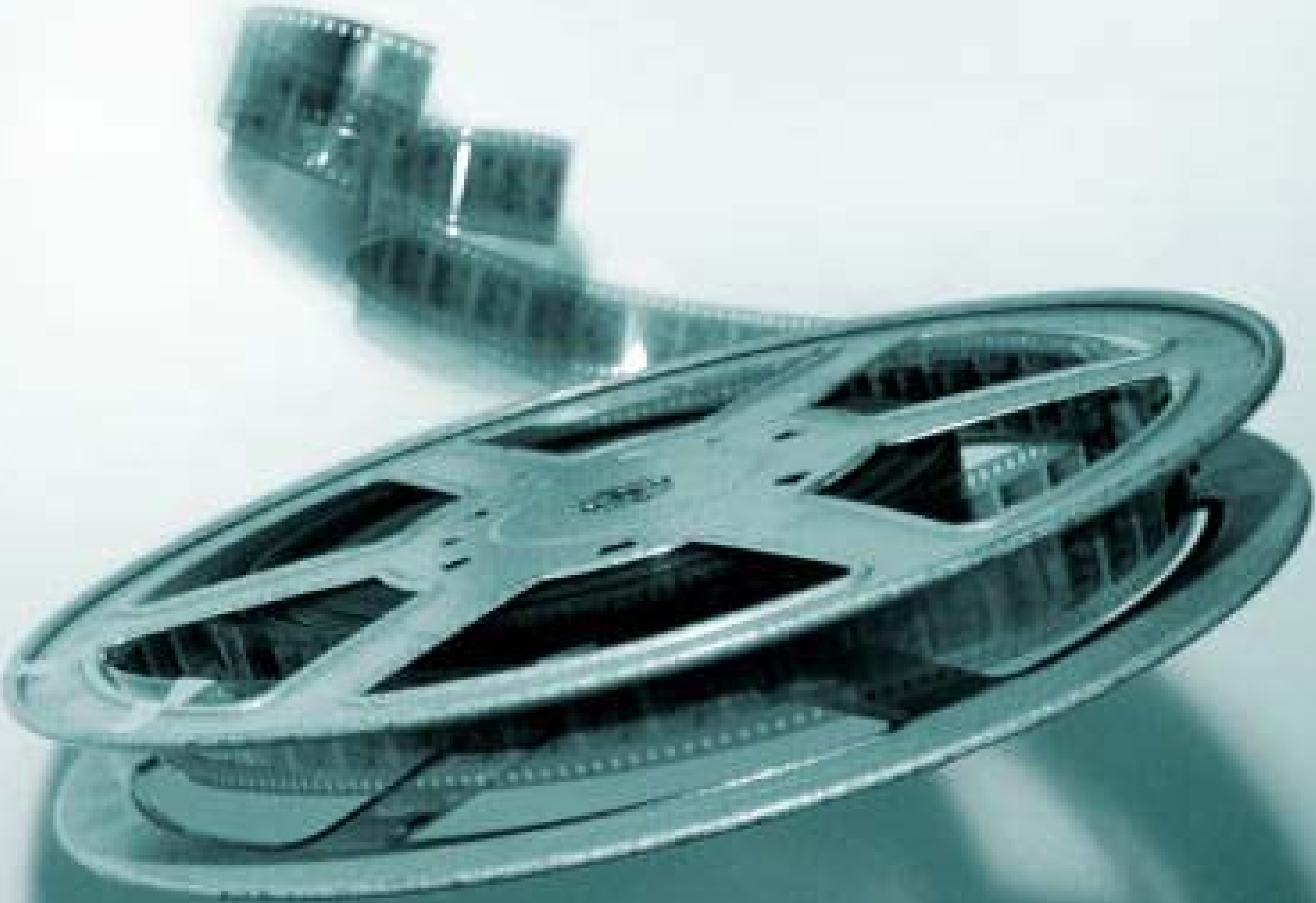


California Film and Television Tax Credit Program

An Economic Impact Study

LAEDC

Los Angeles County Economic Development Corporation

Christine Cooper, Ph.D., Gregory Freeman, Shannon Sedgwick and Myasnik "Nik" Poghosyan

This report was prepared by the Economic and Policy Analysis Group of the Los Angeles County Economic Development Corporation (LAEDC).

As the Southern California region's premier economic development organization, the mission of the LAEDC is to attract, retain and grow businesses and jobs in the regions of Los Angeles County.

The LAEDC Economic and Policy Analysis Group offers objective economic and policy research for public agencies and private firms. The Analysis Group focuses on economic impact studies, regional industry analyses, economic forecasts and issue studies, particularly in water, transportation, infrastructure and environmental policy. Projects are selected based on their relevance to the *L.A. County Strategic Plan for Economic Development* and the potential for the research to shape policy that supports the LAEDC mission.

Executive Summary

During the first two years of the program, California's Film and Television Tax Credit, enacted in 2009, has generated more than $3.8 billion in economic output and is supporting more than 20,000 jobs in California. This activity will return to state and local governments an estimated $201 million.

For every tax credit dollar approved under California's Film and Tax Credit program, at least $1.13 in tax revenue will be returned to state and local governments. This impact is based on 2 components: (i) $1.06 per tax credit dollar in initial economic impact; and (ii) 7¢ per tax credit dollar from ancillary production.

Additional impacts from film-related tourism, although not quantifiable, may be significant and would increase the return noted above.

Economic Impact of Approved Productions

A total of 110 productions have been approved under the program to date. This study estimates the impact of the first 77 productions that were approved for allocation of tax credits totaling $198.8 million. Extrapolating results from a detailed examination of nine production budgets, the total economic impact in California of these productions, including the direct, indirect and induced activity, is shown in the table below.

Total Economic Impact in California of Approved Productions (2009/10 and 2010/11)	
Direct Impact	
Production spending ($ millions)	$ 1,530.0
Qualifying expenditures ($ millions)	$ 970.3
Credit allocations ($ millions)	$ 198.8
Total Economic Impact	
Output ($ millions)	$ 3,816
Employment (jobs)	20,040
Labor income ($ millions)	$ 1,410
State and local taxes ($ millions)	$ 201

Sources: California Film Commission; Estimates by LAEDC

The productions will generate economic output of more than $3.8 billion and support 20,040 jobs with labor income of $1.41 billion. Production-related tax revenues, including income taxes, property taxes, social insurance taxes, sales taxes and permits and fees, are estimated to be $201 million.

Cost-Benefit Analysis

One way to interpret the value of the tax credit is to measure the economic impacts in terms of the current dollar value of the credits allocated. This is shown in the exhibit below.

For *each tax credit dollar* allocated:

- Total economic activity in the state will increase by $20.11
- Labor income (including to the self-employed) will increase by $7.41
- Total GDP in the state will increase by $8.48
- Initial tax revenue returned to local and state governments will be $1.06
- The highest return on state tax credits is generated by productions with large above-the-line expenditures.

Ancillary Production

Having a critical mass of production activity is essential for the industry to thrive in California. The productions qualifying for film tax credits will spend more than $1 billion (since not all such spending qualifies for credits). Each additional $100 million in follow-on production spending facilitated by the local availability of talent, supplies and services generates at least $10 million in state and local taxes, or an additional 7 cents per current dollar of tax credit allocated. The credits may attract more than $100 million in additional activity.

Film-Related Tourism

The film industry draws visitors from around the world to Southern California. These visitors add money to the state economy as they spend on accommodations, food services, entertainment centers such as Universal City and LA Live, and local tourism hotspots such as West Hollywood, Mann's Chinese Theatre and the shopping district in Beverly Hills.

None of this tourist-related "follow-on" economic activity is included in the standard economic models used to measure the impact of motion picture production, but these dollars circulate through the economy and have a significant impact on regional economic activity, generating tax revenues for state and local governments which have not been included in our estimates above.

Other Considerations

- The tax credits are an investment in keeping the industry in California, potentially reversing a loss and retaining a critical mass which will generate future tax receipts.

- Film credits for larger productions than currently allowed will generate even larger returns since tax revenues would be generated by all activity while tax credits are capped. For example, a $175 million production with a 20 percent tax credit and a $75 million cap on qualifying expenditure could return $1.78 in tax revenue per dollar of tax credit.

Introduction

In this study, the LAEDC Economic and Policy Analysis Group examines the economic implications of the California Film and Television Tax Credit program. The study proceeds as follows:

We start by providing background on the motion picture industry and the use of tax incentives to lure production away from its historic home in California.

Next, we describe the details of the California Film and Television Tax Credit program, including the number of projects, qualifying expenditures and credit allocation by production type.

We estimate the economic and fiscal impact of productions that have qualified under the program to receive tax credits. We also examine other sources of economic activity that generate taxes not captured by the traditional economic impact analysis, including entertainment-related film tourism and the benefits of a critical mass of activity in a thriving motion picture industry.

We conclude with a consideration of the economic and fiscal consequences of including two production types currently ineligible for the tax credit program: feature films with budgets in excess of $75 million, and network television series.

An explanation of the methodology, key assumptions and a description of industry sectors can be found in the Appendix.

Background

In the face of increasing competition from other states and nations looking to lure away the film industry from its historic California home, the California legislature in 2009 approved a 5-year program of $100 million in annual tax credits against sales and use taxes and income taxes on qualifying productions, adding California to the list of more than forty states in the nation to offer incentives to production companies basing their filming activities locally.

Film and television production is lucrative and mobile, making it an attractive target for tax incentives. Unlike other industries in which firms typically make location decisions based on a variety of factors, such as the availability of qualified labor and proximity to customers and suppliers, for film production these factors themselves are not always location-specific and thus cost considerations override most others.

Many film production incentive programs are designed to induce local industry infrastructure (with the investment credits for the construction of sound-stages and production facilities) to empower further development of the industry and its supply linkages in the region. For example, while filming can take place in almost any new location, film-editing, post-production work, sound recording, captions and other specializes services and their qualified workers are often not available locally; thus this work is returned to areas where the industry is already established. However, as the local industry grows and a cluster of related and supporting industries develops, these activities will be increasingly provided locally.

Since 2000, the incentives offered by other states have led to the development of film production industry clusters elsewhere, threatening the loss of jobs from California which has been the heart of this activity in the nation. Exhibit 1-1 shows the importance of motion picture and sound industries in California as compared to the nation as a whole. We include data for *independent artists, writers and performers*, an industry which is essentially freelancers, since this industry includes a large swath of the upper income workers in the motion picture industry. All employment data includes the self-employed and freelance workers. The data is shown for 2009, the latest year for which such data is available.

Although employment in California accounts for less than 12 percent of national employment and approximately 13 percent in all labor income, almost 39 percent of national employment in motion picture and video industries occurs in California, and 60 percent of all labor income in the industry is earned in California. The proportion of freelance workers (independent artists, writers and performers) in California and their income is similar, with almost 62 percent of all national labor income in this sector earned in California.

Exhibit 1-1
Economic Activity in the Motion Picture Industry – California and the US
(2009)

	US	CA	CA as % of US
Employment (jobs):			
Total (all industries)	172,400,750	19,856,986	11.5
Motion picture and video industries	411,368	159,291	38.7
Independent artists, writers and performers	191,975	69,129	36.0
Output ($ billions):			
Total (all industries)	$ 25,361.7	$ 3,223.3	12.7
Motion picture and video industries	82.0	48.5	59.2
Independent artists, writers and performers	24.2	14.3	59.0
Labor Income ($ billions):			
Total (all industries)	$ 8,825.0	$ 1,159.9	13.1
Motion picture and video industries	25.8	15.5	60.2
Independent artists, writers and performers	12.5	7.7	61.9

Source: Estimates by LAEDC

California's rich history in film making has allowed the development of a deep pool of talented workers in the variety of occupations needed to produce a motion picture or television series. This makes it possible for the industry to find suppliers for almost all its needs within the state, keeping this economic activity here. Almost 92 percent of all the goods and services purchased by the industry are sourced within the state. The values of these purchases in 2009 by industry are shown in Exhibit 1-2 on the following page.

The industry purchased $6.4 billion in goods and services from other firms within its own industry; it purchased $1.7 billion in advertising services and paid $1.5 billion in rent or real estate services. In aggregate, the industry spent $15.4 billion on goods and services in California in 2009 from a wide variety of industries.

Exhibit 1-2
Purchases of Goods and Services in California by the Motion Picture Industry in 2009 ($ millions)

Motion picture and video services	$ 6,368
Advertising and related services	1,685
Real estate buying, selling, leasing	1,534
Independent artists, writers and performers	729
Management, scientific and technical consulting services	440
Employment services	349
Software and video media, mass reproduction services	336
Telecommunications	300
Legal services	299
Accounting, tax preparation and payroll services	206
Automotive equipment rental and leasing	194
Management	183
Insurance	181
Miscellaneous professional services	164
Office administrative services	159
Services to buildings	156
Banking services	138
Truck transportation	138
All others	1,884
Total ($ millions)	$ 15,442

Source: Estimates by LAEDC

On the flip side, the *loss* of filming activity over time threatens the stability of the industry in California as other locations invest in and develop their own infrastructure and local talent pools and eliminate the need for any work to occur in California. The gradual shrinking of the industry in California, if it continues, would reduce it to a smaller component of the economic base of the state, and could siphon away many related industries and activities that have depended on the purchases of the motion picture and television production industry.

California once accounted for more than half of all motion picture production in the United States but production has shifted elsewhere in recent years, particularly in response to tax incentive programs. Competition comes not only from other states but increasingly from other nations. The development of excellent production and post-production facilities in Canada, Australia, New Zealand, the United Kingdom and Germany is enabling a shift of work that was once done almost exclusively in California. All of these nations have attractive incentive programs. While relocation of production to London or Auckland may be more costly than filming in Albuquerque, tax credits combined with favorable exchange rates can make the move cost-effective, in particular for large budget productions that involve the construction of complex sets and filming for twelve months or longer. Such blockbuster productions are taking advantage of generous tax incentives to establish facilities and production houses overseas, reducing or even eliminating the need to return to California.

The California Film and Television Tax Credit Program

The California tax incentive program allows qualified taxpayers to take a credit against income or sales and use taxes based on qualified expenditures.

The amount of the tax credit varies between 20 and 25 percent based on the type of production. Feature films with production budgets between $1 million and $75 million qualify for a 20 percent non-transferable tax credit. Such credit is also available for mini-series and made-for-television movies with a minimum production budget of $500,000 and new television series licensed for original distribution on basic cable (half-hour shows and other types of television programming are excluded). Qualified motion pictures must spend at least 75 percent of their production days or total production budget in CA.

In an effort to attract business, the program allows for a 25 percent tax credit for television series that had been previously filmed outside of California (regardless of episode length), and for independent films with budgets of between $1 million and $10 million, where the definition of an "independent production" is one that is produced by a company that is not publicly-traded and of which publicly-traded companies do not own more than 25 percent. The program allocates a minimum of $10 million of the annual funding for independent productions.

Qualifying expenditures are the portion of production expenditures that qualify for a tax credit allocation. These costs must be incurred in California, and can include: crew and staff salaries, wages, and fringes; cost of rental of facilities and equipment; production operations costs such as construction, wardrobe, food and lodging; and post-production activities. Costs that do not qualify for tax credits include: salaries for performers, directors, producers and writers; licensing fees; and distribution expenses.

Initial Allocation

All funds for the 2009/10 and 2010/11 fiscal years have been allocated. Tax credit applications have been approved for 77 productions with total qualifying expenditures of $970 million, approximately half of which is in the form of wages and benefits. The production types, qualifying expenditures and credit allocations by type are shown in Exhibit 2-1.

Exhibit 2-1
Credit Applications Approved by Production Type
(2009/10 and 2010/11)

Production Type	Number of Projects	Qualifying Expenditures (millions)	Credit Allocation (millions)	% of Total
Feature film	34	$ 758.7	$ 152.0	76.5
Movie-of-the-week (MOW)	3	21.9	4.5	2.2
New television series	6	96.9	19.4	9.7
Relocated television series	1	5.4	1.3	0.7
Independent feature films	22	67.8	16.7	8.4
Independent MOW	11	19.7	4.9	2.5
Total	77	$ 970.3	$ 198.8	100.0

Source: California Film Commission

Thirty-four of the approved projects are feature films and have been allocated more than three-quarters of the credits. Independent feature films and movies-of-the-week, generally smaller-budget productions, total thirty-three projects, with just over 10 percent of the credit allocations.

Regardless of production type, the slate of approved projects range in budgets and qualifying expenditures, as shown in Exhibit 2-2.

Exhibit 2-2
Credit Applications Approved by Budget Range
(2009/10 and 2010/11)

Qualifying Expenditures	Number of Projects	Total Credit Allocation (millions)	% of Total
$0 to $2 million	21	$ 7.1	3.6
$2 million to $5 million	12	9.2	4.6
$5 million to $10 million	11	18.3	9.2
$10 million to $20 million	14	41.2	20.7
$20 million to $40 million	15	84.7	42.6
Over $40 million	4	38.2	19.2
Total	77	$ 198.8	100.0

Source: California Film Commission

While 21 of the 77 projects have qualifying expenditures of less than $2 million, these projects garnered only 3.6 percent of the credit allocations. Since credits are allocated according to the qualifying expenditures, higher levels of expenditures will be allocated commensurately larger credits.

Economic Impact Estimates

We expect the impacts in California to be large for several reasons. First, the economy of California is large and diversified, allowing households and businesses to obtain most of the goods and services they need within the state, meaning there is less leakage of purchases out of the state and the dollars circulate within the state.

Second, the motion picture and video industry itself is complex and comprehensive in California. Because the supply linkages are well-established, the industry can find all production facilities and requirements within the state, although lower costs elsewhere can impel the purchase of goods and services from outside of California.

Third, the California tax incentives are less generous than those offered in other states – in some cases, substantially less. With a deep talent base and skilled workers at all levels and stages of production, and a full range of supporting infrastructure and companies, California does not need to offer incentives above those (or even equal to those) offered by other states. Instead, smaller incentives that keep California "in the game" can be sufficient, as suggested by the response to the current program.

Fourth, California's steeply progressive income tax gives the state the ability to recoup its tax credit quickly. Similarly, California's high sales tax rate will generate more revenue from taxes on household purchases than states with lower sales taxes.

We reviewed the detailed production budgets for nine productions, which included a small budget independent movie-of-the-week, a new television series, and small-, medium- and larger-budget feature films. The production budgets ranged from $2.5 million to $75 million, with total production spending of $336.0 million and qualifying expenditures of $215 million.

The nine productions have been allocated $43.4 million in tax credits, accounting for approximately 22 percent of the credits allocated for the first two years of the program. Because the tax credits will not be realized until 2012, we discount their value by the estimated expected rate of inflation from 2010 to 2012, as more fully described in the Appendix. The current value of these allocations is $41.4 million.

The total economic impact in California of the nine selected productions in California, including the direct, indirect and induced activity, is shown in the exhibit on the following page.

Exhibit 3-1 Total Economic Impact in California of Selected Productions	
Direct Impact	
Production budgets ($ millions)	$ 336.0
Qualifying expenditures ($ millions)	$ 215.3
Credit allocations ($ millions)	$ 43.4
Current value of credit allocations ($ millions)	$ 41.4
Total Economic Impact	
Output ($ millions)	$ 847
Employment (jobs)	4,440
Labor income ($ millions)	$ 312
Total Fiscal Impact	
Income taxes	$ 16.6
Sales taxes	9.4
Property taxes	7.6
Social insurance taxes	5.4
Fees, fines and other taxes	5.7
Total state and local taxes ($ millions)	$ 44.6

Sources: Selected production budgets; LAEDC

These productions will generate $847 million in economic activity in California and support 4,440 jobs with labor income of $312 million. Total state and local tax revenues are estimated to reach $44.6 million.

After adjusting for the temporal mismatch between the spending and the tax credit realization, the per current dollar of tax credit, the total state and local tax impact for this sample of productions per current dollar of tax credit is $1.08.

A close inspection of the production budgets and impact results shows that *the overriding factor influencing this rate of return is the proportion of the budget that is spent above-the-line.* Above-the-line spending generates economic activity but does not qualify for consideration under the tax credit program, so in essence this spending comes at no cost to the state. For our sample, the correlation between the percentage of the budget above-the-line and return per dollar of tax credit is 0.877, which implies a strong positive relationship between the percentage of the production budget spent above-the-line and the rate of return.

Under the current program, the size of the budget by itself does not indicate the likely return to the state. Larger productions are not necessarily more efficient in terms of return on tax credits than smaller productions. The correlation between overall budget and return per dollar of tax credit in the sample is only 0.439, which implies that there is only a very weak relationship between the absolute size of the budget and its rate of return.

Economic Impact of All Approved Productions

To extend these results to the entire slate of productions that qualified for the tax credit program, we extrapolated based on the value of the qualifying expenditures of each production. To enable this extrapolation, we first expressed the impacts we found above per million dollars of qualifying expenditures.

Exhibit 3-2 Total Economic Impact in California of Selected Productions (Per $1 million of Qualifying Expenditures)	
Output ($ millions)	$ 3.93
Employment (jobs)	21
Labor income ($ millions)	$ 1.45
State and local taxes ($ millions)	$ 0.21

Sources: Selected production budgets; LAEDC

For every $1 million in qualifying expenditures, the nine productions will generate $3.9 million in economic output and support 21 jobs with labor income of $1.4 million. Each $1 million of qualifying expenditures will result in $207,100 in state and local taxes.

Using these values, we estimate the total economic impact in California of all productions that have been allocated tax credits, including the direct, indirect and induced activity.

Exhibit 3-3 Total Economic Impact in California of Approved Productions (2009/10 and 2010/11)	
Direct Impact	
Qualifying expenditures ($ millions)	$ 970.3
Credit allocations ($ millions)	$ 198.8
Current value of credit allocations ($ millions)	$ 189.8
Total Economic Impact	
Output ($ millions)	$ 3,816
Employment (jobs)	20,040
Labor income ($ millions)	$ 1,410
Total Fiscal Impact	
Income taxes	$ 74.8
Sales taxes	42.2
Property taxes	34.1
Social insurance taxes	24.3
Fees, fines and other taxes	25.6
Total state and local taxes ($ millions)	$ 200.9

Sources: California Film Commission; LAEDC

The total qualifying expenditures for all 77 productions is $970.3 million. Extrapolating from the results of our sample of productions, we estimate that the full slate of qualifying productions will generate more than $3.8 billion in economic output in California and support 20,040 jobs with labor income of almost $1.4 billion. Total state and local tax revenues are estimated to reach $201 million.

In our sample of nine productions, we found that the return per tax credit dollar (in current terms) was $1.08, but for the entire set of qualifying production, the return is just over $1.06. This is a consequence of the larger representation of productions qualifying for a higher tax credit (25 percent rather than 20 percent of qualifying expenditures) in the overall slate. As a result, the tax credit per dollar of qualifying expenditures is marginally higher than in the small sample, reducing the overall rate of return.

Industry Sector Impacts

The economic impact spills across industries in California through indirect and induced effects. A list of the sectors most impacted (ranked by employment) is shown in Exhibit 3-4. The values in the exhibit should be interpreted as illustrative of industry effects rather than precise given model and data limitations.

Exhibit 3-4
Economic Impact of Approved Productions by Industry Sector

Industry	Output ($ millions)	Jobs	Labor income ($ millions)
Information	$ 1,656.4	5,964	$ 559.2
Arts, entertainment and recreation	600.0	3,899	328.1
Retail trade	130.4	1,455	53.0
Real estate and rental	380.3	1,214	53.2
Health care and social assistance	121.1	1,159	67.9
Administrative and waste management	70.8	1,077	38.6
Accommodation and food services	66.6	1,038	24.7
Professional, scientific and technical	147.5	937	72.9
Other services	63.8	851	26.2
Finance and insurance	171.6	660	59.9
All others	408.1	1,785	122.9
Total *	$ 3,816	20,040	$ 1,410

* May not sum due to rounding
Source: LAEDC

Most of the impacts will occur in the information sector, which includes the motion picture and video industries, and in the arts, entertainment and recreation sector, which includes independent artists, writers and performers. However, retail trade, rental and leasing services, health care and accommodation and food services all reap substantial employment from the spending by film and television production. A description of these industries is provided in the Appendix.

Discussion

One way to interpret the value of the tax credit is to measure the economic impacts in terms of the current dollar value of the credits allocated. This is shown in the exhibit below.

Exhibit 3-5
Impact Ratios

Economic output per dollar tax credit	$ 20.11
Labor income per dollar tax credit	7.41
GDP per dollar tax credits	8.48
State and local tax revenue per dollar tax credit	1.06

Source: LAEDC

These ratios are interpreted as follows:

- For *each tax credit dollar* allocated:
  - Total economic activity in the state will increase by $20.11
  - Labor income (including to the self-employed) will increase by $7.41
  - Total GDP in the state will increase by $8.48

- For every tax credit dollar given, $1.06 will be returned to local and state governments in initial tax revenue.

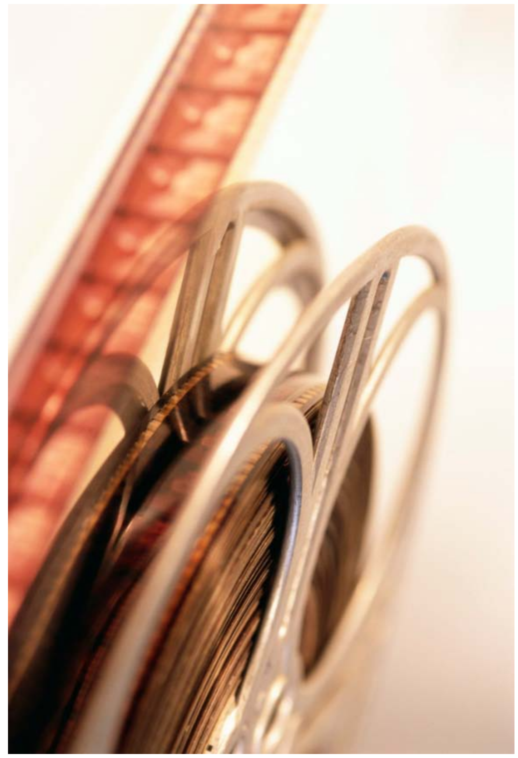
- The highest return on state tax credits is generated by productions with large above-the-line expenditures which do not qualify for tax credits.

- The dollar value of the tax credits allocated has been discounted to reflect the inter-temporal mismatch between the spending generated by the productions and the tax credit realization, as described more fully in the Appendix.

- Our estimates are based on *proposed* budgets. Actual credits allocated are based on actual production spending, which may differ from the proposed budgets. Some spending which was anticipated to be considered as qualifying has in practice been rejected and therefore results in a smaller tax credit than originally allocated. To the extent that the actual spending is consistent with the proposed budget while the tax credit is smaller, the return per dollar will be a few cents higher.

Other Impacts Due to Tax Incentive Program

Film Tourism



Tourism is a major economic engine for many states, California included. In 2009, the Tourism and Hospitality industry cluster in California supported almost 12,000 establishments and 320,000 jobs with over $9.9 billion in labor income. Revenues in the accommodation industry alone reached $18.1 billion. An additional $11.4 billion was earned in amusement parks and gambling industries, and almost $3.7 billion was earned by travel agents and tour operators.

The draw of the entertainment industry is most visible in Southern California, where visitors from around the world flock to Hollywood film locations, the Walk of Fame, and celebrity homes. They attend Hollywood premieres hoping to catch a glimpse of famous stars, and trace the footsteps of some of their favorite character actors, sometimes, as in the popular series *Entourage*, as these characters themselves discover Los Angeles.

These visitors add money to the state economy in the form of spending on accommodations, food services, entertainment centers such as Universal City Walk and LA Live, and local tourism hotspots such as West Hollywood, Mann's Chinese Theatre and the exclusive shopping district in Beverly Hills.

Of course, not all entertainment-related tourism is attributable to productions that qualified for tax credits. Tourists are drawn by a combination of historical activity (the legacy of past productions, former stars and monuments), related attractions such as theme parks, and current activity (ongoing productions, premiers, and the presence of the glitterati). In some cases, however, a single film can have exceptional drawing power because of identifiable landmarks and locations featured in the film, such as the movie *Sideways* showcasing the wineries of Santa Barbara County.

None of this tourist-related "follow-on" economic activity is included in the standard economic models used to measure the impact of motion picture production, but these dollars circulate through the economy and have a significant impact on regional economic activity, generating tax revenues for state and local governments which have not been included in our estimates above.

Critical Mass and a Thriving Industry

The current availability of talent, supplies and services tends to facilitate *additional* production activity. In our analysis, we have estimated the contribution of only those productions that have qualified for the current tax credit allocation. But discussions with people in the industry suggest that location sometimes matters for subsequent work. Producers involved in a project at a particular location may add additional unrelated production activity in the same area because of the availability of talent and co-workers or because of scheduling coordination. For example, a director may insist on filming in Los Angeles if he and his key collaborators are already in the area finishing work on a project that was allocated tax credits. This follow-on activity contributes additional economic activity which has not been captured here.

Without individual survey data, this additional activity is difficult to quantify. However, based on our findings above we can broadly estimate the economic activity generated by each $100 million in additional production activity. This is shown in Exhibit 4-1.

Exhibit 4-1 Total Economic Impact in California of Production Spending	
Direct Impact	
Production spending ($ millions)	$ 100.0
Total Economic Impact	
Output ($ millions)	$ 243
Employment (jobs)	1,270
Labor income ($ millions)	$ 89
State and local taxes ($ millions)	$ 13

Sources: Selected production budgets; LAEDC

We estimate that based on the total production spending of projects qualifying for the tax credit program, revenues would be over $1.5 billion. An incremental $100 million in production spending would thus represent an increase of approximately 6.5 percent of the work that has been allocated tax credits and less than ½ of one percent of all production activity in California. If production in California that is motivated by the tax credit program facilitates an additional $100 million in production spending on follow-on projects, this additional activity will generate 7 cents per current dollar of tax credit allocated. We believe the effect could reasonably be higher.

Other Considerations

Potential of Big-Budget Productions

The current tax credit program is limited to productions with budgets under $75 million. This is a policy which encourages larger budget productions to seek locations where tax incentives are not constrained by budget.

Larger productions, however, have commensurately larger impacts. If the program instead were to allow credits to a certain limit to be applied to productions of any size, this may encourage some productions to stay in California. The state would collect tax revenues *on all activity* associated with the production but would be liable only for tax credits up to the specified limit.

To quantify this idea, we reviewed a detailed budget for a feature film production that exceeds the limits set for the California tax incentive. The total production budget is $175 million, of which approximately 51 percent is below-the-line expenditures. Using the same methodology as above, we estimate the economic impact and impact ratios of this production.

Exhibit 5-1 Total Economic Impact in California of Big-Budget Production	
Direct Impact	
Production budget ($ millions)	$ 175.0
Total Economic Impact	
Output ($ millions)	$ 471
Employment (jobs)	2,400
Labor income ($ millions)	$ 168
State and local taxes ($ millions)	$ 27

Sources: Production budget; LAEDC

We assume that the film will be allocated a tax credit of 20 percent of qualifying expenditures up to some amount but not to exceed $75 million. Exhibit 5-2 presents the impact ratios for this production assuming a 20 percent tax credit with a $75 million cap on qualifying expenditures.

Exhibit 5-2 Impact Ratios of Big-Budget ($175 million) Production With 20% Tax Credit on $75 million Qualifying Expenditures	
Estimated tax credit ($ millions)	$ 15.00
Economic output per dollar tax credit	31.4
Labor income per dollar tax credit	11.23
GDP per dollar tax credit	10.67
Tax revenue per dollar tax credit	1.78

Source: LAEDC

Thus for a production budget of $175 million, if a 20 percent tax credit were allocated on qualifying expenditures up to $75 million, the state will pay $15 million in tax credits but state and local governments will receive $26.7 million in tax revenue. In other words, $1.78 in taxes would be generated for each dollar of tax credit allocated. Note that this is almost 80 percent higher than the tax recovery ratio estimated for the approved projects under the current tax incentive program. Moreover, this estimate does not include potential tax revenue from film tourism, or the contributions to a thriving industry, discussed above, nor does it account for any potential delay in realizing the tax credits and their consequent discounted value.

Network Productions

Another category of production that is not currently eligible for the tax credit program is the network television series. Although new television series qualify for tax credits, the policy to exclude ongoing network television series is shortsighted. Many of these series can be long-running, meaning that local spending will persist, supporting the local ancillary businesses.

To illustrate, we reviewed two detailed budgets for network television series that currently do not qualify for tax credits, one of which is 12 episodes in length, the second is 22 episodes. The total production budget for the 12-episode series is $35.2 million, of which approximately 64 percent ($22.5 million) is below-the-line expenditures, compared to $61.0 million and 65.1 percent for the 22-episode series.

We assume that each series would be allocated a tax credit of 20 percent of qualifying expenditures, which we further assume are all below-the-line expenditures. While these budgets are similar to the budget of a new series that was in our sample of productions, the below-the-line expenditures in these productions are somewhat more heavily weighted towards the purchase of goods and services and less towards labor costs.

Using the same methodology as above, we estimate the economic impact and impact ratios of these productions, shown in Exhibit 5-3.

Exhibit 5-3 Total Economic Impact in California of Representative Network TV Series		
	12-Episode Series	22-Episode Series
Production budget ($ millions)	$ 35.2	$ 61.0
% of production budget BTL	64.0	65.1
Total Economic Impact		
Output ($ millions)	$ 89.9	$ 156.8
Employment (jobs)	480	840
Labor income ($ millions)	$ 32.8	$ 57.2
State and local taxes ($ millions)	$ 5.1	$ 8.4

Sources: Production budget; LAEDC

Exhibit 5-4 presents the impact ratios for these network series.

Exhibit 5-4 Impact Ratios of Network Television Series With 20% Tax Credit on $22.5 million Qualifying Expenditures		
	12-Episode Series	22-Episode Series
Estimated tax credit ($ millions)	$ 4.50	$ 7.94
Economic output per dollar tax credit	19.97	19.75
Labor income per dollar tax credit	7.29	7.21
GDP per dollar tax credit	7.89	7.80
Tax revenue per dollar tax credit	1.05	1.05

Source: LAEDC

Again, these estimates do not include potential tax revenue from film tourism, or the contributions of a thriving industry, as discussed above, nor do they account for the potential delay in receiving the tax credits.

If these budgets are representative of network television series, they would appear to be capable of returning tax revenues above their tax credit allocation.

Appendix

Methodology

Detailed budget data is highly confidential, and complete budget information for all projects that received credit allocations is not available. We were able to review a sample of nine complete, detailed budgets for productions that qualified for the tax credit program, and we use these to extrapolate our estimates to the entire set of 77 productions that have been approved.

To protect the confidentiality of this proprietary data, we report the results of our analysis in the aggregate; however, we believe the sample of nine is fairly representative of the total roster of productions that have qualified since it includes feature films of varying budgets, a new television series, and an independent movie-of-the-week with a typical budget pattern.

To estimate the economic impact of our selected productions, we proceeded in two steps: First, for each budget, we isolated the below-the-line spending and allocated expenditures by industry, such as, for example, motion picture and video production, sound recording, construction services, electricity, retail purchases, car rentals, warehousing and storage, telecommunications, advertising, photographic services, guard services, waste management, dry cleaning and laundry, and government permits. We excluded any spending that would not occur in the state of California since such spending will not have an economic impact here.

Second, we estimated the economic impact of the above-the-line expenditures, since, although these do not qualify for tax credits, they represent significant spending which will generate economic activity in the state.

Our estimates are based on a 440-sector economic input-output model developed using software and data from the Minnesota IMPLAN Group, which traces inter-industry transactions resulting from an increase in demand in a given region. The total estimated economic impact includes direct, indirect and induced effects. *Direct activity* includes the materials purchased and the employees hired by the production companies. *Indirect effects* are those which stem from the employment and business revenues motivated by the purchases made by the production companies and any contractors. *Induced effects* are those generated by the spending of employees whose wages are sustained by both direct and indirect spending.

Our estimates for labor income and output are expressed in current (2010) dollars. Labor income includes payments made to wage and salary workers and to the self-employed. Employment estimates are measured on a job-count basis for both wage and salary workers and proprietors regardless of the number of hours worked.

Assumptions

Most studies examining the economic impact of filming and motion picture production examine the new spending that has entered the geographic region. The intention of most states' incentives programs is to *attract* a new industry, thus the focus of new spending is appropriate. As a proxy for new spending, many analysts use the spending of those productions that have qualified for tax incentives, as presumably these productions would not have taken place in the absence of the tax incentives.

Although California's incentive program is intended to *retain* the industry, we adopt this assumption. The flight of productions to other states and nations in response to competing incentives give credibility to the assertion that the cost reductions made possible by California's tax credit are responsible for keeping these productions here.

While in general below-the-line wages and local purchases are those that qualify for the purposes of the tax credits, we also consider the amount of above-the-line wages and purchases. These are important because the spending patterns of higher income earners are quite different from the spending patterns of median income households. From discussions with industry participants, we assume that above-the-line workers (talent, writers and directors) are paid as independent artists, writers and performers under such corporate entities as "loan-out" corporations, and that 5 percent of these payments are sent out of state. We assume that all below-the-line workers are California residents.

Our estimates do not include income taxes paid by producers or talent who earn a share of the profits of the films or series once they are released.

We do not take into account the tax revenue that might be generated from income taxes on the sales of tax credits to other persons or corporations. While such sale may generate tax liability, it is equally likely that the sale can be offset by costs.

There exists an inter-temporal mismatch between the spending generated by the productions and the tax credit realization. The tax credits are allocated but not awarded until the production is complete and the budgets audited; they are not realized until tax returns are filed. Therefore, these allowances will reduce future tax revenues to the state, while the spending (and revenues received by the state) will occur as production is underway. Although the indirect and induced impacts of the spending will occur over time, the tax credit realization will occur even further into the future. To account for this differential, we discount the value of the tax credits by 4.5 percent, the expected inflation from late-2010, when most of the spending occurred, to mid-2012, when the tax returns are filed and the credits realized. This discount was calculated using the Federal Reserve Bank of New York's five year, five-year forward break-even rate estimate from April 2011. For ancillary production, which is assumed to lag the associated film production, we discount the value of the applicable tax credit by 3.0 percent, allowing for an additional six-month lag in spending. *No discount was applied in our estimates of network productions or large-budget productions.*

Description of Industry Sectors

The industry sectors used in this report are established by the North American Industry Classification System (NAICS). NAICS divides the economy into twenty sectors, and groups industries within these sectors according to production criteria. Listed below is a short description of each sector as taken from the sourcebook, *North American Industry Classification System,* published by the U.S. Office of Management and Budget (2007).

Agriculture, Forestry, Fishing and Hunting: Activities of this sector are growing crops, raising animals, harvesting timber, and harvesting fish and other animals from farms, ranches, or the animals' natural habitats.

Mining: Activities of this sector are extracting naturally-occurring mineral solids, such as coal and ore; liquid minerals, such as crude petroleum; and gases, such as natural gas; and beneficiating (e.g., crushing, screening, washing and flotation) and other preparation at the mine site, or as part of mining activity.

Utilities: Activities of this sector are generating, transmitting, and/or distributing electricity, gas, steam, and water and removing sewage through a permanent infrastructure of lines, mains, and pipes.

Construction: Activities of this sector are erecting buildings and other structures (including additions); heavy construction other than buildings; and alterations, reconstruction, installation, and maintenance and repairs.

Manufacturing: Activities of this sector are the mechanical, physical, or chemical transformation of material, substances, or components into new products.

Wholesale Trade: Activities of this sector are selling or arranging for the purchase or sale of goods for resale; capital or durable non-consumer goods; and raw and intermediate materials and supplies used in production, and providing services incidental to the sale of the merchandise.

Retail Trade: Activities of this sector are retailing merchandise generally in small quantities to the general public and providing services incidental to the sale of the merchandise.

Transportation and Warehousing: Activities of this sector are providing transportation of passengers and cargo, warehousing and storing goods, scenic and sightseeing transportation, and supporting these activities.

Information: Activities of this sector are distributing information and cultural products, providing the means to transmit or distribute these products as data or communications, and processing data.

Finance and Insurance: Activities of this sector involve the creation, liquidation, or change of ownership of financial assets (financial transactions) and/or facilitating financial transactions.

Real Estate and Rental and Leasing: Activities of this sector are renting, leasing, or otherwise allowing the use of tangible or intangible assets (except copyrighted works), and providing related services.

Professional, Scientific, and Technical Services: Activities of this sector are performing professional, scientific, and technical services for the operations of other organizations.

Management of Companies and Enterprises: Activities of this sector are the holding of securities of companies and enterprises, for the purpose of owning controlling interest or influencing their management decision, or administering, overseeing, and managing other establishments of the same company or enterprise and normally undertaking the strategic or organizational planning and decision-making of the company or enterprise.

Administrative and Support and Waste Management and Remediation Services: Activities of this sector are performing routine support activities for the day-to-day operations of other organizations, such as: office administration, hiring and placing of personnel, document preparation and similar clerical services, solicitation, collection, security and surveillance services, cleaning, and waste disposal services.

Educational Services: Activities of this sector are providing instruction and training in a wide variety of subjects. Educational services are usually delivered by teachers or instructors that explain, tell, demonstrate, supervise, and direct learning. Instruction is imparted in diverse settings, such as educational institutions, the workplace, or the home through correspondence, television, or other means.

Health Care and Social Assistance: Activities of this sector are operating or providing health care and social assistance for individuals.

Arts, Entertainment and Recreation: Activities of this sector are operating facilities or providing services to meet varied cultural, entertainment, and recreational interests of their patrons, such as: (1) producing, promoting, or participating in live performances, events, or exhibits intended for public viewing; (2) preserving and exhibiting objects and sites of historical, cultural, or educational interest; and (3) operating facilities or providing services that enable patrons to participate in recreational activities or pursue amusement, hobby, and leisure-time interests.

Accommodation and Food Services: Activities of this sector are providing customers with lodging and/or preparing meals, snacks, and beverages for immediate consumption.

Other Services (except Public Administration): Activities of this sector are providing services not specifically provided for elsewhere in the classification system. Establishments in this sector are primarily engaged in activities, such as equipment and machinery repairing, promoting or administering religious activities, grant-making, advocacy, and providing dry-cleaning and laundry services, personal care services, death care services, pet care services, photofinishing services, temporary parking services, and dating services.

Los Angeles County Economic Development Corporation
444 S. Flower Street, 34th Floor
Los Angeles, CA 90071
(888) 4-LAEDC-1
www.LAEDC.org