Konrad Jackson

From: Jerry LaVine [akjerry@yahoo.com]
Sent: Friday, April 08, 2011 2:44 PM
To: Rep. Kurt Olson; Rep. Craig Johnson; Rep. Mike Chenault; Rep. Dan Saddler; Rep. Steve Thompson; Rep. Lindsey Holmes; Rep. Bob Miller
Cc: Konrad Jackson
Subject: CSSB 23 in House L&C
Attachments: MASS2010FilmIncentiveReport.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Hello House L&C Committee Members,

Thanks to the Chair and the members of the committee for taking up this bill from the Senate.

I write with concerns for this legislation. CSSB 23 is not in the best interest of Alaska's economy. I am thinking of the future when it will not be popular to subsidize Hollywood. What does Alaska businesses do when that happens?

This is an exciting industry to work. I have been in the business for for over 25 years. I own and operate a production company and equipment rental business in Anchorage since 1997 and have been self employed since 1993. I am grateful to have a career here in Alaska as it is also the place I have grown up.

I have been looking to learn about film incentives and their effect on markets around the US. I have been researching other states film programs and I believe Alaska can learn from what is happening around the country.

From what I have learned, I have made the hard decision that I believe that film subsidies will not be as good for Alaska as some in the industry will claim.

Here is a list of concerns I sent to my State Senator and State Representative:

Alaska Film Subsidy Concerns
for the 27th Alaska State Legislature to consider

1. Economic study is needed first before a 10-year extension. To move forward with $200 million more in public money and 10 extra years added to the program is not good policy until the legislature can see if there is a return to Alaska's economy. This extension should not be rushed through this legislative session. The current program still has 2 1/2 years before sunset. We need more time to see what the current impact is for proper analysis. SB 23 and HB 67 should be tabled until economic questions can be answered.
2. Subsidy artificially lowers Alaskan's wages by subsidized interstate travel of non-resident workers.
3. Subsidy artificially lowers rental rates on capital assets owned by Alaskan businesses (grip & lighting equipment, sound gear, cameras, trucks and other customary industry assets).
4. High risk for Alaska businesses to invest in industry capital assets when subsidy pays for producer to bring with them and ship interstate, necessary equipment and autos for production.
5. Wages of actors, directors, producers and other above the line and below the line personnel from out of state are counted as local Alaska ground spend with regards to the current statues.

6. All equipment and vehicles shipped into Alaska for use on a production is also counted as local Alaska ground spend as long as the producer uses a Alaska vendor to write the checks to the out of state vendors.
7. The current statue puts Alaskans second behind out of state workers. Producers are not required to hire Alaskan's except for travel agencies and CPA's.
8. Lack of sound stages and other industry infrastructure to also include roads throughout Alaska.
9. No checks and balances within the Alaska Film Office and the statue does not provide for any. The Alaska Film Office budget does not include any money for more staff to check the paperwork and receipts turned in by producers.
10. No market demand to make movies in Alaska unless a subsidy exists.
11. U.S. film subsidy wars could create a paradigm of perpetual public money for the film industry at state or local levels.
12. Too many loopholes that benefit out of state producers.

Think about what it means for industry to invest? You might hear that Hollywood producers are lined up to invest in Alaska when that is not the case. These producers and films are very transient and chase subsidizes around the country and world.

This is not about movie producers investing in Alaska. Their money is not an investment. The Alaska private sector is the one taking all the risk on investment. The producers want businesses in local jurisdictions to take all the risk by investing in infrastructure such as sound stages and film equipment. If the jurisdiction does not have the film equipment the producers are given subsidy to ship in the equipment and the money spent with the out of state vendor is counted as local Alaska ground spend. If the local jurisdiction has no sound stage, the producer rents open space or takes the film to another jurisdiction. The biggest risk here again is the local businesses investment on infrastructure. Again they don't invest and they take no risk in the future of Alaska.

With the CS for SB 23, changes have been made but still not enough to protect the interest of Alaskans. Lowering the base subsidy to 20% from 30% for Non-fiction Television (Reality TV) still does not keep the non-resident producer from hiring non-resident workers just the opposite is true, any subsidy to a non-resident producer to hire a non-resident worker is bad public policy. Alaska should not have to pay for television shows that were already in production or any future reality show because it is not new money to our state. It would be free advertising for Alaska if the state didn't subsidize these shows. It was free advertising until the subsidy started paying reality show producers. Alaska Should not subsidize these reality shows.

SB 23 has a secrecy section that does not protect Alaska's interest and I think is bad public policy.

Sec. 12. AS 44.33.234 is amended by adding a new subsection to read:
(c) Information submitted in an application under (a) of this section is confidential and is not subject to inspection or copying under AS 40.25.110 - 40.25.125.

I am concerned that this new subsection will take away what the public currently is allowed to view in the public records. What the public see's currently is highly redacted.

I have attached a report from the Commonwealth of Massachusetts Department of Revenue. This is the most current economic report from a film incentive state that has bigger markets of population and infrastructure. There is more reports and studies circulating. I can provide you more information if you like. This report and others have help me make a decision about film subsidies.

The local study done by The MacDowell Group for AEDC is great to see but is done without the producers of "Everybody Loves Whales" completing their production expenses, audit and final application for tax credit.
We do not know what the real numbers are until the numbers are turned into the Alaska Film Office. You can't make a $200 million decision based on MacDowell Group numbers. I would want to wait and ask more questions.

I want finish by saying that I do not support the passage of CSSB 23 or HB 67 if it is to come before you. Please consider tabling of the bill or a no vote.

If you have more questions and would like to contact me, please feel free to call or email me back. I am also open to working with your staff to help provide you with more information.

The one thing that stands out in my mind when it comes to the future of film in Alaska is that one day the legislature will decide not to subsidize Hollywood. Once the subsidy is gone so are the Hollywood producers.

It is ok to say no. . .

Thanks for your time,

Jerry LaVine
907-561-6450

TO INFINITY AND BEYOND!

A Report on the Massachusetts Film Industry Tax Incentives

Commonwealth of Massachusetts
Department of Revenue

Navjeet K. Bal
Commissioner of Revenue

January 2011

Key Findings

This is the Department of Revenue's third annual report of the Massachusetts film industry tax incentive program. In accordance with the Massachusetts' statutory requirements, this report provides an estimate of the Massachusetts economic impact of the film tax incentives. The Department relied on data provided in connection with the film tax credits to estimate the amount of new Massachusetts spending generated by the film tax incentives and the positive multiplier effects on the Commonwealth's economy. Given that the state has a balanced budget requirement, the report then takes into account state budget cuts that are needed to offset tax expenditures on the film tax incentives, and the negative multiplier effects of such cuts to arrive at an estimate of the net impact on the state's economy.

The report's key findings are as follows:

2009 Film Productions and net tax impact:

- For productions filmed in calendar year 2009 that have thus far applied for film tax credits, a total of approximately $82.4 million in film tax credits were generated by 86 individual productions. While commercial/advertising productions accounted for the largest number of tax credits awarded (48), 13 feature films accounted for almost 93% of the total value of tax credits claimed (pages 12-13);

- Massachusetts paid an estimated $100 million in fiscal year 2010 for film tax credits that were issued in calendar year 2009 and those that had been issued in prior calendar years but had not yet been used (page 13);

- In calendar 2009, the film tax incentive program generated $10.4 million in new state revenue that partially offset the cost of the tax credits (pages 16-17);

Spending allocations:

$319.0 million in calendar year 2009 spending			
	Massachusetts Spending	Non-Massachusetts Spending	Total
Wages	$42.3 million	$152.3 million	$194.7 million
Non-Wage Spending	$61.5 million	$62.9 million	$124.3 million
Total	$103.8 million	$215.2 million	

- Calendar year 2009 production spending eligible for the tax credits totaled $329.7 million. Of that spending, DOR estimates that $10.7 million in spending would have occurred even in the absence of the film credits, as it was for long-running series and local-themed commercials that had been produced in Massachusetts prior to the enactment of the film incentives. Of the remaining $319.0 million in new 2009 spending considered attributable to the tax incentives, $103.8 million, or 33% was paid to Massachusetts residents or businesses located in Massachusetts, and $215.2 million, or 67%, was paid to non-residents or businesses located outside of Massachusetts (pages 8-10);

- Of the $319.0 million in new film production spending, $194.7 million, or 61% was spent on wages and $124.3 million, or 39%, was non-wage spending. Approximately $42.3 million, or 22% of wage spending, was paid to residents and $152.3 million, or 78%, was paid to non-residents. Of the non-wage spending, approximately $61.5 million, or 49%, was paid to Massachusetts-based businesses, and $62.9 million, or 51%, was paid to non-Massachusetts based businesses (pages 9-10);

Net economic impact

- After taking account of payments to non-residents and non-Massachusetts businesses, as well as state spending reductions required to fund the tax credits in order to maintain a balanced budget, in calendar year 2009 the film tax credit program resulted in $32.6 million in new spending in the Massachusetts economy. Over the calendar year 2006 to 2009 period, the film incentive program resulted in $161.2 million in new spending in the Massachusetts economy (page 15);

- In calendar 2009, the film incentive program generated additional Massachusetts state Gross Domestic Product (GDP) of $168.5 million, and personal income of $25.2 million (pages 16-17);

Net impact on FTE's:

- In calendar 2009 the film tax incentive program resulted in approximately 586 net new full time equivalent employees (FTEs), with approximately 1,897 new FTEs created by film production spending and its multiplier effects and 294 Massachusetts residents employed out of state. Under the State's balanced budget requirements, the tax expenditure for the film tax incentives has to be offset by either a tax increase or a budget cut. For purposes of analyzing the net economic impact of the film tax incentive, this report assumes that state budget expenditures were reduced to offset the film tax incentive, resulting in an estimated reduction of 1,606 FTEs. In 2009, the number of net new jobs for Massachusetts residents is estimated at 222 as a result of the film incentives offset by corresponding state spending reductions. In 2009, the cost to the state per Massachusetts resident job created was $324,838, and for all jobs created was $123,130. For the period 2006 to 2009 the cost per Massachusetts resident job created was $133,055 and for all jobs created was $70,648 (pages 16-19);

Film tax incentives from 2006 through 2009

- For productions completed between calendar years 2006 and 2009, a total of approximately $259.8 million in film tax credits were generated by 449 individual productions. Production activity generated tax credits of $19.1 million in calendar 2006, $38.7 million in 2007, $119.6 million in 2008, and $82.4 million in 2009. Another 33 projects currently in pre-production, production, or post-production or which have not yet applied for tax credits are expected to generate at least $24 million in additional tax credits in calendar year 2010 (pages 13-14);

- Of the $259.8 million in film credits generated through calendar year 2009, $33.3 million are in the final stages, $10.3 million were retained by film production companies (of which $3.0 million was refunded), and $216.1 million were sold directly to other Massachusetts taxpayers or to tax credit brokers. Of the $226.5 million in credits generated so far, $201.1 million of the benefit accrued to film production companies, $4.8 million was gross profit of tax credit brokers, and $20.6 million benefited other Massachusetts taxpayers in the form of reduced net tax payments to the Commonwealth (pages 22-23);

- Of the $259.8 million in film credits generated through calendar year 2009, Massachusetts has paid out an aggregate of $232.4 million in issued film tax credits to production companies and other Massachusetts taxpayers in fiscal years 2007 through 2010 (page 13);

- Estimates of calendar years 2006-2008 economic activity generated by the film incentive program have been revised downward from last year's DOR report, due to the information received in 2009 on the location of non-wage film production spending;

Introduction

This is the third annual report on the Massachusetts film tax incentives issued by the Massachusetts Department of Revenue (DOR). As previous years' reports explained in detail how the film incentives work and the methodologies underlying the Department's analysis of the program's economic and fiscal impacts, this year's study forgoes those background and methodological discussions and refers readers to the relevant sections of prior years' reports where appropriate. (The prior years' reports are available on the Department's website at www.mass.gov/dor under the headings "News and Reports – Other DOR Reports"). Consequently, this report will focus on calendar year 2009 film production spending, but will also provide updated information on calendar years 2006-2008, where additional information for productions in those years was received.

The Massachusetts film tax incentives[1], as amended in July 2007, are composed of a tax credit equal to 25% of a film's production and payroll costs and sales tax exemptions[2] for film productions. The tax credits can be used to reduce the production company's tax liability, and to the extent that the tax credits exceed that tax liability, production companies may receive cash refunds from the Department of Revenue equal to 90% of the amount of the tax credit remaining. The tax credits may also be transferred or sold by production companies to third parties, who can use the tax credits to reduce their Massachusetts corporate, insurance, financial institutions, or personal income tax liabilities. In some cases, sales to third parties are direct sales to such third parties. In other cases the credit may be sold to tax credit brokers, who in turn may resell the credits to Massachusetts taxpayers who use the credits to reduce their state tax payments.

In March 2008, DOR issued its first annual report on the film industry tax incentives. That report relied mainly on data from sales tax exemption applications (the first step in qualifying for tax incentives), as a relatively small number of film productions had been completed and accordingly, few tax credit applications had yet been submitted. In July 2009, DOR issued its second annual report, which relied more heavily on tax credit applications and their supporting documentation, as well as on data gathered from the Department of Revenue's tax return and transaction processing databases. This year's report relies on sources similar to last year, but supporting information this year includes more detailed data on wage and non-wage spending, allowing more precise estimates of state economic impacts.

Economic Impact Methodology

As required by law, one of the primary purposes of this report is to estimate the Massachusetts economic impact of the film tax incentives. Conceptually, the immediate net economic impact of the incentives is relatively straightforward, and calculated as shown in the following diagram:

[1] *See* St. 2007, c. 63; also *see* DOR's TIR 07-15 for a full description of the film credit.
[2] Applies to sales of tangible personal property, including meals, to a qualifying motion picture production company or to an accredited film school student for the production expenses related to a school film project.

Amount of *New* Massachusetts Wage and Non-Wage Spending Generated by the Tax Incentives **And** Additional Massachusetts Economic Activity Generated by New Wage and Non Wage Spending (Positive "Multiplier" Impact)

Minus

Negative Economic Impact of State Spending Cuts or Tax/Fee Increases Required (Net of Tax Revenues Generated by New Economic Activity) to Maintain a Balanced Budget **And** Additional Massachusetts Economic Impact of Those State Spending Cuts or Tax/Fee Increases (Negative "Multiplier" Impact)

In order to estimate the net economic and fiscal impacts of the tax incentive program, this report provides in-depth statistical data from film tax credit applications and uses this data to estimate economically relevant variables. This report includes the following statistical information:

- The total amount of tax credits generated, claimed, and paid by calendar and fiscal year;
- The types of productions claiming the tax credits;
- An estimate of the film production activity that would have occurred in the Commonwealth even in the absence of the tax incentives;
- The dollar amount of wage and non-wage spending for film productions that claimed the tax incentives;
- The dollar amount of wages and salaries that were paid to Massachusetts residents and non-residents;
- The dollar amount of non-wage spending that was paid to Massachusetts-based and out-of-state businesses;
- The number of new jobs generated by film productions that claimed the tax incentives, for both residents and non-residents; and
- The net increase in the amount of spending that occurred in Massachusetts as a result of the film tax credits.

As in last year's report, this year's study uses this statistical information to estimate the net economic and fiscal impacts of the film tax incentive program, employing a dynamic model of the Massachusetts economy developed by Regional Economic Models, Incorporated ("REMI"). A dynamic analysis estimates the full impact on the economy and the state's revenue stream of an increase or decrease in economic activity resulting from a tax law change, including the impacts of "multiplier" and displacement effects. We have also taken advantage of the more detailed spending data now available to update our estimates of the program's impact in calendar years 2006 through 2008.

In this report we use the terms "film" and "film credit" to refer to production activity that is eligible for the Massachusetts motion picture credits and sales tax exemptions. This activity includes the production of motion pictures, certain television programs and commercials, as well as related activities.

Production Spending in the Absence of Tax Incentives. Because this report is attempting to measure only *new* Massachusetts economic activity, we do not include economic activity that, while eligible for the film tax incentives, was already taking place before the tax incentives were implemented and presumably would have continued to take place had the incentives not been enacted. In particular, there was significant commercial and advertising production activity in Massachusetts that pre-dated the tax incentives, and Massachusetts has been an important center for public television productions, with stations from the Commonwealth providing significant national and local programming. Massachusetts has also served as a base for documentary productions. In estimating the economic impact of the tax incentives, it is important to establish a spending base for these activities, and include only the incremental impact of spending that would not have occurred absent the tax incentives. We used the following methodology and assumptions to determine whether production activity was new:

Feature Films. We assumed that all feature films applying for the tax credits were induced to film in Massachusetts due to those credits. Although a small number of feature films were produced in Massachusetts prior to enactment of the film tax incentives in 2005, in this analysis we have assumed that there would have been no feature films produced in the Commonwealth had it not been for the tax incentives. With more than 40 states now having adopted tax incentives to encourage film production, it is reasonable to assume that no major movie productions would have been filmed in the Commonwealth in the absence of the Massachusetts tax incentives. While some smaller-budget filming might have occurred here, we have no way to distinguish these and assume in this analysis that they represent new economic activity. Since smaller-budget films represent only a small portion of film production spending in the Commonwealth, they do not materially affect our results.

Commercials/Advertising Projects. For commercials and advertising projects, we analyzed each of the 48 calendar year 2009 productions identified as commercials or advertising. If those commercials were for local businesses, local sports teams, local non-profits (such as local health insurers), state and local governments, or public service announcements, then we classified them as productions that would have occurred even in the absence of the tax incentives. The remainder of the advertising productions, which were for non-Massachusetts businesses or governments or national advertising campaigns, were assumed to have been due to the tax incentives. While this probably overestimates the amount of spending due to the tax credits (since there were a substantial number of advertising companies in Massachusetts responsible for national advertising campaigns prior to the enactment of the tax incentives), this overestimate does not materially affect our calculation of the overall economic impact of the incentive program since advertising makes up a relatively small portion (around 2%) of the value of production activity eligible for the tax incentives.

Television Series. We identified long-running shows and specifically local programming that claimed the tax incentives, and assumed that these would have continued to be produced even without the incentives. For the most part, these consisted of educational, public affairs, and sports-themed productions connected to long-established local institutions.[3]

[3] If we could not conclusively identify the TV series as having been produced prior to the incentives becoming available, we assumed that such series would not have been produced in the absence of the tax incentives. Thus our estimate probably overestimates the amount of new television series production activity spurred by the incentives.

Including the 16 television series produced in 2009, DOR has received 96 tax credit applications for television series produced in the years 2006 to 2009, claiming tax credits of $18.0 million. Based on an analysis of these applications, DOR estimates that two-thirds of these programs would have been produced in Massachusetts even without the credit, as they were long-running series produced by local stations. While these existing productions increased the amount of tax incentives attributable to these years, they had no impact on our estimates of economic activity in those years, since they do not represent new spending resulting from the tax incentives.

Documentaries. Because documentaries generally are one-time events, it was more difficult to estimate how many would have been made in the absence of the film tax incentives. However, some documentaries that were produced in 2009 were made for local television stations or had local themes, and the production companies that produced them had created similar programs in the Commonwealth in the past. In such cases, we classified those documentaries as ones that would have been made even without the film tax incentives.

Payments to Non-Residents and Non-Massachusetts Vendors. Not all production spending benefits the Massachusetts economy or Massachusetts residents – some spending "leaks" out of the Commonwealth's economy if spent on imports of goods or services, or employment of non-residents. Money spent on imports by definition is not included in the state's gross domestic product (GDP) although wages paid to non-residents are included in that measure. To the extent that non-resident wages are a significant share of film industry spending, including them in Massachusetts's gross state product overstate the direct benefit of such spending to the Massachusetts economy. In contrast, measures of state personal income *do not* include non-resident wages (as such measures are based on the state of residence of workers, not the place where the work was performed), and thus may be a better measure of economic benefit to Massachusetts citizens. As almost all feature films are by definition short-term projects that spend at most several months shooting in Massachusetts, an important consideration is whether the work on those productions is done by Massachusetts residents or non-resident actors and movie industry professionals. Payments to Massachusetts residents have much higher "multiplier" effects than payments to non-residents, as a significantly higher proportion of income earned by residents is spent on local businesses and in turn generates additional local economic activity. Payments made to non-residents – especially workers who spend only a short time in the Commonwealth on film projects – will be spent almost entirely outside of Massachusetts, likely in the state or states where the worker regularly resides. This is particularly true of wages paid to highly-compensated actors, directors, producers, writers and their staff, whose local expenses – including in-state travel, food, lodging, entertainment, and ancillary expenses – are already included in the film production budget (and are themselves generally eligible for the 25% production credit), thereby reducing the amount of income that such highly compensated non-residents need to spend in Massachusetts.

In this context, it is useful to distinguish between so-called "above-the-line" and "below-the-line" film production expenses:

- "Above-the-line" spending includes the costs of the primary cast, director, producer, and screenwriter (to the extent that any rewrites are done in Massachusetts during the course of production), virtually all of which are payments made to non-Massachusetts residents, including significant budgets for food, travel, entertainment, and living expenses.

- "Below-the-line" expenses include costs such as those for production crew, set designers, set construction, and extras, and it is these payments that generate economic activity in the Commonwealth, but mainly to the extent that they are made to Massachusetts residents.

Because most film budgets we reviewed included amounts for wages, lodging, meals, and entertainment for non-resident production employees (including below-the-line workers), and because the work on most film projects is intensive, requiring long work hours that leave little time for other activities, we follow previous studies in assuming that non-resident wages and salaries generate little additional economic activity in the Commonwealth. As is the case in most other studies, we assume that none of the (above-the-line) wages of those earning $1 million or over is spent in Massachusetts because virtually all their local expenses, including lodging, food, entertainment, and miscellaneous expenses, are typically covered in the production budgets. There is greater uncertainty about what portion of other non-resident wages and salaries (mostly, but not entirely, below-the-line costs) is spent locally. However, because lodging is provided and meals are catered or otherwise covered by *per diems* for these non-resident employees, we assume that only 5% of wage and salary payments to non-residents earning less than $1 million per production (which includes a portion of above-the-line employees who are paid high salaries) is spent in the Commonwealth. Similar to our assumption in last year's report, this implies that after non-resident employees working on Massachusetts film productions have federal, state, and Social Security taxes deducted from their wages, they would spend locally 8%-9% of the disposable income they earn during their short time here. As most consumer spending is generally for housing (33.9%), transportation (17.0%), food (12.8%), pensions (11.1%), health care (5.9%), and entertainment (5.6%)[4], almost all of which is provided for in the production budgets themselves, our assumed local spending level for non-resident employees is most likely a high-end estimate.

Our assumption that only a small amount of non-resident earnings is spent in Massachusetts does *not* imply that the presence of non-resident employees creates no economic activity, but rather that the economic activity is already accounted for in the travel, lodging, meals, and entertainment allowances and *per diems* that are included in the film production budgets themselves. To count additional indirect spending from wages and salaries of non-residents would be to double-count this economic activity, and thus overestimate the economic impact of film productions.[5]

Economic "Multipliers". The gross production spending amounts do not take into account "multiplier" impacts of the initial "direct" spending. As money is spent on productions, these direct purchases stimulate "indirect" economic activity of vendors, and payments to such vendors' employees increase personal income and spending of Massachusetts residents, resulting in additional "induced" economic activity. These multiplier impacts, which in this report are simulated using a dynamic model of the Massachusetts economy constructed by Regional Economic Models Inc. ("REMI"), must be taken into account. Multiplier impacts must also include the effect of state spending cuts required to maintain a balanced budget (see next section).

Balanced Budget Requirement and Refundable/Transferable Tax Credits. Massachusetts has a balanced budget requirement, so government spending reductions must be made (or other revenue raised) to maintain a balanced budget when film tax credits and sales tax exemptions reduce state revenues. In the same way that production spending has positive multiplier impacts, government spending reductions have negative multiplier effects, as government spending cuts reduce employment and purchases in Massachusetts. Where tax credits are non-refundable and non-transferable, the cost to the state of the credits is limited to the state taxpayer's tax liability, and to the extent that the tax credits induce new economic activity, the revenue loss to the state from the tax credits can be considered revenue that would not have been received by the Commonwealth in the absence of the tax incentives. In that case there is no net revenue loss to the state. However, where tax credits

---

[4] These percentages are derived from the most recent U.S Consumer Expenditure Survey, *Consumer Expenditures in 2008*, U.S. Department o f Labor, Bureau of Labor Statistics, April 2009, available at: http://www.bls.gov/cex/csxann08.pdf.

[5] Another study that excludes both above-the-line and below-the-line non-resident wage and salary spending in calculating multiplier effects is Steven B. Miller and Abdul Abdulkadri, "The Economic Impact of Michigan's Motion Picture Production Industry and the Motion, Picture Production Credit," Center for Economic Analysis, Michigan State University, February 6, 2009, p. 4, available at: http://www.michigan.gov/documents/filmoffice/MSU_Economic_Impact_Study_269263_7.pdf. Two other studies exclude all above-the-line wages and salaries but do not explicitly address non-resident below-the line wages. See Connecticut Department of Economic and Community Development, "The Economic and Fiscal Impacts of Connecticut's Film Tax Credit", February 2008, at http://www.ct.gov/cct/lib/cct/Film_Tax_Credit_Study_-_Final.pdf and Community Opportunities Groups, Inc. and Jeffrey Donohoe Associates, "Plymouth Rock Studios: Economic and Fiscal Analysis", October 2008, p.23 available at: http://www.plymouthrockstudios.com/PDFPresentations/Plymouoth%20Rock%20Studios%20Report.pdf.

are refundable or transferable, as is the case with the film tax credits, the revenue loss to the state can (and usually does) exceed the tax liability of the taxpayers generating the tax credits. Where production companies that generate film tax credits have no Massachusetts tax liability and claim the credits under the 90% refundable option, the cash payments made by the Department of Revenue to film production companies are equivalent to direct cash grants from the Commonwealth, though that spending is administered through the tax refund system and is not classified as a direct state expenditure. In those instances in which the production companies have no Massachusetts tax liability against which to apply the tax credits but elect to sell those credits to a Massachusetts taxpayer (or to a tax credit broker, which then sells the tax credits to a Massachusetts taxpayer) which uses the credits to reduce or eliminate tax payments it otherwise would have made to the Commonwealth, the effect on the Commonwealth's cash flow and budget is equivalent to that of a cash grant. The film production company receives a percentage of the credit amount (see Table 7 on page 23) as the purchase price for the credit. The purchaser of the tax credit realizes the full value of the credit in the form of a refund or reduction in its Massachusetts tax liability. In this case, the cash payment to the film production company is made by a third party (either a tax credit broker or a Massachusetts taxpayer) rather than the Commonwealth itself, with the reduction in state tax revenue coming between one and six months later when the buyer of the credit (typically an insurance company, financial institution, or other corporation) reduces its tax payments. Therefore, where film production companies that generate tax credits do not have sufficient tax liability to use them, both refundable and transferable credits do not constitute new tax revenue foregone (since there is in fact no tax revenue to forgo), but are equivalent to cash outlays by the Commonwealth, though in the case of credits that have been transferred to third parties, the cash outlay comes in the form of either reduced tax payments or refunds of already remitted taxes on economic activity entirely unrelated to film productions. While there is much debate in tax policy circles whether all exceptions to the tax code are equivalent to expenditures, there is no question that tax credits which can be monetized by either refunding or selling them in the absence of sufficient tax liability are functionally identical to state spending. While these tax expenditures may generate offsetting economic activity that reduces the necessary spending cuts, that is no different from other state subsidies that may also generate economic activity and tax revenues. In this report, we therefore calculate the amount of state expenditure cuts that were required to offset the tax expenditures, but only after taking into account the estimated amount of tax revenue generated by the tax incentives, which reduce the amount of required spending cuts.

Calendar Year 2009 Film Productions

As noted in the introductory section of this report, for calendar year 2009 film productions DOR was able to obtain much more detailed information on spending than it had in previous years, including the location of vendors for non-wage expenditures. This permitted us to generate much more precise estimates of economic impact of film production spending in 2009, as well as to update estimates of pre-2009 impacts based on the more comprehensive data.

One important consideration in the economic analysis is that under Massachusetts law non-wage expenditures *do not* have to be purchased from a Massachusetts-based business in order to qualify for a film tax credit; purchases can be made from out of state and imported into the Commonwealth. As long as those purchases are used in the Massachusetts-based production, they are considered Massachusetts spending and eligible for the 25% film credit. Purchases from Massachusetts-based vendors have very different economic impacts than imports, as purchases from vendors generally stimulate material economic activity only in the state or country where the purchase is made, and not elsewhere.

Table 1 – 2009 Film Production Spending by State of Residence or Location of Vendor on page 10 shows the distribution of wage and non-wage expenditures by state of residence (for wage expenses) and location of vendor (for non-wage expenses). As of June 30, 2010 there were 86 productions (see Table 2 on page 12) filmed in calendar year 2009 that have been approved for tax credits or are in the final stages of the approval process.

Total 2009 film production spending eligible for tax credits was $329.7 million, generating $82.4 million in film credits (see Table 3 on page 13), with $201.4 million in wage spending and $128.3 in non-wage spending. Of the $329.7 million in 2009 spending, DOR estimates that $6.2 million in spending on commercials (90% of total spending on commercials), $3.9 million in spending on television series (32% of spending on television series) and $0.6 million in spending on documentaries (10% of spending on documentaries) would have occurred even in the absence of the tax incentives, so these are subtracted from our estimates of new economic activity generated by the tax incentives, leaving $319.0 million in new spending generated by the tax incentives. Of that $319.0 million in new spending, $103.8 million, or 33% of total new spending, was paid to Massachusetts residents or Massachusetts-based businesses, and $215.2 million, or 67% was paid to non-residents or businesses located outside of Massachusetts. The largest category of new spending was wages and salaries, where $194.7 million in new spending was generated, with $42.3 million, or 22% paid to Massachusetts residents, and $152.3 million, or 78%, paid to non-residents. Of that amount, $82.0 million, or 42.0% of total new wage spending, was paid to non-resident actors earning over $1 million per production.

Table 1 shows non-wage spending in 26 different spending categories, based on a DOR analysis of tens of thousands of individual expenditures, documentation for which was submitted as part of film credit applications. Of the new non-wage spending of $124.3 million, $61.5 million, or 49% of total non-wage spending, was paid to Massachusetts-based businesses and $62.9 million, or 51% was paid to out-of-state vendors. As column C in Table 1 shows, the largest categories of new non-wage spending were fringe benefits, ($22.8 million), set construction ($11.8 million), location fees ($10.2 million), hotel/motel and private residence rental ($10.4 million and $1.3 million, respectively), cameras/film ($7.1 million), set lighting/electrical ($6.9 million), special effects ($6.7 million), producer/director fees ($6.4 million), and food/restaurants/catering ($4.3 million). In general, the more film industry-specific the service or product, the higher proportion of purchases made from non-Massachusetts businesses, as shown in columns F and G of Table 1. The categories of primarily local expenditures include location fees and hotel/motel spending, where purchases were 100% local; extras, which were 90% local; private security/police details, which were 83% local; food/restaurants/catering, which were 63% local (with non-local catering purchasing reducing the total percentage); and set construction, which was 60% local. Primarily non-local purchases were cameras/film, which were 92% non-local; trailers/mobile dressing rooms, which were 91% non-local; producer/director fees, which were 90% non-local; special effects, which were 87% non-local; and costumes/clothing/props, which were 86% non-local. (The percentages shown in the table are adjusted for estimates of local purchases by non-local vendors, such as where out-of-state caterers are assumed to purchase food in Massachusetts and out of-state transportation services are assumed to purchase fuel in Massachusetts.)

Table 1 - 2009 Production Spending By State of Residence or Location of Vendor[1]
(Dollar Amounts are in Millions)

Category of Spending	(A) Total Spending Eligible for Tax Credits	(B) Minus Spending That Would Have Occurred in Absence of Incentives	(C) = (A-B) New Spending Resulting from Tax Incentives	(D) New MA Resident Wages or MA Vendor Purchases Resulting from Incentives	(E) = D/C New MA Resident Wages or MA Vendor Purchases as % of New Spending	(F) New Non-Resident Wages or Non-MA Vendor Purchases Resulting from Incentives	(G)= F/C Non-Resident Wages or Non-MA Vendor Purchases as % of New Spending
Wage Spending	**$201.4**	**$6.8**	**$194.7**	**$42.3**	**22%**	**$152.3**	**78%**
Wages $1 Million & Over	*$82.0*	*$0.0*	*$82.0*	*$0.0*	*0%*	*$82.0*	100%
Wages Under $ 1 Million	*$119.4*	*$6.8*	*$112.6*	*$42.3*	38%	*$70.3*	62%
Non-Wage Spending	**$128.3**	**$3.9**	**$124.3**	**$61.5**	**49%**	***$62.9***	**51%**
Fringe Benefits[2]	$23.3	$0.5	$22.8	$7.1	31%	$15.7	69%
Employment Taxes[2]	$2.3	$0.1	$2.2	$0.5	22%	$1.7	78%
Set Construction	$12.0	$0.2	$11.8	$7.1	60%	$4.8	40%
Hotel / Motel	$10.6	$0.2	$10.4	$10.4	100%	$0.0	0%
Location Fees	$10.5	$0.3	$10.2	$10.2	100%	$0.0	0%
Cameras / Film	$7.4	$0.3	$7.1	$0.6	8%	$6.5	92%
Set Lighting/Electrical	$7.0	$0.1	$6.9	$2.7	39%	$4.2	61%
Special Effects	$6.9	$0.2	$6.7	$0.9	13%	$5.8	87%
Producer / Director Fees	$6.6	$0.2	$6.4	$0.7	10%	$5.7	90%
Food / Restaurants / Catering	$4.4	$0.2	$4.3	$2.7	63%	$1.6	37%
Costumes / Clothing / Props	$3.4	$0.1	$3.3	$0.5	14%	$2.9	86%
Transportation / Moving Services	$3.4	$0.1	$3.3	$2.3	70%	$1.0	30%
Trailers / Mobile Dressing Rooms	$2.9	$0.1	$2.9	$0.3	9%	$2.6	91%
Office Rental / Supplies / Support	$2.7	$0.3	$2.4	$1.6	67%	$0.8	33%
Local Travel / Car Rental	$2.5	$0.1	$2.5	$2.1	84%	$0.4	16%
Production Services	$2.3	$0.3	$2.0	$0.6	32%	$1.4	68%
Parking, Fuel, Auto Repair	$2.3	$0.1	$2.2	$1.9	86%	$0.3	14%
Private Security/Police Details	$2.3	$0.0	$2.2	$1.8	83%	$0.4	17%
Video Services / Studio Rental	$1.9	$0.1	$1.8	$1.0	53%	$0.9	47%
Animals	$1.8	$0.0	$1.8	$0.1	5%	$1.7	95%
Private Residence Rental	$1.4	$0.0	$1.3	$1.3	100%	$0.0	0%
Cleaning and Repair	$1.3	$0.0	$1.3	$1.2	97%	$0.0	3%
Extras	$1.2	$0.1	$1.1	$1.0	90%	$0.1	10%
Insurance	$1.1	$0.1	$1.0	$0.0	0%	$1.0	100%
Computer / Telecom Equip	$1.0	$0.0	$0.9	$0.4	44%	$0.5	56%
Miscellaneous / Other	$5.6	$0.2	$5.4	$2.5	47%	$2.9	53%
Total Spending	**$329.7**	**$10.7**	**$319.0**	**$103.8**	**33%**	**$215.2**	**67%**

[1] Based on film credit applications received through June 30, 2010

[2] Fringe benefits and employment taxes are allocated to the state of residence of the wage earner

Detail may not add to total due to rounding

Table 2 - Total Massachusetts Production Spending Eligible for Film Tax Credits below summarizes spending data for calendar years 2006 to 2009, the years in which the Massachusetts film credits were available. Because DOR was not provided with detailed spending data for pre-2009 productions, Table 2 shows broader categories available from pre-2009 film credit applications, with the 2009 data made comparable by allocating it to the pre-2009 categories. As the table shows, over the four years in which the tax incentive program was in effect through calendar year 2009, 449 productions claimed film tax credits, with total credit-eligible spending of $1,047.7 million. Of that $1,047.7 million in spending eligible for the tax credits, $335.5 million, or 32% was paid to Massachusetts residents and Massachusetts-based businesses, and $712.3 million, or 68% was paid to non-residents or non-Massachusetts businesses. Of that $1,047.7 million in spending eligible for the tax credits, $86.3 million would have occurred in the absence of the credits (see Table 4 on page 15).

Table 2 - Total Massachusetts Production Spending Eligible for Film Tax Credits, 2006-2009
(Dollar Amounts are in Millions)

	Calendar Years				
Category of Spending	2006	2007	2008	2009	2006 to 2009
Number of Productions	**91**	**119**	**153**	**86**	**449**
Feature Films	*7*	*14*	*20*	*13*	*54*
Commercials/Advertising	*41*	*52*	*84*	*48*	*225*
Television Series	*26*	*28*	*26*	*16*	*96*
Documentaries/Other	*17*	*25*	*23*	*9*	*74*
Total Wages	$43.4	$110.6	$303.9	$201.4	$659.3
Wages $1 Million & Over	*	*	*$133.6*	*$82.0*	*$262.1*
Wages Under $ 1 Million	*	*	*$170.3*	*$119.4*	*$397.1*
Fringe Benefits**	$4.9	$7.2	$21.4	$23.3	$56.8
Hotel/Motel/Private Residence	$4.0	$5.9	$19.5	$12.0	$41.3
Food/Restaurants/Catering	$2.4	$3.5	$11.8	$4.4	$22.2
Transportation/Moving Services	$5.2	$7.7	$22.9	$3.4	$39.2
Set Construction	$1.2	$4.7	$23.5	$12.0	$41.5
Location Fees	$9.3	$10.5	$41.1	$10.5	$71.4
Local Travel/Car Rental	$0.2	$0.2	$0.7	$2.5	$3.6
Unclassified/Other***	$14.2	$4.8	$33.3	$60.0	$112.4
Totals	**$84.7**	**$155.2**	**$478.2**	**$329.7**	**$1,047.7**
Of Which Spent on:					
MA Residents/Businesses	**$29.9**	**$46.1**	**$152.3**	**$107.2**	**$335.5**
Non-MA Residents/Businesess	**$54.8**	**$109.1**	**$325.9**	**$222.5**	**$712.3**

*Data hidden to protect taxpayer confidentiality

**Includes Social Security, unemployment insurance, and workers' compensation taxes

***May overlap with previous categories

Detail may not add to total due to rounding

Table 3 – Aggregate Amount of Tax Credits Generated and Used below shows the amount of tax credits claimed, categorized by the calendar year in which the production was completed and the fiscal year in which the tax credits were or are expected to be used to reduce tax payments. Through June 30, 2010, 449 productions had been approved or were in the process of being approved for tax credits totaling $259.8 million.

Table 3 - Aggregate Amount of Tax Credits Generated and Used

(Dollar Amounts are in Millions)

Year	Number of Tax Credits by Calendar Year In Which Production Took Place	$ Amount of Tax Credits Generated by Calendar Year in Which Production Took Place ($ millions)	Estimated Amount of Tax Credits Used By Fiscal Year ($ millions)
2006	91	$19.1	$0.0
2007	119	$38.7	$11.9
2008[1]	153	$119.6	$10.5
2009	86	$82.4	$110.0
2010	N/A	N/A	$100.0
Total Approved and Pending[2]	**449**	**$259.8**	**$232.4**

[1] Calendar year 2008 totals include 3 films that generated $35.8 million in tax credits where most filming was completed in 2008 but some production activities continued into early 2009.

[2] Through June 30, 2010.

Note: For Tax Year 2006, the payroll credit was only 20%, and credits were capped at $7 million for any one production.

Detail may not add to total due to rounding.

There is a lag between the date tax credits are issued and the date they are actually used to reduce tax liability, partly due to the time it takes to provide documentation of expenses and gain verification from DOR, but mainly because virtually all the production companies that have thus far generated the tax credits have no declared tax liability in the Commonwealth. Such companies sell the credits to brokers (who then resell them to taxpayers) or directly to taxpayers who can use the credits to offset their tax liabilities. The Department of Revenue estimates that of the $259.8 million in film tax credits for productions through calendar year 2009, $11.9 million was used to reduce tax payments or increase refunds in FY07, $10.5 million was used to reduce tax payments or increase refunds in FY08, $110 million was used to reduce tax payments or increase refunds in FY09, and $100 million was used to reduce tax payments or increase refunds in FY10. DOR estimates that tax credits already approved or in the final stages of approval but not yet used total $27.4 million, which presumably will be used in FY11. As explained in the previous section, where tax credits are refundable or transferable, the use of tax credits to reduce state tax payments determines the amounts of state spending cuts required in a fiscal year to maintain a balanced budget.

Based on an analysis of sales tax applications submitted through June 30, 2010, there were 33 additional film productions that were then currently filming in Massachusetts or that had recently completed filming in Massachusetts that will be eligible for an estimated $24.3 million in additional film tax credits.

Total New Massachusetts Direct Spending

Table 4 – Calculation of Increase in Massachusetts Local Spending Due to Film Tax Incentives below shows the calculation of new direct local spending from film production activity after adjusting for projects that would have occurred in the absence of tax incentives, wage and non-wage spending paid to non-residents, and state spending cuts required to fund the tax credits and maintain a balanced budget. Starting from credit-eligible film production total spending of $1.0477 billion for the period of 2006 through 2009 ($659.3 million in wages and salaries and $388.4 million in non-wage spending), we subtract $86.3 million for productions that would have occurred in the absence of tax incentives and $483.2 million in wages paid to non-residents (the entire $262.1 million in payments to non-residents earning more than $1 million per production and an additional $221.0 million, which represents 95% of under $1 million wages paid to other non-residents for feature films and all other productions), and $181.6 million in non-wage spending estimated to have been paid to non-Massachusetts vendors, and $135.4 million in state spending cuts to maintain a balanced budget, which leaves a total of $161.2 million in *net* new Massachusetts spending activity. For calendar year 2009 alone, the net new spending in the Massachusetts economy was $32.6 million. (The state spending cuts shown in Table 4 include adjustments for amount of state spending cuts that affect non-residents and non-Massachusetts businesses and thus “leak” out of the Massachusetts economy. These “non-Massachusetts” spending cuts reduce the direct and indirect impacts of the spending reductions.) These are the net new spending totals used as inputs for the REMI model to estimate multiplier effects.

Table 4 - Calculation of Increase in Massachusetts Local Spending Due to Film Tax Incentives
(Dollar Amounts are in Millions)

	Calendar Years				
	2006	**2007**	**2008**	**2009**	**2006 to 2009**
Film Production Total Spending	**$84.7**	**$155.2**	**$478.2**	**$329.7**	**$1,047.7**
Minus Spending In Absence of Tax Incentives	($23.8)	($22.5)	($29.3)	($10.7)	($86.3)
Minus Adjustment for Non-Resident Wages[1]	($19.9)	($78.4)	($236.1)	($148.8)	($483.2)
Minus Non-Wage Spending on Non-MA Vendors	($17.2)	($18.6)	($83.0)	($62.9)	($181.6)
New Massachusetts Film Spending from Incentives	**$23.9**	**$35.7**	**$129.8**	**$107.3**	**$296.7**
Minus Reduced MA Spending to Balance Budget[2]	$1.4	($6.6)	($55.4)	($74.8)	($135.4)
Net Increase in Massachusetts Local Spending	**$25.2**	**$29.1**	**$74.3**	**$32.6**	**$161.2**

[1]Includes all non-resident wages over $1 million per person ($262.1 million), plus 95% of non-resident wages under $1 million per person ($221.0 million).

[2]Net of increased taxes generated by film production and state spending cuts that are borne by non-residents and out-of-state businesses.

REMI Model Results

A dynamic analysis attempts to calculate the full impact on the state economy and revenue stream of an increase or decrease in economic activity resulting from a tax law change, including the impacts of "multiplier" and displacement effects. The REMI model simulates the structure of and interrelationships among the various parts of the Massachusetts economy, and can be used to estimate the impacts of a tax law change on state economic activity and tax revenue collections. The tax revenue changes calculated by the REMI model can then be compared to the initial cost of the tax incentives to arrive at a net cost to the state.

Table 5 – Dynamic Economic Impacts of Film Incentives on page 17 combines the results of DOR's payroll analysis (for direct employment) and the REMI simulation for indirect and induced employment (i.e., employment resulting from "multiplier" impacts) and other measures of economic activity.

Table 5 - Dynamic Economic Impacts of Film Incentives - REMI Model Results
Massachusetts Changes from Baseline
(Dollar Amounts are in Millions, Except Where Noted)

		Calendar Years				
		2006	**2007**	**2008**	**2009**	**2006-2009**
REMI Inputs - Calculation of Net New MA Spending						
Net New Massachusetts Spending for REMI Input (from Table 4)		**$25.2**	**$29.1**	**$74.3**	**$32.6**	**$161.2**
REMI Results - Changes from Baseline						
Employment (Resident - Includes Jobs Held in Other States)	a	314	352	795	222	1,683
Employment (Non-Resident)	b	137	308	679	364	1,487
State GDP[1]	c	$48.9	$107.2	$310.5	$168.5	$635.1
Economic Output[2]	d	$85.0	$151.9	$506.8	$327.2	$1,070.8
State Personal Income[3]	e	$16.5	$22.8	$50.8	$25.2	$115.4
State Taxes	**f**	**$2.4**	**$5.5**	**$16.6**	**$10.0**	**$34.6**
From Direct Spending	*f1*	*$1.6*	*$5.0*	*$15.6*	*$11.1*	*$33.3*
From Indirect/Induced Spending	*f2*	*$0.7*	*$0.5*	*$1.1*	*-$1.1*	*$1.3*
State Non-Tax Revenue	g	$0.3	$0.3	$0.8	$0.4	$1.8
Total State Revenue	**h=f+g**	**$2.6**	**$5.9**	**$17.4**	**$10.4**	**$36.3**
Tax Credits Generated (Not from REMI)	**i**	**$19.1**	**$38.7**	**$119.6**	**$82.4**	**$259.8**
Additional Tax Loss from Sales Tax Exemption (not from REMI)	**j**	**$0.0**	**$0.1**	**$0.3**	**$0.1**	**$0.6**
Total Tax Expenditure (not from REMI)	**k=i+j**	**$19.1**	**$38.9**	**$119.8**	**$82.5**	**$260.3**
$ in State Revenue Per $ of Tax Credit Generated	**h/i**	**$0.14**	**$0.15**	**$0.15**	**$0.13**	**$0.14**
Net $ Cost to State	**k-h**	**$16.5**	**$33.0**	**$102.4**	**$72.1**	**$224.0**
Net Cost to State Per MA Resident Job Created ($)[4]	(k-h)/a	$52,515	$93,749	$128,695	$324,838	$133,055
Net Cost to State Per MA & Non-MA Job Created ($)[4]	(k-h)/(a+b)	$36,597	$49,997	$69,443	$123,130	$70,648

[1,2]State GDP and state economic output include non-resident earnings
[3]State personal income excludes non-resident earnings
[4]Includes jobs held by Massachusetts residents working in other states; in dollars per job
Detail may not add to total due to rounding

Based on the inputs detailed in Table 4, the REMI simulation estimates that Massachusetts state GDP (the most useful measure of economic activity) increased by $48.9 million in calendar 2006, $107.2 million in calendar 2007, $310.5 million in calendar 2008, and $168.5 million in calendar year 2009 due to new film production spending resulting from the tax credits, while economic output (a broader, less useful measure of economic activity roughly equivalent to sales, including "sales" of labor) grew by $85.0 million in 2006, $151.9 million in 2007, $506.8 million in 2008, and $327.2 million in 2009. The REMI model estimates that the new economic activity generated by increased film production resulted in additional Massachusetts personal income of $16.5 million in calendar year 2006, $22.8 million in 2007, $50.8 million in 2008, and $25.2 million in 2009. The significant difference between growth in state GDP and economic output on the one hand and state personal income on the other (+$168.5 million for state GDP vs. +$25.2 million for state personal income in 2009) is caused almost entirely by the large proportion of wage and non-wage spending paid to non-resident employees and non-Massachusetts businesses, which are included in state GDP and state output but not in state personal income. Including estimated changes in Massachusetts residents employed in other states, estimated full time equivalent employment (FTEs) increased by 450 in 2006, 660 in 2007, 1,474 in 2008, and 586 in 2009 (see Table 6 on page 19), with increases in film-related industries offset by reductions in other industries caused by state spending cuts required to maintain a balanced budget. For Massachusetts residents, full time equivalent employment is estimated to have increased by 314 in 2006, 352 in 2007, 795 in 2008, and 222 in 2009. The impact of state spending cuts is considerably greater in 2009 than in previous years due to the delayed use of film tax credits, which results in a smaller net increase in employment in 2009 than in previous years.

Table 6 - Estimated Wages and Number of Full-Time Equivalent Employees (FTEs) Generated by Film Incentives on page 19 shows the details of the employment and associated total and median wages. The number of FTE Massachusetts residents employed directly on film productions is estimated to have increased by 100 in 2006, 190 in 2007, 600 in 2008, and 473 in 2009, while the number of non-residents hired directly in film productions is estimated to have increased by 105 in 2006, 286 in 2007, 673 in 2008, and 430 in 2009 (these results are not from the REMI model, but from an analysis of film budgets). The REMI simulation estimates the number of additional net indirect and induced jobs due to film spending but offset by state spending cuts, though no state spending cuts were required in 2006 due to the fact that no film credits were claimed until 2007. Film production spending created an estimated 207 indirect FTE positions in 2006, 291 indirect jobs in 2007, 1,088 indirect jobs in 2008, and 876 indirect jobs in 2009 for Massachusetts residents, as well as 28 jobs in 2006, 40 jobs in 2007, 147 jobs in 2008, and 118 jobs in 2009 for non-residents. However, job creation by film spending was offset by the job losses due to state spending cuts to maintain a balanced budget (except for 2006, when 28 jobs for residents and 4 jobs for non-residents were created due to a projected state spending increase as tax revenue generated by film production was not offset by tax credit claims). State spending cuts eliminated an estimated 133 jobs in 2007, 1,085 jobs in 2008, and 1,421 jobs in 2009 held by Massachusetts residents, as well as 17 jobs in 2007, 141 jobs in 2008, and 185 jobs in 2009 held by non-residents. Table 6 shows median wages for direct film jobs (with wages less than $1 million per production). The median wage was $67,775 for Massachusetts residents and $98,598 for non-residents for the period 2006 to 2008, and $51,116 for Massachusetts residents and $104,637 for non-residents in 2009[6].

[6] Due to lack of available detailed data for calendar years 2006-2008, median wages for those years are for feature films only and are not available for each year separately. Median wages for 2009 are calculated based on all new projects.

Table 6 - Estimated Wages and Number of Full-Time Equivalent Employees (FTEs) Generated by Film Incentives	Calendar Years			
	2006	2007	2008	2009
Employment				
Employment (Full-Time Equivalents)	**450**	**660**	**1,474**	**586**
Employment (Resident)	**314**	**352**	**795**	**222**
Direct Resident (Employed on Film Productions)	*100*	*190*	*600*	*473*
Indirect/Induced Jobs Held by MA Residents Due to Film Spending	*207*	*291*	*1088*	*876*
Indirect/Induced Jobs Lost by MA Residents Due to State Spending Cuts [1]	*28*	*-133*	*-1085*	*-1421*
Indirect Jobs Held By MA Residents in Other States	*-21*	*4*	*193*	*294*
Employment (Non-Resident)	**137**	**308**	**679**	**364**
Direct Non-Resident (Employed on Film Productions)	*105*	*286*	*673*	*430*
Indirect/Induced Jobs Held by Non-Residents Due to Film Spending	*28*	*40*	*147*	*118*
Indirect/Induced Jobs Lost by Non-Residents Due to State Spending Cuts [1]	*4*	*-17*	*-141*	*-185*
Total Wages ($ Million)				
Wages (Resident)	**$16.7**	**$24.4**	**$56.6**	**$32.3**
Direct Resident (Employed on Film Productions) [2]	$8.7	$18.2	$55.2	$51.4
Indirect/Induced Jobs Held by MA Residents Due to Film Spending	$7.0	$10.8	$41.3	$36.4
Indirect/Induced Jobs Lost by MA Residents Due to State Spending Cuts	$1.0	-$4.7	-$39.9	-$55.6
Wages (Non-Resident)	**$22.3**	**$45.7**	**$135.3**	**$88.4**
Direct Non-Resident (<$1 million per worker) [2]	$21.2	$44.8	$134.9	$90.7
Indirect/Induced Jobs Held by Non-Residents Due to Film Spending	$0.9	$1.5	$5.6	$4.9
Indirect/Induced Jobs Lost by Non-Residents Due to State Spending Cuts	$0.1	-$0.6	-$5.2	-$7.2
Median Wages ($) [3,4,5]				
Direct Resident (Employed on Film Productions)	$67,775 for the 2006-2008 Period			$51,116
Direct Non-Resident (<$1 million)	$98,598 for the 2006-2008 Period			$104,637

[1]Film credit program did not require state spending cuts in 2006 due to lag in tax credit claims

[2]Including wage payments reported as non-wage spending

[3]Indirect/induced jobs are generated from REMI output which does not include information necessary to calcuated median wages

[4]Wage payments reported as non-wage spending, which are not available for individuals, are excluded in calculating median wages

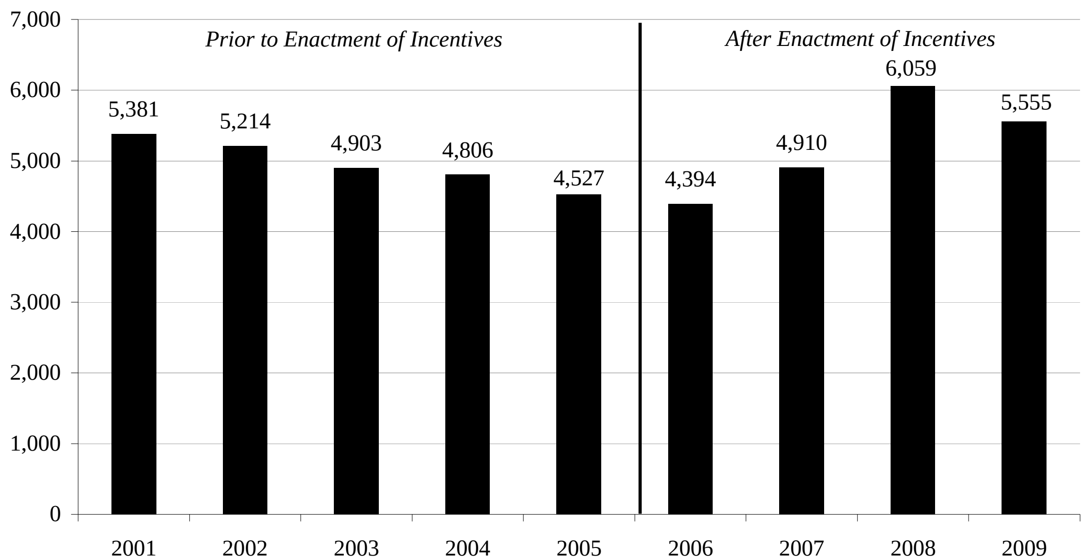
[5]Due to lack of available detailed data, median wages for 2006-2008 are for feature films and for all three years.
Median wages for 2009 are calculated based on all new projects.

Detail may not add to total due to rounding

To confirm the job estimates derived from the film budgets and the REMI model, DOR examined data reported by the state's Department of Labor and Workforce Development. DOR's FTE calculations are not strictly comparable to the Workforce Development data, since the latter are not FTE counts but rather snapshots of the number of employees (including short-term employees) working at a particular point in time. However, an analysis of the Workforce Development data can tell us whether the employment trends are consistent between the two sources. Data on industry employment are included in the Department of Workforce Development's "ES-202" employment and wage reports[7]. Prior to January 2008, employees in the motion picture category were undercounted in the ES-202 reports because the category excluded employment for members of the Screen Actors Guild, who were included in the "temporary employment" category of those reports. Starting in January 2008, Screen Actors Guild members were included in the motion picture category, accounting for some of the growth seen in the first half of calendar 2008. The Department of Labor and Workforce Development is not able to estimate how many employees moved from the temporary employment to the motion picture category, so making comparisons between the pre- and post-January 2008 periods provides measures of film industry growth between the two periods that are more suggestive than precise.

The chart below shows trends in average monthly film industry employment before and after the film incentives were enacted. Prior to 2006 when the film incentives were implemented, film industry employment had declined from 5,381 in 2001 to 4,527 in 2005. That downward trend continued in 2006, and since then film industry employment has risen steadily, reaching a peak average monthly employment of 6,059 in 2008, before declining to 5,555 in the first three quarters of 2009. The decline in average monthly employment from 2008 to 2009 highlights the sensitivity of short-term film industry employment to spending on large budget film productions, with employment trends closely tracking production schedules of those films. As noted above, comparisons before and after January 2008 exaggerate growth after 2007 to some extent. What can be stated is that according to Workforce Development data, film industry employment in Massachusetts (for both residents and non-residents) in 2009 increased by a maximum of 1,161 jobs compared to 2006, and most likely by a smaller amount. This compares to DOR's estimates of an increase of 903 direct film production jobs in 2009 (held by residents and non-residents), not all of which would be recorded in the motion picture and video industry category.

Motion Picture and Video Industry Average Monthly Employment, Prior to and After Enactment of Film Industry Tax Incentives



---

[7] The ES-202 reports do not distinguish among full-time, part-time, and temporary employment.

Offsetting State Revenues

Both DOR's own calculations and the REMI simulation were used to estimate the amount of additional state revenue generated by new film production activity. For tax revenue from direct film production employment, DOR examined withholding records and tax returns of individuals paid $1 million or more per production; for other employees, for whom we did not have withholding records and tax returns, we applied known effective tax rates based on those employees' average annualized wages. In calendar year 2009, for employees earning more than $1 million per production, we estimate that the Commonwealth received approximately $4.1 million in income taxes (mostly withholding taxes) on wages of $82.0 million, implying an effective tax rate of 5.0%. For non-resident employees earning less than $1 million, we assumed an effective tax rate of 4.8%, which yielded an estimate of $4.4 million in income taxes on taxable income of $90.7 million[8]. Since employees who were Massachusetts residents had lower average wages, we applied an effective tax rate of 4.0%, which resulted in an estimate of $2.1 million in income taxes on taxable income of $51.4 million[9]. As shown in Table 5 on page 17, taxes on direct film production spending – consisting almost entirely of income tax withholding – totaled $11.1 million in calendar year 2009, and for the 2006-2009 period totaled $33.3 million. In addition to taxes on direct production activity, the REMI model estimates that there was a tax revenue loss of $1.1 million in 2009, primarily due to the impact of state spending cuts, and tax revenue gains of $1.3 million for the entire 2006-2009 period due to indirect impacts. (We also estimate that a small amount of revenue was generated from taxation of profits from the sale of credits, about $809,413 over the four year period, though it has not been confirmed if this tax revenue was actually received.) The REMI model also estimates that $0.4 million in new non-tax revenue was received in 2009, and $1.8 million over the 2006-2009 period, mostly from state fees related to increased economic activity. Total new state revenue (tax and non-tax) is estimated to have been $10.4 million in 2009 and $36.3 million over the 2006-2009 period. Since state tax expenditures totaled $82.5 million in 2009, ($82.4 million in tax credits plus $0.1 million in sales tax revenue losses), this implies that in calendar year 2009 the state received $0.13 in offsetting revenue for each dollar of tax expenditure. Over the 2006-2009 period, total revenues were $36.3 million vs. tax expenditures of $260.3 million, implying $0.14 in offsetting revenue for each dollar of tax expenditure. In calendar year 2009 net tax expenditures were $72.1 million ($82.5 million in tax expenditures minus $10.4 million in revenue generated). With 222 net new jobs created for Massachusetts residents, this implies the cost per new Massachusetts resident job created of $324,838 ($72.1 million (rounded) divided by 222) and for the 2006-2009 period the cost per net new Massachusetts-resident job created was $133,055 ($224.0 million (rounded) divided by 1,683 net new Massachusetts jobs).

Revenue Loss from Sales Tax Exemptions

The amount of state revenue forgone due to sales tax exemptions is calculated from the production expense data included in the tax credit and sales tax exemption applications. Because we assume that no feature films would have been made in Massachusetts in the absence of the tax incentives, sales tax revenue forgone on purchases made by those productions does not result in lost tax revenue. Our estimate of tax revenue lost is therefore calculated using expenditure data only for productions we assume would have been made in Massachusetts even in the absence of the tax credits. Based on an analysis of the non-wage spending by commercials, television series, and documentaries, we estimate that the spending ordinarily subject to the Massachusetts sales tax was 22.8% of non-wage production expenditures for those productions, meaning that sales tax revenue was reduced by approximately $93,254 in 2009 and $551,432 for the 2006 to 2009 period as a result of the sales tax exemption.

Transfers vs. Refunds of Tax Credits

[8] Including wage payments reported as non-wage spending, such as per diem, petty cash card advances, paid holidays and so on.
[9] Also include wage payments reported as non-wage spending.

As noted earlier in this report, production companies shooting films in the Commonwealth frequently report little or no tax liability in Massachusetts, so they either sell the tax credits to taxpayers who can use them or they claim them as refundable credits at 90% of their face value. Table 7 – Distribution of Film Tax Credit Beneficiaries on page 23 shows the distribution of tax credit sales by type of end-user. Through June 30, 2010, $216.1 million of the $259.8 million (83.2%) in tax credits generated have been sold to other parties, $126.7 million through tax credit brokers. On average, credits have been sold for approximately 90% of their face value. As of June 30, 2010, $33.3 million, or 12.8% of the total amount of tax credits generated through calendar year 2009 had not been issued to production companies for transfer or sale.

Approximately $3.0 million in tax credits had been claimed under the 90% refundable option by production companies whose tax credits exceeded their tax liabilities. Use of the 90% refundable option reduced the state's revenue loss by $0.3 million below what would have been the revenue reduction had the credits been used to offset tax liability at 100% of their face value (e.g., in the case of transferred credits, where the buyers offset tax liability at 100%). To the extent that any of the currently unsold $33.3 million in film credits are refunded at 90% of their value, the revenue loss to the Commonwealth would be reduced, though based on previous experience it is likely that most tax credits will be sold and used by third parties.

Table 7 - Distribution of Film Tax Credit Beneficiaries, 2006-2010 (in $ Millions)

			Net Benefit ($ Millions)	
Total Film Credits Generated			**$259.8**	
Pending Credits Claimed by Production Companies			$33.3	
Credits Retained by Production Companies to Offset Taxes or for Later Sale			$7.3	
Credits Refunded to Production Companies at 90% of Face Value			$3.0	
Face-Value of Credits Sold by Production Companies			$216.1	
Disposition of Credits Sold by Production Companies				
Face-Value of Credits Sold by Production Companies			$216.1	
Sale Proceeds of Credits Paid to Production Companies			$190.8	
Credit Value Accruing to Final Purchasers of Tax Credits			$20.6	
Tax Credit Broker Net Profit (includes amount still held*)			$4.8	
Benefits Accruing to Final Purchasers of Tax Credits:	Credit Value:	Purchase Price:	Net Benefit:	Price/credit:
Insurance Companies	$131.6	$122.7	$8.9	93.2%
Financial Institutions	$43.4	$39.4	$3.9	91.0%
Corporations	$33.5	$28.5	$5.0	85.1%
Individuals	$7.0	$4.3	$2.8	60.7%
Still Held by Brokers*	$0.6			
Total	**$216.1**	**$194.9**	**$20.6**	**89.9%**

*Through 06/30/10. May be sold in future transactions.
Detail may not add to total due to rounding

Other Issues

Taxation of Income from Residuals

The estimates for 2006-2009 do not reflect revenue generated from income taxes on earnings of actors or directors who, as part of their compensation, participate in the revenues or profits of the motion pictures after release. An examination of Massachusetts tax returns indicates that the Commonwealth does not at this point appear to have received tax revenue from any such residuals for films produced in the Commonwealth during that period.

Economic Activity Generated by Movie-Induced Tourism

As was the case in DOR's previous analyses, we have not included the impact of potential increased economic activity resulting from greater exposure of the Commonwealth through films and other productions that are made in Massachusetts, or the potential economic benefits of having high-profile movie and television actors in the Commonwealth for extended periods of time, which in some cases might be tantamount to advertising. As we noted in last year's report, we are not aware of any model that can reliably estimate such impacts, which depend on several variables, including how many people view the films made in Massachusetts, the demographics of the audience, whether particular motion pictures are set in Massachusetts and include recognizable Commonwealth scenery, and whether the films portray the state in a positive, negative, or neutral light[10]. So while it is possible that there is some increase in tourism resulting from the film production activity, it is impossible to estimate the impact given the information currently available.

[10] See the discussion of the potential economic impact of tourism in the 2009 year's DOR report, pages 22-23. The report can be accessed at http://www.mass.gov/Ador/docs/dor/News/2009FilmIncentiveReport.pdf.