## **Evaluating the Economic Impact of Film Production Incentives in South Carolina**

### Prepared by

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Film production has the potential to diversify and expand the economic base of South Carolina. The industry has many tangible and intangible benefits that make it attractive to states across the country. As a result, many regions across the United States and Canada have offered incentives to attract film production. While film production is still concentrated in California, production is spreading to other areas. Over time, it is conceivable that new centers of film production will emerge and add a significant new dimension to local economies.

The report examines the economic impact of recent films shot on location in South Carolina. It compares the statewide economic benefits with the cost of incentives offered by the South Carolina Film Commission. The benefit side of the impact analysis focuses on income generated for South Carolina citizens. The incentives considered are wage and local supplier rebates paid by the South Carolina Film Commission. The rebates are designed to make South Carolina competitive and attract production to the state. The analysis was performed on seven productions made during 2006–2007, based on information provided by production companies and the South Carolina Film Commission.

As this report documents, film production appears to have a net positive impact on the state's economy. Despite having no permanent infrastructure to support local activity, the industry still contributes to the economy while placing minimal burdens on South Carolina communities. Anecdotal evidence suggests that citizens enjoy having films shot in their neighborhoods and appreciate the image it sends to the rest of the world.

Film production encompasses motion picture, television series, and pilot episode productions. The most important measure of this industry's contribution to the state's economy is the new income generated for local residents. To model the total South Carolina income derived from film production, direct information on expenditures was collected. These expenditures were then entered into a model that can determine the multiplier effects as the money circulates throughout the state's economy. The researchers used an inter-industry, or input-output model of South Carolina, the common tool used in multiplier analysis. Specifically, IMPLAN is the input-output model that provides data specific to industry codes and employees within South Carolina.

This model allows researchers to determine the cascading effect of film production spending and additional income for state residents. Wages received by employees and revenue accruing to local suppliers touch off the multiplier effect. Additional income is gained by state residents who directly or indirectly engage in business transactions with the film production company, its suppliers, and employees. The impact of spending by the film production, its employees, and South Carolina suppliers is diminished as the money is taxed, saved, or used to buy goods and services outside South Carolina. The multiplier analysis calculates the total amount of money that remains within the state.

The following sections detail the analyses performed for wages and supplier revenue keeping in mind the direct and indirect effects for each factor.

#### WAGE ANALYSIS

For the seven films considered in this analysis, South Carolina residents earned \$4,609,162 between 2006 and 2007. This figure represents gross wages minus taxes withheld and was used (as opposed to gross wages or gross taxable wages) because it most closely represents the take-home-pay for employees. The South Carolina Film Commission paid wage rebates of \$4,759,014 to the seven films studied. This suggests that for every dollar the South Carolina Film Commission paid to the film industry, \$0.97 was generated in take-home-pay for a South Carolina resident.

It was assumed that 100 percent of the take-home income for South Carolina residents was spent (rather than saved) and spent in South Carolina. This means that for every dollar paid in wage rebates, \$0.97 in new income enters the state economy.

Through the multiplier effect, a \$1.00 initial increase in income would engender a multiplier impact of \$1.34. For \$4,609,162 in direct earnings from film production, this multiplier leads to a *total* economic impact on South Carolina income totaling \$6,176,277. This means that for every \$1.00 paid in wage rebates (\$4,759,014), a *total income effect* of a \$1.30 was generated for the state.

#### AGGREGATE SUPPLIER ANALYSIS

The seven film productions considered in this report purchased \$14,047,077 in goods and services from South Carolina businesses between 2006 and 2007. These businesses were classified into broad industry categories: Construction, Food, Hotel, Real Estate, Rentals, Retail, and Services. The South Carolina Film Commission paid \$5,203,213 in supplier rebates to the seven films studied.

To account accurately for the impact of these supplier purchases on income generated within the state, it is necessary to apply income multipliers based on the appropriate industry categories. This analysis accounts for the money spent by suppliers that circulates in-state and leaks out of the state. The out-of state leakage of expenditure is deducted to yield an estimate the amount of money that is directly and indirectly impacting South Carolina's income. Based on this analysis, the total income generated for South Carolinians from the supplier purchases is \$19,172,374. Every \$1.00 spent in rebates related to suppliers yields a total income effect of a \$3.68 for state citizens.

#### **CONCLUSION**

In this report, the only economic impacts from film production were those based on wages and salaries received by employees that reside in the state and money received by suppliers within the state. The direct impacts led to indirect benefits that accrued to other entities in South Carolina, based on the amount of money that stays within the economy as a result of employees spending money locally and supplier revenue remaining within the state.

A summary of the impacts is as follows:

Every \$1.00 spent on wage rebates generated a total income effect of a \$1.30 for the state of South Carolina.

Every \$1.00 spent on supplier rebates generated a total income effect of a \$3.68 for the state of South Carolina.

Thus, it can be seen that film production has had a positive economic impact on South Carolina. The impact would likely be larger if more films were attracted to the state. In addition, the impact will grow if South Carolina develops a film cluster with larger pools of skilled labor, suppliers, and production capabilities. A film production and post-production cluster would likely attract more films and lead to a significant, lasting, long-term economic impact on the South Carolina economy.

This last point goes beyond the scope of this study of South Carolina's incentives, but is worth emphasizing. At present, the film industry is still highly concentrated in California. Yet more films will be continually made elsewhere. Just as automobile production is no longer concentrated around Detroit, Hollywood will de-cluster and move some economic activity away from California over time. Regions that have infrastructure to support film production will benefit the most from the dispersal of the industry during the next few decades. To capture more value added, local areas will need soundstages, film processing labs, industry-specific suppliers, and distributors. It will also help to have talent pools, including skilled labor, actors, agents, directors and so forth. Like many industries, however, it is not necessary to have the whole cluster in order to capture significant benefits. Even at a modest scale, pieces of this growing economic sector can have a strong impact in smaller regions as the more activity spreads across the country and around the world. Incentives can play a role is helping to seed the industry in alternative locations. Using incentives, some states and countries have already been successful in attracting production and then moving forward to develop as new film production and postproduction centers. As South Carolina gains experience with film production, it can capture more value from the industry if the infrastructure is in place and more skilled labor becomes available locally.