

Testimony of Ralph Palumbo, Chief Financial Officer and Member
CT Studios, LLC

Before the Finance, Revenue & Bonding Committee of the CT General Assembly
Monday, February 23, 10:30am

Raised Bill No. 933 An Act Concerning the Governor's Recommendations on Revenue
Senator Daily, Representative Staples, Senator Roraback, Representative Candelora and
members of the Finance, Revenue and Bonding Committee, my name is Ralph Palumbo
and I am the Chief Financial Officer and Member of CT Studios, LLC.

On behalf of CT Studios, LLC I would like to thank everyone for the opportunity to offer
testimony on Raised Bill No. 933 titled An Act Concerning the Governor's
Recommendations on Revenue. First let me start by commending the legislature and the
administration for its wisdom in crafting the digital media and motion picture tax credit
program and expanding it to include the infrastructure tax credit. The digital media and
motion picture tax credit program has made Connecticut a viable and attractive film
production location and by doing so has added significantly to the state's economy – as
evidenced in the DECD's Economic and Fiscal Impact Study.¹ As envisioned by the
legislature, the inclusion of the infrastructure tax credit has enticed motion picture studio
companies such as CT Studios, LLC, to invest in building motion picture production
studios here. These investments will certainly increase jobs for Connecticut residents and
establish the permanent motion picture production industry here as well as increase
revenues for the State. Recent economic impact studies in New York and New Mexico,
states with significant motion picture studio infrastructure, further prove that these
incentive packages work and there is a direct correlation between the incentives and the
number of productions. In New York, for example, State and City Return on Investment
equals \$1.90 for each dollar of state tax credit.² Similarly in New Mexico, where
Albuquerque Studios – built and operated by my partner Hal Katersky, the enactment of
the credit program has resulted in state and local tax collections of \$1.50 for each dollar
of state rebate payment.³ I have attached copies of the New York and New Mexico
studies to my testimony. These studies done by the national accounting and consulting

¹ The Economic and Fiscal Impact of Connecticut's Film Tax Credit prepared by the Department of
Economic and Community Development

² Estimated Impacts of the New York State Film Credit prepared by Ernst & Young

³ Economic and Fiscal Impacts of the New Mexico Film Production Tax Credit prepared by Ernst & Young

firm Ernst & Young provide empirical evidence which proves that spending driven by these tax credits benefit the state and local economies more than the cost of the tax credit. The studies further show that states with significant sound stage infrastructure have high yields (NY=190% and NM=150%) on film production tax credit programs.

While the Connecticut tax credit program is in its infancy, great promise is just ahead. I am concerned, however, that the instituting of a \$30 million cap on the program within section 7 of the bill would send the wrong message to the motion picture industry. An industry that has found Connecticut to be a great place to work, an industry that is growing here in this state.

A \$30 million cap effectively supports \$100 million in annual production spending. A single major motion picture shot in Albuquerque Studios in 2008 spent more than \$200 million. The shooting of a major motion picture like this is analogous to a new start up business – with the added advantage to the state and local governments that this type of spend is often “inefficient” in that productions often hire more people and purchase more than they need from local vendors to ensure that the movie is completed on time. These local vendors include hardware centers, lumber dealers, caterers, equipment rental companies, stylists, make-up artists and the list goes on and on. If a cap is put in place, a production such as this one – which nets the greatest yield on the state tax credits – will not shoot in the state. That new business would “start-up” in another state which will gain those benefits.

While I do recognize the precarious financial situation that Connecticut faces, I would encourage members to support the growth of the motion picture industry and to look at the positive economic evidence that the economic studies of Connecticut and from other states demonstrate in terms of increased jobs and tax revenues. Another important point is that all production company spending and the resulting collection of state and municipal revenues occur before the tax credit certificates are issued by the state. Also, I would ask you to consider the economic benefits from the project that we are proposing to build here in Connecticut:

Immediate Construction Jobs & Short Term Economic Impacts:

- \$90,000,000 project investment.
- Estimated 500-600 union construction jobs for the construction period.
- \$40,000,000 in construction union wages over the construction period.
- Shovel ready in 4 months.
- Creation of a new industry in Connecticut.

Sustained Annual Movie Production Jobs & Long-Term Economic Impacts:

- **Phase I:** 1650 production related union jobs per year paying an average salary of \$68,200, generating approximately \$112,500,000 in additional annual Connecticut payroll.
- **Phase II:** 500 to 700 new jobs for production related and post production related higher paying jobs, many of which will be in excess of \$100,000
- Strategic location within the greater Hartford area enhancing CT resident vs. non-resident employment.
- 114 full time studio facility jobs paying an average salary of \$37,500 generating approximately \$4,275,000 in additional Connecticut payroll.
- In 2008, film production generated over Four Hundred Million Dollars (\$400,000,000) in direct production expenditures in the State of New Mexico.
- Industry statistics show the economic multiplier effect is approximately four times direct production expenditures.
- CT Studios will provide a valuable connection to the entertainment industry for Connecticut's regional technical schools, colleges & universities with related academic programs and provide strong incentive for graduates and young professionals to remain in the state.
- CT Studios will utilize fuel cell technology developed by UT Power, a subsidiary of United Technologies Corporation.

The \$30 million cap imposed by the legislation before you would eliminate the opportunity for CT Studios, LLC to build our motion picture production studio project in Connecticut.

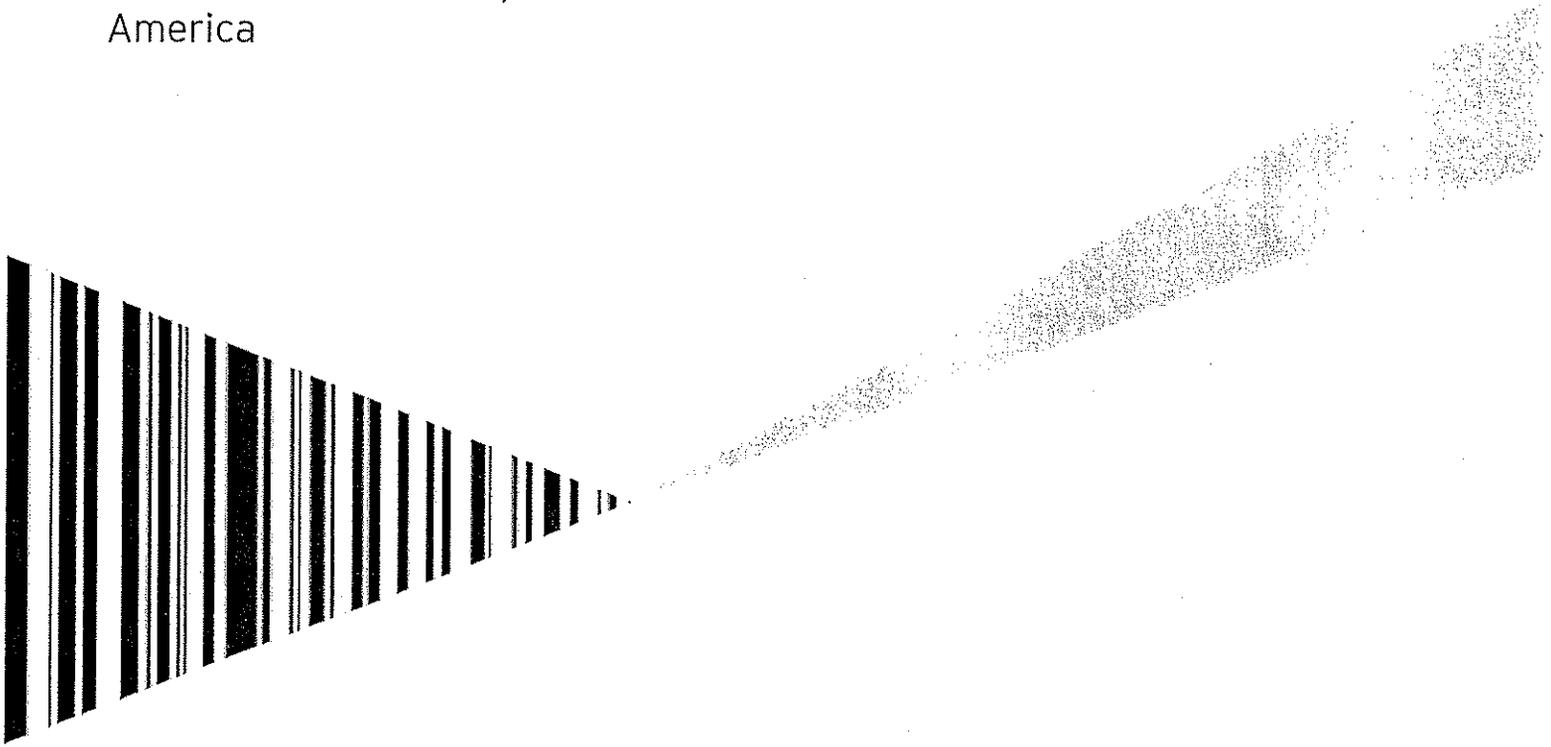
Lastly, as shown in the attached Ernst & Young fiscal impact studies, the investments made in the production tax credits provides an attractive yield to Connecticut and has the added advantage of collecting the resulting revenues six to twelve months before the tax credits are used.

Thank you and I'd be happy to answer any questions that you may have.

Estimated Impacts of the New York State Film Credit

February 2009

Prepared for the New York State Governors Office of Motion Picture
and Television Development and the Motion Picture Association of
America



Estimated Impacts of the New York State Film Credit

Overview and Summary

New York State's Empire Film Credit has attracted feature film and television production to the State of New York since 2004 by initially offering a tax credit equal to 10% of qualified New York production activities. A similar credit is available to productions in New York City, equal to 5% of qualifying New York City production expenses.

Competition from states that have recently adopted new or more generous film credits reduced the effectiveness of the Empire and NYC film credits. According to data compiled by the New York State Governor's Film Office, introduction of competing incentives from other states, including Connecticut and Massachusetts caused a \$750 million drop in New York film production from July 2006 – June 2007 as compared to the previous 12 months. To improve New York's ability to continue to attract films and television production activities, the Empire state film credit rate was increased from 10% to 30% of qualifying costs in 2008.

As described in the sections below, the 30% credit program evaluated at the \$940 million level of film spending in 2007, has the following impacts¹:

- **New York jobs created and retained: 19,512 jobs**
- **New York State and City Return-on-Investment (ROI): 1.90**

Impacts of the Film Credit

Factors Considered

Table 1 presents the impact of film production and post-production activities in New York. The estimates assume that the 30% credit rate will allow New York to retain its current level of film and post-production activity by competing with other states offering similar credits.

The ROI estimates compare the cost of the 30% credit with the additional state and local taxes collected from the 2007 level of economic activity for film and production activities receiving the credit and supporting activities. This impact analysis shows the impact of the \$940 million in direct spending of the credit-assisted productions and the retention of post-production industry activity due to the credit.

In addition to the credit-eligible production and post-production activities, economies of scale that these projects create for companies and producers attract collateral productions such as non-credit eligible features and television projects, web casts, interstitials and video shorts. Absent the credit, it is reasonable to anticipate that, due to the loss of this industry cluster effect, New York's share of US employment in the industry would continue to decline at the rate experienced from 1999 to 2004. The economic and fiscal contributions of these additional activities from media and entertainment clusters, are taken into account in the impact estimates. (See the Appendix for a more detailed description of the methodology used in the study.)

¹ The rate-of-return (ROI) estimates assume that the 30% credit applies to the 2007 level of activities for credit-eligible film, television series, and pilots receiving credits (the most recent year complete data is available). These activities generated approximately \$940 million of New York spending. The cost of the 30% credit was estimated based on the expenditure characteristics of projects receiving credits in 2007.

The analysis does not attempt to project the future level of film activity in New York that arises with the enhanced incentive. However, preliminary data compiled by the Governor's Film Office indicates a substantial increase in productions since the enhanced incentive to effect. From the Empire State Film Credit's enhancement on April 23, 2008 to the end of the calendar year, the New York State Governor's Film Office received 100 film applications, up from 60 applications for the same period in 2007. Spending on labor, facilities and vendors for the 100 projects received between April 23 and December 31, 2008 is in excess of \$1.8 billion, as compared to the \$940 million in spending for all of 2007.

The ROI does not take into account the positive impact on tourism associated with the production of feature films and television in New York. Although an additional tourism impact is not included in the analysis, there is a generally acknowledged relationship between film and television production and tourism. The Mayor of NYC recently noted the importance of local film production to New York City's tourism industry and the Economic Development Corporation of Los Angeles cited the negative impact on tourism of runaway production.² Research shows that certain locations where a successful motion picture was filmed enjoyed a 54% increase in tourism over the succeeding four years.³

Program's Impact Throughout New York Economy

In addition to generating economic impacts from direct spending by credit-assisted film productions in New York, the credit program has helped reverse the downward trend in film and television productions overall and contributed to expanded activities supporting film production, such as post-production and film processing facilities. The estimated economic and fiscal impact of the 30% film credit takes into account the contribution of the productions qualifying for credits, the increase in other production activities as well as the contribution of post-production activities.

Reversing Trend of Job Loss

New York employment in the film industry as a percentage of total US employment in the industry steadily declined over the 1999 to 2004 period. Absent the film credit, this trend would likely have continued, if not accelerated, given the proliferation of film incentives across the country. Following the adoption of the film credit, this trend was reversed. By 2007, New York enjoyed an estimated increase of 3,655 jobs from credit-eligible film and television productions, 1,815 additional jobs in non-credit-eligible production activity, and 1,561 jobs retained in post-production activities that support film and television production activities in New York and outside the state.⁴ The sum of the jobs in these impacted areas (credit-eligible productions, non-credit-eligible productions, and retained post-production activities) is 7,031 jobs.

Current Results and Looking Ahead

Based on \$940 million in direct spending by credit-eligible projects of similar characteristics as 2007 projects and additional spending by other affected film productions and post-production businesses, the film production and related post-production activities account for 7,031 direct jobs. (See Table 1.) The total impact on New York employment is over 19,500, which includes

² See *Bloomberg Touts Film, TV Impact on Economy*, Hollywood Reporter, October 20, 2008 and *What is the Cost of Runaway Production?* LAEDC, May 2005

³ Riley, Roger, Baker and Van Doren (1998), 'Movie Induced Tourism', *The Annals of Tourism Research*, vol. 25, no. 4, 919 – 935.

⁴ The proliferation of tax credits, coupled with the technological advancements in post-production services allow film support services to actually follow film projects. See, Orbit Digital's mobile post-production lab supporting films shooting in Connecticut. *Hollywood Reporter*, November 6, 2008

the direct impacts of film and post-production activities and the indirect impacts resulting from higher economic activity in other sectors of the economy.⁵ The economic impact is expected to grow over time with the continued expansion of New York based support facilities,⁶ and an increase in the volume of large budget feature films that is already taking place since the adoption of the 30% credit rate in April 2008.⁷

**Table 1. Impact of New York Film and Retained Post-Production Activity, 2007
(\$Millions)**

Economic Impact	Direct	Indirect	Total	Multiplier
Production Value	\$1,711	\$2,157	\$3,868	2.26
Income	\$816	\$1,242	\$2,057	2.52
Jobs	7,031	12,481	19,512	2.77

As shown in Table 2, the estimated credit allocation and tax impact of film productions and related activities will yield a State ROI of 1.1. When New York City credits and local taxes are included, the ROI is 1.9. The credit cost presented in Table 2 is a hypothetical showing the cost of the credit if a 30% credit applied to qualified expenditures in 2007.

⁵ The indirect economic impact of the retention of film and post-production activities was estimated using the IMPLAN model of the New York economy. Note that the multiplier associated with post-production activity is lower than the film production multiplier, resulting in a lower overall multiplier for activities under the expanded credit. Other studies have focused solely on a production multiplier in the 3:1 range See, e.g. *New York's Big Picture, Assessing New York's Position in Film, Television and Commercial Production*, Cornell University, August 2006; and *What is the Cost of Runaway Production?* LAEDC, May 2005

⁶ In May, 2008 for example, the post-production house Deluxe opened a state-of-the-art, 40,000 square foot Motion Picture Laboratory and EFILM® Digital Intermediate Facility in New York City. http://www.bydeluxe.com/highlights_details.php?highlight=54. As New York's capacity to support all elements of film production expands, the economic impact will also increase.

⁷ Because a smaller percentage of the expenditures of large budget features (greater than \$50 million) qualify for the credit, New York's ROI on this category of films is higher than other genres. Data compiled by the Governor's film office indicates that the large budget film productions have increased significantly from the level in 2007. This should contribute to a higher ROI on film and television production activity in 2008 and 2009.

**Table 2. State and Local Fiscal Impact of State and New York City Film Credit Programs
(\$Millions)**

State Tax Revenue	Amount
Individual Income Tax	\$143.2
Sales Tax	\$34.1
Corporate Income Tax	\$9.2
Other Selective Sales Tax	\$4.7
Other Taxes	\$17.5
Total State Taxes	\$208.7
Estimated Film Credits	\$184.4
State ROI	1.1
New York City Tax Revenue	Amount
Property Tax	\$62.5
Individual Income Tax	\$75.1
Sales Tax	\$29.7
Corporate Income Tax	\$12.6
Other Selective Sales Tax	\$3.8
Other Taxes	\$11.6
Total City Taxes	\$195.3
Estimated Film Credits	\$30.7
New York City ROI	6.4
Total State and City Taxes	\$404.0
Total State and City Credits	\$215.1
State and Local ROI	1.9

Cash Flow Impact of Credits

The structure of the Empire state film production tax credit program provides an additional favorable economic impact on New York State. The program in effect, front loads economic activity by requiring production activity to occur, followed by a State review process to verify production expenditures and concluding with a production company's claiming of tax credits on a tax return filed twelve to eighteen months later. For example, film credits arising from production activities in calendar year 2007 will not be claimed until fiscal years 2008 and 2009 because of the credit certification process and the timing of tax return filing. Taxpayers can only claim the credit after receiving a Tax Credit Certificate. The taxpayer submits a final application for the credit within 60 days of completing post production. A certificate is generally approved within 30 to 60 days of receiving the final application. The taxpayer then claims the credit on the annual tax return for the year in which the project is completed. In most cases, the tax return claiming the credit is filed in December following the year in which production is completed.

Table 3 shows that film productions and related activities are expected to result in more than \$2,690 million of state and local taxes in fiscal years 2005-2010.⁸ Over the same period, estimated state and city credits claimed will total \$690.2 million. Based on the estimated taxes

⁸ Estimated annual state and local tax impacts are based on film production data supplied by the New York State Governors Office of Motion Picture and Television Development and Ernst & Young estimates.

and credits claimed from fiscal year 2005 through fiscal year 2010, tax collections exceed credits claimed by \$2,000 million.

**Table 3. Estimated New York State and New York City
Tax Collections and Film Credits by Fiscal Year
(\$Millions)**

Calendar Year	2004	2005	2006	2007	2008	2009
Fiscal Year	2005	2006	2007	2008	2009	2010
Tax Collections						
Current Year	\$208.8	\$327.2	\$439.9	\$404.0	\$546.1	\$765.8
Cumulative	\$208.8	\$536.1	\$976.0	\$1,380.0	\$1,926.1	\$2,691.9
Credits Claimed						
Tax Credit Claimed		\$60.4	\$82.2	\$106.2	\$92.2	\$349.2
Cumulative Tax Credit Claimed		\$60.4	\$142.6	\$248.8	\$341.0	\$690.2
Revenues in Excess of Cost						
Current Year Difference	\$208.8	\$266.8	\$357.7	\$297.8	\$453.9	\$416.6
Cumulative Difference	\$208.8	\$475.7	\$833.4	\$1,131.2	\$1,585.1	\$2,001.7

Appendix
**Detailed Results and Methodologies for Estimating Economic and Fiscal Impacts
of the New York State Empire Film Credit**

Economic Impacts

The estimated economic impacts of the New York State film credit include the impacts of three types of activities:

- 1) the impact of credit eligible film productions,
- 2) non-credit eligible productions, and
- 3) retained post-production activity.

As described in the sections below, the direct impacts were estimated based on either production spending data from the New York State Governor's Office for Motion Picture and Television Development or using Census data describing employment levels and trends in the film production and post production industries. Indirect and induced impacts were estimated using a 2006 IMPLAN model of New York State and Type-SAM multipliers.

Credit-Eligible Film and TV Production

Production spending for 2007 films is based on New York State film and television spending data supplied by the New York State Governor's Office for Motion Picture and Television Development. Table A-1 below shows the detailed budget information for films of different sizes, series and pilot productions in New York in 2007. This spending totaled \$937 million in 2007.

Table A-1. New York Film & Televisions Production Spending (\$Millions)

Film Budget	Total Budget	Total NY Spend
Feature films with budgets exceeding \$50 mil	\$290.9	\$227.6
Feature films with budgets \$20-50 mil	\$165.6	\$143.3
Feature films with budgets \$5-20 mil	\$36.5	\$30.4
Feature films with budgets less than \$5 mil	\$46.2	\$44.8
Television Series	\$540.1	\$420.0
Television Pilots	\$77.2	\$71.1
Total	\$1,156.5	\$937.3

Tables A-2 and A-3 present the estimated direct and total economic impacts of each component. The unadjusted 2006 IMPLAN New York State output multiplier for film and television production (IMPLAN industry 418) is 2.35. (No adjustments were made to the IMPLAN model to estimate this impact.) Based on \$937 million of credit-eligible film and television spending, the total output impact of credit eligible productions is \$2.20 billion.

The direct personal income impact of film and television production is \$445 million, which includes \$285 of employee compensation, \$124 million of proprietary income, and \$37 million of other property type income. These impacts are based on the unadjusted IMPLAN production function for film and television production (IMPLAN industry 418). The 2006 IMPLAN income multiplier (combined labor income and property type income multiplier) for eligible film and television production was 2.52, based on the unadjusted IMPLAN industry profile.

Based on the \$937 million of production spending, IMPLAN estimates the direct employment impact at 3,655 jobs in 2007. Using the unadjusted IMPLAN employment multiplier for film and video production of 2.97, total employment from film production activities in 2007 is 10,872.

Non-eligible film and TV production:

Non-credit-eligible film and television production activity attributable to the credit program was estimated based on employment data for the film and television industry in New York over the 1999-2006 period. Between 1999 and 2004, New York film and television employment as a percentage of total US employment in the industry declined by approximately 0.9% per year – from 13% in 1999 to 8% in 2004. Given this downward trend in New York film and television jobs as a percentage of total US film and television jobs over the 1999 to 2004 period, and the increase and expansion of film incentives across the country it is expected that the trend would have continued in the absence of the film credit program. If New York film and television industry employment had continued to decline through 2006, New York employment in the industry would have been 9,472 in 2006 – 6,115 jobs fewer than the 15,587 actual jobs in 2006 under the credit program. Credit-eligible film spending in 2006 totaled \$1.1 billion and created approximately 4,300 direct jobs, meaning that the full rebound in industry employment is not captured by the 4,300 jobs that were created by credit-eligible film productions in 2006. An additional 1,815 jobs were created and are assumed to be attributable to the film credit program. These 1,815 jobs are assumed to remain constant in 2007.

Based on the unadjusted IMPLAN film and video production industry output and income per worker, the estimated 1,815 jobs associated with non-credit-eligible productions generate \$465.4 million of economic output and \$221.0 million of personal income.

Using the unadjusted IMPLAN multipliers for the film and video production industry, the indirect impacts were estimated for output, income, and employment. The total impacts, including these indirect impacts are shown in Table A-3.

Retained Post-Production Activity:

Based on U.S. Census Bureau state-by-state data describing employment in the post-production industry in each state, each state's post-production employment as a percentage of total employment was calculated. In most large states with no significant film production activity, the percentage of total state employment in the post-production industry was only 45% as large as the share in New York. Based on this calculation, it is assumed that 55% of New York's post-production activity is directly linked to film and video production activity that occurs in New York. It is further assumed that in the absence of a film credit program, this 55% of post-production activity would leave the state. This share of the post-production industry is equivalent to 1,561 jobs.

The film and video production industry in the IMPLAN model was adjusted to reflect the post-production industry using data from the U.S. Census Bureau's 2006 *Service Annual Survey*, including average compensation of \$95,093 and output per worker of \$197,331. After these adjustments were made to the 2006 IMPLAN model, the output multiplier for post-production activity for New York was 1.87.

Table A-2 shows the direct economic impact estimates by component (film and television productions of various sizes, post-production, and non-credit-eligible films). Table A-3 shows the estimated total impacts of these same components.

Table A-2. Direct Impacts (\$Millions)

Film Budget	NY Output	NY Income	NY Jobs
Feature films with budgets exceeding \$50 mil	\$227.6	\$108.1	888
Feature films with budgets \$20-50 mil	143.3	68.0	559
Feature films with budgets \$5-20 mil	30.4	14.5	119
Feature films with budgets less than \$5 mil	44.8	21.3	175
Television Series	420.0	199.5	1,638
Television Pilots	71.1	33.8	277
Total Film & Television Productions	\$937.3	\$445.2	3,655
Non-Eligible Film & TV Productions	465.4	221.0	1,815
Post Production & Allied	308.2	149.6	1,561
Total	\$1,710.8	\$815.8	7,031

Table A-3. Total Economic Impacts (\$Millions)

Film Budget	NY Output	NY Income	NY Jobs
Feature films with budgets exceeding \$50 mil	\$533.8	\$272.3	2,640
Feature films with budgets \$20-50 mil	336.1	171.4	1,662
Feature films with budgets \$5-20 mil	71.4	36.4	353
Feature films with budgets less than \$5 mil	105.1	53.6	520
Television Series	985.3	502.6	4,872
Television Pilots	166.8	85.1	825
Total Film & Television Productions	\$2,198.6	\$1,121.5	10,872
Non-Eligible Film & TV Productions	1,091.7	556.9	5,398
Post Production & Allied	577.7	379.0	3,242
Total	\$3,867.9	\$2,057.4	19,512

Fiscal Impacts

Fiscal impacts were estimated by calculating the historical ratio of tax collections to personal income and applying this ratio to the estimated personal income impacts shown in Table A-3. The ratios were estimated for each category of tax revenue reported by the U.S. Census Bureau for the state and city. The ratios are then adjusted to reflect the historical elasticity of changes in tax collections to changes in personal income.

State Fiscal Impacts

After adjusting for the estimated elasticity of tax to income, the combined state-level tax ratio for New York State in 2007 was 10.15%. The fiscal impacts were estimated by multiplying the total state tax ratio (10.15%) by the estimated personal income impact for each component (film production, post-production, and non-credit-eligible productions). The impact for each tax is proportionate to its share of the total 10.15% state tax ratio.

Table A-4. Effective State Tax Rates on Personal Income

<u>Tax</u>	<u>Ratio</u>
State sales tax	1.66
State individual income tax ⁹	6.85
State corporate income tax	0.45
Other state taxes	1.19
Total State Taxes	10.15%

City Fiscal Impacts

Using the same methodology as was used to estimate the state ratios of tax collections to personal income, the ratio for New York City was estimated at 9.49%.

The major tax categories used to estimate city tax collections are shown in Table A-5 below. For all tax categories except individual income, historical tax collections to personal income ratios were used to estimate tax impacts.

The estimated property tax impact includes incremental real property taxes paid by expanding film and television production and post-production operations as well as the real property taxes paid by indirectly affected businesses, including suppliers to the film and television production industry and retailers, hotels, restaurants, and service providers that sell goods and services to the employees of production-related businesses and indirectly affected businesses. The New York City commercial rent tax is included in the "other" tax category.

Table A-5. Effective City Tax Rates on Personal Income

<u>Tax</u>	<u>Ratio</u>
Property tax	3.04
City sales tax	1.44
City individual income tax ¹⁰	3.65
City corporate income	0.61
Other city taxes	0.75
Total	9.49%

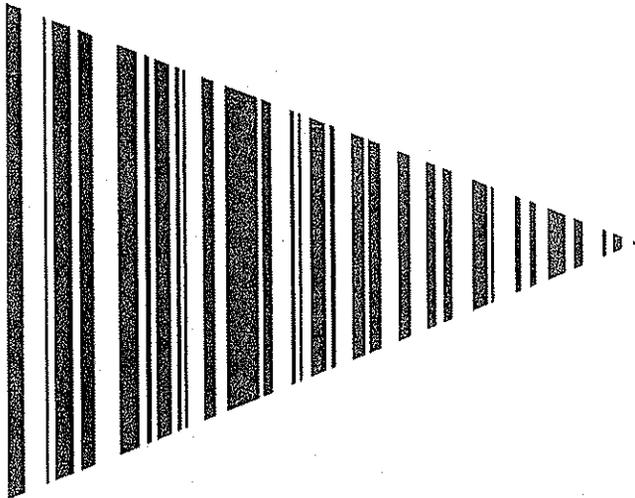
⁹ The top marginal income tax rate of 6.85% was applied to personal income impacts.

¹⁰ The top marginal income tax rate of 3.65% was applied to personal income impacts.

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



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

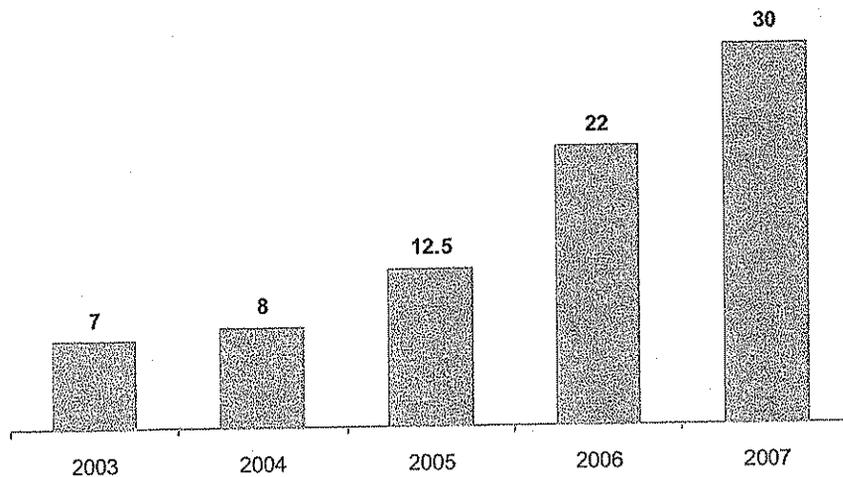
The New Mexico film production tax credit program has been successful in attracting an increasing number of films each year as shown in Figure 1. In 2007, 30 film projects qualifying for the credit were shot in New Mexico, a 36% increase from the 22 films that were shot in 2006 and more than four times 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.¹ 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.

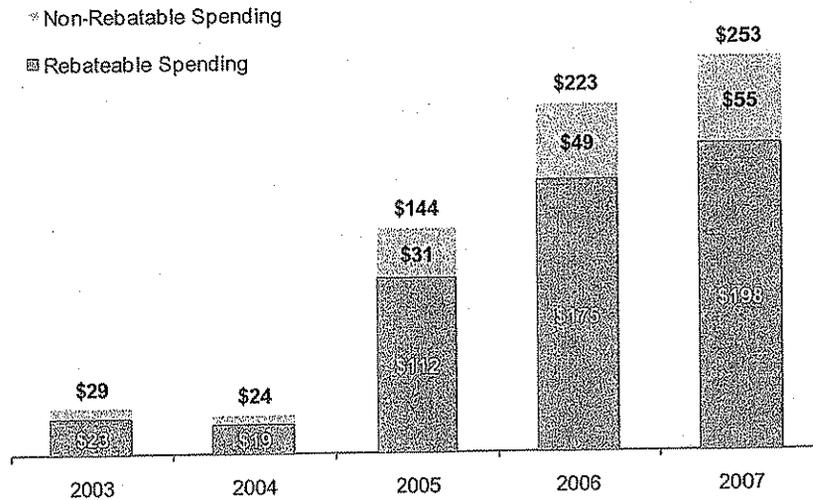
Figure 1: Number of Films Participating in the Credit Program, 2003-2007



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

¹ 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.

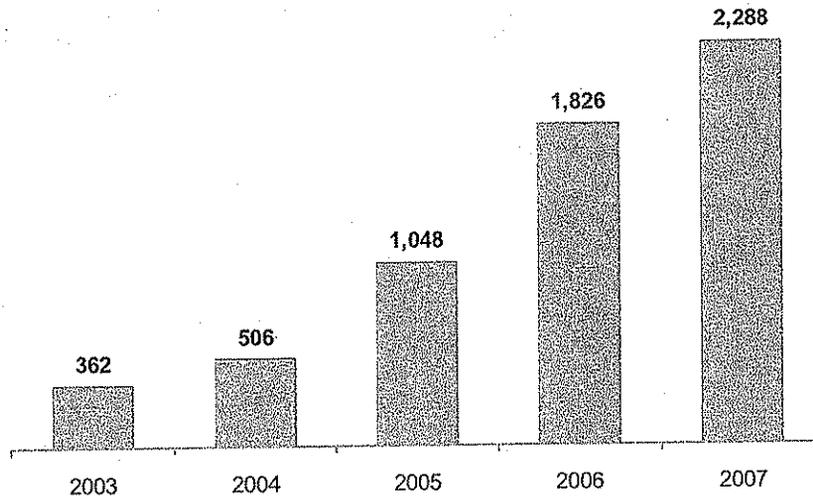
Figure 2: Annual Film Production Spending by Film Productions Participating in the Film Production tax Credit Program, 2003-2007



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.² As shown in Figure 3, employment in the New Mexico film and video production industry has increased by almost 2,000 people since 2003.

² 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

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

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.

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 2007.³

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

Film Production Activities	Direct	Indirect	Total
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.⁴ 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

³ 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.

⁴ 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

Capital Investment Impacts	Direct	Indirect	Total
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.⁵ 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

⁵ 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.⁶

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

⁶ 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%.

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**

Film Tourism Spending	Direct	Indirect	Total
Output (\$mil)	\$165.9	\$119.2	\$285.2
Income (\$mil)	\$69.7	\$54.3	\$124.0
Employment	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**

Total Impact	Direct	Indirect	Total
Output (\$mil)	\$533.8	\$358.1	\$891.8
Income (\$mil)	\$314.4	\$173.1	\$487.5
Employment	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)

State	Direct	Indirect	Total
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
Total State Taxes	\$16.4	\$6.1	\$22.6
Local	Direct	Indirect	Total
Property	\$3.1	\$1.3	\$4.5
Gross Receipts	2.8	1.2	4.0
Other	0.8	0.3	1.2
Total Local Taxes	\$6.8	\$2.8	\$9.6
State and Local Taxes	\$23.2	\$9.0	\$32.2

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)**

State	Direct	Indirect	Total
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
Total	\$3.2	\$2.4	\$5.6
Local	Direct	Indirect	Total
Property	\$0.6	\$0.5	\$1.2
Gross Receipts	5.1	0.5	5.6
Other	0.2	0.1	0.3
Total	\$5.9	\$1.1	\$7.0
State and Local	\$9.1	\$3.6	\$12.7

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)**

State	Direct	Indirect	Total
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
Total State Taxes	\$12.0	\$3.9	\$15.9
Local	Direct	Indirect	Total
Property	\$3.1	\$1.3	\$4.5
Gross Receipts	3.0	1.2	4.0
Other	0.8	0.3	1.4
Total Local Taxes	\$7.0	\$2.8	\$9.8
State and Local Taxes	\$18.9	\$6.7	\$25.7

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.