



California Film and Television Tax Credit Program 2.0

An Economic Impact Study



Los Angeles County Economic Development Corporation

CALIFORNIA FILM AND TELEVISION TAX CREDIT PROGRAM 2.0

AN ECONOMIC IMPACT STUDY

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This report was prepared by the Institute for Applied Economics of the Los Angeles County Economic Development Corporation (LAEDC) for the Motion Picture Association.

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 Institute for Applied Economics 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 workforce development and foreign direct investment.

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EXECUTIVE SUMMARY

The California Film and Television Tax Credit 2.0, enacted in July 2015 and sunseting June 2020, has contributed almost **\$21.9 billion in economic output** over five years, supporting more than **110,000 total jobs** (includes direct, indirect, and induced) in California. This increase in economic activity has returned to state and local governments an estimated **\$961.5 million in tax revenue**.

For every tax credit dollar approved under California’s Film and Tax Credit program, at least \$24.40 in output, \$16.14 in gross domestic product (GDP), \$8.60 in wages, and \$1.07 in initial state and local tax revenue will result from production in the state of California.

Economic Impact of Approved Productions

As of February 26, 2020, a total of 169 productions were allocated tax credits under the California Film and Television Tax Credit Program 2.0. This study estimates the economic impact of those productions, which collectively were approved for tax credits totaling \$915 million.

The productions contained in the data provided to the LAEDC by the California Film Commission are estimated to have generated total economic output (direct, indirect, and induced) of almost \$21.9 billion and supported 110,300 jobs with labor income of \$7.7 billion as a result of tax credits. Production-related state and local tax revenues, including income taxes, property taxes, social insurance taxes, sales taxes, and permits and fees, are estimated at \$961.5 million (Exhibit ES-1).

Exhibit ES-1

**Approved Film and Television Tax Credit Program 2.0 Productions
Total Economic Impact in California
(FY 2015-16 through FY 2019-20)**

Direct Impacts

Production Spending	\$ 7,371,163,518
Qualifying expenditures	\$ 4,769,351,973
Credit allocations	\$ 914,951,573

Total Economic Impact

Output	\$ 21,863,795,000
Employment	110,300
Labor income	\$ 7,734,177,000
State and local taxes	\$ 961,508,000

Source: California Film Commission; Estimates by LAEDC

Cost-Benefit Analysis

One way to interpret the value of the tax credit is to measure the economic impacts resulting from one dollar of tax credit allocated.

For *each tax credit dollar* allocated:

- Total economic activity in the state will increase by \$24.40
- Labor income (including to the self-employed) will increase by \$8.60
- Total GDP in the state will increase by \$16.14

- Initial tax revenue returned to local and state governments will be \$1.07

Film-Related Tourism

The film industry draws visitors from around the world to Southern California in addition to famous locations all over the state used as filming locations. 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, TCL Chinese Theatre, and shopping districts in Beverly Hills, Santa Monica, and Mid-City.

This tourist-related “follow-on” economic activity is not included in the standard economic models used (including in this Report) to measure the impact of motion picture production. However, these dollars circulate through the economy and have a significant impact on regional economic activity, generating tax revenues for state and local governments.

Other Considerations

- The tax credits are an investment in keeping the film and TV industry in California, potentially reversing a loss and retaining a critical mass that will generate future tax receipts.
- This study demonstrates that most significant economic and fiscal returns come from feature films, new TV series, and recurring TV series. Collectively, these three types of production accounted for 77 percent of estimated additional total output, 75 percent of estimated additional total employment, and 77 percent of total new tax revenues. It must be noted that relocating TV series become recurring TV series in subsequent years for purposes of allocating tax credits and, accordingly, contribute significantly to the recurring TV series category in subsequent years.



Economic Impact of Lost Productions

From 2015 to 2020, 157 out of 312 projects (50%) that applied for but did not receive a California tax credit left California for another state.¹ If these productions had stayed in the state, California would have reaped the economic benefits. Instead, the loss of this spending in California cost the state:

- \$7.7 billion in generated economic activity
- 28,000 total jobs
- labor income of approximately \$2.6 billion
- state and local tax revenues which would have totaled \$354.4 million

Recommendations

From the research conducted for this report and its key findings, a set of recommendations has been identified to continue to support California's iconic film and television production industry, helping to prevent further runaway production to other jurisdictions with more attractive credit programs and helping to ensure continued growth of the industry, its workforce, its infrastructure, and the clustering effect of the industry that helps generate additional activity across the varying supporting industries.

- Consider increasing the annual allocation of tax credits to avoid future shortfalls.
- Consider extending the period of the program, making it a longer-lasting tax credit incentive program to encourage additional investment in infrastructure.
- Consider addressing California's lack of a standalone video effects (VFX) tax credit to prevent the further loss of this growing part of the industry.
- Consider making California's tax credit certificates refundable or transferable similar to other states' programs to attract productions with larger job numbers. Consider setting a cap on the amount of tax credits to be refunded or transferred in any one year.
- Consider expanding the tax credits available in the new California Sound Stage Filming Tax Credit Program (SB144) to ensure California continues to grow its much-needed sound stage production infrastructure.

¹ These numbers represent the projects that could be tracked by the California Film Commission. It is possible, and even likely, that more of these productions that did not receive a tax credit were filmed outside of California, or they were never made.

Exhibit ES-3

Lost (Out-of-State) Productions 2015 to 2020 Total Economic Impact (\$2021)

Economic Impact	
Output	\$ 7,706,475,000
Value Added	\$ 4,755,320,000
Employment	28,000
Labor Income	\$ 2,561,037,000
Fiscal Impact	
State and Local Taxes	\$ 354,381,000

Source: Estimates by LAEDC



1. INTRODUCTION

In this study, the LAEDC Institute for Applied Economics examines the economic impact 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 attract production away from its historic home in California.

Next, we describe the details of the California Film and Television Tax Credit 2.0 program in Section 2, including the number of projects, qualifying expenditures, and credit allocation by production type.

In Section 3, we estimate the economic and fiscal impact of productions that have qualified under the program to receive tax credits by production type.

Section 4 provides a brief narrative on other impacts related to the tax incentive program, including film-related tourism.

Section 5 quantifies the impact of known lost production, those productions which did not receive a tax credit and are known to film outside of California.

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



Background

In 2009, California introduced a 5-year program providing \$100 million annually in tax credits to incentivize film and television production in the state. Administered by the California Film Commission, the program provides a tax credit to reduce the tax liabilities of production companies by up to 25 percent of qualified production expenditures.

In 2015, the program was expanded to provide \$330 million in tax credits per year, with a sunset in 2020. The California Film and Television Tax Credit Program 2.0 broadened the scope of projects that could qualify for tax credits and awarded tax credits on the basis of a jobs ratio ranking, ensuring that those productions that create the most jobs, among the applicants, would receive tax credits. In addition, the 2.0 program provided an additional 5 percent tax credit for certain kinds of production spending, such as visual effects. In the 2018 budget, the production tax credit program was extended for an additional five years through 2025, making relatively minor changes to the program. This Study focuses on the 2.0 program, which divides the annual \$330 million allocation among productions as follows: 35% for feature films, 40% for TV series, 20% for TV series relocating from another jurisdiction, and 5% for independent productions.



As of July 2020, the Credit program 2.0 has allocated \$1.55 billion, with \$915.0 million tax credits certificates issued by the California Film Commission, over five years to ensure California is and remains domestically and internationally competitive as other states, provinces, and countries vie for preeminence in the international film and television production industry.

Film and television production is mobile and lucrative. Over the last several years, new streaming services have driven demand for new programming, creating an explosive growth in production. In most other industries, firms typically make location decisions based on a variety of factors, including the availability of qualified labor and proximity to customers and suppliers. For film, television and streaming production these factors are less relevant and cost considerations override most others. Since tax credits directly and effectively reduce production costs, these programs are now the most important consideration in where to locate a movie, or TV or streaming series.

Many film and television 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, animation, captions, digital distribution, and other specialized services and their skilled workers are often not available locally; thus, this work is often 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 services will be increasingly provided locally. The clustering effect of the film and television production industry refers to the high degree of business generation which develops around areas with large concentrations of production. This not only applies to companies directly involved in the various stages of the filming and production process, as mentioned above, but businesses that provide supporting services such as trailer rentals, prop rentals, and craft services. Additionally, the presence of the industry generates increased demand for local firms that aren't industry-related, many of which are small businesses, including restaurants, dry cleaning services, hotels, and spa services. California's cluster may be the most extensive and mature in North America, but the extraordinary growth evidenced in the state of Georgia over the past 15 years, serves as a prominent example of this clustering effect.²

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 traditionally been the nation's unrivaled center for this activity.

Over 30 states have production incentives in place to attract film, TV and streaming productions. These incentives take the form of rebates, grants and tax credits. Incentives offered as tax credits are generally either refundable tax credits, where the state redeems the tax credit at a discount, or as transferrable tax credits, which can be sold to a company with in-state tax liability. California is one of just two states whose tax credits are largely nonrefundable and non-transferrable.³ California's program is also distinguishable from those of many other states and countries in that the wages of the above-the-line high wage earners, such as directors, actors, composers, are not qualified wages for purposes of calculating the amount of tax credits earned, and California's economy derives significant benefit from those salaries earned in-state.⁴

Currently, California is the only major production center without a stand-alone visual effects (VFX) tax credit. VFX companies use specialized software and live footage visuals, altered videos, and computer-generated imageries (CGI) to augment productions in post-production, incorporating scenes and imagery that would be too costly, too difficult or dangerous, or downright impossible to film. Future iterations of the California Film and Television Tax Credit should consider the potential for increased economic activity in the highly mobile visual effects industry.

² See Georgia Dept. of Economic Development, Georgia Film Industry – Overview and Current Climate (2017) https://www.senate.ga.gov/sro/Documents/StudyCommRpts/AppendixH_GDEcDFilmTaxCreditReport.pdf

³ California's production tax credit program is offered as an offset to existing tax liability, except for a small part of the program available to productions made by "independent" or non-publicly traded companies. The "indies" can sell their earned tax credit certificates to other California taxpayers.

⁴ The terms "below the line" and "above the line" arose in reference to the budget document of a film or TV project. Expenses related to those individuals working as producers, director, actors, writers and other key department heads who may have separate employment agreements were listed on the top sheet of the budget ("above the line") and those crew members performing pre-production, production and post-production work were listed after and came to be known as "below-the-line." The California production incentive includes as qualified wage expenses for the purposes of calculating the amount of tax credit only wages for below-the-line workers.

Exhibit 1-4 outlines tax credit incentives offered for a selection of states.

Exhibit 1-4

Select Production Tax Credits in Other Jurisdictions

US State	Incentive Description	Cap Per Project	Funding Cap	Sunset	Incentive Type
Georgia	Transferable Tax Credit: 20% Spending and labor, 10% promotional	No Cap	No Cap	None	Transferable
Illinois	Transferable Tax Credit: 30% Spending and resident labor, 15% resident labor in poverty areas	No Cap	No Cap	12/31/2026	Transferable
Massachusetts	Refundable/Transferable Tax Credit: 25% Payroll 25% spending	No Cap	No Cap	None	Refundable/ Transferable
New Mexico	Refundable Tax Credit: 25% Spending, resident labor and nonresident performing artists, 5% Location/stage/pilot 15% Limited below-the-line nonresident crew	No Cap	\$110M / fiscal year Uncapped for NM film ptr	None	Refundable
New Jersey	Transferable Tax Credit: 30% Spending and labor, 5% for some counties, 2% uplift for meeting diversity plan	No Cap	\$100M /fiscal year \$200M for commitment to infrastructure + volume production	06/30/2034	Transferable
Louisiana	Transferable to state at discount: 25% Spending and labor, 15% resident labor, 10% screenplay, 5% Out-of-Zone, 5% VFX costs	\$20M/\$25M	\$180M / fiscal year with rolling cap	06/30/2025	Transferable
New York: Production uplift for Post-Production	Refundable Tax Credit: 25% Spending and labor, 10% labor uplift for upstate county 25%, post-production only, 10% upstate county	No Cap	\$395M per calendar year or \$25M per calendar year for Post-production Only	12/31/2024	Refundable

Source: Cast & Crew, 2020; Cobalt Stages, 2020

In addition, competitive production incentives are offered outside of the United States in Canada, the United Kingdom, Australia, and New Zealand, among other countries.

Exhibit 1-5 breaks down tax credit incentive programs for select Canadian provinces.

Exhibit 1-5

Select Production Tax Credits in Canada

Province	Incentive Description	Cap Per Project	Funding Cap	Sunset	Incentive Type
British Columbia	Refundable Tax Credit: 28% Resident labor, 6% regional, 6% distant, 16% for VFX, post-production, and animation labor	No Cap	No Cap	None	Refundable
Manitoba	Refundable Tax Credit: 45%–65% labor or 38% all spending	No Cap	No Cap	None	Refundable
Ontario	Refundable Tax Credit: 21.5% OPSTC Spending and labor, 18% for VFX and animation labor	No Cap	No Cap	None	Refundable
Québec	Refundable Tax Credit: 20% Spending and labor, 16% for VFX and animation labor	No Cap	No Cap	None	Refundable

Source: Cast & Crew, 2020⁵⁶

⁵ Cast & Crew, 2020

⁶ Clarence, N. and Deirdre Owens. 2020. "Canadian Production Incentives at a Glance." <https://www.castandcrew.com/wp-content/uploads/2020/02/Canada-TIP-MAP-January-2020.pdf>

Exhibit 1-6 describes the production incentive programs in Australia.

Exhibit 1-6
Production Incentives in Australia

Incentive Name	Incentive Description	Cap Per Project	Funding Cap	Incentive Type
Producer Offset	Refundable Tax Offset: 40% for productions released theatrically; 30% for other productions.	No Cap	No Cap	Refundable
PDV Offset	Refundable Tax Offset: 30%	No Cap	No Cap	Refundable
Location Offset	Refundable Tax Offset: 16.5% + 13.5% Discretionary Location Incentive	No Cap	No Cap	Refundable

Source: Olsberg SPI, 2020⁷

In the United Kingdom, UK Film Tax Relief is offered to all qualifying films of any budget. A production company can claim a rebate of up to 25 percent of UK-qualifying expenditures. Rebates are capped at 80 percent of production budget expenditures with no limit on rebate size. A qualifying film must either pass a cultural test or qualify as a co-production.⁸ In addition, TV Tax Relief offers a rebate of up to 25 percent on qualifying UK expenditure.⁹

New Zealand’s Screen Production Grant offers a 20 percent rebate with a potential 5 percent ‘uplift’ offered to productions that produce significant economic benefits to New Zealand.¹⁰ Films must incur \$9.9 million (USD) in qualifying expenditures while TV and other productions must incur \$2.6 million. The post-production, digital, and VFX (PDV) incentive offers a 20 percent rebate for qualifying expenditures up to \$16.6 million and 18 percent to expenditures over \$16.6 million. Furthermore, a domestic rebate is available to New Zealand productions and official co-productions worth 40 percent of qualifying expenditures.

Though California faces stiff domestic competition from other states and international competition from places such as Canada and Europe, the Film and Television Tax credit program has demonstrated its capacity to preserve and regrow the industry in California. Between 2015 and 2020, 18 television series relocated from other states, including Georgia and New York, and other countries,



⁷ Olsberg SPI. “Global Incentives Index 2020.” <https://www.o-spi.com/projects/blog-global-incentives-index>

⁸ British Film Commission. “Film Tax Relief.” <http://britishfilmcommission.org.uk/plan-your-production/tax-reliefs/>

⁹ Kemps Film TV Radio. “Tax Breaks and Incentives.” <https://www.kftv.com/country/uk/guide/incentives>

¹⁰ Olsberg SPI. “Global Incentives Index 2020.” <https://www.o-spi.com/projects/blog-global-incentives-index>

including Canada and Ireland, contributing \$2.1 billion in spending to the California economy.¹¹

Not All Programs or Analyses are Created Equal

As mentioned, over 30 states have production incentives in place to attract film, TV and streaming productions, and as we just outlined, film and



television tax credit programs vary widely from state to state in the types and structure of incentives offered and the qualifications for and efficacy of these programs. **What holds true for one state does not hold true for another.** Here in California, others have put forth analysis on the film and television tax program; however, just as not all programs are created equal, not all analyses are created equal. Associate Professor Michael Thom of University of Southern California has emerged as a critic of film and television tax credit programs, not only here in California, but across the nation. It should be noted that his work does not attempt to estimate the value of the net return on this investment of tax dollars, as is done in this and past studies produced by the LAEDC, but to test the effectiveness of such programs in generating any favorable outcome on economic activity.

Thom's paper "Lights, Camera, but No Action", released late 2016, presents a cross-state analysis of motion picture incentive (MPI) programs using longitudinal data from 1998 through 2013 to attempt to analyze the effect of these tax treatments on labor markets and economic outcomes at the state level for each of the fifty states in the nation. The study asserts that most incentives had little to no impact on employment and wage growth or industry concentration.¹² However, the results of his econometric analysis were mixed and failed to find much impact of MPIs on economic outcomes. This paper's lack of significant results is taken to indicate that targeted tax incentives are not effective. However, as documented in analyses of this paper, Thom utilized flawed data sets leading to flawed conclusions that MPI programs had no economic impact. There is a distinction between *failing to find impacts and finding evidence of no impact*. Thom's paper cannot be held as evidence that targeted tax incentives do not provide meaningful contributions to employment, wage growth and industry concentration.¹³

¹¹ Bell, Colleen, et al. Progress Report 2020. Film and Television Tax Credit Program, California Film Commission. Pg. 3.

¹² Thom, M. Lights, Camera, but No Action. Sage Journals, June 5, 2016. <https://journals.sagepub.com/doi/abs/10.1177/0275074016651958>

¹³ A deeper discussion on methodological issues identified in Thom's paper *Lights, Camera, but No Action*, is available through Oxford Economics, LAEDC and the Motion Picture Association using the following links, respectively: <https://www.oxfordeconomics.com/recent-releases/lights-camera-but-no-action>; <https://laedc.org/2017/09/06/lights-camera-no-action-paper-michael-thom/>; and https://www.motionpictures.org/press/when-analyzing-data-on-film-incentives-you-have-to-start-with-the-right-data/#.V_fb9E1kCUm. In our own analysis we found the following

In late 2019, Thom released “Do State Corporate Tax Incentives Create Jobs? Quasi-experimental Evidence from the Entertainment Industry”, looking for the employment impact across the 30 states that have motion picture incentive programs.¹⁴ His newer work also showed issues with the method used to arrive at his conclusions. While the general methodology chosen is reasonable, this paper suffers from two flaws: the paucity of data with which to fit the model and the excessive number of explanatory variables used. These inadequacies undermine the paper’s conclusions, and its findings should not be accorded much significance. Additionally, the choice to express the changes in percentage terms makes the implausible assumption that the relationship between money spent and employment changes is simple and linear; it ignores the size of a state’s existing employment base in the industry, which is massive in California, and the impact that has on percentage increases in employment.¹⁵ As such, these results, like those in the 2016 paper, should not be used to inform any policy choices here in California.



inadequacies with Thom’s data: (1) Using employment and gross product data for aggregated industry sectors rather than data at the detailed industry level; (2) Using industry gross product data for activity that does not generate revenues for the state in which the activity takes place; (3) Models that are not well-defined; (4) Using annual employment data for activity that may be of shorter duration; and (5) Poor identification of explanatory variables.

¹⁴ Thom, M. Do State Corporate Tax Incentives Create Jobs? Quasi-experimental Evidence from the Entertainment Industry. Sage Journals, September 22, 2019.

<https://journals.sagepub.com/doi/abs/10.1177/0160323X19877232?journalCode=slgb>

¹⁵ A deeper discussion on methodological issues in Thom’s paper *Do State Corporate Tax Incentives Create Jobs? Quasi-experimental Evidence from the Entertainment Industry* by the LAEDC can be found here: https://laedc.org/wp-content/uploads/2020/08/LAEDC_Thom-Methodology-Memo_20191113a.pdf

2. THE CALIFORNIA FILM AND TELEVISION TAX CREDIT 2.0 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 minimum production budgets of \$1 million are eligible for a 20 percent *non-transferable/non-refundable* tax credit for the first \$100 million of qualified expenditures, plus uplifts. Such credit is also available for mini-series and new television series with a minimum budget of \$1 million and for which episodes are 40 minutes or longer. This same credit is also available for television pilot episodes with a \$1 million minimum budget and a duration of at least 40 minutes. **Qualified motion pictures must spend at least 75 percent of their production days or total production budget in California.** Independent films¹⁶ with a \$1 million budget or greater may qualify for a *transferable* tax credit for the first \$10 million of qualifying expenditures.



In an effort to attract production, the program allows for a 25 percent *non-transferrable* tax credit for television series that had previously been filmed outside of California with a \$1 million per episode budget minimum and a show run minimum of at least six episodes. The credit is reduced to 20 percent after one season of filming in California. Qualifying projects may also be eligible for a five percent uplift for filming outside of the 30-mile Los Angeles zone. Visual Effects (VFX) spending in California also qualifies for a five percent uplift provided that VFX spend represents at least 75% of the project's worldwide VFX budget or equals at minimum \$10 million of qualified visual effects expenditures.

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 below the line 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: above the line salaries for

¹⁶ According to the CFC, an independent film is at least 75 minutes or longer and is intended for commercial distribution to a motion picture theater, home video, television or via the internet. It must have a minimum budget of \$1 million and be produced by a company that is not publicly traded and a publicly traded company does not own directly or indirectly more than 25% of the producing company.

performers, directors, producers, writers, music supervisors and composers; licensing fees; and distribution expenses.

Initial Allocation

For the Film and Television Tax Credit Program 2.0 that began July 1st, 2015, \$330 million in tax credits were allocated in each fiscal year (July 1-June 30). By funding category, these credits were allocated as follows:

- 40 percent (\$132 million) to New TV Series, Recurring Series, Pilots, and Miniseries (also called TV Projects);
- 35 percent (\$115.5 million) to Feature Films (non-independent features);
- 20 percent (\$66 million) to Relocating TV Series;
- 5 percent (\$16.5 million) to Independent Films.

As denoted in the Progress Report 2020, the California Film Commission (CFC) is permitted to allocate any unused credits in a funding category to another category with higher demand. Indeed, Program 2.0 actual credits allocated substantially more (19 percent) to TV Projects and substantially less to Feature Films (11 percent) and Relocating TV Series (6 percent).

As can be seen Exhibit 2-1, TV Projects in Program 2.0 accounted for 58.9 percent of qualifying projects and 59.5 percent of allocated credit dollars. By comparison, films, both feature and independent, were only 31.4 percent of qualifying projects and 26.8 percent of allocated credit dollars. Finally, Relocating TV Series were 9.5 percent of qualifying projects and 13.5 percent of allocated credit dollars.

Exhibit 2-1
Credit Applications Approved by Production Type
(FY 2015-16 through FY 2019-20)

Production Type	Number of Projects	Qualifying Expenditures	Credit Allocation	% of Total
Feature	28	\$ 1,039,797,387	\$ 193,832,572	21.2%
Independent Film	25	\$ 421,855,821	\$ 51,423,410	5.6%
Movie of the Week	1	\$ 11,148,554	\$ 2,261,430	0.2%
Mini-Series	1	\$ 11,571,710	\$ 1,844,019	0.2%
Pilot	18	\$ 110,294,366	\$ 20,705,937	2.3%
New TV Series	32	\$ 982,063,928	\$ 180,891,685	19.8%
Recurring TV Series	48	\$ 1,684,587,783	\$ 340,641,935	37.2%
Relocating TV Series	16	\$ 508,032,424	\$ 123,350,585	13.5%
Total	169	\$ 4,769,351,973	\$ 914,951,573	100.0%

Source: California Film Commission; Estimates by LAEDC

When broken down by budget size, qualifying projects for Program 2.0 tend to be oriented toward the larger projects with fully one third of qualifying projects with qualifying expenditures in excess of \$75 million and close to three quarters (72.9 percent) with qualifying expenditures over \$30 million. Since tax credits are awarded to projects with the highest jobs ratio (paying the most wages for the most employees, among applicants), those projects would have higher budgets.

While \$330 million in total credit dollars were allocated during each of the five years of Program 2.0, the amount of tax credit certificates issued by the California Film Commission never reached this threshold in any fiscal year of the program. As demonstrated by Exhibit 2-3, the amount of tax credit certificates issued never exceeded \$275 million in any given year. Indeed, the highest amount of tax credit certificates issued by the California Film Commission occurred in FY 2017-18 with \$273.7 million in tax credit certificates issued for qualifying productions. The total dollar amount of tax credit certificates issued proceeded to decline in subsequent fiscal years. It should be noted that FY 2019-20 covered the initial and the most economically devastating stages of the COVID-19 pandemic (March-June 2020).¹⁷

Exhibit 2-2
Credit Applications Approved by Budget Range
(FY 2015-16 through FY 2019-20)

Qualifying Expenditures	Number of Projects	Total Credit Allocation (\$ millions)	% of Total
\$0 to \$15 million	39	\$ 49.6	5.4
\$15 million to \$30 million	17	50.3	5.5
\$30 million to \$45 million	35	147.9	16.2
\$45 million to \$60 million	38	235.4	25.7
\$60 million to \$75 million	16	123.3	13.5
Over \$75 million	24	308.6	33.7
Total	169	\$ 915.0	100.0

Source: California Film Commission

Exhibit 2-3
Credit Allocations by Fiscal Year
(FY 2015-16 through FY 2019-20)

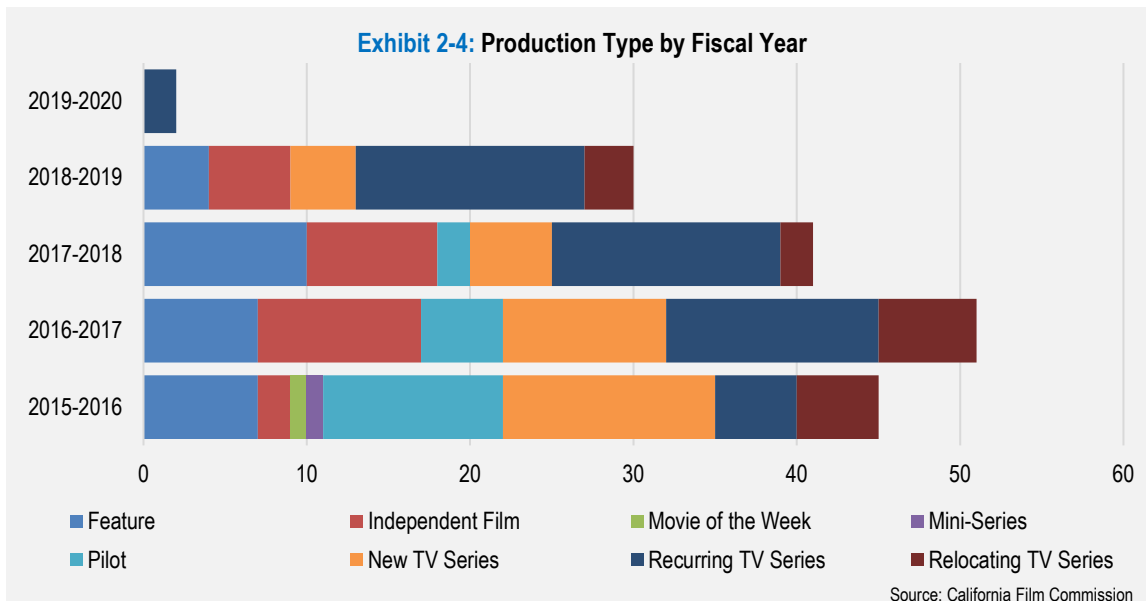
Fiscal Year	Total Credits Approved (\$ millions)
2015-2016	\$ 164.8
2016-2017	273.6
2017-2018	273.7
2018-2019	192.7
2019-2020	10.1
Total Allocation	\$ 915.0

Source: California Film Commission

The make-up of qualifying projects also changed markedly over the lifetime of Program 2.0, as can be seen in Exhibit 2-4. Whereas TV pilots accounted for nearly a fourth of qualifying projects in FY 2015-16, they accounted for none of the qualifying projects in FY 2018-19 and FY 2019-20. Moreover, Independent Films have accounted for an increasingly smaller portion of qualifying projects since FY 2016-17. The same is true of New TV Series since FY 2015-16.¹⁸ As can be seen in FY 2018-19, the last full fiscal year of the last economic expansion, films have made up proportionally more of qualifying projects since the beginning of Program 2.0 in July 2015.

¹⁷ The amount of tax credit certificates issued by the California Film Commission is dependent upon the final expenditures of the production, production schedule of each production, as well as completion of the process of review, including CPA audits and CFC review. This process also ensures accountability and transparency in the issuance of tax credit certificates. In addition, the timing of the claiming of earned tax credits is also related to the timing of project completion, and the review process, resulting in a slower credit recovery. The CFC’s 2019 Progress Report notes information from the Franchise Tax Board and the Department of Tax and Fee Administration indicates that the amount of tax credits claimed by taxpayers, on an annual basis, is significantly less than the annual \$330 million allocation and the amount of tax credit certificates issued by the CFC. <https://cdn.film.ca.gov/wp-content/uploads/2020/10/CA-Tax-Credit-Progress-Report-2019.pdf>, see page 28.

¹⁸ Fewer pilots are in part a function of the evolution of production as more projects are receiving straight to series orders and bypassing the pilot phase. Fewer pilots and original series in the program are also a function of the television queues being regularly oversubscribed because of the number of recurring series that continued to be renewed. This ensures stable employment for film crews and the local economies, but the annual cap means the state did not have capacity to attract more new productions.

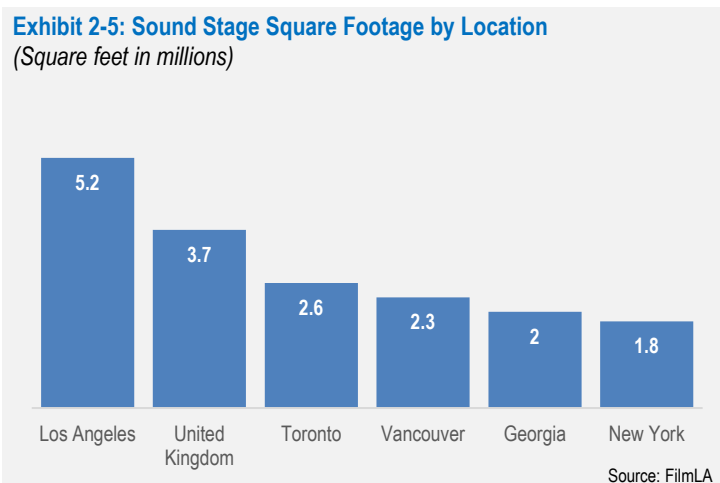


Entertainment Production Infrastructure

With 5.2 million square feet of certified stage space, and an additional estimated one million square feet of noncertified or specialty space, Los Angeles is an unrivaled industry leader in entertainment production infrastructure.¹⁹ To put this figure in perspective, the United Kingdom boasts 3.5 million square feet of stage space, and the entire country of Canada has the same amount of square footage as Los Angeles County. Within the United States, Georgia and New York have an estimated 2.0 and 1.8 million square feet of stage space respectively.

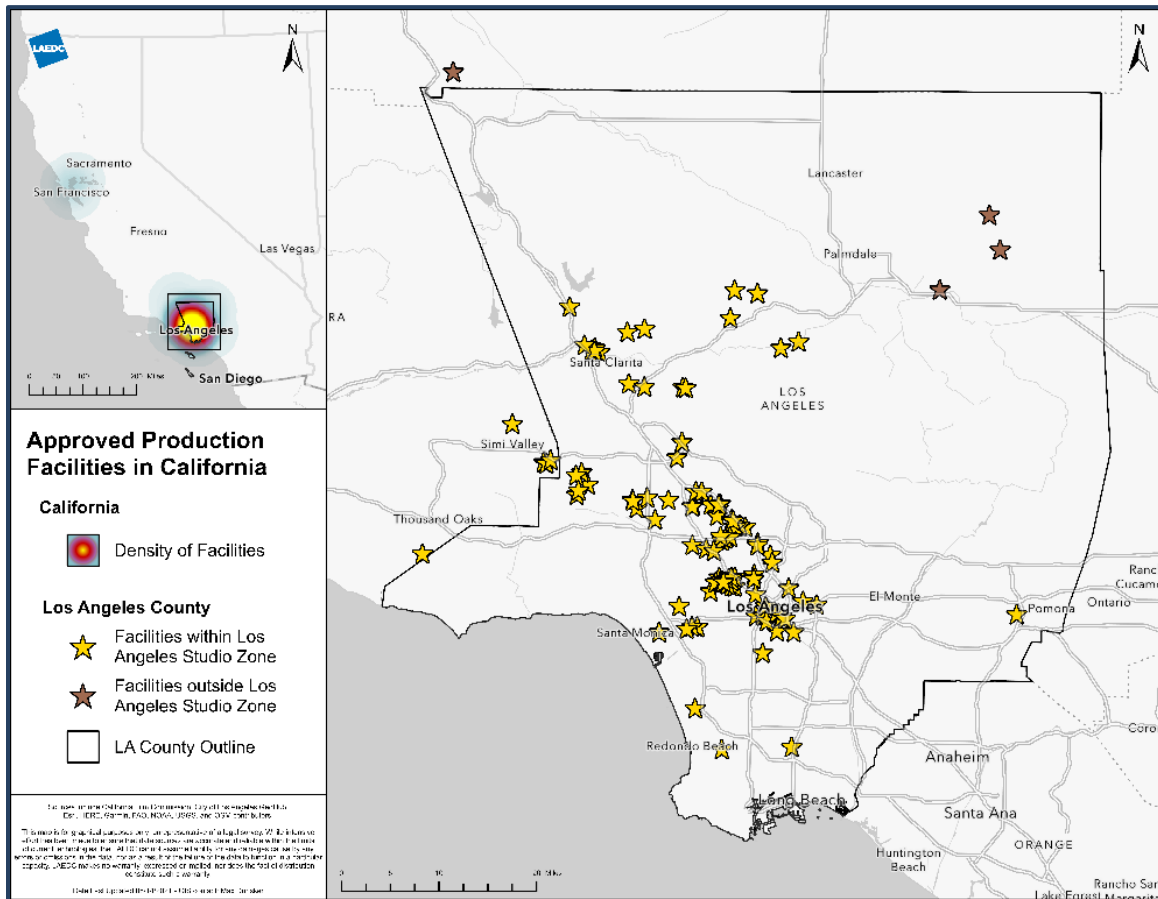
From 2016 to 2018, an estimated 500,000 square feet of stage space was added to the Los Angeles supply.²⁰ However, during this same period, jurisdictions in direct competition with Los Angeles for productions, most notably the United Kingdom, Ontario (Toronto), and New York, have announced significant additions to supply totaling an estimated one to two million square feet.

Major projects are planned or currently underway to expand entertainment production infrastructure in the United Kingdom, Ontario, Canada,



¹⁹ FilmLA. 2020. "Soundstage Production Report (2018). https://www.filmla.com/wp-content/uploads/2020/06/Sound_stage_report_v1-WEB.pdf

²⁰ FilmLA. 2020. "Soundstage Production Report (2018). https://www.filmla.com/wp-content/uploads/2020/06/Sound_stage_report_v1-WEB.pdf



Georgia, and in the New York/New Jersey area.²¹ Real estate developers in New Jersey have consistently cited the state’s tax credit program itself as the main impetus for increased investment in new studio projects in the state. According to Shibber Khan, head of the Criterion Group in Queens, New York, regarding his company’s reasons behind a new studio project in Jersey City, “The determining factor is the production companies, which are coming to New Jersey purely because of the tax credit.”²² Steven Gorelick, executive director of the New Jersey Motion Picture and Television Commission further explains that “The tax credit creates a constant flow of activity and paves the way for construction of studios, equipment houses and other businesses that come into the state because of the activity to support them,” “It’s the most important and powerful way to attract permanent businesses that create the foundation of an industry here.”²³ In 2020 and 2021, New Jersey’s film and TV tax credit program was expanded, with the annual cap on incentives for film and television productions

²¹ “Wall Street’s Red Hot Real Estate Play: Film and TV Soundstages,” The Hollywood Reporter Magazine, Aug. 25, 2021. <https://www.hollywoodreporter.com/business/business-news/film-and-tv-soundstages-wall-street-1235003587/>

²² Lynn, K. “Developers Eyeing Large-Scale Studio Projects in New Jersey, Spurred by Popular Film Tax Credit.” Real Estate New Jersey. <https://re-nj.com/developers-eyeing-large-scale-studio-projects-in-new-jersey-spurred-by-popular-film-tax-credit/>

²³ Lynn, K. “Developers Eyeing Large-Scale Studio Projects in New Jersey, Spurred by Popular Film Tax Credit.” Real Estate New Jersey. <https://re-nj.com/developers-eyeing-large-scale-studio-projects-in-new-jersey-spurred-by-popular-film-tax-credit/>

increasing from \$75 million a year to \$300 million a year with the program sunset date extended by five years to 2034.²⁴

The film and TV industry in Los Angeles is currently experiencing a significant scarcity of stage space. A recent study by FilmLA reported that among studio partners, average reported occupancy was 93 percent in 2019 with a median occupancy rate of 98 percent.²⁵ Additionally, some studios reported 100 percent occupancy in all four quarters of 2019.



Current high occupancy rates combined with the relative lack of future planned studio facilities in Los Angeles County will limit the local industry's ability to attract and accommodate future film and TV productions.

Construction of entertainment production facilities is a relatively capital-intensive endeavor. In addition, high land prices in the Los Angeles region make the construction of sizeable entertainment production facilities particularly costly. Before building these facilities, potential investors require reasonable expectations that sufficient customer demand will be present and will provide the cash flows required to make the investment pay off. The time horizons being considered for such investments are relatively long, reaching decades into the future. However, given the mobility of TV and film productions, these cash flows are far from certain. Recent film and TV tax credit programs with short time horizons will do little to indirectly encourage the construction of entertainment production facilities since the relevant time periods being considered by investors when making investment calculations are much longer. The mismatch between the short time horizons of the recent tax credit programs and the longer time horizons that are relevant to the construction of entertainment production facilities should be remedied in order to encourage the construction of production facilities. A longer-lasting tax credit incentive program will serve to inject more certainty into the industry and to ensure that new and existing production facilities such as sound stages will experience steady demand for their space from customers. The resulting increase in production facilities will further serve to attract out-of-state productions that currently find the lack of available studio facilities in California to be problematic and to retain productions that may otherwise move to jurisdictions with more available studio space. A longer-lasting incentive program will therefore have much greater potential to indirectly encourage the construction and expansion

²⁴ Cobalt Stages. 2020. "Big News: The NJ Film and TV Tax Credit has been Expanded!" <https://cobaltstages.com/2021/big-news-the-nj-film-and-tv-tax-credit-has-been-expanded/>

²⁵ FilmLA. 2021. "Soundstage Production Report (2019)." <https://www.filmla.com/filmla-updates-annual-sound-stage-production-report/>

of entertainment production facilities than will a shorter-lived program with an uncertain future.

In July 2021, the California State Legislature passed, and Governor Newsom signed, Senate Bill 144 (SB144) which contains provisions designed to encourage private investment in the construction of soundstages. Qualified film and TV productions of companies that spend at least \$25 million to build or renovate soundstages, or to enter long-term leases on these newly constructed or renovated soundstages, will be entitled to production tax credits on projects filming in those newly constructed or renovated soundstages.

After the passage of SB144, several additions to the supply of soundstages in Los Angeles were subsequently announced. For example, in November 2021, NBCUniversal announced that it is planning to build eight soundstages at its Universal Studios lot with the soundstages scheduled to be completed by summer of 2022.²⁶ In addition, one month before NBCUniversal's announcement, Warner Bros. announced that its Warner Bros. Ranch satellite studio located in Burbank will be redeveloped with 16 newly added soundstages on the property.²⁷

A longer-lasting film and TV tax credit program will go hand in hand with SB144 by injecting certainty into the industry and creating a market environment to encourage the production, expansion, and renovation of soundstages directly and indirectly in California.



²⁶ News Nation USA. 2021. "NBCUniversal Building 8 Soundstages to Boost Production -L.A. Biz." [NBCUniversal building 8 soundstages to boost production - L.A. Biz - News Nation USA](#)

²⁷ Vincent, R. 2021. "Famed Universal Studios Lot Will Add Soundstages as Film and TV Production Surges." Los Angeles Times. [Universal Studios adds soundstages as film, TV shoots surge - Los Angeles Times \(latimes.com\)](#)

3. ECONOMIC IMPACT OF APPROVED PRODUCTIONS

As of February 26, 2020, a total of 169 productions were allocated tax credits under the California Film and Television Tax Credit Program 2.0. This study estimates the economic impact of those productions, which collectively were approved for tax credits totaling \$915 million.

The productions contained in the data provided to the LAEDC by the California Film Commission are estimated to have generated total economic output (direct, indirect, and induced) of almost \$21.9 billion and supported almost 110,300 jobs with labor income of \$7.7 billion as a result of film and tax credits over the five years of the program. Production-related state and local tax revenues, including income taxes, property taxes, social insurance taxes, sales taxes, and permits and fees, are estimated at \$961.5 million.

Exhibit 3-1
Approved Film and Television Tax Credit Program 2.0 Productions
Total Economic Impact in California (FY 2015-16 through FY 2019-20)

Direct Impacts	
Production Spending	\$ 7,371,163,518
Qualifying expenditures	\$ 4,769,351,973
Credit allocations	\$ 914,951,573
Total Economic Impact	
Output	\$ 21,863,795,000
Employment (jobs)	110,300
Labor income	\$ 7,734,177,000
State and local taxes	\$ 961,508,000

Source: California Film Commission; Estimates by LAEDC

Cost-Benefit Analysis

One way to interpret the value of the tax credit is to measure the economic impacts resulting from one dollar of tax credit allocated.

For *each tax credit dollar* allocated:

- Total economic activity in the state will increase by \$24.40
- Labor income (including to the self-employed) will increase by \$8.60
- Total GDP in the state will increase by \$16.14
- Initial tax revenue returned to local and state governments will be \$1.07

Production Spending

We expect the impacts in California of the tax incentive program to be significant 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 of the dollars that 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, compared to other states and countries, **the California tax incentives are less competitive**— 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’s more modest incentive can keep California competitive and “in the game,” as suggested by the response to the current program.

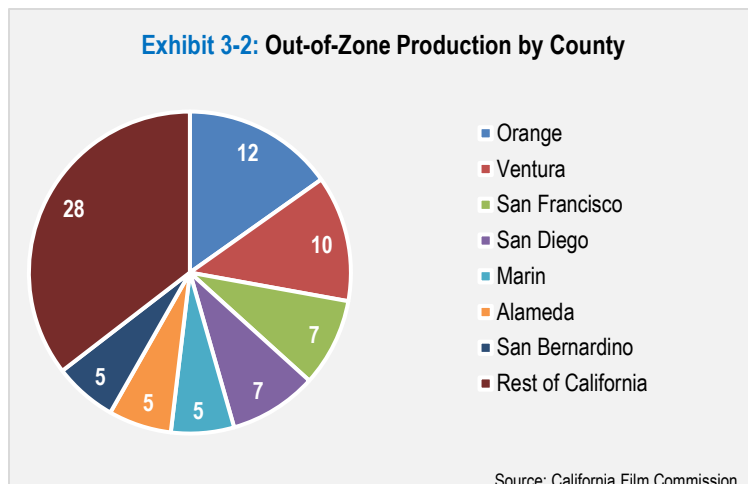
Fourth, while credits are allocated based only on qualifying expenditures, **the real benefit to the state’s economy is based on the overall expenditures made in California, including those made to non-qualifying expenditures**, including above-the-line talent and non-qualifying below-the-line expenditures, such as songwriters and music supervisors, community relations and publicity. While these expenses may not qualify for tax credit purposes, they nevertheless generate significant economic activity in the state through indirect and induced effects.

Fifth, California’s steeply **progressive income tax** gives the state the ability to recoup its tax credit quickly. Similarly, California’s **high sales tax rate and base** will generate more revenue from taxes on household purchases than states with lower sales tax rates and fewer household purchases.

The CFC provided the LAEDC Institute for Applied Economics with data on 169 productions that qualified for tax credits over the lifetime of Program 2.0. These productions ranged in budget between \$2.7 million to over \$185.9 million in expenditures made within the state of California. The findings presented in this section represent an impact analysis of all expenditures, qualified and non-qualified, that took place in California. Economic impacts are presented as a total (direct, indirect and induced) and are additionally broken out by production category.

In total, the 169 qualifying productions added over \$21.8 billion in new output to California over the lifetime of Program 2.0. This activity supported the equivalent of more than 110,000 jobs in the state paying \$7.7 billion in labor income. California state and local governments are estimated to have earned \$961.5 million in tax revenues as a result of this activity.

While much of the production activity in California occurs within the Los Angeles 30-Mile Studio Zone, Out-of-Zone production activities provide economic benefits to other parts of the state. As Exhibit 3-2 demonstrates, this Out-of-Zone activity was distributed across 24 counties in the state. The top four counties by number of credit-



qualifying projects were Orange, Ventura, San Francisco, and San Diego. Of the 169 projects that received credits over the five years of Program 2.0, 79 engaged in Out-of-Zone production activities.

Exhibit 3-3 gives a full accounting of impacts by production type.

Exhibit 3-3

Spending of Credit-Approved Productions Total Economic Impact in California (\$2021)

Economic Impact	Feature	Independent Film	TV Projects	Relocating TV Series	Total*
Output*	\$ 4,698,956,000	\$ 2,026,602,000	\$ 12,725,201,000	\$ 2,413,036,000	\$ 21,863,795,000
Direct	2,671,857,000	1,152,909,000	7,221,672,000	1,374,802,000	12,421,240,000
Indirect and Induced	2,027,099,000	873,693,000	5,503,529,000	1,038,235,000	9,442,556,000
Value Added*	\$ 3,105,292,000	\$ 1,339,455,000	\$ 8,432,643,000	\$ 1,596,806,000	\$ 14,474,196,000
Direct	1,817,513,000	784,871,000	4,936,391,000	937,213,000	8,475,988,000
Indirect and Induced	1,287,709,000	554,585,000	3,496,252,000	659,594,000	5,998,140,000
Employment (jobs)*	24,600	11,500	63,500	10,700	110,300
Direct	14,800	7,200	36,800	5,700	64,600
Indirect and Induced	9,800	4,300	26,600	5,100	45,800
Labor Income*	\$ 1,656,821,000	\$ 713,310,000	\$ 4,514,454,000	\$ 849,592,000	\$ 7,734,177,000
Direct	942,276,000	404,932,000	2,577,002,000	482,655,000	4,406,865,000
Indirect and Induced	714,545,000	308,378,000	1,937,452,000	366,937,000	3,327,312,000
Fiscal Impact					
State and Local Taxes	\$ 205,938,000	\$ 88,873,000	\$ 560,270,000	\$ 105,924,000	\$ 961,508,000

*May not sum due to rounding
Source: Estimates by LAEDC

As might be imagined, the production categories in which the greater expenditure took place accounted for the greater impacts. Feature Films, Recurring TV Series and New TV Series were the top categories in terms of largest economic impact over the life of Program 2.0. Collectively, these categories account for 77 percent of estimated total (direct, indirect, and induced) output generated, 75 percent of total employment impacts estimated, 77 percent of estimated total labor income, and 77 percent of estimated total state and local tax revenues.

- For each tax credit dollar allocated:
 - Total economic activity (output) in the state will increase by \$24.40
 - Labor income (including to the self-employed) will increase by \$8.60
 - Total GDP in the state will increase by \$16.14
- For every tax credit dollar allocated, \$1.07 will be returned to local and state governments in initial tax revenue.

4. OTHER IMPACTS DUE TO TAX INCENTIVE PROGRAM

The plethora of talent, supplies, and services that can be found throughout California, specifically within the Los Angeles region, enables additional production activity to occur as a result of the tax incentive program. The concentration of resources within one geographical area creates an attraction effect that often leads a producer that completes a project in a certain location to pursue subsequent projects there. Whether this is due to the supply of talent and staffing or merely a matter of scheduling, a producer may bring additional production activity to an area above and beyond their initial project. If that initial production had allocated tax credits, this subsequent activity can be termed the “Critical Mass Effect.”

In addition to the “Critical Mass Effect,” there are many other inadvertent ways that the Film and Television Tax Credit Program could result in additional economic activity, such as through film-related tourism.

Film-Related Tourism

California’s Tourism and Hospitality industry cluster is the third largest engine of employment in the state: in 2018, it boasted almost 456,873 jobs with over \$19.7 billion in labor income. An additional \$6.3 billion was earned by employees in the amusement parks, gambling, and recreation industries, and almost \$2.5 billion was earned by travel agents and tour operators. The GDP of the accommodation industry alone reached \$21.8 billion in 2019, nearly thrice what it was in 1999 (\$7.6 billion).

Though 2020 was a difficult year for both the tourism and entertainment industries, as travel resumes, the magnet of the entertainment industry will inevitably draw people to the Southern California region. Tours offered by studios such as Warner Bros., Paramount, Sony Pictures Studios, and Universal Studios will soon attract throngs of tourists whose spending on accommodations, food services, and other activities will inject money into the regional economy. With movie theaters across the state reopening, iconic theatres like TCL Chinese and Fox Theatres will resume hosting premieres that draw in people eager to get a glimpse at their favorite movie star.

Visitors to Los Angeles are drawn to the Wizarding World of Harry Potter at Universal Studios, but movie and television filming locations all around California attract tourists. From Los Angeles’ The Last Bookstore, which was featured in the television series *You*, to Glassell Park’s Super A Foods parking lot where Lady Gaga and Bradley Cooper’s characters discuss



songwriting in *A Star is Born*, people flock to locations where their favorite scenes were shot. Even outside of major metropolitan areas, visitors can retrace the steps of their favorite characters. Some productions demonstrate the power of film and television to bring visibility to less familiar California locations, such as the Veluzat Ranch in Santa Clarita, the filming location of countless movies and television productions over the years, including *Westworld*.

Although film and television-related tourism cannot be specifically attributed to productions that qualified for the Film and Television Tax Credit, the agglomeration of film and television production in the region plays a large part in drawing in crowds. The Film and Television Tax Credit encourages projects filming in and around California to refresh locations around the state for non-resident audiences. This serves to encourage tourism in the state and will help support the state's tourism industry comeback. A recent study by HR&A found that around 6.5 percent of domestic non-resident travelers to New York qualified as film-induced tourists.²⁸ **If filming in California induced even half as much tourism as it does in New York, the yearly figure would have equaled an estimated 1.3 million domestic non-resident travelers in 2018, which represents a significant contribution to the state's tourism industry and to the California economy as a whole.**²⁹ While entertainment-related tourism is not captured in the standard economic models employed to measure the entertainment industry's impact, the resulting spending will no doubt play a role in the resurgence of California's regional economies, supporting local businesses and employment and generating tax revenues.



²⁸ HR&A Advisors Inc. 2018. *New York Film-Induced Tourism: An Economic Impact Report*.

²⁹ Estimates by LAEDC using data from the U.S. Travel Association and the California Travel and Tourism Commission.

5. THE COST OF LOST PRODUCTION

From 2015 to 2020, the California Film Commission (CFC) tracked film and television projects that applied for tax credits but were denied and later produced in other locales.³⁰ The findings provide powerful evidence supporting the positive impact that California's film and TV tax credits have on retaining and attracting film and television production.



Data shows that California lost 67 percent of the production spending made by those projects that applied for but did not receive the state tax credit. **About half of the projects that did not receive a tax credit ended up leaving California altogether for another jurisdiction.**³¹ It must also be noted that the remaining projects that applied for but did not receive the tax credit did not necessarily stay and film in California without receiving the tax credit. Instead, it is possible that some of these projects were never made. Out-of-state production spending for these runaway projects totaled \$3.89 billion, which represents a significant loss to the state's below-the-line production workers as well as to businesses that rely on the film and television industry.

Productions that applied for but did not receive tax credits left California to spend \$1.90 billion in 18 different states. **Lost productions generated over \$1 billion in production spending in states that offer competitive film and TV tax incentives**, such as Georgia (\$551.9 million), New Mexico (\$250.3 million), New York (\$186.6 million), and Louisiana (\$103.4 million).

Furthermore, productions fled to international locations such as Australia, Belgium, Canada, China, Hungary, Ireland, New Zealand, South Africa, and the United Kingdom, costing California around \$2 billion in runaway production expenditures. Canada alone attracted \$1.2 billion in production expenditures from runaway productions leaving California.

Economic Impact

The total economic and fiscal impacts in California of these runaway projects, had they been filmed in the state, are presented in Exhibit 5-1 on the next page.

³⁰ Bell, C., Stone, N.R., & L. Medrano. (2020). *Progress Report: December 2020*. California Film Commission. <https://cdn.film.ca.gov/wp-content/uploads/2020/12/Progress-Report-2020.pdf>

³¹ These numbers represent the projects that could be tracked, it is possible, and even likely, that more of these productions that did not receive a tax credit were filmed outside of California or were never made.

These projects would have generated an estimated \$7.7 billion in economic activity in the state and supported 28,000 jobs with labor income of approximately \$2.6 billion. State and local tax revenues generated by this activity would have totaled \$354 million.

In addition to the direct negative economic impact on the film and television production industry, the loss of this spending in California imposed economic costs on many of the state’s other industries.

The negative economic impact of lost film and TV productions affects a wide variety of California industries. For example, lost productions would have generated the real estate and rental industry sector an estimated \$568 million in economic output and would have supported 1,150 jobs earning an estimated \$32 million in labor income. Lost productions would have generated the professional, scientific and technical services sector an estimated \$262 million in economic output and would have supported 1,210 jobs earning an estimated \$104 million in labor income.

The estimate of lost economic activity represents a conservative estimate of what was lost over the period; it only covers productions that applied for the tax credit, it does not capture production that did not apply and left California due to other factors such as higher costs, a shortage of studio space, or higher incentives elsewhere.

Exhibit 5-1
Lost (Out-of-State) Productions 2015 to 2020
Total Economic Impact (\$2021)

Economic Impact	
Output *	\$ 7,706,475,000
<i>Direct</i>	3,891,000,000
<i>Indirect and Induced</i>	3,815,475,000
Value Added *	\$ 4,755,320,000
<i>Direct</i>	2,398,007,000
<i>Indirect and Induced</i>	2,357,312,000
Employment*	28,000
<i>Direct</i>	10,570
<i>Indirect and Induced</i>	17,420
Labor Income *	\$ 2,561,037,000
<i>Direct</i>	1,278,044,000
<i>Indirect and Induced</i>	1,282,993,000
Fiscal Impact	
State and Local Taxes	\$ 354,381,000

*May not sum due to rounding
 Source: Estimates by LAEDC

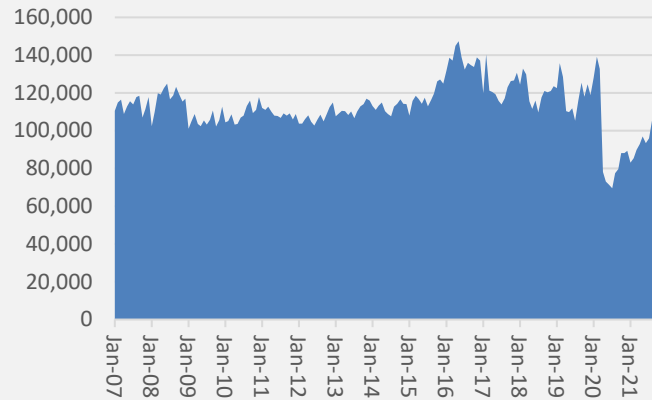


6. RESTARTING CALIFORNIA: THE TAX CREDIT AND ECONOMIC RECOVERY

Production During COVID-19

With Governor Newsom’s Stay At Home Public Health Order, effective March 16, 2020, motion picture, television and streaming production shut down³². Industry employment remained well below pre-pandemic levels throughout the year, with the greatest job losses in March, April, and May of 2020. The suspension of productions and projects led to the loss of 66,000 jobs from industry payrolls in just three months’ time (6,300 jobs lost in March and an additional 59,700 jobs in April and May). This represented just over 47 percent (47.4%) of total payroll jobs in the industry in February 2020.

Exhibit 6-1: Historical Payroll Employment in California’s Motion Picture and Video Production Industries (NAICS 51211)



Source: CA EDD, CES

Typically, the motion picture industry is one of the most resilient industries. During the Great Recession, employment levels in other industries in California experienced more severe and sustained job losses. California’s motion picture and video industries employment from January 2007 through October 2021 is displayed in Exhibit 6-1.

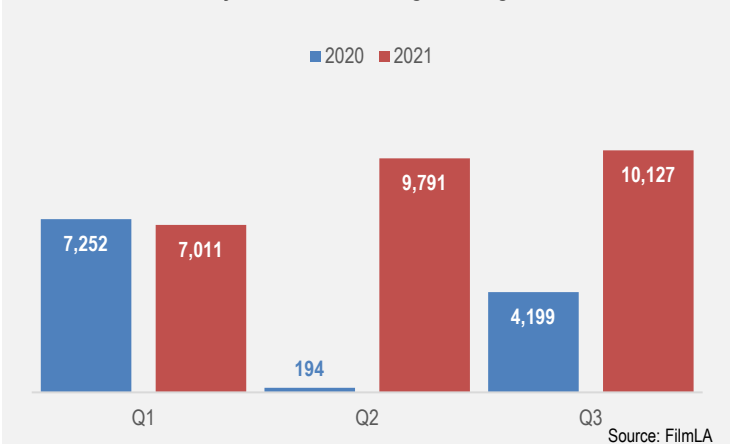
Beginning in April 2020, the Industry-Wide Labor-Management Safety Committee Task Force began meeting to discuss the possibility of production resuming. The work of the Safety Committee culminated with a “White Paper” issued on June 1, recommending Health and Safety Protocols for the safe resumption of production. The state of California allowed the film and television industry to return to work June 2020 after the Industry-Wide Labor-Management Safety Committee Task Force established safety protocols for film and TV productions in the state.³³ The “White Paper” led to negotiations between entertainment unions and the Alliance of Motion Picture and Television Producers regarding how the protocols and the accompanying changes in working conditions would be implemented. The COVID-19 Return-to-Work Collective Bargaining Agreement enabled film and TV

³² Television news broadcasting continued as essential work.

³³ Robb, D. “With Hollywood’s Return-to-Work Agreement Up for Renegotiation, Vaccinations Could be on the Table”. Deadline. March 3, 2021. <https://deadline.com/2021/03/with-hollywoods-return-to-work-agreement-up-for-renegotiation-vaccinations-could-be-on-the-table-1234702855/>

productions to resume work relatively early on in the pandemic. And production was able to bounce back relatively quickly. In the first four months of 2021, SAG-AFTRA members earned a record high \$1.5 billion. Furthermore, SAG-AFTRA-covered jobs also set a record high of 319,000 for the time period. These accomplishments demonstrate the ability of production work to continue safely through the pandemic.³⁴

Exhibit 6-2: Shoot Days, Greater Los Angeles Region



In late 2020, many in the industry voluntarily dropped production again to help stop the second wave of the virus when it surged over the holidays. Production is currently allowed, and the industry adheres to government mandates and union agreements to protect the health of workers, their families and the wider community.

Over the past year and a half, the Motion Picture and Video Production industries have been experiencing a significant recovery in terms of employment. **From April 2020 to October 2021, employment in the industry increased by just over 41.2 percent from 78,200 to 111,100 payroll jobs.** Although film permit applications and shoot days plummeted in 2020 as a result of the pandemic, there was a strong resurgence in the second and third quarters of 2021. The 10,127 shoot days in 2021 Q3 represented the highest total since the fourth quarter of 2018, and the best third quarter in twenty-six years (Exhibit 6-2).

According to the California Employment Development Department (EDD), pre-pandemic, California had 139,100 payroll jobs in the Motion Picture and Video Production industries³⁵ in February 2020, *accounting for 0.8 percent of the 17.6 million total nonfarm jobs across the state.* Note that this jobs figure encompasses more than just employment on qualified motion picture and television productions and includes productions that do not qualify for the film and TV tax credit, such as commercial advertising, music videos, news programs, education programs, talk shows, game shows, sporting events/activities, awards shows, telethons, and reality shows.

Stimulative Effects of the Program

As the California economy officially reopened June 15, 2021, and countenances a post-COVID-19 economy, it is worth assessing the California Film and Television Tax Program in the context of its ability to stimulate economic activity. Maintaining, and even expanding, the

³⁴ Robb, D. "SAG-AFTRA Members Earned Record \$1.5 billion in First 4 Months of 2021; Jobs Also Hit 'Record High'". Deadline. July 27, 2021. <https://deadline.com/2021/07/sag-aftra-members-record-earnings-jobs-covid-2021-1234800756/>

³⁵ North American Industry Classification System (NAICS) 51211 Motion Picture and Video Production

tax credit program will serve as a catalyst for production spending in the short-term with the redemption of the credits, and therefore the cost associated with it, delayed.

The process of claiming or redeeming tax credits through the CA Film and Television Production Tax Credit program is lengthy. Once credits are awarded, production spending must begin within a certain period of time; as such, the economic benefits related to production activity – job creation and spending - precede the redeeming of the tax credits. The November 2019 Progress Report for the Film and Television Tax Credit Program estimated that program applicants typically receive their tax credit certificate 18 to 24 months after application, with new television series in particular receiving credit certification 23.9 months, on average, after application.

Investing in California’s film and television industry can provide an immediate economic boost and create jobs; and additional value lies in supporting the industry’s competitiveness over the longer term. The redemption of the credits will be staggered over several years, as production have their own timetables for completion. Yet, the production spending made by these projects, induced by the credits awarded, are associated with high jobs and output multipliers, more than paying for the state’s investment.



7. CONCLUSION

This section concludes the report with a quick summary of the study's main findings and recommendations.

Main Findings:

- The California Film and Television Tax Credit 2.0 Program has generated almost **\$21.9 billion in economic output** and is supporting more than **110,000 jobs** in California. This increase in economic activity has returned to state and local governments an estimated **\$961.5 million in tax revenue**.
- **For every tax credit dollar allocated** under California's Film and Tax Credit program, at least \$24.4 in additional output, \$16.14 in addition gross domestic product (GDP), and \$8.6 in additional wages will result just from production in the Los Angeles Zone. In addition, for every tax credit dollar allocated, state and local governments will receive \$1.07 in additional tax revenue.



Recommendations:

From the research conducted for this report and its key findings, a set of recommendations has been identified to continue to support California's iconic film and television production industry, helping to prevent further runaway production to other jurisdictions with more attractive credit programs and helping to ensure continued growth of the industry, its workforce, its infrastructure, and the clustering effect of the industry that helps generate additional activity across the varying supporting industries.

- **Consider increasing the annual allocation of tax credits to avoid future shortfalls.** **Critical new funding provided in SB144 to preserve recurring TV series allows California to sustain one of the most important genres of content.** The adoption of new measures authorizing the California Film Commission to avoid future shortfalls provides program stability. Since the program provides a positive return to state and local governments, consideration should be given to increasing the annual allocation of tax credits.
- **Consider extending the period of the program, making it a longer-lasting tax credit incentive program to encourage additional investment in infrastructure.**

California Film and TV Tax Credit Program 3.0 is set to sunset on June 30, 2025. **The potential impact of a longer-lasting tax credit incentive program should be investigated.** A longer program gives certainty to producers who plan film and TV and streaming series far in advance of physical production. And, a longer-lasting incentive program had the potential to indirectly encourage the construction and expansion of entertainment production facilities, which will likely attract out-of-state productions and retain in-state productions.



- **Consider addressing California’s lack of a standalone video effects (VFX) tax credit to prevent the further loss of this growing part of the industry.**

California is the only major production center without a standalone VFX tax credit. As larger budget films become more visual, dramatic and technological in their effects, the portion of the production budget spent on visual effects has increased commensurately. VFX is the only department on a film crew that has grown in recent years and, with advances in virtual production, will continue to be a large part of budgets for motion pictures and television projects moving forward.

For the special effects industry, even more so than film and television production, the work can be done anywhere by qualified labor. It is a lucrative business, with a high-skilled, highly-technical workforce that can produce quality product using personal computers across the globe.

Therefore, a provision specifically aimed at allowing visual effects providers to access tax credits should be considered. The need for a refundable and/or monetized VFX tax credit can serve to revitalize what was once a robust industry in California and create good paying jobs for thousands of Californians. Creating employment in the VFX sector will also help boost opportunities for a more diverse workforce in the film and television production industry.

- **Consider making California’s tax credit certificates refundable and transferable similar to other states’ programs to attract productions with larger job numbers.**

Consider setting a cap on the amount of tax credits to be refunded or transferred in any one year.

Over 30 states have production incentives in place to attract film, TV and streaming productions. These incentives take the form of rebates, grants and tax credits. Incentives offered as tax credits are generally either refundable tax credits, where the state redeems the tax credit at a discount, or as transferrable tax credits, which can be sold to a company with in-state tax liability. **California is the only major production center whose tax**

credits are nonrefundable and non-transferrable (for non-Indie film and TV productions).³⁶ Since California’s program awards tax credits to the biggest job creators, the state may be losing some productions with higher numbers of jobs, if those productions cannot utilize the nonrefundable or non-transferrable tax credits. A California tax credit that is refundable or transferrable could be offered to those productions with a limitation on the amount that could be refunded or transferred in any one year. Moreover, a refundable tax credit could be offered at a discount to the taxpayer, leaving some tax credits to revert to the General Fund or added back into the production tax credit program.

- **Consider expanding the tax credits available in the new California Sound Stage Filming Tax Credit Program (SB144) to ensure California continues to grow its much-needed sound stage production infrastructure.**

The establishment in SB144 of the new California Sound Stage Filming Tax Credit Program will drive private investment in infrastructure as well as the creation of new content. The new program positions California to compete with other jurisdictions that offer more aggressive production incentives and maintain California's leadership position in soundstage and production support capabilities. As several states aggressively pursue soundstage development, consideration should be given to expanding the tax credits available in this program to ensure California continues to grow its production infrastructure.



The CBS Television City owner, Hackman Capital Partners, is planning \$1.25 billion worth of improvements to the existing production facility (seen in its current state above), to meet the tremendous demand for studio space related to the insatiable demand for streaming services and the increase in virtual production in the industry.

³⁶ California’s production tax credit program is offered as an offset to existing tax liability, except for a small part of the program available to productions made by “independent” or non-publicly traded companies. The “indies” can sell their earned tax credit certificates to other California taxpayers.

APPENDIX

Methodology

Detailed budget data is highly confidential and not publicly available. Working closely with the California Film Commission, the LAEDC Institute for Applied Economics had access to budget data for all applicants to Program 2.0 (as of February 26, 2020) and approved for tax credit allocations with some aggregation by spending category. Each production was also anonymized by a numeric code, with additional numeric notation if the production took place over multiple fiscal years (especially for television productions with multiple seasons) and with indications for relocated productions. Data was also given for productions that took place in whole or part outside of the Los Angeles Zone. These data included expenditure data by California county.

To protect the confidentiality of this proprietary data, we report the results of our analysis in the aggregate; however, we do report both data and estimates by production type. The data provided included above- and below-the-line hires by project, qualified wages, qualified non-wages, all non-qualified expenditures. Data for those projects that engaged in production outside the Los Angeles Zone were given by project and by county in which the activity took place. These Out-of-Zone data were separated into project hires, local wages paid, and local expenditures for hotels, rentals, and permits and fees. Estimates were only generated for productions that received tax credits, since those productions and their associated economic activity were those directly subsidized by the state of California.

To estimate the economic impact of productions in receipt of tax credits, we proceeded in two steps: First, for each In-Zone production, we isolated the below-the-line wage expenditures and hires (as denoted by Qualified Wages and crew hires) for separate analysis within the model. All qualified expenditures, both wages and otherwise, were analyzed as taking place within NAICS 5121/IMPLAN 429. All non-qualifying expenditures were assessed at NAICS 7115/IMPLAN 499. Productions were analyzed separately by production type and estimates were aggregated across production type post-analysis. Second, Out-of-Zone expenditures were analyzed by production type and county. For Out-of-Zone expenditures, wages and expenses were analyzed by industry type. For example, hotel expenses were analyzed as industry activity within the accommodation industry. After analysis, In-Zone and Out-of-Zone impacts were reaggregated by project and again by production type. All findings are presented by Program 2.0 production type funding category.

Our estimates are based on a 536-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 (2021) 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 gives credibility to the assertion that the cost reductions made possible by California's tax credit are responsible for keeping these productions here.

All In-Zone activity was assumed to take place in the motion picture and video production industry and in Los Angeles County. Qualified wages were constrained in the model by the number of crew members hired by each production to prevent over-counting or under-counting of direct employment impacts because of those hires. Out-of-Zone expenditures for productions that did not ultimately receive credits, as indicated by the data provided by the California Film Commission, were omitted from the Out-of-Zone analysis.

For background players, a full-time equivalent (FTE) calculation was derived and applied. Due to the per diem nature of extras and background players, they were assumed to have only worked 16 hours within each 30-day period of production. Using these constraints, the maximum number of workable hours for a background player was determined for each project. Then, using the number of background players hired for each project, an FTE conversion factor was calculated for each project by comparing the maximum number of background player worker-hours to a 2,080 yearly number of hours assumed for a full-time, 40-hour per calendar week employee.

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

We do not consider 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. However, the data provided to the LAEDC by the California Film Commission indicated a variable credit certification across productions, including certifications that occurred within the same year, indicating there exists immense variation between productions in terms of credit realization. Therefore, unlike previous analyses, the LAEDC did not apply an intertemporal discount to reported credit allocations.

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