AECOM Economics

Analysis of South Carolina's Film Incentives

Prepared for:
South Carolina Department of Parks, Recreaton, and Tourism
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Every reasonable effort has been made to ensure that the data contained in this report are accurate as of the date of this study; however, factors exist that are outside the control of AECOM and that may affect the estimates and/or projections noted herein. This study is based on estimates, assumptions and other information developed by AECOM from its independent research effort, general knowledge of the industry, and information provided by and consultations with the client and the client's representatives. No responsibility is assumed for inaccuracies in reporting by the client, the client's agent and representatives, or any other data source used in preparing or presenting this study.

This report is based on information that was current as of November 2011 and AECOM has not undertaken any update of its research effort since such date.

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This study is qualified in its entirety by, and should be considered in light of, these limitations, conditions and considerations.

01

Executive Summary of Findings

AECOM was contracted through a competitive bid process by the South Carolina Department of Parks, Recreation, and Tourism to review and estimate the economic impacts of film production in South Carolina since 2007 as a result of the film production incentives in the state. A number of firms were reviewed and AECOM was selected based on price and extensive history of work in the film and media industry over the last decade. Over the course of this analysis, AECOM reviewed audit data available for expenditures from nine applicable productions as well as non-incentivized productions, estimated related economic and fiscal impacts within South Carolina from this activity, reviewed South Carolina's incentive program as compared to other state film incentive programs, compared previous South Carolina film analyses to this analysis, and addressed some selected issues and questions ancillary to the economic impacts of the analysis. The results of the analysis and findings are given in this report and summarized here.

Key Findings

- Since 2007, nine qualified productions and a smaller number of non-incentivized productions facilitated by the South Carolina Film Commission generated $86.9 million in sales for state businesses and supported 1,610 full-time equivalent jobs for South Carolina residents paying $48.5 million in wages.
- State and local governments received $6.6 million in revenues from corporate income, personal income, property and sales taxes generated as a result of these productions.
- The State of South Carolina paid $21 million in wage and supplier rebates to the nine qualified productions since 2007.

- For every $100 spent on rebates, $31 came back in the form of taxes, a net loss as is the case with many other film incentive programs in the U.S. However, every $100 in total rebates also generated $410 in total economic output (i.e., sales at state businesses) and $230 in wages to South Carolina residents as shown in the chart below.
  - For every $100 paid in wage rebates, South Carolina residents earned $230.
  - For every $100 spent on supplier rebates, state businesses generated nearly $370 in sales.

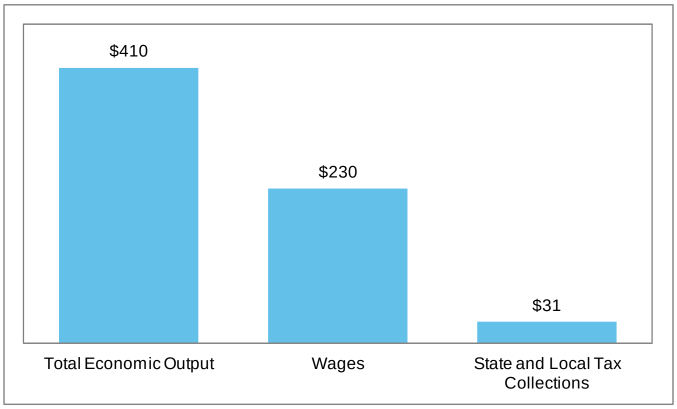
The table and chart below summarize the key findings.

Table 1 – Impacts Attributed to Film and Television Productions Since 2007 in South Carolina

	Total
Economic Impacts	
Total Output (millions)	$86.9
Full-Time Equivalent Jobs	1,610
Wages (millions)	$48.5
Net Fiscal Cost (millions)	
Fiscal Impacts	$6.6
Rebate	$21.0
Net Fiscal Cost	-$14.4

FTE = Full-time equivalent
Sources: SC Film Commission, IMPLAN and AECOM

Figure 1 – Costs and Benefits for Every $100 in Rebates Spent



In all, as reviewed in this analysis the South Carolina film incentive program is more targeted and conservatively managed than many other U.S. film incentive programs. In recent years the Film Commission has developed robust data to better understand the costs and benefits of the program. Current ongoing research is being developed and implemented to understand the direct tourism impacts of production in South Carolina – an issue which other states have yet to understand in greater detail.

02

Incentive Program Comparisons

In this section of the report AECOM explores available film incentive programs nationally and South Carolina's relative position in this competitive landscape, and other previous studies of South Carolina's film incentives. Overall this section aims to set the context with respect to South Carolina's existing film incentive program, and how this compares to other film incentive programs nationally.

U.S. Film Incentive Programs

South Carolina is currently one of 40 states that offer some type of incentive to film and television producers either in the form of tax credits, cash rebates or grant programs. To analyze South Carolina's position among states, this section is divided into three subsections as follows:

1. An overview of the number of recent film and television productions in individual states, either for calendar year or fiscal year ("FY") 2010;
2. An overview of the current types of incentives (i.e. tax credits, rebates, etc.) and characteristics of the current film incentive programs offered in individual states;
3. An estimate (as available) of individual state spending on film production this year.

Recent Film &Television Production Activity in the U.S.

To put South Carolina's film and production activity in perspective, AECOM reviewed recent film and television production numbers for calendar or FY 2010, as reported to the Motion Picture Association of America ("MPAA"). This information appears in the table that follows. California and New York lead the U.S. in terms of annual production activity. As noted in the table, the numbers that are reported for California pertain only to location shoots for film and television projects and exclude studio shoots. As the headquarters for most film and television studios in the U.S., California contains between 4 and 5 million square feet of total studio space, compared to the approximate one million square feet of space in the state of New York. Therefore, the numbers for California would likely be considerably higher than those for New York.

Other states that have been generating over 100 combined film and television productions each year include the neighboring state of Georgia (111 in 2010), Michigan (112), and Texas (148). The average state generated a total of 16 film and television projects last year according to this data. For comparative purposes, South Carolina attracted a total of 13, which is close to the national average.

Overview of Current Film Incentives in the U.S.

At this time, a total of 40 states offer film production incentives. Five smaller states – Delaware, New Hampshire, North Dakota, and Vermont – have never offered incentives, though some provide indirect incentives such as lodging and sales tax exemptions that may be available to producers. Two other states – Iowa and New Jersey – recently suspended their programs. Iowa suspended its program after widespread abuse and fraud was uncovered, and New Jersey suspended its program, though legislators and film producers are pushing for reinstatement. Three other states – Arizona, Nebraska and Nevada – have legislation pending to modify, add or repeal their incentives. Finally, three additional states – Arkansas, Idaho and Maine – did not appropriate funds for their programs in 2011 and remain unfunded at this time. This means that a total of 37 states have some sort of funding available for producers.

An overview of these incentives, including the type offered: (a) tax credit ("TC"); (b) cash rebate ("R"); (c) grant ("G"), or a combination thereof appears in a later table. At this time, a total of 25 states offer tax credits only, 10 states offer rebates only, 1 state (Texas) provides a grant program, and 4 states provide a combination of two or more of these incentives programs.

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Table 2 – Film and Television Projects by State, 2010

State	Film	TV	Total	State	Film	TV	Total
South Carolina	3	5	8				
Regional Competitors							
Georgia	44	67	111				
Louisiana	69	18	87				
North Carolina	15	15	30				
Other States							
Alabama	6	1	7	Montana	1	1	2
Alaska	5	15	20	Nebraska	2		2
Arizona	12	3	15	Nevada	15	10	25
Arkansas	5	1	6	New Hampshire	3	4	7
California[1]	273	254	527	New Jersey	32	19	51
Colorado	11	9	20	New Mexico	23	6	29
Connecticut	20	6	26	New York	279	345	624
Delaware	5	0	5	North Dakota	4		4
District of Columbia	3	12	15	Ohio	15	3	18
Florida	31	34	65	Oklahoma	23		23
Hawaii	9	4	13	Oregon	18	5	23
Idaho	8		8	Pennsylvania	34	25	59
Illinois	37	37	74	Puerto Rico	6		6
Indiana	12		12	Rhode Island	7	3	10
Iowa	26		26	South Dakota	1	1	2
Kansas	2		2	Tennessee	20	6	26
Kentucky	3	4	7	Texas	103	45	148
Maine	3	2	5	Utah	31	4	35
Maryland	5	1	6	Vermont	4		4
Massachusetts	9	9	18	Virginia	18	11	29
Michigan	93	19	112	Washington	9		9
Minnesota	12	27	39	West Virginia	2	2	4
Mississippi	6		6	Wisconsin	13		13
Missouri	7		7	Wyoming	5	5	10

Note: Data pertains to either calendar year 2010 or FY 2010, as reported to the MPAA, and the South Carolina Film Commission

[1] Pertains to location shoots only. Actual numbers would be considerably higher since CA has 4 times the amount of studio space of NY

Source: Motion Picture Association of America and AECOM

Film Incentive Program Caps

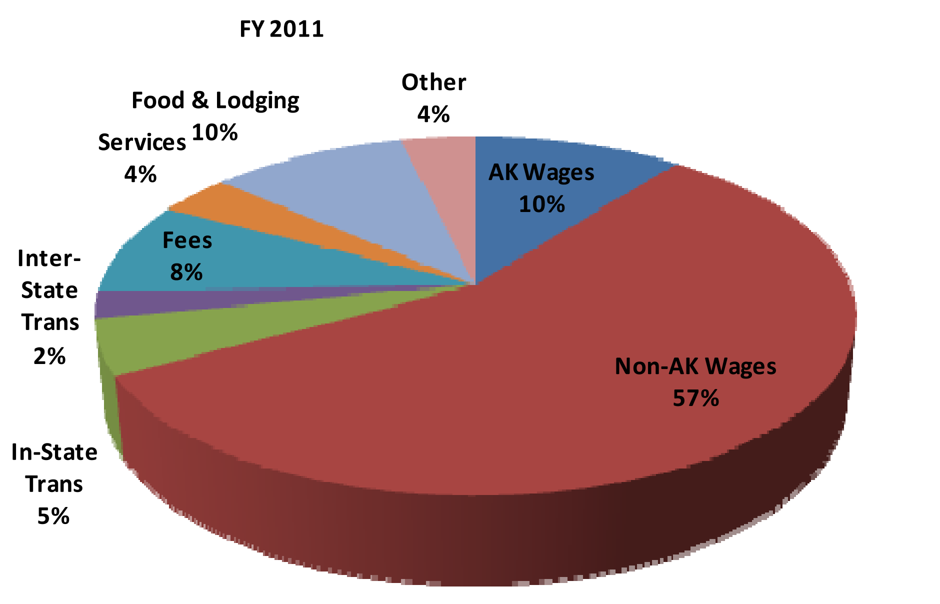
The information presented in a later table lists the current percentage of "qualifying spend," whether additional resident and non-resident wages are included, whether a shooting bonus is offered for filming outside of major metropolitan areas, and whether the state offers an annual cap. Currently, seven states – Connecticut, Georgia, Illinois, Louisiana, Massachusetts, Montana, and North Carolina – do not have an annual cap in place. That being said, certain per project caps or salary caps are in place as follows:

- Connecticut places an aggregate "star talent" compensation project cap of $20 million;

- Georgia has a $500,000 per person per project cap on W-2 salaries only;
- Illinois, which covers 15 percent of resident labor expenditures, limits compensation to $100,000 per employee;
- Louisiana has a $1 million per person cap on the 5% Louisiana payroll credit;
- Massachusetts' 25 percent payroll credit excludes salaries of > $1 million;
- Montana imposes a per person cap of $50,000 on the 14 percent resident wage credit;
- North Carolina has a cap of $1 million on compensation.

Note that while Louisiana and Georgia have salary caps with respect to incentives there are "workarounds" that are possible for other types of expenditures that may increase the overall reimbursement for above-the-line credits. (Note: Above-the-line talent refers to the creative talent involved in a film (i.e., director, producer, writer and actors), while below-the-line talent involves all other crew members, including technical, professional and skilled tradespersons.) With the exception of Illinois and Montana, which do not cover non-resident above- and below-the-line labor, the remaining five states do cover both types of positions. This has lead to criticism among opponents of film incentive programs, who argue that the money is being used to pay people domiciled out of state.

Figure 2 – Alaska Film Production Spend



Source: Alaska Dept. of Commerce and Economic Development

For example, a review of data provided by the Alaska Dept. of Commerce and Economic Development for FY 2011, shows that of the approximate $19 million that was spent by productions in Alaska this past year (FY 2011), nearly $11 million (57 percent) went to out-of-state crew and talent. Similarly, the State of Michigan recently capped non-resident wages at 25 percent for below-the-line and 27 percent for above-the-line. Prior to October 2011, the state had provided 40 percent of non-resident, above-the-line talent, capped at $2 million per person.

By comparison, productions that film in South Carolina only receive a 10 percent cash rebate up to $35,000 on out-of-state employee wages for both above- and below-the-line positions. All South Carolina residents working on a film production, both above- and below-the-line, are eligible for the full 20 percent rebate, but only out-of-state actors (including stunt performers) are eligible for the full 20 percent cash rebate, provided they earn less than $1 million.

Unlike the seven states mentioned, most states have annual funding or appropriation caps in place. A later table lists the current 2011 appropriations by state. As shown, the average annual cap is approximately $32 million this year, with the median being closer to $8 million. In South Carolina, there is an annual cap on the amount of rebate funds available per year, which is typically $15 million each fiscal year; a figure that is not excessive compared to other national incentive programs.

One notable change in film incentive programs over the past year has been the sudden cap to annual funding in two states that previously has no funding limits – Michigan and New Mexico. New Mexico recently capped its incentive at $50 million, and Michigan also capped theirs at $25 million, though it has been increased to $100 million for FY 2012. At this time, New Mexico only has two films in production, both smaller, independent offerings, though two television shows – AMC's Breaking Bad and USA Network's In Plain Sight – are still based there. Both of those series are coming to an end after their fifth and final season. And while Michigan attracted over 100 film and television projects last year, this year the number is projected to be closer to 23 total.

Table 3 – Current Film Production Incentives in the U.S., 2011

		Incentive Characteristics							Other Incentives				
State	Type	Refundable?	Transferable?	Qualifying Spend %	Resident Wage Percentage	Non-Resident Wages?	Shooting Bonus?	No Annual State Cap	Infrastructure Credit	Sales Tax Relief	Lodging Tax Relief	Loan Program	Right to Work State?
South Carolina	R/TC			20-30%	20%	10%			✓	✓	✓		✓
Regional Competitors													
Georgia	TC		✓	20-30%				✓		✓			✓
Louisiana	TC	✓	✓	30%	5%			✓					✓
North Carolina	TC	✓		25%				✓		✓	✓		✓
Other States													
Alabama	TC	✓		25%	35%		✓			✓	✓		
Alaska	TC		✓	30%	10%								
Arizona	Pending									✓			
Arkansas*	R			15%	10%								✓
California	TC			20-25%									
Colorado	R			10%							✓		
Connecticut	TC		✓	10-30%				✓	✓	✓	✓		

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		Incentive Characteristics							Other Incentives			
State	Type	Refundable?	Transferable?	Qualifying Spend %	Resident Wage Percentage	Non-Resident Wages?	Shooting Bonus?	No Annual State Cap	Infrastructure Credit	Sales Tax Relief	Lodging Tax Relief	Loan Program	Right to Work State?
Delaware	None								✓				
District of Columbia	Under Review												
Florida	TC		✓	20%			✓			✓			✓
Hawaii	TC	✓		15-20%			✓		✓				
Idaho*	R			20%						✓	✓		✓
Illinois	TC		✓	30%	15%			✓					
Indiana	TC	✓		15%							✓		
Iowa	Suspended										✓		
Kansas	TC			30%									✓
Kentucky	TC	✓		20%						✓	✓		
Maine*	R			5%	12%	10%				✓	✓		
Maryland	R	✓		25-27%						✓			
Massachusetts	TC	✓	✓	25%	25%			✓		✓			
Michigan	TC	✓	✓	27%	32%	25-27%	✓		✓		✓	✓	
Minnesota	R			15-20%						✓	✓		
Mississippi	R			25%	30%	25%				✓			✓
Missouri	TC		✓	35%									
Montana	TC		✓	9%	14%			✓			✓		
Nebraska	Pending										✓		
Nevada	Pending										✓		
New Hampshire	None												
New Jersey	Suspended									✓	✓		
New Mexico	TC		✓	25%						✓	✓	✓	
New York	TC		✓	30%						✓			
North Dakota	None										✓		
Ohio	TC	✓		25%	35%						✓		
Oklahoma	R			35-37%			✓		✓	✓			✓
Oregon	R			20%	10-16%						✓		
Pennsylvania	TC		✓	25%							✓		
Puerto Rico	TC		✓	40%	40%	20%			✓				
Rhode Island	TC		✓	25%									
Tennessee	G/TC	✓		17%			✓						✓
Texas	G			5-15%	8-25%		✓			✓	✓		✓
Utah	R/TC	✓		25%						✓	✓		✓

State	Type	Refundable?	Transferable?	Qualifying Spend %	Resident Wage Percentage	Non-Resident Wages?	Shooting Bonus?	No Annual State Cap	Infrastructure Credit	Sales Tax Relief	Lodging Tax Relief	Loan Program	Right to Work State?
		Incentive Characteristics							Other Incentives				
Vermont	None									✓	✓		
Virginia	R/TC	✓		15-20%	10-20%					✓	✓		✓
Washington	R			30%						✓	✓		
West Virginia	TC			27%			✓			✓	✓		
Wisconsin	TC		✓	25%	25%				✓	✓			
Wyoming	R			12-15%							✓		✓

* These states currently do not have funds in their film incentive program for 2011
G = Grant; R = Rebate: TC = Tax credit
Sources: Incentive Solutions (2011), Individual film commissions and AECOM

Film Incentive Minimum Spend Requirements

The next table shows that the minimum spend requirement ranges from $0 in Montana up to $1 million in states like South Carolina, California, Utah and Oregon. This means that states like South Carolina are trying to attract higher budgeted projects such as film and television productions, that will have a greater economic impact on the state spend.

Table 4 – Annual Cap and Minimum Spend Requirements, FY 2011

State	Type	Annual Cap	Minimum Spend* ($000s)	State	Type	Annual Cap	Minimum Spend* ($000s)
South Carolina	R/TC	$15	$1,000				
Regional Competitors							
Georgia	TC	None	$500				
Louisiana	TC	None	$300				
North Carolina	TC	None	$250				
Other States							
Alabama	TC	$10	$500	Montana	TC	None	$0
Alaska	TC	$100	$100	Nebraska	Pending	--	`
Arizona	Pending	$0	--	Nevada	Pending	--	--
Arkansas	R	$0	$50	New Hampshire	None	--	--
California	TC	$100	$1,000	New Jersey	Suspended	--	--
Colorado	R	$0.6	$100-$250	New Mexico[2]	TC	$50	See Notes[2]
Connecticut	TC	None	$100-$1,000	New York	TC	$420	$15,000
Delaware	None	--	--	North Dakota	None	--	--

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State	Type	Annual Cap	Minimum Spend* ($000s)	State	Type	Annual Cap	Minimum Spend* ($000s)
District of Columbia	Under Review	--	--	Ohio	TC	$10	$250
Florida	TC	$53.5	$625	Oklahoma	R	$5	$25
Hawaii	TC	None	$200	Oregon	R	$7.5	$750-$1,000
Idaho	R	$0	$200	Pennsylvania[3]	TC	$60	See Notes[3]
Illinois	TC	None	$50-$100	Puerto Rico	TC	$50	$100
Indiana	TC	$2.5	$100	Rhode Island	TC	$15	$300
Iowa	Suspended	--	--	Tennessee	G/TC	$20	$150-$500
Kansas	TC	$2	$50-$100	Texas	G	$30	$250
Kentucky	TC	$7	$500	Utah	R/TC	$6.8	$1,000
Maine	R	None	$75	Vermont	None	--	--
Maryland	n	$7.5	$500	Virginia	R/TC	$4	Varies
Massachusetts	TC	None	$50	Washington	R	$3.5	$500
Michigan	TC	$25	$50	West Virginia	TC	$10	$25
Minnesota[1]	R	$1	See Notes[1]	Wisconsin	TC	$0.5	$50
Mississippi	R	$20	$50	Wyoming	R	$1.2	$200
Missouri	TC	$4.5	$50-$100				
Average		$32	$676				
Median		$8	$200-$250				

[1] To qualify, feature films must be ≥ 80 minutes, 60% of principal photography days must be local, or ≥ 60% of principal and post-production must be local
[2] No minimum spend, however, there is a $5 million cap per project on credit for all performing artists, as long as the amount does not exceed $20 million
[3] No minimum spend, however, ≥ 60% of budget must be spent locally
G = Grant; R = Rebate: TC = Tax credit
Source: Individual film commissions and AECOM

Types of Film Productions Covered

The next table lists the types of productions that qualify for film incentives. Most states now offer incentives for commercial productions, though the minimum spend and qualifying spend requirements may vary. In recent years, video games and digital media projects have been added.

Table 5 – Types of Film Productions Covered, 2011

State	Type	Feature Film	Documentaries	TV Programs	Sound Recordings	Videos	Music Videos	Commercials	Videogames	Digital Media
South Carolina	R/TC	✓	✓	✓		✓		✓		
Regional Competitors										
Georgia	TC	✓		✓	✓	✓	✓	✓	✓	✓
Louisiana	TC	✓		✓		✓		✓		
North Carolina	TC	✓	✓	✓				✓		✓
Other States										
Alabama	TC	✓	✓	✓	✓	✓	✓	✓		
Alaska	TC	✓	✓			✓		✓		
Arkansas	R	✓	✓	✓		✓	✓	✓	✓	✓
California	TC	✓		✓						
Colorado	R	✓	✓	✓				✓		
Connecticut	TC	✓	✓	✓	✓	✓	✓	✓	✓	✓
Florida	TC	✓		✓		✓		✓	✓	✓
Hawaii	TC	✓	✓	✓	✓	✓		✓	✓	✓
Illinois	TC	✓	✓	✓		✓				
Indiana	TC	✓	✓	✓		✓	✓			✓
Kansas	TC	✓	✓			✓		✓		
Kentucky	TC	✓	✓					✓		
Maine	R	✓	✓	✓		✓	✓	✓		
Maryland	R	✓	✓	✓			✓	✓		
Massachusetts	TC	✓		✓		✓		✓		✓
Michigan	TC	✓	✓	✓		✓	✓	✓	✓	✓
Minnesota	R	✓	✓	✓				✓		✓
Mississippi	R	✓	✓	✓		✓		✓		
Missouri	TC	✓	✓	✓		✓		✓		
Montana	TC	✓	✓	✓		✓	✓	✓		✓
New Mexico	TC	✓	✓	✓		✓	✓	✓	✓	
New York	TC	✓		✓				✓		
Ohio	TC	✓	✓	✓	✓	✓	✓	✓	✓	✓
Oklahoma	R	✓	✓					✓		
Oregon	R	✓	✓	✓				✓		
Pennsylvania	TC	✓		✓				✓		
Puerto Rico	TC	✓	✓	✓	✓		✓	✓	✓	
Rhode Island	TC	✓	✓	✓		✓		✓		
Tennessee	G/TC	✓	✓	✓				✓		
Texas	G	✓	✓	✓		✓	✓	✓	✓	
Utah	R/TC	✓	✓	✓						✓

State	Type	Feature Film	Documentaries	TV Programs	Sound Recordings	Videos	Music Videos	Commercials	Videogames	Digital Media
Virginia	R/TC	✓	✓	✓		✓	✓	✓		
Washington	R	✓		✓				✓		
West Virginia	TC	✓		✓			✓	✓		
Wisconsin	TC	✓		✓		✓			✓	
Wyoming	R	✓		✓			✓	✓		

G = Grant; R = Rebate: TC = Tax credit
Source: Individual film commissions and AECOM

Current Film Incentives in South Carolina

Motion Picture Tax Credit

In addition to the 20 percent wage rebate and 30 percent supplier rebate, producers and investors who create motion pictures can receive up to 20 percent of their cash investment, with a limit of $100,000 per tax payer.

Tax Credit for a Motion Picture Production/Post-Production Facility

Investors who build motion picture production or post-production facilities can claim an income tax credit of up to 20 percent, provided credits by all taxpayers in a single facility do not exceed $5 million.

South Carolina Production Fund

Mandated by the South Carolina Legislature as part of the incentive program to attract film production to the state, the South Carolina Production Fund grants and training seminars help South Carolina students and professionals become prepared to work on feature films or advance in their profession. The South Carolina Film Production Fund was created to develop projects in film, video and multimedia between professionals in motion picture and related industries, and South Carolina institutions of higher learning. Professionals in motion picture-related fields partner with South Carolina colleges to help develop the talent pool. Each school has been awarded $100,000 to collaborate with South Carolina independent producers and media professionals. Mini-Grants are also available.

The Production Fund is for writers, directors and producers who will collaborate with colleges to produce short films using professionals as mentors and advisors. To date, the Production fund has created 7 short films and animations working with USC, Clemson, and Trident Tech. Over 60 students have participated in this apprenticeship program. The USC grant also includes 140 hours of classroom instruction during the fall and spring semesters, culminating in the creation of a short film.

The SC Indie Grant program helps producers who work with students at Trident Technical College. Collaborative efforts in a professional short film help SC producers create a “sizzle reel” or film calling card. Grant funds are available for the production of short films designed to give local professionals an opportunity to showcase their skill, build alliances with professional filmmakers and mentor students and aspiring professionals. This program, in its second year has produced 6 short films, two of which have won national awards, and have helped train 10 Trident Tech students.

Just started in 2011, High school students from through-out South Carolina will be encouraged to create a short film using South Carolina State Parks as a practical location in their films.

Also, regularly scheduled seminars for professionals and students are presented around the state each year. Past seminars, led by nationally known experts included: Final Cut Pro editing, writing, lift safety, PA Bootcamp, marketing and distribution, casting and other topics needed for both students and professionals to be prepared for the entertainment industry. Over 800 have been trained in the last five years.

Overview of South Carolina Film Incentives

The State of South Carolina has not engaged as extensively in the highly competitive incentive race. With neighboring states like Georgia and North Carolina, this would be difficult at this point in the film incentive process. According FY 2011 data from the Georgia Film Office, a total of 83 film and television productions with combined budgets of $671.6 million shot in the state. This year has also been North Carolina's busiest year in the film industry with productions having a direct spend of over $200 million. "Iron Man 3" will add to their record breaking year and carry over into 2012.

What States Spend on Film Incentive Programs

The primary objective of tax incentives is typically to encourage a self-sustaining industry. With significant budget deficits and waning revenues, however, some lawmakers are taking a closer look at tax credits for filmmakers and either (a) reducing their annual appropriations (as in the recent case of new Mexico and Michigan), or suspending their programs (i.e., New Jersey and Iowa).

One of the problems is that the film industry is mobile and production can vary considerably from year to year. According to the latest report from the Massachusetts Department of Revenue, for instance, in-state production spending fell from $333 million in 2009 to $58.4 million in 2010, a decline of 82 percent. And as South Carolina has experienced, in 2006, the state hosted 9 different feature length films and handed out a record $12 million in tax incentives, the most spend in one year by South Carolina.

The Center on Budget and Policy Priorities estimates that states spent about $1.5 billion on film tax subsidies last year (2010). This information appears in the following table. It should be noted that there is a lag between the time credits are issued and the time they are redeemed, which sometimes makes them difficult to track. In some instances, the amount of credits issued one year may also exceed state spend that same year. Based on the available information from film commissions, AECOM estimates that total state incentive spending will be in the order of roughly $1 billion this year.

Table 6 – Dollars Appropriated or Claimed for Film Production Funds (Millions)

State	Dollars Appropriated or Claimed FY 2010[1]	Dollars Appropriated or Claimed FY 2011[2]	FY 2011 Annual Cap
South Carolina	15		$15.0
Regional Competitors			
Georgia	33.5	130	None

State	Dollars Appropriated or Claimed FY 2010[1]	Dollars Appropriated or Claimed FY 2011[2]	FY 2011 Annual Cap
Louisiana	139	102	None
North Carolina	22.5	n/a	None
Other States			
Alabama	7.5	n/a*	$10.0
Alaska	20	5.7	$100.0
Arizona	70	0	$0.0
Arkansas	0	0	$0.0
California	100	100	$100.0
Colorado	0.3	n/a	$0.6
Connecticut	116	37.6	None
Florida	53.5	53.5	$53.5
Hawaii	16.2	30	None
Idaho	0	0	$0.0
Illinois	20.5	20.5	None
Indiana	2.5	0.063	$2.5
Iowa	12.9	0	$0.0
Kansas	0	0	$2.0
Kentucky	15	n/a*	$7.0
Maine	0	0	None
Maryland	2	n/a	$7.5
Massachusetts	100	14.6	None
Michigan	110	25	$25.0
Minnesota	2.5	0.95	$1.0
Mississippi	20	n/a	$20.0
Missouri	4.5	n/a	$4.5
Montana	0	n/a	None
New Jersey	15	0	$0.00
New Mexico	66.7	50	$50.0
New York	350	420	$420.0
Ohio	10	n/a	$10.0
Oklahoma	5	n/a	$5.0
Oregon	5	7.5	$7.5
Pennsylvania	74		$60.0
Rhode Island	15	n/a	$15.0
Tennessee	20	4.0	$20.0
Texas	11	n/a	$30.0
Utah	7.5	n/a	$6.8
Virginia	1.25	2.5	$4.0
Washington	3.5	n/a	$3.5
West Virginia	10	n/a	$10.0
Wisconsin	0.9	n/a	$0.5
Wyoming	2	n/a	$1.2
Total	$1,475	$1,004	$992

* means that although figures may not be available, film commissions report on capping out

[1] Based on data from Center on Budget and Policy Priorities (updated December 2010)

[2] AECOM estimates based on data from film commissions (as available)

Sources: Center on Budget and Policy Priorities, individual film commissions and AECOM

Previous South Carolina Film Analyses

AECOM was provided and reviewed two previous studies of the South Carolina film incentives program. The first was completed in 2007 by the Moore School of Business at the University of South Carolina for the South Carolina Department of Commerce. The report reviews films and series produced in-state from 2006-2007 using an IMPLAN multiplier model. While impacts from 8 projects are shown it is referred to as 7 in the body of the analysis (AECOM is unsure if this is simply a reference mistake). Key findings of this analysis conclude that the labor income effect for every $1.00 spent on South Carolina wages is $1.30, while this figure is $3.68 in output effect for every $1.00 spent in rebates for suppliers. The output multiplier appears to be the result of categorizing spending by appropriate multiplier categories within IMPLAN (discussed later). The report did not include a net fiscal cost analysis or related estimates.

The second analysis was completed in 2008 by the College of Charleston for the South Carolina Coordinating Council for Economic Development. The analysis includes a review of 9 productions from 2006-2007 using an IMPLAN multiplier model. Key findings of this analysis conclude that South Carolina experiences $3.76 in output effect for every $1.00 spent in rebates for suppliers. The output multiplier used is the Sector 418 code for the Motion Picture and Video Industry rather than itemized expenditure categories. The fiscal impact analysis appears to assume a tax impact generated from state ratios of income to fiscal revenues. The analysis also assumes no spending takes place in-state by out-of-state employees working on the project in South Carolina.

Direct comparisons between the two analyses can be somewhat problematic given the different methodologies, though some similarities and differences include:

- Both analyses utilize IMPLAN impact models which is a commonly accepted tool in estimating impacts for this sort of economic activity. The IMPLAN model is similarly used by AECOM for the purposes of estimated in this analysis;
- The output effect estimated by each analysis is relatively close ($3.68 vs. $3.76).
- The first analysis does not include a net fiscal impact calculation, which can obscure the actual cost of the program depending on the reader's familiarity with economic impact analysis. The second analysis did include such an analysis as does the AECOM analysis. The second analysis also uses a uniform ratio from the state economy for tax receipts to income, which is then applied to the film industry analysis. This approach may not fully value tax contributions as production can more often occur in places with greater levels of physical and human infrastructure which typically also have higher tax burdens (ex. cities and more urban areas).
- The second analysis utilizes the Motion Picture and Video Industry sector code within IMPLAN to generate the multiplier estimates. Whenever possible (and based on available data) actual itemized spending is preferred since the IMPLAN code <u>includes movie theatres</u> which can significantly skew results as such establishments typically have fewer employees per dollar of revenue as well as lesser paid employees as compared to actors, producers and crew working on a production. AECOM requested and received the itemized expenditures by film which were used in the impacts for this analysis;
- And lastly, the second analysis assumes no spending in-state by out-of-state employees working on production in South Carolina. The South Carolina Film Commission has begun conducting surveys of

such employees and now has some data to support spending by these employees (albeit still well below their actual levels of salary). AECOM used this survey data to estimate impact from spending by these out-of-state residents employed in local production projects.

03

Economic and Fiscal Impact Estimates

In this section, AECOM presents the economic and fiscal impacts of film and television productions that were produced, in part, in South Carolina since 2007. The following nine productions met the criteria to qualify for incentives as outlined by the South Carolina Film Commission:

- Angel Camouflaged
- Army Wives, seasons 3, 4 and 5
- The Bay
- Dear John
- Little Red Wagon
- Nailed
- New Daughter

In addition, AECOM estimated the economic and fiscal impacts of productions that did not qualify for incentives such as commercials, documentaries, and television episodes, as these productions are similarly facilitated by the Film Commission. Impacts of the two types of productions are presented separately.

Methodology

AECOM used IMPLAN, a commonly used and accepted proprietary software that runs on data collected by the Minnesota IMPLAN Group to estimate economic impacts of a change in the economy, in this case, wages and spending associated with film and television productions made in South Carolina. More than 1,500 clients across the country, including government agencies, non-profit agencies, industry associations and private companies use IMPLAN to prepare location-specific economic impact analysis. IMPLAN data files are compiled from a wide variety of sources including the U.S. Bureau of Economic

Analysis, the U.S. Bureau of Labor and the U.S. Census Bureau. Economic impact analysis traces the changes in economic activity in a defined geographic region (the State of South Carolina) resulting from some action (qualifying film expenditures or wages), identifies the economic sectors that are impacted by that activity and estimates the resulting changes in output, employment and income in the region as defined below:

- **Output:** This is the total value of goods and services produced across all industry sectors and all stages of production in the study area;
- **Employment:** This represents the number of jobs needed to support the given economic activity across all sectors. It includes all wage and salary employees, both part- and full-time, as well as self-employed jobs. AECOM converted this data to measure full-time equivalent jobs which equates to 35 hours per week or 227.5 days per year;
- **Compensation:** The total payroll costs (including benefits) of each industry. It includes the wages and salaries of workers who are paid by employers, as well as benefits such as health and life insurance, retirement payments and non-cash compensation. It also includes proprietary income received by self-employed individuals.

The economic impacts were measured using only those dollars that were spent in South Carolina as determined by examining the detailed audits conducted for the South Carolina Film Commission. The audits detail all expenditures made by the productions which includes everything from construction materials to cast lodging, catering, transportations, equipment, props, etc. Only those expenses made at a South Carolina business were included. In addition, wage records for all cast, crew and administration were provided with detailed information on days and dates worked, total wages, withholding tax and residency. This level of detail allowed for a very precise analysis of how production companies spend their dollars rather than using IMPLAN to estimate how a motion picture company generally allocates its spending in South Carolina. The most current IMPLAN data for South Carolina was used for this analysis.

Spending and the associated economic impacts generate revenues for state and local governments in the form of fees, permits and taxes, i.e., fiscal impacts. AECOM estimated the following state and local tax revenues: corporate income tax, personal income tax, property tax and sales and use tax. Note that these are not all of the revenues that could be collected by the wage and spending impacts, however it represents the majority. Effective rates were measured using 2009 baseline data collected by the U.S. Census Bureau on state and local government finances relative to total Gross Domestic Product (GDP) and total personal income from the U.S. Bureau of Economic Analysis. The effective rates for corporate income and property taxes were measured as a share of total GDP. Individual income tax ranges from 0 to 7 percent in South Carolina. Therefore, an effective rate was determined using total personal income. State sales tax was applied to select goods and services. Local sales tax was measured using the relationship to state sales tax collections. These rates will be applied to the appropriate economic impacts.

Table 7 – Effective Tax Rates for Fiscal Impacts

	2009 Baseline (millions)	Effective Rate	
Gross Domestic Product	$159,593		
Total Personal Income	$145,042		
Tax Collections			
Property Tax	$4,423	2.79%	of total output
Sales Tax			
State	$2,910	6.00%	select goods and services
Local	$219	7.54%	share of state sales taxes
Individual Income	$2,812	4.33%	of wages
Corporate Income	$249	0.16%	of total output
Total Select Taxes	$10,614		

Sources: U.S. BEA, U.S. BLS, U.S. Census Bureau

Many of the productions receiving incentives also qualify for a state sales tax exemption. Therefore, state and local sales taxes associated with the direct spending are not included in the fiscal impact analysis, though in some cases they are still paid.

Film Incentives

To qualify for incentives, a production company must spend a minimum of $1 million in total production costs within a calendar year. For complete details on the incentives currently offered by the State of South Carolina, please visit their website (www.filmsc.com). The South Carolina Film Commission audits productions applying for incentives and determines if the spending occurred at a qualified South Carolina business. Wages paid to South Carolina residents and non-residents working during these productions were also provided to AECOM. This data forms the base of our analysis.

The following table shows that the nine productions paid a total of $56.5 million in eligible wages earning a rebate of $9.4 million. They purchased more than $73.5 million in goods and services of which $38.7 million was spent at South Carolina businesses and qualified for a 30 percent rebate. Combined, these nine productions received $21 million from the State of South Carolina in incentives.

Table 8 – Summary of Productions Receiving Incentives since 2007 (in millions)

	Total	Wages		Suppliers		
Production	Production	SC Eligible	Rebate	Total	SC Spend	Rebate
Angel Camouflaged	$3.0	$1.3	$0.2	$1.3	$0.7	$0.2
Army Wives, season 3	$51.3	$7.7	$1.4	$12.8	$9.6	$2.9
Army Wives, season 4	$45.5	$6.9	$1.4	$13.0	$10.0	$3.0
Army Wives, season 5*	NA	$14.5	$2.9	NA	$7.1	$2.1
The Bay	$2.5	$0.8	$0.1	$0.8	$0.6	$0.2
Dear John	$37.7	$8.7	$1.2	$4.9	$4.3	$1.3
Little Red Wagon	$6.0	$2.7	$0.4	$1.3	$1.2	$0.3
Nailed	$30.6	$9.6	$1.2	$30.6	$3.5	$1.1
New Daughter	$13.7	$4.1	$0.6	$8.8	$1.9	$0.6
Total	$190.2	$56.5	$9.4	$73.5	$38.7	$11.6

NA = Not available
* Preliminary estimates
Note: Totals may not add due to rounding
Source: SC Film Commission

It should be noted that the data for Army Wives, season 5 is still being reviewed and should be considered preliminary, though close to the final estimate.

Since 2007, qualified productions hired 9,200 people (both residents and non-residents) as actors, managers, stunt performers, extras, crew, construction, administration, support services, etc. This job count includes everyone who worked on the production, even if only for one day. When adjusting for the fact that many people worked on several productions during this time period, there were nearly 7,000 individuals hired at some point. Due to the nature of work in the film industry, these jobs are short-term. Therefore, using data from IMPLAN, AECOM estimated the number of full-time equivalent (FTE) jobs this would represent. Since 2007, there were 1,010 FTEs created as a direct result of the qualified productions.

The most direct way that the film industry impacts South Carolina is by hiring residents. There were nearly 7,400 positions filled by 5,600 residents since 2007. This equates to 820 full-time equivalent jobs created.

Wages

Wages of all South Carolina residents working on qualified productions are eligible for the maximum 20 percent wage rebate. In addition, a production is eligible for a wage rebate up to 20 percent for non-resident performing artists. Wages of all other non-residents are eligible for a 10 percent wage rebate up to $3,500 per person. However, for qualifying television series, the wages of all non-residents are eligible for the 20 percent rebate. All wages must be subject to South Carolina withholding tax to be eligible for the rebate.

As shown above, the nine productions completed since 2007 paid $56.5 million in eligible wages. However, not all of this expenditure stayed within South Carolina. Information on residency was collected by the South Carolina Film Commission. All wages paid to South Carolina residents were included in the impact analysis. For non-residents, AECOM allocated a per diem based on a recent survey of the cast and crew of Army Wives and applied it to the number of days worked in South Carolina. The per diem is what the cast and crew spent in addition to what the production company paid for housing, transportation and meals. On average, non-residents spent approximately $83 per production day for things such as living expenses, entertainment, household expenses, health care, souvenirs, etc. The table below shows the wages paid to residents and non-resident per diems estimated to have remained within South Carolina and paid to local businesses for goods and services. Of the $56.5 million paid in total wages, an estimated $22.4 million remained in South Carolina and circulated throughout the state. The majority of those wages were paid to residents, $18.1 million.

For every dollar paid in wage rebates, South Carolina residents earned $1.93. This is up considerably from the Hefner study prepared for the South Carolina Coordinating Council for Economic Development which examined the impacts of nine productions made in 2006 to 2007. This is due to the much higher share of wages being paid to residents. In his study, only 18 percent of the wages went to residents yielding a $0.97 return. Since 2007, 32 percent of the wages are paid to South Carolinians.

In IMPLAN, there are two ways to examine how a change in wages affects the economy – as a change in household income or a change in labor income. In both cases, the economic sector in which the wages were paid is not modeled (i.e., $1 million in wages for restaurant workers). Instead, both models look at an overall change in the economic wealth of residents in the study area. When modeling a change in labor income, the payroll and associated spending implications are distributed across all household sectors in the region. If the change in household income is used, a specific household income category would have to be selected (e.g., $35-50,000 in household income) and the spending would be distributed for this income group only. Since there is a wide range of salaries paid to management, cast and crew associated with these nine productions, AECOM opted for a broad spectrum approach to be more representative and used the labor income methodology here.

AECOM examined the induced spending impacts generated by the $22.4 million in wages occurring since 2007. It is assumed here that wages will be re-spent rather than saved. For every dollar paid in wages that remain in South Carolina from a qualified production, an additional $0.77 is generated in induced spending impacts for a total of $17.3 million in induced spending. In addition, these wages and induced spending supported 150 full-time equivalent jobs throughout the state with $5.6 million in wages.

Table 9 – Economic Impacts of Wages Remaining in South Carolina since 2007

	2007*	2008	2009	2010	2011	Total
Initial Impacts						
Wages (millions)	$0.01	$8.1	$4.0	$6.6	$3.8	$22.4
Jobs, FTE	**	260	160	250	150	820
Wage Impacts						
Induced impacts (millions)	$0.01	$6.2	$3.1	$5.1	$2.9	$17.3
Jobs, FTE	**	50	30	40	30	150
Wages (millions)	$0.0	$2.0	$1.0	$1.7	$0.9	$5.6

	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12*	Total
Initial Impacts						
Wages (millions)	$4.5	$4.2	$6.4	$7.4	$0.0	$22.4
Jobs, FTE	130	150	250	280	**	820
Wage Impacts						
Induced impacts (millions)	$3.4	$3.2	$4.9	$5.7	$0.0	$17.3
Jobs (FTE)	30	30	40	50	0	150
Wages (millions)	$1.1	$1.1	$1.6	$1.9	$0.0	$5.6

All revenues in millions.
* Partial year data
** Less than 10 jobs
FTE = Full-time equivalent
Note: Totals may not add due to rounding
Sources: SC Film Commission, IMPLAN and AECOM

To measure the fiscal impacts, AECOM used the effective rates shown earlier. However, total wages ($56.5 million) were used as the base for personal income tax estimates not just the portion remaining in South Carolina since all eligible wages were subject to withholding. The $56.5 million in eligible wages, of which $22.4 million remained and circulated within the South Carolina economy, generated nearly $3.4 million in state and local fiscal impacts.

Table 10 – Fiscal Impacts of Wages Remaining in South Carolina Since 2007

Fiscal impacts	2007*	2008	2009	2010	2011	Total
Corporate income tax	$0	$9,900	$5,000	$8,100	$4,700	$27,600
Personal income tax	$1,200	$1,052,500	$453,300	$706,000	$485,400	$2,698,400
Property tax	$200	$171,900	$87,100	$141,700	$81,300	$482,100
Sales tax	$100	$68,000	$34,400	$55,700	$31,800	$190,000
Total	$1,500	$1,302,200	$579,700	$911,600	$603,200	$3,398,200

	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12*	Total
Corporate income tax	$5,500	$5,200	$7,900	$9,100	$0	$27,600
Personal income tax	$633,500	$537,900	$665,500	$861,200	$200	$2,698,400
Property tax	$95,500	$90,100	$137,800	$158,700	$100	$482,100
Sales tax	$37,800	$35,600	$54,300	$62,300	$0	$190,000
Total	$772,300	$668,800	$865,500	$1,091,400	$300	$3,398,200

* Partial year data
Note: Totals may not add due to rounding
Sources: SC Film Commission, IMPLAN and AECOM

For every dollar spent in wage rebates, $0.36 was generated in fiscal impacts yielding a net loss of $0.64 per dollar in wage rebate.

Suppliers

Qualified productions are eligible for a rebate of up to 30 percent spent on qualifying goods and services purchased, rented or leased by the production company from a South Carolina business. All expenditures must be filed with the Film Commission and subject to audit prior to leaving South Carolina.

According to the South Carolina Film Commission, these nine productions had eligible expenses of $38.7 million and qualified for $11.6 million in rebates. As with the wage analysis, AECOM focused on including all expenditures made at South Carolina businesses. In some cases, the Film Commission deemed some expenses ineligible for the rebate such as meal money, location fees and vehicle taxes, for example. In other cases, spending was capped for certain types of expenditures such as housing. In both cases, if the purchases were made at a South Carolina business, they were included in the economic and fiscal impact analysis. Airfare expenses as well as baggage fees were not included. For this portion of the analysis AECOM used IMPLAN regional purchasing coefficients (RPC) to reflect actual expenditures recurring within South Carolina.

The following table presents the economic impacts associated with $38.8 million spent by film and television companies on purchase made at South Carolina businesses since 2007. More than $25.7 million of the initial spending stayed within the State resulting in a total economic impact of $42.9 million in goods and services provided by local businesses. This supported 410 full-time equivalent jobs throughout the State paying $14.3 million in wages as shown below.

Table 11 – Economic Impacts of Supplier Spending Since 2007

	2007*	2008	2009	2010	2011	Total
Initial SC spend	$0.0	$9.3	$11.0	$12.0	$6.5	$38.8
Total Output (millions)						
Direct	$0.0	$5.3	$7.8	$8.4	$4.2	$25.7
Indirect + induced	$0.0	$3.6	$5.2	$5.5	$2.9	$17.3
Total	$0.0	$8.9	$13.0	$13.9	$7.1	$42.9
Jobs, FTE	0	90	120	130	70	410
Wages (millions)	$0.0	$3.0	$4.3	$4.5	$2.4	$14.3

	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12*	Total
Initial spend	$5.4	$10.9	$12.5	$9.9	$0.1	$38.8
Total Output (millions)						
Direct	$3.1	$7.2	$8.8	$6.5	$0.0	$25.7
Indirect + induced	$2.1	$4.9	$5.9	$4.4	$0.0	$17.3
Total	$5.1	$12.1	$14.7	$10.9	$0.1	$42.9
Jobs, FTE	50	110	140	100	0	410
Wages (millions)	$1.8	$4.1	$4.8	$3.6	$0.0	$14.3

* Partial year data
FTE = Full-time equivalent
Note: Totals may not add due to rounding
Source: SC Film Commission, IMPLAN and AECOM

This spending in turn generated nearly $2.1 million in state and local fiscal impacts in the form of corporate and personal income tax, property taxes and sales tax. Since these nine productions are also eligible for a sales tax rebate, sales tax on the direct spending was not included.

Table 12 – Fiscal Impacts of Incentivized Spending at South Carolina Suppliers

	2007*	2008	2009	2010	2011	Total
Corporate income	$0	$14,200	$20,800	$22,300	$11,300	$68,700
Personal income	$200	$130,300	$186,200	$195,300	$105,600	$617,600
Property	$300	$247,100	$363,000	$389,100	$197,600	$1,197,200
State and local sales	$0	$34,000	$50,300	$52,200	$28,000	$164,400
Total	$500	$425,600	$620,300	$658,900	$342,500	$2,047,900

	FY 07-08	FY 08-09	FY 09-10	FY 10-11	FY 11-12*	Total
Corporate income	$8,200	$19,400	$23,500	$17,400	$100	$68,700
Personal income	$76,000	$175,500	$207,200	$157,700	$1,200	$617,600
Property	$143,500	$338,400	$410,400	$302,800	$2,100	$1,197,200
State and local sales	$0	$46,800	$55,500	$41,800	$400	$164,400
Total	$227,700	$580,100	$696,600	$519,700	$3,800	$2,047,900

* Partial year data
Note: Details may not add to totals due to rounding.
Sources: SC Film Commission, IMPLAN and AECOM

Non-Incentivized Spending

In addition to the larger productions that qualify for incentives, there are many smaller productions occurring throughout the State such as television episodes, commercials and print ads. These productions do not qualify for incentives but are similarly facilitated by the Film Commission. From 2007 to date, there have been 258 such productions, most of which were television episodes and print ads. Of the nearly $38 million spent to produce these shows, more than $16 million was spent in South Carolina generating additional economic and fiscal benefits. The table below shows that while TV episodes such as sporting events, debates and Wheel of Fortune, spent the largest share of this money ($5 million), only 37 percent of their total budget was spent in South Carolina. At the same time, firms producing print ads and catalogs such as clothing stores, car companies and hardware stores, spent a higher share of their total budget in state, nearly $2.7 million.

Table 13 – Non-Incentivized Spending, 2007-2011

Non-Incentivized Production	Productions	Total Spend (millions)	SC Spending (millions)	Share SC Spend
Feature Film	7	$2.3	$0.7	30%
MOW's/Cable Movies/TV Series/Pilots	12	$7.2	$3.0	42%
Other (Student, Docs.)	20	$0.4	$0.3	78%
Print Ads & Catalogs	71	$3.9	$2.7	69%
Training/Industrials	14	$0.6	$0.2	43%
TV Commercials	50	$9.7	$4.5	46%
TV Episodes/Music Videos	84	$13.6	$5.0	37%
Total	258	$37.6	$16.5	44%

Source: SC Film Commission

The South Carolina Film Commission surveys these companies after production. Details from this survey reveal that since 2007, these non-incentivized productions spent 1,000 days in production throughout South Carolina, hired more than 1,000 residents as part of the crew, 2,000 extras, 400 actors and paid for 7,600 hotel rooms. However, on average, these productions spend a minimum amount of time in South Carolina and hire fewer than 20 South Carolinians as actors, extras and crew as shown in the following table. It should be noted that very often the same people will work on several such productions throughout the year meaning that the above mentioned 1,000 residents hired for the crew may actually be several hundred residents being hired several times since 2007. Data is not available to examine that in further depth.

Table 14 – Average Duration and Employment for Non-Incentivized Productions, 2007-2011

Non-Incentivized Production	Days in SC	SC Hires
Feature Film	15.0	22
MOW's/Cable Movies/TV Series/Pilots	18.4	9
Other (Student, Docs.)	8.7	18
Print Ads & Catalogs	2.7	8
Training/Industrials	2.6	10
TV Commercials	1.3	18
TV Episodes/Music Videos	2.8	13
Average	4.0	13

Source: SC Film Commission

Despite their limited stay in South Carolina, these productions do generate both economic and fiscal impacts. Since detailed spending patterns similar to incentivized productions was not available, AECOM classified all spending associated with productions that did not receive incentives as part of the motion picture industry. The tables below show the economic impacts of these productions on South Carolina by calendar and fiscal year. The $16.5 million spent on these productions generated an additional $10.3 million in indirect and induced spending, supported a total of 230 full-time equivalent jobs paying $6.1 million in wages.

Table 15 – Economic Impacts of Non-Incentivized Productions by Calendar Year

	2007	2008	2009	2010	2011	Total
Output (millions)						
Direct	$5.2	$3.2	$4.4	$2.4	$1.2	$16.5
Indirect + induced	$3.3	$2.0	$2.7	$1.5	$0.7	$10.3
Total	$8.5	$5.2	$7.1	$3.9	$2.0	$26.7
Other Impacts						
Jobs, FTE	70	50	60	30	20	230
Wages (millions)	$2.0	$1.2	$1.6	$0.9	$0.4	$6.1

FTE = Full-time equivalent
Note: Totals may not add due to rounding
Sources: SC Film Commission, IMPLAN and AECOM

Table 16 – Economic Impacts of Non-Incentivized Productions by Fiscal Year

	FY 2006 -2007*	FY 2007 -2008	FY 2008 -2009	FY 2009 -2010	FY 2010 -2011	FY 2011 -2012*	Total
Output (millions)							
Direct	$4.1	$3.4	$3.6	$3.4	$1.5	$0.6	$16.5
Indirect + induced	$2.6	$2.1	$2.2	$2.1	$0.9	$0.3	$10.3
Total	$6.6	$5.5	$5.8	$5.5	$2.4	$0.9	$26.7
Other Impacts							
Jobs, FTE	60	50	50	50	20	10	230
Wages (millions)	$1.5	$1.3	$1.3	$1.2	$0.5	$0.2	$6.1

* Partial year data
FTE = Full-time equivalent
Note: Totals may not add due to rounding
Sources: SC Film Commission, IMPLAN and AECOM

The fiscal impacts of this spending follow. What is significant to note is that no incentives were given to these productions, therefore there was no fiscal cost to the State. However, production companies that spend $250,000 in South Carolina within one calendar year (i.e., 12 consecutive months) may qualify for a states sales and use tax exemption on goods and services purchased, leased or rented for production by the production company. The $26.7 million in spending associated with non-incentivized productions since 2007 generated more than $1.1 million in state and local taxes.

Table 17 – Fiscal Impacts of Non-Incentivized Productions by Calendar Year

	2007	2008	2009	2010	2011	Total
Corporate income	$13,600	$8,300	$11,400	$6,200	$3,100	$42,700
Personal income	$86,400	$53,000	$70,400	$37,600	$18,600	$266,000
Property	$237,400	$145,300	$199,500	$108,500	$54,600	$745,300
State and local sales	$24,100	$14,700	$19,800	$10,500	$5,200	$74,300
Total	$361,500	$221,300	$301,100	$162,800	$81,500	$1,128,300

Note: Details may not add to totals due to rounding.
Source: SC Film Commission, IMPLAN and AECOM

Table 18 – Fiscal Impacts of Non-Incentivized Productions by Fiscal Year

	FY 2006 -2007*	FY 2007 -2008	FY 2008 -2009	FY 2009 -2010	FY 2010 -2011	FY 2011 -2012*	Total
Corporate income	$10,600	$8,800	$9,300	$8,900	$3,800	$1,400	$42,700
Personal income	$67,100	$55,800	$57,800	$54,100	$22,700	$8,400	$266,000
Property	$184,400	$152,900	$162,700	$154,700	$65,900	$24,800	$745,300
State and local sales	$18,700	$15,500	$16,200	$15,200	$6,300	$2,400	$74,300
Total	$280,800	$233,000	$246,000	$232,900	$98,700	$37,000	$1,128,300

* Partial year data
Note: Details may not add to totals due to rounding.
Source: SC Film Commission, IMPLAN and AECOM

Total Economic and Fiscal Impacts

In conclusion, South Carolina paid $21 million in rebates to film and television companies for in-state spending on goods, services and wages. In return, state and local governments received $6.6 million in tax revenues. For every $100 spent on wage and supplier rebates, $31 came back in the form of taxes, a net loss as is the case with many other film incentive programs in the U.S. However, every $100 in total rebates also generated $410 in total economic output (i.e., sales at state businesses) and $230 in wages to South Carolina residents as shown below.

Table 19 – Impacts Attributed to Film and Television Productions Since 2007

	Type of Impact		
	Incentivized	Non-incentive	Total
Economic Impacts			
Total Output (millions)	$60.2	$26.7	$86.9
Full-Time Equivalent Jobs	1,380	230	1,610
Wages (millions)	$42.3	$6.1	$48.5
Net Fiscal Cost (millions)			
Fiscal Impacts	$5.4	$1.1	$6.6
Rebate	$21.0	$0.0	$21.0
Net Fiscal Cost	-$15.5	+$1.1	-$14.4

FTE = Full-time equivalent
Note: Totals may not add due to rounding
Sources: SC Film Commission, IMPLAN and AECOM

In looking at the supplier rebate, the total economic impact relative to the rebate is 3.695. That is, for every $100 spent on supplier rebate, state businesses generate $369.50 in sales. This compares to 3.76 and 3.68 in the previous analyses.

These rebates generated enough economic activity to support 790 full-time equivalent jobs in South Carolina. This is in addition to the 820 FTE jobs for residents on production. For every 10 FTE jobs on qualified television and film productions in South Carolina, 9.6 FTEs were supported in other sectors of the state's economy. Since 2007, it has cost the State of South Carolina approximately $13,000 in rebates per full-time equivalent job supported.

AECOM

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Additional Issues for Consideration

AECOM was requested to explore a selected number of issues ancillary to the economic impact analysis that is the focus of this report. While some issues can be more directly addressed than others AECOM documents estimates and responses to the issues in this section of the report. The key areas of focus and questions involve:

- Exploration of the impact of the Sales and Use Tax exemption for film production;
- Potential impact of a change on policy regarding FSO's;
- How, if at all, tourism spending an impact can be accounted for in film analysis;
- How the South Carolina film incentive program compares to other competitive states;
- The South Carolina Film Commission and incentives.

Sales and Use Tax Exemption

Currently, qualifying productions may be eligible for a sales and use tax exemption. Based on AECOM's economic and fiscal impact analysis of the nine productions above, AECOM estimates that South Carolina would have received $304,000 in state sales tax and $23,000 in local sales tax revenue since 2007 if this were revoked.

Withholding Tax Policy Change

According to the current legislation, wages paid to individuals on qualified productions through Personal Service Corporations and Loan Out Companies are subject to a maximum withholding rate of 2 percent. Typically these arrangements are for above-the-line earners such as directors, producers and headliners. For the nine productions included in this analysis, the 250 individuals paid through this arrangement earned $19.9 million in wages and paid $388,600 in withholding tax, 2 percent. The table below presents how this amount of revenue for the State would change is this rate were increased. If the $19.9 million in wages had been subject to the maximum personal income tax rate of 7 percent, the State of South Carolina would have received nearly $1.4 million, almost $1 million more in revenue that it actually collected for these productions.

Table 20 – Potential Withholding Tax

Proposed Rate	Withholding Amount	Additional Revenue
3%	$593,900	$205,300
4%	$791,800	$403,200
5%	$989,800	$601,200
6%	$1,187,800	$799,200
7%	$1,385,700	$997,100

Source: SC Film Commission and AECOM

Tourism Spending and Impact(s)

It is often stated that one beneficiary of film production is the tourism industry. This is both true and difficult to quantify given constraints in available data in most states. There are two primary benefits to the tourism industry which have different constraints when attempting to quantify:

1. The economic impact of production workers in the state;
2. The economic impact of visits generated as a result of the publicity generated when the film is distributed.

The first impact is accounted for in this analysis and in most film industry analyses provided that some estimate is made for out-of-state workers spending a portion of income on local activities while working in the state. This number is typically significantly lower than the overall wage the worker generates from the production and ranges depending on the place and type of production. In this report the expenditure was based on a recent survey by the South Carolina Film Commission of crew members working on a local production.

The second type of impact is much more difficult and costly to estimate which is why it is generally beyond the scope of traditional film impact analyses. Nevertheless, there is often a value associated with publicity and promotion of a place that is unaccounted for – particularly when the place has an integral role in the plot and story development. Some analyses attempt to estimate this through trips to places clearly associated with a film, then tying back all visitor expenditures to the number of visits to the attraction. However, this method is inaccurate as it assumes that the trip's primary motivating factor was the attraction, whereas attractions are often secondary motivating factors in the decision to make a trip. Further, attraction visits are typically comprised of a combination of resident and tourist visits. In AECOM's view the best method for estimating the tourism value of this activity can be achieved through estimating a cost of advertisement equivalent to the visibility of the place as a result of the production activity in media – number of media mentions of the state or city, talk-show conversations revolving around the place of production, etc. While documenting such events is a somewhat costly and labor intensive exercise it has more clear and readily available benchmarks for valuation – advertizing costs per impressions and the audience exposure of the film itself.

As is the case with most film industry impact studies, such an analysis was beyond the scope of this exercise. However, it's important to note that the South Carolina Film Commission is working with Tourism officials to survey and estimate the potential impact of film productions on visitor spending. This data may be used to improve the understanding of film production impacts on the tourism economy of South Carolina. In any event, it is reasonable to assume that some amount of tourism value – not accounted for here – is derived from production activity, though that ultimate amount is unknown at this point.

South Carolina Film Commission

The South Carolina Film Commission maintains several support and promotional activities outside of incentive-related activity. A notable number of productions use South Carolina for activities that do not qualify for incentives. Such productions are typically commercial, and they are noted separately from the incentive-oriented productions in the economic and fiscal impact sections of this report. Estimates indicated annual activity in the order of $1 million and $5 million spent in South Carolina annually with related economic impacts of over $26 million since 2007. The Film Commission is responsible for maintaining a database of available locations, crew, and suppliers and is responsible for working with such productions to develop and implement filming options in South Carolina.