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Texas Comptroller  
of Public Accounts

THE CURRENT AND POTENTIAL  
ECONOMIC AND FISCAL IMPACTS OF  
TEXAS' MOVING MEDIA INDUSTRY

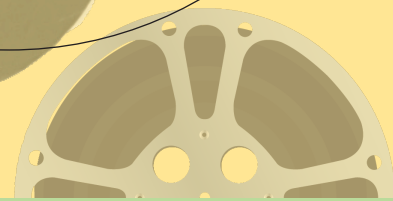
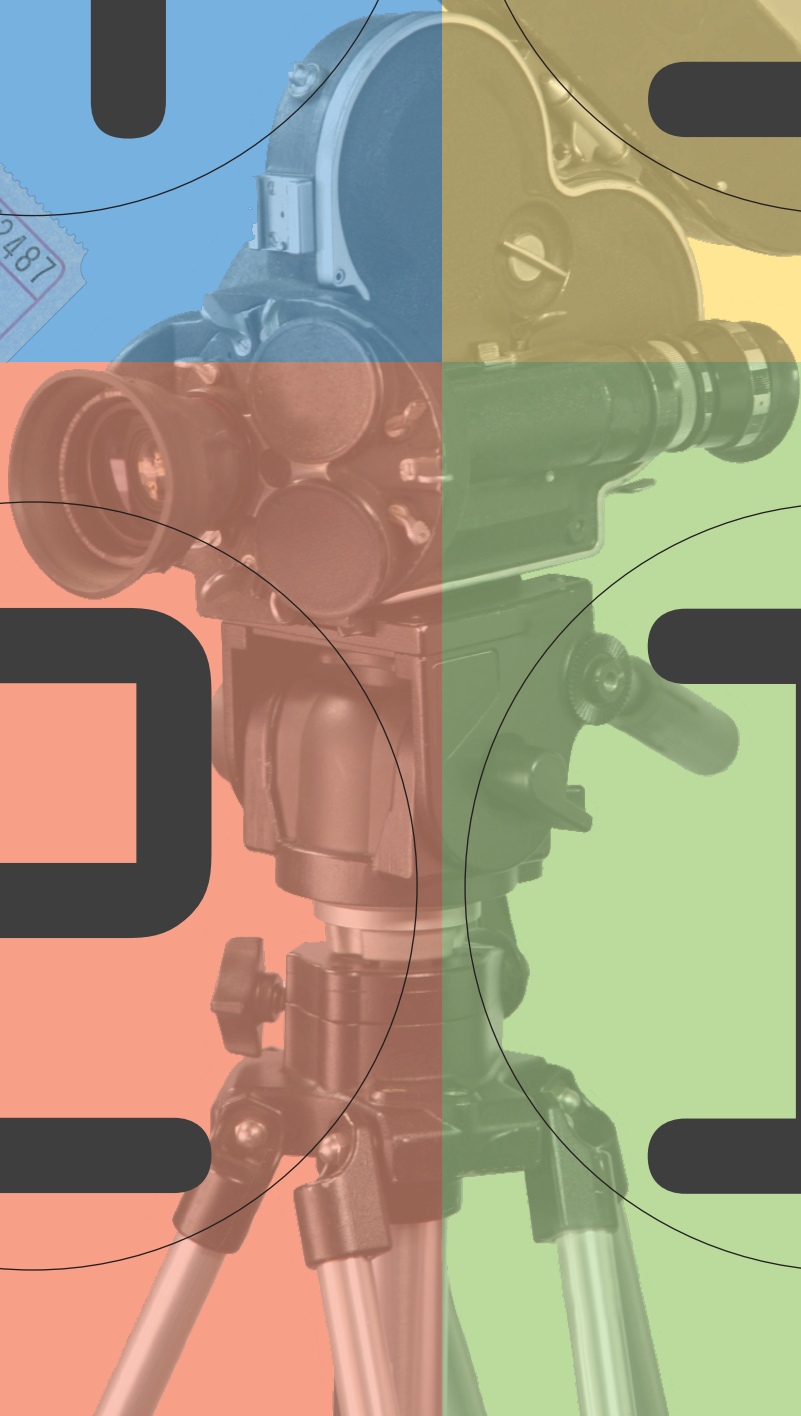
Final Report • December 1, 2008

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December 1, 2008

Ladies and Gentlemen:

We are pleased to submit *The Current and Potential Economic and Fiscal Impacts of Texas' Moving Media Industry* report for the state of Texas. Rider 20, General Appropriations Act, Acts of the 80th Legislature, Regular Session, directs the Texas Comptroller of Public Accounts to report the findings of its review of the fiscal effectiveness of the film incentive program to the Legislative Budget Board and the Governor's Office of Budget and Planning by Dec. 1, 2008.

It has been our pleasure to work together on this important project with the Texas Workforce Commission, the Texas Film Commission, industry representatives appointed by the Comptroller to the Texas Film Industry Incentive Program Advisory Committee and the University of North Texas report consultants. We are grateful for the time and energy each representative of the Texas Film Industry Incentive Program Advisory Committee provided to the assessment of the fiscal effectiveness of the film incentive program and to the development of a Texas-focused economic profile.

The report represents many months of effort. The committee met in December 2007 and in June and October 2008 to discuss current trends in the moving media industry. The resulting report compares the film industry incentive programs of other states with the Texas incentive program and examines their respective economic and fiscal impacts. In Texas, the economic impact of the moving media industry approached \$345 million in 2007. The report also identifies strategies proposed to enhance Texas' future competitive position in the moving media industry.

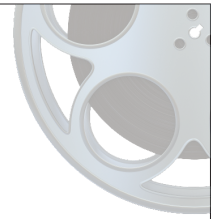
If you have any questions concerning this report or would like to request additional copies, please contact our office. You may also find the report online at [www.window.state.tx.us/specialrpt/mmedia/](http://www.window.state.tx.us/specialrpt/mmedia/).

Sincerely,

Susan Combs





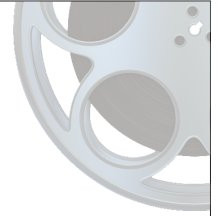


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## Executive Summary

For several decades, the state of Texas has operated a Film Commission and has also offered various incentives to the film and video industry. Though the dollar volume of media spending varies from year to year, in 2007, according to the Texas Film Commission, industry outlays approached \$345 million. This spending generated a total state economic impact of about \$522 million and supported 2,421 full-time jobs.

Today, the “moving media industry” is comprised of five major components: feature films, television productions, commercials, animation and video games. In recent years, the fastest-growing industry sector has been video games. In Texas, video game development currently accounts for more than one-third of all industry spending with commercials second. Veronis Suhler Stevenson, the industry’s leading information source, projects video games to continue as the fastest-growing component of the moving media business.

The recruitment and expansion of media production activities has become extremely competitive, and virtually every state has enacted specific fiscal incentives to attract and retain the media industry. In 2007, the Texas Legislature enacted the Texas Moving Image Industry Incentive Program that offers cash grants equal to 5 percent of qualified in-state spending on feature films, documentaries, television programs, commercials and video games. The Texas Legislature has authorized up to \$10 million for fiscal 2008 and another \$10 million for fiscal 2009.

An initial comparison of revenues with the costs of the new film incentive program suggests that the program operates slightly above a break-even point. Anticipated grant awards for fiscal 2008 are about \$6 million, while spending on new production is estimated to generate about \$8.8 million in state and local tax receipts. In terms of state revenues, tax receipts exceed outlays by about \$232,000. There are also other real economic benefits to Texas from the presence of the media industry that cannot be easily quantified, such as the impact on travel and tourism.

Two growth scenarios are examined for the Texas media industry through the year 2011. Scenario one assumes the Texas industry expands at the same rate as the national industry, and scenario two assumes the Texas industry grows twice as fast. Under the first scenario, the moving media industry will generate about \$623 million in state economic activity in 2011, support almost 3,000 jobs, and produce more than \$10 million of new state and local revenue, of which about \$7 million will accrue to the state. Under scenario two, economic activity from industry spending rises to \$800 million, supports more than 3,700 jobs, and yields new tax revenues of \$13.4 million with about \$9.4 million going to the state treasury.

To achieve this level of activity in the film and video industry, the state may need to enhance its incentive programs. For example, the median tax credit/rebate level nationwide is 25 percent, well above Texas’ 5 percent rate. Additional funding for university and community college based-training programs in technology and the arts could also improve the state’s competitive posture. Finally, consideration should be given to leveraging the Moving Image Industry Incentive Program with the Emerging Technology Fund and/or the Texas Enterprise Fund as a strategy for bringing new video gaming companies to the state.



### Introduction

The film industry in Texas began nearly 100 years ago when the New York-based Star Film Company moved to San Antonio in 1910 and produced more than 80 films in a year's time. In 1927, the World War I movie "Wings" was made in Texas and won the first Academy Award for best picture. At the 1984 Academy Awards, seven of the top eight Oscar-winning films were made wholly or partially in Texas.

Over the past two decades, Texas has become a major location for feature and independent film production, television programming, commercials and video games. Though the dollar volume of media spending varies from year to year, in 2007 estimated spending in Texas by the film and video industry approached \$345 million. This spending, in turn, boosted the state's total economic activity, produced substantial labor income and generated new revenues for the state and its local governments (see discussion in section IV of this report).

As the moving media industry has grown and matured, Texas' supporting infrastructure has improved as well. In 2003, the University of Texas (UT) at Austin established the UT Film Institute within the College of Communications to provide students with highly specialized experience in all phases of filmmaking, from pre- to post-production. Importantly, the Institute incorporates the most advanced digital technology currently available into all aspects of its curriculum. The Department of Radio, Television and Film at the University of North Texas is also recognized as one of the nation's leading programs in film/digital production, documentary and media culture and industry studies. Degrees are offered at both the undergraduate and graduate levels.

In addition, the state offers a variety of sound stages and sets that can be used in the production of feature films, television shows and commercials. For example, Texas is home to more than a dozen studio facilities that range in size and function and are well suited for mid-level productions.

Attracting media production activities has become an extremely competitive sport. Virtually every state and territory in the United States has a film commission, as do more than 125 large cities. Canada, Mexico, Spain, Australia, the Czech Republic, Morocco and many other countries are also actively recruiting and supporting the film and video industry. And virtually every state has enacted specific fiscal incentive programs to attract and retain the media industry. (see **Figure 1**)

For years, Texas has offered sales tax exemptions and a waiver of the hotel occupancy tax for stays of 30 days or longer to film and video producers. But in the face of a more aggressive posture by other states, the Texas Legislature in 2007 enacted the Texas Moving Image Industry Incentive Program with the express purpose of making the state more attractive to media producers.

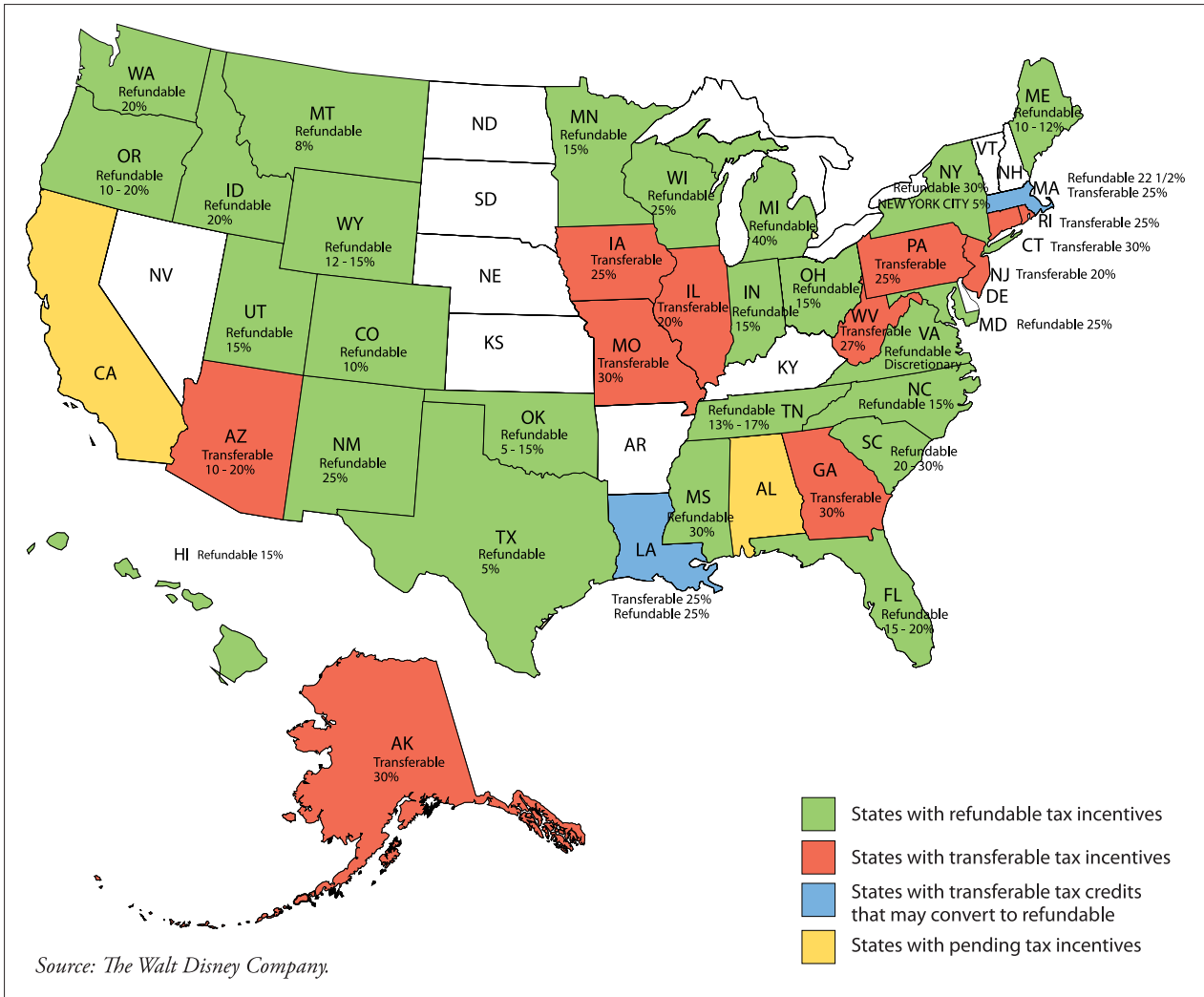
This program, which became effective September 1, 2007, offers cash grants equal to 5 percent of qualified in-state spending on feature films, documentaries, television programs, commercials and video games. Both live-action and animated projects are eligible, and some producers may also claim sales tax exemptions on a variety of items and services used in the image-making process. Up to \$10 million in grants has been authorized for fiscal 2008 and another \$10 million for fiscal 2009.

The enabling legislation requires the Comptroller of Public Accounts to assess the fiscal effectiveness of the program. To that end, this report first summarizes current trends in the media industry and how Texas compares with other states. It then examines the current and potential economic and fiscal impacts of the media



industry in the state of Texas and compares new state revenues with the estimated amount of cash grants to be awarded to the moving media industry in 2008. Following the fiscal impact assessment, the report presents a discussion of strategies the state may wish to consider to help stimulate the industry and improve Texas' competitive position in the marketplace for the production of film and digital media.

FIGURE 1  
Production Incentives in 2008





## Current Trends in the Media Industry: Film Production, Television Commercials and Video Games

Over the last three years the communications and entertainment industry has grown to \$885.2 billion in sales, catapulting it into the fourth-largest economic sector in the United States, according to Veronis Suhler Stevenson (VSS) research.<sup>1</sup> Solid growth at the box office, increased spending on TV programming, in-flight entertainment and new video game rollouts have driven revenue gains.

### Feature Films

Film industry dynamics have changed significantly over the last few decades, with studios turning into major media conglomerates focused on the financial bottom line. The industry kept pace with the 2006 hit “Pirates of the Caribbean: Dead Man’s Chest,” which grossed \$423 million at the domestic box office. Seventeen other movie titles grossed more than \$100 million. Total box office spending rose 6.5 percent in 2006 to \$9.73 billion.

VSS research forecasts rising ticket prices will dampen movie attendance and overall box office performance from 2007 to 2011. Theater owners will try to overcome this with more digital screens and studios offering IMAX and 3-D formats.

Box office movie titans correlate to millions of dollars spent in production revenue brought into areas such as the Big Island in Hawaii. *West Hawaii Today* reported Steven Spielberg’s “Indiana Jones and the Kingdom of the Crystal Skull” added \$17 million in production revenue – about 85 percent of the total production revenue for the island in 2007.

### Home Video Spending

Home video spending, the second largest entertainment category according to VSS research, grew only 0.5 percent in 2006 to \$25.7 billion. Growth was driven primarily by a 7.4 percent increase in DVD spending. Additional purchases of DVDs helped offset a staggering 68.9 percent decline in videocassette sales to \$720 million.

The growth in DVD spending was propelled by the plethora of box office titles that became available in 2006, including 15 films that generated more than \$100 million each at the box office. Releases included “The Chronicles of Narnia,” “Cars” and “Harry Potter and the Goblet of Fire.” These titles fueled total DVD purchases up to \$17.9 billion and DVD rentals up to \$7.08 billion.

According to a February 2008 article in *The Economist*, there is growing concern in the DVD industry that the Internet will decimate DVD sales, which in America generate about half as much revenue as feature films. Film pirating is seen as another threat to the health of the industry. Apple’s iTunes captures about 80 percent of the download-to-own market, while Xbox accounts for more than 70 percent of online rentals. Another article in *BusinessWeek* that same month stated the industry is trying to mitigate pirating threats by holding onto paying customers and coming out with more movies using 3-D images.



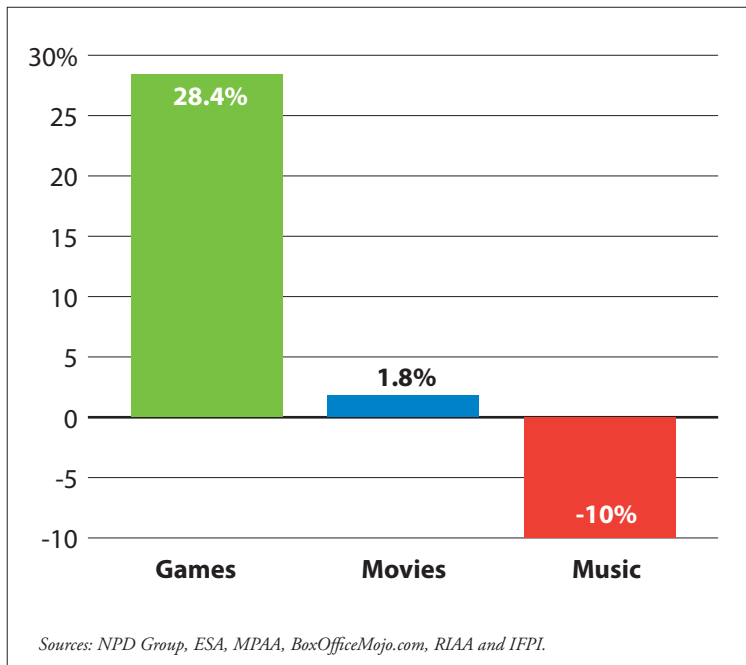
As the VHS market evaporates, with declines of \$439 million in sales and \$281 million in rentals in 2006, this part of the home video sector will offset some of the gains in the DVD market. Sales and rentals of VHS will probably disappear by 2009, partly because of the FCC-mandated digital television conversion.

## Video Games

The video game market — comprised of sell-through (units sold directly to the customer) and rental console games, PC software, and video game and Web site advertising — expanded 7.3 percent to \$8.69 billion in 2006 according to VSS. In 2007, video game spending increased at an even faster clip (see **Figure 2**). New console releases bolstered video game software sales and rentals to \$7.16 billion in 2006, reversing the drop in sales from the previous year. Meanwhile, PC software sales declined 1.3 percent in 2006 with spending dropping to \$1.01 billion. With box office revenues promising only modest future growth, the rapidly expanding gaming industry is attracting interest from Hollywood big-wigs such as producer Jerry Bruckheimer, director Steven Spielberg and the television network MTV.

According to Robert W. Crandall and J. Gregory Sidak of the Brookings Institution, the video game market will not only help push entertainment software sales to \$15 billion in 2009, but this market will have a ripple-effect and spread technological innovations to other industries.<sup>2</sup>

FIGURE 2  
**U.S. Music, Movie and Gaming Revenue Growth 2006-2007**



The demand for additional production inputs is also growing in the gaming industry. In the early 1990s, the average cost of developing a video game was \$40,000. In 2004, the average development cost ran about \$10 million. This huge increase is due to the demand for three-dimensional images, artificial intelligence and enhanced voice and sound effects. By 2011, it is estimated that development costs for a single game will range anywhere from \$15 million to \$25 million. Relatively new financial components to the video game industry, “in-game” advertising and product placement, will help offset some of this spiraling development cost.<sup>3</sup> Although entirely absent from the industry only a few years ago,



in-game advertising and placement revenue ballooned from \$34 million in 2004 to a projected \$562.5 million in 2009.<sup>4</sup> In addition to helping publishers offset costs, this revenue stream represents a welcome new avenue for advertisers. In-game advertising and product placement enables advertisers to continue reaching the prime 18-34 year old male demographic that is steadily choosing video game play over television viewing.<sup>5</sup> Consumer video game spending will be linked to the availability of new titles for updated console game platforms, which include enhanced online multi-player subscription components such as the Wii and Xbox 360.

VSS predicts that video game unit sales and spending from 2007 to 2011 will be attached to the availability of new titles for updated console game platforms and enhanced multi-player online subscription components. This trend may already be underway, as indicated by the phenomenal success of the recently released video game "Grand Theft Auto IV." In its opening week, 6 million copies were sold grossing more than \$500 million.<sup>6</sup> VSS also projects that the PC software market will rebound modestly as sales increase for new computers with superior graphics.

The video game industry also represents a significant employment sector. The Entertainment Software Association notes that while direct employment grew at an annual rate of 4.4 percent between the years 2002 and 2006, the sector was responsible for more than 80,000 direct and indirect jobs in 31 states in 2006. This places the industry on track to support more than 90,000 direct and indirect jobs in America by 2009.<sup>7</sup>

### Commercials

Total spending on advertising in 2006 reached \$209.74 billion, a growth of 5.7 percent over the previous year. Although there were many drivers of this spending increase, television advertising was a prime factor. Increased competition for consumers' attention has prompted major brands to use integrated advertising and marketing strategies. Complementary media outlets include satellite radio, the Internet and mobile phones.

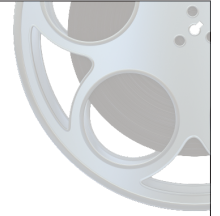
Members of The Association of Independent Commercial Producers (AICP) spent \$2.64 billion on direct production in 2006, with more than 80 percent occurring in the United States.<sup>8</sup> Major production locations for commercial shoots in 2006 were New York, Florida and Southern California with Canada being the largest foreign production area.

Radio advertising is not expected to grow significantly in the foreseeable future, due primarily to widespread consolidation in broadcast radio and the shift to digital platforms.

### Television Programming

Spending on television programming and in-flight entertainment increased 9.1 percent in 2006 to \$27.45 billion, according to VSS. In that year the television networks also benefited from the cyclical pattern of rising spending on even-numbered years due to the Olympics and election campaign coverage. But because of the glut of reality shows, the growth has been modest because of the lack of scripted, off-network programs available for syndication.

However, a reversal may be underway as viewers begin to suffer from "reality fatigue." Spending on scripted programs is rebounding after the recent success of programs such as "Lost," "House," "My Name is Earl,"



“Ugly Betty,” “Heroes” and “Desperate Housewives.” But while scripted programs are in high demand, the impact of the 2008 writers’ strike has left its mark. With more than 12,000 East and West Coast guild members out of work for three months, revenue losses have been estimated between \$500 million and \$750 million. But some of these losses may be recouped by the end of the year.

Local television stations are encountering many challenges in sustaining growth through 2011, including competition with cable and increased DVD sales of many of the programs they air in syndication. However, TV stations are expected to benefit from the FCC-required shift from analog to digital signals in February 2009 as some local affiliates may be able to sell ads on the extra spectrums they own.



## How Texas Compares with Other States in the Moving Media Industry

### Feature Films and Television Shows

In 2006, the Motion Picture Association of America (MPAA) prepared an economic impact study for film production in the United States.<sup>9</sup> This study examined 699 motion picture and television shows produced across 50 states during 2005, the top states being California, New York and Nevada. In 2005, the state of Texas produced 16 feature films, the same amount produced by Utah.

The International Alliance of Theatrical Stage Employees (IATSE), whose membership includes motion picture technicians, states, “IATSE film, television and commercial workers in Texas earned in excess of \$15 million per year in 2004 and 2005.<sup>10</sup> In 2006, the first real downturn showed when the IATSE-eligible wage dropped to \$13 million. The Writers’ Guild of America Strike in 2007 sharpened the downturn, dropping total wages earned to \$12 million. Projections for 2008 are just under \$11 million, based on numbers available through June 30, 2008. Production-based wages fell about 30 percent during the last three years.<sup>11</sup>

Texas-based talent agents have seen a downturn in the production industry. One agency representative stated, “We’ve already lost some of our support staff with crew relocating to other states, and now, talent are talking about either getting out of the business or moving to find opportunities for better-paying jobs.” Another agency says they are sending more talent than ever for auditions in surrounding states. “Of the 115 film and TV actors I represent in Texas, over 75 have traveled to Louisiana or New Mexico for work opportunities. They bolster the economies of other states while living away from their families to work in their chosen field. We need to bring the work back to Texas.”

The motion picture and television industry in California generated \$42.2 billion of economic activity in 2006, according to the MPAA (see **Table 2**). About 266,000 people were directly employed in this industry with an average salary of \$80,600, and another 500,000 workers were indirectly employed.

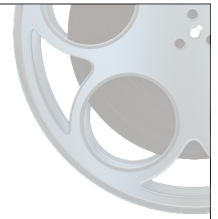
In 2006, New York City hosted the highest number of film, television, commercial and music video shoots ever. The entire state realized about \$1.5 billion of economic benefits from film and television production, according to the MPAA. About 90 percent of the 250 feature films were independent productions. With a newly enacted 30 percent production tax credit at the state level, combined with an existing 5 percent credit for New York City-based production, New York State’s share of the moving media industry is likely to increase substantially in the years ahead.

Nevada benefits from both television and film productions set in locations ranging from the casino locale of Las Vegas to the remote ghost town of Rhyolite. In 2005, the state’s economy

TABLE 1  
Motion Pictures and Television Shows Produced in 2005

State	Number of Shows
California	365
New York	281
Nevada	237
Arizona	97
North Carolina	64
Montana	36
New Jersey	24
Louisiana	23
New Mexico	22
Illinois	21

Source: MPAA, 2006.



**TABLE 2**  
**The Economic Benefit of Motion Pictures and Television Shows, 2006**

State	Economic Impact	Rank
California	\$42.2 billion	1
New York	1.5 billion	2
New Mexico	780 million	3
Louisiana	400 million	4
North Carolina	300 million	5
Arizona	107 million	6
Nevada	102.5 million	7
Illinois	100 million	8
New Jersey	83 million	9
Montana	81.4 million	10

*Source: Estimated economic benefit taken from the 2006 MPAA Economic Impact report, based on film commission estimates.*

thived as the motion picture and television show industry contributed 3,210 workdays to the economy.

Although the MPAA did not profile Texas and the economic impact by the motion picture and television show industry, the Texas Film Commission estimates spending for film and television at \$87 million for 2007 (see discussion below). What’s more, at the 2007 Golden Globes, four films set or shot in the state of Texas — “No Country for Old Men,” “There Will be Blood,” “Charlie Wilson’s War” and “The Great Debaters” — received awards. However, “The Great Debaters” was filmed largely in Louisiana, while “No Country for Old Men” was filmed primarily in New Mexico. Both states have been extremely aggressive in luring Hollywood productions.

The Louisiana film incentives program, enacted in 2002, has created a significant level of activity in the state. According to the Texas Film Commission, both Louisiana and New Mexico have realized a compound annual employment growth of 23 percent per year in moving media production. A recent study by Economics Research Associates claims Louisiana now has the third highest film concentration in the United States behind California and New York.<sup>12</sup>

In Texas, the outlook for television production is mixed. “Prison Break,” a popular television series on the Fox Network, relocated from Texas to Los Angeles with the upcoming season. The show has filmed 35 episodes in North Texas bringing almost \$50 million dollars to the area. The average episode costs about \$1.4 million dollars and employs around 600 people. On the plus side, “Friday Night Lights,” currently filmed in Austin, has decided to remain in Texas after considering other locations.

**Table 3** presents employment and payroll data from the 2002 Economic Census, the latest available. Without question, when the 2007 Census is released, the numbers and state rankings will likely be quite different, with Nevada, New Mexico and Louisiana appearing among the leaders.

In all likelihood, a fair amount of film and TV production goes unreported by both the U.S. Census Bureau and the Texas Film Commission. According to the Texas Motion Picture Alliance, one vendor reports supporting 1.5 Texas movies per month that go unreported to the state film commission because the projects don’t meet the threshold requirements for an incentive grant. Numerous film labs, post-production facilities, equipment suppliers, audio facilities and studios may have a hand in re-shoots, pick-up shots, voiceovers and coloring, but don’t meet the threshold for the incentive program. These labs and post-production facilities often provide processing services for films and TV shows shot in Louisiana and New Mexico. While their activities may not be





picked up by the Texas Film Commission, they nonetheless constitute an important part of the moving media industry's infrastructure in the state.

### Commercials

Production cost per commercial varies widely from a tabletop photograph to expensive filmed sequences incorporating models and actors while using film caliber crews and soundstages.

As mentioned above, for members of the Association of Independent Commercial Producers, major production locales for commercial shoots in 2006 were New York, Florida and California with Southern California accounting for 55 percent of the domestic shooting days and New York City for 18 percent (see **Table 4**). However, AICP does not track commercial shoots by non-members. Many non-AICP producers of commercials are active in Texas and other states.<sup>13</sup>

The 2002 Economic Census supports the AICP survey findings with New York and California leading in this employment sector (see **Table 5**). Texas was in fifth place after Illinois and Minnesota.

### Video Games

According to the Entertainment Software Association (ESA), the job growth rate for the United States computer and video game industry exceeded 17 percent between 2003 and 2006.<sup>14</sup> In a recent study, ESA finds that California is the largest employer of computer and video game personnel in the nation with almost 40 percent of the total industry jobs (see **Table 6**). *The Game Developer Salary Report* for 2006 closely matches the U.S. Census Bureau with the industry's top six states being California, Washington, Texas, New York, Massachusetts and Illinois. These states collectively employ about 74 percent of entertainment software industry professionals.

The ESA study cited above found that California is the largest employer of video and computer game personnel in the United States with about 40 percent of all

**TABLE 3**  
**Motion Picture Production Employment, 2002**

Area	Employment	Payrolls
United States	151,696	\$9.5 billion
California	90,023	6.4 billion
New York	17,200	1.1 billion
Texas	3,278	143.2 million
Louisiana	324*	9.2 million*
New Mexico	100*	3.2 million*

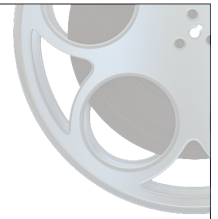
Sources: U.S. Dept. of Commerce, U.S. Census Bureau, 2002 Economic Census – NAICS codes: 51211, 51212, 51219, 51224, 51229.  
\*New Mexico and Louisiana did not report in all categories.

**TABLE 4**  
**Mean Commercial Shoot Days in the United States by Location, 2006**

Location	Number of Days
Southern California	30
New York	12
Florida	4
Other Southeast	6
Southwest	6
Illinois	7
Louisiana	2
Other U.S. Locations	14

Source: *The Association of Independent Commercial Producers (AICP), Fifth Annual Survey.*





industry jobs. California video and computer game companies provided in excess of \$1.8 million in direct and indirect compensation to state residents in 2006. In 2006 alone, the industry in California grew by 12.3 percent, nearly three times faster than the state's overall growth rate, and added \$1.7 billion to the state's economy.

Washington ranked second nationally in video and computer game personnel in 2006 by directly employing 2,674. In fourth place, New York followed Texas with 1,501 direct employees.

According to the Texas Film Commission, about 90 video game development and publishing companies call Texas home. Most of these companies, like Electronic Arts, Sony Online Entertainment and Amaze Entertainment, are based in Austin and Dallas. As with films and commercials, no doubt there is a sizeable amount of production activity flying "under the radar." Digital content can be created on home computers or in university laboratories. Small "mom and pop" or perhaps "kid" enterprises are likely engaged in producing video games and other moving digital content that may eventually be sold, refined and commercialized. Indeed this creative impulse is a fundamental part of the human resource base that will be required if Texas is to increase its presence in video games and other forms of digital moving media.<sup>15</sup>

Refer to **Appendix A** for maps showing the location in Texas of film and production companies, film and television productions on location, film and television production crews and video game companies.

**TABLE 5**  
**Commercial Photography**  
**Employment Selected States, 2002**

Location	Employment	Payrolls
U.S.	15,750	\$512.5 million
New York	2,875	130.4 million
California	2,061	64.9 million
Illinois	1,109	42.4 million
Minnesota	985	30.3 million
Texas	729	22.3 million
Louisiana	127	3.1 million
New Mexico	74	1.6 million

Source: U.S. Census Bureau, 2002 Economic Census – NAICS code: 541922.

**TABLE 6**  
**Direct Employee Shares**  
**per State, Top Six States**

State	Employment	Percent
California	9,245	39.2%
Washington	2,674	11.3
Texas	2,172	9.2
New York	1,501	6.4
Massachusetts	1,012	4.3
Illinois	896	3.8
Subtotal	17,500	74.2
<b>TOTAL ALL STATES</b>	<b>23,596</b>	

Source: *Video Games in the 21st Century, The Game Developer Salary Report 2004-2007.*



## The Economic and Fiscal Impacts of the Texas Moving Media Industry in 2007

Each year, the Texas Film Commission collects data on spending by various components of the media industry in the state. The Commission further breaks down spending for the five largest metropolitan areas in the state. In 2007, total spending was almost \$345 million, with video games accounting for the largest share (see **Table 7**). Commercial production was second and television was third. Austin led the state with about \$143 million in spending followed by Dallas-Fort Worth with \$128 million (see **Table 8**). Houston was a distant third.

**TABLE 7**  
**Texas Moving Media Industry Spending by Component, 2007**

Component	Amount
Studio feature films	\$750,000
Independent feature films	11,636,100
Television productions	74,766,980
Commercial, corporate and sports	91,950,000
Animation	16,790,000
Video games	149,057,970
<b>TOTAL</b>	<b>\$344,951,050</b>

Source: Texas Film Commission.

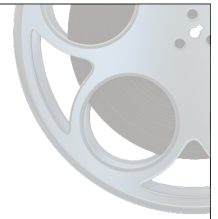
**TABLE 8**  
**Texas Media Industry Spending by Metropolitan Area, 2007**

Area	Amount
Austin	\$143,187,350
Dallas-Fort Worth	128,085,920
El Paso	3,401,800
Houston	42,522,630
San Antonio	9,188,550
Other	18,564,800
<b>TOTAL</b>	<b>\$344,951,050</b>

Source: Texas Film Commission.

Spending by media producers in Texas has a “multiplier” effect so that the overall economic impacts are actually greater than the initial level of expenditure. In order to estimate total economic impacts, we have used an input-output model called IMPLAN. Developed by the Minnesota IMPLAN Group, this model provides estimates of total state-level economic activity — including direct, indirect and induced impacts — from initial spending by a given entity. The direct effects include items like a film producer’s payroll, contract labor, purchases and rental of equipment and commissary supplies. Indirect effects capture the activities of a company’s vendors. For example, the accounting firm providing bookkeeping services to a video game company rents office space, purchases computers and pays its telephone bill. Induced effects include the impact of the employees of all these firms spending a portion of their earnings on goods and services in the state (local) economy. Each of these impacts is adjusted to account only for that portion of spending that stays in Texas. For example, on average only 57 percent of direct spending in film production activities stays in the state while only 33 percent of video game industry spending remains in Texas.

The IMPLAN results are summarized in **Table 9**. Reported industry spending of \$344 million had a total state economic impact of about \$522 million. Labor income — i.e. salaries and wages — generated by the initial spending of the Texas media industry totaled almost \$99 million statewide in 2007. Direct, indirect and induced employment attributed to Texas media activity came to 2,421 on an FTE basis while other



property income totaled almost \$44 million. Property income includes rents, royalties, dividends and corporate profits.<sup>16</sup>

Importantly, the Texas media industry has a significant fiscal impact. According to the IMPLAN model, in 2007 indirect business taxes amounted to more than \$8.8 million. About 70 percent of these revenues were realized by the state of Texas and the other 30 percent by local governments and school districts. An initial comparison of revenues with the costs of the new Film Incentive Program suggests the program is paying for itself (see **Table 9**). Grants awarded through March 2008 amounted to \$4,519,042, and an additional \$1,423,863 in incentive grants is projected for the rest of fiscal 2008 for a total of \$5,942,905. This was considerably less than the \$8.8 million in tax receipts generated by media industry spending. If we just look at additional state tax receipts from media production, new state revenues exceed outlays by about \$232,000.

As discussed above, it is likely that a sizeable amount of filmmaking, television, commercial production and video game development spending across Texas is not captured by the Film Commission data. Total spending could easily exceed \$500 million annually with an economic impact in excess of \$700 million and additional millions in state and local tax revenues. For example, the spending data tracked by the Texas Film Commission do not include outlays for part-time or contract workers, nor do they include dozens of other local businesses that benefit from on-location production. These businesses may include accounting and payroll services, dry cleaners, neon suppliers, helicopter services, gas stations, florists, lumberyards and dozens of other small- and medium-sized businesses.

**TABLE 9**  
**Economic and Fiscal Impacts of the Texas Moving Media Industry, 2007**

Activity	Value	Output	Labor Income	Employment	Other Property Income	Indirect Business Taxes
Studio Feature Films	\$750,000	\$1,242,750	\$249,750	7	\$95,250	\$22,500
Independent Feature Films	11,636,100	19,281,017	3,874,821	109	1,477,784	349,083
Television	74,766,980	123,888,885	24,897,404	701	9,495,406	2,243,009
<i>Sub Total</i>	<i>\$87,153,080</i>	<i>\$144,412,652</i>	<i>\$29,021,975</i>	<i>817</i>	<i>\$11,068,440</i>	<i>\$2,614,592</i>
Commercials, Corporate, Sports	91,950,000	152,397,655	30,610,494	864	11,610,054	2,727,672
Animation	16,790,000	27,827,695	5,589,453	158	2,119,987	498,071
Video Games	149,057,970	198,098,042	33,388,985	582	18,334,130	2,981,159
<i>Sub Total</i>	<i>\$257,797,970</i>	<i>\$378,323,392</i>	<i>\$69,588,932</i>	<i>1,604</i>	<i>\$32,064,171</i>	<i>\$6,206,902</i>
<b>GRAND TOTAL</b>	<b>\$344,951,050</b>	<b>\$522,736,044</b>	<b>\$98,610,907</b>	<b>2,421</b>	<b>\$43,674,225</b>	<b>\$8,821,494</b>

Sources: IMPLAN and Texas Film Commission.



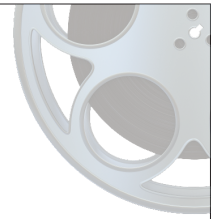
Of course, there are other real economic benefits from having a thriving media industry in Texas that cannot be easily quantified. For instance, films and television shows that emphasize the natural or cultural amenities of Texas are simultaneously conveying “free” advertising messages that may boost the convention and tourism industry in the state. The link between movies and tourism is perhaps best described as follows:

Essentially, movies become “pull” factors (attractions) situated in “push” locations (tourism generating areas). The attractions of a destination are transferred to the locations of potential tourists as opposed to being firmly and immovably ensconced....Pull factors can be the classic tourist attractions of sun, sea and sand, or of cultural, social and activity based origins. Push factors are predispositions to travel implying physiological or psychological motivations....Consumers exposed to the constant bombarding of advertising become immune to it. When viewing movies, consumers are able to experience attractions vicariously without leaving the security of home and without the hard-sell impressions inherent in paid advertising....***Movies which create major interest are likely to reach wider audiences with less investment than specifically targeting tourism advertisements and promotion.***<sup>17</sup>

According to a recent study prepared for the Office of the Governor’s Economic Development and Tourism Division, travel and tourism is one of the state’s most important “export-oriented” industries with a total economic impact of \$56.7 billion in 2007.<sup>18</sup> State revenues generated by travel spending, primarily sales and bed taxes, were estimated at \$2.9 billion in 2007.<sup>19</sup> Were it not for the state’s free media exposure from film and television, these tourism-related revenues would probably have been smaller.

Media exposure may also help “sell” Texas to families and businesses as an attractive place to live and work. Would Texas and its major metropolitan areas have led the nation in population gains, in-migration, job growth and business relocations and expansions over the past 30 years in the absence of media exposure? Would Texas rank number two among the states in corporate headquarters? There is no way to know for sure. But clearly Texas’ portrayal through moving image media has helped to create an identity that bonds Texans to the state while at the same time marketing Texas to the rest of the world as a good place to live, work and recreate.

Finally, the moving media industry is typically “non-cyclical.” That is employment and payroll tend to grow steadily regardless of the health of the national economy. Given the likelihood of a prolonged national recession, and slower growth in Texas for the next several years, expansion of the moving media industry can help provide stability to the Texas economy.



## Projections of Growth in the Moving Media Industry in Texas through 2011

To make any reasonable projections about the growth of the moving media industry in Texas, we first need to look at forecasts for the United States. Veronis Suhler Stevenson (VSS) has forecast expenditures by industry segment for the period 2007 to 2011.

**Table 10** summarizes the VSS national projections for spending growth in films, television, commercials and video games/animation between 2007 and 2011. In making our projections of industry spending for Texas, we have developed two scenarios. Under scenario one, we assume that spending in each segment of the Texas moving media industry matches the national growth rate between 2007 and 2011. In scenario two, we assume that industry spending in Texas grows at twice the national rate, implying that the state succeeds in increasing its relative share of the business — perhaps in response to the new incentive program.

With scenario one, by the year 2011 moving media production has grown to a \$408 million industry in Texas while under scenario two, it becomes a \$523 million industry in the state (see **Table 11**). Once again using the IMPLAN input-output model, we can estimate the overall economic and fiscal impacts on the state from this spending (see **Table 12**).

In Scenario 1, total spending for all industry segments in 2011 will approach \$408 million. This spending will generate about \$623 million in state economic activity, boost labor earnings by \$118 million and support almost 3,000 jobs. In addition, media industry spending will create almost \$51 million in property income and more than \$10 million in indirect business taxes, of which about \$7 million will accrue to the state. If the state succeeds in boosting its share of media industry activity to more than \$522 million (sce-

TABLE 10  
**National Projections of Spending in the Moving Media Industry, 2007-2011**  
(in millions of dollars)

Industry	2007	2011	% change
Feature films	\$10,522	\$13,061	24.1%
Television	181,183	232,071	28.1
Broadcast	49,056	57,060	16.3
Cable and satellite	132,127	175,011	32.5
Commercials	91,386	123,069	34.7
Broadcast	48,150	53,454	11.0
Cable and satellite	23,452	32,492	38.5
Internet	19,093	34,780	82.2
Entertainment media	691	2,343	239.1
Video games and animation	9,838	14,715	49.6
<b>GRAND TOTAL</b>	<b>\$292,929</b>	<b>\$382,916</b>	<b>30.7%</b>

Source: Veronis Suhler Stevenson.



nario 2), the state will enjoy almost \$800 million in related economic activity supporting more than 3,700 jobs paying \$150 million in salaries, wages and benefits. State and local indirect tax revenues will increase by \$13.4 million (\$9.4 million to the state) and property income in the form of rents, royalties, dividends and corporate profits will rise by \$65 million.

**TABLE 11**  
**Projections of Spending for Texas' Moving Media Industry, Under Two Scenarios, 2011**

Industry	Scenario 1a	Scenario 2b
Studio and Independent Films	\$14,983,337	\$17,893,075
Television	82,269,728	100,332,026
Commercials	123,856,650	155,763,300
Animation	25,117,840	33,445,680
Video Games	161,582,960	215,155,920
<b>TOTAL</b>	<b>\$407,810,515</b>	<b>\$522,590,001</b>

*a – Assumes spending in Texas grows at the U.S. average rate.*  
*b – Assumes spending in Texas grows at twice the U.S. average rate.*

**TABLE 12**  
**Economic and Fiscal Impacts, 2011 Projections**

**Scenario 1**

Industry	Value	Output	Labor Income	Jobs	Property Income	Indirect Business Taxes
Features	\$14,983,337	\$24,822,337	\$4,988,008	141	\$1,891,869	\$444,477
Television	82,269,728	136,353,599	27,387,896	773	10,387,776	2,440,509
Commercials	123,856,650	205,279,635	41,232,333	1,163	15,638,743	3,674,174
Animation	25,117,840	41,630,233	8,361,822	236	3,171,501	745,114
Video Games	161,582,960	214,847,993	36,043,878	631	19,827,770	3,159,994
<b>TOTAL</b>	<b>\$407,810,515</b>	<b>\$622,933,797</b>	<b>\$118,013,937</b>	<b>2,944</b>	<b>\$50,917,659</b>	<b>\$10,464,268</b>

**Scenario 2**

Industry	Value	Output	Labor Income	Jobs	Property Income	Indirect Business Taxes
Features	\$17,893,075	\$29,655,932	\$5,956,671	168	\$2,259,267	\$530,793
Television	100,332,026	166,289,999	33,400,901	942	12,668,410	2,976,322
Commercials	155,763,300	258,161,630	51,845,177	1,463	19,667,433	4,620,676
Animation	33,445,680	55,432,769	11,134,190	314	4,223,014	992,157
Video Games	215,155,920	286,081,008	47,994,257	841	26,401,682	4,260,954
<b>TOTAL</b>	<b>\$522,590,001</b>	<b>\$795,621,338</b>	<b>\$150,331,196</b>	<b>3,728</b>	<b>\$65,219,806</b>	<b>\$13,380,902</b>

Source: IMPLAN.



## Strategies for Enhancing Texas' Competitive Position in the Moving Image Industry

### Incentive Programs

Incentives programs targeting the film and television industry are not a new concept. For the past three decades, states (and some cities) have offered incentives, financial and otherwise, to lure film and television production inside their borders. With the passage of time, incentive programs have become more diverse and aggressive. In addition to film and television productions, states have expanded their incentive programs to cover areas such as commercials, music videos, soundtrack composition, multimedia productions and video games. The range of incentives has also expanded to include various tax tools such as rebates, credits and exemptions, as well as cash rebate options, and, in the case of New Mexico, an innovative loan program based on participation in lieu of interest (see **Appendix C**).

If ranked, Texas would fall behind many other states in terms of the level of incentives offered. This situation is compounded by the fact that states such as Michigan, Massachusetts, New York and Louisiana have recently increased their incentives significantly – roughly five to nine times the amount that Texas offers. To compete effectively in this arena, Texas probably needs to increase its incentives. A 25 percent tax credit is the current median nationwide. New Mexico and Louisiana, states that routinely stand-in for Texas' varying landscapes, both offer 25 percent tax credit programs and are having great success luring filmmakers to their states – in some cases away from Texas.<sup>20</sup>

Along with raising incentive levels, spending caps on the amounts paid-out per production should be reexamined. Most states have a significantly higher cap on payouts, with some having none at all (see **Appendix C**). By raising or eliminating payout caps, projects with large budgets may once again find Texas economically competitive as a shooting location. But to address the payout cap issue, the Moving Image Industry Incentive Program must receive greater funding in order to handle the increased payouts that major projects would require. Texas currently operates its incentive program with a dedicated \$20 million per biennium. While this amount is competitive with some states, it is also dwarfed by many others (see **Appendix C**).

The fast-growing video game industry and the high volume television commercial sector also warrant renewed attention. Video game development in particular offers the opportunity to not only compete for individual projects via incentives — as with films and television production — but to attract entire game development companies. Unlike the majority of film and television companies who are largely tied to Los Angeles due to well-developed financial and social networks, game development companies can and do operate efficiently in many states — including Texas.

### University Programs

To grow and attract the moving media industry, Texas must do more than offer financial incentives. In particular, the state must support an education and training infrastructure that can produce qualified professionals with the requisite skills demanded by the industry. On that score, Texas appears to be on the right track.

A total of 29 university and college programs specializing in film and television production are found across the state (see **Appendix D**). These programs continue to produce graduates qualified to work in various capacities from on-air personality to film director. To enhance the state's already well respected programs, con-





sideration should be given to offering financial inducements for the production of student films. The Southern Utah Student Film Production Incentive program, instituted to entice student filmmakers to the state, is a good example. Students compete for cash grants in the range of \$15,000 to \$20,000, and eligible projects must meet the following guidelines:

It must be a feature-length film; it can be any genre, but it must be Western-themed and 75 percent of principal photography must be shot in Kane County, Utah; the film must have a G or PG-13 rating; and the student and university must each match the cash contribution of the incentive, equating to a minimum budget of \$45,000 to \$60,000.<sup>21</sup>

By offering a matching incentive, the Southern Utah Student Film Production Incentive creates a holistic arena in which the filmmaker, the university and the granting organization leverage each other to produce the film while at the same time stimulating the local economy.

Texas universities are also responding to the growing market for animation and video gaming by creating innovative programs melding arts and technology. At present, about 24 institutions offer associate, bachelor's and master's degrees that train students in video graphics, computer animation and other digital arts (see **Appendix D**). With curricula that mix courses in computer programming, engineering, animation, storytelling and project management, these new programs are graduating students whose salaries are, in some, cases considerably higher than the average college graduate (See **Table 13**).

As these arts and technology programs mature, employment options for graduates are expanding as well. Though “entertainment” is still the largest segment of the video game industry, the technology is rapidly migrating to “serious gaming.” For example, real estate companies, the military, the health care industry and government agencies are all integrating advanced simulations and digitally created worlds into their day-to-day operations.<sup>22</sup>

One successful arts and technology program, located in the Institute for Interactive Arts and Engineering at the University of Texas at Dallas (UTD), has already forged partnerships with many entities outside the entertainment industry including Alcatel, Lockheed Martin, Raytheon, Samsung USA, Texas Instruments, as well as several branches of the military.<sup>23</sup> These industry connections are important because they help keep some of UTD's newly-minted arts and technology graduates in the state.

But most graduates of the UTD program and similar programs at other state universities move out-of-state upon graduation, especially to California and Washington where the major video game developers are located. The challenge to Texas, then, is to focus on the demand side of the equation, since we appear to be competitive on the supply side. In other words, we need to stimulate expansion of home-grown gaming

**TABLE 13**  
**Entertainment Software Average Salary Comparison, 2007**

Profession	Salary
Programmer	\$80,886
Producer/Project Lead	77,131
Art & Animation	65,107
Game Designer	61,538
Average College Graduate	56,788

Sources: *Game Developer Magazine*, *U.S. Census*.





companies while simultaneously pursuing policies to entice non-local companies to expand or relocate in the state of Texas.

### **Leveraging Existing Economic Development Programs**

As discussed above, video game development companies and publishers are more geographically footloose than traditional film and television companies. Texas is home to many video companies, both large and small, but ranks third in overall employment behind California and Washington. Despite the gaming industry's geographic mobility, companies tend to congregate in regional clusters — just as they do in the information technology industry. With moderately-sized clusters already formed in Austin and Dallas, Texas has a significant advantage over other locations in terms of becoming a major production center for digital content. That being said, it may make sense to target several of the state's economic development programs at game publishers and developers. As a 2006 study of Austin's gaming industry notes, due to the substantial lack of game publishers in the city, “much of the value created by the intellectual capital developed in Austin is realized elsewhere.”<sup>24</sup>

One strategy to grow and attract video developers and publishers might be to leverage the Moving Image Industry Incentive Program with other economic development programs, such as the Emerging Technology Fund (ETF) and the Texas Enterprise Fund (TEF). Indeed, Gov. Rick Perry has already indicated a strong interest in this leveraging strategy.<sup>25</sup> Serious gaming, in particular, would seem to qualify for funding from either the ETF or the TEF, which both stipulate that grants should go to firms with the potential for scientific breakthrough as well as firms offering partnerships with educational institutions. Much like the aforementioned student film incentive concept in Utah, which uses several sources of funding, policymakers should consider leveraging all or some of the three Texas programs in question to create an attractive relocation package.

For instance, a game development company in California might be enticed to relocate to Texas via a grant from the Texas Enterprise Fund. Simultaneously, the company would already be eligible for incentives offered by the Moving Image Industry Incentive Program. In addition to these two options, the company could receive funding through the Emerging Technology Fund if certain criteria were met such as producing a game considered to be of scientific merit, using proprietary technology that could be spun-off as a separate product, or forming a partnership with a Texas public or private institute of higher education.

In short, by offering a “package” of incentives, grants and rebates, Texas might be able to attract entire companies from California, Washington and other states instead of individual projects.



### Conclusion

The moving media business — comprised of filmmaking, television production, commercials and video games/animation — has been targeted as a potential growth industry for the state of Texas, with the recently enacted Texas Moving Image Industry Incentive Program now in effect. Under this new program, the Texas Film Commission is expected to approve about \$6 million in grants by the end of fiscal 2008.

In 2007, the moving media industry in Texas was quite small, accounting for a mere fraction of 1 percent of Texas' trillion-dollar economy. Though the new incentive program should help attract additional film and video production spending to Texas, the industry at best might double its relative contribution to the state's overall economic activity by 2011. The Texas Moving Image Incentive Program was affected by the Writers Guild of America strike from October 2007 to January 2008. The strike shut down all productions using scripts from writers in the guild. For example, "Prison Break" and "Friday Night Lights" stopped production during the strike, and several independent movies halted pre-production efforts while waiting for a strike resolution.

Our initial scan finds the program is breaking even in terms of generating new state tax revenues roughly equal to the value of the grants expected to be approved in 2008. Though we have no way of calculating the value of grants that might be awarded in the year 2011, based on our two growth scenarios industry spending should produce between \$7 million and \$9.4 million in new state tax revenues by that time. The growing market presence of the moving media industry in Texas will have economic benefits beyond the fiscal returns presented in this report.

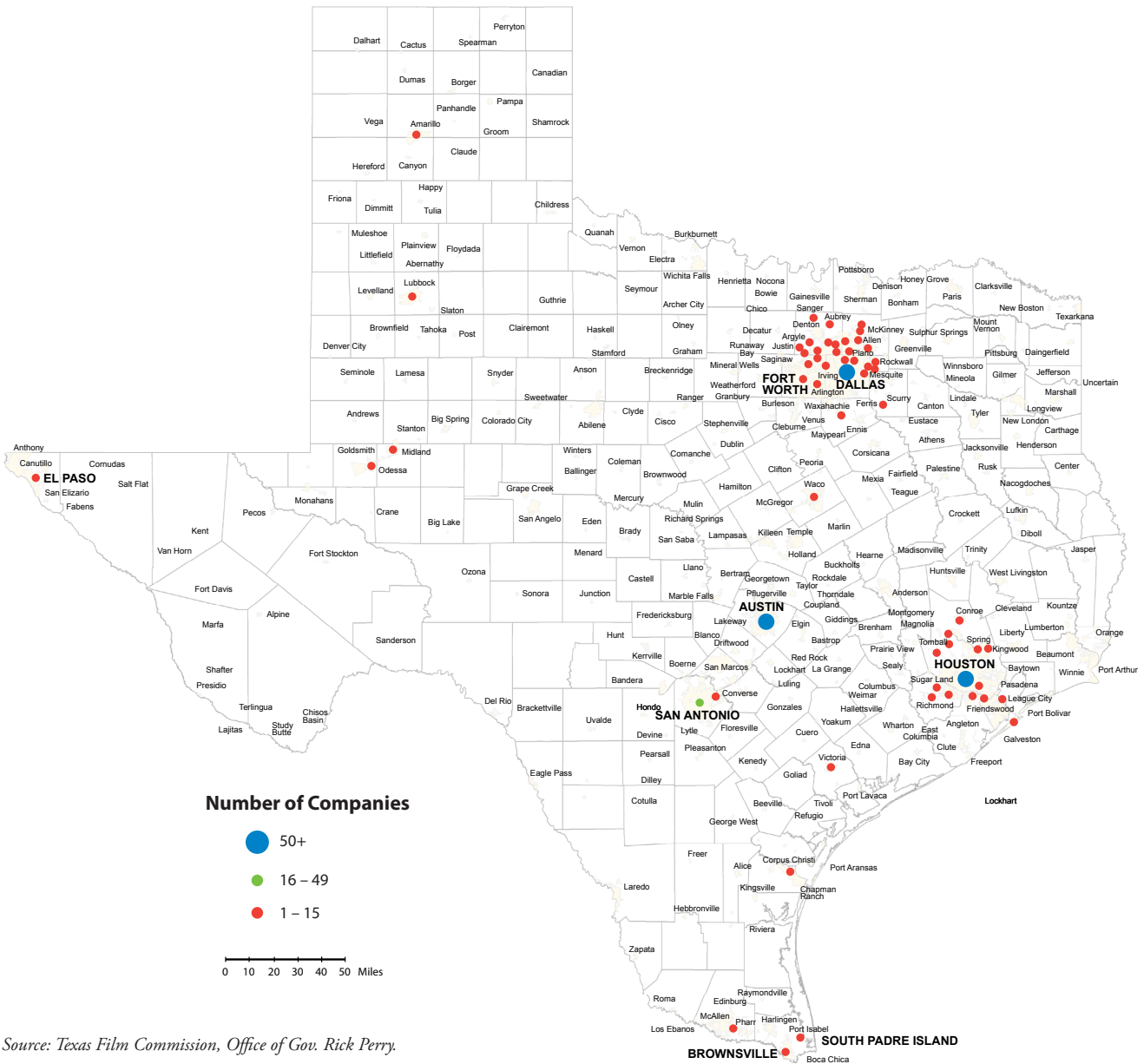
To improve the state's competitive position and its ability to attract new projects and companies, consideration should be given to increasing the percentage of qualified state spending that is eligible for grants under the Texas Moving Image Industry Incentive Program. Additional funding for university and community college based training programs in arts and technology could also enhance the state's competitive posture. Finally, leveraging the Moving Image Industry Incentive Program with the Emerging Technology Fund and/or the Texas Enterprise Fund should be explored as a strategy for bringing new video gaming companies into the state.

# APPENDICES



## Appendix A

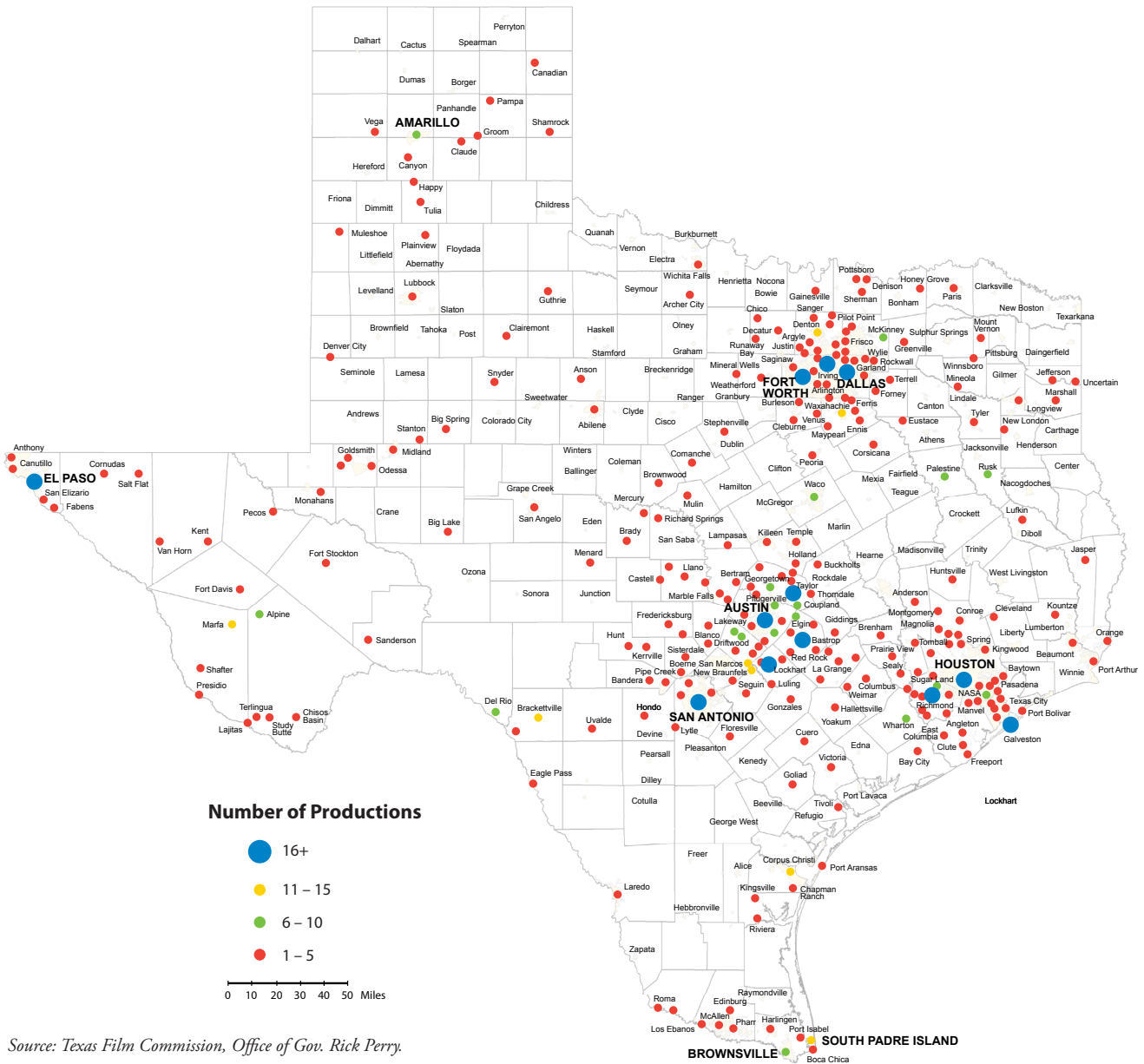
### Film and TV Production Companies in Texas (2008)





## Appendix A (cont.)

### Film and TV Productions on Location in Texas (1990-2008)

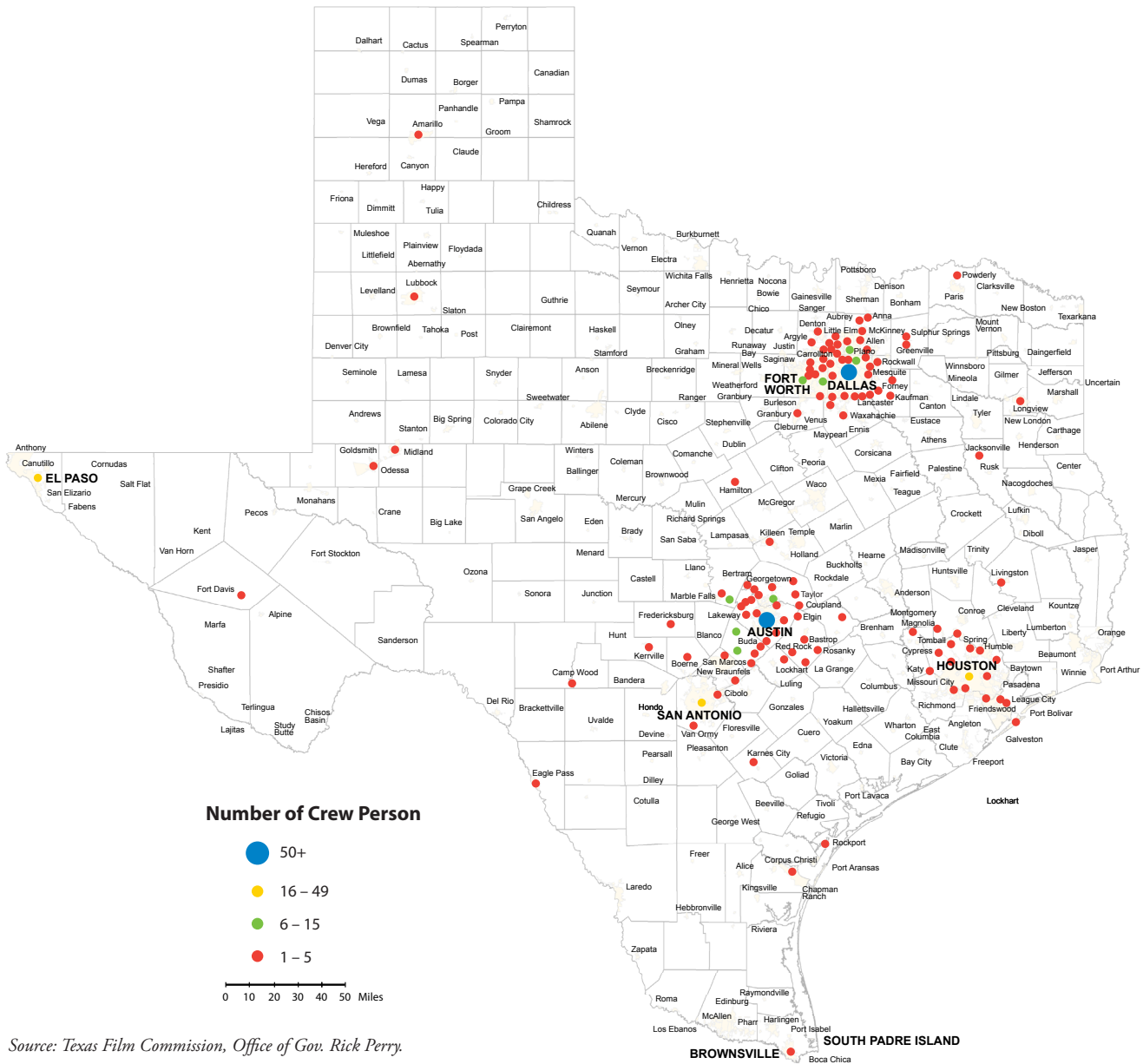


Source: Texas Film Commission, Office of Gov. Rick Perry.



## Appendix A (cont.)

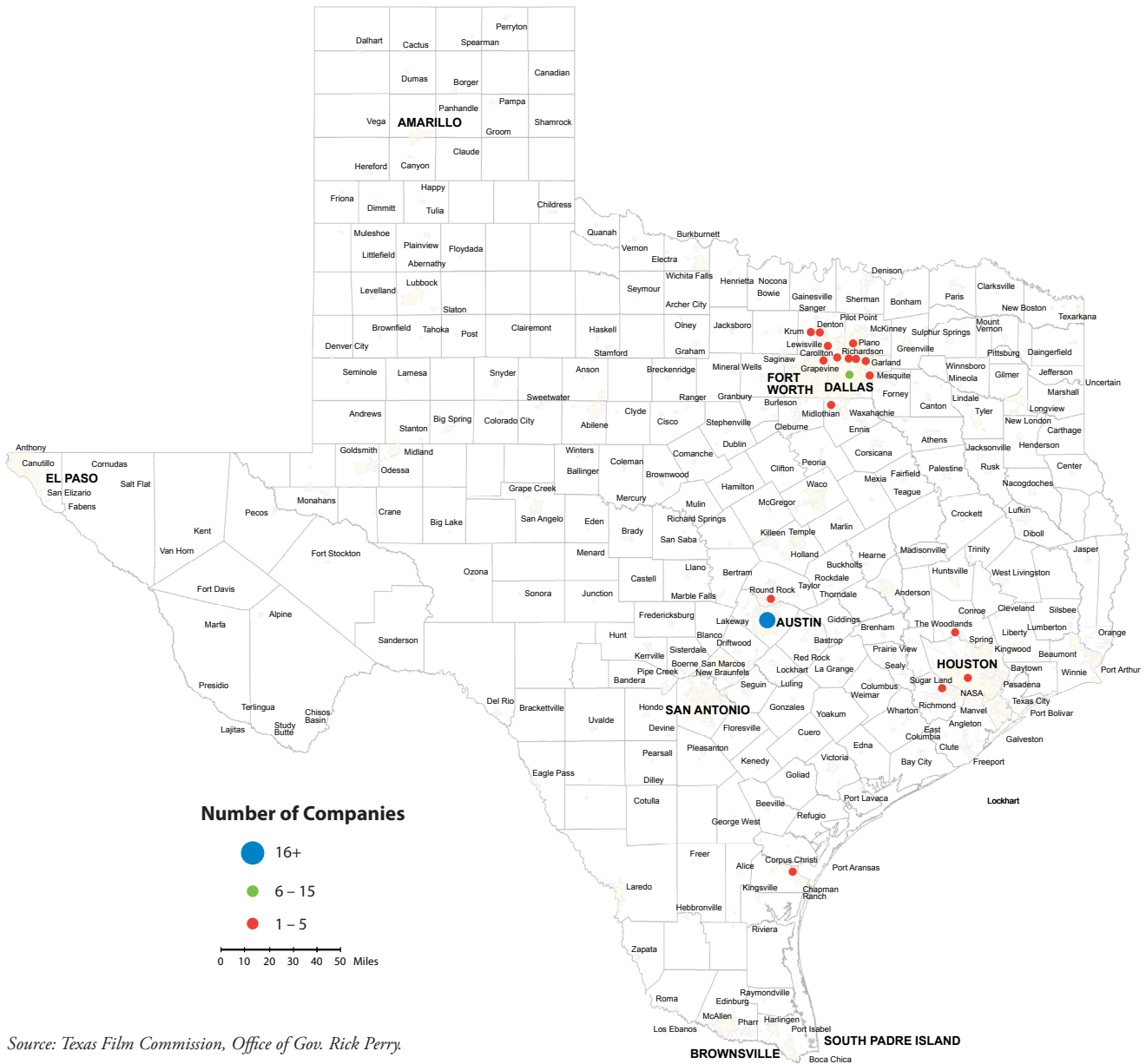
### Film and Television Production Crews in Texas (2008)





## Appendix A (cont.)

### Video Game Companies in Texas (2008)



Source: Texas Film Commission, Office of Gov. Rick Perry.





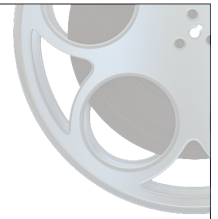
## Appendix B

The staff of the Texas Film Commission recently developed a spending scenario for the moving media industry in Texas based on an annual appropriation of \$30 million. Though no specific target date is mentioned, the Commission believes that increasing funding for the moving media incentive program would generate significantly higher levels of spending and job creation. Their “pro-forma” appears below.

PROJECTED FILM & TELEVISION PRODUCTION & JOBS (Based on \$30M Annual Appropriation)												
Type of Project	Total Texas Spending	Crew Jobs	Work Days	Hours/ Day	FTE* Job Multiplier	FTE Jobs Created	Crew : FTE Job Ratio	Total Texas Wages	Total Man Hours	Hourly Salary	Annual Salary	15% Payout (No Cap)
Low Budget Film (< \$10M)	\$1,500,000	120	20	12	0.120	14.4	8.33 : 1	\$795,293	28,800	\$27.61	\$55,229	\$225,000
Studio Budget Film (\$10M - \$80M)	\$16,000,000	250	60	12	0.360	90.0	2.78 : 1	\$6,880,000	180,000	\$38.22	\$76,444	\$2,400,000
Large Budget Film (> \$80M)	\$40,000,000	375	100	12	0.600	225.0	1.67 : 1	\$17,400,000	450,000	\$38.67	\$77,333	\$6,000,000
Episodic TV	\$24,000,000	150	146	12	0.876	131.4	1.14 : 1	\$8,400,000	262,800	\$31.96	\$63,927	\$3,600,000
<b>Film and Television Projections</b>												
Low Budget Film (21)	\$32,000,000	2520				302		\$16,701,153				\$4,800,000
Studio Budget (5)	\$80,000,000	1250				450		\$34,400,000				\$12,000,000
Large Budget (1)	\$40,000,000	375				225		\$17,400,000				\$6,000,000
Episodic Television Series (2)	\$48,000,000	300				262		\$16,800,000				\$7,200,000
<b>TOTALS</b>	<b>\$200,000,000</b>	<b>4445</b>				<b>1239</b>		<b>\$85,301,153</b>				<b>\$30,000,000</b>
PROJECTED COMMERCIAL PROJECT PRODUCTION & JOBS (Based on 5% Credit)												
Type of Project	Total Texas Spending	Crew Jobs	Work Days	Hours/ Day	FTE* Job Multiplier	FTE Jobs Created	Crew : FTE Job Ratio	Total Texas Wages	Total Man Hours	Hourly Salary	Annual Salary	5% Tax Credit
Average Commercial	\$250,000	35	3.5	12	0.021	0.74	47.3 : 1	\$47,856	1,470	\$32.56	\$65,110	\$12,500
<b>Commercial Projections</b>												
Average Commercial (625)	\$156,250,000	21875				459		\$29,910,000	183,750			\$7,812,500
<b>TOTALS</b>	<b>\$156,250,000</b>	<b>21875</b>				<b>0</b>		<b>\$29,910,000</b>	<b>183,750</b>			<b>\$7,812,500</b>
PROJECTED VIDEO GAME PROJECT PRODUCTION & JOBS (Based on 5% Credit)												
Type of Project	Total Texas Spending	Crew Jobs	Work Days	Hours/ Day	FTE* Job Multiplier	FTE Jobs Created	Crew : FTE Job Ratio	Total Texas Wages	Total Man Hours	Hourly Salary	Annual Salary	5% Tax Credit
Low Budget Video Game	\$599,212	15	250	8	1.000	15	1 : 1	\$470,612	30,000	\$26.08	\$52,160	\$29,961
High Budget Video Game	\$4,644,903	43	250	8	1.000	43	1 : 1	\$2,993,000	86,000	\$34.80	\$69,605	\$232,245
<b>Video Game Projections</b>												
Low Budget Video Game (20)	\$11,984,240					300		\$9,412,240				\$599,212
High Budget Video Game (5)	\$23,224,515					215		\$14,965,000				\$1,161,226
<b>TOTALS</b>	<b>\$35,208,755</b>					<b>515</b>		<b>\$24,377,240</b>				<b>\$1,760,438</b>
PROJECTED TOTAL PRODUCTION NUMBERS												
<b>FILM &amp; TELEVISION</b>	<b>\$200,000,000</b>					<b>1239</b>		<b>\$85,301,153</b>				<b>\$30,000,000</b>
<b>COMMERCIALS</b>	<b>\$156,250,000</b>					<b>459</b>		<b>\$29,910,000</b>				<b>\$7,812,500</b>
<b>VIDEO GAMES</b>	<b>\$35,208,755</b>					<b>515</b>		<b>\$24,377,240</b>				<b>\$1,760,438</b>
<b>TOTALS</b>	<b>\$391,458,755</b>					<b>2213</b>		<b>\$139,588,393</b>				<b>\$39,572,938</b>

\*FTE = Full Time Equivalent equal to 2000 Hours per Job  
NOTE: Projections are based on the new Incentive Program





## Appendix C

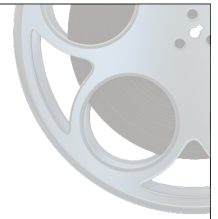
### Incentive Programs by State (as compiled by the Texas Film Commission and the authors)

State	Tax Credit, Rebate, Reimbursement or Investment Incentives	Sales and Use Tax Exemption/ Rebate	Hotel Tax Exemption	Other Incentives	Info Updated
Alabama		Exemption on 4% tax to qualifying productions.	Exemption for qualified productions.		Jun-07
Alaska	<b>Tax Credit</b> of 30% for expenditures including ALL cast & crew. Additional 10% for wages to Alaska residents. Additional 2% if filming in rural area. Additional 2% if filming between October – March. To qualify, must spend \$100K in 24 months. No salary cap. Credits are transferable and capped at \$100 million per year.	No state sales tax.	No tax on occupancy.	No state income tax.	Jul-08
Arizona	<b>Income Tax Credit</b> provides tiered, transferable credit for Arizona production costs including wages – 10% if spending \$250K-\$1M, 15% if spending \$1M-\$3M and 20% if spending over \$3M. To qualify, 25% of full-time employees must be Arizona residents in 2006, 35% in 2007 and 50% in 2008. Capped at \$5M per project, \$30M per year (increasing by \$10M every year until 2010). Must choose between income tax credit OR sales tax exemption.	Exemption on 5% tax for production spending.	Occupancy tax exemption for productions.	<b>Fuel Use Tax</b> exemption on production vehicles entering state for use on location.	Jun-07
Arkansas		Rebate of 5.125% tax to companies spending \$500K in six months or \$1M in 12 months.			Jun-07
California		No tax on production/post services. 5% exemption on purchase/lease of post-production equipment.	No state tax on occupancy. Local tax after 30 days.	No location fees for state property. Unused state buildings available to filmmakers.	Jun-07
Colorado	<b>Cash Rebate</b> of 10% of below-the-line costs. To qualify, 75% of Below-the-Line spending, (i.e. salaries for non-starring cast members and film crew, items needed for production, etc...) must be with Colorado businesses and 75% of crew must be Colorado residents.	No tax on production services. Tangible property is taxed.	After 30 days.		Jun-07



**Incentive Programs by State (cont.)**  
 (as compiled by the Texas Film Commission and the authors)

State	Tax Credit, Rebate, Reimbursement or Investment Incentives	Sales and Use Tax Exemption/ Rebate	Hotel Tax Exemption	Other Incentives	Info Updated
Connecticut	<b>Business Tax Credit</b> of 30% for qualified digital media and motion picture production expenses (including pre and post) incurred in Connecticut. Must exceed \$50K in spending to qualify. Includes goods, services and labor. Credits are transferable and carry forward for 3 years. No annual or per-production cap.	Exemption on 6% tax for most production services and rentals.	After 30 days.	No location fees for state property. Five-year exemption on local property taxes for machinery/equipment used in production. State reimburses municipalities for taxes they waive for brick and mortar facilities.	Apr-06
Delaware		No state sales tax.			Apr-06
Florida	<b>Entertainment Industry Financial Incentive</b> provides qualifying productions with 15% reimbursement on total cost of approved Florida expenditures when spending minimum of \$625K in Florida. Projects placed in queue and funds certified to projects in queue until funding exhausted. Award capped at \$2M per project. Appropriation for fiscal 2008 capped at \$25M.	Exemption on 6% tax for most production services and rentals.		No state income tax.	May-07
Georgia	<b>Income Tax Credit</b> of 9% of all Georgia spending including personnel/services brought into the state to companies spending at least \$500K in calendar year. Wages limited to first \$500K per individual. Additional 3% credit for wages to Georgia residents. Additional 3% credit for spending in underdeveloped counties. Additional 2% credit if spending exceeds \$20M in calendar year. Credits carry for five years and can be sold for minimum of \$0.60 on the dollar. The 2008 Entertainment Industry Investment Act reinforces and strengthens Georgia's position within the entertainment industry. The new, more competitive incentives replace those currently in use by offering a 20 percent tax credit for qualified productions, which are then eligible for an additional 10 percent tax credit if they include an animated Georgia promotional logo within the finished product.	Exemption on 7% tax for most production services/rentals including certain vehicles.		<b>Georgia Production Partnership Program</b> – State-wide discount program offered through an alliance of industry specific service/material providers, professional organizations and support businesses.	Oct-08



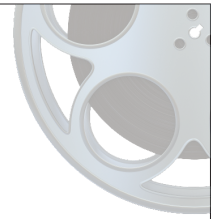
**Incentive Programs by State (cont.)**  
 (as compiled by the Texas Film Commission and the authors)

State	Tax Credit, Rebate, Reimbursement or Investment Incentives	Sales and Use Tax Exemption/ Rebate	Hotel Tax Exemption	Other Incentives	Info Updated
<b>Hawaii</b>	<b>Income Tax Credit</b> of 15 – 20%. 15% of production costs if filming in Oahu; 20% if on a neighbor island. \$8 M cap per production. “Qualified production” spends \$200K + in “qualified production costs” in Hawaii. Applies to film, television, commercials, music videos, and gaming. Must demonstrate reasonable efforts to hire local talent and crew. Must make a financial or in-kind contribution or educational or workforce development efforts, in partnership with related local industry labor organizations, educational institutions, or both, toward the furtherance of the local film and television and digital media industries.		Up to 7.25% rebate with same percentages and qualifications as income tax credit.	<b>High Tech Investment Tax Credits</b> for production entities provide a 100% return over five years for investments up to \$2M per year per qualifying business. Business is required to be an employer, own capital / property or maintain an office in Hawaii, stay in business for five years and conduct 75% of all business in Hawaii.	Sep-08
<b>Idaho</b>		20% rebate for qualifying productions on all goods and services purchased in Idaho. Capped at \$500,000 per production.	After 30 days.		Apr-06
<b>Illinois</b>	<b>Income Tax Credit</b> of 20% of wages paid to Illinois resident (35% if resident from high unemployment area) and 20% of Illinois production spending. Wage credit limited to first \$100K paid to each employee. Minimum spending to qualify: \$100K for projects over 30 minutes and \$50K under 30 min. Credits are transferable.		After 30 days.		Apr-06
<b>Indiana</b>			After 30 days	No location fees for state property. Production-related businesses with tax liability in Indiana can qualify for 10% tax credit for investment in equipment or buildings.	Apr-06



**Incentive Programs by State (cont.)**  
 (as compiled by the Texas Film Commission and the authors)

State	Tax Credit, Rebate, Reimbursement or Investment Incentives	Sales and Use Tax Exemption/ Rebate	Hotel Tax Exemption	Other Incentives	Info Updated
Iowa	Investors earn 25% of qualified spending as transferable Iowa income tax credits. Producers earn 25% of qualified spending as transferable Iowa income tax credits. No cap on projects or program. Applies to “film, video and television” productions.				Sep-08
Kansas	30% tax credit of the direct production expenditures made in Kansas that are directly attributable to the production of a film in Kansas. \$2M in funding available. Applies to any “film, video, commercial or television production.”	Rebate of 4.9% sales tax.	After 28 days.		Sep-08
Kentucky		Rebate of 6% sales tax on expenses including lodging, meals, office equipment and utilities.			Apr-06
Louisiana	<b>Investor Tax Credit</b> of 25% of total production expenditures (including payroll, except portion of any salary over \$1M) for projects spending at least \$300K in Louisiana. Payroll to Louisiana residents receives an additional 10% credit. Credits are transferable and can be carried forward for 10 years. Louisiana repealed the 4% state tax exemption over a year ago. Now there is no tax exemption, either state or parish. Combined, taxes can be as high as 9%. Effective January 1, 2006, the Sales and Use Tax Exemption is no longer part of Louisiana’s incentive package.		After 30 days.		Oct-08
Maine	A wage rebate equal to 10% of non-Maine residents’ wages and 12% of Maine residents’ wages. Income tax offset for companies investing in Maine productions. Applies to film, television, video, commercials, photographic project, interactive computer or video game.	Exemption of 5% tax for approved productions on production-related expenses.	After 28 days	No location fees for state property. Exemption from tax on 95% of the cost of fuel/ electricity used at production sites such as locations/ studios. Free use of surplus state property such as furniture/office equipment.	Sep-08



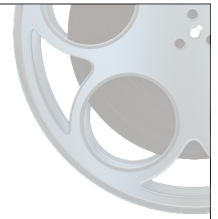
**Incentive Programs by State (cont.)**  
 (as compiled by the Texas Film Commission and the authors)

State	Tax Credit, Rebate, Reimbursement or Investment Incentives	Sales and Use Tax Exemption/ Rebate	Hotel Tax Exemption	Other Incentives	Info Updated
Maryland	<b>Wage Rebate Grant</b> of 50% of wages, limited to the first \$25K paid and excluding anyone making \$1M or more. Project must spend \$500K in Maryland to qualify. Grant capped at \$2M per project with annual appropriation of \$4M.	Exemption on 5% tax for approved production services and rentals including vehicles.	After 30 days.		Apr-06
Massachusetts	<b>Income Tax Credit</b> of 20% of Massachusetts payroll (excluding salaries of \$1M or more) when spending at least \$250K in the state. Projects spending more than 1/2 of days or cost in Massachusetts also receive 25% credit on all production expenses incurred in state (excluding payroll). Credits capped at \$7M per project.	Exemption on 5% tax if spending more than \$250K in any one-year period.	After 90 days.	Productions provided with office and stage space at no cost except for utilities in vacant state-owned properties.	Apr-06
Michigan	<b>Income Tax Credit</b> of 40% of Michigan expenditures. Project must spend at least \$50K in Michigan. Extra 2% may be claimed if filming in certain areas. Wages (capped at \$2M per employee) credited at 40-42% for BTL Michigan residents and all Above-the-Line personnel (those with wages negotiated before filming takes places, i.e. producer, director, actor, etc). Wages credited at 30% for non-resident BTL crew.		After 30 days.		Jun-08
Minnesota	<b>15% rebate</b> ("Snowbate") on production costs for film, television, video and commercials. \$1.7M in funding available.	TV commercial production exempt from 6.5% sales tax.	After 30 days.		Sep-08
Mississippi	<b>Income Tax Rebate</b> of 10% on all production expenditures in Mississippi (except payroll). <b>Payroll Tax Credit</b> of 10% of the total aggregate payroll for Mississippi residents employed by a state-certified production.	Exemption from 7% tax on production material. Tax reduced to 1.5% for production equipment such as cameras.			Apr-06
Missouri	<b>Income Tax Credit</b> of up to 50% of production expenditures (labor, equipment, lodging, food, property rental, etc.) in Missouri not to exceed \$1M/project. Company must spend \$300K or more in Missouri. Annual appropriation is capped at \$1.5M/year.		After 31 days.		Apr-06



**Incentive Programs by State (cont.)**  
 (as compiled by the Texas Film Commission and the authors)

State	Tax Credit, Rebate, Reimbursement or Investment Incentives	Sales and Use Tax Exemption/ Rebate	Hotel Tax Exemption	Other Incentives	Info Updated
Montana	<b>Wage Rebate</b> of 12% of the first \$50K paid to Montana residents. <b>Spending Rebate</b> of 8% of total Montana spending. Total of both rebates capped at \$1M per project. Rebate applied against Montana tax liability with any remainder refunded directly to the production. \$500 application fee.	No state sales tax.	After 30 days.	Out-of-state vehicles used in production exempt from licensing for 180 days. Out-of-state equipment used in production exempt from property tax for 180 days.	Apr-06
Nebraska			After 30 days.		Apr-06
Nevada			After 30 days.	No state income tax.	Apr-06
New Hampshire		No state sales tax.		No property tax on equipment/machinery. No state income tax. No permit fees.	Apr-06
New Jersey	<b>Income Tax Credit</b> of up to 20% of production expenses when at least 60% of total production expenses are spent in New Jersey. Filming must commence within 150 days of credit application approval.	Exemption from 6% tax on tangible property, machinery and equipment.	After 14 days.	<b>Loan Guarantees</b> for projects spending 50% of below-the-line budget and 70% of production days in New Jersey. Guarantee cannot exceed 30% of financing cost or \$1.5 million, whichever is less.	Apr-06
New Mexico	<b>Income Tax Rebate</b> of 25% of eligible New Mexico production and post-production costs including wages. Must choose income tax credit OR sales tax exemption for each expenditure. <b>Film Investment Program</b> – interest-free loans/equity investment up to \$15M per project. <b>No state sales tax.</b> Not to be used in conjunction with the 25% tax rebate. Type 16 Nontaxable Transaction Certificates (NT-TCs) work much like grocery-store coupons. A certificate is presented at the point of sale and no gross receipts tax (sales tax) is charged. (Used primarily for commercials and public service announcements).	Exemption from state and local tax on production related costs.	After 30 days.	<b>Mentorship Program</b> provides 50% wage reimbursement to productions providing on-the-job training to NM crew. No location fees for state property.	Oct-08



**Incentive Programs by State (cont.)**  
 (as compiled by the Texas Film Commission and the authors)

State	Tax Credit, Rebate, Reimbursement or Investment Incentives	Sales and Use Tax Exemption/ Rebate	Hotel Tax Exemption	Other Incentives	Info Updated
<b>New York</b>	<b>Income Tax Credit</b> of 30% of eligible production expenditures including payroll. Production must film at least 75% of total stage work on a qualified New York soundstage. Funded at \$60M per year until 2012. <b>New York City</b> provides additional 5% tax credit up to \$30M annually for filming in New York City. Separate fund of \$42M for commercial producers provides same 10% credit without soundstage qualification.	Manufacturing exemption of 4% tax including fuel and utilities.		<b>New York City</b> provides free permits and free police and also offers a discount card to productions that provides a minimum 10% discount and other special offers at more than 200 local vendors including production services, hotels, car rentals and parking.	Jun-08
<b>North Carolina</b>	<b>Income Tax Credit</b> of 15% of North Carolina production expenditures including payroll. Requires minimum spending of \$250K and capped at \$7.5M per project. Productions with tax burden exceeding 15% spending rebate will have difference picked up by state.	1% cap on 6.5% tax for production related expenses.			Apr-06
<b>North Dakota</b>			After 30 days.		Apr-06
<b>Ohio</b>			After 30 days.		Apr-06
<b>Oklahoma</b>	<b>Film Enhancement Rebate</b> provides cash rebate of 5-15% of Oklahoma production expenditures depending on percentage of Oklahoma residents on BTL crew (5% rebate for 0-24% Oklahoma crew, 10% for 25-49%, 15% for 50+%). Requires minimum budget of \$2M and Oklahoma spending of \$1.25M, completion bond, distribution agreement within one year and Oklahoma screen credit. Appropriation capped at \$5M/year. Must choose between rebate OR sales tax exemption.	State and local sales tax exemption on production related goods and services.	After 30 days.	<b>Tax Credit for Oklahoma Film Projects</b> – Oklahoma taxpayers receive income tax credit of 25% on film profits when profits are reinvested in another film project. <b>Tax Credit for Facilities Construction</b> – gives companies 10-25% income tax credit when building production facilities in Oklahoma. Credit cannot exceed tax liability and is non-transferable.	Apr-06

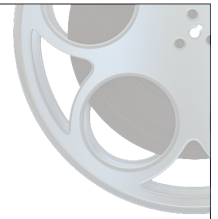




**Incentive Programs by State (cont.)**  
 (as compiled by the Texas Film Commission and the authors)

State	Tax Credit, Rebate, Reimbursement or Investment Incentives	Sales and Use Tax Exemption/ Rebate	Hotel Tax Exemption	Other Incentives	Info Updated
Oregon	<b>Production Investment Fund</b> offers 10% rebate on Oregon production expenses; minimum \$1M in spending to qualify, capped at \$250K per film and \$30K per episode for TV series. <b>Labor Rebate Fund</b> rebates 6.2% of wages from which Oregon income tax was withheld to projects spending at least \$1M. <b>Vendor Rebate</b> gives a 10% discount on goods/services from registered Oregon vendors to projects spending at least \$1M.	No state sales tax.	After 30 days.		Apr-06
Pennsylvania	<b>Income Tax Credit</b> of 25% of Pennsylvania production expenses (including payroll) when at least 60% of total production expenses are spent in Pennsylvania. Credits are transferable and can be carried forward for three years. Total credits can not exceed \$75M in any fiscal year.	Exemption from 6% tax on production related goods and services.	After 30 days.	No location fees for state property except for actual costs incurred by affected department or agency.	Oct-07
Rhode Island	<b>Motion Picture Tax Credit</b> provides 25% credit for Rhode Island production expenses including wages. Must film primarily in Rhode Island and have budget of \$300K. <b>Investment Tax Credit</b> to RI residents investing in Rhode Island based production. Credit is 15% for budget between \$300K – \$5M and 25% if budget over \$5M.		After 30 days.		Apr-06
South Carolina	<b>Payroll Tax Rebate</b> of 20% of total (not South Carolina) payroll when spending in South Carolina exceeds \$1M. Rebate cannot exceed withholding on South Carolina income tax. Rebate applies to all crew, cast and extras earning less than \$1M and subject to South Carolina withholding tax. <b>Spending Rebate</b> of up to 30% of South Carolina spending if total spending is \$1M or more. Funded by appropriation of 13% of admissions tax. (\$4-5M/year).	Exemption from state and local tax on film-related expenses if spending \$250K or more in a 12-month period.	After 30 days or if spending 250K or more.	No location fees for state property. Production Company Credit of 10% of total South Carolina investment if investment is more than \$500K in calendar year. Investor Tax Credit of up to 20% of investment in SC film or facility.	Oct-06
South Dakota			After 28 days.	No state income tax.	Apr-06





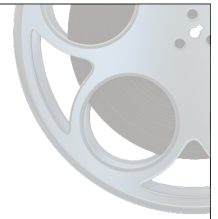
**Incentive Programs by State (cont.)**  
 (as compiled by the Texas Film Commission and the authors)

State	Tax Credit, Rebate, Reimbursement or Investment Incentives	Sales and Use Tax Exemption/ Rebate	Hotel Tax Exemption	Other Incentives	Info Updated
Tennessee	<b>Incentive Test Fund</b> of \$10M will provide 13% rebate of Tennessee BTL spending if out-of-state company spends more than \$500K in Tennessee. In-state company must spend more than \$200K to qualify. Rebate increases to 15% if using 25% Tennessee cast and crew. Rebate increases to 17% if using \$20K of Tennessee music.	Rebate of 7% sales tax to production companies spending \$500K in 12 months.	After 30 days.	No state income tax. No location fees for state property. No state or local permit fees. All truck permits, fees and fuel taxes waived except for overweight and/or oversized vehicles.	Oct-06
Texas	<b>Moving Image Industry Incentive Program</b> returns 5% of TX spending for film/TV projects spending at least \$1M and 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 at \$2M for films, \$2.5M for TV, \$200K for commercials and \$250K for video games. Grant increases to 6.25% if 25% of production occurs in underused area.	Exemption from state and local sales tax on production-related expenses.	After 30 days.	No state income tax.	Jun-07
Utah	<b>Industrial Assistance Fund</b> provides 10% rebate (12% if project set in Utah) of production dollars spent in Utah. Fund capped at \$1M/year. Rebate capped at \$500K for feature film, \$250K for TV movie, \$100K per episode for TV series. Rebate only 8% if Utah return on investment drops below \$3.50.	Exemption from 4.75% sales tax on production related expenses.	After 30 days.		Apr-06
Vermont	<b>Film Production Grant Program</b> provides 10% reimbursement of Vermont spending for productions spending over \$1M in Vermont. Grants are first-come, first-serve and are capped at \$1M annually. Salaries over \$1M are excluded from the spending calculation.	Exemption from 5% sales tax on production related expenses.	After 30 days.	Tax liability of nonresident performers subject to income tax derived from business conducted in Vermont is limited to the amount they would pay in their home state.	Oct-06
Virginia	<b>Incentive program</b> in place but up to the discretion of the governor's office. \$200K in funding available.	Exemption from 4.5% tax for production-related expenses.	After 90 days.	No location fees for state property.	Sep-08



**Incentive Programs by State (cont.)**  
 (as compiled by the Texas Film Commission and the authors)

State	Tax Credit, Rebate, Reimbursement or Investment Incentives	Sales and Use Tax Exemption/ Rebate	Hotel Tax Exemption	Other Incentives	Info Updated
Washington	<b>Competitiveness Fund</b> provides up to 20% rebate of in-state expenditures if spending \$500K (film), \$300K (TV) or \$250K (commercial). Fund is \$3.5M with a cap of \$1M per project.	Exemption from 6.5% tax on production-related expenses including rental vehicles.	After 30 days.	No state income tax. Seattle permits only \$25 per day including rental of city-owned property. Indie Vendor Deal provides 30-70% discounts from participating vendors for projects with budgets between \$500K-\$3M	Apr-06
West Virginia	31% transferable tax credits on direct production and post-production in-state spend. No per project cap. \$10M in funding available. Applies to film, television, commercials, videos and still photography.				Sep-08
Wisconsin	<b>Effective July 2007: Tax Credit</b> of 25% of direct production expenditures for films, TV, video games and commercial production. <b>Investment tax credit</b> of 25% for investing in WI based productions. <b>Income tax credit</b> of 15% for film, TV and electronic game production businesses that make a capital investment by starting a business in Wisconsin.	July 2007: Exemption for machinery, equipment and services used in production and post. No tax for all services contracted by out-of-state production companies.		Free use of state-owned property, no-fee permits and dedicated "traffic control" police unit free of charge available on a city-by-city basis.	Jun-06
Wyoming			After 30 days.	No state income tax. Participating Wyoming businesses offer a 10% discount to productions.	Apr-06



## Appendix D

### College and University Programs for the study of film, television, animation and game development (as compiled by the Texas Film Commission and the authors)

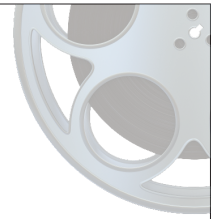
#### Film and Television

School	Location	Degrees Offered	Description
<b>Art Institute of Dallas</b>	Dallas	BFA Digital Media Production  AAS Video Production	The Video Production program is a competency-based program emphasizing the production process from inception through completion, and preparing graduates for job entry in the fields of audio and video. The Digital Media Production degree program allows students to build their creative potential as they gain familiarity with editing and compositing equipment as well as content manipulation. Students learn to utilize 3-D and Flash animation software and build technical abilities in authoring, video compression and media delivery.
<b>Austin College</b>	Sherman	BA Communication Arts (Media Studies)	The media studies emphasis of the Department of Communication Arts includes study of media theory, criticism and practice. Traditional media (print, radio, television) and new media (Internet) are included in primary course work. The emphasis also offers production facilities such as a working television studio, editing system and multimedia authoring station for digital video and CD-ROM creation.
<b>Austin Community College</b>	Austin	AA Radio-Television-Film	The Associate of Arts degree provides students with the first two years of a college Radio/Television/Film education.
<b>Baylor University</b>	Waco	BA Telecommunication  MA Communications Studies (Production)	The telecommunication major is designed to prepare students for a variety of careers in television, radio, cable, film, digital media and allied fields. Several courses are designed for non-majors who wish to understand the role of broadcast and film media in American society. In cooperation with the Hankamer School of Business, the division offers a combined business-broadcast major.
<b>Collin County Community College District</b>	DFW	AAS Certificate of Completion in Digital Video	Collin County's Applied Graphic Design Technology department offers industry standard programs in 3-D Animation, Game Art and Animation, Digital Video, Graphic Design and Interactive Media. Creative problem-solving as well as technical skills are emphasized. Full- and part-time faculty present current practices and methods in the industry. Students have access to current software and individual computers within each class as well as generous lab time for projects.



Film and Television (cont.)

School	Location	Degrees Offered	Description
<b>Del Mar College</b>	Corpus Christi	AA TV and Radio  AA Digital Media	Classes include Speaking for TV and Radio and Writing for Radio, Television and Film. This is a two- year program.
<b>El Paso Community College</b>	El Paso	AAS Media Production Technology	
<b>Howard Payne University</b>	Brownwood	BA, BS Communication (Radio/TV)	The communication major comprises 15 hours of core communication courses and a 21-hour specialization in speech, public relations, or telecommunications. The telecommunications specialization requires Radio Production, Broadcast Writing and Announcing, Television Production II, Television Practicum or Radio Practicum and six additional hours.
<b>Lamar University</b>	Beaumont	BS Communication (Film Studies)	Students in the film studies program move from introductory courses in film and audio production to courses in advanced film and video production techniques, advanced audio recording, scriptwriting and digital film and video editing. Majors in the program select 18 hours from film studies courses in addition to fulfilling the department's 30-hour core curriculum.
<b>MediaTech Institute</b>	DFW Austin Houston	Certificate Digital Film and Video Arts	The Digital Film and Video Arts Program is designed to teach students basic to advanced aspects of producing commercials, music videos, documentaries, television shows and feature films. Students participate in every step of the production process, including developing, writing, producing, directing and editing for single and multi-camera productions.
<b>North Lake College</b>	Irving	AAS Video Technology  Certificate Animation and Special Effects	Successful participants in the Video Technology program graduate with an Associate in Applied Sciences Degree. They gain knowledge and experience in television production, engineering, post-production, digital imaging, lighting, digital audio and a host of other industry specific areas. The two-year program is designed for persons interested in entering video production or television broadcasting. Students participate in studio and remote productions, individual and group productions and in-classroom and on-the-job training.
<b>Our Lady of the Lake University</b>	San Antonio	BA Communication Arts (Cinema Studies and TV Broadcasting)	The Communication Arts Program offers four areas of concentration: television broadcasting, film studies, journalism and public relations, with a dual-language (Spanish-English) option in television broadcasting.



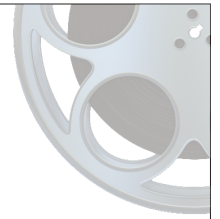
Film and Television (cont.)

School	Location	Degrees Offered	Description
<b>Sam Houston State University</b>	Huntsville	BA Mass Communication (Broadcast Production, Media Sales and Management)	The broadcast programs in the Department of Mass Communication provide a broad-based background in the skills necessary for today's media marketplace, as well as a broader theoretical background needed to advance in the professions. The department has an active internship program and also provides opportunities for on-campus, hands-on experience. Department offerings include Broadcast Journalism, Print Journalism and Public Relation emphases.
<b>San Antonio College</b>	San Antonio	AAA, AAS Radio-TV-Film	The Radio, Television and Film Program at San Antonio College offers students a fun and engaging way to learn basic skills and principles every media professional needs, whether their interest is in television broadcasting as an announcer or a technician, audio production in radio, television or film or technical or creative work on a film or video production.
<b>South Plains College</b>	Levelland	AA Telecommunication (Radio-TV-Film)	Prepares students for transfer to a university for completion of a baccalaureate degree in telecommunications (radio/tv/film). Students in this area receive hands-on training in the W.D. "Dub" Rogers Television Studio, using the latest video equipment and techniques related to television production. The curriculum will meet all requirements for the Associate of Arts degree.
<b>Southern Methodist University</b>	Dallas	BA, MA Cinema-TV  MFA TV-Radio	The Division of Cinema-Television offers students basic courses in audio and video production, 16mm film production, screenwriting, editing, lighting and other technical skills; these lead to more focused classes in those areas. At the same time, a series of courses in film/television history, theory and aesthetics provide an intellectual foundation that enhances creative work and contributes to a liberal arts education.
<b>Southwestern Adventist University</b>	Keene	BA, BS Radio-TV-Film	The department aims to strengthen students' personal, public, and professional communication skills while teaching them how to create and manage the elements of communication.
<b>Stephen F. Austin State University</b>	Nacogdoches	BA, BS Radio-TV  BA, BFA – Art (Cinematography)	These courses are designed to prepare the student for a professional career in the broadcasting industry. For students demonstrating exceptional talent, opportunities are available for independent creative work. Cinematography is a course of study that leads to a professional career in film. Cinematography covers the areas of pre-production, production and post-production. It covers all aspects of film/video production, including feature films, documentaries, commercials, industrial film and art films.



Film and Television (cont.)

School	Location	Degrees Offered	Description
<b>Texas A&amp;M University</b>	College Station	BA, BS Telecommunications Media Studies	The program in Telecommunication Media Studies offers courses to help students understand the social, historical and conceptual impact of public communication based in electronic and digital communication systems. It offers an undergraduate education for careers in the fields of information and telecommunication.
<b>Texas A&amp;M University Corpus Christi</b>	Corpus Christi	BA Communication (Media Studies)	The Media Studies emphasis offers historical and critical study of a variety of media contexts, such a film, video, television and print, as well as opportunities to acquire basic writing and production skills.
<b>Texas A&amp;M University Commerce</b>	Commerce	BA, BS Radio-TV	The radio-television program prepares students for employment in production and management at broadcast stations, networks, cable TV companies, independent production houses, school media centers and corporate or industrial television operations.
<b>Texas Christian University</b>	Ft. Worth	BA Radio-TV-Film	The Department of Radio-TV-Film encourages students to see the media industries from multiple perspectives and prepares them for many different careers as well as graduate education. After a set of "core" courses, students are required to take a mix of courses from three major areas: analysis/history, production and industry studies. Radio-TV-Film students will graduate with a working knowledge of media history and of the media's changing socio-cultural role, as well as an appreciation of the complexity and creativity of film, radio and television programming. They will also acquire fundamental skills in written and oral communication and a plan of action regarding the careers they wish to pursue.
<b>Texas Tech University</b>	Lubbock	BA, MA Electronic Media and Communications	Designed to prepare students for survival in the new media environment, the Electronic Media and Communication (EM&C) program blends professional courses in broadcasting, digital production and writing into a broad liberal arts education.
<b>Tomball College</b>	Tomball	AAS Visual Communication (Video and Postproduction)  Certificate Video and Postproduction	The Visual Communication program trains today's digital designers in the communication media of the future. This program provides students with skills needed for careers in commercial art and design, desktop publishing, Web design, 3-D animation, multimedia development, video and post-production.



Film and Television (cont.)

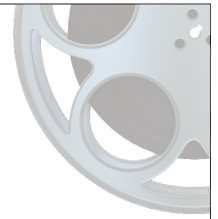
School	Location	Degrees Offered	Description
University of Houston	Houston	BA Communication-Media Production	Students will acquire the ability to create communications using audio, video, motion picture, photography and computer graphics techniques. An appreciation and ethical concern for the professional values and effects on an audience of such techniques will accompany both practical and theoretical instruction. This concentration provides the preparation for internships and entry-level positions in a wide variety of careers that require media production knowledge and skills, and the foundation for advancement in those fields.
University of North Texas	Denton	BA, MA, MS, MFA Radio-TV-Film	Undergraduate degree program encompasses creative skills-based training as well as theoretical knowledge covering history, criticism, management, economics and policy, all built upon a strong liberal arts foundation. This educational experience prepares students for many different career opportunities in and around the electronic media and film industries, as well as preparation for advanced study.
University of Texas at Arlington	Arlington	BFA, MFA Film/Video	Being in an Art Department, the Film/ Video area is in a unique position to offer a fine art, narrative, animation or commercial approach to best suit the student. Students enter hands-on production classes as early as possible (freshman year), and progress through three (intro, intermediate and advanced) classes on their way to individual projects. Narrative screenwriting emphasizes the understanding of character development and conflict in writing for film and video. The program integrates with the film and video production classes to prepare students to produce and direct their own screenplays.
University of Texas at Austin	Austin	BA, MFA Radio-TV-Film  MFA Screenwriting	In addition to production-oriented work, students study a broad range of media issues, including critical and cultural studies, communication technology and policy analysis, international communication, gender and sexuality issues, ethnic and minority studies and more. This combination of production, screenwriting and media studies is one of the strengths of the department and a unique characteristic of the undergraduate program. Students graduate with a solid education in skills and theory, technical and historical knowledge and creative and critical abilities.
University of Texas Pan American	Edinburg	BA Communication (TV/Film Track)	The UTPA Theatre-Television-Film area features four undergraduate program tracks. Students may pursue their undergraduate degrees under one of the four tracks offered — the television film track, the performance track, the design track and the teaching track. Each track features special courses and requirements pursuant to their appropriate goals.





**Video Game Development and Animation**

School	Location	Degrees Offered	Description
<b>Art Institute of Austin</b>	Austin	BFA Media Arts and Animation	The Bachelor of Fine Arts degree program provides students with an important foundation in drawing skills, color theory, design concepts, audio/video techniques and basic computer applications. From this foundation, degree candidates develop advanced skills in various aspects of computer graphics and animation. Students explore the various tools used in computer animation, including operating systems, 3-D modeling and animation software, 2-D animation techniques and desktop video production.
<b>Art Institute of Dallas</b>	Dallas	BFA Media Arts and Animation	The Art Institute of Dallas' Arts and Animation program is designed to give graduates a firm foundation in computer graphics while preparing them for entry-level positions in the animation, media design and digital imaging fields.
<b>Art Institute of Houston</b>	Houston	BFA Media Arts and Animation	The Art Institute of Houston's Media Arts and Animation program is designed to give graduates a firm foundation in computer graphics while preparing them for entry-level positions in the animation, media design and digital imaging fields.
<b>Austin Community College</b>	Austin	Certificate Video Game Development  AAS 2-D and 3-D Animation  Certificate 2-D and 3-D Animation	<p>Austin Community College certifies students in Video Game Development with a specialization in Programming, Art, Design or Production. At the end of their course training, they work in teams to create an actual video game. The program is designed and developed by leaders in the Austin video game development industry.</p> <p>The 3-D Animation degree is a specialized course of study focusing on 3-D visual art production for the Film, Broadcast and Computer Game Development industries. The 2-D Animation degree focuses on various areas of traditional and computer animation, offering students a comprehensive course of study and practicum in the field. The objective of these degrees is to prepare students to produce completed animation productions and find intermediate entry into the industry.</p>
<b>Baylor University</b>	Waco	BS Computer Science (Game Development)	Baylor University offers a game development specialization within the Bachelor of Science in Computer Science degree program. This specialization is designed to provide an understanding of the core principles of production and development of video games. Graduates of the program are awarded a fully accredited Computer Science degree, allowing them to pursue career and educational opportunities in gaming or any other area of computing.



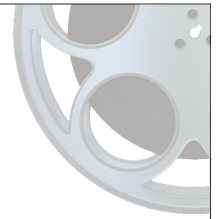
**Video Game Development and Animation (cont.)**

School	Location	Degrees Offered	Description
<b>Collin County Community College District</b>	DFW	AAS, Certificate Game Art and Animation	Collin's Applied Graphic Design Technology department offers industry standard programs in 3-D Animation, Game Art and Animation, Digital Video, Graphic Design and Interactive Media. Creative problem-solving as well as technical skills are emphasized throughout the curriculum. Full-time and part-time faculty represent current practices and methods in the industry. Students use current software and individual computers within each class and have generous open lab time for projects.
<b>DeVry University</b>	Austin, DFW	BS Game and Simulation	DeVry's Game and Simulation Programming curriculum prepares graduates to join the private and public sector game software industry in a variety of software development roles. Applications-oriented, the program provides preparation in the math and physics of games; programming fundamentals; game design; modifications and massively multi-player online game programming; two- and three-dimensional graphics programming; and simulation and game engine design. Also included is a full complement of general education courses recommended by game industry experts as critical for well-rounded development team members.
<b>Gemini School of Visual Arts and Communication</b>	Austin	BA Visual Arts and Communication (Computer Graphics / 3-D Illustration)	The Gemini School of Visual Arts and Communication provides a four-year diploma in Visual Arts and Communication, geared specifically for the student who wishes to become a professional artist. Our unique blend of instruction includes classical painting and drawing techniques, combined with the latest computer graphics technologies to prepare students for success in the commercial art world.
<b>Houston Community College</b>	Houston	AAS Programming or Art	The Digital Gaming and Simulation Department offers career training that leads to employment in the game industry as either a game artist or a game programmer, and uses state-of-the-art technologies to help students reach their personal and professional goals.
<b>Kingwood College</b>	Houston	AAS, Certificate Game Design and Simulation	The Game Design and Simulation Program at Kingwood College is designed to prepare students to launch a successful career in video game design, visual effects for film and television, game programming, and any of the new and emerging applications for 3-D utilizations.



**Video Game Development and Animation (cont.)**

School	Location	Degrees Offered	Description
<b>North Lake College</b>	DFW	AAS Computer Graphics	This degree is designed to develop the hands-on skills and conceptual art knowledge necessary to advance in career paths related to computer graphics. The program allows students to gain skills with industry-standard equipment and software and stresses the role of motion graphics in designing and producing professional graphics for the Web, animation and video games.
<b>Sam Houston State University</b>	Huntsville	BFA Computer Animation	The new BFA program in computer animation emphasizes creativity and at the same time addresses technique and technical instruction. The program creates a foundation in traditional 2D animation with a focus on solid drawing skills. Towards the end of the curriculum, animation students take courses with professional artists working in game development from studios all over the U.S.
<b>Southern Methodist University</b>	Dallas	MIT Digital Game Development	The Guildhall at SMU offers a Master of Interactive Technology degree and a professional certificate with specializations in art creation, level design and software development. With a curriculum designed by experts in academia and leaders in the digital games industry, the Guildhall provides students with a solid foundation in game development and experience in working on cross-disciplinary teams on projects of increasing complexity and size.
<b>St. Edward's University</b>	Austin	BBA, MBA Digital Media Management	St. Edward's offers Bachelors and Masters programs aimed at preparing students for the creative or business management side of film, music, online, television or interactive media.
<b>Texas A&amp;M University</b>	College Station	MS Visualization Sciences  PhD Visualization Specialty	The Masters of Science in Visualization Sciences is designed to prepare students for a range of long-term careers in visualization. The program's core curriculum is designed to give all students a basic grasp of the artistic, scientific, cognitive and technical foundations of the discipline.
<b>Texas A&amp;M University Commerce</b>	Commerce	BFA New Media	The BFA in New Media provides a full baccalaureate education, including required general studies courses in mathematics, natural sciences, behavioral and social sciences, humanities, and visual and performing arts. A rigorous foundations program emphasizes the student's conceptual and practical skills in art, while building his or her knowledge of art history, criticism and theory. Advanced courses in design and storyboarding complete the student's education and provide specialized skills in animation, visualization, interactive and multimedia design.



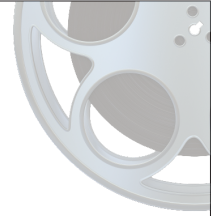
**Video Game Development and Animation (cont.)**

School	Location	Degrees Offered	Description
<b>Texas State Technical College Harlingen</b>	Harlingen	AAS Gaming Simulation and Programming  AAS Digital Imaging Technology	<p>Graduates from the Gaming Simulation and Programming program will have a strong background in systems analysis and design, software development tools and techniques, and data management. Students also will be experienced in customer service relations, effective oral and written communication skills, effective teamwork experience, and proper record-keeping techniques.</p> <p>Students in the Digital Imaging Technology program manipulate sound, still images, 3-D images, animations and digital video on computers. The program provides training in desktop publishing, painting, drawing, scanning, color correction, solids modeling, animation, sound editing, non-linear video editing and Web page creation.</p>
<b>Texas State Technical College Waco</b>	Waco	AAS Graphics, Gaming and Simulation	The Graphics, Gaming and Simulation specialization of Computer Science Technology is designed to prepare students for entry into the world of graphics programming, with potential careers in education and training, aerospace and defense and gaming.
<b>Tomball College</b>	Tomball	AAS Game Design and Simulation  Certificate Game Development and Design  AAS Visual Communication (3-D Animation)  Certificate 3-D Animation	<p>The Game Design and Development program is designed to teach the basics required for an entry-level position in the computer gaming and simulation industries. The student will acquire knowledge of the basics of the industries and markets as well as the programming and graphic skills required to create games.</p> <p>The Visual Communication program trains today's digital designers in the communication media of the future, providing the skills needed for careers in commercial art and design, desktop publishing, Web design, 3-D animation, multimedia development, video and post-production.</p>
<b>University of Houston</b>	Houston	BA AS Applied Arts and Sciences with Concentration in Digital Gaming and Simulation  BS Computer Science with Concentration in Digital Gaming and Simulation	Both Digital Gaming and Simulation concentrations allow students to examine and participate in the fast-growing digital gaming phenomenon. The BS-CS Gaming program helps students build and develop technical skills and explore the development and study of digital games. It is primarily targeted to students interested in pursuing artistic, multimedia and other non-programming careers in the game industry, but programmers may enter this option as well. Both concentrations will provide a cultural perspective on the history, philosophy, ethics and sociology of digital games and game playing.



**Video Game Development and Animation (cont.)**

School	Location	Degrees Offered	Description
<b>University of North Texas</b>	Denton	Certificate Game programming	The certificate requires a four-course sequence and may be taken as part of a bachelor's degree in computer science, computer engineering or information technology. The courses include two classes in game programming, a class on game math and physics and a game development class that allows students to pursue specific projects on various topics.
<b>University of Texas at Austin</b>	Austin	Certificate Digital Arts and Media	The Bridging Disciplines Programs (BDPs) at the University of Texas at Austin allows undergraduates to earn a certificate in one of nine different interdisciplinary content areas. The Digital Arts and Media BDP provides a unique mix of courses from Fine Arts, Radio-TV-Film, Computer Sciences, Humanities and Engineering. Foundation courses provide the conceptual scaffolding for exploring new media and developing new skills, while additional courses allow students to pursue individual interests in games and entertainment, image and film, mixed media, music and audio or other areas. Students in the Digital Arts and Media BDP must complete a required independent creative project and may complete internships or undergraduate research related to Digital Arts and Media.
<b>University of Texas at Dallas</b>	Dallas	BA, MA, MFA Arts and Technology	The Art and Engineering interdisciplinary program emphasizes the interplay of visual art, music and narrative with the new media that have emerged from the convergence of computing and media technologies.
<b>University of the Incarnate Word</b>	San Antonio	BFA Computer Graphic Arts (3-D Animation)	The Computer Graphic Art (CART) program prepares students to pursue careers in the field of computer-generated imagery, including Web design, multimedia production, print design and publication and 3-D animation. Graduates find work as Web designers, graphic designers, multimedia specialists, 3-D animators and game creators. In addition to layout, illustration and cinematic skills, students learn professional production values and practices.



## Endnotes

- <sup>1</sup> Veronis Suhler Stevenson (VSS), a private equity firm that specializes in the media, communications and information services industries, publishes an annual forecast that is considered the most reliable source for past and future trends in the media industry.
- <sup>2</sup> Entertainment Software Association, *Video Games: Serious Business for America's Economy*, by Robert W. Crandall and J. Gregory Sidak (Washington, D.C., 2006), pp. ii, iii. <http://www.theesa.com/newsroom/seriousbusiness.pdf>. (Last visited September 26, 2008.) See discussion of "serious gaming" below.
- <sup>3</sup> Entertainment Software Association, *Video Games: Serious Business for America's Economy*, p. ii.
- <sup>4</sup> "Is That a Video Game – or an Ad?" *BusinessWeek* (January 25, 2006), [http://www.businessweek.com/innovate/content/jan2006/id20060124\\_792815.htm](http://www.businessweek.com/innovate/content/jan2006/id20060124_792815.htm). (Last visited September 26, 2008.)
- <sup>5</sup> "Games Advertisers Love Most," *Business 2.0* (July 10, 2007), [http://money.cnn.com/magazines/business2/business2\\_archive/2007/07/01/100117054/index.htm](http://money.cnn.com/magazines/business2/business2_archive/2007/07/01/100117054/index.htm). (Last visited September 26, 2008.)
- <sup>6</sup> "Grand Theft IV Smashes Sales Records," *Financial Times* (May 8, 2008).
- <sup>7</sup> Entertainment Software Association, *Video Games in the 21st Century*, by Stephen E. Siwek (Washington, D.C., 2007), p. 5, [http://www.theesa.com/newsroom/2007\\_eireport.pdf](http://www.theesa.com/newsroom/2007_eireport.pdf). (Last visited September 26, 2008.)
- <sup>8</sup> Association of Independent Commercial Producers, Inc., "Fifth Annual Survey of the Commercial Production Industry," by Goodwin Simon Victoria Research (Culver City, Calif., 2007).
- <sup>9</sup> Motion Picture Association of America, *The Economic Impact of the Motion Picture and Television Production Industry in the United States: 2006 Report* (Washington, D.C., 2006), [www.mpa.org/press\\_releases/mpa%20us%20economic%20impact%20report\\_final.pdf](http://www.mpa.org/press_releases/mpa%20us%20economic%20impact%20report_final.pdf). (Last visited September 26, 2008.)
- <sup>10</sup> Steve Belsky, president of IATSE Local 484 (Texas Motion Picture Studio Mechanics).
- <sup>11</sup> Steve Belsky, president of IATSE Local 484 (Texas Motion Picture Studio Mechanics).
- <sup>12</sup> Louisiana Department of Economic Development, "Trends in Film, Music, and Digital Media," by Economics Research Associates (Baton Rouge, Louisiana, December 2006), p. 2, [www.lafilm.org/images/docs/00%20ERA%20Trends%20Paper.pdf](http://www.lafilm.org/images/docs/00%20ERA%20Trends%20Paper.pdf). It should be noted that this study was commissioned by the state of Louisiana and may be somewhat biased.
- <sup>13</sup> According to Shoot-Online, more than 40 non-AICP commercial production companies are currently active in Texas ([www.shootonline.com](http://www.shootonline.com)).
- <sup>14</sup> Entertainment Software Association, *Video Games in the 21st Century*, p. 5.
- <sup>15</sup> See discussion below on developing arts and technology programs at Texas universities.
- <sup>16</sup> A study prepared for the city of Austin in September 2006 by TXP Inc. claims that the entertainment software/digital media industry has an annual economic impact on the region of \$399 million. Because an adjustment was not made for spending leakages outside the region and state, however, this large number overstates the true economic impact of the industry on the city of Austin. See: City of Austin, *The Economic Impact of Austin's Entertainment Software/Digital Media Industry*, by TXP Inc. (Austin, Texas, September 2006), [www.ci.austin.tx.us/redevelopment/downloads/gaming\\_study09-26-06.pdf](http://www.ci.austin.tx.us/redevelopment/downloads/gaming_study09-26-06.pdf). (Last visited September 26, 2008.)
- <sup>17</sup> Roger W. Riley and Carlton S. Van Doren, "Movies as Tourism Promotion," *Tourism Management* (September 1992), p. 268.
- <sup>18</sup> Office of the Governor, Economic Development and Tourism Division, "The Economic Impact of Travel on Texas," by Dean Runyan Associates (Portland, Oregon, August 2008), p. iii, <http://www.travel.state.tx.us/DocumentStore/TXImpRpt07.pdf>. (Last visited September 29, 2008.)
- <sup>19</sup> *Ibid.*, p. ii.
- <sup>20</sup> Chris Garcia, "In Less than 3 Years, Shreveport Has Passed Austin as a Film Hotbed," *Austin American-Statesman* (May 18, 2008), <http://www.austin360.com/movies/content/movies/stories/2008/05/0518shreveport.html>. (Last visited September 26, 2008.)



- <sup>21</sup> Taylor Eisenman, "Utah Sets Precedent for First Student Film Incentive," *Park Record* (January 18, 2008), [http://www.nightlightpictures.com/Nightlight\\_Pictures/Press\\_files/Park%20City%20Record%20-%20Attic.pdf](http://www.nightlightpictures.com/Nightlight_Pictures/Press_files/Park%20City%20Record%20-%20Attic.pdf). (Last visited September 26, 2008.)
- <sup>22</sup> Entertainment Software Association, *Video Games: Serious Business for America's Economy*, pp. 23-28.
- <sup>23</sup> Karen Nielsen, "UT-Dallas Degree Program Melds Computer Science and the Creative Arts," *Dallas Business Journal* (October 5-11, 2007).
- <sup>24</sup> City of Austin, *The Economic Impact of Austin's Entertainment Software/Digital Media Industry*, by TXP Inc. (Austin, Texas, September 2006), p. 19, [www.ci.austin.tx.us/redevelopment/downloads/gaming\\_study09-26-06.pdf](http://www.ci.austin.tx.us/redevelopment/downloads/gaming_study09-26-06.pdf). (Last visited September 26, 2008.)
- <sup>25</sup> Texas Office of the Governor, "Texas is a Hotbed of Game Development," 2008 E3 Convention Keynote Remarks by Gov. Rick Perry, Austin, Texas, July 16, 2008, <http://governor.state.tx.us/news/speech/10712/>. (Last visited September 26, 2008.)





**Texas Comptroller of Public Accounts**  
Local Government Assistance and Economic Analysis  
PO Box 13528 • Austin, Texas 78711-3528

Publication #96-1357, December 2008