THE ECONOMIC IMPACT OF THE MOTION PICTURE PRODUCTION TAX CREDIT ON THE RHODE ISLAND ECONOMY FOR THE YEARS 2005-2009

By

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EXECUTIVE SUMMARY

The purpose of this study was to determine the impact of the Motion Picture Tax Credit on the Rhode Island economy. Since the passage of the tax credit in 2005, forty-six film and television productions have received $56.7 million in tax credits. The study does not include the economic impact of film and television production companies in the state who did not request nor receive the tax credit.

The impact of the Motion Picture Tax Credit on the Rhode Island economy was measured by the amount of "new money" that it brought to the state. That is, the amount spent in Rhode Island that would not have occurred if not for the tax credit. There were also impacts resulting from money spent by companies such as restaurants and automobile rental agencies providing goods and services to the production companies and from the salaries paid to employees of the production companies and employees of the supply companies.

Although not measured in this study, new money was also injected into the Rhode Island economy by tourists that visited the state and spent money at hotels, restaurants, retail stores and other businesses as a result of seeing a film or television series.

There was also new money generated by out of state students who attended Rhode Island's colleges and universities programs in film and television studies because of job opportunities resulting from the tax credit.

The Motion Picture Tax Credit has led to the employment of thousands of people on film and television productions and generated millions of dollars in direct expenditures for wages and salaries and goods and services purchased locally.

Year	Goods and Services ($mil)	Wages ($mil)	Total Expenditures ($mil)
2005	$ 6.27	$23.48	$29.75
2006	$27.23	$60.16	$87.39
2007	$25.18	$38.95	$64.13
2008	$29.78	$46.56	$74.34
2009	$ 8.68	$12.53	$21.21

To estimate the indirect and induced economic impact of the Motion Picture Tax Credit, a regional economic multiplier developed by the U.S. Department of Commerce's Regional Input-Output Modeling System (RIMSII) was used.

Based on the model, an employment multiplier of 1.61 and an earnings multiplier of 1.84 were used in measuring the economic impact. This means that for every FTE worker in film and television production, an additional .61 FTE jobs were created in Rhode Island. Similarly, for every dollar paid to workers by the film and production companies, $.84 was paid to workers in indirect and induced jobs.

Below is a comparison by year of actual tax credits granted and the total economic effects of the credit. Total economic effects are the sum of the direct, indirect and induced impacts.

Year	Tax Credit	Total Economic Effects
2005	$ 7.6 million	$ 53.87 million
2006	$ 22.8 million	$149.21 million
2007	$ 10.9 million	$104.15 million
2008	$ 12.9 million	$124.19 million
2009 *	$ 2.5 million	$ 34.09 million
TOTALS	$ 56.7 million	$ 465.51 million

The number of direct, indirect and induced FTE jobs created by the tax credit was:

Year	Number of FTE Jobs
2005	301
2006	1077
2007	1035
2008	1124
2009	647

The tax credit generated the following employee state and local taxes:

Year	Employee State and Local Taxes
2005	$ 4.4 million
2006	$11.3 million
2007	$ 7.3 million
2008	$ 8.7 million
2009	$ 2.4 million
TOTALS	$34.1 million

*There may be applications in 2010 for tax credits for 2009 productions.

Although difficult to measure, the tax credit created other benefits such as:

- support of Rhode Island's cultural and historic sites
- formation of new businesses to support film and television production companies
- support of the state's creative sector
- local internship opportunities for students
- out-of-state students enrolling in film and television courses at Rhode Island's colleges and universities
- support of other employment sectors such as leisure and hospitality, business and professional services, construction and education
- tourism from out-of-state visitors
- support of local film festivals
- support of charities, and
- publicity for the state

Film and television production companies spend a lot of money in a short period of time when on-location. This can be profitable to local businesses such as:

Hotels	Restaurants and Catering
Gas Stations	Construction companies
Drycleaners	Taxi companies
Gift stores	Stationery stores
Building rentals	Security firms
Hardware stores	Lumberyards
Accounting firms	Commercial cleaning services
Payroll companies	Employment agencies
Delivery services	Hair stylists and barbers
Florists	Camera equipment stores
Pet stores	Plumbing companies
Electricians	Car rental companies

STUDY HIGHLIGHTS

The total economic activity that resulted from the $56.7 million tax credit for the period 2005 through 2009 was $465.51 million dollars.

The tax credit was responsible for creating and supporting 4,184 new FTE jobs.

The tax credit generated $ 181.7 million in wages for direct employees of film and television production companies and $152.6 million in wages for jobs created in other industries for the period 2005 through 2009.

Employees of film and television production companies paid $18.5 million dollars in state and local tax dollars, almost all of which would have been at risk without the tax credit incentive.

Employees in other industries that supported film and television production companies paid $ 15.6 million dollars in state and local tax dollars, almost all of which would have been at risk without the tax credit program.

The Motion Picture Tax Credit was and is critical to the film and television production industry in Rhode Island and vital to the state's economy.

The film and television production companies that come from outside the state to make productions in Rhode Island spend money locally, support locally owned film and video companies, create in-state jobs for locally educated individuals which reduces the loss of skilled workers to other states, create new local businesses, increase out-of-state tourism and attract out-of-state students to local universities and colleges with film and television studies.

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INTRODUCTION

This report presents an analysis of the economic impact of the motion picture production tax credit on the Rhode Island economy. The tax credit passed by the General Assembly in 2005 has benefited Rhode Island by (1) increasing the number of film and television productions in the state, (2) supporting Rhode Island film and television production facilities, (3) creating jobs, (4) increasing out-of-state tourism and (5) helping promote the state to new businesses.

The emphasis of this report is on job creation, wages, state taxes and spending in Rhode Island as a result of the tax credit. The report also includes a discussion of the importance of the film and television production industry to Rhode Island's leisure and hospitality, business and professional services, construction and education employment sectors.

This economic analysis will measure the broad economic benefits of the motion picture production tax credit rather than just the economic impact on taxes and revenue collected by the state. The broad economic benefits consider that the money invested by the state is invested in jobs and expenditures that lead to higher tax payments by employees and Rhode Island businesses. The return that Rhode Islanders receive is what is important rather than just the revenue needed to cover the movie production tax credit.

The quantitative data presented in this report are estimates of expected employment and expenditures based on an accepted methodology for analyzing the economic impact of a tax credit.

The economic impact of the film and television production industry to Rhode Island is the sum of direct, indirect and induced impacts. The direct impact measures the wages, goods and services purchased from Rhode Island businesses by film and television production companies.

The increased sales, income and jobs to Rhode Island from firms supplying goods and services to the film and television production companies represent the indirect economic benefits.

The induced impact is the impact of the wages paid to employees of film and television production companies and employees of firms that supply goods and services to film and television production companies which is then spent on consumer goods and services. This spending generates additional economic activity because local retailers and service providers will spend money to meet the additional demand for their goods and services. The indirect and the induced impacts are combined and described as indirect effects.

A way of measuring the economic impact is the multiplier effect from expenditures. Besides direct labor, film and television production companies purchase supplies and services from Rhode Island businesses when they are on-location in the state.

It is difficult to quantify the other benefits the film and television production companies provide Rhode Island such as:

- internship opportunities for students majoring in theatre and film production at Brown University, Bryant University, Johnson and Wales University, New England Tech, Rhode Island College, Rhode Island School of Design, Roger Williams University and the University of Rhode Island,
- valuable educational and career development interactions between students and film and television industry professionals
- job opportunities for graduates of local schools
- formation of new businesses to support film and television production
- publicity for the state
- increased out-of-state tourism
- use of Rhode Islanders as extras in productions
- support of other employment sectors such as leisure and hospitality, business and professional services, construction and education
- investment in infrastructure and facilities that are used after the film and television production is over
- support of Rhode Island's cultural and historic assets
- support of the state's creative sector
- support of local film festivals such as the Rhode Island International Film Festival
- support of local charities raising funds by auctioning walk-on roles

The tourism benefit from film and television productions is beyond the scope of this study. Tourism benefits would only include new money injected into the economy from outside the state. Expenditures by those who live in the state do not contribute an economic benefit because their expenditures represent a recycling of money that is already in Rhode Island.

A recent study published by the University of Massachusetts-Boston for the Massachusetts Film and Television Production Industry reported that, "Some studies have included tourism benefits in their model though without sufficient detail to evaluate the reliability of the estimates of new tourism spending. Other studies recognize that these benefits may be significant and provide anecdotal and survey data to support their findings."

Research on destination marketing and film induced tourism also suggest that these benefits are important when evaluating the benefits of increased feature film production to the local economy. The Annals of Tourism Research reports that the number of visitors increases by an average of 54 percent over four years in a location where a successful film was made.

Film festivals like the Rhode Island International Film Festival have created opportunities for tourism activities by promoting historical sites and area restaurants on their websites. The leisure and hospitality industry is important to Rhode Island. The production of films and television programs in the state could have a significant economic impact to tourism from out of state visitors.

RHODE ISLAND MOTION PICTURE PRODUCTION TAX CREDIT

In 2010, forty-five states and the District of Columbia offer film production incentives such as a transferable or refundable tax credit, a direct rebate, a waiver of sales and occupancy taxes and/or a production loan. Some of the incentive programs have an annual funding cap, a high funding cap or no cap.

As a result of the incentives offered to film and television production companies, California's share of U.S. feature film production declined from 66 percent in 2003 to 31 percent in 2008. In addition, television production of pilots in California went from 81 percent in 2004 to 57 percent in 2009.

The tax credit program has made Rhode Island one of the fastest growing locations of film and television productions in the United States. In addition to the tax credit, production companies are attracted to Rhode Island because of its 300 miles of coast, urban and rural settings, historical sites and architecture.

Tax credits are not only designed to expand tax revenues but also as a catalyst for developing an industry sector or jobs that would be beneficial to the long-term economic development of a state. Many studies report that the increased activity brought about by tax credits has had a positive impact on local jobs and businesses.

Rhode Island's Motion Picture Production Tax Credit provides a tax credit to film and television production companies of 25% for certified production costs which include dollars spent locally in Rhode Island on food, lodging, equipment rental and salaries with a minimum production budget of $300,000. Fifty-one percent of the film production must take place at a state location. The tax credit can be used or transferred for personal or corporate income taxes and can be carried forward for up to three years.

To obtain the credit, each film or television production company must submit an application to the Rhode Island Film and Television Office with a list of Rhode Island vendors, a distribution plan and an accountant's certification of costs. The Rhode Island General Assembly in 2008 placed a $15 million a year cap on the credit. Film and television production companies must also submit a plan on how their projects will use interns from state higher education institutions, labor organizations and nonprofit organizations involved in film, television, and related media arts work.

Prior to the tax credit, Rhode Island had a very small film and television production industry. An initial goal of the tax credit program was to develop and support the industry - to create jobs, hire graduates from film and television production programs from Rhode Island colleges and universities and support the state's 2,500 arts and cultures businesses.

Table 1 lists the tax credits granted by year. Forty-six projects were granted a total of $56.7 million in tax credits from 2005 through 2009.

Table 1 – TAX CREDITS

2005	$ 7.6 million
2006	$22.8 million
2007	$10.9 million
2008	$12.9 million
2009	$ 2.5 million

The Center for Entertainment Industry and Data reported, "The United States has lost 47,000 jobs on average per year since 1998 as well as an estimated $23 billion in economic revenues from film projects produced overseas." When a film is made in a state because of a tax credit or another incentive, jobs stay in the United States.

Employment in film and television production has increased in many states during a period when employment in other sectors declined. In Louisiana, as a result of financial incentives, film and television production companies increased the amount of dollars they spent on production from $20 million to $350 in a two year period with spending "rippling through the economy" as sales increased for caterers, lumberyards, restaurants and hotels.

Connecticut, Massachusetts and Rhode Island offer tax credits, Maine offers tax credits and wage reimbursements and Vermont offers production grants. The New England Public Policy Center of the Federal Reserve Bank of Boston in October 2006 found that "the little evidence available suggests that film tax credits do attract film production and create jobs in states that have little or no film industry."

A 2008 report by Rhode Island's Department of Revenue concluded that the state received back an average of 28 to 32 cents for each dollar it gave to film and television production companies in the form of a tax credit from 2005 through 2007. The report did not take into account the revenue generated and taxes paid by individuals and businesses who benefited from film and television production activities in the state.

The state's calculations did not include the taxes paid by the production companies such as state income taxes for employees on location, the sales and use taxes, meals/beverage taxes and hotel taxes. The report focused on the direct economic benefit to the state – the increased tax receipts and did not include the indirect and induced benefits. At the time of the report, 29 film and television productions qualified for the tax credit. The report focused on just 16 projects spending $142.2 million and receiving $35.6 million in tax credits. The state's calculations may have captured the direct returns to the state but did not include local tax and fee revenues or any state non-general revenues resulting from the film and television production activity, and the revenue from indirect economic activity before, during and after the film or television production.

The study did not consider the secondary market for tax credits, namely, increased tax collections from expenditures that companies and individuals may make by paying less tax now and using their funds to hire additional employees, purchase capital equipment or expand their business facilities which may lead to even more tax revenue in the future.

Some of the tax revenue lost by the use of tax credits was regained by personal income, business and other taxes generated from film and television productions that would not have taken place in Rhode Island without offering a tax credit.

An Ernst & Young study prepared for the New York Governor's Office of Motion Picture and Television Development reported that the 30 percent production tax credit resulted in $940 million in spending in 2007, created and retained 19,512 jobs and generated a return on investment of $1.90 for every $1 invested in tax credits. Another Ernst & Young study prepared for the New Mexico State Film Office and State Investment Council reported that New Mexico's state film production tax credits resulted in combined state and local tax collections of $1.50 for every $1 of state credits.

A 2008 study by the Connecticut Commission on Culture and Tourism concluded that the $282 million in expenditures by film and television production companies in Connecticut had positive effects on gross state product, jobs and personal income. The study also found that the expenditures led to more sales for local businesses and associated increases in sales and personal income tax revenue to the state. Each tax dollar spent on the film tax credit generated more than one dollar of additional real gross state product in present value terms. The study found that the tax credit increased economy-wide activity by a greater amount than the cost of its implementation.

FILM AND TELEVISION PRODUCTION INDUSTRY

The motion picture and television industry in the United States is a major private sector employer with an annual payroll of over 43 billion dollars. The industry includes about 11,000 companies. The major companies are Disney, FOX, MGM, Paramount, Sony Pictures, Universal and Warner Bros. Some of these companies have produced films in Rhode Island using the tax credit incentive.

The industry is highly concentrated with the 50 largest companies accounting for about 80 percent of revenue. Most of the top motion picture studios are part of media companies and engage in both production and distribution of motion pictures. The profitability of the companies depends on creativity, long-term contracts with well-recognized actors and directors, production costs, marketing and distribution.

The television program production and distribution industry includes about 500 companies. The major companies are NBC Universal, CBS Paramount, Disney-ABC, Fox Television Studios, Warner Bros. Television Group and Sony Pictures Television. Some of these companies have produced television programs in Rhode Island using the tax credit incentive.

Like the motion picture production and distribution industry, the 50 largest companies account for about 80 percent of industry revenue. The large companies have advantages in financing, distribution, on-staff creative and technical talent, and multiple year contracts with major actors and directors.

Nationally, there are over 285,000 full-time, part-time and free lance people employed in producing, marketing and distributing motion pictures and television shows. Between 2005 and 2008, there was an over 100 percent growth in employment in the motion picture, video production and postproduction industries.

There are also about 500,000 people employed in related businesses that distribute motion pictures and television shows such as those people that work at movie theaters and television cable companies.

A report prepared by the Connecticut Commission on Culture and Tourism in February 2008 stated, "Two factors typically determine filming location for production companies. The first factor is artistic – local landscape and scenery is of primary importance. The second is the availability of economic incentives."

Selecting a location to shoot a film or television program is a major production cost and an economic benefit to a local economy. The Motion Picture Association of America reported that "when a major studio shoots a film on location that can mean $225,000 per day to the local economy. Even a brief shoot creates local jobs and generates waves of positive publicity."

Although production companies are responsible for financing, producing and distributing a film or television program, the making of a film involves hundreds of small businesses and independent contractors hired by the studio. These companies provide a wide range of services such as equipment rental, lighting, special effects, set construction and costume design. The production companies also use workers in other industries such as truck drivers, construction workers, caterers, electricians, and make-up artists.

According to the Bureau of Labor Statistics in 2006, the film and sound recording industries represented 0.33% of employment in the United States as a whole. Rhode Island's film and sound recording industries accounted for 0.22% as compared to 0.15% for Connecticut and 0.16% for Massachusetts as compared to California's 1.15%.

In 2006, Rhode Island had 70 film production establishments employing 917 people as compared to 305 in Connecticut employing 2,181 people, and 468 in Massachusetts employing 4,581 people.

The New England Studio Mechanics IATSE Local 481, which represents skilled technicians and crafts people who work on commercials, television programming and studio and independent feature films reported that the number of members living in Rhode Island increased over 200 percent since the passage of the tax credit. Before the tax credit, Local 481 members earned less than $1 million in Rhode Island and after the tax credit, members earned over $15 million from 2005 through 2009.

Film making is labor intensive. Twenty-two percent of workers have part-time schedules and 14 percent have variable schedules. In 2008, workers averaged 29.6 hours per week according to the U.S. Bureau of Labor Statistics. The industry workforce is younger than most other industries with 54 percent of employees being 34 or younger. Many of the positions pay higher wages than other jobs.

The May 2008 Metropolitan Occupational Employment and Wage Estimates for the Providence-Fall River-Warwick Metropolitan Statistical Area reported the following mean salaries for positions in film and television production:

Arts, Design & Entertainment	$48,350
Art Director	$62,060
Multi-Media Artists and Animators	$42,390
Graphic Designers	$49,370
Producers and Directors	$69,140
Editors	$65,770
Writers	$58,000
Media & Communication Workers	$30,400
Audio & Video Equipment Technicians	$39,090

Camera Operators, Television, Video & Motion Pictures	$39,500
Media & Communications Equipment Workers, All Others	$72,390

Employment in the film and television production industry nationally was projected to grow 14 percent between 2008 and 2018 as compared with 11 percent in all other industries combined. The growth in employment results from the increase in demand for programming for new cable and satellite television channels, for films to meet increasing in-home demand for videos and DVDs, and films over the Internet.

The industry classifies expenses as above the line and below the line. The above the line expenses relate to performing and producing: talent, script, music and office services. Below the line refer to two broad areas: (1) the physical elements (sets, props, make-up, wardrobe, graphics, transportation, production equipment, studio facilities, and editing), and (2) the technical personnel (the stage manager, engineering personnel, video recording operators, and other labor that makes filming possible.). Between 70 to 80 percent of the below-the-line workers needed to produce a film are hired locally. Below-the line workers often earn a higher hourly wage than workers employed in other industries.

A recent report by the National Governor's Association concluded that,

> "Film and media can play a key role in state economic development. State efforts to develop the film industry and create production clusters by attracting out-of-state film projects and cultivating local filmmaking can return millions of dollars to state economies. States have moved quickly to capitalize on the economic benefits of the film industry by launching aggressive marketing campaigns and financial incentives to attract production companies. As economic impact studies have demonstrated the ability of the film industry to create high-paying jobs, stimulate tourism, engage the community, and boost out of state spending, states have recognized the value in investing in this growing industry."

Like most industries, the film and television production industry needs to maximize the returns made on its feature films and episodic television series to obtain investors. Production companies seek ways to minimize costs by producing films and television productions in states and localities that offer incentives. When a film or television production company receives a tax credit, the tax credit is often sold for 80 to 85 percent of its value to local businesses and individuals. Tax incentives are recorded as reductions in film costs because the monies saved reduces the overall cost of production which is important to those that finance film making.

RESEARCH METHODOLOGY

A regional input-output model was used to measure the economic impact of the tax credit.. Economic impact is more than the direct impact of the payments to Rhode Island residents, businesses and government by the film and television production companies. These payments also generate indirect effects, namely, spending by the firms which do business with the production companies, the jobs created and the induced effects that are the result of household spending by employees. These expenditures generate income for other individuals and businesses. There are some indirect and induced impacts that are difficult to measure such as government jobs created by the payment of taxes to local and state government agencies by direct employees and indirect employees.

In this analysis, the measures of economic impact considered were employment and income. The multiplier that is part of the input-output model captures the total effect of an industry's "direct" dollar and employment impact on a state's economy. A multiplier means that for each job a certain number of additional jobs are created in other parts of the state's economy.

The economic model use in this report was the Regional Input/Output Modeling System (RIMSII) developed by the Bureau of Economic Analysis of the United States Department of Commerce for Rhode Island.

The RIMSII model makes the following assumptions:

1. All firms in a given industry segment employs the same technology and produces similar products or services.
2. The model is linear, double one input and it doubles another.
3. The model represents activities for one year at a time.
4. The model relies on the North American industrial classification system and current government economic censuses, in which individual firms report sales, wages and salary payments and employment.
5. The computation for induced impacts assumes that jobs created by additional spending are new jobs that result in new households in the area, and that there is a linear change in household spending with changes in income.
6. Jobs include full-time, part-time, free-lance and seasonal jobs without any distinction made between them. The job measure does not identify the number of hours worked in each job or the proportion of jobs that are full-time, part-time or seasonal.
7. The earnings spent by households will be less than the wages paid because earnings will also be used for household expenditures such as rent, mortgage payments and taxes.

RIMSII simulates the flow of goods and services among 500 industry sectors, and between households and industries. It is a table with hundreds of rows and columns, with all industries (plus household sector) listed down the side as producers; the same industries (plus households) are also listed across the top as consumers. Each dollar of spending by any consumer industry is allocated across all of the producer industries and the household sector. Each industry in turn has to purchase a particular set of inputs from all of the other industries in order to produce the output it sells.

The model traces the multiplier effect of each dollar of spending as it ripples through other industry sectors and translates the allocation of spending across sectors into estimates of employment – that is, into estimates of the labor requirements by these industries. RIMSII measures employment impacts in the number of full-time equivalent jobs generated. Actual impacts could include both full-time and part-time employment.

There are advantages of using RIMSII to measure the economic impact of the motion picture production tax credit. First, the level of industrial detail used in the model helps avoid aggregation errors which often occur when industries are combined. Second, multipliers can be compared across areas because they are based on a consistent set of estimating procedures nationwide. And third, multipliers are updated to reflect the most recent local-area wage and salary and personal income data.

The economic data and other information used in this report came from:

The Rhode Island State Council on the Arts – Film & Television Office
Rhode Island Film and Television Cost Analysis Forms by Program
Motion Picture Association of America
Economics Research Associates
The Center for Entertainment Industry Data and Research
Dun & Bradstreet industry reports
The Federal Reserve Bank of Boston
The Connecticut Commission on Culture and Tourism
Ernst and Young
The University of Massachusetts-Boston
The Massachusetts Department of Revenue
The National Governor's Association
New Mexico State Film Office and State Investment Council
Rhode Island Department of Revenue- Office of Revenue Analysis
The Tax Foundation,
New England Studio Mechanics IATSE Local 481
PriceWaterhouseCoopers
The Bureau of Labor Statistics of the U.S. Department of Labor
Articles appearing in Tourism and Hospitality Research, Journal of Travel Research, Annals of Tourism Research, Journal of Sport Management, Journal of Marketing, Journal of Marketing Research and FilmL.A.

To determine the economic impact of the motion picture production tax credit, the analysis had to be done on a yearly basis. For each year, there were four distinct economic impacts:

1. Employment impact – the number of full-time and part-time jobs created by the film and television production companies. This consisted of jobs created by the production companies as well as induced jobs, or jobs created by the purchase of goods and services by those individuals directly dependent upon the activities of the film and production companies.

2. Income impact – the level of wages and salaries associated with the jobs created by the film and television production companies. The income impact included the income received by those directly employed as well as the income received by individuals holding induced jobs as well as indirect job holders. The indirect jobs are with suppliers of materials, business service providers and others. The induced jobs include jobs that supply those directly employed by the film and television production companies in retail trade, service industries and housing.

3. Revenue impact – the expenditures generated by the film and television production companies to pay wages and salaries, expenditures for hotel rooms, caterers, dry cleaners, electricians and others, to purchase equipment and supplies and to pay taxes.

4. Tax impacts – payment by the film and television production companies for corporate income taxes and business license fees as well as payments by its employees and others to Rhode Island and local tax agencies whose jobs are directly dependent (induced and indirect jobs) in film and television production. State and local taxes are based on information from The Tax Foundation.

There are limitations and assumptions in the use of the model. They include:

1. A number of above-line workers on film and television productions including actors, producers and directors may spend no time in Rhode Island. If they were included in the "multipliers," the analysis could overstate the impact on the Rhode Island economy.

2. The expenditures of film and television production companies applying for a tax credit represent "net" new spending in the state.

3. Film and television production companies would not come to Rhode Island without the tax credit.

4. The employees of the film and television production companies on-location stay in Rhode Island hotels, and eat meals, shop and travel locally.

5. The impact of any tax law change affecting the motion picture production tax credit was not considered.

6. Direct job estimates from RIMSII are full-time equivalents while film and television production personnel on-location are temporary.

7. Some of the increased non-payroll spending and income generated by film and television production companies in Rhode Island will be spent outside of Rhode Island and will reduce the "multiplier" effect.

8. Often location fees are direct payments to towns, municipalities and local governmental agencies such as police. The fees are considered additional sources of revenue to these entities and are not included in the model.

9. Wage and nonwage spending is not the same for all productions.

ECONOMIC IMPACT OF TAX CREDIT

The economic impact of the movie picture production tax credit on Rhode Island's economy is greater than the total of all spending by the film and television production companies. This is caused by money spent being spent again by employees and Rhode Island businesses that are its recipients. Employees use their salaries to purchase from local businesses. Local businesses make their own purchases and hire employees who spend their salaries in the local economy. This spending is done over and over again until spending leaves the system through savings, taxes, investments and expenditures outside the state.

Using RIMSII, the employment multiplier for the film and television production industry in Rhode Island is 1.61, which means that every job in film and television production creates an additional .61 jobs. The wage multiplier in film and television production is 1.84 which means that every $1 paid in wages by film and television production companies creates 84 cents in indirect and induced wages.

The actual multiplier for any sector depends on four factors:

- the overall size and economic diversity of the state and region's economy; a state or region with a large diversified economy will have higher multipliers as households and business can find most of the goods and services they need locally;

- the geographic area of the state; larger geographic areas will have higher multipliers than small areas;

- the nature of the economic sectors under consideration; multipliers vary across different sectors of the economy based on the mix of labor and other inputs and the propensity of each sector to buy goods and services from within the region; and

- the characteristics of the economy at a single point in time.

About thirty-five percent of film and television production spending between 2005 and 2009 in Rhode Island was on non-salary items. The major categories included location fees, transportation, hotels and housing, set construction and food. Most of the spending was at the actual production location which represented revenue for local merchants.

Employee state and local taxes were determined by data from The Tax Foundation. Rhode Island wage earners tax burden was 10.2 percent which included state income tax and local taxes such as property taxes. This percentage was used in determining the economic impact of the movie production tax credit for employee state and local taxes.

Full-time employee equivalents were used to determine the number of new jobs created in other employment sectors (indirect and induced effects.) For this analysis, it was determined that 2.5 of film and television production employees were equal to 1 FTE by studying the number of days on-location in Rhode Island. For example, in 2005 the film and television companies had 468 employees on their payrolls while on-location – this was the equivalent of 187 FTE based on the formula used. Extras were not included in the employment numbers. During the period 2005 through 2009 over 10,000 extras were used in film and television productions averaging $100 a day. Tables 2 through 6 details by year the total economic impact of the tax credit.

Table 2 - 2005 ECONOMIC IMPACT OF THE TAX CREDIT

	Direct Effect	Indirect and Induced Effects	Total Effects
Products and Services Purchased in Rhode Island	$ 6.27 million		$6.27 million
Employment (FTE)	187	114	301
Wages and Salaries	$23.48 million	$19.72 million	$43.2 million
Employee State and Local Taxes	$ 2.39 million	$ 2.01 million	$4.4 million
TOTALS	$32.14 million	$21.73 million	$53.87 million

Table 3 – 2006 ECONOMIC IMPACT OF THE TAX CREDIT

	Direct Effect	Indirect and Induced Effects	Total Effects
Products and Services Purchased in Rhode Island	$27.23 million		$27.23 million
Employment (FTE)	669	408	1077
Wages and Salaries	$60.16 million	$50.53 million	$110.69 million
Employee State and Local Taxes	$ 6.14 million	$ 5.15 million	$ 11.29 million
TOTALS	$93.53 million	$55.68 million	$149.21million

Table 4 – 2007 ECONOMIC IMPACT OF THE TAX CREDIT

	Direct Effect	Indirect and Induced Effects	Total Effects
Products and Services Purchased in Rhode Island	$25.18 million		$25.18 million
Employment (FTE)	643	392	1035
Wages and Salaries	$38.95 million	$32.72 million	$71.67 million
Employee State and Local Taxes	$ 3.97 million	$ 3.33 million	$ 7.30 million
TOTALS	$68.1 million	$36.05 million	$104.15 million

Table 5 – 2008 ECONOMIC IMPACT OF THE TAX CREDIT

	Direct Effect	Indirect and Induced Effects	Total Effects
Products and Services Purchased in Rhode Island	$29.78 million		$29.78 million
Employment (FTE)	698	426	1124
Wages and Salaries	$46.56 million	$39.11 million	$85.67 million
Employee State and Local Taxes	$ 4.75 million	$ 3.99 million	$ 8.74 million
TOTALS	$81.09 million	$43.1 million	$124.19 million

Table 6 – 2009 ECONOMIC IMPACT OF THE TAX CREDIT

	Direct Effect	Indirect and Induced Effects	Total Effects
Products and Services Purchased in Rhode Island	$ 8.68 million		$ 8.68 million
Employment (FTE)	402	245	647
Wages and Salaries	$12.53 million	$10.53 million	$23.06 million
Employee State and Local Taxes	$ 1.28 million	$ 1.07 million	$ 2.35 million
TOTALS	$22.49 million	$11.60 million	$34.09 million

CONCLUSIONS

This study reports on the economic impact of the Motion Picture Production Tax Credit on the Rhode Island economy for the period 2005 through 2009. The economic impact was determined by adding the direct, indirect and induced impacts of the tax credit. The RIMSII model was used to determine the economic impact of the tax credit.

What was the tax credit's overall economic impact? Using the multipliers from the model, the tax credit had a total economic impact of $465.51 million dollars for the period 2005 through 2009. The tax credit generated $181.7 million in wages for direct employees of film and television production companies and $152.6 million in wages for jobs created in other industries.

The tax credit created 4,184 FTE workers for the period 2005 through 2009. The actual headcount of crew and cast members was 6,488 which converted to 2,595 FTE workers using the formula 1 FTE=2.5. This does not include the more than 10,000 extras used in the productions.

The production companies provided benefits to Rhode Island's economy through increased state tax revenues, increased revenue in complementary industries such as leisure and hospitality, and by supporting educational, community and charitable activities.

Employees of film and television production companies paid $18.5 million dollars in state and local taxes, almost of which would have been at risk without the tax credit. Employees in other industries that supported the film and television production companies paid $15.6 million dollars in state and local taxes, almost all of which would have been at risk without the tax credit.

Did the tax credit achieve its targeted objectives? Yes, there was a direct connection between the tax credit and more film and television productions coming to Rhode Island. Prior to the tax credit, there was little activity in film and television production. Since the tax credit, there have been over 50 film and television productions on-location in Rhode Island with 46 productions receiving the credit.

Without the tax credit, it would have been unlikely that most, if not all, of the film and television productions would have come to Rhode Island. Forty-five states offer incentive programs, and even California in 2009 enacted a film production incentive program because the state was unable to compete with other state's incentive programs. Production incentives are a key factor in selecting locations for film and television productions.

Whether the motion picture tax credit is necessary should not solely be a function of how much tax revenue it generates but whether the economic activity that results from the credit is favorable to the state's economy. Film and television productions are important to Rhode Island. The industry provides high paying jobs for actors, crew and support personnel. While on-location, substantial amounts of money are used to pay Rhode Island businesses such as hotels, restaurants, hardware stores, construction companies, lumberyards, car rental companies, fabric stores, gift shops, stationery stores and many others. An average production will do business with more than 100 Rhode Island businesses.

The Motion Picture Production Tax Credit has been critical to bringing film and television productions to Rhode Island, and to building Rhode Island's film and television production industry. The economic benefits of the tax credit far outweigh the state's investment in the program.