside Oklahoma, offering additional incentives for non-resident payroll and bonuses for using local sound stages, producing TV pilots, engaging in multi-picture deals, and spreading expenditures across the state.

Texas provides a grant-based incentive with a sliding scale of 5 to 20 percent for resident and local spending, based on the project's budget size. To qualify, a project must shoot 60 percent of total filming days in Texas and meet specific crew residency requirements. The state's program emphasizes supporting local businesses and talent, with additional tax credits for filming in economically disadvantaged areas. This approach underscores Texas' strategy to foster a homegrown film industry while encouraging economic development in various communities.

[23] Montana Code Annotated, § 15-31-1003(3)(d). https://leg.mt.gov/bills/mca/title_0150/chapter_0310/part_0100/section_0030/0150-0310-0100-0030.html.
[24] "Film Tax Incentives Back in the Spotlight". National Conference of State Legislatures, May 5, 2022. Film Tax Incentives Back in the Spotlight (ncsl.org)
[25] Ibid.

Utah's Motion Picture Incentive Program (MPIP) combines fully refundable tax credits and rebates, offering up to 25 percent back for eligible film and television productions. [26] The program aims to showcase the state's varied landscapes and support its local talent pool. Utah's incentives are designed to attract productions that can spend at least $1 million locally and employ a significant number of Utah residents. Additionally, the state offers a cash rebate for smaller projects, emphasizing its commitment to supporting productions of all sizes.[27]

Washington's rebate program offers up to 30 percent back on local spending and resident payroll, with a lower rate for Below the Line non-resident payroll. The program supports a broad range of production types, including animation, documentaries, and scripted television. Washington incentivizes projects that shoot in rural communities or focus on marginalized communities with additional bonuses. This comprehensive support package is designed to distribute the economic benefits of filmmaking across the state, promoting diversity in storytelling and production locations.

2.5. Film Industry Workforce Development Programs in Montana

Montana's statewide workforce development efforts are multifaceted and strategically designed to target several key industries deemed vital for the state's economic growth. Industries such as media and entertainment, technology, construction and trades, healthcare, forestry and natural resource conservation, agriculture, and manufacturing are all focal points of these efforts. Each of these sectors has been identified by policy makers as essential for the state's economic resilience and growth, and as such, targeted programs have been developed to ensure that the workforce in these areas is well-prepared to meet current and future demands.

In the realm of media and entertainment, Montana has placed a significant emphasis on the film industry. Recognizing the dual potential of the film industry to drive economic growth and enhance the state's cultural landscape, Montana has initiated targeted workforce development efforts. These programs are designed not only to attract more film productions to the state but also to ensure that there is a local talent pool equipped with the necessary skills to support this industry.

Production Assistant (PA) Training Scholarship Program

A prime example of these targeted efforts is the Production Assistant (PA) Training Scholarship Program offered by Commerce. This innovative program is specifically designed to develop a skilled workforce for the film and television production industry, addressing a critical gap in local talent. By providing hands-on training opportunities, the program aims to prepare individuals for the rigors and demands of on-set work, from managing logistics to understanding the technical aspects of film production.

The program's focus on enrolled tribal citizens of Montana is particularly noteworthy. It represents a concerted effort to ensure that Indigenous communities, which are often underrepresented in the media and entertainment industry, have access to meaningful career opportunities. This initiative not only supports individuals in their career aspirations but also enriches the industry with diverse perspectives and stories.

[26] Ibid.

[27] In conjunction with the MPIP, Utah has established the Community Film Incentive Program (CFIP) to support emerging local filmmakers and productions. CFIP is a 20 percent post-performance cash rebate for projects with budgets ranging from $100,000 to $500,000.

From Training to Triumph in Film[28]



Amanda Bearmedicine
From Rocky Boy ranch to film industry acclaim.

Amanda Bearmedicine's transition from a ranch in Rocky Boy to working on high-profile film projects such as *You Can't Run Forever* with J.K. Simmons and the series *Yellowstone* exemplifies the direct impact of the Production Assistant (PA) Training Scholarship Program. Her achievements highlight how the program equips participants with the skills necessary to navigate and succeed in the film industry. Moving from personal success to collaborative achievement, the program's influence extends to the production of *Return to the Blanket*. Directed by Bearmedicine, this project's recognition at the Big Sky Documentary Film Festival, particularly winning the Indigenous Challenge, showcases the program's capacity to support its graduates in making meaningful contributions to the film industry. The involvement of 15 graduates, including 10 Indigenous individuals, in this film not only underlines the program's commitment to hands-on, practical training but also its broader success in fostering a skilled workforce that enhances diversity and storytelling within Montana's film landscape.

The targeted approach to workforce development in Montana's burgeoning film industry underscores the state's broader strategy of leveraging specific industries for economic and cultural benefits. By focusing on building a skilled workforce within the film industry, Montana not only enhances its attractiveness as a location for film productions but also supports the creation of high-quality, locally produced content. This, in turn, contributes to job creation, stimulates local economies, and showcases Montana's rich cultural heritage on a national and international stage.

Moreover, the emphasis on inclusion within the program serves to broaden the narrative scope of the film industry, ensuring that stories from Indigenous and underrepresented communities are told. This not only enriches the cultural tapestry of Montana but also fosters a more inclusive and representative media landscape.

2.6. Rural Economic Development

In Montana, the film industry's role in rural economic development presents a compelling case for the strategic use of film tax incentives. These incentives serve not only to attract film and television productions but also act as a catalyst for broader economic growth in rural areas, which often face challenges such as limited job opportunities, brain drain, and disinvestment.[29] Additionally, rural areas also face more vulnerabilities from closures of major employers since their economies cannot quickly absorb unemployed workers. For example, the 2023 closure of American Crystal Sugar Co.'s sugar beet processing plant in Sidney impacted approximately 300 workers, many of whom had to relocate, exiting

[28] "Production Assistant Case Study: Amanda Bearmedicine," Accelerate Montana, July 11, 2023, https://www.acceleratemt.com/blog/amandabearmedicinecasestudy.
[29] "'Brain drain' persists in much of America's heartland". Successful Farming, December 21, 2023. https://www.agriculture.com/brain-drain-persists-in-much-of-america-s-heartland-8419571.

the local workforce given the lack of opportunities.[30] While the filming activities in rural areas tend to be periodic, they can bring substantial dollars into communities allowing for entrepreneurial opportunities, such as Reel Supplies in Georgia, and for bolstering their tourism economies.

The influx of production activity can stimulate demand for goods and services from local vendors and suppliers, creating secondary economic benefits throughout the community. Small businesses, such as equipment rental companies, catering services, and transportation providers, can experience a boost in sales and employment opportunities due to the presence of film productions. Moreover, film production can contribute to skills development and training programs, providing residents with valuable employment skills and fostering a sustainable workforce, as discussed in the previous section.

Building Rural Economies Through Georgia's Film Industry[31]



Some of the Reel Supplies team in East Point, Georgia.

The film industry in Georgia has spurred significant economic benefits within the state, particularly for the state's rural communities. Reel Supplies, based in East Point, Georgia, stands as a prime example of this economic interplay, serving exclusively the film and television production industry. From its inception in August 2021, the company has expanded rapidly to employ 16 full-time and two part-time employees. The company spends over $10 million annually on wholesale lumber, sourced from mills spread across 52 Georgia counties. This operation not only supports the local lumber industry but also fosters job creation and economic stability in various parts of the state, from South Georgia's Lowndes County to North Georgia's Fannin County.

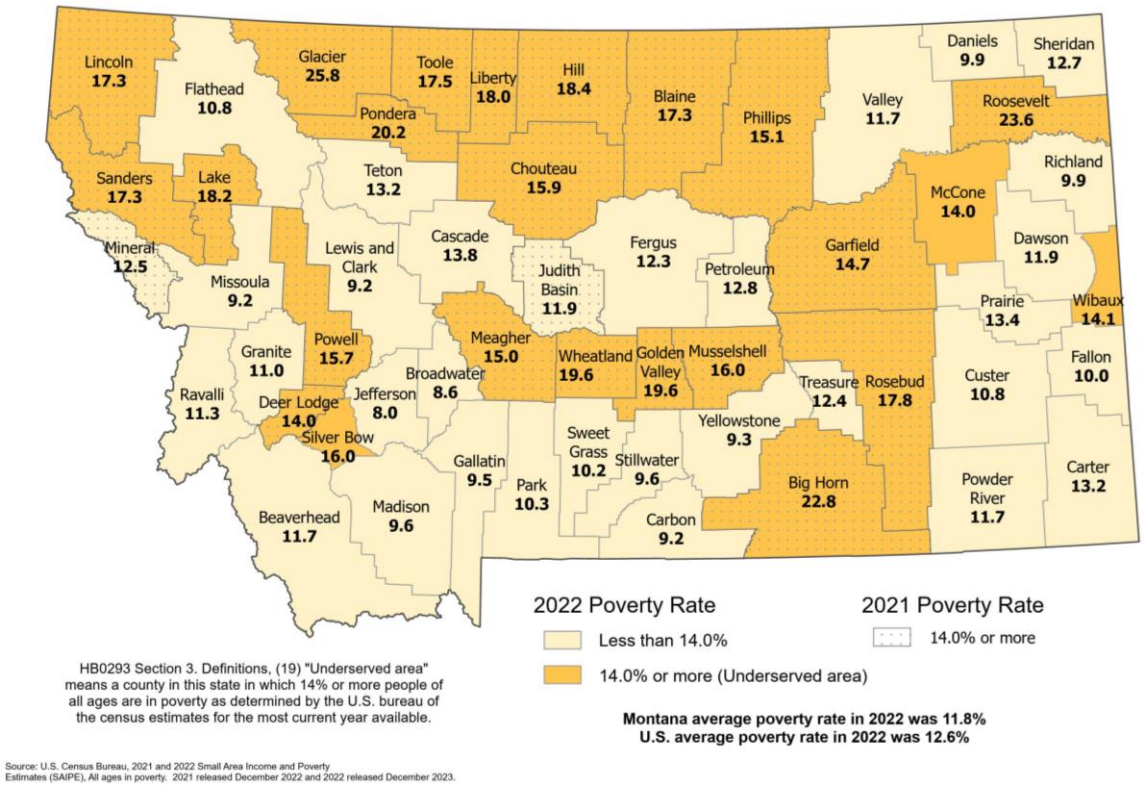
Montana is home to 12 tribal nations: Blackfeet Nation on the Blackfeet Reservation, Crow Nation on the Crow Reservation, Confederated Salish, Kootenai, and Pend d'Oreille Tribes on the Flathead Reservation, Gros Ventre and Assiniboine Tribes on the Fort Belknap Reservation, Assiniboine and Sioux Tribes on the Fort Peck Reservation, Little Shell Chippewa Tribe, Northern Cheyenne Tribe on the Northern Cheyenne Reservation, Chippewa and Cree Tribes on the Rocky Boy's Reservation.[32,33] Some of these reservations have been sites for various filming projects in the past. Notably, the Blackfeet Reservation recently served as the backdrop for *Sooyii,* a production shedding light on the Native American experience during the smallpox pandemic of the 1700s.

[30] "American Crystal Sugar Closing Montana Plant due to Lack of Local Sugar Beet Supply". Food Processing, February 7, 2023, https://www.foodprocessing.com/ingredients/sweetening-solutions/news/21549020/american-crystal-sugar-closing-montana-plant-due-to-lack-of-local-sugar-beet-supply.
[31] "Film industry's demand for building materials boosts Georgia's rural economies," Georgia Screen Entertainment Coalition, June 2023, https://www.gsecoalition.com/post/film-industry-s-demand-for-building-materials-boosts-georgia-s-rural-economies.
[32] Montana Indians and Their History and Location, Montana Office of Public Instruction, 2015, https://opi.mt.gov/Portals/182/Page%20Files/Indian%20Education/Indian%20Education%20101/Montana%20Indians%20Their%20History%20and%20Location.pdf.
[33] https://tribalnations.mt.gov/.

Filming in reservations can offer much needed employment opportunities for the Native American individuals, who often confront systemic challenges as a marginalized community. Beyond the immediate economic advantages, such filming ventures also foster potential collaborations between production companies and the Native American population. This collaborative platform enables Native Americans to share stories from their unique perspectives, reclaiming control over narratives that have historically been misrepresented.

The map below shows underserved counties in Montana, meaning those with a poverty rate greater than 14 percent. As one of the growing sectors, the film industry can have a positive impact on the current trends within the state, offering opportunities for economic revitalization and social inclusion, particularly in underserved counties.

Figure 2.6: Montana's Underserved Counties, 2022



Source: The Film Office at the Montana Department of Commerce (2023)

2.7. Film Tourism—National and State Context

Film tourism has experienced several historical turning points that have shaped its current landscape. The post-war decades of the 1940s and 1950s were the earliest truly significant examples of the medium of film influencing travel to Austria with films such as *The Third Man*.[34] This was followed by the increase in popularity of Rome, Italy as a destination due to various films produced there, and increased tourism

[34] Film Tourism through the Ages: From Lumiere to Virtual Reality.

to Australia caused by the popularity of Crocodile Dundee in the 1980s and 90s. More recent examples include the *Harry Potter* film series and the drama series *Game of Thrones* have spurred increased travel to the United Kingdom and Northern Ireland respectively. In 1991*, Field of Dreams* attracted an estimated annual visitation of 35,000 people to the movie site in Dryersville, Iowa, a number that steadily rose year-over-year.[35]

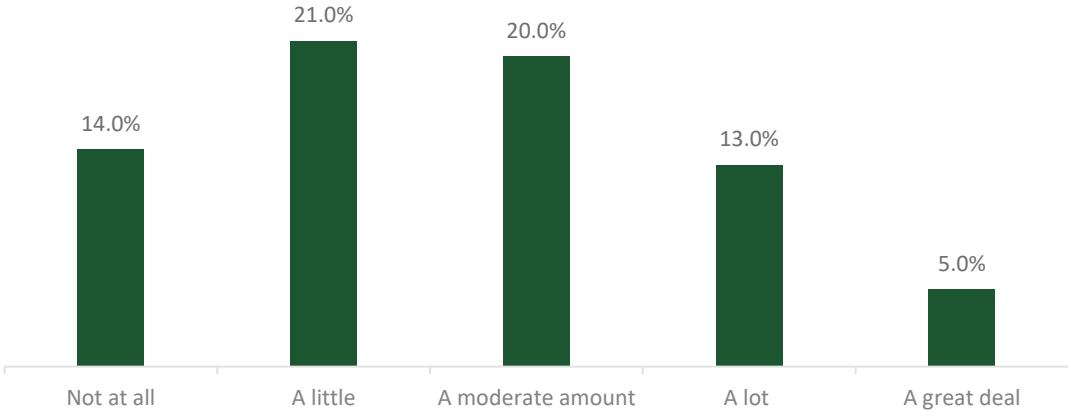
Film-induced tourism can exist in different forms including main holiday, special interest, focal points of visit, film's actual shooting location, romantic gaze, and escape reasons.[36] Tourism is a critical component of Montana's economy. Montana has witnessed an increase in visitors of more than 20 percent since 2010, although visitation has been fairly consistent over the last few years with around 12.5 million visitors annually.[37] Films have the potential to inspire audiences to embark on travels through their depiction of physical attributes such as scenery and landscapes, as well as their thematic elements, storylines, events, and cast members.

Cinema and television influence people's choice of tourist destinations. In 2014, the Institute for Tourism and Recreation Research (ITRR), at the University of Montana conducted a survey of tourists to the state and found that over 82 percent of respondents had seen a production that has made them think about visiting Montana.[38] Film tourism has actually benefited the state for the last several decades given the success of a *River Runs Through It* after its release in 1992.[39]

This influence is not just theoretical; it translates into tangible increases in visitor numbers and spending across the state. ITRR estimates that nonresident visitors spent an estimated $5.4 billion in the state, averaging about $86 per day per visitor in 2023.[40] In the fall of 2022, the Bureau of Business and Economic Research and ITRR conducted a survey of recent visitors to Montana to assess how *Yellowstone* influenced their decision to visit Montana. The survey data, illustrated in the chart below, provides insights into the substantial influence *Yellowstone* holds over visitors who had been exposed to it through various media channels.[41]

[35] Film Induced Tourism Among Students, Cactus Tourism Journal, Diaconescu.
[36] Film-induced Tourism: Inventing a Vacation to a Location, Walaiporn.
[37] University of Montana Institute for Tourism and Recreation Research, Interactive Data.
[38] University of Montana Institute for Tourism and Recreation Research. 2014. Survey: Travel Influence of Moving Pictures.
[39] "A River Still Runs Through Montana". Forbes, September 5, 2019, www.forbes.com/sites/gretchenkelly/2019/09/05/a-river-still-runs-through-montana.
[40] 2023 Estimates Non-Resident Visitation, Expenditures and Economic Contribution, Institute for Tourism and Recreation Research, 2023.
[41] Assessing the Impact of the Yellowstone Television Series on Montana's Tourism Economy, BBER, 2023.

Figure 2.7: Response Counts for Viewership and Influence of the *Yellowstone* Television Series on Plans to Visit the State of Montana



Source: Bureau of Business and Economic Research, Institute of Tourism and Recreation Research, University of Montana (2023)

Eighteen percent of respondents who had watched *Yellowstone* were significantly influenced by the show to visit the state. The television series is one of many productions that highlight the relationship between the entertainment industry and tourism sector, where on-screen depictions can translate into real-world economic opportunities for destinations like Montana.

In addition to film-induced tourism, film enthusiasts visit the state for film events hosted by different organizations. An example is the Montana International Film Festival (MINT) in Billings, a growing event. MINT attracts over 4,300 audience members each year and connects hundreds of individuals in the industry including talent, directors, and filmmakers.[42] Another popular event is the Montana Film Festival (MTFF) in Missoula, which attracts around 2,000 audience members annually.[43] This adds another element to visitation to the state.

Film-induced tourism and other film-related activities can play a significant role in attracting visitors, and visitor spending as a result. This underscores the need, from a destination perspective, to comprehend the possibilities arising from the fusion of tourism and cinema. Presently, numerous locales are recognizing film tourism as a distinct strategy.

2.8. Stakeholder Engagement Summary

Stakeholder engagement included four sessions in November and December 2023 with around 30 attendees representing various aspects of the film industry in the state, including producers, directors, actors, writers, technicians, and vendors. Outreach also included meetings with members of the Montana Economic Developers Association (MEDA) and representatives from the University of Montana's ITTR.

[42] Montana International Film Festival
[43] Montana Film Festival, Film Freeway

The following summary includes key discussion points, feedback, and themes about the role of the film industry within the context of the statewide economy, where there are challenges for growth, and what will be needed to ensure that the industry remains robust, vibrant, and competitive within the state.

Strengths

Some of Montana's greatest assets as a filming destination are its natural beauty, landscapes, and open spaces, allowing the state to continue attracting productions that rely on natural settings such as nature documentaries, Westerns, and car commercials.

Stakeholder Identified Strengths

- Natural beauty/scenery
- MEDIA Act
- High-visibility and larger-scale production activity (e.g., *Yellowstone*, *1923*)
- The Film Office at the Montana Department of Commerce resources
- Ancillary benefits from production/visitation on local economies
- Culture and committed local film community
- Resources for smaller producers (e.g. Big Sky Film Grant Program)
- Strong workforce development resources

Over the last decade, the film production ecosystem has grown considerably through the MEDIA Act and resources of the Film Office at the Montana Department of Commerce, allowing the state to attract larger-scale, high-visibility productions like *Yellowstone* and *1923*. Larger scale productions like these create more stable employment opportunities as well as confidence for local vendors and suppliers to reinvest in their businesses. These types of productions also bring national and global recognition to the state, in turn contributing to the state's tourism and hospitality industry. Tourism spending can support entrepreneurial activities in communities throughout the state, through new hotels, restaurants, and retail, which are especially critical in rural communities.

The state's film production ecosystem also supports smaller producers through resources like the Big Sky Film Grant (BSFG), which help celebrate the state's rich natural and cultural history and legacy. The state's film industry is positioned to grow given its robust workforce development resources, including the University of Montana (media arts program), Montana State University, Film Connection Film School, Media Training Center, and AccelerateMT as well as the scholarship program for a certified film production assistant (PA) course for members of Montana's tribal nations.

Weaknesses

The stakeholder engagement provided some insights as to the concern about misperceptions and experiences of out-of-state actors and production crew when filming in Montana that the state does not have the resources to serve the needs of large productions. Those needs include technical crew, equipment, or even meeting certain dietary needs. In many cases, out-of-state producers choose to bring their own crews and do not hire locally.

Stakeholder Identified Weaknesses

- General expectations/misperceptions from out-of-state actors/production crew
- Housing availability and affordability
- Uncertainty about future of tax credit and industry in state
- More competitive tax credit programs in other competitor states
- Limited supply of hotels and accommodations in rural areas
- Inconsistent work opportunities for production crews and talent
- Little market or opportunity for larger-scale capital investment (e.g., production studio)

Housing affordability and availability in the state's population centers is a major deterrent to industry growth, since wages are not keeping pace with housing costs. While the rising cost of housing is a statewide challenge with adverse impacts for the broader workforce, many film industry workers in particular are relocating to areas with higher wages and lower housing costs, such as Georgia or Texas. This dynamic exacerbates the perception of inadequate supply of in-state crews to support major productions.

There is some hesitancy for productions to film in rural areas given the limited supply of adequate hotels or other accommodations. Cast and crew often have to travel great distances to and from the state's population centers to rural areas, which lengthens production schedules, increases costs, and limits direct local spending opportunities. Additionally, the limited supply of hotels and accommodations curtail opportunities for film-based tourism and subsequent spill-over impacts from visitor spending in many parts of the state.

While the MEDIA Act has catalyzed the industry in the state, there is increasing competition from other states, including New Mexico and Texas, that have more robust tax credit incentive programs. According to the participants of the stakeholder interview sessions, small business owners are hesitant to expand their businesses and larger production companies are unlikely to make substantial capital investments (e.g.: build production facilities) without more certainty about the MEDIA Act's incentive size and duration. The permanence and continuity of employment opportunities for film workers is dependent on the expansion of larger production activities. Film industry workers face similar challenges as those in the construction industry in which once a project is completed, they need to quickly find the next project or else have to rely on part-time or gig economy work to "fill the gaps" between jobs. It was noted that while smaller-scale productions are valuable for the state's film ecosystem, the larger scale productions like *Yellowstone* or *1923* create longer-lasting opportunities.

Opportunities

While the state is known as a film destination for Westerns genre films and nature documentaries, there is an opportunity to better define a Montana brand specifically targeted to the film industry nationally and internationally. By enhancing and expanding marketing and branding efforts to attract film production activities, this type of campaign can also impact statewide tourism activities. Another consistently-stated opportunity is the creation of better synergies within the film industry across the state, especially in rural areas. Better linkages and interactions between industries—including tourism, hospitality, workforce development, and technology—is also crucial.

Stakeholder Identified Opportunities

- Create a dedicated brand that defines Montana film industry/niche
- Expand tax credit program with a focus on local hires to attract and retain talent
- More statewide industry collaboration
- Leverage large-scale productions to drive local investment in the state
- Collaborations between big budget productions from out of state and small-scale local productions
- Leverage tourism spending to create more opportunities in rural communities

While some focus group participants said that some communities perceive larger-scale, out-of-state productions as a threat, there was consensus that larger productions create opportunities for local investment and employment as well as also opportunities for smaller-scale production activity. It was also recognized that tourism spending creates opportunities for more investment in rural communities. Some focus group participants indicated that future revisions of the MEDIA Act should put a greater emphasis on hiring Montana residents, whether through incentives or mandated set-asides in order to have an even greater impact in the state economy. Ultimately, the most significant opportunity for growing the film industry and its impacts on the state will be through expanding the MEDIA Act and other direct funding and incentives for film production.

Threats

There are several external forces that threaten the sustainability and viability of the film industry in the state. As other competitive states continue to invest in their tax incentive programs, Montana will struggle to attract new production activity, especially from larger-scale producers. There was a consensus by focus group participants that the expiration of the MEDIA Act would be severely detrimental to the industry and leads to an exodus of film workers and spending activities to other states. While Montana would still be a strong location for documentaries and independent films, the state would effectively lose its ability to attract large-scale productions like *Yellowstone*.

Stakeholder Identified Threats

- Increasing competition from tax incentive programs in other states
- Expiration of the MEDIA Act
- Industry-wide disruptions like WGA strike
- Changing/evolving trends in film locations/screenwriting (ebb and flow of Western genre)
- Changes to film industry's long-term commitments to shows/episodes (fewer episodes in a series = less stable work)
- Increasing cost of housing in larger population centers
- Perceptions of larger productions as a general threat to local culture
- Rising costs and pricing parity threaten viability of independent productions

However, even with a competitive tax credit program, industry-wide disruptions like the recent Writer's Guild of American and Screen Actors Guild strikes effectively halted all film activity nationwide, causing many within the industry to seek other careers. There are also national and global trends that could threaten Montana's competitive positioning as a film location given the cyclical nature of preferences for the Western genre as well as the evolving nature of the industry with commitments to longer-running series that limits stable work for the local workforce and vendors. The rising costs for production as well as housing could limit the expansion of the industry in the state, but also general misperceptions of the Montana film industry and who stands to benefit from incentive programs, especially for independent productions.

3. Economic and Fiscal Impact of Film Production in Montana

This section delves into the historical and current economic footprint of the film industry in Montana as well as the recent utilization of the MEDIA Act Tax Credit Program, between July 2022 and mid-May 2024. ESI's data collection and research identified 167 productions have been filmed in the state over this two-year period. Productions that have applied for the MEDIA Act Tax Credit during this study period include television series *Yellowstone*, *1923*, and *Into the Wild Frontier*; and feature films including *Tokyo Cowboy*, *Organ Trail*, and *Outlaws*.

In mid-2023, the Writers Guild of America staged a 148-day strike, significantly disrupting the film industry and causing delays in planned productions in Montana. Unfortunately, by the time the strike was resolved, it was too late in the season to commence filming some of the halted productions, coinciding with the onset of winter in the region. Adding to the setback, the popular show *1923* chose not to return to Montana—opting instead for Texas.[44] The push to expand tax credits failed in the 2023 legislature due to tie votes in the State House; and as a result, the production of *1923* cited the lack of available credits as the reason for moving the filming of its second season to Texas.[45] Consequently, Montana experienced reduced production activity and a diminished economic impact from the film industry in 2023.

The comprehensive economic impact of film productions in the state extends beyond the immediate spending during filming within Montana. Direct expenditures by production companies on resident wages and local goods generate ripple effects across various industries. This analysis delves into the broader implications of the sector's activities, including the economic stimulation stemming from productions certified under the MEDIA Act Tax Credit Program.

The total economic impact in Montana from productions that have filmed during this two-year time period is estimated to be approximately $312.2 million, supporting 1,320 FTE jobs with $95.8 million in employee compensation in Montana. The tax revenues generated by these productions is estimated to provide $17.8 million to the State of Montana and $4.4 million in additional tax revenues generated to local jurisdictions such as county and municipal governments for a total fiscal impact of $22.2 million over the study period.[46,47]

It is important to note that the MEDIA Act Tax Credit Program is still relatively new, and large productions often make location decisions multiple years in advance. Furthermore, with the Writers

[44] Worthington, Olinda. "Productions begin in Montana after strikes end." *Yellowstone Public Radio*. November 13, 2023, https://www.ypradio.org/community/2023-11-13/productions-begin-in-montana-after-strikes-end.
[45] Margolis, Josh. "Montana Media Coalition begins latest push to expand film tax credits." *NBC Montana*. May 22, 2024.
[46] Details of the breakdown of these tax revenues by jurisdiction are provided in the Appendix of the report.
[47] A recent economic impact analysis on Season 4 of *Yellowstone* was released by the University of Montana. The UMT report utilized the REMI model for their purposes which is a computable general equilibrium (CGE) model that models the dynamic shifts in an economy based on a shock. This report utilizes IMPLAN, an input-output modeling software that models the static impact of spending within an established economy. IMPLAN, and I-O models in general, are not built to answer questions that broadly affect inter- and intra-industry relationships. Computable general equilibrium (CGE) models, on the other hand, are economic models that can estimate changes in external factors. CGE models make use of elasticities (such as price elasticity of demand) and can better reflect such behavioral changes as they are less static. For this reason, the two models should not be compared.

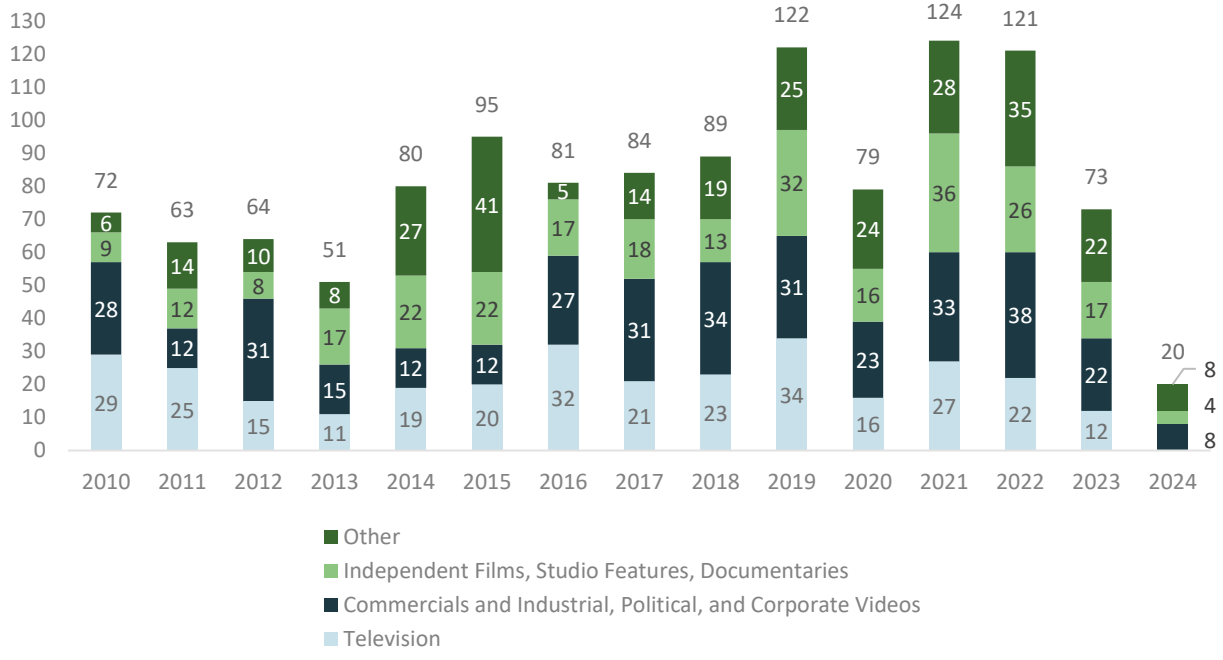
Guild strike in 2023 resulting in some delays in productions, activity in this sector is just now again gaining momentum. The analysis provided in this section offers a snapshot of the industry's current footprint and highlights how the industry has grown since the previous analysis that ESI completed.

3.1. Sizing of the Industry

Historic Film Production

Over the past almost fifteen years, there has been an average of 75 productions in Montana annually, representing 20 television productions, 22 commercial shoots, 17 documentaries, and 17 productions categorized as "other", which include web series, music videos, short films, and still photography. Although the 2020 total production count demonstrated a slowdown in activity due to the COVID-19 pandemic, the industry recovered in 2021, as many out-of-state productions were drawn to the state due to the ability to remain open for production with less restrictions than other locations. 2022 proved to be another strong year for Montana's film industry, until another slowdown then occurred in 2023 due to the WGA and SAG strikes. At its peak in 2021 and 2022—between the pandemic coming to an end and prior to the strikes—more than 120 productions spent time in Montana each of these years.

Figure 3.1: Montana Productions from 2010 to Mid-May 2024



Source: The Film Office at the Montana Department of Commerce (2024), Econsult Solutions, Inc. (2024)

The Scale of the Film Industry in the Montana Context

Analysis conducted by the National Endowment for the Arts (NEA) and the U.S. Bureau of Economic Analysis (BEA)[48] reveals that Montana's arts and culture sector, inclusive of the motion picture industry, generated a production value of $2.2 billion in 2022. This amounted to 3.3 percent of the state's GDP and provided employment for 16,540 individuals. Within this vibrant cultural landscape, the film industry plays a significant role, bolstering the economic vitality of the broader sector. Its contributions, as reported by the Bureau of Economic Analysis, amounted to over $103 million towards the state's GDP in 2022, underscoring its importance in fostering a conducive environment for artistic expression and economic growth.

Footprint of Film Production in the State

This report separates film production in Montana into two categories:

- Productions that did not apply for the MEDIA Act Tax Credit Program ("Other Productions"), either because the incentive was not available during the time of filming (credits were reserved far out in advance), the production did not qualify for the incentive, or the production qualified but did not apply; and
- Productions that have either received the MEDIA Act Tax Credit ("MEDIA Act Production") or have been certified to receive the credit and have filmed.

Figure 3.2: Summary of Film, Television, and Other Media Productions in Montana, 2020 through Mid-May 2024[49]

Production Type	Number of Productions	MEDIA Act Productions	Total Spending ($M)
2020 Productions	79	8	$77.8
2021 Productions	124	22	$48.1
2022 Productions	121	10	$269.2
2023 Productions	73	6	$60.0
2024 Productions[50]	20	1	$4.7
Total	417	47	$459.9

Source: The Film Office at the Montana Department of Commerce (2024), Econsult Solutions, Inc. (2024)

This report includes an analysis of 167 productions that filmed in the state during the subject 24-month period (July 2022 through Mid-May 2024). Of the 121 productions that filmed in 2022, 47 were excluded as they filmed prior to the study period and were included in the previous report. In 2023, 73 productions were filmed and included in this analysis. At the time of this report, 20 productions have filmed in 2024. Of the filming activity from July 2022 through May 2024, 17 projects applied to participate in the MEDIA Act Tax Credit Program.

[48] https://www.arts.gov/impact/research/arts-and-cultural-production-satellite-account.
[49] 2024 productions included to date as of May 21, 2024. 2020 and 2021 data from previous report.
[50] Limited data still available for 2024.

The Appendix includes a list of all known productions that were filmed in Montana included in this analysis, with the productions that received the tax credit or were certified by the state as eligible for the tax credit identified.

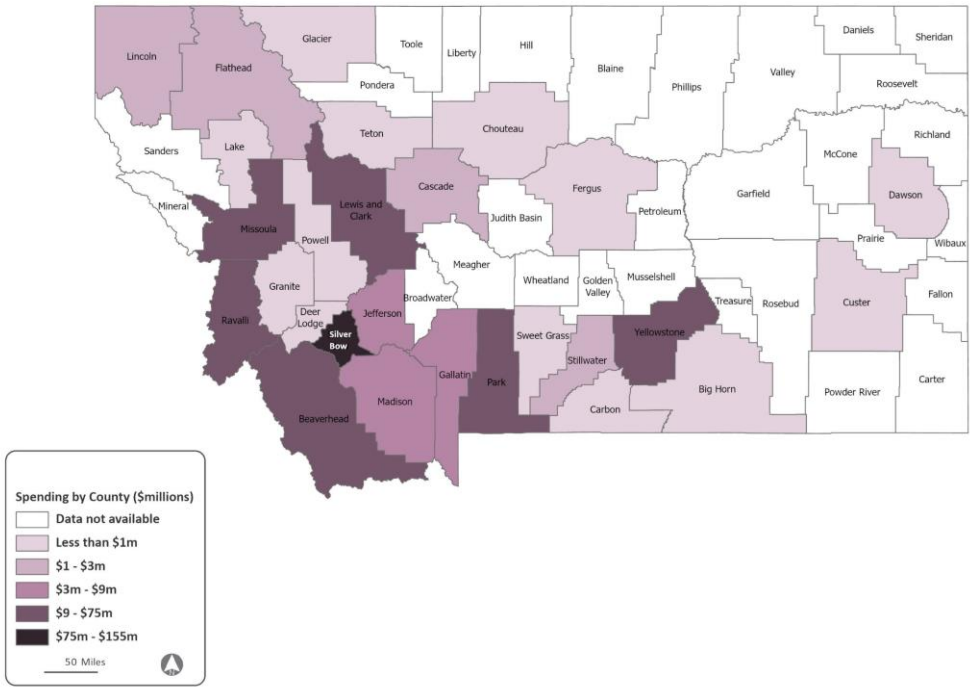
Figure 3.3: Summary of Film, Television, and Other Media Productions in Montana, July 2022 through Mid-May 2024

Production Type	Number of Productions	Total Production Spend ($M)
MEDIA Act Productions	17	$277.2
Other MT Productions	150	$56.8
Total	167	$334.0

Source: The Film Office at the Montana Department of Commerce (2024), Econsult Solutions, Inc. (2024)

Between July 2022 and May 2024, 37 counties in Montana hosted production activity to some extent. This represents about 66 percent of all the counties in the state. Almost two-thirds of production spending occurred in Ravalli and Silver Bow Counties (see Figure 3.4).

Figure 3.4: Estimated Production Spend by County, July 2022 through Mid-May 2024

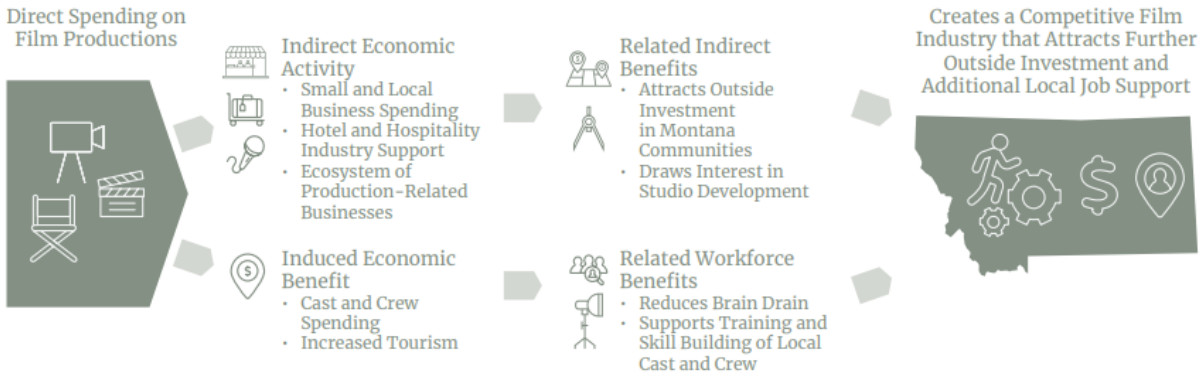


Source: MT Film Office (2024), Econsult Solutions, Inc. (2024)

3.2. The Direct Economic Footprint of Film Production in Montana

Film industry activity in Montana injects spending from outside the state into Montana's economy, generating jobs, and fostering economic growth. Film and television productions impact various Montana-based industries by purchasing the necessary resources for their operations. For instance, cast and crew members dine at local restaurants, shop at businesses, stay in hotels, and procure goods and services from local vendors.

Figure 3.5: How the Film Industry Creates Spillover Economic Benefits in Montana



Source: Econsult Solutions, Inc. (2024)

To determine the economic impact of film activity in Montana, ESI examined the direct spending footprint of productions with locations in the state. ESI collected information from the Film Office at the Montana Department of Commerce regarding the 2022-2024 list of known productions, indicating those that were approved and certified for the Montana Film Tax Credit Program, from July 2022 to May 2024. ESI communicated with individual productions to receive additional data when possible, including call sheets and production spending information.

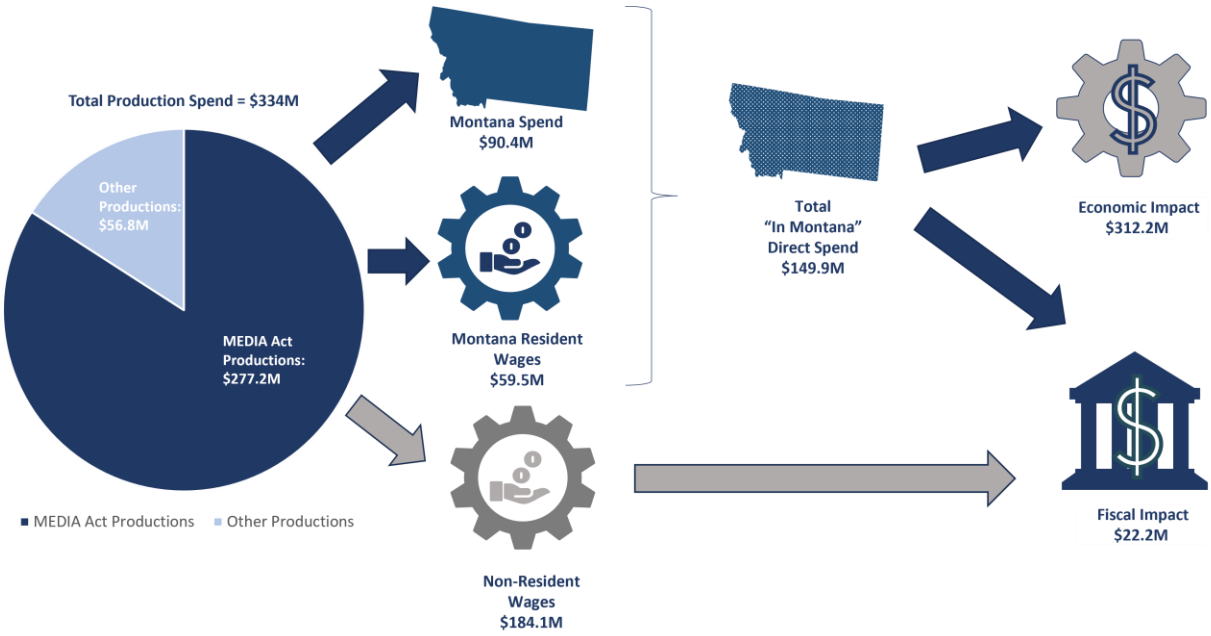
When available, specific expenditure data from productions that have been filmed in the state were used. Since detailed data were not available for every production, ESI utilized a combination of individual call sheet data and production length estimates, industry standard daily spending estimates from the Association of Film Commissioners International (AFCI), and average daily production spend estimates based on production type, to serve as a baseline for the analysis. Together, these data were used to estimate the total local expenditures of all productions in Montana.[51]

The total estimated direct spend of all productions in Montana over this period was $334.0 million. This overall estimated spend is comprised of three components: production spending on goods and services purchased by productions in Montana ($90.4 million), resident employee compensation ($59.5 million), and non-resident employee compensation ($184.1 million).[52] For the purposes of economic impact modeling, only those expenditures—purchases and resident employee compensation—that took place and stayed in Montana are included ($149.9 million). While a large portion of the total production spend

[51] See Appendix for further detail on methodology.
[52] In the 2019-2020 report, non-resident employee compensation were excluded completely from the economic impact estimates.

is estimated to be non-resident employee compensation, the majority of these wages will likely not be spent in Montana and are therefore excluded from modeling.[53] However, these wages are subject to Montana compensation tax and will be included in the fiscal models presented in Section 3.6 below (see Figure 3.6 and Figure 3.7).

Figure 3.6: Estimated Production Spend and Employee Compensation in Montana by Production Type for All Productions, July 2022 through Mid-May 2024



Sources: The Film Office at the Montana Department of Commerce (2024), Econsult Solutions, Inc. (2024)

[53] When film crew and cast come to Montana from out-of-state, they spend money on foods, hotels, entertainment, and services. However, because per-diem, hotels, craft services, and car rentals are included in the production budgets (within the MT spend estimate), we do not include any portion of this "visitor" spend in the overall economic impact. Therefore, there is undercounting in the economic impact of these workers living and working in Montana during production.

Figure 3.7: Estimated Production Spend and Employee Compensation in Montana by Production Type for All Productions, July 2022 through Mid-May 2024 ($ millions)

Production Type	Number of Productions	Total Production Spend	MT Spend	Resident Emp Comp	Total MT Production Spend	Non-Resident Emp Comp
Commercials	31	$8.5	$2.6	$3.3	$5.9	$2.5
Documentaries	17	$5.5	$1.4	$3.2	$4.7	$0.9
Independent Features	18	$35.3	$10.4	$18.0	$28.4	$6.9
Industrial/Corporate	4	$0.4	$0.1	$0.2	$0.3	$0.1
Music Videos	5	$0.8	$0.2	$0.3	$0.5	$0.2
Online/Web Content	4	$0.0	$0.0	$0.0	$0.0	$0.0
Other	16	$1.3	$0.4	$0.5	$0.9	$0.4
Political	13	$2.9	$0.9	$1.1	$2.1	$0.9
Short Films	16	$2.6	$1.8	$0.3	$2.1	$0.5
Still Photography	19	$1.0	$0.3	$0.4	$0.7	$0.3
Television	24	$275.7	$72.2	$32.1	$104.3	$171.4
All Productions	**167**	**$334.0**	**$90.4**	**$59.5**	**$149.9**	**$184.1**

Source: The Film Office at the Montana Department of Commerce (2024), Econsult Solutions, Inc. (2024), Various production companies

Of the productions summarized in Figure 3.7, 17 have requested support via the MEDIA Act Tax Credit Program. Figure 3.8 below shows the total direct expenditures of this subset of productions. Data on estimated spending activity was provided to ESI directly from the production companies.

Figure 3.8: Estimated MEDIA Act Production Spend and Employee Compensation in Montana, July 2022 through Mid-May 2024 ($ millions)

Production Type	Number of Productions	Total Production Spend	MT Spend	Resident Emp Comp	Total MT Production Spend	Non-Resident Emp Comp
MEDIA Tax Act Productions	17	$277.2	$78.4	$38.4	$116.8	$160.4
Other MT Productions	150	$56.8	$12.0	$21.1	$33.1	$23.7
Total	**167**	**$334.0**	**$90.4**	**$59.5**	**$149.9**	**$184.1**

Source: The Film Office at the Montana Department of Commerce (2024), Econsult Solutions, Inc. (2024)

3.3. Economic Impact of Film Industry and MEDIA Act Tax Credit Program

The direct economic footprint of these productions creates spillover impacts into other industries. For example, direct spending by film companies on goods and services such as production equipment or catering produces subsequent indirect impacts. The direct spending on resident wages generates induced spending in other industries; for example, when the crew subsequently spends money earned on set at a local store or restaurant. In order to assess these localized impacts, each county's production spend was modeled within IMPLAN.

The total economic impact of the film production activity that occurred within the State from July 2022 to May 2024 is shown in Figure 3.9 below. In aggregate, these productions have a total economic impact of almost $312.2 million, supporting 1,320 FTE jobs with $95.8 million in employee compensation.

Figure 3.9: Economic Impact of Productions in Montana, July 2022 through Mid-May 2024

	Other Productions	MEDIA Act Tax Credit Productions	All Productions
Direct Output ($M)	$33.1	$116.8	$149.9
Indirect and Induced ($M)	$41.6	$120.7	$162.3
Total Impact ($M)	**$74.7**	**$237.5**	**$312.2**
Direct Jobs Supported (FTE)	110	400	510
Indirect and Induced Jobs Supported (FTE)	210	600	810
Total Jobs Supported (FTE)	**320**	**1,000**	**1,320**
Total Employee Compensation Supported	**$30.6**	**$65.3**	**$95.8**

Source: IMPLAN (2022) Econsult Solutions, Inc. (2024)

ESI's analysis in this report uses multipliers from IMPLAN, which are revised annually but lag due to data availability.[54] Differences in results from past years' multipliers are a result of economic forces at a larger scale than simply the film industry in Montana. In particular the COVID-19 pandemic changed economic indicators due to labor shortages, supply chain issues, and significant inflation; all of these factors influence the economic and tax revenue impacts within the IMPLAN input-output model.

In past iterations of ESI's analysis, the MEDIA Act Tax Credit Program was still in the beginning stages. Since production decisions are often made years ahead of filming, the ramp up that the program has seen is understandable. One challenge in evaluating this most recent cycle of the program (2022-2024) has been the impacts of the WGA and SAG strikes, which caused delays in the planning and executive of productions in 2023.

[54]The economic impact study was produced with IMPLAN's 2022 multipliers, which are the most recent multipliers available. Previous reports were done with 2019 multipliers.

3.4. Local Economic Impacts

From caterers to hotels, and hardware stores to transportation, the film industry can have a significant economic impact on various sectors of the local economy. During filming, a production often hires local businesses to support the operation. To quantify the economic impact of this local spending, the aggregate spend of productions by county was modeled for 11 counties with at least $1 million in Montana procurement and resident wages. The remaining 24 counties with less than $1 million were modeled within a statewide model.

Figure 3.10: Estimated Montana Production Spend by County, July 2022 through Mid-May 2024 ($ millions)

County[55]	Total Production Spend[56]	MT Production Expenditures	Resident Employee Compensation	Total Montana Production Spend	Non-Resident Employee Compensation	Underserved Area
Beaverhead*	$29.9	$7.5	$3.1	$10.6	$19.3	
Big Horn	$0.2	$0.1	$0.1	$0.1	$0.1	X
Blaine	$0.0	$0.0	$0.0	$0.0	$0.0	X
Carbon	$0.3	$0.1	$0.2	$0.2	$0.1	
Cascade*	$1.6	$0.4	$0.6	$1.0	$0.6	
Chouteau	$0.2	$0.1	$0.1	$0.2	$0.1	X
Custer	$0.5	$0.2	$0.2	$0.4	$0.2	
Dawson	$1.0	$0.1	$0.3	$0.5	$0.5	
Deer Lodge	$0.2	$0.1	$0.1	$0.1	$0.1	X
Fallon	$0.1	$0.0	$0.0	$0.1	$0.0	
Fergus	$0.1	$0.1	$0.0	$0.1	$0.0	
Flathead*	$3.0	$0.7	$1.1	$1.9	$1.1	
Gallatin*	$7.5	$2.0	$2.6	$4.6	$2.9	
Glacier	$0.9	$0.2	$0.4	$0.5	$0.3	X
Golden Valley	$0.0	$0.0	$0.0	$0.0	$0.0	X
Granite	$0.1	$0.0	$0.0	$0.1	$0.0	
Hill	$0.1	$0.0	$0.0	$0.1	$0.0	X
Jefferson*	$6.1	$0.7	$2.1	$2.9	$3.2	
Lake	$0.9	$0.3	$0.4	$0.8	$0.1	X
Lewis and Clark*	$35.7	$9.2	$5.7	$14.9	$20.9	
Lincoln	$1.2	$0.1	$0.4	$0.6	$0.6	X
Madison*	$3.6	$0.9	$1.6	$2.5	$1.1	
Missoula*	$51.8	$11.2	$11.1	$22.3	$29.5	
Park*	$26.5	$7.7	$13.4	$21.1	$5.4	
Phillips	$0.0	$0.0	$0.0	$0.0	$0.0	X
Pondera	$0.1	$0.0	$0.1	$0.1	$0.0	X
Powell	$0.2	$0.1	$0.1	$0.2	$0.0	X
Ravalli*	$34.3	$8.1	$4.5	$12.6	$21.7	
Roosevelt	$0.1	$0.0	$0.1	$0.1	$0.0	X
Sanders	$0.0	$0.0	$0.0	$0.0	$0.0	X
Silver Bow*	$116.4	$37.6	$5.9	$43.6	$72.8	X
Stillwater	$1.1	$0.1	$0.4	$0.5	$0.6	
Sweet Grass	$0.5	$0.1	$0.2	$0.2	$0.3	
Teton	$0.2	$0.0	$0.1	$0.1	$0.0	
Valley	$0.0	$0.0	$0.0	$0.0	$0.0	
Yellowstone*	$9.6	$2.7	$4.5	$7.1	$2.5	
Total	**$334.0**	**$90.4**	**$59.5**	**$149.9**	**$184.1**	

Sources: United States Census Bureau (2023), Econsult Solutions, Inc. (2024)

The MEDIA Act includes an additional tax credit of five percent of expenditures for production activity that occurs within the state's designated underserved areas. This bonus is meant to attract more

[55] Impacts of counties with a spending over $1 million (with asterix) were calcualted at the county level. Results are located in the Appendix.

spending in areas that the Montana Legislature has designated a need of increased economic development focus. In total, 24 counties in the State fall into this category. Based on data provided by the Film Office at the Montana Department of Commerce and research completed by ESI, 15 productions were filmed, at least in part, in underserved counties.

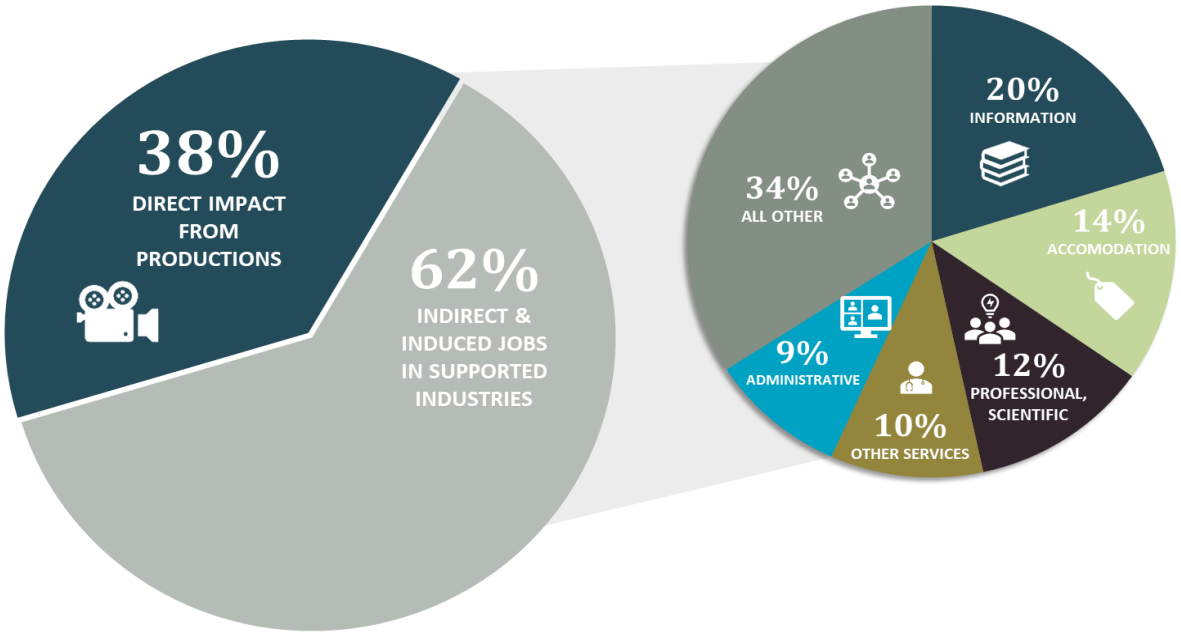
It is likely that as the program progresses, more data will become available to determine how much additional film activity is being diverted to these locations due to the added benefit. It is important to note that the underserved county designation is updated annually, and released each winter, and should be used to encourage more spending activity in these areas.

3.5. Industry Distribution of Jobs Supported by the Industry

The economic impacts associated with film production extend beyond direct employment in the film industry. Other sectors including information, accommodation, professional and scientific services, other services and administrative services also see benefits from the indirect (supply chain) and induced (labor income) impacts of the activity (see Figure 3.10).

Overall, 62 percent of the total employment supported by these economic impacts occurred in sectors outside of the direct film industry. The industry distribution pie chart below shows the sum of indirect and induced jobs created by the economic activity generated by the productions.

Figure 3.11: Industry Distribution of Employment Generated from Productions in Montana, July 2022 through Mid-May 2024



Source: IMPLAN (2022), Econsult Solutions, Inc. (2024)

[56] Blaine, Golden Valley, Phillips, Sanders, and Valley counties had less than $50,000 in Total Production Spend/Total Montana Production Spend, thus, rounded down to $0.0 in this table.

3.6. Tax Impact of Film Industry

The economic impacts due to productions from July 2022 to mid-May 2024 also increase the tax base by supporting taxable economic activity via procurement of goods and services, and employee spending. The total tax impact shown below is the sum of taxes generated from the spillover of the spending taking place in the state as well as the taxable wages supporting non-resident workers.

Fiscal Impacts from Economic Impacts of Montana Spending

It is estimated that the total economic impact from the Montana-spend portion of production activity has generated $12.8 million in tax revenues in Montana, with $8.4 million remitted to the State of Montana.

Figure 3.12: Total Fiscal Impact of July 2022 through Mid-May 2024 Productions in Montana ($ millions)[57]

	Other Productions	MEDIA Act Tax Credit Productions	All Productions
Sub-County General Taxes (City/Town)	$0.2	$0.6	$0.8
Sub-County Specific Taxes (School/Fire)	$0.4	$1.3	$1.7
County Taxes	$0.4	$1.2	$1.5
State Taxes	$2.3	$6.1	$8.4
MEDIA Act Transfer Fees[58]	-	$0.4	$0.4
Total Tax Impact	**$3.3**	**$9.5**	**$12.8**

Source: IMPLAN (2022), Econsult Solutions, Inc. (2024)

Fiscal Impacts from Non-Resident Compensation Tax

In addition to the taxes generated from the economic activity spurred by the film industry, many non-resident film crew and cast members temporarily relocate to Montana during production. Although these workers are not permanent residents, their wages earned in Montana are subject to the state's compensation tax. Montana's graduated tax code determines the tax rate based on overall compensation. Due to the variable nature of film industry wages, assessing the exact tax rate for each non-resident worker is challenging. However, the Montana Department of Revenue reports an effective tax rate of 5.1 percent for non-resident compensation[59]. Using this rate, it is estimated that non-residents contributed approximately $9.3 million in compensation tax to the State of Montana during the study period.

A new law passed in May 2023, MT Code § 15-30-2106 (2023), will affect the tax revenue collected from some non-residents who are present in Montana for 30 days or less.[60] The new law exempts some non-resident employees from Montana source income tax for services provided within the state for 30 days

[57] For more information on the taxes included in each jurisdiction, please see explanation here: Taxes: Where's the Tax? – IMPLAN - Support.
[58] Transfer fees are a projection based on past reported fees associated with the MEDIA Act program.
[59] Individual Income Tax: Analysis of Non-Resident & Partial Year Residents' Income.
[60] https://leg.mt.gov/bills/mca/title_0150/chapter_0300/part_0210/section_0060/0150-0300-0210-0060.html.

or less in a calendar year, effective January 1, 2024. This exemption applies only if the employees work in more than one state during the year. However, key employees, defined as individuals with annual compensation exceeding $500,000, and certain other professionals are excluded from this exemption. If non-resident employees exceed 30 days of work in Montana, all their compensation becomes taxable, including the first 30 days.[61] This new exemption will likely impact Montana's non-resident compensation tax revenues, particularly for smaller productions with shorter filming durations. However, professional entertainers are not included in this 30-day exemption; it is possible, therefore, that all compensation earned by actors and other professionals that are deemed to fall in that category would be considered taxable income.

Figure 3.13: Total Fiscal Impact of Non-Resident Wage Earners in Montana, July 2022 through Mid-May 2024 ($ millions)

	Other Productions	MEDIA Act Tax Credit Productions	All Productions
Non-Resident Wages	$23.6	$160.4	$183.9
Total Non-Resident Wage Tax Impact (Effective Rate @ 5.1%)	**$1.2**	**$8.2**	**$9.4**

Source: IMPLAN (2022), Econsult Solutions, Inc. (2024)

Summary Fiscal Impacts from Film Production Activities

Combined, the total fiscal impact of the film industry over the study period is estimated to be $22.2 million. This value includes local, county, and state taxes collected from the economic impact of the film industry as well as the out-of-state resident wage tax.

Figure 3.14: Total Fiscal Impact of the Film Industry Montana, July 2022 through Mid-May 2024 ($ millions)

	Other Productions	MEDIA Act Tax Credit Productions	All Productions
Total Tax Impact from Economic Activity	$3.3	$9.5	$12.8
Total Non-Resident Wage Tax Impact	$1.2	$8.2	$9.4
	$4.5	**$17.7**	**$22.2**

Source: Department of Revenue (2022), IMPLAN (2022), Econsult Solutions, Inc. (2024)

3.7. Economic and Fiscal Impact of Film-Induced Tourism in Montana

As outlined in Section 2, film-induced tourism attracts a multitude of visitors to the state. Visitors spend on hotels, retail, meals, and alcohol, among other goods and services. In order to estimate total film induced visitors and spend profiles, several sources were used for modeling. Total visitation to Montana

[61] "Montana law gives nonresident income tax and withholding relief for short-term business travelers and their employers." May 22, 2023. *EY.* https://taxnews.ey.com/news/2023-0919-montana-law-gives-nonresident-income-tax-and-withholding-relief-for-short-term-business-travelers-and-their-employers#:~:text=On%20May%2018%2C%202023%2C%20Montana,less%20during%20the%20calendar%20year.

was estimated by the Institute of for Tourism and Recreation Research at the University of Montana (ITRR).[62] According to ITRR, approximately 12.5 million travelers visited Montana in 2023. Estimated spend amounts by category were also drawn from the ITRR study, which estimated that visitors spend about $85.96 per person per day (see figure below). This estimate includes any money spent on gasoline, car rentals and hotels.

Figure 3.15: Average Daily Non-Resident Visitor Spending Per Person

Category	Spend
Hotel	$17.71
Food	$15.02
Retail	$25.53
Transportation	$24.32
Other	$3.39
Total	**$85.96**

Source: Institute for Tourism and Recreation Research (2023)

The Bureau of Business and Economic Research (BBER) recently assessed the impact of *Yellowstone* on Montana's Tourism Economy.[63] The research group conducted a survey, asking respondents a number of questions about the purpose, frequency, and duration of their visit(s) to Montana. More importantly, they were also asked questions to measure the degree to which the series *Yellowstone* was an influence on their decision to visit. Eighteen percent of respondents indicated they had been significantly influenced to visit the state as a result of watching *Yellowstone*. Although other individuals may have been influenced to visit Montana after watching other productions, this served as a good proxy and conservative means to estimating the number film induced visitors. Of the 12 million visitors to Montana in 2023, approximately 2.2 million were considered for our impact study.

Combined, the estimated additional $945 million spent by visitors within Montana resulted in an economic impact of approximately $1.35 billion. Additionally, the visitor spending supported approximately 13,100 jobs with earnings of $431 million (see figure below).

Figure 3.16: Annual Economic Impact of Film-Induced Tourism

Impact type	Montana
Direct Output ($M)	$758
Indirect and Induced Output ($M)	$587
Total Output ($M)	**$1,345**
Employment Supported (FTE)	**13,100**
Employee Compensation ($M)	**$431**

Source: IMPLAN (2022), Econsult Solutions, Inc. (2024)

[62] 2023 Estimates Non-Resident Visitation, Expenditures and Economic Contribution, ITRR, 2023.
[63] Assessing the Impact of the *Yellowstone* Television Series on Montana's Tourism Economy, BBER, 2023.

Spending activity by visitors drives a significant amount of tax revenue to the state. It is estimated that in 2023, film induced visitor spending drove about $19.6 million in local tax revenues, and about $40 million in state tax revenues. In total, the tax revenue impact of this ancillary visitor spending is estimated at $59.7 million per year. (see Figure below)

Figure 3.17: Annual Fiscal Impacts of Film-Induced Tourism ($ millions)

	Tax Revenues
Sub-County General Taxes (City/Town)	$4.0
Sub-County Specific Taxes (School/Fire)	$8.2
County Taxes	$7.5
State Taxes	$40.1
Total Tax Impact	**$59.7**

Source: IMPLAN (2022), Econsult Solutions, Inc. (2024)

4. Conclusion

This report provides a detailed look at the economic impact of the MEDIA Act Tax Credit Program as well as the entire film industry in Montana. As noted in the previous sections, the film industry produces both qualitative and quantitative economic benefits to businesses and residents of Montana. However, the tax credit that helps attract some portion of this activity does incur a fiscal cost to the State of Montana in terms of foregone tax revenue.

To compare the amount of tax credit validated to the amount of estimated tax revenue gained from the film industry's economic activity, it is important to compare the appropriate time periods. This report analyzes July 2022 through May 2024. The Department of Revenue's tracking system is by calendar year. To date, $62.5 million in tax credits have been validated by the Department of Revenue (see Figure 4.1).

Figure 4.1: Total Tax Credit Reserved, Validated, and Available, by year ($ millions)

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Total Credit Reserved	$0.0	$0.0	$0.0	$0.0	$0.0	$5.5	$12.0	$10.4	$0.0	$0.0
Total Credit Validated	$10.0	$10.0	$12.0	$12.0	$12.0	$6.5	$0.0	$0.0	$0.0	$0.0
Total Credit Available	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0	$1.6	$12.0	$12.0

Source: Department of Revenue (2024)

For this reason, it is important to analyze both the tax credits validated and the economic impact realized to date. Figure 4.2 shows the estimated total tax revenue stemming from the film industry since the beginning of the MEDIA Act.[64] It is estimated that from the January 2019 through May 2024, tax revenues generated from the film industry activity alone total approximately $41.9 million to local, county, and state jurisdictions.

Figure 4.2: Total Estimated Fiscal Impact to the State of Montana, by year ($ millions)

	Study 1 (January 2019-June 2021)	Study 2 (July 2021-June 2022)	Current (July 2022-Mid May 2024)
State Revenues	$2.0	$12.0	$17.8
Local and County Revenues	$1.5	$4.6	$4.4
Total Revenues	$3.5	$16.6	$22.2

Source: Econsult Solutions, Inc. (2024)

When comparing the available tax credit to the estimated tax revenue generated from the additional economic activity in Montana, there is a net loss of $1.8 million when considering the tax generated to all jurisdictions. However, the taxes exclusively generated from film activity are only part of the impact.

[64] Revenue in the "previous" column is based on the direct production spend and wages from the time period analyzed in the previous report. To ensure completeness, the same IMPLAN fiscal models were applied to the previous report's values. Because the previous report did not include county impacts, there were no local and county revenues estimated. Additionally, only business and income tax models were included in the previous report.

Figure 4.3: Total Tax Credit Available and Estimated Tax Revenues from Productions Generated July 2022 through Mid-May 2024 ($ millions)

	All Jurisdictions	State Revenue
Total Estimated Tax Revenue	$22.2	$17.8
Total Credit Available	($24.0)	($24.0)
Net Tax Loss/Surplus	**($1.8)**	**($6.2)**

Source: Department of Revenue (2024), IMPLAN (2024), Econsult Solutions, Inc. (2024)

This report also examines how the economic impacts from film-induced tourism are a significant source of fiscal revenues for local governments, the counties, and the State. This emphasizes the potential for film-related activities to play a significant role in attracting visitors, and the resulting visitor spend. This underscores the need, from a destination perspective, to consider film tourism as a distinct strategy of the incentives program because it produces tangible spillover impacts attributable to the film sector.

Figure 4.4: Annualized Economic Impact of Productions and Film-Induced Tourism in Montana (Averaged Impacts Over July 2022 through Mid-May 2024 Timeframe)

Total Estimated Annual Economic Impact	Film Production Activity	Film-Induced Tourism Activity	Annualized Impact of Economic Activity Supported by Film
Direct Output ($M)	$75	$758	$833
Indirect and Induced ($M)	$81	$587	$668
Total Impact ($M)	**$156**	**$1,345**	**$1,501**
Direct Jobs Supported (FTE)	255	10,200	$10,455
Indirect and Induced Jobs Supported (FTE)	405	2,900	$3,305
Total Jobs Supported (FTE)	**660**	**13,100**	**$13,760**
Total Employee Compensation Supported ($M)	**$48**	**$431**	**$479**

Source: IMPLAN (2022), Econsult Solutions, Inc. (2024)

Figure 4.5 shows the total tax revenue by activity on an annual basis and compares it to the tax credit validated in a one-year period, while Figure 4.3 shows the revenues for the two-year period.

Figure 4.5: Annualized Tax Revenues of Productions and Film-Induced Tourism in Montana (Averaged Impacts Over July 2022 through Mid-May 2024 Timeframe in $ millions)

Total Estimated Annual Tax Revenue	Film Production Activity	Film-Induced Tourism Activity	Annualized Impact of Economic Activity Supported by Film
Revenue to State	$8.9	$40.1	$49.0
Revenue to Other Jurisdictions	$2.2	$19.6	$21.8
Revenue to All Jurisdictions	$11.1	$59.7	$70.8
Total Credit Validated	($12.0)		($12.0)
Net Tax Loss/Surplus	($0.9)	$59.7	$58.8

Source: Department of Revenue (2024), IMPLAN (2024), Econsult Solutions, Inc. (2024)

This report has established the ways in which film drives economic growth in the State's economy—providing out-of-state spending to small communities across Montana, supporting residents with jobs on set, and building a strong ecosystem for Montana's arts and culture community.

As discovered through the cast and crew engagement process (surveying, focus groups, and individual interviews) and the research conducting over the last year, the film production ecosystem has grown considerably through the MEDIA Act and resources of the Film Office at the Montana Department of Commerce, allowing the state to attract larger-scale, high-visibility productions, which in turn create stable employment opportunities as well as confidence for local vendors and suppliers to reinvest in and expand their businesses. Notably, the SAG and WGA strikes resulted in a slowdown of some of the momentum that the state was seeing, as the pipeline of potential or planned productions were impacted by this national event.

The other influencing factor that the recent volume of film activity has produced is the expanded opportunities for film-induced tourism. The import of visitor spending into Montana as a result of film and television serving as destination marketing is a valuable benefit that has been additionally captured in this report, and, importantly, represents an additional way that the industry's spillover supports a variety of diverse sectors throughout Montana.

Appendix

List of All Productions in Montana, July 2022 through Mid-May 2024

Production	Type	County	MEDIA Act Certified
$55 Dollar Room in A Safe Quiet Neighborhood	Short Films	Missoula	
1923	Still Photography	Silver Bow	
1923 Marketing Material	Other	Silver Bow	
1923 S1	Television	Silver Bow	X
AARP Magazine Cover Shoot	Still Photography	Silver Bow	
American Hi-Line	Documentaries	Roosevelt/Hill	
American Xeno	Short Films	Silver Bow	
Armory Hotel	Commercials	Gallatin	
Authentic Brands Group - Fyre Boots	Commercials	Madison	
AUTHENTIC BRANDS GROUP - FYRE BOOTS (Scout/Fitting)	Commercials	Madison	
Authentic Brands Group - Lucky Jeans	Commercials	Madison	
Backroads Of Montana (Ep. 154)	Television	Golden Valley/Roosevelt/ Lewis and Clark/Ravalli/Cascade	
Backroads Of Montana (Ep. 155)	Television	Sanders/Madison/ Carbon/Teton/ Phillips	
Backroads Of Montana (Ep. 156)	Television	Lake/Valley/Blaine/ Ravalli/ Missoula/Teton	
Big Sky (Aerial Unit)	Television	Lewis and Clark/Park	X
Billings Clinic Women's Services	Commercials	Yellowstone	
Biohaven "Hans"	Commercials	Missoula	
Bitterroot	Independent Features	Missoula	X
Blonde Instinct	Independent Features	Missoula	
Blood And Water	Short Films	Lewis and Clark	
Blood For Dust	Independent Features	Yellowstone	X
Brand Mt - Summer 2024 Project	Commercials	Lewis and Clark	
Carhartt "Making It Happen" (Video/Stills)	Other	Park	
CHEVY ATTRACT - SILVERADO EFOIL ADVENTURE (Pull From App)	Commercials	Lewis and Clark	X
Chris Edwards Photo Shoot	Still Photography	Missoula/Ravalli	
Chromista Video/Still Production	Other	Gallatin	
Cold Case Files	Television	Yellowstone/Stillwater	
Country Living	Still Photography	Park	
Crow Country	Music Videos	Big Horn	
Cuisine De La 'Pocolypse	Independent Features	Missoula	X
Dave Chappelle And John Mayer Benefit Video	Other	Park	

Production	Type	County	MEDIA Act Certified
David Yarrow	Still Photography	Park	
David Yarrow Photo Shoot	Still Photography	Park	
Deadly Waters	Documentaries	Cascade	
Dino's Footsteps	Television	Dawson	
Discovering Mary	Documentaries	Gallatin	
Double Nickel Film	Short Films	Missoula	
Eastern Western	Independent Features	Carbon/Powell/Park/ Madison	
Epic Bighorn River Se Montana (One Episode)	Online/Web Content	Big Horn	
Flylow	Commercials	Gallatin	
HBO Sports			
Frontier At Buffalo Ranch	Television	Lewis and Clark	
Garrett Creamer Video And Still Shoot	Other	Flathead	
Ghosts Of Gold Creek	Short Films	Deer Lodge	
Gmc Boundless	Still Photography	Park/Madison	
Growing Up Grizzly	Documentaries	Park	
Hagger Clothing	Commercials	Missoula/Lake	
HALL AND HALL RANCH BROKERAGE (And Stills)	Other	Gallatin	
Halyna Hutchins Documentary	Documentaries	Park	
Hamlet	Independent Features	Lewis and Clark	
Hbo Sports	Television	Flathead	
Heydude Shoes	Commercials	Missoula	
High Road	Online/Web Content	Missoula	
Huckberry/Relwen	Still Photography	Flathead	
Into The Wild Frontier S2	Television	Ravalli/Missoula	X
Into The Wild Frontier Season 4	Television	Missoula/Ravalli	X
Iplay Toys	Other	Missoula	
Janji Collective Exclusive Print (Video Commercial/Stills)	Other	Gallatin	
Jccs Certified Public Accountants	Still Photography	Lewis and Clark	
Jccs Certified Public Accountants	Still Photography	Missoula	
Jeep	Commercials	Gallatin	
John Deere	Commercials	Cascade	
Jon Tester	Political	Cascade/Chouteau	
Jon Tester	Political	Yellowstone	
Jon Tester	Political	Yellowstone/Gallatin	
Jon Tester	Political	Lewis and Clark	
Jon Tester	Political	Yellowstone	
Jon Tester	Political	Yellowstone	
Jon Tester For Senate	Political	Cascade/Chouteau	
Kung Fu Slayers	Independent Features	Missoula/Ravalli	

Production	Type	County	MEDIA Act Certified
Lana Turner's Eyes	Short Films	Madison	
Laurel Moon	Short Films	Yellowstone/Park	
Leap: A Tale Of The Last Days	Independent Features	Flathead	
Legends Of A Stagecoach	Television	Carbon/Gallatin/Park	X
LEO And Military Industries	Industrial/Corporate	Silver Bow	
Lewis And Clark	Documentaries	Lewis and Clark	
Lewis And Clark Route (2022)	Documentaries	Lewis and Clark	
Lindsay Thornberg (Coats)	Still Photography	Park	
Lindsay Thornberg Coats (Stills/Video)	Other	Park	
Lone Mountain	Short Films	Lake	
Louder Than Guns	Documentaries	Missoula	
Ls Tractors (Commercial/Stills/Web)	Other	Deer Lodge	
Marksmen	Television	Jefferson	
Meshika Hats	Still Photography	Park	
Monica Tranell	Political	Missoula	
Monica Tranell	Political	Yellowstone	
Montana Hospital Association Lifetime Achievement Video	Industrial/Corporate	Lewis and Clark	
Montana State Fund	Still Photography	Lewis and Clark	
Montana State Fund	Still Photography	Beaverhead	
Montana State Fund	Commercials	Missoula	
Montana State Fund	Commercials	Gallatin	
Montana State Fund	Still Photography	Lewis and Clark	
Montana Tourism	Commercials	Flathead	
Mountain Men	Television	Lincoln	
Moveable Feast Ep 903	Television	Yellowstone	
Mr. Pettigrew	Independent Features	Missoula	
Murder In The Heartland Ep 506	Television	Stillwater	
Music Video Line Dancing	Music Videos	Yellowstone	
Neon Wasteland - Madeline Hawthorne	Music Videos	Park	
No On Lr131	Political	Missoula	
O'keeffe's Skin Care	Commercials	Roosevelt/Lewis and Clark	
One Night On Campus	Short Films	Gallatin	
Outlaws	Independent Features	Park/Madison/Lewis and Clark	X
Paramount Montana Flooding PSA	Commercials	Ravalli/Missoula	
PBS Documentary	Documentaries	Glacier/Pondera	
Peak Skiing	Commercials	Gallatin	
Plowing For Pizza - Domino's	Commercials	Gallatin	
Quit Line Commercials	Commercials	Lewis and Clark	
Ralph Lauren (Spec Commercial/Stills)	Other	Park	

Production	Type	County	MEDIA Act Certified
Ranch At Rock Creek Recruitment Videos	Industrial/Corporate	Granite	
Real Housewives Of Orange County (1 Ep)	Television	Missoula	
Restoration Road	Television	Yellowstone/Sweet Grass	
Robin Hood: The Golden Arrow	Short Films	Gallatin	
Rust	Independent Features	Park	X
Ryan Zinke	Political	Flathead	
Saving Yellowstone	Documentaries	Park	
Scraps	Short Films	Park	
Selling Yellowstone	Television	Flathead/Gallatin/ Cascade	
Sex Before The Internet (Eps. 205, 207, 208)	Television	Missoula	
Siloed	Short Films	Yellowstone/Fergus	
St. Peter's Health Foundation Gala Videos	Industrial/Corporate	Lewis and Clark	
Stockman Bank	Commercials	Custer	
Succubus	Independent Features	Gallatin/Park	X
The Caller Returns	Independent Features	Park	X
The Last Of The Nobodies	Documentaries	Lake	
The Mountain Kitchen	Television	Gallatin	
The Tall Tales Of Jim Bridger	Television	Missoula/Ravalli	X
Things Unseen	Short Films	Gallatin	
Three Fingered Jack (Wine Makers)	Still Photography	Ravalli	
Tim Montana	Music Videos	Silver Bow	
Tim Sheehy	Political	Gallatin	
Tim Sheehy	Political	Gallatin	
T-Mobile	Commercials	Flathead	
Today's Wild West (Ep. 607)	Television	Park/Madison	
Touch	Short Films	Silver Bow	
Trapped In The Rockies	Independent Features	Gallatin	
Trisha Tyler Clothing	Still Photography	Gallatin	
Trust For Public Land	Still Photography	Missoula	
Trust For Public Lands	Still Photography	Missoula/Ravalli	
Tukysa (Pharma)	Commercials	Lewis and Clark	
Unholy Trinity	Independent Features	Park	X
University Of Montana Anthem	Commercials	Missoula	
Untitled Documentary	Documentaries	Missoula	
Untitled Documentary	Documentaries	Missoula/Flathead/ Powell/Lake/ Teton	
Untitled Lincoln Documentary	Documentaries	Missoula	
Untitled Short Film	Short Films	Gallatin	
Untitled Short Film	Short Films	Missoula	

Production	Type	County	MEDIA Act Certified
Untitled Tubi Documentary	Documentaries	Silver Bow	
Visit Billings/Brand Usa	Commercials	Yellowstone	
VISIT MONTANA (And Stills)	Other	Sanders	
Visit Montana Social Media Campaign (Video)	Online/Web Content	Flathead	
Visit Mt - Eastern Montana Winter Production (Video/Stills)	Other	Carbon	
Wed The Dark	Independent Features	Missoula	
What My World Spins Around - Jordan Davis	Music Videos	Fallon/Custer	
When They Were Here	Documentaries	Glacier	
When They Were Here	Documentaries	Glacier	
Whitefish Credit Union	Commercials	Flathead	
Whitefish Credit Union	Commercials	Gallatin	
Whitefish Credit Union	Commercials	Park	
Whitefish Credit Union	Commercials	Park	
Wild Animal	Independent Features	Yellowstone	X
Wildlife Nation With Jeff Corwin (One Episode)	Online/Web Content	Valley	
Xiaflex (Pharma)	Commercials	Flathead	
Yellowstone S5 Epk	Other	Silver Bow	
Yellowstone S5a	Television	Missoula/Lewis and Clark/ Beaverhead/Ravalli	X
Yellowstone	Other	Missoula	
Ys5 Marketing (Epk) Shoot	Other	Missoula	
Zero Road (Pickups)	Independent Features	Flathead	

Source: The Film Office at the Montana Department of Commerce (2024)

Economic and Fiscal Impacts by County, July 2022 through Mid-May 2024 ($ Millions)

All Productions	Beaverhead	Flathead	Gallatin	Jefferson	Lewis and Clark	Madison
Direct Output ($M)	$10.6	$1.9	$4.6	$2.9	$14.9	$2.5
Indirect and Induced ($M)	$7.5	$2.2	$5.6	$1.5	$15.9	$1.1
Total Impact ($M)	**$18.0**	**$4.1**	**$10.3**	**$4.4**	**$30.7**	**$3.6**
Direct Jobs Supported (FTE)	35	5	15	10	60	5
Indirect and Induced Jobs Supported (FTE)	40	10	25	10	85	5
Total Jobs Supported (FTE)	**75**	**15**	**40**	**20**	**145**	**10**
Total Employee Compensation Supported ($M)	**$4.5**	**$1.7**	**$3.9**	**$2.4**	**$8.9**	**$1.9**
Total Tax Revenue ($M) (local, county, state)	$0.7	$0.2	$0.4	$0.2	$1.2	$0.1

All Productions	Missoula	Park	Ravalli	Silver Bow	Yellowstone	Cascade
Direct Output ($M)	$22.3	$21.1	$12.6	$43.6	$7.1	$1.0
Indirect and Induced ($M)	$28.1	$10.9	$9.6	$36.0	$8.0	$1.1
Total Impact ($M)	**$50.4**	**$32.0**	**$22.3**	**$79.5**	**$15.1**	**$2.1**
Direct Jobs Supported (FTE)	60	60	60	160	30	5
Indirect and Induced Jobs Supported (FTE)	65	65	55	185	40	5
Total Jobs Supported (FTE)	**125**	**125**	**115**	**345**	**70**	**10**
Total Employee Compensation Supported ($M)	**$18.2**	**$15.6**	**$6.1**	**$13.0**	**$6.3**	**$0.9**
Total Tax Revenue ($M) (local, county, state)	$1.9	$1.3	$1.0	$2.5	$2.5	$0.1

All Productions	County Total	Statewide Remainder	State Total
Direct Output ($M)	$145.0	$4.9	$149.9
Indirect and Induced ($M)	$127.5	$34.8	$162.3
Total Impact ($M)	**$272.5**	**$39.7**	**$312.2**
Direct Jobs Supported (FTE)	505	5	510
Indirect and Induced Jobs Supported (FTE)	590	220	810
Total Jobs Supported (FTE)	**1,095**	**225**	**1,320**
Total Employee Compensation Supported ($M)	**$83.4**	**$12.4**	**$95.8**

Source: The Film Office at the Montana Department of Commerce (2024), Montana Department of Revenue (2024), IMPLAN (2024)

Methodology

Calculating the Footprint of the Film Industry in Montana

In order to arrive at estimated spending and employee compensation for film productions in Montana, we used various data sources since complete data were not available for every production. These include the following data sources:

1. Collected data from MEDIA Act productions' applications.
2. Daily production spending for on-location productions from the Association of Film Commissioners International (AFCI). These daily spending amounts were normalized in 2024 dollars and applied to the appropriate production types.
3. Call sheets from a large number of productions to estimate the number of shoot days, and
4. Production spending and employee compensation from selected productions.

When an estimated budget or direct data from the producer were not available, we applied the daily spending rate to the appropriate production types. This information was supplemented by spending patterns of comparable productions included in the analysis, which were data provided by the Film Office at the Montana Department of Commerce and were independently researched, verified, and adjusted. Call sheets allowed us to calculate an average number of shoot days by production type in order to apply the daily production rate to arrive at an aggregate spend per production. This aggregate spend was proportioned into production spend, resident wages, and non-resident wages based on the spending profile of similar production types.

Economic impact estimates are generated by utilizing input-output models to translate an initial amount of direct economic activity into the total amount of economic activity that it supports, which includes multiple waves of spillover impacts generated by spending on goods and services and by spending of labor income by employees. This section summarizes the methodologies and tools used to construct, use, and interpret the input-output models needed to estimate this project's economic impact. Input-Output Model Theory In an inter-connected economy, every dollar spent generates two spillover impacts:

- First, some amount of the proportion of that expenditure that goes to the purchase of goods and services gets circulated back into an economy when those goods and services are purchased from local vendors. This represents what is called the "indirect effect," and reflects the fact that local purchases of goods and services support local vendors, who in turn require additional purchasing with their own set of vendors.

- Second, some amount of the proportion of that expenditure that goes to labor income gets circulated back into an economy when those employees spend some of their earnings on various goods and services. This represents what is called the "induced effect," and reflects the fact that some of those goods and services will be purchased from local vendors, further stimulating a local economy.

The role of input-output models is to determine the linkages across industries in order to model out the magnitude and composition of spillover impact to all industries of a dollar spent in any one industry. Thus, the total economic impact is the sum of its own direct economic footprint plus the indirect and induced effects generated by that direct footprint.

Input-Output Model Mechanics

To model the impacts resulting from the direct expenditures, Econsult Solutions, Inc. developed a customized economic impact model using the IMPLAN input/output modeling system. IMPLAN represents an industry standard approach to assess the economic and job creation impacts of economic development projects, the creation of new businesses, and public policy changes within its surrounding area. IMPLAN has developed a social accounting matrix (SAM) that accounts for the flow of commodities through economics. From this matrix, IMPLAN also determines the regional purchase coefficient (RPC), the proportion of local supply that satisfies local demand. These values not only establish the types of goods and services supported by an industry or institution, but also the level in which they are acquired locally. This assessment determines the multiplier basis for the local and regional models created in the IMPLAN modeling system. IMPLAN takes the multipliers and divides them into 536 industry categories in accordance with the North American Industrial Classification System (NAICS) codes.

The IMPLAN modeling system also allows for customization of its inputs which alters multiplier outputs. Where necessary, certain institutions may have different levels of demand for commodities. When this occurs, an "analysis-by-parts" (ABP) approach is taken. This allows the user to model the impacts of direct economic activity related to an institution or industry with greater accuracy. Where inputs are unknown, IMPLAN is able to estimate other inputs based on the level of employment, earnings, or output by an industry or institution.

Employment and Employee Compensation Supported

IMPLAN generates job estimates based on the term "job-years", or how many jobs will be supported each year. For instance, if a construction project takes two years, and IMPLAN estimates there are 100 employees, or more correctly "job-years" supported, over two years, that represents 50 annual jobs. Additionally, these can be a mix of a full and part-time employment. Consequently, job creation could feature more part-time jobs than full-time jobs. To account for this, IMPLAN has a multiplier to covert annual jobs to full-time equivalent jobs.

Income to direct, indirect, and induced jobs is calculated as employee compensation. This includes wage and salary, all benefits (e.g., health, retirement) and payroll taxes (both sides of social security, unemployment taxes, etc.). Therefore, IMPLAN's measure of income estimates gross pay opposed to just strictly wages.

About Econsult Solutions, Inc.

This report was produced by Econsult Solutions, Inc. (ESI). provides businesses and public policy makers with consulting and thought leadership services in urban economics, real estate, transportation, public infrastructure, economic development, public policy and finance, strategic planning, as well as expert witness services for litigation support.

ESI combines robust quantitative analysis with trusted expert insights to create sustainable solutions. The firm works collaboratively with its clients, and draws in expertise, when necessary, from our network of experts and partners across industries, regions, and management practices. Based in Philadelphia, the firm supports clients nationwide.

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