



Project Report

**Louisiana Motion Picture, Sound
Recording and Digital Media Industries**



Prepared for

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Louisiana Economic Development
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Economics Research Associates

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Table of Contents

Executive Summary	1
Motion Picture Industry	1
Sound Recording Industry	2
Digital Media Industry	3
I. Introduction and Methodology	4
Employment Trends	5
Location Quotients	6
Economic Impact Analysis	7
Interviews	9
II. Overview of the Motion Picture Industry.....	10
Structure of the Industry	10
Main Products.....	11
Trends in the Feature Film Industry	12
Trends in the Television Production Industry	14
Trends in the Commercial Production Industry	16
Other Production Trends	18
Economic Significance of Motion Picture Production.....	21
III. Louisiana’s Motion Picture Industry.....	27
Employment Trends	28
Economic Impact of Louisiana’s Motion Picture Industry	31
Cost Benefit Analysis	34
Regional Interviews	35
IV. Overview of Music Industry	37
Industry Trends	37
Genre	40
Consumer Demographics	41
V. Louisiana’s Music Industry	43
Employment Trends	43
Economic Impact of Louisiana’s Music Industry	45
Cost Benefit Analysis	47
Regional Interviews	48
VI. Overview of the Digital Media Industry	49
State of the Video Game Industry.....	51
Employment Trends	53
Workforce Development Efforts.....	54
Gamers	55
Future of the Industry.....	56
VII. Louisiana’s Digital Media Industry.....	57
Employment Trends	57
Economic Impact of Louisiana’s Digital Media Industry	60
Cost Benefit Analysis	64
Regional Interviews	65

VIII. Infrastructure Development in Louisiana..... 66
 Current Infrastructure..... 66
 Proposed Infrastructure Development..... 67
 Economic Impact of Louisiana’s Infrastructure Development 68
 Cost Benefit Analysis 70
 Regional Interviews 71

IX. Entertainment Industry Incentive Programs 72
 Types of Incentives for Film Production 72
 Current U.S. Production Incentives..... 74
 States with Aggressive Film Incentive Programs..... 77
 The Effectiveness of Film Incentives..... 80
 Other Incentives 82

Appendix A – Overview of Louisiana’s Entertainment Legislation..... 85
Appendix B – Motion Picture Productions in Louisiana 87

Index of Tables

Table 1 – Studio Production and Marketing Costs per Film (millions)	13
Table 2 – Mini-Major Production and Marketing Costs per Film (millions)	14
Table 3 – Non-Traditional Advertising Projects.....	17
Table 4 – Percent of Shooting Days by Domestic Location, 2002-2006	18
Table 5 – U.S. Motion Picture and Sound Recording Industry Employment (in thousands).....	23
Table 6 – Mean Hourly Wage for Select Occupations in the U.S. Motion Picture Industry, 2007	23
Table 7 – Motion Picture Industry (NAICS 51211, 51212, 51219 and 7115)	29
Table 8 – Average Annual Employment in Motion Picture Industry in Louisiana	29
Table 9 – Employment Share and Location Quotients in Film Industry for Largest States, 2007	30
Table 10 – Top Location Quotients by State for Film Industry, 2007	31
Table 11 –Productions in Louisiana, 2002-2007	32
Table 12 – Summary of Motion Picture Projects in Louisiana.....	32
Table 13 – Certified and Non-Certified Spending on Motion Picture Productions in Louisiana.....	33
Table 14 – Benefits and Costs of the Motion Picture Tax Credits	35
Table 15 – Music Sales by Format	37
Table 16 – U.S. Sales of Recorded Music (millions)	38
Table 17 – Physical and Internet Sales in the U.S.	39
Table 18 – U.S. Sales by Retail Outlet	40
Table 19 – Consumer Music Preference.....	41
Table 20 – Consumer Demographics.....	42
Table 21 – Music Industry (NAICS 5122 and 71113)	44
Table 22 – Concentration of Employment in Music Industry, 2007	44
Table 23 – Top Location Quotients for Music Industry, 2007	45
Table 24 – Certified Spending in Louisiana for Music Production	46
Table 25 – Economic Impact of Louisiana’s Music Production Industry	47
Table 26 – Benefits and Costs of the Sound Recording Tax Credit Program	48
Table 27 – Economic Impact of the Entertainment Software Industry in Select States, 2006.....	54
Table 28 – Digital Media Industry (NAICS 5112 and 541511)	59
Table 29 – Concentration of Employment in Digital Media, 2007	60
Table 30 – Top Location Quotients for Digital Media, 2007	60
Table 31 – Approved Digital Media Tax Credits.....	61
Table 32 – Pending Digital Media Tax Credits	62
Table 33 – NAICS Classification of Companies Applying for Digital Media Tax Credits	62
Table 34 – Economic Impacts of Spending Associated with Digital Media Tax Credits	64
Table 35 – Benefits and Costs of the Digital Media Tax Credits	65
Table 36 – Film Production Facilities in Louisiana.....	66
Table 37 – Sound Recording Studios in Louisiana	67
Table 38 – Proposed Infrastructure Development	68
Table 39 – Certified Infrastructure Projects in Louisiana	69
Table 40 – Economic Impacts of Certified Physical Infrastructure Projects.....	70
Table 41 – Benefits and Costs of the Infrastructure Tax Credits	71
Table 42 – Types of Direct Film Production Incentives	73
Table 43 – Current State Incentive Programs	75
Table 44 – U.S. States with Aggressive Film Incentives.....	77
Table 45 – Strengths and Constraints of Aggressive Film Incentives	79
Table 46 – Summary of Existing U.S. Film Incentive Programs, 2008.....	81
Table 47 – U.S. States with Digital Media and Music Related Incentives.....	83

Index of Figures

Figure 1 – Feature Films Released in the U.S., 1990-2007	13
Figure 2 – Home Video Game and Toy Sales in the U.S., 1980-1999	50
Figure 3 – U.S. Computer and Video Game Sales, 1996-2007	52
Figure 4 – Sales in the Video Game Industry, 2007	52
Figure 5 – Film Tax Incentives by State	82

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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 Economics Research Associates and that may affect the estimates and/or projections noted herein. This study is based on estimates, assumptions and other information developed by Economics Research Associates 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.

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

Executive Summary

The Louisiana Economic Development Department (LED) hired Economics Research Associates (ERA) in Chicago, an AECOM company, to conduct an analysis of the State's motion picture, sound recording and digital media incentive programs and related economic development. Over the course of this analysis, ERA evaluated national and international trends in the target industries, reviewed similar incentive packages and structures of other states, estimated, with input from LED and the State's Legislative Fiscal Office Chief Economist, the impacts and costs of the incentive programs, conducted interviews of state and regional film offices within Louisiana and provided insights into the level of infrastructure development in the state.

In general, Louisiana's film incentive program, enacted in 2002, appears to be growing apace with recent historical trends. Previous efforts at workforce and infrastructure development are beginning to pay dividends, and new businesses have been founded and are moving to the state from elsewhere. Independent films and low budget features are a valuable product of emphasis and high budget commercial productions are being pursued by some regional film offices. In ERA's experience, television and cable shows have the potential to generate significant economic impacts due to their steady and intensive use of local resources.

The digital media and sound recording industries are in earlier stages of development compared to the state's film industry. Current efforts in both are oriented towards the early stage workforce and infrastructure development issues which met with success in supporting the film industry. The ultimate evolution of these industries in the state will be heavily influenced by regional business development focus and efforts.

Motion Picture Industry

Since the State has enacted the Motion Picture Incentive Act in 2002, growth in this segment of the economy has been robust. Since the program began through 2008, there have been 185 projects produced in Louisiana. This report focused on expenditures associated with these productions that occurred from 2005 through 2007. In 2007, ERA estimates that these expenditures were approximately \$429 million resulting in a total economic impact to the state of \$763 million.

In ERA's regional interviews a series of questions relating to current trends and performance of the film industry revealed that throughout most regions of the state, movie of the week (MOW)

production seems to be less active recently than historically. Current trends tend to favor low budget features and independent productions – a niche which can remain competitive for the state, and may be a valuable area of focus moving forward. Many of the interviewees and film office managers indicated that relatively high budget commercial productions, and to some extent television, are potential areas of focus and emphasis moving forward.

Several areas of the state (most noticeably the northwest and south/ southeast portions) have experienced an influx of new and relocated businesses from outside of Louisiana. While some of these businesses are production based, most are supportive to the production process and provide ancillary services. Additionally, businesses which cater primarily to local markets (food services, consumer services, etc.) have learned to package their products and service to the needs of productions have experienced a notable increase in business volume.

Recent improvements in film infrastructure have been significant throughout the state and the recent infrastructure tax credit appears to have been a primary enabler of these improvements. Shreveport likely experienced the most dramatic improvement in infrastructure and Baton Rouge has also benefited noticeably. In the New Orleans area there are currently several new soundstages under development according to the Louisiana Economic Development Department – two of which are purpose built. In addition, there are other projects (studios and post production facilities) which were in the conceptual stage but unable to meet the sunset provision for infrastructure tax credits.

Sound Recording Industry

After the documented success of state incentive programs to grow and develop the film industry, a similar package was created to jumpstart the sound recording industry. Though still much smaller than the motion picture industry, there are proven results of the success of this program in the state as well. In 2006, there was only one certified project in Louisiana but that increased to 5 in 2007 and 15 in 2008. The \$340,300 spent on 5 certified sound recording productions in Louisiana during 2007 generated a total economic impact of more than \$576,700 throughout the state economy. According to the LED, preliminary estimates for 2008 indicate significant growth in the industry.

Generally there are fewer resources, efforts and organized processes focused on the current music incentive program throughout the various regions of the state when compared to the motion picture incentive program. The recent tax credit program does seem to have enabled some growth in the

industry which may not have been achievable otherwise, however, for most involved in the industry live performance is the most significant contribution to personal income. Thus, it is generally believed that a program to support live music performance could have a more direct and significant impact on personal and industry wages. The recent live performance legislation passed by the State has the potential to address this issue.

Digital Media Industry

The intention of the Digital Interactive Media Act, enacted in 2005, is to grow and develop the video game industry in Louisiana. As of January 2009, 7 companies have applied for the credits and four applications have been approved and certified. The \$1.2 million in Louisiana spending on qualified projects during 2007 yielded a total economic impact of \$2.1 million in the state.

While the digital media credit and focus in Louisiana is new compared to the State's film program, there are emerging initiatives targeted to this segment. Focus products at this time are generally geared towards video games and interactive professional software applications (GIS, oil and gas exploration applications, etc.). An important emphasis in current efforts related to digital media are workforce and program development. Much like previous efforts in film crew base development, it is well recognized that digital media will require a similar effort in workforce and infrastructure development.

An important and visible success in this area has been the agreement of Entertainment Arts (EA) Sports to partner with Louisiana State University (LSU) in Baton Rouge to create a new testing facility, with the potential for an expanded relationship in the future. This sort of relationship is a highly beneficial use of the existing tax credit program, and one that offers the potential for mutual benefit between the city of Baton Rouge, LSU and EA Sports.

I. Introduction and Methodology

Economics Research Associates (ERA), an AECOM company, was contracted by the Louisiana Economic Development Department (LED) to define and measure the economic impact of various entertainment industries receiving economic incentives in Louisiana, as well as review trends in the film, music and digital media industries. ERA researched available data on the industries in Louisiana and nationally and conducted interviews to supplement research data and information. In this section, we detail the data sources and methodologies used in this process.

ERA's first task was to identify the distinct segments of Louisiana's entertainment industry. Louisiana is targeting the development of the motion picture, sound recording and digital media industries through tax credit incentive packages. A summary of the legislative history can be found in Appendix A. Each of the profiled industries is defined below using the North American Industry Classification System (NAICS). These industry definitions differ from those used in ERA's previous analysis when the film industry was the sole focus of study. Given some overlapping NAICS definitions between motion picture, sound recording and digital media, some NAICS codes which were previously identified as part of the film industry are now assigned to the digital media or music industries if the core classification was better aligned with that industry than film. This will yield slightly different numbers from the previous analysis.

Film Industry

- NAICS 51211 Motion Picture and Video Production
This industry comprises establishments primarily engaged in producing, or producing and distributing motion pictures, videos, television programs or television commercials.
- NAICS 51212 Motion Picture and Video Distribution
This industry comprises establishments primarily engaged in acquiring distribution rights and distributing film and video productions to motion picture theaters, television networks and stations and exhibitors.
- NAICS 51219 Postproduction Services and Other Motion Picture and Video Industries
This industry comprises establishments primarily engaged in providing postproduction services and other services to the motion picture industry, including specialized motion picture or video postproduction services, such as editing, film/tape transfers, titling, subtitling, credits, closed captioning and computer-produced graphics, animation and special effects, as well as developing and processing motion picture film.

- NAICS 7115 Independent Artists, Writers and Performers

This industry comprises independent (i.e., freelance) individuals primarily engaged in performing in artistic productions, in creating artistic and cultural works or productions, or in providing technical expertise necessary for these productions. This industry also includes athletes and other celebrities exclusively engaged in endorsing products and making speeches or public appearances for which they receive a fee.

Music Industry

- NAICS 5122 Sound Recording Industries

This industry group comprises establishments primarily engaged in producing and distributing musical recordings, in publishing music, or in providing sound recording and related services.

- NAICS 71113 Musical Groups and Artists

This industry comprises groups primarily engaged in producing live musical entertainment (except theatrical musical or opera productions) as well as independent (i.e., freelance) artists primarily engaged in providing live musical entertainment. Musical groups and artists may perform in front of a live audience or in a studio and may or may not operate their own facilities for staging their shows.

Digital Media Industry

- NAICS 5112 Software Publishers

This industry comprises establishments primarily engaged in computer software publishing or publishing and reproduction. Establishments in this industry carry out operations necessary for producing and distributing computer software, such as designing, providing documentation, assisting in installation and providing support services to software purchasers. These establishments may design, develop and publish, or publish only.

- NAICS 541511 Custom Computer Programming Services

This industry comprises establishments primarily engaged in writing, modifying, testing and supporting software to meet the needs of a particular customer.

Employment Trends

There are several ways to measure the size of an industry, but perhaps the simplest is through employment. However, due to the elastic nature of employment in the entertainment industries, getting a precise measure of how many people are working in each profiled industry during the year

is difficult. Motion picture production in particular is characterized by a high level of contingent and transient employment. Therefore, to best understand employment trends in Louisiana's entertainment industries, ERA used data from the Quarterly Census of Employment and Wages (QCEW). This data, formerly known as ES202 data, is used by the Bureau of Labor Statistics and Bureau of Economic Analysis to provide accurate and comprehensive reporting for virtually every segment of the economy. These data are collected in a uniform manner as required by federal law and reported monthly. State and local governments use this data set to compute rates, project income tax revenues, study employment history and labor markets.

The QCEW data includes employment for the entire industry for every worker who receives a paycheck during the pay period that includes the 12th of the month, which generates a W-2 form and is therefore covered by unemployment insurance. Typically, between 85 and 95 percent of all employees are covered by unemployment insurance in a given state. This includes part-time, temporary and contingent workers. However, individuals who are owners or proprietors of a business enterprise, who are paid through distribution of payments or through operation of an unincorporated business, will not be covered by QCEW.

The QCEW data includes the number of firms, monthly employment and total wages organized by North American Industry Classification System (NAICS). Data may be suppressed for a detailed industry group if there are less than three firms reporting information in that particular NAICS or if 80 percent of total employment comes from one or more unit.

Location Quotients

In addition to employment trends, ERA examined the strength of these industries relative to other states using location quotients. Location quotients compare the distribution of industry in a state relative to its overall employment distribution. It assumes that employment in each industry is distributed in the same representation as the overall state. For example, in 2007, 1.3 percent of the entire national workforce was employed in Louisiana. If employment in a particular industry is allocated in the same manner, then the location quotient for that industry in Louisiana would be 1. If there is an overrepresentation of an industry in Louisiana (more than 1.3% of total national employment in that industry during 2007), the associated location quotient would be greater than 1. Therefore, location quotients measure the relative concentration of different industries in specific localities relative to the national total. The meaning of location quotient values follows:

- $LQ > 1.0$ means that an industry is more concentrated in the state than in the nation.
- $LQ = 1.0$ means that an industry is equally concentrated in the state as in the nation.
- $LQ < 1.0$ means an industry is less concentrated in the state than in the nation.

A concentrated (high) location quotient means that a given industry is represented more in the home state than one would expect, given its total level of employment.

Economic Impact Analysis

Although employment is a valid measure of industry size, it does not capture the full economic impact of an industry on the economy as a whole. The U.S. economy functions as an interlocking system where changes in supply and demand for one industry affect supply and demand in others. Economic impact analysis is the tool used to measure the economic activity occurring within a defined geographic region as a result of an initial change in the economy. The initial economic stimulus is referred to as the direct impact. The indirect impacts are generated as a result of the purchases of the identified industry. Finally, the induced impacts occur when employees spend their earnings in the economy on goods and services. For example, a motion picture production company comes to Louisiana to make a movie. The direct impact includes all the expenditures by the motion picture production company while filming in Louisiana on things like supplies, rent, technology and the like. Companies supplying those things to the production company in turn buy goods and services from other companies. This is the indirect impact which acts as a further economic stimulus. In addition, the individuals earning wages will have additional spending power, as they re-spend part of their wages on goods and services in state. This is the induced impact.

The results of an economic impact analysis are reported in the following ways:

- **Output:** This is the total value of goods and services produced across all industry sectors and all stages of production within a defined geographic region.
- **Employment:** This represents the number of jobs needed to support the given economic activity across all sectors, often referred to as “jobs created.” It includes all wage and salary employees, both part- and full-time, as well as self-employed jobs. It is measured in annual average jobs.
- **Earnings:** 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.

- **Total Value Added:** Value added refers to that portion of the value of total output that was actually created by the economic activity in an area and/or industry. It is the difference between the value of goods produced and the cost of materials and or supplies that are used in producing them. It includes wages, proprietary income, other property type income and indirect business taxes. Other property type income is comprised of rents, royalties, dividends and profits. Indirect business taxes include excise taxes, property taxes, fees, licenses and sales taxes paid by businesses that occur during the normal operation of businesses but do not include taxes on profit or income.
- **Fiscal Impacts:** These are the revenues, both taxes and fees, generated at the federal, state and local levels resulting from the economic activity.

ERA measured the economic impact of the entertainment industry in Louisiana using IMPLAN, a software program produced by the Minnesota Implan Group and first developed by the USDA Forestry Service to perform impact analysis for planning. IMPLAN's database includes state-level data for 528 industrial sectors and the ways in which those sectors interact with each other, households and government agencies. IMPLAN is widely used across the United States by government and private entities to prepare location-specific economic impact analysis. The economic multipliers found in IMPLAN are developed using Input-Output tables that provide information on all production activities and transactions between producers and consumers in an economy. The multipliers measure the re-spending of dollars in an economy and are used to calculate direct and induced impacts, the 'multiplier effect.' Data specific to Louisiana was used in this analysis.

To determine the economic impact of the profiled entertainment industries, ERA uses data from the Office of Entertainment Industry Development (OEID), within the Louisiana Department of Economic Development (LED). This office tracks the amount of money spent in Louisiana by companies that have applied for state incentives for film, music or digital media production. Only the dollars spent in Louisiana are considered the economic stimulus. Only after these dollars are certified independently are tax credits awarded. The impacts from 2005 through 2007 are presented in this report. The 2008 certification information for Louisiana productions is incomplete, therefore the associated impacts have not been included in this report.

Finally, it should be noted that economic impact results in this report differ from previously reported estimates for a few reasons. As discussed above, ERA redefined the industries and separated the associated impacts. Also, inaccuracies resulted from incorrect input information provided by

previous entertainment office leadership. In economic impact analysis, it is important to include only those expenditures that occurred in the region being studied. Unfortunately, because previous data provided to ERA represented all production budget spending as opposed to just Louisiana spending, reported expenditures were incorrect. As a result, the associated economic impacts, including the reported number of jobs, were inflated since only a portion of the total production budgets were spent in the state. For this report, ERA and LED staff have worked very closely to provide a revised, accurate history for project spending and associated impacts within the state from 2005 through 2007. This analysis is the latest and best assessment from that collaborative effort. It should be noted that the economic impacts for 2005 are lower than those previously reported.

Interviews

And lastly, as part of the analytical process ERA conducted a series of interviews with the purpose of detailing recent trends, marketing and operational emphasis of different incentive programs and other issues such as workforce development and infrastructure capacity. ERA interviews were focused on 1) regional film, music and digital media offices and participating organizations within the State and 2) film offices from other states around the country with aggressive film incentive programs.

II. Overview of the Motion Picture Industry

To assess Louisiana's competitive position in the motion picture industry, it is first necessary to look at relevant trends in the national industry. The "motion picture industry" is a broad term that includes feature film and television product, as well as music videos, commercials, business, industrial and government films. More recently, it includes short film products made for distribution on the Internet and other mobile technology (i.e., cell phones, video iPods, etc.). The purpose of this section is to evaluate the characteristics of film, television, video and commercial industries and other technologies, with the intention of pinpointing those trends that enhance the potential of the industry to grow in Louisiana. The following section will discuss the economic relevance and impacts, both direct and indirect, of the motion picture industry in Louisiana.

Structure of the Industry

The motion picture industry has historically been dominated by several large studios based primarily in Los Angeles. These studios have produced much of the world's film and television product. Today, with the growth in other mediums of entertainment such as cable television and the Internet, many independent small and medium-sized companies have been established to meet this growing demand in areas outside of Los Angeles and New York.

The studio majors consist of six diversified media conglomerates:

- Sony/Sony Pictures
- New Corporation/Fox Filmed Entertainment (20th Century Fox)
- The Walt Disney Company/Walt Disney and Touchstone Pictures
- Time Warner/Warner Bros.
- Viacom/Paramount Pictures
- General Electric/NBC Universal

The majority of today's "Big Six" companies include formerly independent companies that have been acquired under the corporate umbrella. The majors have also established specialty divisions to concentrate on art house pictures. Examples include Paramount Vantage and Fox Atomic.

The major studios today are primarily backers and distributors of films whose actual production is largely handled by independent companies. There are thousands of small, independent production and/or distribution companies throughout the U.S. The two largest independent

producers/distributors are Lionsgate and The Weinstein Company, which are sometimes referred to as “mini-majors.”

Main Products

The following is a brief overview of relevant trends in the visual (film, television, commercials, etc.) production industry. Broadly speaking, there are five to six types of products which are part and parcel of three main production and distribution processes. The following are the most common products created in the visual production process. With the exception of feature films, industry wide data on television and industrial products, such as total volume of productions produced each year, is not available:

- **Feature Films** can be divided into higher budget “blockbuster” films and lower budget feature films. Blockbusters have budgets typically ranging from \$30 million to \$100+ million, whereas smaller budget features have budgets closer to a \$2 to \$20 million range per film. Daily shooting rates run as high as several thousand (or tens of thousands) of dollars per day. Both feature film products are typically intended for theatrical distribution (either small, or large-scale), though they derive significant income from repurposing for T.V., DVD and other sales;
- **Movies of the Week (MOWs)** are “made for T.V.” movies. They are more cost sensitive than most other types of film product and typically have modest budgets ranging from several hundred thousand dollars to a few million dollars. In many ways, MOW productions are similar to low budget features in their cost sensitivity and common production expenditures;
- **Television Series** are perhaps the best source of steady income in the industry. Each half-hour episode takes an average of four days to shoot, while a weekly hour series takes approximately one week of shooting time, part of which is spent on location. The average price of an hour-long network series ranges as much as \$2 million per episode and one-half-hour sitcoms can cost as much as \$1 million per episode. A television series consists of 26 episodes. A single television series could be expected to use 150+ days per year in the location where it is produced;
- **Television Pilots** for prospective series are similar to MOWs. Since their budgets are low, they are extra-sensitive to costs;
- **Music Videos/Short Form** also have very low budgets and thus are sensitive to costs; as new distribution platforms emerge (e.g., Internet, iPods), the demand for these types of productions is likely to increase. Production costs typically range from several thousand to several hundred thousand dollars;

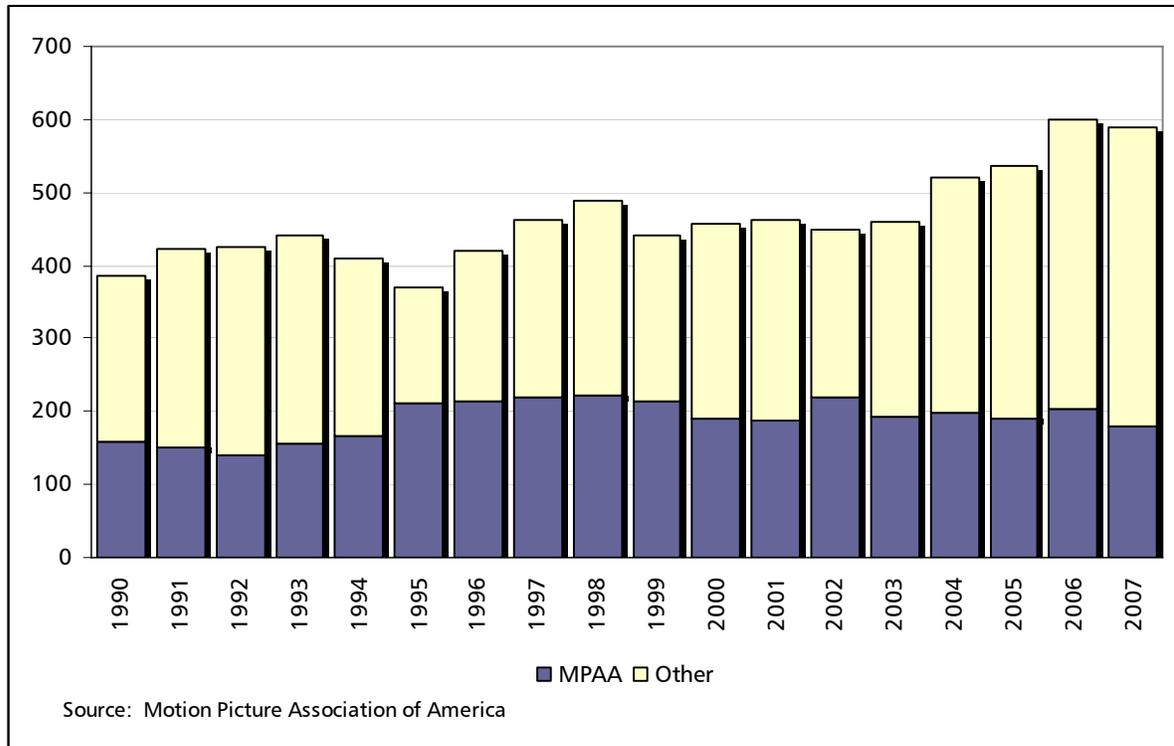
- **Industrial (Commercials & Communications/Training Videos)** have smaller budgets, but for local businesses, can produce higher margin returns per unit of production. Commercials are typically shot in areas with high concentrations of industry (e.g. Los Angeles, New York, etc.), though regional commercials are shot throughout the U.S. for local/regional companies. Product costs are typically in the range of a few hundred thousand dollars.

These types of products are usually created for one of two main purposes – theater distribution or television. Films released to theaters are often later repurposed and sold in television and home entertainment markets (DVD, etc.). The television market, which includes shows, commercials, music videos, etc., is supported by advertising sales and subscription costs.

Trends in the Feature Film Industry

The movie industry is experiencing some growing pains. As independent films become more popular and as DVDs penetrate into more and more households, major studios' core business is not threatened, however substantial operational changes may be needed to remain competitive. As shown in the chart below, the number of new films being released by major Hollywood Studios (referred to as "MPAA" studios) as compared to other feature releases, has stayed relatively flat since 2000, with the exception of 2002 (220 films). Comparing growth in the number of studio ("MPAA") versus other feature films between 1990 and 2007, growth has been in "other features" – which in this case is both mini-majors (owned by the studios) and independent films. Over this period, the number of studio films increased by only 13 percent, compared to 81 percent for other features. These other features often have different production and distribution characteristics than larger 'blockbuster' movies. Overall compound annual growth (CAGR) in total released features between 1990 and 2007 is 2.5 percent, with MPAA features registering annual growth of under 1 percent and smaller, non-MPAA and independent features growing at an annual rate of approximately 3.6 percent.

Figure 1 – Feature Films Released in the U.S., 1990-2007



Movies have been getting more expensive to make in recent years, though costs have fallen from their peak in 2003. The following table shows that the total production cost of a studio feature film (including marketing costs) reached over \$100 million in 2003 and has been steady since. In 2007, it was approximately \$106.7 million to produce and market a film compared to \$54.1 million in 1995. Overall, marketing costs represent one-third or more of a studio feature film’s total production costs.

Table 1 – Studio Production and Marketing Costs per Film (millions)

	Production	Marketing	Total
2001	\$47.7	\$31.0	\$78.7
2002	\$47.8	\$30.4	\$78.2
2003	\$66.3	\$39.5	\$105.8
2004	\$65.7	\$34.8	\$100.5
2005	\$63.6	\$36.1	\$99.7
2006	\$65.8	\$34.5	\$100.3
2007	\$70.8	\$35.9	\$106.7
CAGR	6.8%	2.5%	5.2%

Source: Motion Picture Association of America

Mini-majors are independent film companies that have production or distribution agreements with major studios. Examples include Spyglass Entertainment (Disney), Village Roadshow Pictures

(Warner Bros.) and the Weinstein Company (MGM). Marketing costs for these productions are taking up an increasing share of the total costs to produce the film as shown in the table below. In 2001, marketing accounted for 23 percent of a mini-major film's budget (compared to 39 percent for a studio feature). In 2007, that figure reached 34 percent, which is comparable for that of a studio-produced feature. Thus, non-studio films now appear to have a similar share devoted to marketing, as do films produced by the major studios, which is likely due to the increasingly competitive nature of the industry, especially with respect to securing theatrical distribution.

Table 2 – Mini-Major Production and Marketing Costs per Film (millions)

	Production	Marketing	Total
2001	\$31.5	\$9.5	\$41.0
2002	\$34.0	\$11.2	\$45.2
2003	\$46.9	\$15.1	\$62.0
2004	\$29.0	\$11.4	\$40.4
2005	\$23.5	\$15.2	\$38.7
2006	\$30.7	\$17.8	\$48.5
2007	\$49.2	\$25.7	\$74.9
CAGR	7.7%	18.0%	10.6%

Source: Motion Picture Association of America

The broader implications of rising production and marketing costs mean that studios and producers alike are constantly looking for ways to cut production costs. This, in turn, has led to the creation of film incentives in various U.S. states, particularly within the past two years. Also, the recent devaluation of the U.S. dollar has made former production centers such as Canada and the United Kingdom less attractive to producers from an economic standpoint.

In the past, independent filmmakers have struggled to finance new productions and pay for a film's distribution, because they compete with large motion picture production companies. However, as will be discussed further, digital technology is lowering the barriers to entry.

Trends in the Television Production Industry

The TV production and distribution industry in the U.S. includes approximately 500 companies with combined annual revenue of \$13 billion. Major companies include NBC Universal, CBS Paramount, Disney-ABC, Fox Television Studios, Warner Bros. Television Group and Sony Pictures Television. As a result, the television industry is highly concentrated, with the 50 largest companies accounting for 80 percent of the industry revenue. Most firms, however, are small, privately held production

companies. Producing television shows is expensive and costs occur well in advance of revenue. An hour-long television network show can cost between \$1 and \$2 million to produce.

In addition to the recent writer's strike which shut down scripted television for 100 days in 2008, several major trends have influenced the volume and patterns of television production in recent years, namely the demise of the movie-of-the-week ("MOW") genre, the rise of specialty cable television and the proliferation of reality television.

The Decline of the MOW Genre

Fewer numbers of television movies of the week (MOWs) are being produced throughout North America. Many U.S. networks have cut back their TV movie orders and some like Showtime have revised their programming strategies to funnel more resources into TV series. In recent years, the MOW has been replaced by the emergence of reality television (see below). These types of productions are low, unscripted programs that are frequently shot in either Los Angeles or an exotic location. Operating profit from the entertainment sector of Time Warner declined significantly from 80 percent of the total in 2004 to only 44 percent in 2007. The reason for the decline of interest in MOWs is speculative. One such explanation involves changing viewer attitudes, in addition to habits toward formats (i.e. attention span). Yet at this point it is difficult to determine whether this genre is dead or in a period of dormancy.

The Rise of Specialty Cable

The rise of specialty cable has increased the demand for television product. According to the National Cable & Telecommunications Association (NCTA), there are just under 400 cable networks throughout the U.S. Some of these networks produce their own product, but the majority of them purchase some or most of their shows from outside producers. Since cable programming services can no longer just showcase movies that have already been on home video and in pay-per-view, cable television channels are now spending heavily on original programming in their efforts to attract audiences on the increasingly crowded cable systems. The number of digital cable subscribers has grown at a rapid rate. According to the NCTA, the number of digital cable customers increased from 12.2 million during the second quarter of 2001 to 38.3 million in 2008. This represents an increase of over 200 percent in almost 7 years.

Reality Television

In 2000, the success of the reality series, *Survivor* and subsequent contest-style reality series directly influenced the current trend toward reality programming. A typical one-hour drama on one of the six

American commercial television networks averages around \$2 million an episode. Studios often lose money on the first run of a show, but recoup that cost by selling the show for syndication. The appeal of reality television is that the shows are relatively inexpensive compared to regular dramas. Reality TV shows can be produced for considerably less, approximately \$400,000 to \$1 million per one-hour episode. The reasons are simple, namely such shows have no regular cast to pay and often have a minimal writing staff. In addition, they can sometimes save on other production costs by using preexisting homes or other means to avoid expensive set construction and labor costs. The downside is that reality programs have no real syndication potential.

Reality television has also impacted secondary production centers throughout North America, especially “traveling shows” that shoot various episodes outside of the major production centers on location in areas like Louisiana. Many of these shows bring their own crew base, but some will hire local crew as well. Reality television shows that are shot on soundstages, however, are still largely filmed in Los Angeles. According to FilmL.A., Inc., an organization that coordinates and processes permits for on-location production in the Los Angeles region, among television programs produced in the metro area, more than half of all permitted production days for television programming were spent on reality television shows in 2007.

Television Networks as Feature Film Producers

In recent years, television networks have become increasingly involved in the feature film business. As an example, MSNBC just announced that they are creating a special division, MSNBC Films, which will serve as a financing vehicle for feature-length documentaries. MSNBC now commissions dock-style programming.

Trends in the Commercial Production Industry

In comparison to film and television productions, a far greater number of commercial productions are produced each year. Actual or estimates of the number of commercial productions made by U.S. companies/producers are not available. But to demonstrate the scale of commercial production in the U.S. compared to film and television production, the MPAA reported a total of 520 total feature films produced in 2004. That same year, the American Association of Advertising Agencies (AAAA) reported the findings of nearly 1,282 national commercials (excluding local and regional ones) among only twenty agencies and branch offices that participated in their survey. This figure excludes thousands of regional and local commercials as well, in addition to national commercials produced by

agencies that did not participate. In other words, the number of total commercial productions made by U.S. companies at both the national, regional and local levels, is likely in the many thousands.

Types of Commercial Productions

At this time, broadcast television remains the dominant medium for advertising, constituting an estimated \$9 billion annual market. The average cost of a 30-second TV commercial production is approximately \$300,000. This represents a 12 percent decline from the average cost in 2005.

The advertising landscape and commercial production are changing rapidly, with traditional 30-second television spots and print campaigns being replaced by other forms of advertising. The Association of Independent Commercial Producers (AICP), a group of commercial production companies whose members account for approximately 85 percent of all domestic commercials aired nationally, has commissioned member studies to track trends in commercial production in years 2002, 2003, 2005, 2006 and 2007. An on-line survey was conducted in August 2007, in which 155 members completed an interview. The AICP reports that approximately 67 percent of surveyed members produced “non-traditional advertising” outside of traditional television commercials, with the most common format being Internet or broadband as shown in the following table.

Table 3 – Non-Traditional Advertising Projects

Type of Project	Share
Internet/broadband virals	86%
Original content (branded entertainment)	42%
Other (banner ads, music video, print ads, industrials, etc.)	18%
Mobile contact (cell phones, iPods)	17%
Podcasts	8%
In-game advertising (video games)	4%

Note: Multiple responses were allowed
 Source: Association of Independent Commercial Producers

Commercial producers surveyed reported an average of 18 percent of their billings coming from non-traditional advertising, with projected growth of 38 percent (of total billings) by 2010. The average budget for these non-traditional projects ranges from \$25,000 to \$125,000.

Locations for Commercial Productions

Among those AICP members surveyed, Southern California is the most popular location for commercial shoots, representing 68 percent of all domestic shoots in 2006, followed by New York at 24 percent and other U.S. locations at 8 percent as shown below.

Table 4 – Percent of Shooting Days by Domestic Location, 2002-2006

State	2002	2003	2004	2005	2006	% Change
Southern California	38	36	43	42	42	10.5%
New York	13	16	15	12	13	0.0%
Florida	4	3	4	3	2	-50.0%
Illinois	2	3	2	1	3	50.0%
Other	21	23	21	20	24	14.3%

Source: Association of Independent Commercial Producers

In 2007, 82 percent of all reported shoot days took place domestically, with 18 percent abroad. Among foreign locations, Canada has been the largest overseas production center, capturing 36 percent of all foreign shoot days in 2006. The region with the largest increase since 2002, however, is in Central and South American locations. These Latin American locations have experienced an increase from 12 percent of total foreign shoot days in 2002 to 26 percent in 2006. Over the same period, foreign shoot days in the UK and Europe declined from 24 percent to 12 percent in 2006. This trend is likely due to recent fluctuations in the U.S. dollar, which have made it more expensive to shoot in European countries.

Other Production Trends

Video Games

Video games, which will be discussed in detail later in this report, were introduced as a commercial entertainment medium in 1971, becoming the basis for an important entertainment industry in the U.S. by the late 1970s or early 1980s. The video game industry has experienced sustained growth for over two decades now and rivals the motion picture industry as the most profitable entertainment industry segment internationally.

Since a crossover of skill sets/talent often exists between technicians working in the video game industry and other aspects of the motion picture industry, many jurisdictions have recognized the importance of this industry and now include financial incentives for the video game industry, in conjunction with other traditional types of motion picture production. As an example, Wisconsin's new 25 percent tax credits for the film and television allows video game developers to also take advantage of the incentives.

Aside of the crossover of technical talent, another reason the video game industry is increasingly important to motion picture production industry is due to its rapid growth compared to other forms of

entertainment. The U.S. computer and video game industry's annual growth rate from 2003 to 2006 exceeded 17 percent, according to the Entertainment Software Association.

In a recent report, PricewaterhouseCoopers projects the industry to grow from \$41.9 billion in global sales in 2007 to an estimated \$68.3 billion by 2012 with the largest projected growth for online and mobile games. Both categories are projected to increase by over 100 percent by 2012. Key factors in the growth of the video game industry include: an increase in the number of mobile phones capable of displaying games and an increase in the number of broadband households in the U.S.

Despite the tremendous growth in the video game industry, the business remains a risky one from a producer's standpoint. A high-quality video game will cost between \$15 and \$30 million to develop and publish. Unlike the movie business, in which producers and distributors can recoup their costs over the long-term via DVD sales, pay-per-view and other ancillary markets, video games have one shot at making money via retail sales. The retail price of a quality video game can range between approximately \$40 to \$60, making it unaffordable for some households. Also the success of a game can be determined quickly as the majority make their money within the first six to nine months after release.

Mobile Content

Though this trend is still in its infancy in North America, television makers are beginning to program content for the mobile phone user. Mobile content offers many potential rewards, including creating synergy among platforms, reinforcing loyalty to TV programs and extending brands. Of course legal issues need to be resolved with this new technology, including who will be responsible for paying guild residuals. Hollywood studios and other global companies are setting up new divisions to cater to this programming outlet. The target user for mobile delivery is typically the 12- to 24-year-old. In this regard, companies are moving into the original content arena, which differs from the high-budget, studio-backed feature films and traditional hour-long episodic TV shows for international consumption. Some studios, however, are even making feature films available for mobile consumption. As an example, Sony Pictures Digital has made *Ghostbusters* and *Spider-Man 2* available for mobile consumption.

Since mobile content is so new, there is no absolute formula for success as yet. Therefore, one cannot draw conclusions as to its impact on the film and television industry other than to speculate that it can only help it since production costs are likely to be lower for productions that are produced

specifically as mobile content and mobile content is more likely to adapt genres such as shorts and videos.

Changing Technology and Distribution Models

The history of motion picture and television production is highly correlated with technological change. Much of the proliferation of film production is a direct result of technological advances such as digital filmmaking and mobile broadcasting. Similar to other industries, advances in technology have impacted the nature of film production by allowing filmmakers to take their productions to foreign locations. Technological advances are also driving the globalization of production, making it easier for filmmakers to take their projects to distant locales. Final Cut Pro, a computer software editing package from Apple Computer Inc., is one of several technological innovations that is leading a democratization of the movie and television industry. In this respect, it is similar to the desktop publishing revolution of more than a decade ago.

Impact on Film Production

Technology has provided filmmakers with more choices and flexibility regarding the location for principal photography during a film shoot. This new technology also is having an effect on location production. Location shooting is now more feasible since cameras, sound and lighting equipment is much lighter. There are two countervailing forces at work that need to be resolved before any clear trend can be delineated. First, new technology will allow for the creation of so-called “virtual locations.” The improved ability for digital masking and special effects may lead to an overall reduction in location filming as filmmakers are more realistically able to portray a scene without having to be physically present. This is frequently an imperative in low cost productions where reality images are less important. However, as a countervailing tendency, this new technology is reducing the overall cost of production and is having the net effect of luring more entrants into the film industry. Many observers see an opening of the industry in coming years spurred by technological advances. This may support the rise of regional industries, which would have increasing need for on-location production.

New Distribution Models

The studio model of celluloid is fast disappearing. Under this traditional business model, particular physical infrastructure was necessary to support and develop an industry. Today, however, the entertainment industry is moving into the digital age. As high-definition and on-demand technologies propagate, that mix will continue to shift away from cinemas and even DVDs. Now the situation is one of extending programming to multiple platforms.

The entertainment industry is also experiencing a major shift in the way that entertainment is distributed. New distribution channels such as broadband, Internet access and mobile (wireless) technology will drive significant growth in the industry. The Internet is still viewed as the most promising medium of the future. The NCTA reports that the number of residential high speed data subscribers increased from 5.5 million in Q2 2001 to 37.0 million in Q1 2008. This represents an increase of nearly 600 percent, which is nearly three times the increase in the number of digital cable subscribers. To date, there is no common commercial model for optimizing the distribution of content over the Internet. Internet distribution is often sponsored by advertising, subscription fees, pay-as-you-go product sales or some combination of the three.

Economic Significance of Motion Picture Production

Having discussed the changing nature of the motion picture production industry, or film industry, it is also important to discuss its economic significance to local economies. As noted, the film production business is comprised of entities producing movies, videos, television programs, industrials and commercials. Local sectors that benefit from production include: labor, transportation, lodging, car and truck rentals, gas stations, food and beverage establishments, other retail, construction and repair, equipment rentals, personal, business and government services, as well as other location expenses.

When discussing the “film industry,” it is important to note that the “industry” consists of two separate, but often mutually supportive, halves:

- The local or “indigenous” industry, which consists of locally-based or out-of-state companies with local offices. These include local production companies, television stations and affiliates, suppliers, etc. In some instances, these local companies may perform a fair share of business on location in other cities and states. At present, the majority of production activity occurring in the state of Louisiana is indigenous. For instance, a locally-based production company specializing in commercial production might spend a considerable amount of the year filming on location out of state.
- The external or “exogenous” industry, which refers to outside producers (e.g., based out-of-state) who shoot their productions locally. Hollywood productions fall into this category. A majority of their expenditures represent new money to the state, as it is spent by non-residents.

The film industry is therefore an “export” base industry which provides an injection of new business into the state’s economy.

A healthy film industry is one that actively supports both types of productions. In general, more production activity increases the talent pool, which is beneficial to both external and internal production.

Direct Impacts of Film Production

Among the direct impacts of the film industry are:

- The employment of a local workforce
- The need for local materials and supplies
- The generation of room nights at area hotels (exogenous production)
- Increased restaurant and retail revenues (exogenous production)

To provide an example of the impact of film production, a report from the California Film Commission (August 2005) analyzed a number of theatrical and television productions of various budgets and concluded that mid-level projects budgeted at \$17 million that shot outside of California for 40 days cost the state of California \$1.8 million in lost state tax revenues and the equivalent of 304 full-time jobs. Even lower budget features in the \$2 million range that shot for 16 days outside of California cost the state \$215,000 in potential lost tax revenues and the equivalent of 59 full-time jobs. In general, episodic television contributes more as a long-term source of revenue and employment. For instance, the former television series, *Dawson’s Creek*, spent more than \$1 million locally per episode in the Wilmington, North Carolina, area where it was filmed.

Impact on Employment

According to the U.S. Department of Labor, Bureau of Labor Statistics (BLS), the motion picture and sound recording industry (NAICS 512) employed 380,000 persons in 2007. This represents a slight increase of 1.2 percent from 2006, however it is still below the 2002 peak of nearly 388,000 people. It should be noted that many individuals work in the motion picture and video industries on a freelance, contractual, or part-time basis. In general, the motion picture industry depends on contingent labor. Further, some motion picture and video establishments employ fewer than 5 workers.

Table 5 – U.S. Motion Picture and Sound Recording Industry Employment (in thousands)

Year	Annual	Change
2001	376.6	–
2002	388.0	3.0%
2003	376.5	-2.9%
2004	384.2	2.0%
2005	377.5	-1.7%
2006	375.7	-0.5%
2007	380.1	1.2%

Source: Bureau of Labor Statistics

Employment of a local workforce is particularly noteworthy since film production/crew jobs tend to pay higher wages than comparable employment using the same skills. For instance, a greens man or costume designer working on a film production can earn nearly double their regular earnings from what they would otherwise make in a non-production-related job. The motion picture production industry also involves highly-skilled, high wage employment.

Data from the (BLS) for May 2007 compares the average hourly earnings of wage and salary workers in select occupations in the motion picture and video industries to similar occupations in all industries. As shown below, persons working in the motion picture industry earn considerably more than their counterparts in similar occupations outside of the industry. For example, producers and directors engaged in motion picture/video production are paid an hourly wage that is, on average, 22 percent higher than similar jobs in other industries (e.g., theatrical producers/directors). In fact, on average, this industry paid workers across all occupations an average hourly wage of \$23.40 in May 2007, compared to a national average of \$19.56 per hour.

Table 6 – Mean Hourly Wage for Select Occupations in the U.S. Motion Picture Industry, 2007

Occupation	All Industries	Motion Picture	Variance
Actors	\$23.91	\$28.83	20.6%
Audio and Video Equipment Technicians	\$18.88	\$20.22	7.1%
Camera Operators, Television, Video and Motion Picture	\$22.39	\$24.25	8.3%
Film and Video Editors	\$29.42	\$33.17	12.7%
Producers and Directors	\$37.05	\$45.04	21.6%
Writers and Authors	\$28.90	\$45.09	56.0%

Source: Bureau of Labor Statistics

Indirect Impacts of Film Production

Film and television product make a significant contribution to the local economy as demonstrated above. In addition, this industry has indirect, non-quantifiable impacts on the local economy such as prestige and an expression of local or national identity.

Tourism Impacts

Perhaps the most notable secondary impact associated with film production is increased tourism. An exported film product helps to sell the culture. Similar to tourism, film production is also an export industry that primarily generates money from outside a region. Film productions generate new money without draining infrastructure and local resources.

Tourism is a long-term impact of local film production, particularly when it showcases cultural or natural resources. For example, Devil's Tower National Monument in northeast Wyoming experienced a 75 percent increase in tourism following the release of *Close Encounters of the Third Kind* (1977). When *The Bridges of Madison County* was released in 1995, locals began offering tours of the county's covered bridges. Eleven years later the bridges still draw an estimated 50,000 visitors per year to Madison County.

Recently, the HBO series, *Deadwood*, has drawn tourists to the small city in the Black Hills of South Dakota. Prior to the March 2004 debut of the series, the city drew an estimated 1.2 million visitors annually and the local Chamber of Commerce estimates an annual increase of 800,000 visitors since the show began. More recently, the award-winning film, *Sideways* (2004), has been a boon to the Santa Barbara/Santa Ynez region. The Santa Barbara Conference and Visitors Bureau produced, "Sideways – The Map," a guide to the film's locations before the picture was released. A local tour company has even created a now popular "Sideways" tour and another firm has a "snob-free" winery tour that includes some of the movie's locations.

Infrastructure Impacts

In terms of land use impacts, film production occasionally creates infrastructure that is left behind for future utilization. Cases include Fox Studios Baja in Mexico which was created by film director James Cameron when he was shooting the 1997 feature film, *Titanic*. The studio has since expanded and is used for a variety of productions ranging from feature films to video shoots. Film and video production also requires support that generally involves cutting-edge technology. If not locally supplied, such technology is imported (e.g., cameras, cranes, etc.).

Creation of Industry Clusters

The film industry depends on the synergistic relationship of creative arts professionals and skilled technicians working in highly specialized crafts. For example, writers, painters, actors, directors, etc., all benefit by working on a production or merely being close to it. Workers in the arts are typically accustomed to working in contingent labor occupations and often work in multiple jobs. In many important aspects, the organization of a labor force in a regime of flexible specialization closely mirrors the organization of traditional craft industries. Individual artists and crafts persons often maintain their affiliations with their regular sources of employment while working on a production. This is especially true in the smaller production centers outside of New York and Los Angeles, such as Louisiana, where the nature of production activity is sporadic at best. The ability to move in and out of employment in the entertainment industries while still maintaining a working income can serve as a key “shock absorber” that could potentially allow for the development of a fully articulated entertainment industry labor force.

A recent study by the Entertainment Economy Institute (2005) reported that about one half of all motion picture and television workers in California earn a significant portion of their annual income from jobs outside the industry. These findings suggested that there might be a “cross-over” between skills that allow entertainment workers to successfully compete for jobs in other industries, particularly for non-industry specific skills such as computer programming. The film and television production industry is increasingly making use of digital and computer technologies.

Many digital artists also work in the fast-growing video game industry. As such, synergies and opportunities may exist between related industries such as computer gaming and the internet/e-commerce, which support development of a cluster of highly skilled and creative technology-driven industry.

There is a strong, statistically significant correlation between vibrant and creative city milieus and the presence of high-paying knowledge intensive industries such as high technology. Examples include Austin, Texas and San Francisco, California. Increasingly, the quality of place and quality of life are key determinants of economic growth in a globalized knowledge economy. Such correlations are only likely to increase as we enter the digital age and the “democratization” of film production and new distribution modes increase.

In terms of economic development, regional economic growth is powered by creative people and cultural vitality makes these places attractive to members of the “creative class,” which includes,

professionals, managers, entrepreneurs and analysts. Another sub-group within the creative class includes the “super-creative core,” which includes many of those who work in entertainment and creative industries. This includes filmmakers, writers, entertainers, actors, designers, architects, editors, engineers, scientists and university professors. This creative talent is attracted to quality of place and further contributes to this quality of place via their contributions to cultural vitality in the places in which they choose to live and work.

III. Louisiana's Motion Picture Industry

Louisiana is a scenic state rich in history and culture. Swamps, lakes, bayous, hills, plantations, historic homes and New Orleans' French Quarter – among other places - are popular backdrops to feature films, television shows and commercials. Filming in Louisiana is cost effective given the State's incentive program. These lower costs mean producers are able to better stretch their film budgets in Louisiana as opposed to New York or California. Lower costs translate directly the bottom line of film productions and impact everything from production studio rent to labor costs. It has been reported that the movie, *The Curious Case of Benjamin Button* was originally to be filmed in Baltimore. However producers changed their mind when they realized that they could save money if they moved production to Louisiana. The falling value of the U.S. dollar also encouraged producers to reconsider filming in the U.S. rather than Toronto, Vancouver or other popular spots in Canada or other countries.

According to the Internet Movie Database (IMDb) website, there have been 426 productions that took place in Louisiana from 2002 through 2008. Their database includes feature films, television (TV) episodes, made for TV movies, TV series, direct to video movies and live action video games. TV shows such as *Dawson's Creek*, *K-Ville* and *Varsity, Inc.* have filmed in the state as well as reality shows such as *American Idol* and *Newlyweds: Nick and Jessica*. Documentaries such as *After Katrina: Rebuilding St. Bernard Parish*, *ReNew Orleans* and *When the Levees Broke* featured the devastation and rebuilding of New Orleans after Hurricane Katrina. Popular feature films include *All the King's Men*, *Big Momma's House 2*, *Dukes of Hazard*, *Ray* and most recently, *W.* and *The Curious Case of Benjamin Button*. It should be noted that not all 426 of the productions listed on IMDb applied for tax credits through Louisiana's incentive programs. A complete list of those productions can be found in Appendix B. Feature films, by year of production include:

2005

- *All the Kings Men*
- *Big Momma's House II*
- *Deal*
- *Failure to Launch*
- *Flakes*
- *Just My Luck*
- *Local Colour*
- *Lubu*
- *Stay Alive*
- *The Last Time*
- *Three Days to Vegas (Retirement)*

2006

- *Bug*
- *Déjà vu*
- *Hatchet*
- *Kill Theory (Last Resort)*
- *Pride (PDR)*
- *Solstice*

2007

- *American Summer*
- *American Violet (American Inquisition)*
- *Black Water Transit*
- *Bolden*
- *College 2007*
- *In the Electric Mist*
- *Meet the Spartans*
- *Non Fiction*
- *Spring Break '83*
- *The Curious Case of Benjamin Button*
- *Waking Madison*
- *Welcome to Academia*
- *Yellow Handkerchief*

2008

- *12 Rounds*
- *Bad Lieutenant*
- *Chess*
- *Cirque du Freak*
- *Family that Preys*
- *Final Destination 4*
- *Hurricane Season*
- *I Love You Phillip Morris*
- *Mardi Gras*
- *My Very Own Love Song*
- *Night of the Demons*
- *Robosapien: Rebooted*
- *Welcome to the Reillys*

Employment Trends

The film industry in Louisiana has undergone substantial growth since 2001, far outpacing national averages. Employment in Louisiana's film industry increased at a compound annual growth rate (CAGR) of 22 percent from 2001 to 2007. This compares to a national growth rate of 1.8 percent annually over the same time period. Although the average wages are lower than the national levels, they have increased at an average annual rate of 8.2 percent, much faster than inflation. The lower wages reflect both the lower cost of living in Louisiana as well as the fact that higher industry earners live outside of the state. The film industry expanded most rapidly from 2002 to 2003, in large part as a result of the incentive programs. When such an expansion occurs, often part-time, temporary and contract workers are used to support the growth. This can explain the lower average wage also experienced in 2003. As the industry has developed, both employment and wages have stabilized. By 2007, people in the motion picture industry in Louisiana earned an average wage of \$37,209. Recall that many jobs in this industry are often characterized by seasonal, short-term projects in Louisiana, not traditional full-time, year-round employment as in other parts of the country which explains, in part, the difference from national average annual wages.

Table 7 – Motion Picture Industry (NAICS 51211, 51212, 51219 and 7115)

	Firms	Jobs	Total Wages (\$ millions)	Average Pay
United States				
2001	33,081	242,828	\$17,844.6	\$73,487
2002	33,846	259,172	\$18,963.4	\$73,169
2003	34,375	250,882	\$19,045.8	\$75,915
2004	35,257	265,505	\$21,233.1	\$79,973
2005	36,374	262,300	\$21,340.0	\$81,357
2006	38,706	265,995	\$22,417.8	\$84,279
2007	39,405	270,685	\$23,215.4	\$85,765
CAGR	3.0%	1.8%	4.5%	2.6%
Louisiana				
2001	197	926	\$21.5	\$23,247
2002	200	896	\$22.7	\$25,307
2003	193	1,515	\$28.0	\$18,456
2004	184	2,156	\$46.8	\$21,723
2005	218	2,543	\$83.3	\$32,762
2006	237	2,176	\$66.8	\$30,700
2007	260	3,056	\$113.7	\$37,209
CAGR	4.7%	22.0%	32.0%	8.2%

Source: Bureau of Labor Statistics

The following table presents the average annual employment for the film industry by specific industry category in Louisiana from 2001 to 2007 as well as the associated compound annual growth rate (CAGR). Employment in the category for motion picture production is the largest segment among those profiled and has experienced the most growth over this time period. In 2001, before Louisiana enacted tax incentives, there were approximately 500 people employed in this segment. By 2007, employment has increased more than 5 times, reaching 2,700 people (both full- and part-time workers). This represents a compound annual growth rate (CAGR) of 33 percent. There have been some fluctuations in employment levels in each of the segments, but as the industry further matures, employment levels should even out and stabilize. Also recall that self-employed persons are not included in the dataset which may explain in part the relatively low number of artists.

Table 8 – Average Annual Employment in Motion Picture Industry in Louisiana

	Annual Average Employment							CAGR
	2001	2002	2003	2004	2005	2006	2007	
Motion Picture and Video Production	497	516	993	1,281	1,971	1,875	2,737	32.9%
Motion Picture and Video Distribution	71	22	10	6	5	4	6	-33.8%
Postproduction Services	201	195	352	732	468	161	170	-2.8%
Independent Artists, Writers & Performers	157	163	160	137	99	136	143	-1.5%
Total	926	896	1,515	2,156	2,543	2,176	3,056	22.0%

Source: Bureau of Labor Statistics

To put these trends into context, ERA used location quotients to compare the strength of these industries relative to other states. The following table highlights the top ten states in terms of employment by specific NAICS for the film industry. While the share of employment shows where the industry is concentrated around the country, the location quotient can demonstrate the strength of the industry relative to a state's overall economy. Recall that a location quotient greater than 1 indicates that the industry is more concentrated in the state than in the nation. For example, there were 1.5 million people working in Louisiana during 2007, representing 1.3 percent of total employment in the country. Louisiana employed 1.4 percent of all employees in the motion picture production industry. This relationship will yield a location quotient greater than 1 for this industry since the share of total employment is greater than the overall state average. The rankings for Louisiana, if not included in the top ten, are also provided. In fact, Louisiana only ranks in the top ten share of employment in the category for motion picture and video production. California and New York dominate each category which is not surprising due to their well established film industries.

Table 9 – Employment Share and Location Quotients in Film Industry for Largest States, 2007

	% total emp	LQ		% total emp	LQ
Motion picture and video production (NAICS 51211)			Motion picture and video distribution (NAICS 51212)		
California	58.4%	5.04	California	29.7%	2.56
New York	16.0%	2.57	New York	12.8%	2.05
Florida	2.4%	0.40	Illinois	4.1%	0.93
Texas	1.6%	0.21	New Jersey	3.1%	1.06
New Jersey	1.5%	0.50	Ohio	3.0%	0.74
Louisiana	1.4%	1.05	Florida	2.5%	0.41
Illinois	1.3%	0.30	Texas	2.0%	0.27
New Mexico	1.2%	2.11	Massachusetts	1.2%	0.47
Pennsylvania	1.1%	0.26	Michigan	0.9%	0.28
Maryland	1.0%	0.57	Oregon	0.8%	0.60
			Louisiana (26)	0.1%	0.06
Postproduction and other related industries (NAICS 51219)			Independent artists, writers and performers (NAICS 7115)		
California	55.2%	4.76	California	34.5%	2.97
New York	14.9%	2.39	New York	9.2%	1.47
Massachusetts	4.0%	1.63	Florida	6.8%	1.13
Illinois	3.6%	0.82	Illinois	3.9%	0.89
Texas	3.1%	0.41	Texas	3.9%	0.53
Florida	2.6%	0.44	Georgia	2.9%	0.98
Pennsylvania	1.4%	0.33	New Jersey	2.8%	0.96
New Jersey	1.4%	0.47	Colorado	2.7%	1.59
Michigan	1.2%	0.37	Pennsylvania	2.6%	0.60
Georgia	1.1%	0.38	Tennessee	2.6%	1.27
Louisiana (11)	0.9%	0.64	Louisiana (36)	0.3%	0.22

Source: Bureau of Labor Statistics

With more than half of all film industry employment located in California, it is no surprise that its location quotient is also the highest. Many states have a location quotient less than one in the various industries because certain states dominate that particular industry. It is interesting to note the difference in the share of employment and corresponding location quotient. For example, 2.4 percent of the motion picture production employment is in Florida, ranked third. However, the location quotient is fairly low.

Location quotients for the entire industry were then measured by adding the employment in the four sectors together for each state. As shown below, Louisiana had the fifth highest location quotient in the film industry at 0.84 in 2007.

Table 10 – Top Location Quotients by State for Film Industry, 2007

State	LQ
California	4.58
New York	2.34
New Mexico	1.53
Hawaii	1.00
Louisiana	0.84
Nevada	0.80
District of Columbia	0.79
Utah	0.71
Oregon	0.66
Maine	0.62

Source: Bureau of Labor Statistics

Economic Impact of Louisiana’s Motion Picture Industry

In 2002, Louisiana enacted legislation to grow the film industry in the state. As a result, the industry has grown significantly in terms of projects, employment, and infrastructure. The Office of Entertainment Industry Development (OEID), within the Louisiana Department of Economic Development (LED), serves as the information clearinghouse and provides technical assistance for companies engaged in the film and television production in the state. Since the program began through 2007, 135 projects were produced in Louisiana and qualified for funding through the motion picture tax credit program. The OEID estimates an additional 80 projects were produced in 2008. A complete list of productions can be found in Appendix B.

Table 11 –Productions in Louisiana, 2002-2007

	2002	2003	2004	2005	2006	2007
Productions in Louisiana	1	15	21	23	21	54

Source: Louisiana Economic Development

The table below presents the number of productions with certified expenditures in a given year. Due to the nature of motion picture production, a single project may have expenditures in multiple years resulting in annual totals higher than those cited above. Project spending is categorized as certified and non-certified. Certified expenditures indicate that the project had qualified expenditures in Louisiana certified by an audit. Tax credits were then issued. There are also several projects that have applied for tax credits but are awaiting certification. ERA has classified these as non-certified expenditures. They were included since the productions did take place in Louisiana and are in the final stages of being approved. There are 13 such projects at this point for productions through 2007. Spending per production has ranged from a low of \$4 million in 2002 to a high of \$6.6 million in 2005. In 2007, if the submitted expenditures are certified and qualify for the tax credits, the average expenditures made in Louisiana were \$5.9 million per production.

Table 12 – Summary of Motion Picture Projects in Louisiana

	2002	2003	2004	2005	2006	2007
Certified Projects						
Total Projects	1	15	32	36	47	65
Estimated Total Project Spending (millions)	\$10.5	\$241.1	\$413.4	\$613.3	\$683.6	\$387.1
Certified Spending in Louisiana (millions)	\$4.0	\$92.3	\$158.3	\$238.6	\$293.4	\$317.1
Non-Certified Projects						
Total Projects	–	–	–	–	5	8
Estimated Total Project Spending (millions)					NA	\$134.7
Projected Spending in Louisiana (millions)					\$29.1	\$112.1

NA = Not available

Source: Louisiana Economic Development Department, Office of Entertainment Industry Development

It should be noted that this data is continually updated by the OEID as qualified expenditures are certified and tax credits issued. The data in this report represents the most current information as of January 2009.

According to data provided by the Louisiana Economic Development Department, ERA estimates that productions in Louisiana totaled more than \$429 million in 2007. This includes certified spending of \$317 million and \$112 million in estimated spending for the 8 projects awaiting certification and the issuance of tax credits (i.e., non-certified spending). The total economic benefit to the state of these expenditures was \$763 million. Approximately 3,310 jobs were directly supported by the \$429

million in production and post-production spending. An additional 2,920 jobs were supported indirectly in other industries throughout the state for a total of 6,230 jobs. This includes both full- and part-time employment in jobs across all sectors of the economy. Total earnings paid resulting from this spending were nearly \$204 million averaging \$32,700 across all jobs in all sectors. The average wage resulting from direct spending in the film industry was \$30,300 in 2007, lower than the BLS reported average of \$37,209 for the industry as ERA defined it. This difference can be attributed to the number of temporary, contract and self-employed workers which are captured in the economic impact analysis, but missing from the Quarterly Census of Employment and Wages data reported by the Bureau of Labor Statistics.

Table 13 – Certified and Non-Certified Spending on Motion Picture Productions in Louisiana

	Certified			Non-Certified		Total Spending		
	2005	2006	2007	2006	2007	2005	2006	2007
Output (millions)								
Direct	\$238.6	\$293.4	\$317.1	\$29.1	\$112.1	\$238.6	\$322.5	\$429.2
Indirect	\$128.4	\$161.8	\$173.0	\$16.0	\$61.2	\$128.4	\$177.9	\$234.1
Induced	\$53.8	\$69.1	\$73.9	\$6.8	\$26.1	\$53.8	\$75.9	\$100.0
Total	\$420.9	\$524.3	\$563.9	\$52.0	\$199.4	\$420.9	\$576.3	\$763.4
Employment (jobs)								
Direct	1,870	2,350	2,450	230	870	1,870	2,580	3,310
Indirect	1,110	1,390	1,450	140	510	1,110	1,530	1,970
Induced	540	680	710	70	250	540	740	950
Total	3,520	4,420	4,610	440	1,630	3,520	4,850	6,230
Earnings (millions)								
Direct	\$55.8	\$68.6	\$74.1	\$6.8	\$26.2	\$55.8	\$75.4	\$100.3
Indirect	\$39.7	\$50.0	\$53.5	\$5.0	\$18.9	\$39.7	\$54.9	\$72.5
Induced	\$16.5	\$21.3	\$22.8	\$2.1	\$8.1	\$16.5	\$23.4	\$30.9
Total	\$112.0	\$139.8	\$150.5	\$13.9	\$53.2	\$112.0	\$153.7	\$203.7
Total Value Added (millions)								
Direct	\$75.8	\$93.2	\$100.7	\$9.2	\$35.6	\$75.8	\$102.4	\$136.4
Indirect	\$61.5	\$77.5	\$82.9	\$7.7	\$29.3	\$61.5	\$85.2	\$112.2
Induced	\$29.3	\$37.6	\$40.3	\$3.7	\$14.3	\$29.3	\$41.3	\$54.5
Total	\$166.5	\$208.3	\$223.9	\$20.6	\$79.2	\$166.5	\$228.9	\$303.1
Fiscal Impact (millions)								
Federal	\$24.1	\$30.2	\$31.5	\$3.0	\$11.1	\$24.1	\$33.2	\$42.6
State	\$8.2	\$10.3	\$10.8	\$1.0	\$3.8	\$8.2	\$11.3	\$14.6
Local	\$4.4	\$5.5	\$5.7	\$0.5	\$2.0	\$4.4	\$6.0	\$7.7
Total	\$36.7	\$46.0	\$48.0	\$4.5	\$16.9	\$36.7	\$50.5	\$64.9

The reason for examining “total value added” is that it represents the degree to which the state economy is enriched by a given activity. The largest component of total value added is wages. It also includes such things as rents, royalties dividends and profits as well as indirect business taxes that were incurred. It does not include taxes on profit or income which are included in the fiscal impacts. It includes payments made to individuals (employee compensation), business owners (proprietary income or corporate profits), investors (dividends, economic rents and royalties) and governments (sales and excise taxes). In 2007, the total value added as a result of qualified spending on motion picture productions was \$303.1 million.

Economic activity like wages, sales and profits generate tax revenue for federal, state and local governments. In addition to income, sales and property taxes, this includes fees paid to governments, including motor vehicle licensing fees, fines and payments for permits. Motion picture projects that received state tax credits generated \$26.4 million in state and local tax revenue during 2007, of which approximately two-thirds (\$14.6 million) went to the State of Louisiana.

Cost Benefit Analysis

In this section, ERA estimates of the costs and benefits to the State as well as the benefits to the overall economy as a result of the motion picture production tax credit program. Productions that have applied for tax credits must be approved by the State and their in-state expenses must be certified. Tax credits are then issued only on qualified expenditures made in the State of Louisiana. For qualified film productions, there is also a wage credit for state residents employed on the project.

As shown in the following table, the State of Louisiana will issue an estimated \$115 million in tax credits for projects with certified and estimated expenditures incurred during 2007. Combined these projects had an estimated \$429 million in qualified expenditures which generated a total economic benefit to the State of \$763 million. This represents an economic stimulus of \$6.64 for every \$1 in tax credits issued for qualifying motion picture expenditures during 2007. This has grown 4.6 percent since 2005. The \$115 million in tax credits supported the creation of 6,230 jobs (direct + indirect) throughout the state. These jobs paid an average annual salary of \$32,690 at the cost of \$18,460 in tax credits each during 2007. The State of Louisiana directly received \$14.6 million in taxes and fees resulting for the \$763 million in economic output.

Total value added represents the degree to which the state economy is enriched by a given activity. It includes payments made to individuals (employee compensation), business owners (proprietary income or corporate profits), investors (dividends, economic rents and royalties) and governments (sales and excise taxes). For every potential tax credit issued by the State of Louisiana on motion picture productions, total value added to the economy was \$2.63 in 2007.

According to analysis of data from the Department of Revenue (LDR) by the Louisiana Economic Development Department, there is often a delayed fiscal impact of certified tax credits because of the taxpayer’s ability to carry the credits forward for up to ten years after certification. Since the motion picture production program’s inception, nearly \$500 million in tax credits have been certified. However, only slightly more than half of those credits have been utilized. The LDR estimates that taxpayers claimed between \$74 and \$106 million in tax credits during 2007.

Table 14 – Benefits and Costs of the Motion Picture Tax Credits

	Motion Picture Productions		
	2005	2006	2007
Benefits			
Economic Output (millions)	\$420.9	\$576.3	\$763.4
Employment (jobs)	3,520	4,850	6,230
Earnings (millions)	\$112.0	\$153.7	\$203.7
Total Value Added (millions)	\$166.5	\$228.9	\$303.1
State Taxes (millions)	\$8.2	\$11.4	\$14.6
Local Taxes (millions)	\$4.4	\$6.0	\$7.7
Costs			
Based on Tax Credits to be Issued (millions)	\$66.3	\$87.6	\$115.1
Based on Tax Credits Claimed			
Low estimate (millions)	\$45.3	\$61.3	\$74.3
High estimate (millions)	\$45.3	\$75.1	\$105.9
Net State Fiscal Impact			
Based on Tax Credits to be Issued (millions)	-\$58.1	-\$76.3	-\$100.5
Based on Tax Credits Claimed			
Low estimate (millions)	-\$37.1	-\$49.9	-\$59.7
High estimate (millions)	-\$37.1	-\$63.7	-\$91.3

Sources: Louisiana Economic Development Department, Louisiana Department of Revenue, Economics Research Associates

Regional Interviews

In ERA’s regional interviews a series of questions relating to current trends and performance of the film industry were answered. Generally speaking, throughout most regions of the state MOW production seems to be less active recently than historically. Current trends tend to favor low

budget features and independent productions – a niche which can remain competitive for the state. Many of the interviewees and film office managers indicated that relatively high budget commercial productions, and to some extent television, are potential areas of focus and emphasis moving forward.

Several areas of the state (most noticeably the northwest and south/ southeast portions) have experienced an influx of new and relocated businesses from outside of Louisiana. While some of these business are production based, most are supportive to the production process and provide ancillary services. Additionally, businesses which cater primarily local markets (food services, consumer services, etc.) but have learned to package their products and service to the needs of productions have experienced a notable increase in business volume.

IV. Overview of Music Industry

The digital age has brought with it wide-sweeping changes to the music industry. Accompanied by new forms of media, increasing use of the Internet and e-mail along with a younger, technology savvy generation has begun to break long standing music industry traditions. This section contains a general overview of national trends in the music industry and associated consumer and product trends.

Industry Trends

The format of recorded music is constantly evolving from records, 8 track cartridges, cassette tapes, compact discs (CDs) and digital reflecting changes in technology and consumer preferences. Sales of music on physical formats has been declining dramatically since 2001 as shown in the table below. According to the Recording Industry Association of America (RIAA), the number of full-length cassettes sold, one of the oldest forms of media on the market, declined at an average annual rate of 33.3 percent since 2001 to reach a mere 0.3 percent of the market by 2007. Full-length CDs and video DVDs also declined at annual rates of 1.3 percent and 15.5 percent respectively, although, full-length CDs continued to garner 82.6 percent of the market in 2007. Digital downloads climbed from 0.2 percent to 11.2 percent of the market between 2001 and 2007, representing an annual gain of nearly 96 percent.

Table 15 – Music Sales by Format

Format	2001	2002	2003	2004	2005	2006	2007	CAGR
Digital download	0.2	0.5	1.3	0.9	5.7	6.7	11.2	95.6%
DVD audio	1.1	1.3	2.7	1.7	0.8	1.3	1.2	1.5%
Full-length cassettes	3.4	2.4	2.2	1.7	1.1	0.8	0.3	-33.3%
Full-length CDs	89.2	90.5	87.8	90.3	87.0	85.6	82.6	-1.3%
Music videos/Video DVDs	1.1	0.7	0.6	1.0	0.7	1.1	0.4	-15.5%
SACD	NA	NA	0.5	0.8	1.2	0.0	0.6	3.1%
Singles (all types)	2.4	1.9	2.4	2.4	2.7	3.4	2.4	0.0%
Vinyl LPs	0.6	0.7	0.5	0.9	0.7	0.6	0.7	2.6%

Source: Recording Industry Association of America

According to a report by Pricewaterhouse Coopers (PWC), digital distribution consists of music distributed to mobile phones through wireless carriers and music downloaded from the Internet

through licensed services. As shown in the table below, recorded music sales have been falling steadily since 2004 as digital distribution has grown exponentially.

Table 16 – U.S. Sales of Recorded Music (millions)

Distribution Type	2003	2004	2005	2006	2007p	2008p	CAGR
Physical	\$11,854	\$12,154	\$11,195	\$9,869	\$7,986	\$6,508	-11.3%
Digital							
Internet	\$71	\$303	\$653	\$1,085	\$1,459	\$1,852	92.0%
Mobile Phones	\$100	\$271	\$422	\$774	\$879	\$900	55.2%
Total	\$12,025	\$12,728	\$12,270	\$11,728	\$10,324	\$9,260	-5.1%

p = preliminary

Source: Pricewaterhouse Coopers LLP, *Global Entertainment and Media Outlook: 2008-2012*

Downloaded music has contained digital rights management (DRM) software embedded in them which limits the ability of consumers to play purchased music on mobile devices from different manufacturers. For example, a song purchased from iTunes Music Store can only be played on an iPod. However, in 2007, several major companies have indicated that they will drop DRM which will allow consumers to buy music from any Internet service and play it on any device. As the availability of digital music without copy protection software increases, distribution via the Internet is expected to grow rapidly. Projecting out to 2012, PWC estimates that digital music sales will reach \$5 billion, surpassing physical distribution sales in 2011, falling to \$2.9 billion by 2012. Licensed music downloaded over the Internet will become the largest segment of sales, reaching \$3.7 billion by 2012.

The following table compares physical and Internet sales for music sold on singles, albums and video, the most popular formats. The most popular format was digital sales of singles with 810 million downloads during 2007. In part, greater sales can be attributed to the much lower cost via the Internet than physical formats. As broadband becomes more available in the U.S. and albums become faster to download, this segment of the market will continue to expand.

Table 17 – Physical and Internet Sales in the U.S.

	Unit Sales (millions)		Average Price		Total Sales (millions)	
	Physical	Internet	Physical	Internet	Physical	Internet
Singles						
2003	12	25	\$4.75	\$0.99	\$57	\$24
2004	7	139	\$5.00	\$0.99	\$35	\$138
2005	5	367	\$4.80	\$0.99	\$24	\$363
2006	3	586	\$6.00	\$0.99	\$18	\$581
2007p	3	810	\$5.33	\$0.99	\$16	\$802
2008p	3	1,040	\$5.00	\$0.99	\$15	\$1,030
Albums						
2003	766	1	\$14.88	\$9.99	\$11,397	\$10
2004	775	5	\$14.85	\$9.99	\$11,512	\$46
2005	710	14	\$14.89	\$9.99	\$10,569	\$136
2006	622	28	\$15.11	\$9.99	\$9,400	\$276
2007p	513	43	\$14.59	\$9.99	\$7,485	\$425
2008p	430	58	\$14.00	\$9.99	\$6,020	\$579
Music Videos						
2003	20	–	\$20.00	–	\$400	–
2004	33	–	\$18.39	–	\$607	–
2005	34	2	\$17.71	\$1.95	\$602	\$4
2006	23	10	\$19.61	\$1.99	\$451	\$20
2007p	28	14	\$17.32	\$1.99	\$485	\$28
2008p	27	18	\$17.50	\$1.99	\$473	\$35

p = preliminary

Source: Pricewaterhouse Coopers LLP, *Global Entertainment and Media Outlook: 2008-2012*

The changing music format is also reflected in where consumers buy music. The RIAA estimates that music purchases at traditional retail outlets represents nearly 61 percent of sales in 2007, but is falling at an average annual rate of more than 5 percent per year since 2001. With the closing of the retailers Tower Records and Sam Goody and less space for recorded music in big box retailers such as Wal-Mart and Target, it is not surprising that sales are falling. Despite notable declines, the physical format still has its appeal though to many consumers since sound quality is still better, especially on sound systems, and CDs and DVDs come with extras not available by download such as liner notes, song lyrics, artwork and other similar content. Internet and digital downloads accounted for 22.9 percent of sales and grew at respective annual rates of 24.7 and 12.2 percent by 2007. Record club sales also increased to 12.6 percent of the total market by 2007.

Table 18 – U.S. Sales by Retail Outlet

	2001	2002	2003	2004	2005	2006	2007	CAGR
Record Store	42.5	36.8	33.2	32.5	39.4	35.4	31.1	-5.1%
Other Store	42.4	50.7	52.8	53.8	32.0	32.7	29.7	-5.8%
Record Club	6.1	4.0	4.1	4.4	8.5	10.5	12.6	12.9%
Ad or 800 Number	3.0	2.0	1.5	1.7	2.4	2.4	1.7	-9.0%
Internet ¹	2.9	3.4	5.0	5.9	8.2	9.1	10.9	24.7%
Digital Download	NA	NA	NA	NA	6.0	6.8	12.0	12.2%
Concert	NA	NA	NA	1.6	2.7	2.0	1.5	-1.1%

Notes:

1. Internet does not include record club purchases made over the Internet or digital downloads

Source: Recording Industry Association of America

While statistics show a steep decline in CD sales, consumers pay more than ever for live music. Concert revenue hit \$3.9 billion in 2007, up 8 percent from 2006. One of the most successful artists in the music industry today, Jimmy Buffet, has fans flocking to concerts. In 2007, Buffett played 25 dates, with an average ticket price of \$136, making \$35.6 million – 34 percent higher than 2006.

Genre

Children’s music has been the fastest growing genre of music in the industry recently. However, even growing at a 34 percent annual rate since 2001 it still remains a small portion, only 2.9 percent, of total industry sales. Rock, always the most popular genre, along with R&B/Urban and Country music have been the only other genres that have grown percentage-wise since 2001, at rates of 4.8 percent, 1.8 percent and 1.5 percent on an annual basis respectively. The percentage share of every other genre of music declined, led by New Age at 18.2 percent annually, Soundtracks at 8.9 percent annually and Religious at 8.6 annually. Rap/Hip-hop had the lowest decline falling just 0.6 percent or 0.9 percent annually, to 10.8 percent by 2007.

Table 19 – Consumer Music Preference

Genre	2001	2002	2003	2004	2005	2006	2007	CAGR
Rock	24.4	24.7	25.2	23.9	31.5	34.0	32.4	4.8%
Rap/Hip-hop ¹	11.4	13.8	13.3	12.1	13.3	11.4	10.8	-0.9%
R&B/Urban ²	10.6	11.2	10.6	11.3	10.2	11.0	11.8	1.8%
Country	10.5	10.7	10.4	13.0	12.5	13.0	11.5	1.5%
Pop	12.1	9.0	8.9	10.0	8.1	7.1	10.7	-2.0%
Religious ³	6.7	6.7	5.8	6.0	5.3	5.5	3.9	-8.6%
Classical	3.2	3.1	3.0	2.0	2.4	1.9	2.3	-5.4%
Jazz	3.4	3.2	2.9	2.7	1.8	2.0	2.6	-4.4%
Soundtracks	1.4	1.1	1.4	1.1	0.9	0.8	0.8	-8.9%
Oldies	0.8	0.9	1.3	1.4	1.1	1.1	0.4	-10.9%
New Age	1.0	0.5	0.5	1.0	0.4	0.3	0.3	-18.2%
Children's	0.5	0.4	0.6	2.8	2.3	2.9	2.9	34.0%
Other ⁴	7.9	8.1	7.6	8.9	8.5	7.3	7.1	-1.8%

Notes:

1. "Rap": Includes Rap and Hip-Hop.
2. "R&B": Includes R&B, Blues, Dance, Disco, Funk, Fusion, Motown, Reggae, Soul.
3. "Religious": Includes Christian, Gospel, Inspirational, Religious and Spiritual.
4. "Other": Includes Big Band, Broadway Shows, Comedy, Contemporary, Electronic, EMO, Ethnic, Exercise, Folk, Gothic, Grunge, Holiday Music House Music, Humor, Instrumental, Language, Latin, Love Songs, Mix, Mellow, Modern, Ska, Spoken word, Standards, Swing, Top-40, Trip-hop.

Source: Recording Industry Association of America

Consumer Demographics

As early as 2001, the age demographic of music industry consumers was fairly consistent. Consumers aged older than 45 were the largest category followed by those in the 15 to 19 range. The rest of the population ranged between 8.5 percent and 12.2 percent of total sales.

By 2007, the average age of the typical consumer is decreasing. In fact, the fastest growing consumer group by age is also the youngest. Since 2001, consumers in the age bracket of 10 to 14 years have grown at a compound annual rate of over 5 percent, to account for 11.5 percent of industry sales – up from the low of 8.5 percent. The largest consumer group by percentage, those 45 and above, has stayed relatively stable, growing marginally from 23.7 percent to 24.8 percent from 2001 to 2007. The 40 to 44 age group declined the most rapidly over this period, at a rate of 4.3 percent annually, to reach 7.9 percent by 2007 – now the smallest percentage. Consumers aged 15 to 29 years also declined, while those 30 to 39 years old increased. Consumer gender has remained stable with women making up slightly more than half of consumers.

Table 20 – Consumer Demographics

	2001	2002	2003	2004	2005	2006	2007	CAGR
Age								
10-14 Years	8.5	8.9	8.6	9.4	8.6	7.6	11.5	5.2%
15-19 Years	13.0	13.3	11.4	11.9	11.9	12.8	12.3	-0.9%
20-24 Years	12.2	11.5	10.0	9.2	12.7	9.8	11.3	-1.3%
25-29 Years	10.9	9.4	10.9	10.0	12.1	12.7	9.2	-2.8%
30-34 Years	10.3	10.8	10.1	10.4	11.3	10.2	11.3	1.6%
35-39 Years	10.2	9.8	11.2	10.7	8.8	10.6	11.9	2.6%
40-44 Years	10.3	9.9	10.0	10.9	9.2	9.0	7.9	-4.3%
45+	23.7	25.5	26.6	26.4	25.5	26.1	24.8	0.8%
Gender								
Female	51.2	50.6	50.9	50.5	48.2	49.6	50.8	-0.1%
Male	48.8	49.4	49.1	49.5	51.8	50.4	49.2	0.1%

Source: Recording Industry Association of America

Future Trends

When the Music Television Cable Network, or MTV, was launched in 1981, the programming content was virtually free. It was the record companies that paid for the programming, music videos, just as they gave radio stations their records. Through advertising and sponsorship alone, MTV was able to become the first basic cable network to be profitable – not a small feat by any means. Bob Pittman, the same man responsible for the launch of MTV’s initial programming, now believes that music in all formats should be free. It is a vision of the future where artists will use recordings to build a brand so that they can make money on concerts, T-shirts and merchandise – potentially even having sponsors pay to give away albums. If recorded music is given away much like videos were in the past, revenue will have to be generated in other ways by producing 3-D movies and hosting talk shows as well as getting creative with sponsorships and sell naming rights.

Music companies in the United States like Live Nation have already begun to move away from the traditional model of record labels, handling concerts, merchandising, videos and recording – every aspect of an artist. This new model of what could become the modern record label helped Live Nation increase revenues in 2007 by 12.6 percent to \$4.2 billion. Big name artists such as Madonna and Jay-Z, who recently signed with Live Nation, have also caught onto the trend, leaving their traditional labels, branching out on their own or signing with progressive, independent and forward thinking music companies.

V. Louisiana's Music Industry

Compared to the film industry, Louisiana's music industry is significantly smaller. However, after the documented success of state incentive programs to grow and develop the film industry, a similar package was created to jumpstart the sound recording industry. Sound recordings include the production of new master recordings of music released on CDs, digital downloads, soundtracks for film or TV or part of a commercial or video game.

Employment Trends

The following table documents the size of the overall music industry in the United States and Louisiana. The overall trend appears to be one of consolidation with fewer companies in 2007 than in 2001 with fewer employees. Employment fell at an average annual rate of 3.3 percent since 2001 while the number of companies fell at a rate of 2 percent nationally. On the positive side, the average pay has been increasing. The music industry in Louisiana is relatively small with less than 100 firms in the state and less than one percent (0.6%) of the industry's total employment. In 2007, there were 370 people employed at 89 firms in Louisiana. Despite enacting legislation to encourage the development of this industry in Louisiana, there has been a slight decline in the industry, in part reflecting national trends as well as the effects of Hurricane Katrina. As with employment in the motion picture industry, many jobs in the music industry are characterized by part-time and short-term projects in Louisiana, not traditional full-time, year-round employment. Many musicians, like actors, are employed full-time in other industries in order to supplement their wages.

Table 21 – Music Industry (NAICS 5122 and 71113)

	Firms	Jobs	Total Wages (\$ millions)	Average Pay
United States				
2001	10,356	74,705	\$3,463.6	\$46,364
2002	10,070	71,181	\$3,207.4	\$45,060
2003	9,709	66,998	\$3,431.8	\$51,222
2004	9,362	62,713	\$3,278.2	\$52,273
2005	9,290	61,496	\$3,345.2	\$54,397
2006	9,233	60,342	\$3,697.0	\$61,268
2007	9,184	61,100	\$3,843.5	\$62,906
CAGR	-2.0%	-3.3%	1.7%	5.2%
Louisiana				
2001	92	681	\$15.0	\$22,020
2002	98	653	\$18.2	\$27,891
2003	100	633	\$12.6	\$19,881
2004	93	562	\$12.1	\$21,467
2005	94	421	\$10.3	\$24,568
2006	93	365	\$10.7	\$29,290
2007	89	370	\$11.3	\$30,586
CAGR	-0.6%	-9.7%	-4.6%	5.6%

Source: Bureau of Labor Statistics

The following table details where employment in the sound recording industry and musicians are concentrated around the country. The share of employment and associated location quotient (LQ) are provided. Similar to the film industry, the sound recording industry is concentrated in California and New York with 29 and 18 percent of the employment respectively. Musical groups and artists are also concentrated in these two states.

Table 22 – Concentration of Employment in Music Industry, 2007

State	Sound Recording (NAICS 5122)		State	Musical Groups and Artists (NAICS 71113)	
	% of employ	LQ		% of employ	LQ
California	28.9%	2.49	California	17.4%	1.50
New York	18.3%	2.93	New York	10.2%	1.63
Texas	7.8%	1.04	Tennessee	6.5%	3.18
Illinois	7.4%	1.68	Florida	5.2%	0.87
Tennessee	6.4%	3.14	Illinois	5.0%	1.12
Florida	4.3%	0.72	Pennsylvania	4.7%	1.08
Georgia	2.2%	0.72	Ohio	4.6%	1.14
Pennsylvania	2.0%	0.46	Texas	4.4%	0.58
Nevada	2.0%	1.98	Massachusetts	2.7%	1.10
Maryland	1.7%	0.93	Minnesota	2.4%	1.19
Louisiana (33)	0.3%	0.21	Louisiana (32)	0.8%	0.58

Source: Bureau of Labor Statistics

Louisiana, ranks 33rd and 32nd among the states in regard to share of employment in the sound recording industry and musical groups respectively. Its location quotient for sound recording is 0.21 indicating relative weakness of the industry in the state’s overall economy from an employment perspective.

The following table show the states with the largest location quotients. Recall that a large location quotient indicates an overrepresentation of employment in the industry relative to the state’s total employment compared nationally. Reflecting the well-established industry in Tennessee, the state has the largest location quotient in 2007 at 3.2 followed by Hawaii (2.6) and New York (2.1). The overrepresentation of musical groups and artists in Hawaii explains the large location quotient. In 2007, there were 678 people employed in this category in Hawaii, a relatively low share of the total employment for that category. However, due to the state’s small economy, the associated location quotient is large. Louisiana ranks 32nd indicating that the sound recording industry does not currently hold a prominent place in the state’s overall economy.

Table 23 – Top Location Quotients for Music Industry, 2007

Music	LQ
Tennessee	3.17
Hawaii	2.63
New York	2.09
California	1.85
District of Columbia	1.38
Illinois	1.32
Minnesota	1.05
New Mexico	0.97
Maryland	0.87
Washington	0.87
Louisiana (32)	0.45

Source: Bureau of Labor Statistics

Economic Impact of Louisiana’s Music Industry

In 2005, the Sound Recording Investor Tax Credit was designed to boost record production development by reducing the cost of making new master music recordings, whether distributed by CD, digital download or as part of a soundtrack. The legislation also provided a 25 percent tax credit on sound recording infrastructure created with the entertainment industry in mind.

Although the music industry shrank considerably right after Hurricane Katrina, the industry has received a boost from the State through these tax credit initiatives. In 2006, there was only one certified project in Louisiana for \$168,600. In 2007, 5 projects had certified expenses totaling more than \$340,000.

Table 24 – Certified Spending in Louisiana for Music Production

Year/Company	Project	Certified Spending
2006		
Nocturnal Records LLC	Nocturnal Records -- various titles	\$168,550
2007		
ABA Services Inc	Various	\$114,170
DLG Productions Inc.	DLG Productions	\$25,000
Galactic Funk Recording	Galactic	\$138,820
Madea Productions, Inc.	Madea Productions, Inc	\$46,050
Marriage Productions LLC	Why Did I Get Married	\$16,260
Total for 2007		\$340,300

Source: Louisiana Economic Development Department

As of January 2009, there were 15 projects that submitted proposals to the Louisiana Economic Development Office in 2008 with an estimated budget of \$816,800. If all expenditures are certified, the resulting tax credits would be approximately \$204,000.

Using the same methodology to measure the impact of the film industry, ERA generated economic impacts associated with projects that qualified for state tax credits. Only those certified expenses incurred in Louisiana were included. Impacts related to studio construction will be considered separately. The \$340,300 spent on music productions in Louisiana during 2007 generated a total economic impact of nearly \$577,000 throughout the state economy. Although the employment directly supported by projects that qualified for state tax credits is small, less than a job, the state certified spending in this industry has a much higher multiplier than the film industry. For every job in the music industry directly supported by qualified spending, 5 jobs are indirectly supported in other sectors of the state economy. The State of Louisiana received \$7,400 back in taxes and fees as a result of the qualified spending on state certified music industry activity in the State of Louisiana during 2007. When examining these impacts, it is important to realize that the economic activity generated in the music industry in Louisiana is much greater. These impacts are associated solely with projects that applied for and received state tax credits.

Table 25 – Economic Impact of Louisiana’s Music Production Industry

	2006	2007
Output (thousands)		
Direct	\$168.6	\$340.3
Indirect + Induced	\$118.6	\$236.4
Total	\$287.2	\$576.7
Employment Impacts		
Direct	0.2	0.4
Indirect + Induced	1.0	2.0
Total	1.2	2.4
Earnings (thousands)		
Direct	\$7.6	\$15.3
Indirect + Induced	\$36.5	\$72.9
Total	\$44.1	\$88.1
Total Value Added (thousands)		
Direct	\$17.9	\$36.1
Indirect + Induced	\$54.9	\$109.4
Total	\$72.8	\$145.5
Fiscal Impact (thousands)		
Federal	\$10.0	\$19.4
State	\$3.8	\$7.4
Local	\$2.0	\$3.9
Total	\$15.8	\$30.7

Cost Benefit Analysis

The benefits and costs associated with qualified State spending on certified sound recording productions are presented below. The State of Louisiana issued \$85,100 in tax credits for sound recording projects in 2007 with certified expenditures of \$340,300. The total economic benefit to the State was \$576,700. This represents an economic stimulus of \$6.78 for every \$1 in tax credits issued for qualifying expenditures during 2007. Although this is down slightly from 2006, it is slightly higher than the film production returns despite being a much smaller industry. The total value added of these productions was \$145,500 in 2007, averaging \$1.71 per tax credit dollar. The State of Louisiana directly received \$7,400 in taxes and fees resulting for the \$576,700 million in economic output.

Table 26 – Benefits and Costs of the Sound Recording Tax Credit Program

	Music Productions	
	2006	2007
Benefits		
Economic Output (thousands)	\$287.1	\$576.7
Employment (jobs)	1	3
Earnings (thousands)	\$44.1	\$88.1
Total Value Added (thousands)	\$72.7	\$145.5
State Taxes (thousands)	\$3.8	\$7.4
Local Taxes (thousands)	\$2.0	\$3.9
Costs		
Based on Tax Credits to be Issued (thousands)	\$42.1	\$85.1
Based on Tax Credits Claimed (thousands)	–	–
Net State Fiscal Impact (thousands)	-\$38.3	-\$77.7

Sources: Louisiana Economic Development Department, Louisiana Department of Revenue, Economics Research Associates

As with film production, there is a gap between the number of tax credits issued and those utilized. However, the sound recording program did not certify credits until 2008, therefore none of these credits have been claimed.

Regional Interviews

Generally there are fewer resources, efforts and organized processes focused on the current music incentive program throughout the various regions of the state than on the motion picture industry. The recent tax credit program does seem to have enabled some growth in the industry which may not have been achievable otherwise, however, for most involved in the industry live performance is the most significant contribution to personal income. Thus, it is generally believed that a program to support live music performance could have a more direct and significant impact on personal and industry wages. The recent live performance legislation passed by the State has the potential to address this issue.

VI. Overview of the Digital Media Industry

Digital media simply defined is media that can be delivered electronically. However, this can encompass a wide variety of products and a precise, agreed upon definition is difficult to come by. For example, the Digital Media Alliance Florida, a digital media industry association, defines digital media as “the creative convergence of digital arts, science, technology and business for human expression, communication, social interaction and education.” Most often, when digital media is referred to it includes things such as:

- E-commerce
- Electronic games played online, on cell phones or video game consoles
- Internet publishing of books, music and videos
- Mobile communication including cell phones and GPS navigation
- Online learning
- Video conferencing
- Watching film, television, videos on the Internet
- Web design and development

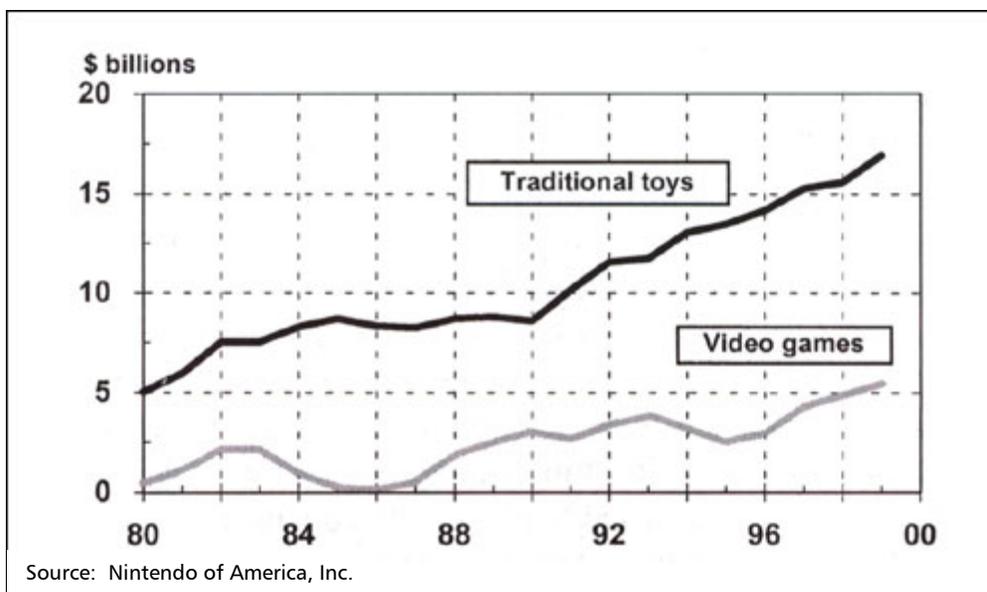
Although digital media can take many forms, what is agreed upon is that digital media is transforming how people create and tell visual stories and how audiences watch and discuss them. For purposes of this analysis, we will focus in on the evolution and current state of the video game industry since that is the focus of Louisiana’s Digital Interactive Media Act.

Video games actually have their history in coin operated games such as pinball which have been around since the 1880s. As the electromechanical pinball components were replaced with new electronic circuitry, the games moved quickly across the country. The game, *Spacewar*, developed in 1962 by an MIT graduate student was one of the first video games played on a PDP-1 mainframe computer. In 1968 the first console that could be used to display games on television sets was developed and sold to Magnavox. However it wasn’t until the early 1970s that the price of electronic computing power made electronic games more economically feasible. Although their original intent was to transform *Spacewar*, which had a large cult following among computer buffs, into a coin-op game, they instead developed a simple tennis-like game called *Pong*. *Pong* was a huge hit which triggered the development of home video games. The market became oversaturated however and interest began waning until *Space Invaders*, an arcade game, was introduced. In addition to capturing wide audience interest, it was the first machine game to demonstrate the emerging

capabilities of microelectronics and software design. These early games appealed mainly to young males.

Software improvements and technological advances permitted designers to redesign the home video units. Arcade games such as *Pac-Man*, released in 1980, were developed for home video and had wider audience appeal. As shown in the chart below, industry sales rose dramatically during the early 1980s. As the market again became saturated and software development could not keep pace with demand, the demand fell. The market rebounded in 1986 when Nintendo hit its stride with a more user-friendly game console and a tight control of software development. Nintendo captured about 80 percent of the market until Sony's PlayStation was introduced in the early 1990s. Video game sales again rose in the late 1990s.

Figure 2 – Home Video Game and Toy Sales in the U.S., 1980-1999



For a game manufacturer, a hit game can generate very high returns on investment. For example, in the late 1990s, games such as Nintendo's *GoldenEye* or *Legend of Zelda* grossed \$200 million in revenues domestically. Production and development costs were about \$6 million each. Although most games won't have such favorable revenue to cost ratios, some do exceed comparable ratios for the film industry. The potential for this type of profit margin however is what continues to attract businesses to the industry. In an industry that continually is upgrading the technology, one hit could

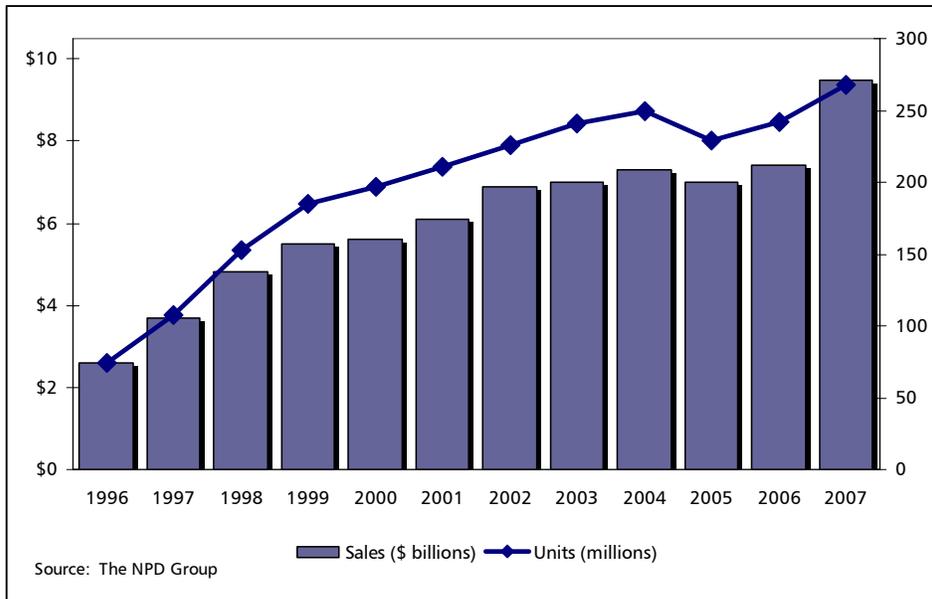
offset the costs of lower returns on other products making the investment worthwhile for many developers and software companies.

Video games, which were once solitary diversions, have been transformed and appeal to diverse segments of the population. Games have been developed for people to use for play, work and educational purposes. In addition to the traditional arcade game experiences, users can solve puzzles, “play” simulated instruments, “hit” a tennis ball, design cities, etc. Some such games are interactive with players connected through the Internet. Companies and organizations are using games to reach and inform tech savvy consumers. For example, the United Nations World Food Programme created a computer game to educate children about world hunger. The National Education Association recommends city building games to improve students’ problem-solving and analytical skills. And large corporations are developing interactive training that includes game-like simulations. In Louisiana, the offensive coordinator for Louisiana State University’s football team used a custom made video game to help his quarterbacks learn to read defenses.

State of the Video Game Industry

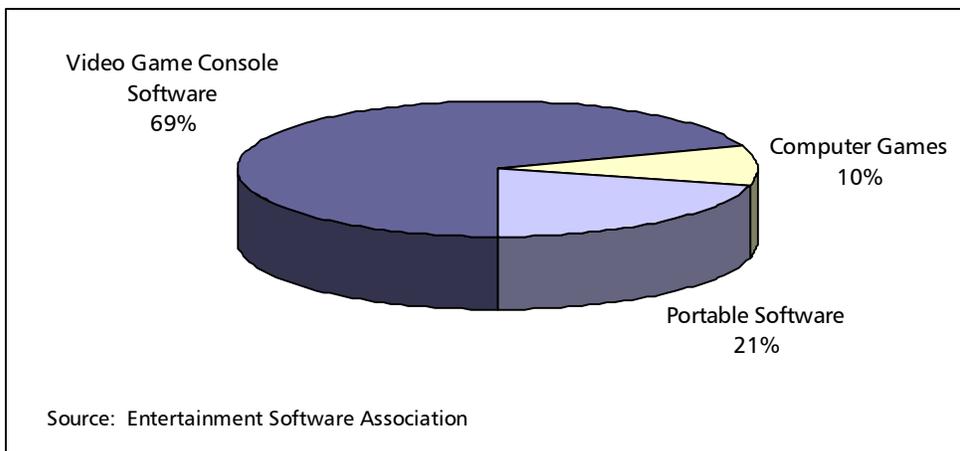
The entertainment software industry, defined as firms that develop and/or publish entertainment software for use with a personal computer, game console, mobile device or online, is one of the best performing sectors in the U.S. economy. According to a recent report by the Entertainment Software Association (ESA), revenues in the entertainment software industry increased at an average annual rate of 12.5 percent since 1996, far outpacing the national economy. In 1996, the U.S. entertainment software industry accounted for a modest 74.1 million units sold and \$2.6 billion in sales revenue. In 2007, computer and video game companies sold 267.8 million units generating \$9.5 billion in revenue.

Figure 3 – U.S. Computer and Video Game Sales, 1996-2007



As shown in the figure below, software for video game consoles such as PlayStation, Xbox and Wii made up the majority of sales in the industry. In 2007, 153.9 million units were sold generating \$6.6 billion in sales. Portable software includes games for devices such as GameBoy.

Figure 4 – Sales in the Video Game Industry, 2007



The genre with the greatest growth was "Family Entertainment," which grew 110 percent (17.2 percent of all games sold in 2007, up from 8.3 percent in 2006). According to Entertainment

Software Association, family entertainment games reprise characters from popular family movies like DreamWorks Animation's "Shrek." The video game "Shrek Treasure Hunt," by TDK Mediactive, enables players to take on the role of Shrek through ten related games. Other family video games capitalize on sports such as 3DO's "Sammy Sosa's Softball Slam" which features a virtual softball diamond where players run bases and tweak pitching skills. Edutainment games also fall into this category. These are games that embed core studies into games for kids so they can hone in on math, science or other skills while playing. One example of an edutainment video game is "The Oregon Trail," developed by Brøderbund and The Learning Company. The game teaches players about American history and 19th century pioneer life on the Oregon Trail by allowing them to assume the role of a wagon chief who leads settlers from Independence, Missouri, to Oregon's Willamette Valley by way of the Oregon Trail. According to a PricewaterhouseCoopers report, software sales of "Family Entertainment" products is expected to reach \$48.8 billion in global sales by 2011.

The video game industry spurs demand for complementary product purchases such as HD televisions. Approximately \$73 million in HD television sales can be directly attributed to Microsoft's XBox 360 game console.

Employment Trends

The industry also continues to grow as a source of employment by adding 23,600 jobs to local economies in 31 states. Of those, the majority (13,600 people) are employed by smaller developer firms. The average salary for employees is \$92,300, resulting in total national compensation of \$2.2 billion in 2007.

The industry is fairly concentrated as it developed initially in states with a strong technical culture such as Silicon Valley in California. Electronic Arts, Inc. (EA), founded in 1982 and headquartered in Redwood City, California, is the world's leading interactive entertainment software company. It develops, publishes and distributes interactive software worldwide for video game systems, personal computers, cellular phones and the Internet. In fiscal year 2007, EA had 24 titles that sold one million copies generating \$3 billion.

Alternatively, parts of the industry developed as other technology clusters did, with a single company developing software and becoming successful which then generated a whole ecosystem of firms developing, publishing and manufacturing games in the vicinity. For example, both Microsoft and

Nintendo are based in Seattle and Origin is located in Austin. Those firms set the foundation and other firms developed as a result. Mirroring trends in other technology sectors, employees often work at a large company for several years, learn how to make games and then start their own smaller companies nearby. Clusters also formed near universities with nationally recognized technical programs and strong computer science degrees such as MIT. Seventy percent of all industry employees (16,604 workers) are located in one of five states – California, Massachusetts, New York, Texas and Washington. California is the largest employer of entertainment software personnel accounting for approximately 40% of the total number of employees in the U.S. as a whole.

The impact of the entertainment software industry on state economies is growing. In the five states where employment is concentrated, growth in the industry occurred at a much faster rate than the overall state. The 9,245 jobs in California’s entertainment software industry supported a total of 34,600 jobs in the state and added \$1.7 billion to the economy in 2006, an increase of 12.3 percent from 2005. By 2009, it is projected that the industry will support over a quarter of a million American jobs.

Table 27 – Economic Impact of the Entertainment Software Industry in Select States, 2006

State	Jobs in Ent. Software	Total Jobs (Direct + Indirect)	Economic Impact (millions)	Growth from 2005
California	9,245	34,600	\$1,700.0	12.3%
Washington	2,674	9,284	\$497.2	14.4%
Texas	2,172	7,688	\$395.0	17.0%
New York	1,501	4,415	\$279.1	13.9%
Massachusetts	1,012	3,192	\$162.9	12.3%

Source: Entertainment Software Association

Workforce Development Efforts

Video game software has developed from simple linear programming to designing advanced artistic, dramatic and interactive game experiences. Today, game design incorporates everything from mathematics and logic to aesthetics and storytelling to understanding human emotion and psychology to understanding how pop culture operates. As the industry becomes more complex, the workforce needs have also changed. Today people working in the industry may be employed as programmers, arts and animation specialists, game designers, game production experts, quality assurance personnel, audio specialists, legal staff members and business or marketing personnel. Developers may specialize in games for specific types of platforms including mobile, handheld and

online media. The production of a single video game can create 35 jobs in a small company and up to 250 jobs in a large company. The production cycle is typically between three and five years.

To develop and support this industry, a concentrated and highly skilled workforce is essential. Thus specialized training relating to various industry functions is viewed as an important prerequisite to ongoing industry development in this field. Many universities across the country are developing programs to meet these workforce needs. Across the United States, there are several schools offering video game degrees, most notably are the University of Southern California (USC) and Worcester Polytechnic Institute in Massachusetts. USC offers a minor and major in video game design and management at the undergraduate and graduate level and Worcester Polytechnic Institute offers a bachelor's of science in interactive media and game development. New York University (NYU) recently announced that beginning in the Fall of 2009, the NYC Game Center will offer undergraduate and graduate programs in the research, design and development of digital games.

Gamers

The entertainment software industry creates a wide variety of computer and video games to meet the diverse interests of gamers. The millions of Americans playing games come from all ages and backgrounds. According to a 2008 consumer survey conducted by the Entertainment Software Association (ESA), nearly two-thirds of all American households play computer or video games. The average gamer is 35 years old and has been playing for 13 years. In fact, there were slightly more gamers over the age of 50 (26%) than under the age of 18 (25%). As the very first gamers have grown up, they are introducing games to their children. While more men play games than women, 60 percent of gamers are male, adult women represent a greater portion of the gaming population (33 percent) than boys ages 17 or younger (15 percent).

People are changing the way in which they play games as well with more people playing online. In 2004, only 8 percent of frequent game players said they played online. This increased to 22 percent by 2008. Another trend is gaming on wireless handheld devices such as cell phone and PDAs with more than one-third of American heads of households (36%) using them. This is up from 20 percent in 2002.

Future of the Industry

The video game industry has evolved from a few companies producing rudimentary games such as *Spacewar*, *Pong* and *Pac Man* that appealed mainly to young males into an economic powerhouse. The recent success of home gaming systems such as Nintendo's Wii, PlayStation 2 and Xbox 360 has opened up the industry and the games being created have a much broader reach. Entertainment software has become one of the fastest growing segments within the entertainment industry.

As for where the industry is heading, there are several trends worth watching. As broadband Internet becomes more accessible, video games may become more available for digital distribution. Although the majority of game sales occur in tradition retail outlets such as Wal-Mart and Best Buy, downloadable games and component upgrades are increasing in overall market share. Microsoft's Xbox 360, PlayStation 3 and the Nintendo Wii all currently offer their own online marketplaces to download smaller games and purchase add-ons and upgrades. Another trend developing is the inclusion of advertisements in downloadable games.

As for the future of game development, there are two separate trains of thought. Some believe that as computers evolve, games will increasingly incorporate artificial intelligence and virtual reality capabilities. These games will require more than just hand-eye coordination but rather complex strategies and abstract reasoning to play. On the other hand, reflecting the diverse spectrum of gamers, some experts predict that video games will be easier to comprehend and shorter in length in order to reach a wider audience.

Innovation will be the constant in this industry. For Gamelab, a small company in New York, that means finding new audiences that wouldn't ordinarily play a game, creating a game for a context you wouldn't think of having games, finding new kinds of visual and audio aesthetics for games or having new kinds of narrative or cultural content in their games. No matter how technology evolves and shapes this industry, the secret of success has remained constant – create a game that is simple to understand and easy to play on an elementary level, but is addictive and maddeningly difficult to fully master.

VII. Louisiana's Digital Media Industry

The entertainment software industry is starting to take root in Louisiana in part due to the recent enactment of the Digital Interactive Media Act. In this section ERA will first look at broad industry trends occurring in the U.S. and Louisiana through employment data. ERA will then examine how the tax incentives are being used. Finally, ERA will provide the economic impact estimates of the spending associated with the certified tax credits.

Employment Trends

The previous section provided industry specific data as measured by the Entertainment Software Association. This was custom research done in part since software game publishing is not identified as a separate U.S. industry in the North American Industry Classification System (NAICS). Typically broader industry groupings are used to identify this industry. Often entertainment software is included within the broader industry category of software publishing (NAICS 5112). According to the official 2007 U.S. NAICS Manual, computer software publishing is comprised of "establishments primarily engaged in computer software publishing or publishing and reproduction. Establishments in this industry carry out operations necessary for producing and distributing computer software, such as designing, providing documentation, assisting in installation and providing support services to software publishers. These establishments may design, develop and publish, or publish only." Within software publishing is home entertainment computer software which is where video game development would most likely fall. Other types of software classified in this NAICS code are:

- Application computer software
- Business oriented computer software
- Educational computer software
- Operating systems computer software
- Prepackaged software
- Publisher's computer software
- Utility computer software
- Word processing computer software

For purposes of this analysis, ERA also included Custom Computer Programming Services (NAICS 541511) as part of its definition of the digital media industry. This industry comprises establishments primarily engaged in writing, modifying, testing and supporting software to meet the needs of a particular customer. Combined ERA felt that the types of firms operating under these classifications would be not only the types of companies targeted by the Digital Interactive Media Act, but would be most likely to be part of the video game industry. As noted previously, digital media is a technological process which has broad ramifications in the ways that content is created and

delivered to end users. The video game industry is one subset of this much larger digital media market. ERA is using these two sectors to capture this growing sector, not to represent the entire digital media industry. In addition, it should be noted that employment in the animation components of video game development may be included within the film industry definition we are using since cartoon production for both motion pictures and television are part of the NAICS 512110, motion picture and video production.

The digital media industry as represented by software publishers and custom computer programming service providers has experienced some fluctuation in employment levels since 2001 but has been increasing steadily since 2004 reaching 847,000 employees nationally. Despite fluctuations in employment levels, the average number of employees per firm has remained relatively stable over time. At the national level, software publishing firms employ an average of 24 people and approximately 8 work at custom computer programming firms. Wages did grow in both sectors over this time period indicating that sales levels may have continued to rise even as the industry shed workers. Wages in the custom computer programming services sector grew at a compound annual growth rate (CAGR) of 3.8 percent from 2001 through 2007.

Following these trends, the number of people working in Louisiana's digital media industry has also fluctuated throughout this time period and appears to be rebounding. In fact, growth in Louisiana is far outpacing national growth rates. For example, in 2007, there were 4,381 people employed in digital media firms throughout Louisiana. This represents an average annual growth rate of 9.0 percent since 2001 in the digital media industry compared to an average growth rate of 0.4% for the country. These jobs are significant for the state economy as they paid an average wage of more than \$50,000 in 2007. In addition these jobs are more stable and not subject to seasonality as other segments of the entertainment industry. Average firm size is significantly smaller in Louisiana with approximately 6 employees per firm in these segments.

Table 28 – Digital Media Industry (NAICS 5112 and 541511)

	United States			Louisiana		
	Firms	Jobs	Total Wages (millions)	Firms	Jobs	Total Wages (millions)
Computer Software Publishers						
2001	11,237	271,263	\$28,432.1	82	423	\$24.2
2002	10,966	249,912	\$24,847.6	67	351	\$21.8
2003	10,432	237,278	\$24,276.9	56	308	\$17.7
2004	9,942	235,328	\$22,469.4	52	359	\$22.5
2005	9,916	236,916	\$23,799.0	49	291	\$23.1
2006	9,852	243,135	\$26,061.0	49	263	\$21.3
2007	10,186	252,282	\$28,699.3	56	347	\$25.3
CAGR	-1.6%	-1.2%	0.2%	-6.2%	-3.2%	0.7%
Custom Computer Programming Services						
2001	60,485	557,021	\$43,192.7	312	2,193	\$91.9
2002	62,893	499,802	\$38,010.3	326	1,883	\$87.9
2003	63,985	489,112	\$37,831.5	345	2,156	\$101.3
2004	64,811	504,489	\$40,657.1	388	2,495	\$127.9
2005	66,878	526,548	\$44,121.8	507	3,428	\$157.8
2006	70,369	560,888	\$49,412.1	617	3,681	\$168.1
2007	74,657	594,740	\$54,114.2	612	4,034	\$195.0
CAGR	3.6%	1.1%	3.8%	11.9%	10.7%	13.4%
Total Digital Media						
2001	71,722	828,284	\$71,624.8	394	2,616	\$116.1
2002	73,859	749,714	\$62,857.9	393	2,234	\$109.6
2003	74,417	726,390	\$62,108.3	401	2,464	\$119.0
2004	74,753	739,817	\$63,126.5	440	2,854	\$150.4
2005	76,794	763,464	\$67,920.9	556	3,719	\$180.9
2006	80,221	804,023	\$75,473.1	666	3,944	\$189.4
2007	84,843	847,022	\$82,813.5	668	4,381	\$220.3
CAGR	2.8%	0.4%	2.4%	9.2%	9.0%	11.3%

Source: Bureau of Labor Statistics

When looking at digital media employment for these two sectors across the country, it is no surprise that the largest share of employment in the software publishing sector is located in the State of Washington, where Microsoft is located. California follows with a concentrated segment of this industry in Silicon Valley. A very small share of software publishers are employed in Louisiana. Employment in custom computer programming is concentrated in states with large metropolitan areas, strong technology universities and/or states where the federal government or national defense industry has a strong presence. Again California dominates with nearly one-fifth of all those working in the segment employed there. Louisiana ranked 28th with a location quotient well below 1.

Table 29 – Concentration of Employment in Digital Media, 2007

Software publishers NAICS 5112			Custom Comp. Prog. Svcs. NAICS 541511		
State	Share	LQ	State	Share	LQ
Washington	18.9%	8.90	California	19.1%	1.64
California	17.0%	1.47	Texas	6.8%	0.91
Massachusetts	8.7%	3.51	Virginia	6.0%	2.29
Texas	6.9%	0.92	New York	6.0%	0.95
Colorado	5.0%	2.93	Florida	4.9%	0.82
Georgia	4.0%	1.35	New Jersey	4.8%	1.63
Oregon	3.6%	2.84	Ohio	4.2%	1.06
Florida	3.5%	0.58	Maryland	3.9%	2.12
North Carolina	2.7%	0.89	Illinois	3.8%	0.87
Michigan	2.6%	0.83	Massachusetts	3.8%	1.55
Louisiana (39)	0.1%	0.10	Louisiana (28)	0.7%	0.51

Source: Bureau of Labor Statistics

Combining the two segments, the table below shows the states with the largest location quotients in ERA’s defined digital media industry. Washington far exceeds that of other states. With a smaller employment base than California, it’s reliance on the digital media industry is much greater.

Louisiana’s location quotient is 0.39 indicating that the digital media industry is underrepresented in the state relative to its share of national employment in all sectors.

Table 30 – Top Location Quotients for Digital Media, 2007

	LQ
Washington	3.23
Massachusetts	2.13
Colorado	1.95
Utah	1.90
District of Columbia	1.89
Virginia	1.84
Maryland	1.60
California	1.59
New Hampshire	1.47
New Jersey	1.32
Louisiana (38)	0.39

Source: Bureau of Labor Statistics

Economic Impact of Louisiana’s Digital Media Industry

The State of Louisiana, in enacting the Digital Interactive Media Act in 2005, is encouraging the development of the digital media industry throughout the state. Although the original intention of the

legislation is to build the computer and video game industry, a digital media project can qualify for the credits if it meets the following criteria:

- It must involve a product that is intended for commercial use or distribution;
- The product must be capable of being distributed over electronic media, including file downloads over the internet;
- The product must involve electronic interactivity which allows users to interact with a computer controlled universe in order to achieve a goal or set of goals; and
- The product must contain an appreciable quantity of 3 of the following data types: text, sound, fixed images, animated images and 3-D geometry.

To date, 7 companies have applied for the credits and four applications have been approved and certified. Credits are awarded at 20% of qualifying in-state expenditures. The table below shows the 4 certified projects. Combined, more than \$2.7 million was spent in Louisiana on them generating approximately \$548,300 in tax credits.

Table 31 – Approved Digital Media Tax Credits

Company/Project	Estimated Total Budget	Louisiana Spending	Credits Earned
Future System Advisors			
Future System	\$16,000,000	\$1,225,316	\$245,063
TurboSquid			
Game Flood	\$804,493	\$201,865	\$40,373
Game Flood	np	\$872,374	\$174,475
Yatec, LLC			
Enchanted Gardens	\$565,837	\$441,724	\$88,378

np = not provided

Source: Louisiana Economic Development Office

As of January 2009, there are 15 projects awaiting certification worth an estimated \$52.3 million. Once certified, the amount of money spent in Louisiana will be determined and the associated tax credits awarded. At this point, there is no way to determine what share of the budget will be spent in Louisiana.

Table 32 – Pending Digital Media Tax Credits

Company/Project	Estimated Budget
Diamond Data Systems	
ALPS	\$500,000
ASOCC-NOP	\$1,000,000
BLITS	\$1,500,000
FAS	\$750,000
Godess	\$300,000
Net Centric METOC	\$2,500,000
NOP	\$1,500,000
GOPOPS.com, Inc.	
POPS	\$5,000,000
Nergyzed Entertainment, Inc.	
Black College Football	\$12,000,000
The "Doug Williams" Edition of BCFX	\$5,500,000
Drumline: The Video Game Experience	\$8,000,000
Stomp the Yard Video Game	\$8,000,000
Resurgent Interactive	
Enigma: Rising Tide	\$1,000,000
Enigma: Sink the Hood	\$4,400,000
Yatec, LLC	
Identity Quest	\$390,120

Source: Louisiana Economic Development Office

To better understand the types of companies applying for the digital media incentives in Louisiana and reflecting the broad definition of the digital media industry, the NAICS code are provided below followed by a brief company description, if available.

Table 33 – NAICS Classification of Companies Applying for Digital Media Tax Credits

Company	NAICS	Category
Diamond Data Systems	541512	Computer Systems Design Services
Future System Advisors	523930	Investment Advice
GOPOPS.com, Inc.		
Nergyzed Entertainment, Inc.	711190	Other Performing Arts Companies
Resurgent Interactive	443120	Computer and Software Stores
TurboSquid	541511	Custom Computer Programming Services
Yatec, LLC	339932	Game, Toy and Children's Vehicle Manufacturing

Sources: Dun & Bradstreet, InfoUSA

Firm profiles of companies applying for tax credits under the Digital Interactive Media Act:

- **Diamond Data Systems**, a subsidiary of Geocent, provides business solutions to clients in the fields of information technology, aerospace and defense manufacturing nuclear energy and others. Since 1992, Diamond Data Systems has delivered tailored IT solutions that positively impact the bottom line performance of its clients in business, government and scientific communities. Our practice includes the engineering of custom software, data integration, IT

contracting and outsourcing, network engineering, enterprise storage, security systems and the provision of a full range of software and hardware tools from vendors such as Microsoft, Oracle, Citrix, IBM, HP and Cisco, to name a few.

- **Future System Advisors**, located in Baton Rouge, develops wealth management planning systems and life insurance product models. They got credits to develop software to help with pricing life insurance. It is classified as an investment advice firm, NAICS 523930.
- **Nerjyzed Entertainment, Inc.**, founded in 2003, classifies itself as a digital entertainment media development and publishing company. In 2007 they launched the computer game “Black College Football Experience.”
- **Resurgent Entertainment** recently expanded by purchasing Tesseract Games Inc., of Eugene Oregon, a computer game development company. In 2008 they had plans to hire 20 additional programmers in Baton Rouge as part of developing an online multiplayer naval warfare game.
- **TurboSquid** is an online marketplace for artists to publish and sell their products (mostly 3D content), exchange ideas and interact with their customers. As of June 2008, they had more than 200,000 unique products for sale on their site. They first opened in 2000.
- **Yatec, LLC** is a video game and media development studio in Baton Rouge. The company was founded in 2006 in the aftermath of Hurricanes Katrina and Rita. They specialize in crafting casual and serious game experience and also offer services in web design, custom animations, 3D modeling, simulations and training programs. Two popular games include Enchanted Gardens and Identity Quest.

The table below provides the economic and fiscal impacts of the 4 digital media projects that have been certified to date. The \$1.2 million in Louisiana spending on qualified projects during 2007 yielded a total economic impact of \$2.1 million in the state. The spending supported 15 jobs in Louisiana paying an average wage of nearly \$41,000.

Table 34 – Economic Impacts of Spending Associated with Digital Media Tax Credits

	2006	2007
Output (thousands)		
Direct	\$1,516.0	\$1,225.3
Indirect + Induced	\$868.6	\$903.5
Total	\$2,384.6	\$2,128.8
Employment		
Direct	16	7
Indirect + Induced	8	8
Total	24	15
Earnings (thousands)		
Direct	\$775.5	\$322.9
Indirect + Induced	\$262.2	\$295.2
Total	\$1,037.7	\$618.1
Total Value Added (thousands)		
Direct	\$808.5	\$317.6
Indirect + Induced	\$468.2	\$466.6
Total	\$1,276.7	\$784.2
Taxes (thousands)		
Federal	\$184.0	\$114.3
State	\$59.5	\$38.0
Local	\$31.6	\$20.1
Total	\$275.1	\$172.4

Cost Benefit Analysis

The impacts associated with the State’s investment in digital media projects are presented in the following table. A relatively new industry and tax credit, the State Louisiana issued \$245,100 in tax credits for digital media projects during 2007, 20 percent of the \$1.2 million in certified expenditures. This generated a total economic benefit to the State of \$2.1 million, or \$8.69 for every dollar in tax credits, the highest return among the entertainment industry tax credit programs, an increase of more than 10 percent since 2006. The estimated \$245,100 in tax credits supported the creation of 15 jobs (direct + indirect) throughout the state paying an average annual salary of \$40,670. Each job generated came at the cost of \$16,120 in tax credits during 2007. Total value added was more than \$784,200, averaging \$3.20 per tax credit dollar issued. The State of Louisiana directly received \$38,000 in taxes and fees resulting from the \$2.1 million in total economic output. As with film production, there is a gap between the number of tax credits issued and those utilized.

Table 35 – Benefits and Costs of the Digital Media Tax Credits

	Digital Media	
	2006	2007
Benefits		
Economic Output (thousands)	\$2,384.5	\$2,128.9
Employment (jobs)	24	15
Earnings (thousands)	\$1,037.7	\$618.1
Total Value Added (thousands)	\$1,276.6	\$784.2
State Taxes (thousands)	\$59.5	\$38.0
Local Taxes (thousands)	\$31.6	\$20.1
Costs		
Based on Tax Credits to be Issued (thousands)	\$303.2	\$245.1
Based on Tax Credits Claimed (thousands)	\$22.0	\$30.0
Net State Fiscal Impact		
Based on Tax Credits to be Issued (thousands)	-\$243.7	-\$207.1
Based on Tax Credits Claimed (thousands)	\$37.5	\$8.0

Sources: Louisiana Economic Development Department, Louisiana Department of Revenue, Economics Research Associates

Regional Interviews

While the digital media credit and focus in Louisiana is new compared to the State’s film program, there are emerging initiatives targeted to this segment. Focus products at this time are generally geared towards video games and interactive professional software applications (GIS, oil and gas exploration applications, etc.). An important emphasis in current efforts related to digital media are workforce and program development. Much like previous efforts in film crew base development, it is well recognized that digital media will require a similar effort in workforce and infrastructure development.

VIII. Infrastructure Development in Louisiana

Much of the physical infrastructure necessary to build and support the entertainment industry in Louisiana was underdeveloped prior to passage of various tax credit initiatives. In addition to incentives to encourage film productions and sound recording to take place in Louisiana, credits were implemented to build or improve the infrastructure in order to create a sustainable entertainment industry in the state. Further developing the infrastructure needed to support the entertainment industry will make Louisiana even more attractive to outside production companies. In addition, having state of the art production and post-production facilities in place will encourage a larger share of project budgets to be spent in Louisiana.

Current Infrastructure

According to LED data, there are currently 8 film production facilities in Louisiana with 18 soundstages. The total stage space is more than 337,000 square feet. The largest is Mansfield Studios in Shreveport. There are 3 stages providing more than 120,000 square feet of stage space. In addition there are 75,000 square feet of office space. The facility has 6 full-service production suites and multiple vendor support services available. There is ample parking and storage on site. Mansfield has been the site for productions including *The Great Debaters*, *Harold and Kumar 2*, *The Killing Room*, *Soul Men* and *Welcome Home Roscoe Jenkins* among others.

Table 36 – Film Production Facilities in Louisiana

Facility	Location	# of Stages	Stage Space (ft ²)	Office/Other Use (ft ²)
Mansfield Studios	Shreveport-Bossier	3	120,000	75,000
Celtic Media Centre	Baton Rouge	4	67,600	25,000
Stageworks of Louisiana	Shreveport-Bossier	2	52,000	10,000
Nims Center	Harahan (Jefferson)	3	37,000	50,000
Stage West	Shreveport-Bossier	2	31,500	15,000
The Louisiana Soundstage	LaPlace	2	25,000	9,000
LAMP/LMS	Baton Rouge	1	4,500	22,000
Hooperwood	Baton Rouge	1	NA	NA
Total		18	337,600	206,000

NA = Not Available

Source: Louisiana Economic Development Department

In addition to these facilities is the Louisiana Wave Studio located in Shreveport, a state of the art water filming facility. Constructed in 2005, it was first used for the film, *The Guardian*. The studio is home to the only computer controlled, precision wave-making machine of its kind. It is capable of

generating up to 13 different types of 2 to 8 foot waves and a wide variety of wind and water effects. The tank is 100 feet long, 80 feet wide and 8 feet deep and can contain up to 750,000 gallons of water.

According to data gathered from Louisiana Economic Development’s Office of Entertainment Industry Development web page, there are 57 sound recording studios located throughout Louisiana as shown in the table below, almost half (25) have film scoring capabilities. The largest concentration of sound recording studios is in New Orleans.

Table 37 – Sound Recording Studios in Louisiana

Location	Recording Studios
New Orleans	16
Baton Rouge	8
Shreveport	4
Metairie	3
Covington	2
Houma	2
Lafayette	2
Slidell	2
St. Rose	2
Other	16
Total	57

Source: Louisiana Economic Development Department

Proposed Infrastructure Development

According to the Louisiana Economic Development Department, there are several applications pending certification for infrastructure development which were submitted before the program expired. The table below shows the most current information as of January 2009. Combined, the estimated budgets for the 54 proposed film studio projects are worth nearly \$3.2 billion. The 7 proposed music studios are worth an estimated \$881,500 if developed.

Table 38 – Proposed Infrastructure Development

Project Name	Estimated Budget	Project Name	Estimated Budget
Film Infrastructure Development Projects			
ACME Film Productions	\$1,061,400	Moxie Media Studios	\$1,127,400
Armada Studios II	\$20,000,000	NOLA Film Logistics	\$766,600
Available Lighting	\$640,000	NOLA Studios	\$2,530,000
Beven Street Film Studios	\$16,285,000	NOLA Studios - Webb St.	\$1,730,500
Blackhawk Prod Veh.	\$376,000	Orleans Studios	\$42,000,000
Cinelease	\$1,900,000	Ormaq Studios	\$16,300,000
Cineworks	\$2,200,000	Paskal Lighting	\$4,030,000
Digilou	\$1,000,000	Rabid Stewdio	\$5,563,000
Digital FX	\$2,621,500	Red Pictures	\$370,000
Emerald Bayou Studios	\$82,464,500	Red Stick Studios	\$665,500,000
Event Producers	\$1,021,160	River Road Creative	\$619,900
Film Fleet 2008-2009 Expansion	\$325,000	Road Wrangler	\$337,500
Fusion Studios	\$16,487,080	Robert Berning Productions	\$883,100
Hammond Studios	\$845,224,000	Robinson Film Center	\$7,300,000
Hanna Brothers Catering	\$1,096,200	Second Line Studios	\$32,000,000
Hollywood Trucks – 2, 3 and 4	\$15,000,000	Seven Arts Post	\$14,000,000
LA Film Institute	\$500,700,000	Sound Stage One	\$10,000,000
LA Film Studio	\$87,258,800	Storyville - New Orleans	\$310,000
La Media Productions	\$2,606,100	Studio City Louisiana	\$495,000,000
LA Post	\$682,800	Studio Operations	\$12,000,000
Le Salon Des Lumieres	\$894,000	Studios @ Riverton	\$61,000,000
Louisiana Media Company	\$37,455,300	Summer Grove Studios	\$62,500,000
Loyola Audio Visual Studio	\$450,000	Swelltone Labs	\$4,997,000
Maison Film Works	\$1,300,000	The Film Compound	\$2,500,000
Mansfield Studios	\$22,922,100	United Studios	\$13,000,000
Mardi Gras Studios	\$62,000,000	Wish List	\$1,422,200
Music Infrastructure Development Projects			
Balance Productions Recording Studio	\$550,000	Dockside Studio Renovation	\$70,000
Blacklight Music LLC	\$85,000	MasterDigital Corporation	\$43,500
Boomboxx Recording	\$58,000	Socket Studio	\$60,000
Carlo Ditta Productions	\$15,000		

Source: Louisiana Economic Development Department

Economic Impact of Louisiana’s Infrastructure Development

Credits for recording studio development are outlined in the Sound Recording Investor Tax Act. Developers must spend a minimum of \$15,000 in a year in Louisiana to qualify for the tax credits. Eligible expenses include the cost of purchasing equipment such as microphones or hard drives, or the cost of investing in new infrastructure such as building recording studios. The table below shows the certified projects in Louisiana.

Table 39 – Certified Infrastructure Projects in Louisiana

	Location	Certified Spending
Film Projects		
2005		
Celtic Media Center	Baton Rouge	\$1,934,500
LA Post	Baton Rouge	\$76,000
WYES	New Orleans	\$258,300
2006		
Celtic Media Center	Baton Rouge	\$2,382,400
Film Factory	New Orleans	\$15,066,800
Hooperwood	Baton Rouge	\$1,519,700
LA Post	Baton Rouge	\$167,100
Louisiana Media Services	Baton Rouge	\$1,692,600
Louisiana Wave Studio/Tank	Shreveport	\$1,024,400
Stage West	Shreveport	\$2,058,000
StageWorks	Shreveport	\$1,404,000
WYES	New Orleans	\$3,455,700
2007		
Celtic Media Center	Baton Rouge	\$13,436,600
Hooperwood	Baton Rouge	\$204,300
La Media Productions	Baton Rouge	\$2,414,400
LA Post	Baton Rouge	\$285,900
Stage West	Shreveport	\$351,400
Stage Works	Shreveport	\$225,400
WYES Telepix Project	New Orleans	\$596,300
Music Projects		
2006		
Balance Productions Recording Studio LLC	Balance Productions	\$742,700
2007		
Axistudio	Axis	\$35,100
Ground Floor Productions	The Grace Marie	\$220,000
Listen Up! LLC	Listen Up!	\$900,000
The Music Place LLC	The Music Shed	\$311,200
The Music Place LLC	New Orleans Scoring Stage	\$2,500,000

Source: Louisiana Economic Development Department

The table below provides the economic impacts associated with the physical infrastructure tax credits. In 2007, qualified projects with certified expenses were \$17.5 million for film infrastructure and \$1.5 million for music infrastructure. The total economic impact in 2007 was more than \$30 million and supported 257 jobs throughout Louisiana, 160 of which were directly related to the infrastructure spending. Total value added in 2007 was approximately \$14.1 million, averaging nearly \$55,000 per job supported by state certified infrastructure projects.

Table 40 – Economic Impacts of Certified Physical Infrastructure Projects

	Film Studios			Music Studios	
	2005	2006	2007	2006	2007
Output (thousands)					
Direct	\$2,268.8	\$28,770.5	\$17,514.2	\$742.7	\$1,466.3
Indirect + Induced	\$1,351.3	\$17,314.6	\$10,699.8	\$447.0	\$895.8
Total	\$3,620.1	\$46,085.2	\$28,214.0	\$1,189.7	\$2,362.1
Employment (jobs)					
Direct	19	244	148	6	12
Indirect + Induced	12	147	89	4	8
Total	31	391	237	10	20
Earnings (thousands)					
Direct	\$877.0	\$11,121.4	\$6,770.2	\$287.1	\$566.8
Indirect + Induced	\$448.9	\$5,765.2	\$3,575.2	\$148.8	\$299.3
Total	\$1,325.9	\$16,886.6	\$10,345.4	\$435.9	\$866.1
Total Value Added (thousands)					
Direct	\$964.9	\$12,235.4	\$7,448.4	\$315.9	\$623.6
Indirect + Induced	\$695.5	\$8,929.4	\$5,531.3	\$230.5	\$463.1
Total	\$1,660.3	\$21,164.9	\$12,979.7	\$546.4	\$1,086.7
Taxes (thousands)					
Federal	\$250.4	\$3,148.9	\$1,904.0	\$81.3	\$159.4
State	\$72.2	\$907.9	\$548.9	\$23.4	\$46.0
Local	\$38.3	\$481.4	\$291.1	\$12.4	\$24.4
Total	\$360.9	\$4,538.2	\$2,744.0	\$117.1	\$229.8

For every dollar spent on infrastructure in Louisiana, \$0.60 is generated in indirect and induced spending for a total impact of \$1.60.

Cost Benefit Analysis

During 2007, there were 7 film and 5 music infrastructure projects with qualifying expenditures that were certified. The total expenditures made in Louisiana totaled \$17.5 million and \$1.5 million respectively in 2007. The table below provides the total economic impacts associated with the physical infrastructure tax credits. The State issued \$7 million in tax credits for qualified film studio projects and \$366,600 for music studios during 2007. The total economic impact was more than \$30 million and supported 260 jobs throughout Louisiana, 160 of which were directly related to the infrastructure spending. Total wages incurred were \$11.2 million, averaging nearly \$43,740 per job. For every dollar spent in tax credits for an infrastructure project in the film industry, \$4.03 was generated in the economy. This was much higher for music infrastructure projects at \$6.44. The tax

credits returned approximately \$595,000 in state tax revenue. The total value added of the state investment was more than \$14 million, averaging \$1.91 per tax credit dollar issued.

Table 41 – Benefits and Costs of the Infrastructure Tax Credits

	Film Infrastructure			Music Infrastructure	
	2005	2006	2007	2006	2007
Benefits					
Economic Output (thousands)	\$3,620.1	\$46,085.2	\$28,214.0	\$1,189.7	\$2,362.1
Employment (jobs)	30	390	240	10	20
Earnings (thousands)	\$1,326.0	\$16,886.6	\$10,354.4	\$435.9	\$866.1
Total Value Added (thousands)	\$1,660.3	\$21,164.9	\$12,979.7	\$546.4	\$1,086.7
State Taxes (thousands)	\$72.2	\$907.9	\$548.9	\$23.4	\$46.0
Local Taxes (thousands)	\$38.3	\$481.4	\$291.1	\$12.4	\$24.4
Costs					
Based on Tax Credits to be Issued (thousands)	\$907.5	\$11,508.2	\$7,005.7	\$185.7	\$366.6
Net State Fiscal Impact (thousands)	-\$835.4	-\$10,600.3	-\$6,456.7	-\$162.2	-\$320.6

Sources: Louisiana Economic Development Department, Economics Research Associates

Regional Interviews

Recent improvements in film infrastructure have been significant throughout the state and the recent infrastructure tax credit appears to have been a primary enabler of these improvements. Shreveport likely experienced the most dramatic improvement in infrastructure and Baton Rouge has also benefited noticeably. Just recently, New Orleans has received two new purpose built soundstage developments which are in the process of completion. There are reportedly several projects (studios and post production facilities) which were in the conceptual stage but unable to meet the sunset provision for infrastructure tax credits.

IX. Entertainment Industry Incentive Programs

In this section, ERA reviews film tax credit incentives currently available in other states. Such production tax credits are frequently used by state or local governments as a temporary measure that jumpstarts specific businesses or industries, with the rationale being that once the industry has developed, it will generate tax revenues that match or exceed those of the tax credits provided.

Types of Incentives for Film Production

Direct Production Incentives

Direct production incentives in other states – both new and revised – are making for an increasingly competitive landscape. The table that follows lists the seven most common types of direct production incentives and provides a brief description of each. In general, the most common types of incentives packages apply either tax credits or rebates to local qualifying expenditures. There is an important difference. A rebate is money back from the state, whereas a tax credit is a reduction in the filmmaker's overall tax liability.

The difference between a refundable tax credit and a transferable tax credit is a crucial one, but it is often overlooked. Refundable tax credits are far more lucrative to filmmakers. When productions have tax liability, a refundable tax credit entitles them to a check from the state for their out-of-pocket liability. In the instance of a transferable credit, however, the production company must sell its remaining tax credits to other taxpayers (often wealthy individuals or companies).

This is often less desirable to filmmakers for a few reasons. First, buyers of these transferable tax credits do not pay the full value of the tax credits – they buy them at a discount. Second, the process involves accountants, lawyers and other middlemen, who also must be paid for their time. Third, the process can be an administrative burden and often takes many months for the production to claim the proceeds of their remaining tax credits. Every step in this process chips away some value from the incentive. This contrasts with a refundable tax credit, whereby productions often get a check for their full liability within 30 days of ending their production.

The issue with the grants is that, unlike a tax credit, they provide a limited sum of money available on an annual basis. Therefore, productions starting later in the fiscal year may be out of luck if funding has been depleted.

Table 42 – Types of Direct Film Production Incentives

Incentive	Description
Production Grants	A production grant is directed toward a percentage of the total production cost of a project spent. This type of incentive differs from a (refundable) production tax credit since it can be disbursed to the production company prior to the start of filming a project, thereby reducing financing costs. In Canada, such an incentive is only available at the provincial level in Alberta.
Production Tax Credits	Production tax credits are tax credits that are generally based on a percentage of labor costs, and/or a combination of materials, services and other costs related to production. These credits may or may not be transferable. These credits usually have a minimum state/provincial spend, may be capped per production or per employee, might require a minimum percentage of the total production be shot in the state/province and generally apply to certain types of productions (e.g., feature films, television, commercials, etc.).
Labor Rebates	Labor rebates differ from labor-based production tax credits since they allow for funds to be dispersed during production. In this respect they are similar to grants and do not require a waiting period.
Regional Incentives	Regional incentives are generally offered for film and television projects that are undertaken outside of a metropolitan area and provide a "bonus" production or labor tax credit.
Training Incentives	Similar to regional tax credits, a training incentive acts as a bonus.
Digital Incentives	The newest type of incentives being offered, digital incentives provide a tax credit for the production of digital images.
Investments in or Loans to Productions	Select jurisdictions may provide investments or loans to selected types of production projects.

Source: ERA

Indirect Production Incentives

There are three principal types of indirect production incentives that some states offer as follows:

- **Sales and use taxes:** Filmmakers spend money in state on goods and services that are subject to state and local sales taxes. These can be waived in two forms. First, the production companies sometimes get a state-certified coupon that waives sales tax at the point of sale. Alternatively, states may refund sales tax after filmmakers submit expense reports detailing qualified expenditures;
- **Hotel taxes:** All out-of-state labor – or even out-of-area labor – generally requires overnight stays in hotels. Some states waive the hotel tax for qualifying stays. A qualifying stay generally requires at least 30 days of consecutive nights and the tax credit or rebate is applied either to the

total stay, or to all nights past the required minimum. Although this benefits feature filmmakers, it has the effect of incentivizing out-of-area labor;

- **Fee-Free Filming:** Many states provide state parks, municipal and state buildings and other public property available to filmmakers free of charge. It is also common for public employees like police to be fee-free as well.

Current U.S. Production Incentives

Incentives in other states – both new and revised – are making for an increasingly competitive landscape. A comprehensive table with current types of incentives being offered by state is given below. This chart includes the estimated state population, gross state product (GSP), amount of the production incentive, indicates whether an infrastructure tax credit is available, any wage withholding credits and the availability of indirect production incentives like sales and lodging tax exemptions. Only two states in the U.S. currently do not offer any type of production incentive – direct and indirect.

Some restrictions and qualifications apply individually to each state. Most states require a minimum qualifying local expenditure. For example, Mississippi's program offers a cash rebate of 20 percent of in-state production costs; 20 percent of payroll paid to non-residents; and 25 percent of payroll to residents with a minimum local spend of \$20,000.

Annual state compensation/funding and per project caps are also frequently put in place. For example, Mississippi's program places a cap of \$1 million on resident and non-resident payroll and an \$8 million cap per project. A statewide fiscal year cap of \$20 million is also in place. The types of productions that qualify for these incentives also vary accordingly. For instance, Florida's 15 percent rebate applies to everything from film, television and commercials, to industrial videos, promotional videos, digital media effects productions and reality television series.

Among those 39 states with direct production incentives in place, transferable tax credits (27 percent), cash rebates (25 percent) and refundable tax credits (20 percent) and wage/labor credits (18 percent) are the most common type of incentive. In addition, six states currently offer incentives for infrastructure. A total of 10 states currently offer indirect incentives only. Again, Arkansas and Delaware are the only two states that do not offer any form of incentive at this time.

Table 43 – Current State Incentive Programs

State	Production Tax Credit	Caps per Project/Year	Infrastructure Tax Credit	Wage/Withholding Credits	Sales Tax Exempt.	Lodging Tax Exempt.
Alabama						✓
Alaska	30% (T)	Aggregate tax credits ≤ \$100 million		10%, plus 2% rural	No Tax State	
Arizona	20-30% (T)	\$7 million/\$50 million	15% of base investment		✓	
Arkansas						
California ^p					✓	✓
Colorado	10% CR	\$600,000				✓
Connecticut	30% (T)		10-20%		✓	✓
Delaware						
Dist. of Columbia	10% G	\$1.6 million for program			Grant may apply	
Florida	15% CR + bonuses	\$5 million for program			✓	
Georgia	20% (T) + 10% bonus				✓	
Hawaii	15%-20% ®	\$8 million per project				
Idaho	20% CR	\$500,000 per project			✓	✓
Illinois	20% (T)			15%		✓
Indiana	15% ®	\$5 million annual funding			✓	✓
Iowa	25% (T)	Investor's pro rata share	25% (T)			✓
Kansas	30%	\$2 million per year				✓
Kentucky					✓	✓
Louisiana	25% (T)		40% (T)	10%		
Maine				10%-12%	✓	✓
Maryland	25% CR	\$4 million for FY 08-09			✓	
Massachusetts	25% ® (T)			25%	✓	
Michigan	40-42% ® & T		25% (T)	30%		✓
Minnesota	20% CR				✓	✓
Mississippi	20% CR	\$8 million per project		20-25%	✓	
Missouri	35% (T)	\$4.5 million annual funding				
Montana	9% ®			14%	No Tax State	✓
Nebraska ^p						✓
Nevada						✓
New Hampshire					No Tax State	
New Jersey	20% (T)	\$10 million per year			✓	✓

Table 43 continued

State	Production Tax Credit	Caps per Project/Year	Infrastructure Tax Credit	Wage/Withholding Credits	Sales Tax Exempt.	Lodging Tax Exempt.
New Mexico	25% ®	\$5 million for out of state			✓	
New York	30% ®	\$65 million in 2008	4-5% eligible investment base		✓	
North Carolina	15% ®	\$7.5 million per feature			✓	✓
North Dakota						✓
Ohio						✓
Oklahoma	5-15% CR	\$5 million per year			✓	
Oregon	20% CR			16.2%	No Tax State	✓
Pennsylvania	25% (T)	Annual cap of \$75 million				✓
Rhode Island	25% (T)	Annual cap of \$15 million				
South Carolina	30% CR	\$5.5 million for FY 07-08		10-20% CR	✓	✓
South Dakota					✓	✓
Tennessee	13-17% ® + bonuses				✓	✓
Texas	5% G + bonus	\$2 million per feature, \$2.5 million per TV, \$200,000 per commercial		includes resident wages	✓	✓
Utah	15% CR	\$500,000 per project, \$5.5 million FY 09			✓	✓
Vermont					✓	✓
Virginia	CR - amt. discretionary	\$200,000 for FY 09			✓	✓
Washington	20% CR	Annual cap of \$3.5 million			✓	✓
West Virginia	27% (T) + bonus	Annual cap of \$10 million			✓	✓
Wisconsin	25% ®			includes resident & non-resident wages	✓	
Wyoming	12-15% CR	Annual cap of \$2 million				✓

Yellow highlight indicates states with no direct production incentives.

P = pending legislation; ® = refundable tax credit; (T) = transferable tax credit; CR = cash rebate; G = grant
 Sources: Individual film commissions; Entertainment Partners (September 30, 2008); and Economics Research Associates

States with Aggressive Film Incentive Programs

Here, ERA reviews some selected states which have aggressive film incentive programs. ERA would also consider Louisiana among this class of state incentive program. Details of five U.S. states that are arguably among the most aggressive in the U.S. – New Mexico, Connecticut, Georgia, Michigan and New York – appear in the following table along with an analysis of their respective strengths and constraints shown later.

Similar to Louisiana, New Mexico has a “first mover” advantage, having been one of the first states to enact film incentives in 2002. The state currently has 13 soundstages with a total of approximately 200,000 square feet of space and an additional three new studio facilities with 21 additional stages have been proposed. New Mexico, along with Michigan which copied parts of New Mexico’s incentive program, has a state-level incentive that offers 50 percent reimbursement of wages for on-the-job training of New Mexico residents in advanced below-the-line crew positions, in addition to a film investment loan package.

Table 44 – U.S. States with Aggressive Film Incentives

State	Description/Components	Types of Qualified Productions
Connecticut	(1) A transferable tax credit that is equal to 30% of preproduction, production and post-production expenses incurred in Connecticut, with a minimum spend of \$50,000 per year or \$500,000 per year for an interactive website. (2) Salaries for both resident and non-resident cast and crew are eligible, up to a maximum of \$15 million per person, provided they work wholly or partially in Connecticut. (3) A 30% transferable digital animation credit. (4) Transferable infrastructure tax credit is available at: (a) 10% of investment for projects between \$15,000 and \$150,000; (b) 15% for projects between \$150,000 and \$1 million; and (c) 20% for projects in excess of \$20 million.	Motion pictures, documentaries, TV series, TV mini-series, long-format specials, videos, music videos, certain sound recordings, video games, commercials, infomercials, interactive websites, interactive games, interactive television, and anything created for exhibition and distribution to the general public for the eventual sale of a product or qualified production.
Georgia	(1) 20% transferable tax credit, which applies to both residents and non-residents, with a salary cap of \$500,000/person per project. (2) An additional incremental 10% tax credit is available if a company utilizes a Georgia promotional logo.	Feature film, TV series, video game, commercial and music videos.

Table 44 continued

State	Description/Components	Types of Qualified Productions
Michigan	(1) 40% refundable tax credit, across the board on Michigan expenditures, with an extra 2% if filming in one of the 103 Core Communities in Michigan. (Labor and Crew: 40%-42% Resident Below the Line. 40%-42% Above the Line regardless of domicile. 30% Non-resident Below the Line). ² (2) A 25% tax credit on infrastructure investments of > \$250,000, up to \$10 million. (3) A 50% refundable job training tax credit to provide on-the-job training for Michigan residents in advanced below-the-line crew positions on qualified productions. (4) A 0% investment loan program is available for up to \$15 million per project, with back end participation in lieu of interest.	Features, documentaries, television projects, video games, interactive games, internet programming, sound recordings, and trailer or commercial promoting a state certified qualified production.
New Mexico	(1) 25% tax rebate on all direct expenditures, including labor ¹ to out-of-state actors, that are subject to taxation by the state; (2) A 0% investment loan program is available for up to \$15 million per project, with back end participation in lieu of interest (averaging 7 to 20 percent), for productions that: (a) shoot 85 percent in New Mexico; and (b) spend 60% of below-the-line payroll on state employees. (3) A 50% wage payback for productions willing to give-on-the-job training to New Mexico residents. (4) Sales tax exemptions are also available, but the production may benefit from either the gross receipts tax deduction/sales tax exemption or the 25% refundable tax credit, but not from both.	Feature films, television, national and regional commercials, (proof of national or regional broadcast required), documentaries and commercial audiovisual product.
New York	(1) 30% refundable tax credit on qualified expenditures made by features and TV projects that shoot for at least one day and for at least 75% of their total studio time, at a qualified production facility. (2) Made in New York Scheme provides an additional 5% tax credit for productions shooting in the five boroughs of New York City. (3) Commercial Production Tax Credit ranging from 5% to 20%. ² (4) An investment tax credit provides 4-5% of the investment base. ³	Feature films and television projects only for the 30% refundable tax credit.

1. Out of-state crew do not qualify but housing and per diem costs do. Actors qualify under a separate tax structure. Amounts paid to out-of-state actors in excess of \$20 million are not considered.
 2. There are three types of program. The Growth Credit program provides a refundable 20% tax credit based on year-to-year growth in a qualified production company's qualified production costs.
 3. For qualification, the property must contain at least one soundstage > 7,000 SF, which is principally used as a film production facility, and the taxpayer must provide > 3 qualified services (i.e. lighting, grip, food, security, heating, A/C, broadband, etc.).

Sources: Individual film commissions (September 2008); and Economics Research Associates

Table 45 – Strengths and Constraints of Aggressive Film Incentives

State	Strengths Appeal to Producers	Disadvantages/ Constraints for Producers
Connecticut	The \$15 million wage cap allows for bigger stars and above-the-line talent. There is no per-production or annual cap and no minimum number of in-state filming days required. Incentive covers a variety of film product.	There are not as many buyers for tax credits in Connecticut as there are in some other states. From January 1, 2009 only 50% of eligible cost incurred outside Connecticut will qualify. From January 1, 2012, no costs incurred outside the state will qualify.
Georgia	Eliminates the previous multi-tier incentive and is now a flat 20% incentive. The incentive applies to both local and out-of-town talent. No project or funding caps. There is an incremental 10% credit (up to 30%) for productions that display the state’s promotional logo.	Salary cap of \$500,000 per person.
Louisiana	No per production or annual cap exists on the production incentives. The program has improved since its inception in 2002. A well-established infrastructure for monetizing the credits now exists. Credits can be sold for up to 84 cents on the dollar, and some local banks will advance funds against the credits.	For purposes of the additional 10% tax credit for Louisiana resident hires, the production cannot earn credits on any one Louisiana resident’s salary over \$1 million.
Michigan	Current the largest film production incentive offered by any state. There is no per-project or annual cap.	Wages costs are currently capped at \$2 million per person/production, so a major star's salary would not qualify. Michigan currently has a limited crew base and infrastructure. There is no other cap and no sunset.
New Mexico	This refundable tax credit functions like a refund on the full amount of the expenditure, including any taxes. Actor salaries are eligible up to a total of \$20 million paid to out-of-state actors. There are no caps, minimum spend/shoot requirements and no sunset clause. with no minimum spend requirement, even small productions can apply.	The script cannot be offensive in nature. The rebate also does not apply to out-of-state above-the-line talent other than actors and stunt persons and thereby excludes non-local directors and producers.
New York	The incentive was recently raised from 10% to 30% in April. The incentives were previously paid over two years, but are now 100% payable in the year in which the project is completed. Incentivizes the use of stages, meaning that New York stages are now competitive with those in Canada, especially now that the US dollar is in decline.	The incentive does not include above-the-line costs. It has also run out of funding.

The Effectiveness of Film Incentives

In 2005, the Ministry of Economic Development in British Columbia commissioned a report to analyze the impact of tax credits in various U.S. and Canadian states/provinces. Their analysis reviewed production spending growth both before and after the introduction of tax credits.

It was found that average annual production spending in Canadian provinces was consistently strong before the introduction of tax credits. The opposite was true for selected U.S. states – Louisiana, New Mexico, Illinois and Hawaii – prior to the introduction of tax credits. With the exception of Hawaii, these states all experienced negative annual growth before the advent of tax credits according to the study. Following the introduction of tax credits, however, production spending increased significantly. At least by this measure, such programs have often met with success.

The opposite was true in the Canadian provinces, all of which experienced flat or negative growth following the introduction of tax credits. This can be partially attributed to the fact that Canada already had a competitive advantage due to: (a) lower exchange rates; (b) lower labor rates, even in U.S. dollars; and (c) the existence of a skilled crew base, except in the Prairie provinces, which have added labor training provisions.

The introduction of tax credits, however, had a significant impact on states such as Louisiana, New Mexico and Illinois. It should be noted, however, that these states had significantly less production spending, prior to the introduction of tax credits, compared to Ontario and British Columbia. Therefore, one or more mid- or large-scale productions could considerably change the industry's rate of growth in such states.

For the short term, as in the case of states such as Louisiana, film tax credits do attract film production and create jobs in states that have little or no film industry. Revenues generated by what is often referred to as the "multiplier effects" can partially reduce losses. Film producers can earn profits, pay wages and purchase goods and services from suppliers. This generates additional economic activity. In turn, this activity generates revenues ranging from personal income tax, the general sales tax and property tax. At the same time, tax incentives can cost states considerable foregone tax revenue since they may not necessarily "pay for themselves". Film tax credits can also benefit firms not engaged in production or that would have filmed locally anyway.

Table 46 – Summary of Existing U.S. Film Incentive Programs, 2008

	Total	% of US	% of Incentive
States with Direct Incentives¹			
Direct Production Co. Tax Credits	39	76%	Range (State)
Wage/Labor Credits/Rebates ²	10	20%	10% (Alaska, Maine) - 30% (Michigan)
Refundable Tax Credits	10	20%	9% (Montana) - 42% (Michigan) ³
Transferable Tax Credits	14	27%	20% (Arizona, Georgia, Illinois, New Jersey) - 42% (Michigan) ³
Cash Rebates	13	25%	5% (Oklahoma) - 30% (South Carolina)
Grants	2	4%	5% (Texas) -10% (District of Columbia)
Infrastructure Incentives	6	12%	4% (New York) - 40% (Louisiana) ⁴
States without Direct Incentives			
Direct Production Co. Tax Credits	12	24%	
Production Incentives and/or Other Minor Incentives	2	4%	
Direct Production Incentives but with Other Minor Incentives ⁵	10	20%	

1. Includes the District of Columbia

2. Includes specific labor incentives. Eligible qualifying spend may or may not include resident labor. For example, under the Wisconsin Film Incentive program, there are three types of expenditures eligible to earn tax credits under this program: salaries or wages paid to WI residents; production expenditures; and Wisconsin sales tax.

3. Michigan offers refundable and transferable business tax credits or non-refundable, non-transferable income tax credits.

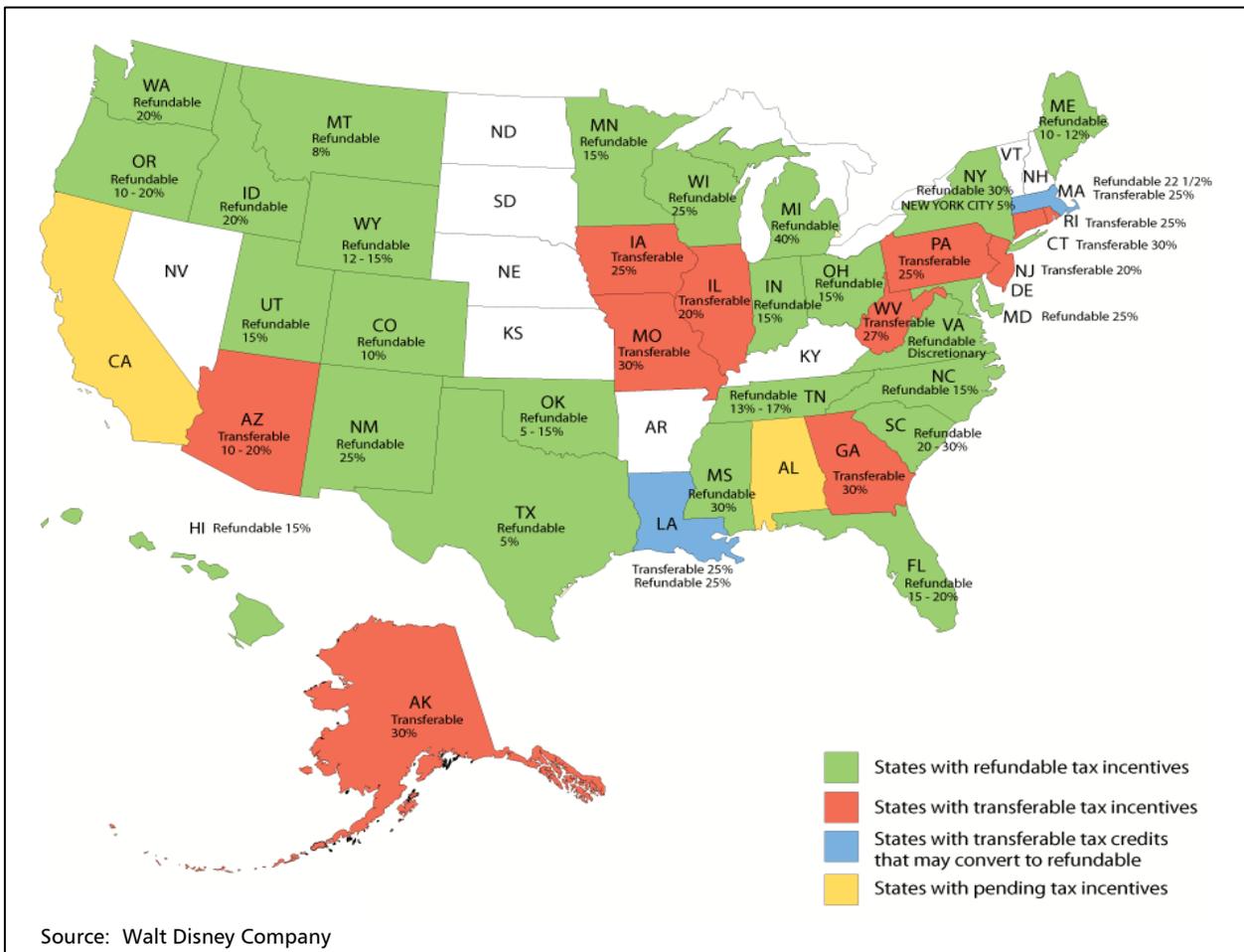
4. Infrastructure investment credit is set to expire on December 31, 2008; the investor tax credit rate decreases to 20% for projects approved after June 2010 and to 15% for those approved after June 2012.

5. Includes sales tax and hotel exemptions.

Source: Entertainment Partners (September 2008); and ERA

The study in British Columbia concluded that the opportunity cost associated with the tax credits in that province was CD \$45 million. In other words, the study concluded that there would be a net tax revenue gain of CD \$45 million if the tax credits were eliminated. Despite these findings, the province British Columbia recently went ahead and raised their tax credits.

Figure 5 – Film Tax Incentives by State



Other Incentives

In addition to the incentives that many states already give to the film production industry, some states have begun expanding their incentive base to include complimentary industries such as music and digital media. Louisiana was one of the first states to offer tax breaks for film production beginning in 2002. Since then 40 other states have developed incentive programs. Connecticut, Florida, Georgia, Hawaii, Louisiana, Maine, Maryland, Michigan, Minnesota, Tennessee, Texas and Wisconsin are currently the only states that have expanded incentives to the digital media industry, video game production or some part of the music industry but like incentives to the film industry, though more may follow suit in the future.

Table 47 – U.S. States with Digital Media and Music Related Incentives

State	Description/Components	Types of Qualified Productions
Connecticut	(1)Spend in excess of \$50,000 in Connecticut for pre-production, production or post-production expenses on a qualified production and receive tax credits up to 30% of qualified Connecticut spending for goods, services and labor. (2) No annual cap and no per-production cap. (3) Connecticut hotel tax is waived for days beyond 30. (4) Sound recording equipment for use in the state for commercial entertainment, commercial advertising or commercial education are exempt from paying sales tax on that equipment.	Videos and music videos, interactive television, interactive games, video games and any format of digital media, including certain interactive websites.
Florida	(1) Music Videos with expenditures \$625,000 or more eligible for 15 - 22% Cash Rebate (2) Music Videos with \$500,000 or more in expenditures and with a minimum of \$100,000 in qualified expenditures per production eligible for 15 - 20% Cash Rebate. (3) Digital Media Projects and Interactive Entertainment eligible for 10% Cash Rebate. (4) Maximum rebate per production of \$8,000,000.	Videos and music videos, including a video game, simulation or animation, or a production intended for internet or wireless distribution.
Georgia	(1) Spend a minimum of \$500,000 in the state on qualified production and post production expenditures in a single year are eligible for transferable tax credit. (2) Tax credit for production and post-production expenditures by as much as 30%. (3) Sales tax exemption up to 8% on most below-the-line materials and service purchases or rentals. (4) Additional 10% tax credit if a production company includes a Georgia promotional logo.	Music videos, game development and animation.
Louisiana	(1) 25% Sound Recording Tax Credit and 25% on sound recording infrastructure. (2) Qualified digital media projects receive a 20% tax credit in years 1 and 2 of development, a 15% credit in years 3 and 4 and a 10% credit in years 5 and 6.	Interactive digital media, such as videogame developers, animation and digital effects. Record production development, master music recordings, CD production, digital downloads or soundtracks.
Maine	(1) 10% wage rebate of non-Maine residents' wages and 12% of Maine residents' wages. (2) Income tax offset for companies investing in Maine productions. (3) 5% exemption on production related expenses.	Interactive or Video Games.
Maryland	(1) \$500,000 in total direct costs in the State and at least 50% of the production's filming must occur in Maryland. (2) rebate in an amount up to 25% of the total direct costs. (3) An exemption from the 6% state sales tax.	Music Videos.
Michigan	(1) 40% tax rebate (42% in core cities) for production. (2) 25% infrastructure tax credit.	Digital Media Production

Table 47 continued

State	Description/Components	Types of Qualified Productions
Minnesota	(1) 15% rebate of Minnesota expenditures available. (2) Commercial Sales Tax Exemption.	Music Videos
Tennessee	2% of the Qualified Expenses (up to a maximum rebate of \$100,000) shall be available if a production company spends at least \$20,000 during postproduction in acquisition costs for music created by Tennessee residents and/or for recording of music in Tennessee.	Movie Soundtracks
Texas	(1) Moving Image Industry Incentive Program returns 5% of TX spending for commercials/video games spending at least \$100K in Texas. 80% of production must be completed in Texas and 70% of crew/cast must be Texas residents. Capped a \$250K for video games. (2) Grant increases to 6.25% if 25% of production occurs in underused area.	Video Games Production
Wisconsin	(1) Tax Credit of 25% of direct production expenditures. (2) Investment tax credit of 25% for investing in Wisconsin based productions. (3) Income tax credit of 15% for production businesses that make a capital investment by starting a business in Wisconsin.	Video Games Production

Source: Economics Research Associates

The expanded benefits offered by these states have primarily impacted the digital media industry – interactive television and games, video game development, digital animation and web applications. Louisiana is the only state that offers special incentives to the music and recording industry, with other states simply offering incentives to the producers of music video, which in essence is a form a film and not traditional music production. Tennessee also offers incentives to film producers who hire local musicians and facilities to reinvents in post-development music for film soundtracks.

All of these states besides Florida offer incentives in the form of transferable tax credits. In Connecticut, Florida, Georgia and Louisiana (the most proactive states with expanded incentive packages) they are in essence an expansion of current legislation and incentives offered to the film production industry. While some states, such as Michigan, offer incentive tax credit rates that are higher in absolute value as compared to Louisiana, they also have higher barrier and restriction requirements. Texas, for example, requires that 80 percent of the production be produced in the state and 70 percent of the production crew or cast be residents of Texas. So, while Louisiana may not be the only player in the market offering incentives to the digital media industry it offers competitive incentives that are, in some respects, more flexible than many other states.

Appendix A – Overview of Louisiana’s Entertainment Legislation

2002

Motion Picture Incentive Act passed creating 10% tax credit (investments between \$300,000 and \$1,000,000) and 15% tax credit (investment greater than \$1,000,000) for all production dollars spent including out of state spend. A 10% employment credit on resident payroll (in state spend between \$300,000 and \$1,000,000) and a 20% employment credit (in state spend greater than \$1,000,000). The minimum threshold was set at \$300,000. Acts 1 and 2 of the 2002 Extraordinary Session

2003

Motion Picture Incentive Act amended to make the credit transferrable and abolish the Film Commission, but created the Governor’s Office of Film & Television Development within LED, Thresholds changed for 10% credit to investment between \$300,000 and \$8,000,000 and to investment above \$8,000,000 for 15% credit. Employment credits remained the same and the sales and use tax exemption was added. Acts 551 and 1240 of the 2003 Regular Session

2005

Motion Picture incentive Act changed to a 25% tax credit for instate spend only and a 10% additional credit for Louisiana resident payroll. An audited expenditure report requirement was added for tax credit certification and 15% infrastructure credit was added to the program. Sales and use tax exemption abolished. Act 456 of the 2005 Regular Session

Digital Interactive Media tax incentive passed creating a transferrable 20% production tax credit for the development of interactive media (i.e.: video games). No minimum threshold. Act 346 of the 2007 Regular Session

Sound Recording tax incentive program passed, creating a 15% production and infrastructure tax credit with a minimum threshold of \$15,000. This credit is not transferrable. Entire program capped at \$3 million. Act 368 of the 2007 Regular Session

October 2005

Attorney General issued opinion declaring language in motion picture incentive act indicates infrastructure tax credit is 40% (Language in the law inadvertently added the 25% production credit to the 15% infrastructure credit).

2006

Name changed from *Governor's Office of Film and Television* to the *Office of Entertainment Industry Development*. Act 346 of the 2006 Regular Session

2007

Motion Picture Incentive Act amended to further clarify legislative intent regarding infrastructure (no condos, golf courses etc.), extends the sunset on the infrastructure credit by one year, grandfathers projects that applied by August 1, 2007 and sets minimum thresholds and creates a \$25 million per project credit cap for new infrastructure applications. Act 456 of 2007 Regular Session

Live Performance Incentive Act (Broadway South) passed offering 4 new transferrable production tax credits and 1 new transferrable infrastructure credit at 10% to 25% with thresholds ranging from \$100,000 to \$1 million. Infrastructure credit is capped at \$10 million per project and \$60 million per year for the program. Act 482 of 2007 Regular Session

Sound Recording Incentive program is amended to provide for a 25% tax credit for production and infrastructure and removes the DOA from certification process. The \$3 million program cap remains. Act 368 Of 2007 Regular Session

Appendix B – Motion Picture Productions in Louisiana

Below is a list of motion picture projects that were produced in Louisiana, by year of production from the Office of Entertainment Industry Development in the Louisiana Economic Development Department.

Project Name	Type	Location
2002		
Evil Remains	Feature	New Orleans
2003		
A Love Song for Bobby Long	Feature	New Orleans
A Twisted Trust	MOW	New Orleans
Because of Winn-Dixie	Feature	New Orleans
Deacon John's Jump Blues	Documentary	
Flood of Fear	MOW	
Freshman Year	Feature	Jefferson Parish
Growing Pains Reunion 2	MOW	New Orleans
Jedakis Video	Music Video	
Mr. 3000	Feature	New Orleans
Music Videos (5 videos)	Music Video	
Ray	Feature	New Orleans
Runaway Jury	Feature	New Orleans
Sky Italia Launch Campaign	Commercial	
Torn Apart	Feature	
Waiting	Feature	Jefferson Parish
2004		
Brooke Ellison	MOW	Jefferson Parish
Canal Street Brothel	MOW	New Orleans
Dead Will Tell	MOW	New Orleans
Dreamer	Feature	St. Tammany
Dukes of Hazzard	Feature	Baton Rouge, New Orleans, Clinton
Five Fingers	Feature	New Orleans
Frankenstein	MOW	
Glory Road	Feature	New Orleans, Baton Rouge
Heartless	MOW	Jefferson Parish
Infidelity	MOW	Jefferson Parish
Last Holiday	Feature	New Orleans
Miracle Run	MOW	New Orleans
Odd Girl Out	MOW	Jefferson Parish
Pop Rocks	MOW	New Orleans
Search for the World's Greatest Kid Magician	MOW	
Searching for David's Heart	MOW	
Shooting Gallery (aka Pool Hall Prophets)	Feature	New Orleans
Skeleton Key	Feature	St. James Parish
Stuck in Suburbs	MOW	New Orleans
Thief	MOW	New Orleans, Shreveport
Venom (aka Backwater)	Feature	New Orleans, Choctaw

Project Name	Type	Location
2005		
All the King's Men	Feature	New Orleans, Baton Rouge
Big Momma's House 2	Feature	New Orleans
Bug	Feature	New Orleans
Campus Confidential	MOW	Jefferson Parish
Elvis	MOW	New Orleans
Factory Girl	Feature	Shreveport
Failure to Launch	Feature	New Orleans
Faith of my Fathers	MOW	New Orleans
Just My Luck	Feature	New Orleans
Little Chenier (Bayou)	Feature	Lake Charles
Local Color	Feature	New Orleans, Covington
Locusts	MOW	New Orleans
Lubu	Feature	New Orleans
Pizza Wars	MOW	New Orleans
Roadhouse II	Feature	Shreveport
Scarlett	TV Pilot	Natchitoches
Snow Wonder	MOW - Burnside & New Orleans	
Stay Alive	Feature	New Orleans
The Last Time	Feature	New Orleans
The Reaping	Feature	St. Francisville
Thief	TV Series	Shreveport
Three Days to Vegas (aka Retirement)	Feature	New Orleans
Vampire Bats	MOW	New Orleans
2006		
Blonde Ambition	Feature	Shreveport
Deal	Feature	New Orleans
Déjà Vu	Feature	New Orleans, Morgan City
Dreamboy	Feature	St. Francisville
Homeland Security	Feature	Shreveport
Initiation of Sarah	MOW	Shreveport
Last Resort	Feature	New Orleans
Life is Not A Fairytale	Feature	New Orleans
Match Race	Feature	Shreveport
Mr. Brooks	Feature	Shreveport
Not Like Everyone Else (aka HEX)	Feature	Shreveport
PDR (Philly Department of Recreation)	Feature	New Orleans
Perfect Day	Feature	New Orleans
Premonition	Feature	Shreveport
Solstice	Feature	New Orleans
The Curious Case of Benjamin Button	Feature	New Orleans
The Guardian	Feature	Shreveport
The Staircase Murders	MOW	New Orleans, Luling
The Year Without Santa	MOW	Shreveport
Travelers	TV Pilot	New Orleans
When the Levees Broke	Documentary	New Orleans

Project Name	Type	Location
2007		
A Good Man is Hard to Find	Feature	Baton Rouge
A Pardon	Feature	Northwest Louisiana
American Inquisition	Feature	New Orleans
American Summer	Feature	New Orleans
Autopsy	Feature	Jackson
Better Man (aka Welcome Home Roscoe Jenkins)	Feature	Shreveport
Black Water Transit	Feature	New Orleans
Bolden!	Feature	New Orleans
Cheerleader Camp	TV Pilot	Shreveport
College	Feature	New Orleans
Comeback	Feature	Shreveport
Dirty Politics	Feature	Baton Rouge
Feast 2 & 3	Feature	Shreveport
For Sale By Owner	Feature	Natchitoches
Geo Hunt	MOW	Baton Rouge
Ghetto Stories	Feature	Baton Rouge
Girl, Positive	MOW	New Orleans
Great Debaters	Feature	Shreveport
Harold & Kumar 2	Feature	Shreveport
Imagination Movers	TV Series	New Orleans
In the Electric Mist	Feature	New Iberia
Jump Out Boys	Feature	St. Tammany
Katrina's Children	Documentary	New Orleans
K-Ville	TV Pilot and Series	New Orleans
Last Lullaby	Feature	Shreveport
Loss of a Teardrop Diamond	Feature	Baton Rouge
Mad Money	Feature	Shreveport
Major Movie Star	Feature	Shreveport
Mama, I Want to Sing	Feature	Baton Rouge
Meet the Spartans (aka Hunting & Fishing)	Feature	LaPlace & Hammond
Middle of Nowhere	Feature	Baton Rouge
NonFiction	Feature	New Orleans
Odd Couple	TV Commercial	New Orleans
Pros Vs. Joes	TV Episode	New Orleans
Queen Sized	MOW	Shreveport
Racing for Time	MOW	New Orleans
ReNew Orleans	Documentary	New Orleans
Sordid Lives	TV Pilot	Shreveport
Spring Break '83	Feature	Hammond
The Cleaner	Feature	Shreveport
The Corn Patch	Feature	Baton Rouge
The Killing Room (aka Untitled Manbreak Project)	Feature	Shreveport
The Mist	Feature	Shreveport
The Platform	Feature	Morgan City
The Pulse II and III	Feature	Shreveport
The Year One	Feature	Shreveport
Trance	Feature	Baton Rouge
Varsity, Inc.	Reality TV	Monroe-West Monroe
Waking Madison	Feature	Slidell
Warbirds	Feature	Baton Rouge
Way of War	Feature	Baton Rouge
Welcome to Acadamia	Feature	New Orleans
Wonderful World	Feature	Shreveport
Yellow Handkerchief	Feature	New Orleans

Project Name	Type	Location
2008		
(untitled reality show)	TV Series	Shreveport
Anytown	Feature	Baton Rouge
Bad Lieutenant	Feature	New Orleans
Beyond A Reasonable Doubt	Feature	Shreveport
Billy the Exterminator	TV Series	Shreveport
Brothers Bloom (Post Only)	Feature, post only	Baton Rouge
Cadillac Records	Feature, 2nd unit only	Baton Rouge
Chess	Feature	New Orleans
Cirque du Freak	Feature	New Orleans
Comeback	Feature	Shreveport
Drones	Baton Rouge	Baton Rouge
Fab Five: Texas Cheerleader Scandal	MOW	Jefferson Parish
Final Destination 4	Feature	New Orleans
Goodie Two Shoes	Feature	
I Hope They Serve Beer in Hell	Feature	Shreveport
I Love You Phillip Morris	Feature	New Orleans
Imagination Movers	TV Series	New Orleans
Judgment Day	Feature	Lafayette
Jumper (1 scene)	Feature, one scene	Baton Rouge
Leader of Wolves	Feature	Lafayette
Librarian 3	MOW	New Orleans
Lightning Strikes	MOW	Baton Rouge
Living Proof	MOW	New Orleans
Mardi Gras	Feature	New Orleans
Microwave Park	Feature	Shreveport
Middle of Nowhere	Feature	Baton Rouge
Midnight Man	Feature	Shreveport
Mike Epps Comedy Mixtape Vol.1	TV Pilot	Baton Rouge
Miracle at St. Anna	Feature	White Castle
Mutant (AKA Lockjaw)	Feature	Baton Rouge
Patriots	Feature	New Orleans
Print		Baton Rouge
Robo-Sapien	Feature	New Orleans
Shotgun Stories, Bringer, Babysitters	Feature, post only	Baton Rouge
Sordid Lives: the series	TV Series	Shreveport
Soul Men	Feature	Shreveport
Speed Freaks	TV Pilot	Shreveport
Sunday, Sunday, Sunday	Feature	Covington
Tekken	Feature	Shreveport
The Abduction of Jesse Bookman	Feature	Baton Rouge
The Darkest Evil	Feature	Lafayette
The Deadline	Feature	Baton Rouge, Houma
The Family That Preys Together	Feature, one scene	New Orleans
The Informant (Post Only)	Feature, audio post only	New Orleans
The Open Road	Feature	Hammond
The Women (Post Only)	Feature	Baton Rouge
The Year One	Feature	Shreveport
True Blood	TV Series	Shreveport
Twelve Rounds	Feature	New Orleans
W.	Feature	Shreveport

Source: Louisiana Economic Development Department, Office of Entertainment Industry Development