

**NEIL ABERCROMBIE**  
GOVERNOR

**BRIAN SCHATZ**  
LT. GOVERNOR



STATE OF HAWAII  
**DEPARTMENT OF TAXATION**  
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**RANDOLF L. M. BALDEMOR**  
DEPUTY DIRECTOR

To: The Honorable Angus McKelvey, Chair  
And Members of the House Economic Revitalization and Business Committee

Date: Thursday, February 9, 2012  
Time: 8:30 a.m.  
Place: Conference Room 312, State Capitol

From: Frederick D. Pablo, Director  
Department of Taxation

Re: H.B. 2869 Relating to Creative Media Development

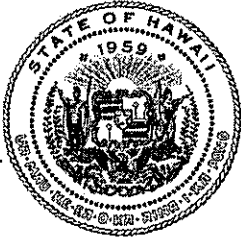
The Department of Taxation (Department) appreciates the intent of H.B. 2869, but the Department would prefer adoption of H.B. 2479, which takes a more measured approach to supporting the creative media industry.

H.B. 2869 extends the sunset date of Act 88, SLH 2006, by fifteen years, from December 31, 2015 to December 31, 2030. The bill carved out the wages and salaries of all cast, crew, and musicians from the production costs for the purposes of claiming the credit; the credit amount for the wages and salaries equals 15% of the wages and salaries. The bill provides an additional 5% tax credit of the Hawaii residents' wages and salaries. To maintain consistency, the Department requests that "resident" be defined as set forth in HRS § 235-1.

This bill increased the cap per qualified production from \$8 million to \$10 million. It also requires the Department of Business Economic Development and Tourism to submit a report to the Governor and Legislature every 5 years beginning with 2015.

This bill will take effect upon approval and will apply to taxable years beginning after December 31, 2011, if enacted. This bill could potentially have a fiscal impact to the current fiscal year, 2012.

Thank you for the opportunity to provide comments.



**DEPARTMENT OF BUSINESS,  
ECONOMIC DEVELOPMENT & TOURISM**

**NEIL ABERCROMBIE**  
GOVERNOR

**RICHARD C. LIM**  
DIRECTOR

**MARY ALICE EVANS**  
DEPUTY DIRECTOR

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Statement of  
**RICHARD C. LIM**  
Director  
Department of Business, Economic Development, and Tourism  
before the

**HOUSE COMMITTEE ON ECONOMIC REVITALIZATION & BUSINESS**

Thursday, February 9, 2012  
8:30 a.m.  
State Capitol, Conference Room 312  
in consideration of  
HB2869

**RELATING TO THE ECONOMY**

Chair McKelvey, Vice Chair Choy, and Members of the Committee.

The Department of Business, Economic Development, and Tourism (DBEDT) offers the following comments on HB2869, which extends the sunset date for Act 88 (HRS 235-17) from 1/1/16 to 1/1/31, raises qualified production credit ceiling from \$8 million to \$10 million, separates the calculation of the credit amount based on wages and salaries from the credit amount based on other qualified productions costs; flattens the base credit for wages at 15% and adds an additional 5% credit amount on wages and salaries of cast crew, and musicians who are state residents.

DBEDT appreciates the legislature's support of our film industry and the recognition of the importance of the Act 88 program. We support the intent of this measure, but are concerned about the cost implications of the increases proposed. We believe it is prudent to maintain the current level of tax credits and refer you to HB2479, the Administration's bill, which broadens the criteria for qualifying productions, eliminates the restriction on internet-only distribution, and extends the current sunset date of 2015 to 2020.

Thank you for the opportunity to testify on this measure.

**TESTIMONY OF NBC UNIVERSAL MEDIA, LLC**

HEARING DATE/TIME: Thursday, February 9, 2012  
8:30 a.m. in Conference Room 312

TO: House Committee on Economic Revitalization & Business

RE: Testimony in Support of the Spirit and Intent of HB1758, HB2869<sup>\*</sup> HB2479 and  
HB2225 with Commentary and Suggested Amendments

Dear Chair, Vice-Chair and Committee Members:

**I. INTRODUCTION**

NBC Universal Media, LLC (“NBC/U”) develops, produces, broadcasts and distributes motion pictures, television programs and related content around the world. Over the last several years, local industry stakeholders, the Hawaii Legislature and the people of Hawaii have developed a clear consensus that the motion picture, television and related digital media industries (the “Film Industry”) in Hawaii has become an important component of a diversified economy and has had a positive financial impact on the State of Hawaii which can be strengthened significantly if Hawaii’s existing incentives for the Film Industry are enhanced.

As a result of the enormous infusion of cash that Film Industry productions bring to production locales, there has been a dramatic increase in the number of state and local governments attempting to attract film productions. Recent studies have confirmed that these jurisdictions have experienced dramatic increases in in-state spending and significant growth in workforce and infrastructure development due to film productions in those state and local jurisdictions and that such productions stimulate more direct and indirect tax revenue and that a properly designed tax incentive program can actually increase (on a net basis) local tax revenues. (See, Ernst & Young - Economic and Fiscal Impacts of the New Mexico Film Product Tax Credit; Meyers Norris Penny - Economic Contributions of the Georgia Film and Television Industry; Cloudberry Communications – The Millennium Report (Economic impact and exposure value for the Stockholm region in the Swedish Millennium feature films), collectively attached hereto as Exhibit “A”).

It is also clear that the State of Hawaii should encourage similar dramatic growth in Hawaii because the Film Industry:

- (1) Infuses significant amounts of new money into the economy, which is dispersed across many communities and businesses and which benefits a wide array of residents; and
- (2) Creates skilled, high-paying jobs; and
- (3) Has a natural dynamic synergy with Hawaii's top industry, tourism, and is used as a destination marketing tool for the visitor industry; and

(4) Acts synergistically to bolster the local music industry and thereby assists in preserving and disseminating Hawaii's host culture by introducing millions of people around the world to Hawaii's recording artists, music and dance. A compelling example of these benefits can be seen in connection with the critically acclaimed and popular motion picture "The Descendents" produced and directed by Alexander Payne and based upon a novel by local author Kaui Hart Hemmings. The Descendents garnered a Best Picture award at the prestigious Golden Globe Awards and landed George Clooney a Golden Globe for Best Actor. In addition, The Descendents has been nominated for the following Oscars in 2012: Best Picture, Best Actor, Best Director, Best Adapted Screenplay, and Best Editing. The Descendents boasts a fabulous sound track consisting entirely of preexisting musical compositions and sound recordings written and performed by up and coming and iconic local musicians from Makana and Jeff Peterson to Sonny Chillingworth and Gabby Pahinui (see attached hereto as Exhibit "B" for a complete list of the music used in The Descendents); and

(5) Is a clean, nonpolluting industry that values the natural beauty of Hawaii and its diverse multicultural population and wide array of architecture.

The Film Industry also has a strong desire to hire locally and invest in the training and workforce development of island-based personnel and intends to continue the practice of hiring a significant number of residents and to support training and opportunities for those residents.

However, it is respectfully submitted that in order to stimulate such dramatic growth it is necessary to enhance Hawaii's existing tax incentive program (that uses the front-end budgeting methods normally used by the Film Industry and that lower production costs) in order to allow Hawaii to effectively compete with other film production centers in attracting a greater number of significant projects to the islands and to continue to build our local film industry infrastructure.

In the Spring of 2011, the State of Hawaii, through the Creative Industries Division of DBEDT, reached out to NBC/U to inquire as to what NBC/U would consider to be essential modifications to Hawaii film tax incentive program in order to build and sustain a robust Film Industry in Hawaii. After careful consideration, NBC/U recommended a few reasonable and measured modifications to Act 88 designed to make Hawaii's incentive program more stable, competitive and technologically friendly given the emerging significance of internet delivered content as an adjunct to traditional content delivery. Specifically, the following modifications to Act 88 (the "Proposed Act 88 Modifications") were respectfully recommended:

PROPOSED MODIFICATIONS TO ACT 88 THAT ARE LIKELY TO SIGNIFICANTLY INCREASE PRODUCTION ACTIVITY IN HAWAII

- (1) Increase the refundable production credit ("RPC") by 10% **with the increase tied to local hires/vendors.**
- (2) Eliminate the prohibition against internet only projects from qualifying for the RPC.
- (3) Allow pass-through entities to recover the RPC directly.

- (4) Increase the per production RPC cap from \$8,000,000 to \$16,000,000.
- (5) Allow webisodes to be included in the RPC application for the related series (avoids failing to meet the \$200K minimum spend).
- (6) Extend the sunset date of Act 88 to at least 2025 to assure certainty and predictability for long term production planning.

## **II. THE HOUSE BILLS**

Several bills are before this Committee which, in various ways, seek to encourage business development in Hawaii through the growth of the Film Industry by providing enhanced incentives that attract more film and television productions to Hawaii, thereby generating good jobs and increased tax revenues. NBC/U respectfully submits that in order for any amendments to Act 88 to be meaningful in developing a robust and long term Film Industry in Hawaii said amendments should mirror the proposed Act 88 Modifications noted above. NBC/U emphasizes that it supports the notion that the proposed increase in the RPC be tied to “local” hires thereby creating more jobs for Hawaii residents.

A) HB1758. HB1758 is a companion bill to, and mirror image of, SB2043 and seeks to increase the production credit available under Act 88 but does not provide a specified percentage increase. It is respectfully submitted that the tipping point at which an incentive program will have a meaningful pull on production activity exists at around 25%. This is especially true in the case of Hawaii because the cost of doing business here is considerably higher than on the mainland.

HB1758 also seeks to develop Hawaii’s Film Industry infrastructure by providing nonrefundable tax credits for qualified media infrastructure projects in the State of Hawaii. NBC/U, as a general proposition, supports the development of infrastructure as an integral part of a robust Film Industry but not at the expense of a competitive production credit. In other words, given limited resources, if the State of Hawaii had to choose between allocating tax dollars to infrastructure development or production credits, it is respectfully submitted that an increase in the production credit would have a more significant and profound ability to bring production work to the State of Hawaii than the addition of an infrastructure credit. If both infrastructure development and an increase in the RPC can be carried out simultaneously, that would be the best of both worlds. However, given a choice between one or the other, it is submitted that the increase in the production credit would result in increased demand and that the local marketplace would respond to that demand by utilizing and/or repurposing existing assets for production use.

B) HB2479 and HB2225. HB2479 is a companion bill to, and mirror image of, SB2741 and expands the definitions of qualified productions to include animation or special and visual effects and productions for internet distribution and like HB2225, extends the sunset date of Act 88. The extension of the sunset date for a significant period of time is important to the Film Industry because it provides some degree of assurance that the program will be around for

years to come thereby allowing major projects, which require long term planning, to consider Hawaii as a production locale. Accordingly, NBC/U strongly supports the spirit and intent HB2479 and HB2225 but would recommend that said sunset date be further extended to at least 2025 (or to 2030 as set forth in HB2869) to assure certainty and predictability for long term production planning.

C) HB2869. NBC/U supports: an extension of the sunset date of Act 88; an increase in the RPC cap; and an increase in the RPC tied to local hires – i.e., on wages and salaries of cast, crew and musicians who are residents of Hawaii. However, it is respectfully submitted that in order for amendments to Act 88 to result in a meaningful uptick in production activity in Hawaii, the cap should be raised to \$16,000,000 and the RPC should be increased by 10% tied to local hires.

### III. CONCLUSION

While Hawaii may be perceived as a highly desirable destination that would instinctively attract the Film Industry, the State needs to take affirmative steps to ensure Hawaii is at the top of the list and not left behind in the wake of other domestic and international locales. The modifications proposed by NBC/U will help to ensure Hawaii is competitive with film destinations around the globe and does so in a manner that is sustainable and rational for the long term. NBC/U stands ready to work with the Legislature, the Administration and local Film Industry stakeholders to improve and enhance Hawaii's film incentive program to help build a robust, stable and sustainable Film Industry in the State of Hawaii.



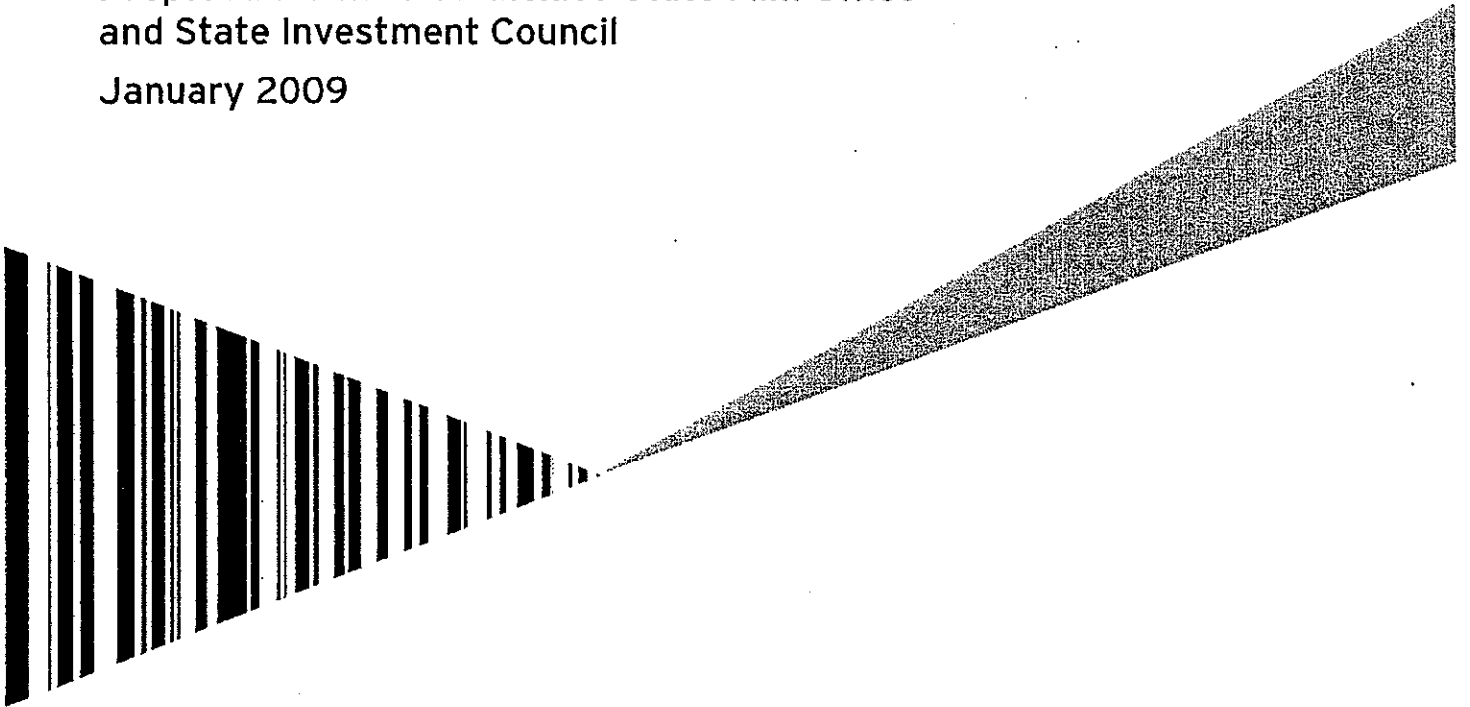
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William G. Meyer, III  
On behalf of  
NBC Universal Media, LLC

# Economic and Fiscal Impacts of the New Mexico Film Production Tax Credit

Prepared for the New Mexico State Film Office  
and State Investment Council

January 2009



 **ERNST & YOUNG**

**EXHIBIT A**

## Executive Summary

New Mexico has provided tax incentives to film productions since the film production tax credit was adopted in 2002. The program has attracted more than 115 major film productions to New Mexico since its adoption in 2002, including 22 films that were assisted through the State Investment Council's loan participation program. In 2007, 30 films were produced in New Mexico generating \$253 million of spending benefiting the New Mexico economy and generating higher state and local tax collections. This study presents the estimated economic and fiscal impact of the film production tax credit program.

- The benefits of New Mexico's film production tax credit program extend beyond the direct and indirect economic impacts of film production activities qualifying for tax credits. In addition to the film spending, New Mexico's economy also benefits from capital investment to support the film industry's growth in the state and additional film-related tourism.
- Film production activities in New Mexico created 2,220 direct jobs in 2007. This employment impact includes approximately 1,670 below the line employees earning \$49,500 annually and 550 actors, directors, and producers working in New Mexico. These 2,220 direct jobs created 1,609 additional jobs in other industries, resulting in a total employment impact of 3,829 jobs.
- Film-related capital expenditures and projected film tourism spending attributable to 2007 productions generated an estimated 3,769 direct jobs and 1,612 indirect jobs, resulting in 5,380 total jobs attributable to capital expenditures and film tourism.
- Combining the 2,220 direct jobs from film productions with the 3,769 jobs from capital expenditures and film tourism results in 5,989 total direct jobs attributable to the film production tax credit. These direct jobs create a total of 3,221 indirect jobs, resulting in a total employment impact of nearly 9,210 jobs.
- The economic activity created by the film production tax credit program also results in higher state and local tax collections. State tax collections resulting from film production activities in 2007 totaled \$22.6 million. Additional state tax impacts from capital expenditures in 2007 and film tourism during 2008-2011 are estimated to total \$21.5 million in 2007 dollars, resulting in a total state tax impact of \$44.1 million.
- Film production expenditures in 2007 qualified for \$49.4 million of state film production tax credits to be paid in 2008. Expressed in 2007 dollars, these film credits total \$47.1 million. Based on the 2007 value of present and future year tax receipts and the 2007 value of state film production tax credits, the program earns \$0.94 in additional tax revenue for each \$1.00 that is paid out in incentives. Local governments in New Mexico earn \$0.56 for each dollar of state credits, resulting in combined state and local tax collections of \$1.50 for each \$1.00 of state credits.



## **Introduction**

New Mexico has provided tax incentives to film productions since the film production tax credit was adopted in 2002. The program has attracted more than 115 major film productions to New Mexico since its adoption in 2002, including 22 films that were assisted through the State Investment Council's loan participation program. In 2007, 30 films were produced in New Mexico generating \$25 million of spending benefiting the New Mexico economy and generating higher state and local tax collections. This study presents the estimated economic and fiscal impact of the film production tax credit program.

The benefits of New Mexico's film production tax credit program extend beyond the direct and indirect economic impacts of film production activities qualifying for tax credits. In addition to the film spending, New Mexico's economy also benefits from capital investment to support the film industry's growth in the state and additional film-related tourism.

## **Description of the Film Production Tax Rebate Program**

The New Mexico film production tax rebate program was adopted in 2002 at a rate of 15% of production expenses incurred during the production and post-production phases of each film produced in the state. In 2005 and 2006, the rate was increased twice bringing the rate to 25% in 2006.

For qualified productions, spending that qualifies for the tax rebate includes payments to employees who are New Mexico residents, payments to non-resident actors who provide their services through a personal service corporation (subject to a \$20 million dollar cap on qualifying actor compensation), and all other direct production and post-production expenditures subject to New Mexico taxes. Payments to employees and contractors who are taxed as non-residents and certain fringe benefits are excluded from spending that qualifies for the current 25% film production tax rebate.

## **Growth of the Film Tax Credit and the New Mexico Film Industry**

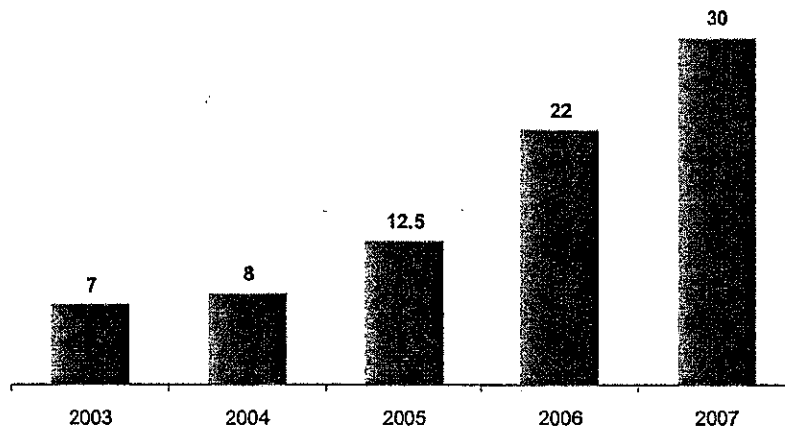
The New Mexico film production tax credit program has been successful in attracting an increasing number of films each year as shown in Figure 1. In 2007, 30 film projects qualifying for the credit were shot in New Mexico, a 36% increase from the 22 films that were shot in 2006 and more than four times the number that were shot in 2003. Of the 30 films shot in 2007 were award-winning and award-nominated films "No Country for Old Men", "3:10 to Yuma," and "Wild Hogs."

As shown in Figure 2, film spending in New Mexico has also increased significantly over the five year period, 2003-2007. In 2003, film productions in New Mexico had qualifying expenditures of \$23 million and estimated total expenditures (including expenditures on labor and other expenses that do not qualify for the credit) of \$29 million. By 2007, qualified spending grew to

\$198 million while total spending was an estimated \$253 million.<sup>1</sup> The total budget for films produced in New Mexico in 2007 was \$575 million, meaning that 44% of these films' expenditures occurred in New Mexico. Only New Mexico expenditures are included in the analysis.

The information in Figures 1 and 2 shows that each time the rate of the film production tax credit has been increased, both the number of films qualifying for the film tax credit and total spending have increased significantly. In terms of total spending, when the credit rate was increased from 15% to 20% in 2005, total estimated spending rose from \$24 million to \$144 million. In the following year, when the rate was increased to 25%, total film spending increased to an estimated \$223 million, a 55% increase from the prior year.

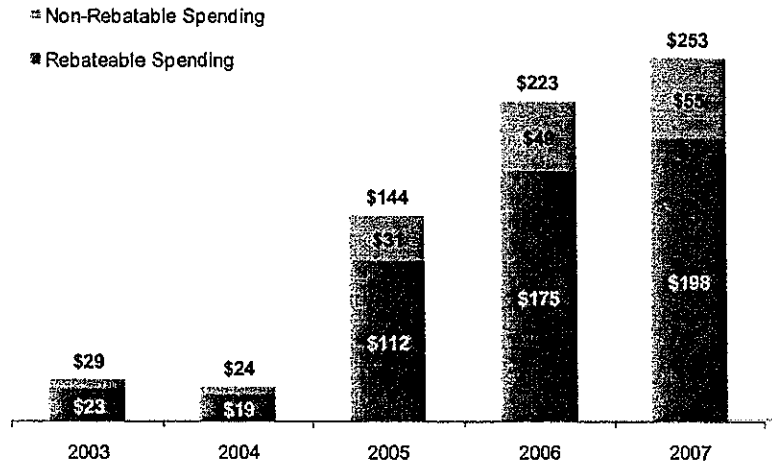
**Figure 1: Number of Films Participating in the Credit Program, 2003-2007**



Note: films that spanned two years are indicated as being half in the first year, half in the second year

<sup>1</sup> Note that the amount of qualified spending in any year does not equal the amount of spending receiving a rebate during the same calendar year due to the delay from the time a film applies for a rebate and begins production in New Mexico and the date on which the State incurs the expenditure cost for the rebate. This delay averages 15 months, meaning that most films shot in New Mexico during one year will not incur any cost to the state until the following year.

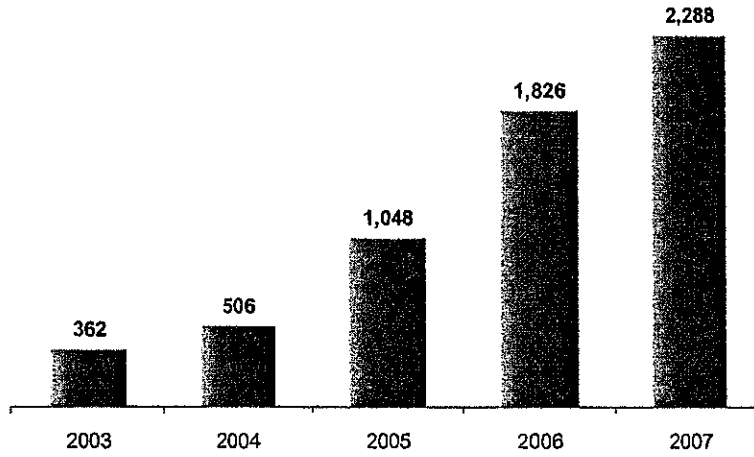
**Figure 2: Annual Film Production Spending by Film Productions Participating in the Film Production tax Credit Program, 2003-2007**



Employment in the film production industry has also increased significantly since the inception of the film production tax credit program. The U.S. Bureau of Labor Statistics (BLS) publishes an estimate of the employment in the New Mexico film and video production industry based on the number of employees and wages covered by the unemployment insurance program. While data published by BLS does not fully capture the contribution of film production activities on the New Mexico labor force, it provides a useful starting point from which to evaluate the total employment contribution of film and video productions in New Mexico.<sup>2</sup> As shown in Figure 3, employment in the New Mexico film and video production industry has increased by almost 2,000 people since 2003.

<sup>2</sup> While full and part-time employees are covered by the unemployment insurance program and therefore included in the BLS estimates, contract employees (for which unemployment insurance contributions are not required) are not included in the BLS estimates. Because film productions employ many actors, producers, directors, and employees who may work for production companies or personal service companies located in other states, the Bureau of Labor Statistics employment estimates understate the total size of the labor force involved in New Mexico film productions.

**Figure 3: Employment in New Mexico Film Production Businesses\***



Source: Bureau of Labor Statistics, Quarterly Census of Employment and Wages  
\*Data for NAICS 51211: Film and Video Production Industries

## **Economic Impact of the Film Production Tax Credit Program**

This section presents estimates of the impact of the film production tax credit program on New Mexico's economy and briefly describes the methodology used to estimate the impacts. The analysis is designed to answer the following question: What is the economic impact of film productions participating in the film production tax credit program in 2007?

The tax credit program impacts the New Mexico economy through three channels: 1) increased film production activity, 2) increased investment in New Mexico film studios and equipment, and 3) spending by tourists who visit New Mexico or extend their trip to the state to see film-related attractions. Each of the three channels of economic impact result in direct, indirect, and induced economic impacts. These separate effects are estimated as described in the sections below, but can be generally characterized as follows:

- **Direct impacts:** The direct impact is the employment, income, or sales associated with the activity being modeled. These direct impacts include the spending by New Mexico film productions, studios investing in New Mexico, and tourists during their stay in New Mexico.
- **Indirect impact:** The direct impacts described above result in purchases of goods and services from other New Mexico firms (suppliers), which create multiplier effects as they are repeated throughout the state economy. The indirect impacts result from expenditures related to tangible property purchases as well as contract labor, business services, and other services provided by New Mexico firms.
- **Induced impact:** The wages paid to employees of film productions and firms that are affected by film-related capital investment and tourism result in substantial induced consumer spending. This spending generates additional economic activity as New Mexico's retailers and service providers expand to meet the additional demand for goods and services. To simplify the presentation of results, the indirect and induced impacts are combined and described as indirect effects.

### ***Data Used in the Analysis***

Ernst & Young worked with the New Mexico State Film Office to compile film spending and survey information that was used to estimate the impacts presented in this study. The data was obtained from three primary sources: 1) a survey of film industry employees and businesses related to the film industry, 2) budget information submitted by film productions during their application to the State Investment Council for participation loans, and 3) qualifying expenditures by all film productions participating in the film tax credit program as indicated on their application to the State Film Office.

- **Survey:** A survey of New Mexico film industry employees and businesses was conducted in the fall of 2008. The survey data was the primary source of wage information for below-the-line employees and capital expenditure (construction and equipment spending) data.
- **Loan Program Data:** Total qualified and non-qualified film production spending for 21 films that received New Mexico State Investment Council loans was compiled by the State Film

Office. Information provided in the spending data includes the amount of total qualified New Mexico spending, qualified and non-qualified below-the-line labor spending, aggregate expenditures on actors', directors', and producers' salaries, and the number of principal actors, directors, and producers for each film.

- *Film Production Tax Credit Application Data:* Total film budgets and total New Mexico spending qualifying for the film tax credit was supplied for each year.

***Economic Impact of Increased New Mexico Film Production Activity***

The film production tax credit generated an estimated \$253 million of total spending by 30 New Mexico film productions in 2007. Examining total expenditures for 21 films that supplied complete budget information to the State Film Office and the State Investment Council reveals that 21% of film production expenditures in New Mexico do not qualify for the tax credit. In other words, productions incur an average of \$0.28 of expenses that do not qualify for the film tax credit for each dollar of expenses qualifying for the credit. Based on this average ratio of qualified to total spending, films that spent a total of \$198 million on labor, goods, and services that qualified for the film tax credit in 2007 also spent an estimated \$55 million on labor and other expenditures during their New Mexico production periods that did not qualify for the tax credit. The composition of expenditures is shown in Table 1. Although the \$55.2 million of expenditures does not qualify for the film tax credit, they generate economic activity and tax revenue for state and local governments in New Mexico.

**Table 1  
Qualified and Non-Qualified New Mexico Film  
Production Spending in 2007**

<b>Qualified Spending</b>	<b>\$197.7</b>
<b>Non-Qualified Spending:</b>	
Non-qualified below-the-line spending	\$20.3
Director and producer compensation	\$34.9
<b>Total New Mexico Spending</b>	<b>\$252.8</b>

*Source: EY estimates based on State Investment Council  
loan program data*

The film spending and survey data provided by the State Film Office was used to calibrate a model of the New Mexico economy supplied by Minnesota IMPLAN Group. These data show the average earnings of below-the-line employees (stage crew) to be \$49,500 while actors, directors, producers and other employees and contractors working on film productions earn significantly more, bringing the total average compensation to \$82,400 and output (production spending) per worker to be nearly \$114,000. This implies that 72% of the cost of production for New Mexico films was labor cost. Based on total labor compensation of \$168 million in 2007 and an average wage of \$82,400, films produced in New Mexico employed an estimated 2,220 people in 2007.

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The economic model of the State of New Mexico was adjusted to reflect the average compensation and output of workers described above. The adjusted model was then used to estimate the total personal income, including employee compensation, proprietor's earnings, and other property-type income (payments to capital). Based on the film spending data supplied by the State Film Office and the adjusted state economic model, the direct personal income impact of film productions in New Mexico during 2007 was nearly \$203 million.

The direct impacts of New Mexico film productions, shown in Table 2, were used as inputs to the adjusted state economic model. As shown in Table 2, the IMPLAN model estimates that direct film production expenditures of \$253 million created an additional \$166 million in indirect economic output, resulting in an estimated total of \$418 million of economic output attributable to film production activities in 2007.<sup>3</sup>

Direct employment of 2,220 workers by film productions in New Mexico indirectly created an estimated 1,609 additional employees in other sectors of the economy, totaling more than 3,800 total employees in 2007. Based on the estimated indirect output and employment from New Mexico film productions, an estimated \$85 million of indirect personal income was created from film production activities in 2007; total direct and indirect income was \$288 million.

**Table 2**  
**Economic Impact of Film Production Activities in 2007**

<b>Film Production Activities</b>	<b>Direct</b>	<b>Indirect</b>	<b>Total</b>
Output (\$mil)	\$252.8	\$165.5	\$418.3
Income (\$mil)	\$202.9	\$85.0	\$287.9
Employment	2,220	1,609	3,829

***Impact of Film-Related Capital Expenditures in 2007***

Capital expenditures related to the expansion of film industry infrastructure in New Mexico totaled \$115 million in 2007. Of this amount, \$103 million was spent on construction while the remaining \$12 million was spent on equipment purchases. The capital expenditure estimate is based on survey responses by New Mexico businesses that indicated they had expanded their businesses due to the increase in New Mexico film production activity assumed to result from the continued support of the film tax credit program.<sup>4</sup> The \$100 million Albuquerque Studios accounts for more than 85% of total capital expenditures in 2007.

As shown in the first column of Table 3, the construction and equipment expenditures described above generated \$42 million of direct personal income and 930 direct jobs in 2007. Including

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<sup>3</sup> The ratio of the total impact to the direct impact is referred to as the economic multiplier. For output, the multiplier is 1.65. In other words, one direct job in the film production industry creates 0.65 additional jobs (indirect and induced) for a total of 1.65 new jobs.

<sup>4</sup> The survey was conducted by the State Film Office in the fall of 2008.

indirect and induced economic impacts, the total economic impact of capital expenditures in 2007 was an estimated \$188 million of economic output, \$76 million of personal income, and 1,553 jobs.

**Table 3**  
**Impact of Capital Investments in Studios and Equipment**

<b>Capital Investment Impacts</b>	<b>Direct</b>	<b>Indirect</b>	<b>Total</b>
Output (\$Millions)	\$115.1	\$73.3	\$188.3
Income (\$Millions)	\$41.8	\$33.8	\$75.6
Employment	930	623	1,553



### ***The Impact of Film Tourism Spending in New Mexico***

Tourism bureaus in other states and countries have reported increases in tourism after the release of a film or television series that was filmed in their jurisdiction. A study recently completed for the New Mexico Tourism Department presents the results of a survey of New Mexico tourists conducted in November 2008 that shows films and television shows shot in New Mexico have a significant impact on tourism in the state.<sup>5</sup> The survey indicates that total trips to New Mexico by tourists increased by 4.3% due to visitors' familiarity with films produced in New Mexico and that the length of the average tourist's stay in New Mexico increased by 1.2% due to interest in seeing locations where movies were filmed or other film-related attractions. Combining the effects of the increased number of tourists and the increased length of visits to New Mexico, film-related tourism accounted for an estimated 5.5% of total New Mexico tourism expenditures in 2008.

Because film tourism in 2008 was the result of films that were shot in New Mexico every year prior to 2008, the impact of 2008 film tourism cannot be attributed entirely to films that were produced in New Mexico during a single year. To account for the delay between the time a film is produced and the impact of that film on film tourism, the survey provides information about which films tourists recalled seeing. The responses show that 84% of survey respondents had seen films that were released in 2007 or 2008. Films produced in New Mexico during 2007 and 2008 include "No Country for Old Men," "Indiana Jones and the Kingdom of the Crystal Skull," "3:10 to Yuma," and "Wild Hogs." The other 16% of respondents indicated that they had seen films that were produced prior to 2007.

Based on the delay between the year in which films are produced in New Mexico and subsequently generate tourism, the analysis assumes that film production expenditures in 2007 first generate tourism spending in 2008. In 2009, films produced in 2007 are assumed to have less of an impact on tourism, 75% of their first-year impact. In 2010, films produced in 2007 are assumed to have only 50% of their first-year impact and by 2011, those films are assumed to have only 25% of their first year impact. The estimates also assume that after four years, films have no impact on film tourism.

Table 4 shows the estimated impact of films produced in 2007 on tourism expenditures in 2008-2011. Line A shows the annual spending on film productions based on Figure 2, assuming that the 2007 level of activity continues in 2008-2011. The annual amounts on Line A are added to prior years to calculate cumulative spending shown in Line B. Line C shows the cumulative impact of film spending, adjusted to remove a portion of spending from prior years following the same "decay" pattern described in the previous paragraph. This provides an annual estimate of the film spending that is influencing tourism through 2011. Line D shows the expected pattern for the influence or impact of 2007 film production activities on movie tourism in future years. Line E presents the percentage of total cumulative film production expenditures that is assumed to have an impact on film tourism spending in each future year (calculated as Line D divided by Line C). This percentage is multiplied by Line F, the estimated film tourism expenditures each

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<sup>5</sup> Southwest Planning & Marketing and CRC & Associates, "The Impact of Film Tourism on the State of New Mexico," December 2008.

year, 5.5% of total New Mexico tourism spending (held constant at the 2007 level). Line G presents the impact of 2007 productions on film tourism spending in each year. The amounts shown on line G are then discounted to 2007 at 5%. The sum of the discounted 2008-2011 incremental tourism spending estimates shown on Line G equals the value of the estimated film-related tourism spending impacts of the 2007 film activities in New Mexico.<sup>6</sup>

**Table 4**  
**Estimation of the Impact of Film Tourism from 2007 Film Productions (\$mil)**

Year of Film Production/ Year of Tourism Spending	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011
A. NM Film Production Activity (Qualified and Non-Qualified) – 2009 and 2010 estimated	\$29	\$24	\$144	\$223	\$253	\$252	\$252	\$252
B. Cumulative Total NM Film Production Activity	\$29	\$53	\$197	\$420	\$673	\$924	\$1,176	\$1,428
C. Cumulative Total NM Film Production Activity Assuming Greater Impact from Recent Films**	\$29	\$46	\$176	\$350	\$498	\$589	\$622	\$629
D. 2007 Spending Affecting Film Tourism**					\$253	\$190	\$126	\$63
E. % of Film Tourism Spending in Year Resulting from 2007 Film Productions (line D divided by line C)					51%	32%	20%	10%
F. Total Annual Film Tourism Spending Attributable to Recent Films (assumed to remain constant from 2008 level)					\$161	\$161	\$161	\$161
G. Film Tourism Spending Impact from 2007 Productions*** (line E times line F)					\$82	\$52	\$33	\$16

\*Assuming 1-year lag between film production and film release.

\*\*Assuming 100% of spending for films produced in the prior year affects tourism, 75% of spending for films produced two years prior, 50% of spending for films produced 3 years prior, and 25% of spending for films produced 4 years prior.

\*\*\*Annual impacts are discounted at 5% to estimate the total 2007 film activity impacts on future tourism spending. Discounted tourism expenditure is equivalent to \$165.9 million of 2007 tourism expenditures.

Table 5 presents the estimated direct and indirect impacts of film tourism based on the estimated \$166 million in film tourism expenditures resulting from 2007 production expenditures. These tourism expenditures are estimated to generate \$69.7 million in personal income and

<sup>6</sup> A key parameter used in determining the impact of film production activity in 2007 on film related tourism expenditures in later years is the ratio of film tourism spending during the current year to the value of film production activity that occurred in the four prior years, adjusted to more heavily discount spending that occurred in the earliest years. Going forward, the ratio of additional film related tourism expenditures to film production expenditures could decrease due to increasing production expenditures or decreasing film-related tourism expenditures. If there is no growth in total tourism spending or change in the percentage of tourism spending attributable to film tourism, as the stock of film production expenditures increases in future years, the ratio of film tourism to film production expenditures will decrease. The 2008 ratio of film-related tourism expenditures (\$161 million) to cumulative adjusted film production spending (\$498 million) was 32%.

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2,839 jobs. Including the direct and indirect film tourism impacts, the total personal income impact of film tourism is \$124 million and 3,827 jobs.

**Table 5  
Economic Impact of Film Tourism**

<b>Film Tourism Spending</b>	<b>Direct</b>	<b>Indirect</b>	<b>Total</b>
<b>Output (\$mil)</b>	\$165.9	\$119.2	\$285.2
<b>Income (\$mil)</b>	\$69.7	\$54.3	\$124.0
<b>Employment</b>	2,839	989	3,827

***Total Economic Impact of the Film Production Tax Credit Program***

As shown in the sections above, the film production tax credit program generates additional jobs, income, and economic output in three areas: film production spending, capital investments related to the film industry, and film tourism spending. Table 6 below shows the total impact of the film production tax credit program incorporating these three impacts.

**Table 6  
Total Impact of the Film Production Tax Credit Program**

<b>Total Impact</b>	<b>Direct</b>	<b>Indirect</b>	<b>Total</b>
<b>Output (\$mil)</b>	\$533.8	\$358.1	\$891.8
<b>Income (\$mil)</b>	\$314.4	\$173.1	\$487.5
<b>Employment</b>	5,989	3,221	9,209

**Fiscal Impacts of the Film Production Tax Credit Program**

The economic activity created by film production spending, capital investment activities, and film tourism generates significant state and local tax revenues. Except where noted, the New Mexico state and local tax impacts were estimated based on the historical ratio of tax collections to personal income.

***Fiscal Impact of Film Production Activities***

The fiscal impact of film production activity was estimated based on the estimated economic impact (measured by personal income) of film production activity and the ratios of tax collections to personal income. Gross receipts and individual income taxes were estimated directly from film production spending and income paid to employees of the film productions.

The direct state individual income tax impact was estimated assuming that the personal income of below-the-line employees would be taxed at the average ratio of individual income tax collections to New Mexico personal income. Based on the average earnings of above-the-line employees, a marginal rate of 4.3% was applied to 75% of personal income assumed to be subject to tax.

The direct state gross receipts tax (GRT) impact was estimated assuming that qualified New Mexico film production expenditures on purchased goods and services (including payments to actors through a super loan-out arrangement) would be subject to the 5% state tax rate. The impacts further assume that the film production spending would not occur in a tax increment district.

As shown in Table 7 below, the estimated direct state tax impact of film productions in 2007 was \$16.4 million. Indirect taxes impacts account for an additional \$6.1 million of estimated state tax collections, resulting in \$22.6 million of total state tax impacts. At the local level, an estimated \$6.8 million of direct local tax collections and an estimated \$2.8 million of indirect tax collections were generated by film production activities, resulting in a total local tax impact of \$9.6 million. Total state and local taxes increased by \$32.2 million.

**Table 7**  
**Estimated Fiscal Impact of Film Production Activities, 2007 (\$mil)**

<b>State</b>	<b>Direct</b>	<b>Indirect</b>	<b>Total</b>
Gross Receipts	\$6.8	\$2.5	\$9.3
Individual Income	5.4	1.8	7.2
Corporate Income	1.2	0.5	1.7
Other	3.1	1.3	4.3
<b>Total State Taxes</b>	<b>\$16.4</b>	<b>\$6.1</b>	<b>\$22.6</b>
<b>Local</b>	<b>Direct</b>	<b>Indirect</b>	<b>Total</b>
Property	\$3.1	\$1.3	\$4.5
Gross Receipts	2.8	1.2	4.0
Other	0.8	0.3	1.2
<b>Total Local Taxes</b>	<b>\$6.8</b>	<b>\$2.8</b>	<b>\$9.6</b>
<b>State and Local Taxes</b>	<b>\$23.2</b>	<b>\$9.0</b>	<b>\$32.2</b>

***Fiscal Impact of Capital Expenditures***

Capital expenditures generated an estimated \$3.2 million of direct state taxes and \$2.4 million of indirect state taxes. Capital expenditures were assumed to be subject to the state gross receipts tax at 5% and a local tax rate of 1.875%. However, all of the capital expenditures are assumed to occur in the Mesa del Sol Tax Increment Development District that diverts 75% of the incremental tax revenue generated by projects within its boundaries to local districts. The estimated gross receipts tax impact of the capital expenditures have been adjusted to remove 75% of the gross receipts impact and reallocate that amount to local districts. All other direct tax and all indirect tax impacts were estimated based on the estimated incremental personal income impacts and the historical ratio of tax collections to personal income.

As shown in Table 8, the capital expenditures are estimated to generate an additional \$5.9 million of direct and \$1.1 million of indirect local taxes. Capital expenditures generate \$12.7 million of additional state and local taxes.

**Table 8  
Fiscal Impact of Capital Expenditures (\$mil)**

<b>State</b>	<b>Direct</b>	<b>Indirect</b>	<b>Total</b>
Gross Receipts	1.4	1.0	2.5
Individual Income	0.9	0.7	1.6
Corporate Income	0.3	0.2	0.5
Other	0.6	0.5	1.1
<b>Total</b>	<b>\$3.2</b>	<b>\$2.4</b>	<b>\$5.6</b>
<b>Local</b>	<b>Direct</b>	<b>Indirect</b>	<b>Total</b>
Property	\$0.6	\$0.5	\$1.2
Gross Receipts	5.1	0.5	5.6
Other	0.2	0.1	0.3
<b>Total</b>	<b>\$5.9</b>	<b>\$1.1</b>	<b>\$7.0</b>
<b>State and Local</b>	<b>\$9.1</b>	<b>\$3.6</b>	<b>\$12.7</b>

### ***Fiscal Impact of Film Tourism***

As shown in Table 9, film tourism generated an estimated \$12.0 million of direct state taxes and \$3.9 million of indirect state taxes, resulting in \$15.9 million of total additional state tax collections. Film tourism also generated an estimated \$7.0 million of direct local taxes and \$2.8 million of indirect local taxes. Combined state and local taxes increase by \$25.7 million.

**Table 9**  
**Fiscal Impact of Film Tourism (\$mil)**

<b>State</b>	<b>Direct</b>	<b>Indirect</b>	<b>Total</b>
Gross Receipts	\$9.0	\$1.6	\$10.7
Individual Income	1.5	1.1	2.6
Corporate Income	0.4	0.3	0.7
Other	1.0	0.8	1.9
<b>Total State Taxes</b>	<b>\$12.0</b>	<b>\$3.9</b>	<b>\$15.9</b>
<b>Local</b>	<b>Direct</b>	<b>Indirect</b>	<b>Total</b>
Property	\$3.1	\$1.3	\$4.5
Gross Receipts	3.0	1.2	4.0
Other	0.8	0.3	1.4
<b>Total Local Taxes</b>	<b>\$7.0</b>	<b>\$2.8</b>	<b>\$9.8</b>
<b>State and Local Taxes</b>	<b>\$18.9</b>	<b>\$6.7</b>	<b>\$25.7</b>

### **New Mexico Public Return on Film Production Tax Credit Program**

For the State of New Mexico, the public's return on investment in the film production tax credit program can be measured by the revenue received through higher state taxes per dollar of state expenditure on film tax credits. Additional taxes generated by the film tax credit occur in 2007 due to film productions and capital expenditures by film studios. The present discounted value of additional state taxes generated by higher film-related tourism spending in the 2008-2011 period is also included in the revenue impacts.

Table 10 presents the rate of return calculations if the present value of the future taxes related to tourism are added to the revenue generated by 2007 film productions and capital investment occurring in 2007. It should be noted that the estimates of the future tourism-related tax revenues are based upon information from a single survey and incorporate projected film tourism activity through 2011. For this reason, this component may be less reliable than the impact estimates for the film production and construction impacts.

**Table 10**  
**2007 State Return on Investment in Film Production Tax Credits Program,**  
**including Film Production, Capital Investment and Tourism Activities**

A. State fiscal impact from film production, capital investment, and tourism (\$mil)	\$44.1
B. Discounted 2008 value of state film tax credits accrued to 2007 (\$mil)	\$47.1
C. State return on investment from 2007 and future tax revenues attributable to 2007 film productions (line A divided by line B)	0.94
D. State and local fiscal impact from film production, capital, investment and tourism (\$mil)	\$70.5
E. State and local return on investment from 2007 and future tax revenues attributable to 2007 film productions (line D divided by B)	1.50

As shown on line A of Table 10, additional state taxes from the three components is estimated to be \$44.1 million. Given the \$47.1 million cost of the credit in 2007 shown on line B, the state earns \$0.94 for each \$1.00 of credits accrued during 2007. Taking into account the tax impact of film tourism generated in 2008-2011, local governments earn \$0.56 for each \$1.00 of film tax credits. These additional local tax impacts bring the combined state and local return on investment to \$1.50 (line E) for each \$1.00 of state film tax credits.

# Economic Contributions of the Georgia Film and Television Industry



Executive Summary February 28, 2011

**MNP**  
MEYERS NORRIS PENNY LLP





## Summary

Since the introduction of the Georgia Entertainment Industry Investment Act (the "film tax credit") Georgia has become a leading state for film and television production. The total value of production spending in Georgia has increased over 400% from 2007 through 2010, with total annual production spending in Georgia exceeding \$600 million in 2010.

Film and television production located to Georgia because of the film tax credit has created significant economic impacts, adding over \$800 million annually to the State Gross Product and supporting over 11,000 full time equivalent jobs.

Georgia Film and Television industry has become as or more important to the economy than many traditional industries. If the film and television industry were to be a single company it would rank as one of the top 10 employers in the state (and one of the top three non-government employers).

An analysis of the fiscal impacts of the productions that received the tax credit demonstrates that the Georgia economy and the State fiscal situation would be substantially worse had the State not provided the film tax credit but had instead used the equivalent amount of funds for other purposes.

In addition, through its value chain the industry has generated a large amount of broader economic benefits. Included in these benefits are increased numbers of local suppliers, substantial infrastructure development, training opportunities for students and out of work individuals, and the generation of tourism and cultural events.

The attraction of film and television production to Georgia through the film tax credit has produced economic and social benefits for Georgia citizens, businesses and communities. Film and television production and related activity has generated more tax revenues for the State than the costs of credits authorized.

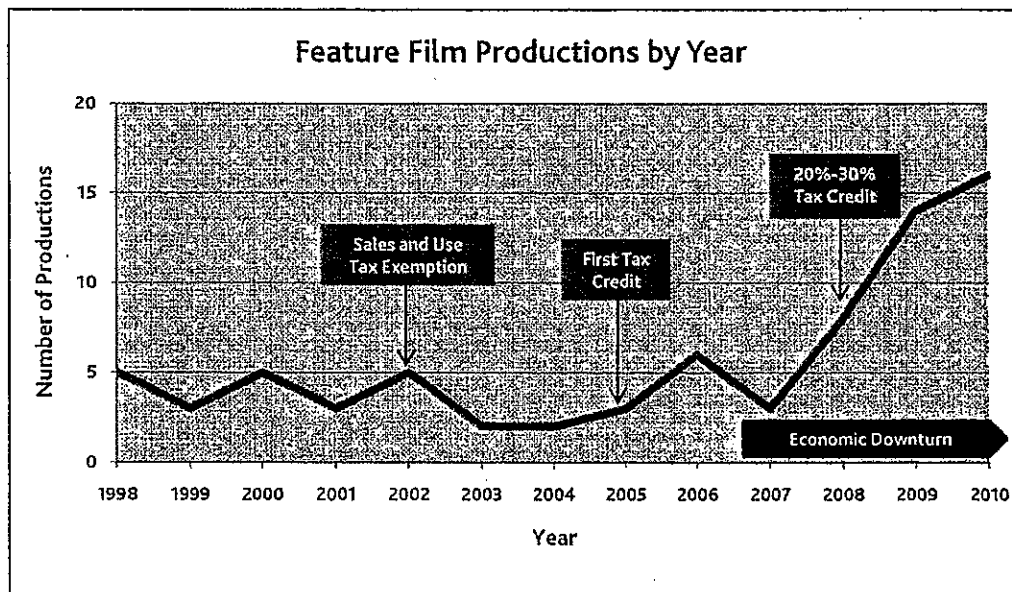
## 1. Georgia Film Tax Credit

### 1. Georgia Film Tax Credit

Recent growth in Georgia's film and television industry has been greatly accelerated by the Georgia Entertainment Industry Investment Act (the film tax credit) which was first initiated in 2005, and later revised in 2008. The foundation of the film tax credit is a 20% transferable tax credit. Production companies that spend a minimum of \$500,000 in the state on qualified production and post production expenditures are eligible for the credit. This includes materials, services and labor. The 20% credit applies to both residential and out-of-state hires working in Georgia with a salary cap of \$500,000 per W2 employee, per production. An additional Georgia Entertainment Promotion (GEP) 10% tax credit is applied if a production company includes a Georgia promotional logo in the qualified finished feature film, TV series, music video or video game project. In Georgia, credits may be sold to third parties or assigned to affiliated entities and can be sold to multiple buyers but may only be transferred once. They have five year carry forwards and can be sold prior to the filing of an income tax return.

### 2. Georgia's Film and Television Industry

The film tax credit has had a transformative effect on film production and related activity in Georgia. Since the introduction of the tax credit, the number of television and episodic productions, feature films and independent films shot in the state has increased dramatically.



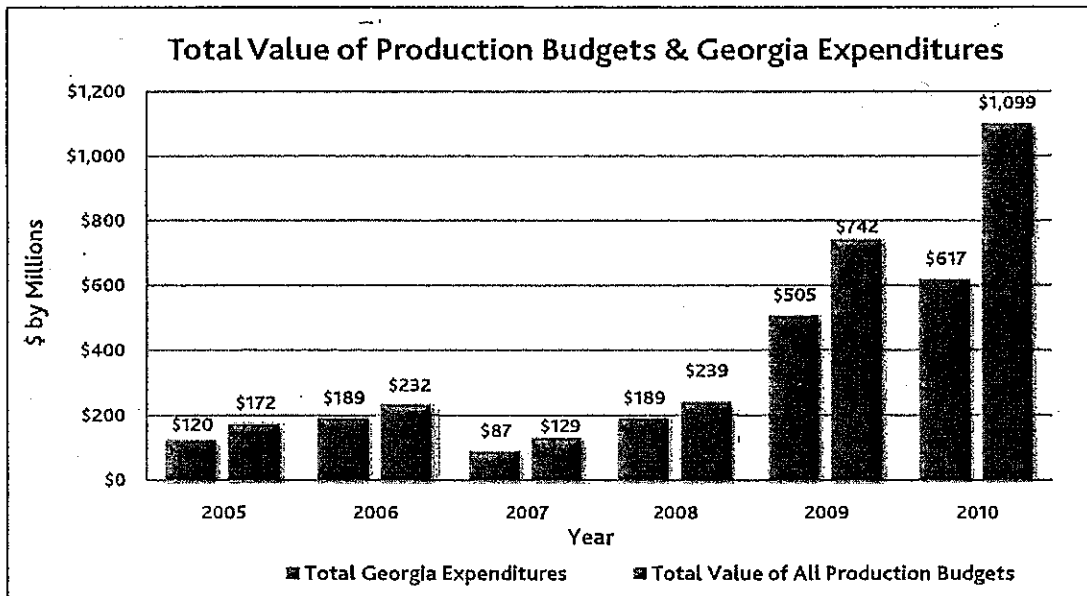
\*Data provided by Georgia Film, Music & Digital Entertainment Office



In 1998 there were only three television and episodic productions shot in the state. This increased to thirty productions in 2004 and to fifty-five in 2010. Between 2006 and 2007, a combined total of nine feature films were filmed in Georgia, while in 2009 and 2010 there were thirty. In 2004, nine independent films were produced in Georgia, while nineteen such films were produced in 2010.

**Feature film production tripled in Georgia after 2008.**

Accompanying the increase in production activity has been a sharp increase in the number of Georgians employed both directly and indirectly by film and television production. As we describe later in this report, the estimated number of Full Time Equivalent (FTE) jobs supported by film tax eligible film and television production has increased over five fold since 2005. With over 11,000 FTE jobs supported, the Georgia film and television industry has now become as or more important to the economy than many traditional industries. If the film and television industry were to be a single company it would rank as one of the top 10 employers in the state (and one of the top three non-government employers).



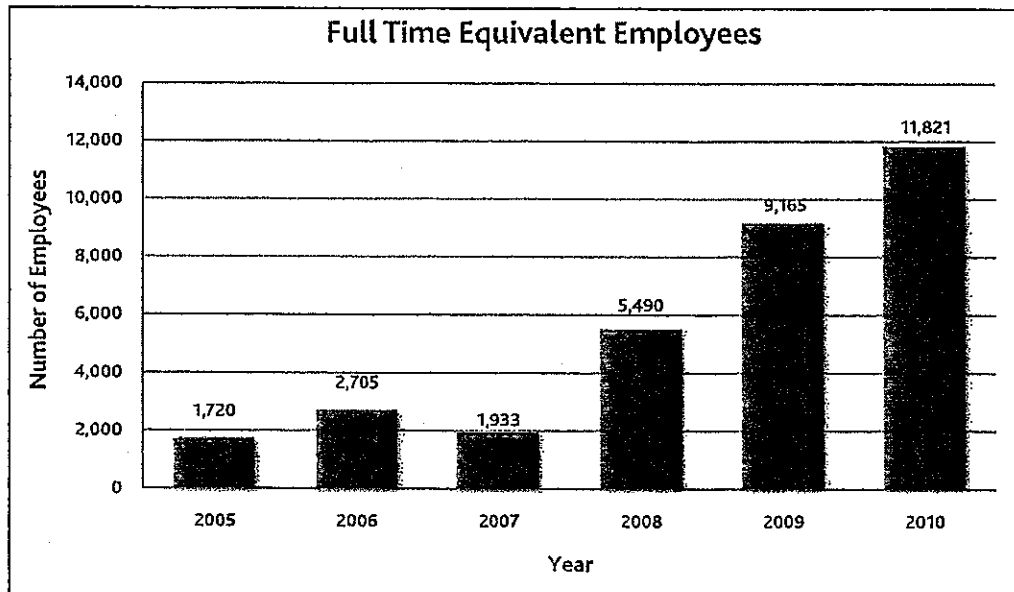
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## 2. Georgia's Film and Television Industry

It is noteworthy that the rise in the economic contribution of the Georgia film and television industry has occurred at a time of retrenchment for the state and national economies. At the same time as the number of jobs supported by the film and television industry has been increasing, the unemployment rate in Georgia has been rising (from 4.6% in 2006 to 10.1% in 2010). Consequently, the Georgia film and television industry has supported an increasing number of jobs at a time when they have been most needed within the state economy.

**Employment in Georgia's Film and Television industry has increased over 500% since 2005.**

The increased economic impacts created by the film and television industry have been accompanied by increases in the broader economic and social benefits created by the industry. For example, since the inception of the tax credit, there has been a proliferation of training and educational programs to encourage youth to enter the industry. At present, there are over fifteen Georgia colleges and universities providing certificates and degree programs in film and television related disciplines. There are also a number of programs targeting unemployed Georgia citizens and preparing them for a career in the film and television industry. Further, over 20 film festivals occur in Georgia annually which attract tourists and local residents, as well as film makers, actors and other related professionals. Examples include the Savannah Film Festival, the Atlanta Film Festival, and the Atlanta Jewish Film Festival.



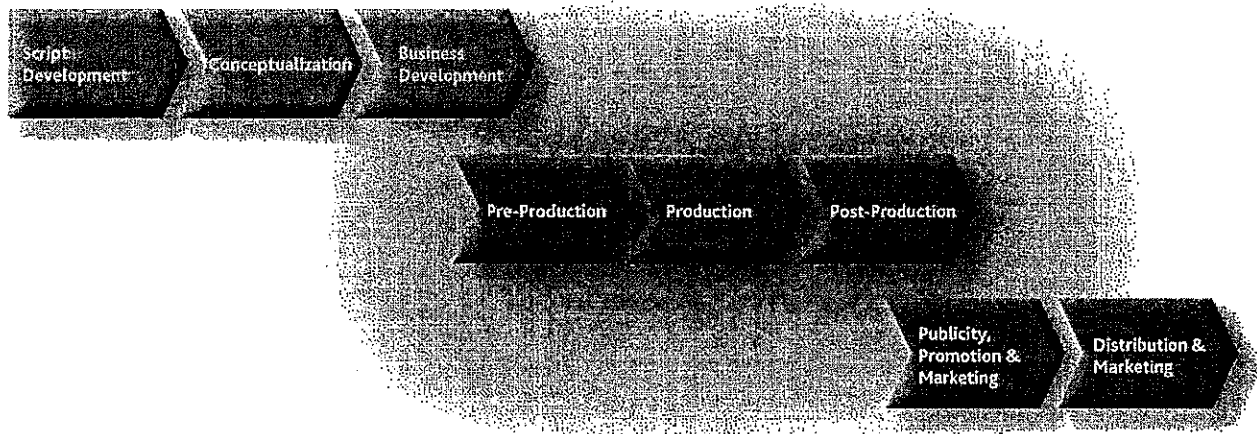


### 3. Film and Television Value Chain

A value chain is defined as a chain of activities that combine to create a product within a specific sector. Products pass through the chain, gaining value at each activity. These activities can range from research and development, to manufacturing and packaging, marketing and distribution. The point of analyzing a value chain is to understand the role played by market participants, as well as their respective strengths and weaknesses.

As illustrated in the following diagrams, there are a number of stages that a typical film/television product passes through as it gains value. This first phase is focused on script development, conceptualization and business development. The second phase is concerned with production before, during and after shooting. The final phase focuses on distribution of the product through publicity and marketing.

An important consideration of the Georgia film and television industry is that it is one of the few jurisdictions where all segments of the value chain can be actualized within its border. If the Georgia film and television industry continues its growth trajectory the resulting economic impacts created by the film and television value chain will only strengthen, increasing the economic benefits created by the investment in this industry.



### 3. Film and Television Value Chain

Phase	Core Activities	Indirect
Pre-Production	<ul style="list-style-type: none"> <li>• Location scouting and selection</li> <li>• Permitting, location agreements and insurance</li> <li>• Directors/writing</li> <li>• Line Producers/casting</li> </ul>	<p><i>Business Services</i></p> <ul style="list-style-type: none"> <li>• Publicity</li> <li>• Accountants</li> <li>• Lawyers</li> <li>• Tax Credit Accountants</li> <li>• Brokers</li> <li>• Financial Specialists</li> <li>• Real Estate Agents</li> <li>• Structural Engineers</li> </ul>
Production	<ul style="list-style-type: none"> <li>• Casting</li> <li>• Location and set organization</li> <li>• Special effects</li> <li>• Cameras</li> <li>• Sound</li> <li>• Lighting</li> </ul>	<p><i>Suppliers</i></p> <ul style="list-style-type: none"> <li>• Carpenters</li> <li>• Caterers</li> <li>• Freight transport</li> <li>• Hotels</li> <li>• Drivers/Limo services</li> <li>• Car Rentals</li> <li>• Furniture stores</li> <li>• Printers</li> <li>• Office supplies</li> <li>• Hardware stores</li> <li>• Camera Equipment</li> <li>• Portable toilet rentals</li> </ul>
Post-Production	<ul style="list-style-type: none"> <li>• Picture editing</li> <li>• Sound editing</li> <li>• Music/composition</li> <li>• Previewing</li> <li>• Subtitling/Dubbing</li> <li>• Lab Processing</li> </ul>	<ul style="list-style-type: none"> <li>• Local musicians</li> <li>• Sound technicians</li> <li>• Audio/visual companies</li> <li>• Computer supplies</li> <li>• Electronic supplies</li> <li>• Caterers</li> <li>• Office supplies</li> <li>• Transportation</li> </ul>

## 4. ECONOMIC IMPACTS AND BENEFITS

### 4.1 Economic Impact Analysis Methodology

When assessing the economic and social contributions of an industry it is useful to draw distinctions between economic impacts, broader economic benefits, and community or social impacts. Economic impacts are generally viewed as being restricted to quantitative, well-established measures of economic activity. The most common of these measures are Output, GDP, Employment, Labor Income and Government Revenue.

- **Output** is the total gross value of goods and services produced by a given company or industry measured by the price paid to the producer. This is the broadest measure of economic activity.
- **Gross Domestic Product (GDP)**, or value-added refers to the additional value of a good or service over the cost of inputs used to produce it from the previous stage of production. Thus GDP is equal to net output, or the difference between revenues and expenses on intermediate inputs. It is the incremental value created through labor or mechanical processing. Total GDP is a more meaningful measure of economic impact, as it avoids double counting during each round of impacts. In the case of a state, the GDP is also referred to as GSP, or Gross State Product.
- **Employment** is measured in terms of full-time equivalents (FTEs).
- **Labor income** is a measure of earnings by FTEs. Labor income includes direct wages and salaries, as well as supplementary labor income and mixed income.
- **Government Revenues** arise from personal income taxes, indirect taxes less subsidies (e.g. sales tax), corporate income taxes, and natural resource royalties.

Economic impacts may be estimated at direct, indirect, and induced levels. Direct impacts are changes that occur in "front-end" businesses that would initially receive expenditures and operating revenue as a direct consequence of the operations and activities of a facility or project. Indirect impacts arise from changes in activity for suppliers of the "front-end" businesses. Induced impacts arise from shifts in spending on goods and services as a consequence of changes to the payroll of the directly and indirectly affected businesses. The impact of any given initial expenditure by a project is calculated by adding the direct, indirect and induced impacts.

In contrast to economic impacts, economic benefits may be broad in scope and can include both activity-based and outcome-based measures. These may also describe long-term or downstream activity that would not normally be captured in economic impacts. While economic impacts utilize standard measures that can be estimated for nearly any type of industry, economic benefits may vary greatly from industry to industry.

## 4. Economic Impacts and Benefits

Economic benefits associated with the film and television industry include:

- Creation of opportunities for unemployed workers, trainees or interns
- Attraction/retention/skill upgrading of qualified workforces
- Development of related or spin-off companies or industries
- The establishment of production and post-production infrastructure
- Attraction of businesses supporting Film Induced Tourism

Community or social impacts may be quantitative or qualitative in nature and are typically associated with involvement with individuals or organizations concerned with community building.

Social impacts associated with the film and television industry include:

- Support for charitable organizations
- Urban revitalization
- Involvement with arts and cultural groups
- Contributions to educational initiatives
- Participation in community or civic events
- Contribution to a regional cultural or educational community

### 4.2 Economic Impacts

The economic impacts of the Georgia film and television industry arise from three main sources:

- Production spending
- Infrastructure spending
- Film Induced Tourism

In this section we examine the economic impacts arising from these sources.

#### 4.2.1 Production Spending

To estimate the economic impacts from film and television production spending we have used the IMPLAN economic impact model. Taking into account limits on vendors and labor, the projects that did and did not avail themselves of the (GEP) Georgia uplift, the aggregate effective tax credit rate is assumed to be 26%. Taxes generated by economic impacts and economic benefits as well as the use of the credits themselves are all assumed to occur in the same year. (As discussed later, however, there is in practice a lag between the time credits are earned and the time they are claimed that further reduces the effective tax credit rate).



Only spending within the state has been used to estimate economic impacts of the productions, since benefits from out-of-state spending do not flow to Georgia. Above-the-line expenses related to directors and major talent has largely been excluded since many of these individuals reside outside of the state (we have assumed that only a small portion, amounting to roughly 5% of above the line spending, would remain in the state). However, all of these individuals pay income tax in Georgia, which has been included in the analysis as an increase in state spending. The modeling takes into account income tax on wages on above-the-line talent and models the tax income as an increase in State spending. Spending on local extras and crew has been modeled as an increase in household income. Below the line spending has been assumed to be spent in Georgia unless otherwise specified in the budgets, e.g. talent from outside of Georgia.

Production Spending Impacts (2010 dollars)							
	2005	2006	2007	2008	2009	2010	Total
Employment (FTEs)	1,720	2,610	1,291	4,337	7,227	8,751	25,936
Labor Income	\$83,308,436	\$126,251,945	\$62,990,461	\$219,952,180	\$347,302,518	\$419,942,306	\$1,259,747,846
GSP	\$139,320,288	\$211,506,505	\$102,858,880	\$355,342,803	\$590,420,803	\$708,558,150	\$2,108,007,429
Output	\$228,359,075	\$347,250,269	\$168,442,242	\$565,403,481	\$965,677,544	\$1,159,740,885	\$3,434,873,496
Georgia Production Spending	\$120,397,348	\$188,946,898	\$86,679,140	\$188,867,274	\$505,404,967	\$617,100,192	\$1,707,395,819
Total State and Local Tax	\$24,093,631	\$35,465,197	\$17,625,425	\$55,277,148	\$104,425,216	\$125,544,614	\$362,431,231

#### 4.2.2 Infrastructure Spending

In addition to production spending, film and TV companies have invested in significant amounts of infrastructure related spending. This infrastructure was developed to meet the expected demand of the industry realized as a result of the film tax credit. Expenditures include construction spending related to studio development as well as spending which relates to equipment and real estate purchases. Essentially this is spending that has been attracted to Georgia by the recent growth in the industry and thus is a by-product of the incentive. Infrastructure spending is not incentivized through tax credits in the state of Georgia although other states do offer film or digital media production infrastructure tax credits.

Based on the information provided to us, the estimated capital expenditures spent between 2008 and 2010 in Georgia is in excess of \$135 million, with construction at Tyler Perry Studios, Raleigh Studios and EUE/Screen Gems being several of the largest individual projects.

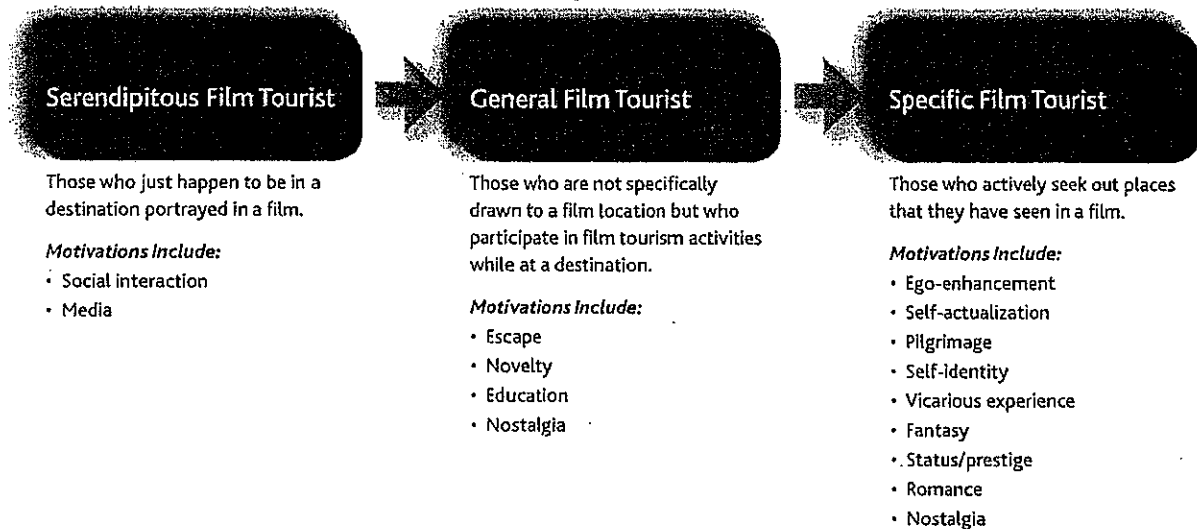
## 4. Economic Impacts and Benefits

To estimate the economic impacts from the major infrastructure spending, we have again used the IMPLAN economic impact model together with the estimated spending pattern. The following table illustrates the economic impacts that the infrastructure spending is estimated to have produced.

Total Impacts (2010 dollars)				
	2008	2009	2010	Total
Employment (FTEs)	157	467	1,102	1,725
Labor Income	\$7,705,669	\$21,598,323	\$50,844,871	\$80,148,863
GSP	\$11,834,198	\$33,486,062	\$79,339,895	\$124,660,155
Output	\$20,291,295	\$61,140,557	\$144,363,716	\$225,795,568
Construction Spending	\$8,000,000	\$36,500,000	\$91,100,000	\$135,500,000
Total State and Local Tax	\$1,565,667	\$4,540,429	\$10,827,926	\$16,934,021

### 4.2.3 Film Induced Tourism

Film Induced Tourism (FIT) and its related concepts such as TV, movies, and media culture has increasingly been acknowledged as an important component of tourism marketing. Researchers classify film tourists into three types: the serendipitous film tourist, the general film tourist, and the specific film tourist. The following table defines these categories of tourists and their motivations for travel.



Quantifying the effects of FIT has often taken the form of location-specific studies that examine the degree to which a film or television production influenced tourism in a specific community. Although these studies demonstrate increases in tourism related to a film production, the results vary greatly depending on the nature of the production, the location and the link between production and location. More comprehensive studies quantifying impacts of FIT include a UK study that focused on inbound international tourism. The study reported "films depicting the UK are responsible for attracting about 1 of 10 overseas tourists, spending around £1.8 billion a year. This is estimated to be worth around £900 million to UK GDP" (Oxford Economics, 2007).

A study of American locations by Riley et al analyzed 15 years of data from 12 specific film locations (10 years prior to and five years after the release). They found that public parks had a 40% higher visitation rate after the movie release and private attractions had a 67% higher visitation rate after three years.

In Georgia the effects of FIT have been realized in many communities, including Juliette, Savannah, and Covington. The town of Juliette has experienced the impacts of FIT generated through the film "*Fried Green Tomatoes*". It has been estimated that FIT as a result of "*Fried Green Tomatoes*" is as high as 100,000 visitors per year. Major motion pictures such as "*Midnight in the Garden of Good and Evil*" and "*Forrest Gump*" have helped to boost the already strong tourism industry in Savannah. Anecdotal evidence suggests that "*Midnight in the Garden of Evil*" contributed to a 40% increase in the number of guests at the Savannah Visitor's Center in the two years following the release of the film.

According to Dr. Steve Morse (economist and director of the University of Tennessee's Tourism Institute) visitors to Covington in 2009 spent an estimated \$72.8 million. Tourism is an important part of Newton County's economy impacting 900 jobs, generating \$16.1 million in worker income and \$2.3 million in local tax revenue. Dr Morse was quoted as saying the county has done well in making the most of its Hollywood connection. "Anytime a town makes a contract with a filmmaker to be included in a show or movie, that always draws attention. The key is what to do after it comes there. How do you market your town? A lot of towns have not followed up with great strategies, and a lot have. Newton County has a tremendous amount of TV business and movie business; I think they've capitalized." (Chamber Tourism Director Clara Deemer was quoted previously in saying that more than 75% of the Newton County's visitors come to visit sites shown in television series.)

#### 4. Economic Impacts and Benefits

The Georgia film and television industry has also helped to provide an impetus for film festivals which have increased since the inception of the first tax credit (approximately 20 film festivals in a given year attracting over an estimated 100,000 attendees) including:

- AthFest Music, Arts, Kids Film Festival
- Atlanta 48 Hour Film Project
- Atlanta Asian Film Festival
- Atlanta Film Festival
- Atlanta Horror Film Festival Atlanta
- Jewish Film Festival
- Atlanta Shortsfest
- Atlanta Underground Film Festival
- Atlanta's Campus MovieFest
- BronzeLens Film Festival
- Coca Cola Film Festival at the Fox
- Dixie Film Festival
- Dragon\*Con Independent Film
- Kingdomwood Film Festival
- Macon Film Festival
- Out on Film
- Peachtree Village International Film Festival
- Robert Osborne Classic Film Festival
- Rome International Film Festival
- Savannah Film & Video Festival

To estimate the impact of FIT arising from film and television production attracted to the state as a result of the film tax credit, we have employed a model that relates the historical experience of communities associated with film and TV shows filmed in Georgia to total historical production spending, together with current levels of production spending. Because we consider only FIT arising from production attracted to the state as a result of the film tax credit the estimated impacts do not begin until 2006, or one year after the introduction of the film tax credit. The estimated impacts are shown in the following table.

Film Tax Credit FIT Impacts (2010 dollars)							
	2005	2006	2007	2008	2009	2010	Total
Employment (FTEs)	0	95	642	993	1,471	1,968	5,171
GSP	\$0	\$3,790,956	\$25,513,564	\$39,553,073	\$58,428,109	\$78,177,937	\$205,463,639
Georgia Film Tax FIT Spending	\$0	\$7,920,000	\$53,302,500	\$82,633,600	\$122,067,000	\$163,328,000	\$429,251,100
Total State and Local Tax	\$0	\$609,936	\$4,104,940	\$6,363,792	\$9,400,643	\$12,578,242	\$33,057,553

To put these estimated numbers in context, in 2009 the Georgia tourism industry accounted for over \$19 billion in spending and generated roughly \$1.5 billion in state and local taxes. Consequently, the estimated FIT accounts for less than 1% of tourism activity.

#### 4.2.4 Summary of Impacts from Production, Infrastructure Spending and FIT

The estimated total impacts arising from production spending, infrastructure and FIT are shown in the following table.

Total Impacts (2010 dollars)							
	2005	2006	2007	2008	2009	2010	Total
Employment (FTEs)	1,720	2,705	1,933	5,490	9,165	11,821	32,832
GSP	\$139,320,288	\$215,297,461	\$128,372,444	\$406,730,074	\$682,334,974	\$866,075,982	\$2,438,131,223
Total State and Local Tax	\$24,093,631	\$36,075,133	\$21,730,365	\$63,206,607	\$118,366,288	\$148,950,782	\$412,422,805

#### 4.2.5 Comparison of Tax Credits Earned to Tax Revenues Generated

To compare the amount of tax credits earned with tax revenues generated it is important to recognize that, due to timing issues, credits are not usually claimed in the year they are earned. Consequently, a comparison of tax credits earned with tax revenues generated requires a discounting to reflect the net present value of the tax credit. In the following table, we compare the amount of tax generated to the discounted value of the tax credit earned, assuming an 18 month lag in tax credits being claimed and a discount rate of 4%. (Although data is not available for all years we note that the actual value of tax credits claimed in 2008 was \$33,565,779 and in 2009 was \$33,991,721.)

Tax Comparison (2010 dollars)							
	2005	2006	2007	2008	2009	2010	Total
Georgia Production Spending	\$120,397,348	\$188,946,898	\$86,679,140	\$188,867,274	\$505,404,967	\$617,100,192	\$1,707,395,819
Value of the Tax Credit Claimed	\$10,365,818	\$16,267,711	\$16,326,357	\$33,848,837	\$113,496,276	\$140,683,713	\$330,988,712
Total State and Local tax	\$24,093,631	\$36,075,133	\$21,730,365	\$63,206,607	\$118,366,288	\$148,950,782	\$412,422,805

## 4. Economic Impacts and Benefits

### 4.3 Additional Economic Benefits

There are additional economic benefits to Georgia created by the impact of the film tax credit. These benefits include:

- **Formation or expansion of businesses to support the film and television industry.** In addition to the major infrastructure developments, we understand that more than thirty industry-specific supplier companies have relocated or expanded to the state since 2008. Those organizations are not entitled to apply for the film tax credit but have moved to the state or expanded operations based on the growth of the film and television industry.
- **Reduction in Georgia unemployment expenditures.** Not quantified in our report are additional benefits resulting from a reduction in unemployment expenditures paid to workers who were unemployed prior to working in the film and television industry. As noted previously, employment in the Georgia film and television industry has increased sharply at a time when Georgia unemployment has more than doubled. Consequently, we would expect there to be a substantial savings in unemployment expenditures realized by not having to make unemployment payments to individuals now employed in the industry.
- **Creation of opportunities for trainees and interns.** Since the inception of the tax credit, Georgia has established and expanded training and educational programs to encourage youth to enter the industry. There are over 15 Georgia colleges and universities that now provide certificates and degree programs in film and television related disciplines. There are also a number of employment training programs that target unemployed Georgia citizens who may want to pursue a career in the industry. The expansion of educational offerings demonstrates the increasing integration of the industry into the state economy, and illustrates the wide range of employment opportunities that exist within the industry for workers with different skills, educational backgrounds and levels of training.
- **Georgia Entertainment Promotion (GEP) brand impact.** The term "place branding" refers to a consolidation of the essential characteristics of location into a brand for competition for tourists, visitors, investors, residents and other resources. The GEP Uplift is a part of an overall place branding strategy that contributes to branding and marketing the state of Georgia as an attractive location for additional film and television production, increased tourism and expanded business investment.

### 4.4 Community and Social Benefits

Community and social benefits are typically associated with involvement with individuals or organizations concerned with community building. Examples of the community and social impacts created by the Georgian film and television industry include:

- **Support for charitable organizations.** The Georgia film and television industry supports local charities and associations, making charitable donations annually to organizations such as Covenant House Georgia, Atlanta Community Food Bank, and Feed the Hungry.
- **Support of local film festivals.** Over 20 film festivals occur in Georgia annually which attract tourists and local residents, and are supported by film makers, actors/actresses, and other related professionals. These film festivals help to enrich the arts and culture sector within each of the communities.

## 5. Legal Matters

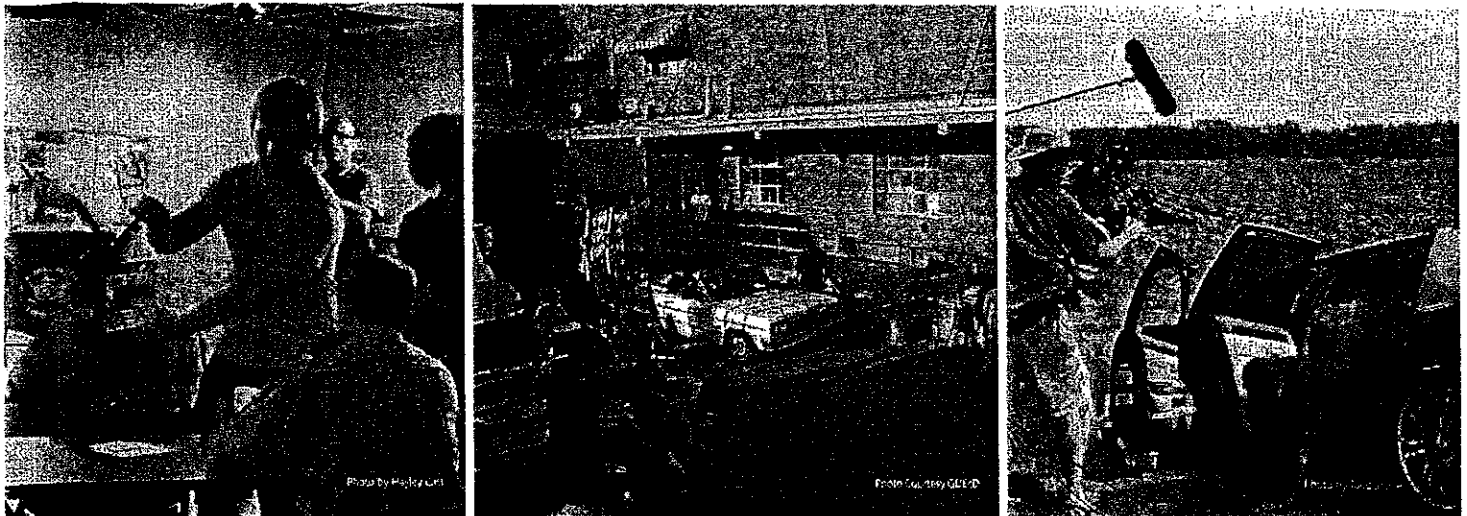
This report was prepared for the Motion Picture Association of America.

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We have relied upon the completeness, accuracy and fair presentation of all information and data obtained from public sources, believed to be reliable. The accuracy and reliability of the findings and opinions expressed in the presentation are conditional upon the completeness, accuracy and fair presentation of the information underlying them. As a result, we caution readers not to rely upon any findings or opinions expressed as accurate or complete and disclaim any liability to any party who relies upon them as such.

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Finally, the reader must understand that our analysis is based upon projections, founded on past events giving an expectation of certain future events. Future events are not guaranteed to follow past patterns and results may vary, even significantly. Accordingly, we express no assurance as to whether the projections underlying the economic and financial analysis will be achieved.



## About the Report Authors

Meyers Norris Penny LLP ("MNP") and W2 Entertainment Finance ("W2") have partnered to prepare this study. Together they have written several Economic Impact Studies for the Film and Television Industry and both have led similar projects on their own.

MNP is the fastest growing chartered accountancy and business advisory firm in Canada. Founded in 1945, MNP has grown to more than 50 offices and 2,400 team members. In British Columbia, MNP's Economics practice is one of the largest of its kind, and its team members have a long and established track record in conducting economic impact and industry studies.

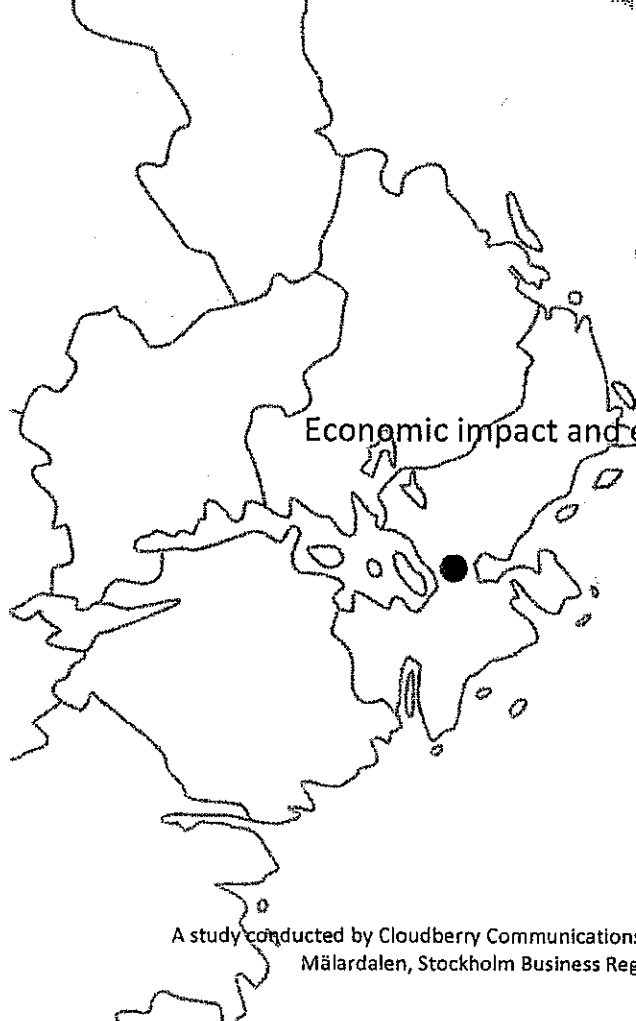
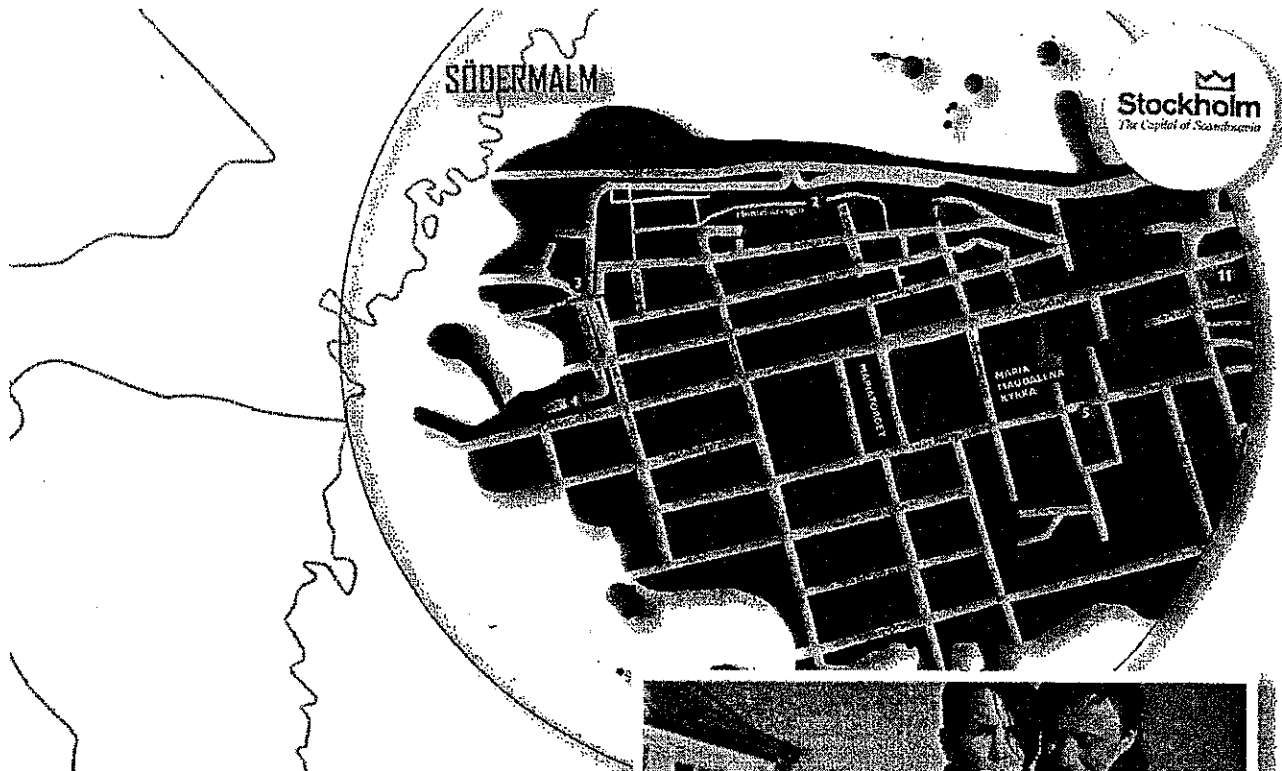
Examples of similar studies we have conducted include economic impact studies of the British Columbia Film and Television Industry, Manitoba Film and Television Production Industry, the Canadian Interactive and New Media Industries and the 2010 Winter Olympic and Paralympic Games.

MNP's team for this project is led by Ed Mansfield who also leads MNP's Economics practice. Ed has over 20 years of experience in consulting on statistical and economic issues. His work has included assignments for public and private companies, professional and industry organizations, as well as numerous government ministries and agencies. Ed holds PhD and MS degrees from the University of Washington.

W2 is a private bank, providing financing solutions for film and television production in North America, Europe and Australia. Warren Fergus and Warren Nimchuk make up the team for W2 Entertainment. Warren Fergus is a chartered accountant specializing in finance and taxation. Since 1995, Warren Fergus has participated in the structuring over 25 partnerships and offerings, primarily in film and television production financing.

Warren Nimchuk is also a chartered accountant with a specialty in entertainment finance matters. A former partner of a major international accounting firm, Warren Nimchuk has been acknowledged as one of the leading tax advisors in Canada and also has extensive experience in finance structuring and tax credit planning. Warren Nimchuk has assisted with drafting incentive legislation in the past and continues to act as an advisor to various Canadian provinces, US states and foreign jurisdictions with respect to incentives related to film, television and video game production, financing and distribution.





Economic impact and exposure value for the Stockholm region in the Swedish Millennium feature films

## The Millennium Report

*Shortened English version*

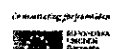
A study conducted by Cloudberry Communications on behalf of the Sörmland Regional Council, Filmregion Stockholm-Mälardalen, Stockholm Business Region Development, the Municipality of Nyköping and Film i Sörmland  
 April 2011



FILMREGION  
 STOCKHOLM-MÄLARDALEN



Stockholm  
 Business Region



079

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### Cover pictures:

Photo: Eric Kress / Jens Fischer, YellowBird, Michael Nyqvist as Mikael Blomkvist and Noomi Rapace as Lisbeth Salander

The map on cover page is from The Stockholm City Museum's Millennium tour map.

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For more information see <http://www.stadsmuseum.stockholm.se/index.php?sprak=english>

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## 1. Introduction

### 1.1. The assignment

The study was performed for the Sörmland Regional Council, Filmregion Stockholm-Mälardalen, Stockholm Business Region Development, the Municipality of Nyköping and Film i Sörmland.

The purpose of the report is to analyse the direct local and regional economic effects of the production of the Swedish *Millennium Films* in the form of higher employment and consumption of goods and services during production. We also look at the more long-term impact on perceptions of the region through exposure of the region in the films, how the value of this exposure can be assessed and what effects we can observe and anticipate from film tourism.

Exposure value is based partly on exposure in the films and partly on the value of supplementary effects from, for example, marketing in the form of advertisements, articles and reviews connected to the films. The valuation is based on audience figures for the films thus far and projected audience office figures until 2011. The value is calculated using the method used to assess the value of product placement.

With respect to the part of the study that sheds light on tourism effects, it is impossible to disconnect the Swedish films from the books and interest in the author, which are intertwined. However, an argument is presented on the effects the region can observe and anticipate from exposure of the region in an internationally successful film.

The report was conducted by Joakim Lind, media analyst and lead consultant at Cloudberry Communications, and Madeleine Sparre, analyst at Oxford Research. For second opinion and guidance on issues related to exposure values and contact surfaces, Jan Schiratzki, K2 Analys, participated.

The summary of social media exposure has been carried out by Niclas Holmqvist, Cloudberry Communications. Additional research and proof reading by Emelie Carlander, Cloudberry Communications. Jenny Nordlöw, Oxford Research, conducted interviews and additional research.

Contact details for the report authors can be found in the back.

### 1.2. Introduction

Interest in the Swedish author Stieg Larsson and his Millennium Trilogy has never been greater. The books have sold 50 million copies in more than 40 countries. As of March 2011, the books are on the bestseller lists in many countries.

Interest in the Millennium stories has been accentuated by interest in the life of author Stieg Larsson and the legal disputes that ensued after his death. Several Swedish and foreign biographies of Larsson have been published. Larsson is currently number six on the Forbes Magazine list of Top-Earning Dead Celebrities.<sup>1</sup>

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<sup>1</sup> DI 2010-11-14 [http://di.se/Default.aspx?sr=12&tr=280638&rl=0&pid=219971\\_\\_ArticlePageProvider&epslanguage=sv](http://di.se/Default.aspx?sr=12&tr=280638&rl=0&pid=219971__ArticlePageProvider&epslanguage=sv)

The Millennium books were adapted for the screen in 2008-2009 and resulted in three Swedish feature films and six episodes adapted for television, all produced by YellowBird and starring Noomi Rapace as Lisbeth Salander and Michael Nyqvist as Mikael Blomkvist.

The films have garnered massive international attention and have been sold to about 60 countries including the United Kingdom, Germany, France and the United States. The first film, *The Girl with the Dragon Tattoo*, won the Best Film not in the English Language Award at the BAFTA Awards in February 2011 in London.<sup>2</sup>

An American version of *The Girl with the Dragon Tattoo* is being produced in 2010-2011, directed by David Fincher, whose previous films include *Seven* and *The Social Network*. The film will premier in December 2011. It is expected to be a major international film hit with the potential to reach an audience in the hundreds of millions.

Overall, the books, films and interest in Stieg Larsson have generated a wave of interest in Sweden as a film country and tourist destination country. The American film can be expected to create even greater interest.

The Swedish Millennium films were filmed mainly in the Stockholm region. Central Stockholm, Gnesta and other locations are featured in the films. Stockholm has in recent years noted greater interest from tourists who come to the region to visit locations associated with author Stieg Larsson and the Millennium Trilogy. There are now guided tours that follow in the footsteps of the author and the stories.<sup>3</sup>

The Millennium Trilogy has had tremendous impact worldwide. The films and productions have helped put Stockholm on the film and tourist map. The Millennium Report is intended to summarise, analyse and comment on the contributions of film production and films to the region.

### 1.3. Method and limitations

Our estimation of the value to regional business while the films were actually in production was based on budget, distribution and sales figures, as well as other information obtained from the production companies. The writers of the report have supplemented this information with studies of public statistics, press coverage data, other reports in the field and personal interviews with representatives of business, film production and tourism.

To estimate the exposure value or marketing value of exposure of the region in film, we have used corresponding methods used to estimate the value of product placement. We look at how many times the location is exposed with tourist associations per film and the size of the audience – how many gross contacts that see the film. The number of contacts is multiplied by the contact cost, which is equal to the cost of advertising during the same period and in the same channel.

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<sup>2</sup> <http://www.bafta.org/awards/film/2011-film-awards,1572,BA.html#jump7>

<sup>3</sup> [http://di.se/Default.aspx?tr=283976&rt=1&pid=226214\\_\\_ArticlePageProvider&epslanguage=sv](http://di.se/Default.aspx?tr=283976&rt=1&pid=226214__ArticlePageProvider&epslanguage=sv)

In this report, we also estimate the advertising value and exposure value of, for example, advertisements and mass media coverage.

## 2. Effects during film production

### 2.1. The creative industries

According to study performed on behalf of the European Commission in 2006, known as the KEA report (*The Economy of Culture in Europe*), the growth rate for culture and the creative sector is higher than for the rest of the European economy.

An attractive setting for filming can draw domestic and foreign film producers to the location and create value for local business, both directly through investments, jobs and sales on location and indirectly through increased tourism, for instance.

Films produced in Sweden, some of which are discussed in this report, are financed with both private and public funds. They are often co-productions with other countries. The regional and national economic effects of film production arise on several levels. First in connection with the investment and use of the investment during actual production, and secondly through the returns/revenues generated by the film.

### 2.2. Economic effects of film production

The average budget for a "normal" Swedish film is about SEK 20 million (2,2 million euros), according to Filmregion Stockholm-Mälardalen.<sup>4</sup>

In summary, one can say that film production affects

1. Business and employment during production and long-term through the establishment of companies in the creative industries in the region
2. Image, both identity and PR
3. Tourism

### 2.3. Effects during the production of the Millennium films

The Swedish Millennium films had a total budget of just over SEK 100 million (11 million euros). The initial plan was that parts two and three of the trilogy would be made for television movies only, but they were later reworked to also become feature films intended for cinema distribution. The majority of the total budget went to Stockholm-Mälardalen. The remainder was spent on music and post-production in Gothenburg, Denmark and elsewhere.

The filming in 2008 - 2009 was done mainly in central Stockholm, Gamla Enskede and Gnesta. The film team consisted of about forty people, in addition to the actors, extras, consultants and people engaged to perform a variety of other services. All told, there were more than 150 people involved in making the film. Filming continued for about

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<sup>4</sup> Ingrid Rudefors, Film Commissioner at Filmregion Stockholm-Mälardalen

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180 days in the Stockholm area. During that time, the film project used transport, catering and other services.

We have summarised the costs of the three films in the following table. The table shows which expenditures were allocated to Stockholm-Mälardalen and the amounts allocated to other locations.

Table 1 Production of feature film 1, TV films and feature films 2 and 3

Production of feature film 1, TV films and feature films 2 and 3	TOTAL (SEK)	To Stockholm-Mälardalen	To other region
Development costs (script, etc.)	16,827,000	13,764,000	3,063,000
Wages, producer/executive management	3,733,000	3,733,000	0
Wages, actors	13,189,000	13,189,000	0
Wages, crew	17,852,000	16,008,000	1,844,000
Wages, make-up, costumes, etc.	10,536,000	10,536,000	0
Technical equipment	8,166,000	8,166,000	0
Materials, make-up, costumes, etc.	7,152,000	7,152,000	0
Studio, premises, offices	2,640,000	2,640,000	0
Travel/transport	4,291,000	4,078,000	213,000
Post production	16,601,000	10,409,000	6,192,000
Music	901,000	0	901,000
Other production costs	3,587,000	3,587,000	0

Source: YellowBird. Figures adjusted and rounded off by Cloudberry/Oxford Research. Exchange rates in euro as per 12 April 2011

### 3. Film tourism

Our view of the world and perceptions of a place are created largely by media images, news, articles, documentaries and films.<sup>5</sup> Stories make us feel. Feelings make us act.

What do *The Da Vinci Code*, *Sex and the City*, *Slumdog Millionaire*, *Australia*, *Vicky Cristina Barcelona*, *Amélie from Montmartre*, *The American*, *The Tourist* and *The Hangover* have in common? They are all films that draw tourists to the places they depict.

Film tourism is a term that describes the tourism that arises when visitors choose destinations as a direct result of having seen a film. Film tourism is not a new phenomenon. Films are visual stories and stories have throughout history shaped our view of the world and how we choose to move around in landscapes and the world.

A few of the myriad examples of what films can do for the tourism industry are shown in the following table.

<sup>5</sup> Busby & Klug 2001:217

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Table 2 Films that have had impact on tourism

Film	Location	Effect
Pirates of the Caribbean (4)	Old Royal Naval College Greenwich, England	13% increase before the film premier (1.3 million visitors a year)
Alice in Wonderland	Cornish Mansion, England	Visitor numbers increased 400% after the film
Robin Hood (2010 production)	Sherwood Forest, England	5.5% increase per year (500,000 visitors a year)
The Twilight Saga	Staden Forks, Washington, USA	Hotel nights have increased by 1000%
Mamma Mia	Skopelos, Greece	Major increase in tourism on the island of Skopelos <sup>6</sup>
The Lord of the Rings	New Zealand	Tourism increased by 400% after the films premiered
Harry Potter	Alnwick Castle, England	Formerly modest turnover has increased to EUR 13 million a year <sup>7, 8</sup>
Notting Hill	Kenwood House, Notting Hill, England	10% increase in tourism
Deliverance	Rayburn County, Georgia, USA	20,000 film tourists every year; turnover of USD 2-3 million per year many years after the premier
Captain Corelli's Mandolin	Cephalonia, Greece	50% increase in tourism over three years

### 3.1. The difficulty of measuring tourism effects

It is often difficult to arrive at figures and statistics for the tourism effects of film exposure for various regions because the precise effect of a film cannot be reliably stated.

Several of the foreign examples with major effects on tourism can be explained by the fact that they were exceptionally successful films, or that the increases in tourism started from a low base. Another explanation for major tourism effects has to do with how the location is defined. For instance, Stockholm already has a high percentage of visitors and tourists and the Millennium effects on increasing tourism for the entire region are limited. If, however, we look at visitor figures to the addresses featured in the stories, we can observe substantial effect.

Successful exposure of a region in a successful film puts the location higher up in the consumer's mind and the exposure may cause people to consider travelling to the region without making any conscious association between the region and the film. However, the effect on travel to a region is usually marginal, despite film exposure.

<sup>6</sup> <http://www.guardian.co.uk/film/2008/dec/20/mamma-mia-greek-island-money>

<sup>7</sup> Cineturismo, 28 August 2005

<sup>8</sup> <http://www.holidayextras.co.uk/news/tourist-destinations/18220875.html>

4/16

## 4. Value to the region of exposure in the Millennium films

### 4.1. Method for estimating exposure value

Stating the marketing value of exposure of a place or region in a feature film is impossible unless the estimate is based on a number of assumptions.

The assumption is that there is value to the exposure of locations in films that are either places of outstanding natural beauty and/or part of a story with the power to draw people in.

We look at how many times the location is exposed with tourist associations per film and the size of the audience – how many people see the film. The number of contacts is multiplied by the contact cost, which is equivalent to what it would cost to advertise during the same period and in the same channel. The contact cost differs depending on whether the film is shown on TV, DVD, the Web or in the cinema. Accordingly, we have also considered the channels in which the films will be shown.

In this context, one usually talks about a “contact cost” – what it would cost in advertising money to reach an individual viewing the medium at a particular point in time. The contact cost is usually stated for an exposure period or 30-second commercial spot. This report is based on the contact cost in Sweden.

Table 3 Contact costs for marketing value valuation<sup>9</sup>

Medium/Channel	Contact cost (<30 seconds)
TV	SEK 0.33 (3,6 euro cents)
DVD and Web film	SEK 0.80 (8,8 euro cents)
Cinema	SEK 0.80 (8,8 euro cents)
Internet	SEK 0.06 (0,7 euro cents)

Exchange rates in euro as per 12 April 2011

### 4.2. Audience projections and channels

The audience figures for cinemas and sold DVDs in table below are based on input provided by YellowBird and cover information through 31 January 2011.

In order to provide an estimated value of exposure, we projected how many contacts the films will reach via television in 2011. The figures are based on the size of the audience an equivalent film may have per television episode, as stated in table below. We have assumed that every television episode will have about 30 million viewers or 60 million gross contacts per film.

<sup>9</sup> All costs are estimates based on information provided by media agencies and refer to the rough cost of reaching a contact with advertising in each medium. Reasonability was also validated against TNS-Sifo and IRM in January 2011. Using this information to assess value and comment on the value of film exposure to a region is the authors' own model.



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Table 4 Sales and exposure - cinema, DVD and television

	The Girl with the Dragon Tattoo	The Girl Who Played with Fire	The Girl Who Kicked the Hornet's Nest	Total
Cinema (tickets sold) <sup>10</sup>	10.3 million	6.2 million	3.7 million	20.2 million
DVD (disks sold) <sup>11</sup>	1.8 million	1.2 million	736 thousand	
DVD (audience contacts) <sup>12</sup>	6.4 million	4.2 million	2.6 million	13.3 million
TV (contacts per episode) <sup>13</sup>	30 million	30 million	30 million	90 million
<b>Total</b>				<b>123 million contacts<sup>14</sup></b>

### 4.3. What and where is Stockholm in the Millennium films?

Many settings in Stockholm are exposed in the films; settings that along with an exciting plot can pique people's interest in going to the addresses on their own, or entice Swedish or foreign tourists to travel to Stockholm.

#### Identified contacts

The locations selected for evaluation are all clearly identifiable. The films feature several views over Saltsjön and Riddarfjärden and many other familiar scenes and settings in Stockholm, Södermalm and Stockholm City.

The occurrence of tourist image-associated scenes and key scenes varies somewhat among the three films. On average, we estimate that about 17 exposures per film for a weighted value of SEK 0.46 (5,1 euro cents) per contact yield an exposure value to the region of SEK 7.8 (0,86 euros) per person contact and film.

Table 5 Exposure associations for the Stockholm region

Film	Examples of Stockholm/Mälardalen associations	Number of associations
The Girl with the Dragon Tattoo, The Girl Who Played with Fire, The Girl Who Kicked the Hornet's Nest	The Lock ("Slussen") towards Riddarfjärden, Saltsjön towards Old Town and Skeppsholmen, Götgatan, Stureplan (evening), Hedeby, the bridge to Hedeby, Riddarfjärden, the Hedeby annex, Hedestad (Gnesta), Riddarfjärden, Hedeby, Nytorget, Sofo, Slussen, Lundagatan, Götgatan, Erstagatan, Hornsgatan, Bergianska Gardens, Katarinavägen, Woodland Cemetery ("Skogskyrkogården").	51 (17 exposures per film)
<b>Contacts per film</b>		<b>17</b>

### 4.4. Value to the Stockholm region of exposure in the Millennium films

**If the films are presumed to reach 123 million gross contacts through the end of 2011 and the region is exposed 17 times, the estimated value of exposure from the Swedish films is SEK 960 million (106 million euros).**

<sup>10</sup> Source: YellowBird

<sup>11</sup> Ibid

<sup>12</sup> Cloudberry's estimate based on units sold. Sold units multiplied by 3.5.

<sup>13</sup> Refers to gross contacts per film. Each television episode has about 30 million viewers.

<sup>14</sup> 123 million gross contacts if we count gross contacts per television film (two episodes per film).

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Both the audience forecast and the contacts with the Stockholm region in the feature films have been estimated conservatively. It is assumed that the actual exposure value is higher. On the other hand, it is unlikely that anyone would be willing to have product placements 17 times per film, which makes the exposure value lower. If a multiplying factor of 4 is applied, based on the fact that the film medium provides a far greater credibility compared to traditional advertising, the value would reach almost SEK 4 billion (440 million euros). Based on this, an exposure value of nearly SEK 1 billion (110 million euros) is considered reasonable.

If the American Millennium film is a hit, it is not unlikely that it may reach 200 million contacts or more.

#### 4.5. Exposure through publicity and marketing

It is not only through the movies that the public come into contact with the Millennium Trilogy and the locations shown in the film. Audiences are drawn to a film by a complex web of interfaces. A rough estimate follows of the exposure value of the films via marketing channels.

Table 6 Estimate exposure value per channel

Channel	Exposure value (estimated, SEK)
Press – Print and online	100 million
TV and radio	80 million
Advertisements	110 million
Web – other	10 million
Trailers	?
<b>Total</b>	<b>SEK 300 million (33 million euros)</b>
Number of contacts	350 million unique contacts

Exchange rates in euro as per 12 April 2011

The value of exposure in the Millennium films and via other quantifiable interfaces is at least SEK 300 million (33 million euros). The planned interfaces included in marketing campaigns reach an estimated 500-600 million unique contacts and many times that if we include gross contacts.

In this estimate, the contacts have to do with the films and not primarily with Stockholm, but we can assume that a large portion of the contacts are aware that the stories take place in Stockholm. It is reasonable to assume that every contact yields exposure value for Stockholm. At any rate, we can see that the films, which are associated with the Stockholm region, reach an audience of several hundred million people internationally, including many markets with a high probability of attracting tourists.

## 5. The Millennium effects

What then, is the outcome for Stockholm? Is it possible to determine that tourist numbers have risen thanks to the Millennium films? And were the films the deciding factor in the choice of destination, or were they a minor consideration among many other decision criteria? It is apparent that many tourists who come to Stockholm are interested in the stories about Mikael Blomkvist and Lisbeth Salander.

In addition, a book that will guide readers of the Millennium books through the life of Stieg Larsson, the settings in the books and the connections to Swedish society will be released in June 2011: *Secrets of the Tattooed Girl*.<sup>15</sup> The author also wrote *Secrets of the Code*. It is likely that the American Millennium film, along with the guidebook, will draw tourists to Stockholm in 2011 and 2012.

The Stockholm City Museum has been arranging guided Millennium Tours since 2009, in which participants walk through the settings in the Söder district featured in the books and films. About 10,000 tourists took the guided Millennium tour in 2010.

Tourists who would rather explore on their own can also buy a Millennium Map at the Stockholm City Museum or the Stockholm Tourist Centre. The map describes 20 locations in the Stockholm area connect to the books and films. The museum estimates that a total of 25,000 people have gone on the walking tour, either with a guide or using the map.

In spring 2010, The Stockholm City Museum surveyed 125 tourists from different countries on several continents who had taken the Millennium Tour. Eight of the respondents (6%) stated that the *main* reason they had travelled to Stockholm was to take the Millennium walking tour through the city. But even among the others, it is very likely that the Millennium Trilogy made them more interested in visiting Stockholm.

In order to gain a clearer picture of why tourists choose to travel to Stockholm and whether the Millennium films may have affected their choice of destination Cloudberry/Oxford Research carried out fifteen interviews with tourists at the Stockholm Tourist Centre in January 2010.

The interviewed tourists came from countries including Australia, Taiwan, Belgium, the United Kingdom, Spain and Italy. It turned out that all of them had heard of the Millennium Trilogy and Stieg Larsson. Most of the respondents had travelled to Sweden primarily as tourists, while a few had business meetings planned. For several respondents, the Millennium stories were an important component in the decision to travel to Stockholm, even if it was not the deciding factor. It may suffice that there is keen interest in visiting locations featured in the stories for us to talk about a Millennium effect. We are already seeing an effect in the 10,000 visitors who take the Millennium tour every year.

Interest may become even stronger with the launch of the American film adaptation of *The Girl with the Dragon Tattoo*. The film is expected to be a major international hit and

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<sup>15</sup> *Secrets of the Tattooed Girl*, Dan Burstein, Arndt De Keijzer, John-Henri Holmberg, will be published 9 June 2011.

can be expected to reach a cinema audience of around 120 million people in the first three or four weeks.

## 6. Conclusion

Film production contributes several direct economic effects to a region.

The Millennium films and the connection to the exceptionally successful books and interest in the life, fate and posthumous reputation of author Stieg Larsson have created a unique context. The stories have a distinct connection to the Stockholm region and obvious significance to exposure of the region.

Based on several examples, we can determine that film production and films add lasting value for regional development as well as value that is more long-term and can be difficult to create, but which can produce large exposure value for a region and attract tourists.

The bases for audience projections, contact costs and tourism effects were all conservatively estimated. The actual value of the films is probably higher, but we chose to use the lower values in all cases because there are several uncertainty factors and the results should not be exaggerated.

We estimate the value of regional exposure of the Stockholm region from the Swedish Millennium films to be SEK 960 million (106 million euros). If we add the books and assume that the American Millennium film will be a major hit, the value becomes many times higher.

Regardless of the chosen scenarios, the films generate revenues for the region.

**This is a shortened version of the full report that can be downloaded here:**  
**<http://bit.ly/millenniumrapport>**

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## THE DESCENDANTS MUSIC CREDITS

1. KA MAKANI KA'ILI ALOHA  
Written by Matthew Kane  
Arranged and Performed by Gabby Pahinui
2. KALENA KAI  
Written by John Kalapana  
Performed by Keola Beamer and George Winston
3. PAKA UA  
Written by Ozzie Kotani  
Performed by Ozzie Kotani and Daniel Ho
4. JEAN'S THEME  
Written by Andrew Lein  
Performed by Steve Di Laudo and Andrew Lein
5. HI'ILAWA  
Traditional  
Arranged and Performed  
by Sonny Chillingworth
6. AN ARTIST'S VISION  
Written and Performed  
by Anthony Natividad
7. KA MELE OKU'U PU'UWAI  
Traditional  
Arranged by Solomon Ho'opi'i  
Performed by Sol Hoopii's Novelty Trio
8. KALENA KAI  
Written by John Kalapana  
Performed by Keola Beamer
9. KAUA'I BEAUTY  
Written by Henry Wai'au  
Arranged and Performed by Gabby Pahinui
10. PAPA SIA  
Written by Johnny Noble  
Performed by 'Elua Kane

# THE DESCENDANTS

## Music Credits

11. LEAHI  
Written by Mary Robins and Johnny Noble  
Performed by Gabby Pahinui
12. AUWE  
Written and Performed by Ray Kane
13. POLI'AHU  
Written and Performed by Keola Beamer
14. HI'ILAWA  
Traditional  
Arranged and Performed by Gabby Pahinui
15. INTERLUDE WITH UKELELE  
Written and Performed  
by George Kahumoku, Jr. and Richard Ford
16. 'IMI AU IA 'OE  
Written by Charles E. King & Queen Lydia Lili'uokalani  
Arranged and Performed by Keola Beamer
17. HOLOHOLO KA'A  
Written and Performed by Jeff Peterson
18. IN YA SYSTEM  
Written by Don Kawaauhau, Shane Veincent and Caleb Richards  
Performed by Sudden Rush  
By arrangement with Robert Sterling Music New York
19. PUA LANI  
Written and Performed by Jeff Peterson
20. NIGHT BLOOMING CEREUS  
Written and Performed by Jeff Peterson and Riley Lee
21. HAWAIIAN SKIES  
Written and Performed  
by Jeff Peterson

22. DEEP IN AN ANCIENT HAWAIIAN FOREST  
Written and Performed by Makana
23. MISS BEA  
Written and Performed by McCoy Tyner  
By arrangement with Manhattan Production Music
24. WAI O KE ANIANI  
Traditional  
Arranged and Performed by Gabby Pahinui
25. KA LOKE  
Written by Mary Heanu and Johnny Noble  
Performed by Makaha Sons with Dennis Pavao
26. `ULILI E  
Written by Johnny Noble, Harry Naope and George Koahi  
Performed by Rev. Dennis Kamakahi
27. ‘ULILI E  
Written by Johnny Noble, Harry Naope and George Koahi  
Performed by Jeff Peterson
28. PUA HONE  
Written and Performed by Rev. Dennis Kamakahi
29. PINE TREE SLACK KEY  
Written and Performed by Pancho Graham
30. WONDERLAND  
Written and Performed by  
Eugene Kulikov
31. SANOE  
Written by Queen Lydia Lili`uokalani  
Arranged and Performed by Danny Carvalho
32. NANI WAI`ALE`ALE  
Written by Dan Pkipala, Sr.  
Performed by Kanak Attack
33. THE YODEL SONG  
Written by Gary Haleamau  
Performed by Kanak Attack

# THE DESCENDANTS

## Music Credits

34. FAITH IN RAIN  
Written by Maureen Davis and Adam Daniel  
Performed by The Flutterbies featuring Maureen Davis
35. HUMMINGBIRD HEART  
Written by Maureen Davis and Adam Daniel  
Performed by The Flutterbies featuring Maureen Davis
36. HE'EIA  
Written by David Bray, Linda Bray and Johnny Noble  
Performed by Gabby Pahinui and Sons Of Hawaii
37. HAPUNA SUNSET  
Written and Performed by  
Charles Michael Brotman
38. THE HARSHTEST PLACE ON EARTH  
(from the motion picture March Of The Penguins)  
Composed by Alex Wurman
39. HI'ILAWÉ  
Traditional  
Arranged by Bernie Ka'ai  
Performed by Ernest Tavares
40. MOM  
Written and Performed by Lena Machado