ARROWHEAD CENTER

LEADING ECONOMIC DEVELOPMENT FOR NEW MEXICO STATE UNIVERSITY

The Film Industry in New Mexico and The Provision of Tax Incentives

A Report Submitted to the
Legislative Finance Committee
of the
State of New Mexico

August 26, 2008

by

Anthony V. Popp and James Peach
Arrowhead Center, Office of Policy Analysis
New Mexico State University
Las Cruces, NM 88005

Email: apopp@nmsu.edu or jpeach@nmsu.edu
Phone: Popp: 575-646-5198 Peach: 575-646-3113

New Mexico State University

Acknowledgements

The authors would like to thank all those who assisted in the preparation of this document and all those who provided data used in the study. We particularly want to thank Rodolfo Telles, a graduate research assistant in the Department of Economics and International Business, NMSU, and staff members from the Department of Taxation and Revenue, New Mexico Film Office and the Legislative Finance Committee of the State of New Mexico.

Table of Contents

List of Tables

The Film Industry in New Mexico and
The Provision of Tax Incentives

I. Introduction

The State of New Mexico has been providing tax incentives to film companies since 2002. The program has been successful in the sense that companies are coming to New Mexico to make movies. In that first fiscal year of incentives, two companies received credits for qualified projects. For fiscal year 2008, thirty-one projects qualified for tax credits totaling $38,195,321.34. Since the credits are for production related expenses in New Mexico and the credit for the time period was twenty-five percent, this implies that the industry spent $152,771,285.36 on production in New Mexico during the year.

The success of the incentives is also evident in the increase in the number of establishments and employees in the industry and the income generated. Table 1 contains a summary of the the growth of the film industry from 2001 through 2007. Since 2001 the number of establishments in the motion picture and video production industry increased by over fifty percent. The number of employees, and the income received by those employees has increased almost ten-fold.

Table 1
Motion Picture and Video Production
In New Mexico by Year
Private Establishments, Employees and Wages

	2001	2002	2003	2004	2005	2006	2007*
Establishments	88	84	81	76	100	126	136
Employees	286	460	362	506	1,048	1,826	2,284
Total Wages (in 1.000's)	$6,185	$12,450	$8,490	$7,738	$43,222	$60,370	$70,522
Ave. Annual Pay	$21,633	$27,042	$23,437	$15,292	$41,226	$33,068	$30,881
Average Weekly Wages	$416	$520	$451	$294	$763	$636	$594

2007 data preliminary
Source: U.S. Department of Labor, Bureau of Labor Statistics

New Mexico is certainly one of the up and coming states when places to film are discussed. Articles from California to New York and on-line stories from a variety of sources document the aggressive incentives that the state provides and the rapid increase in New Mexico film projects.

The amount and growth in the dollar value of incentives has become a point of discussion within the state. The question is not whether the incentives have been successful, but whether or not the state should be funding the industry to the extent that it does? One question being asked is what the state is receiving in return for the incentives granted?

The purpose of this study is to provide insight into the return the state is receiving by providing the tax incentives to the film industry. The study will outline the incentives that are being offered, the amount of money provided in various ways to the industry and an analysis of the amount of revenues received by the state because of the economic activity that is taking place.

II. Summary of Tax Incentives for Filming in NM

The excitement of having movie production take place in a particular locale has reached the capitals of virtually all states. Over forty states now have tax incentives that can be used by the film industry. Some of those incentives are as small as providing relief from the state's lodger tax on hotel rooms if the production companies stay over thirty days. The top five film incentive packages, those from Louisiana, Connecticut, New York, Michigan and New Mexico, offer production and tax credits, labor training subsidies and production loans. Appendix A provides a state by state summary of the tax incentives offered and the web sites providing details of the incentive packages.

New Mexico's incentive package provides production rebates, film crew training assistance and production loans. Details of each of the incentives and the procedures to qualify are provided by the New Mexico Film Office on its web-site www.nmfilm.com.

25% Film Production Tax Rebate: New Mexico offers a twenty-five percent tax rebate on all qualified direct production expenditures in the state.

Film Crew Advancement Program: This on-the-job training program offers a 50% reimbursement of wages paid to New Mexican crew members in below-the line job positions to provide them with work experience to assist them in obtaining continual work in the industry.

Pre-employment Training Program: This relatively new program provides reimbursement funds to contractors who provide short courses, workshops and lectures to below the line personnel.

III. Summary of Other Types of Expenditures

Three other forms of assistance are provided by the state to the development of the industry: production loans, direct capital expenditures and support of academic programs.

Production loans: The state provides up to $15 million in zero percent loans to qualifying productions. In lieu of interest the state will receive a contracted percentage of profits. Qualifying productions can also participate in the twenty-five percent rebate.

Direct Capital Expenditures: Through the governor's office, capital expenditures are authorized for projects relating to the film industry. At this time most of the funds have been granted to educational institutions.

Support of Academic Programs: Many of the state higher educational institutions have developed media related programs. The state supports these programs through the formula funding process.

IV. The Dollar Value of Subsidies

The subsidies provided by the state have amounted to a substantial amount of money. This section of the report provides a listing of the amounts provided by the state in support of the industry.

Production Rebates: The first rebates to qualified projects were granted in fiscal year 2003. Table 2 provides information on the number of projects and amount of rebates claimed by fiscal year. In 2003 two qualifying projects claimed rebates totaling $1.108 million. In fiscal year 2008 (through mid-April), there were thirty-one projects claiming $38.195 million in rebates.

Table 2
Tax Incentives Claimed by Fiscal Year

Fiscal year	FY03	FY04	FY05	FY06	FY 07	FY08*
# of Projects	2	6	6	11	18	31
Amt Claimed (Mil. of $)	$1.108	1.736	2.096	5.709	18.503	38.195

*projects and amounts claimed through mid-April 2008
Before Jan. 07 the rebate was 15%, AFTER Jan. 07 the rebate became 25%
Data provided by the Department of Taxation and Revenue

OTJ Training Expenditures: The state has provided wage subsidies through the Film Credit Advancement Program since fiscal year 2004. Table 3 provides data on the wage subsidy programs offered by the state. During fiscal year 2004 eight projects employed 162 participants for a cost of $380,000. The numbers of projects and participants have fluctuated over the years. The peak year of expenditures for FCAP was fiscal year 2006 when nineteen projects support 545 participants for a cost of $1.9 million.

The Pre-employment Training Program was instituted in fiscal year 2006. This program has had a relatively low level of utilization and has cost less than $100,000 in total.

Table 3 JTIP Expenditures by Fiscal Year						
	Fiscal year	FY04	FY05	FY06	FY 07	FY08*
FCAP	# of Projects	8	6	19	17	16
	Participants	162	119	545	291	177
	Amt spent ($1,000)	380	360	1,900	1,500	850
PETP	# of Classes	n/a	n/a	4	9	9
	Attendees	n/a	n/a	n/a	182	270
	Amt spent ($1,000)			18	40	30
Data provided by the New Mexico Film Office FCAP – Film Credit Advancement Program PETP – Pre-employment Training Program						

<u>Zero Percent Loan Program</u>: The State Investment Council is authorized to invest Severance Tax Permanent Fund in film projects. The limit is six percent of the value of the fund. The first loan was made in 2004. Table 4 provides information on the amount and status of loans made over the years. Also listed in the table is the range of participation percentage included in the contracts for loan should the project show a profit. As of summer 2008 the state was participating in fourteen projects with loan amounts totaling $161.2 million. Three of those loans have been partially paid off ($5.515 million). Nine loans totaling $52.525 million have been made and subsequently been paid off. Two projects (The Flock and Bordertown) paid interest on the loans instead of agreeing to a participation percentage. They have paid a total of $401,047 in interest. As of August 2008, no project has registered a profit, but one project (Employee of the Month) has paid $500,000 in advance against profits.

Table 4 Film Investment Program (in Millions of $)				
	# of projects	Loan Amount	Outstanding Balance	Participation Percentage
Outstanding	14	$161.2	$155.7	8.5% to 20%
Fully Paid	9	$52.525		2.5%-6%
partially Paid	3	$5.515		17%
From State Investment Council Web site Data From inception of program to May 31,2008				

<u>Other Capital Expenditures:</u> The Legislature of the State of New Mexico has authorized capital expenditures for support of the film industry. The expenditures are made through the Office of the Governor and the NM Film Office. As of mid-2008 $22.7 million has been authorized, although not all has been spent. Table 5 provides the amount of

authorized expenditure by fiscal year. Most of these dollars have been spent on projects involving institutions of higher education.

Table 5 Capital Expenditures by Fiscal Year					
Fiscal year	FY04	FY05	FY06	FY 07	FY08*
Amt committed (Mil. of $)	10.0	n/a	4.0	5.7	3.0
Data provided by the Legislative Finance Committee Staff					

Expenditures on Film Related Educational Programs: This type of expenditure is very difficult to estimate. Since the start of the incentive programs and the increased interest in film-making in general, the institutions of higher education in New Mexico have developed academic programs to prepare students to work in the industry. Table 6 provides a list of the programs within the state. A listing of the programs and web sites for programs offered through the institutions are also included in Appendix B. Many of the programs offered by the institutions are not stand alone programs. They are generally embedded in programs already offered by the university, four-year institution or community college. Therefore no estimate of the cost of these programs is included in this analysis. Suffice it to say that part of the formula funding going to institutions is being used for the support of programs for benefit of the film industry.

Table 6 Educational Programs within the State of New Mexico
Universities
Eastern NM University – Dept. of Art – Comprehensive Program NM Highlands University – Communication and Fine Arts Dept.- B.F.A. in Media Arts New Mexico State University – Creative Arts Institute Northern New Mexico College – Film Technician Certificate University of New Mexico – College of Fine Arts – Interdisciplinary Film and Digital Media Program
Community Colleges
Central NM Community College – Film Crew Technician Program Eastern NM University – Roswell – Film Technology Program NMSU – Alamogordo Community College – Digital and Creative Arts Center NMSU – Dona Ana Community College – Creative Media Technology Program Santa Fe Community College – Media Arts Program in School of Business

V. The Economic Impact of Subsidies

Economic impact analysis consists of three steps. The first step consists of calculating the new spending that enters the economy. Only new spending is used in the analysis. The positive effects of spending that is diverted from other uses is offset by the negative effects of the decrease in spending in those other uses. The second step is to calculate the output, employment and income effects of the new spending. This is usually done with the use of an input-output based model. The third step is to calculate the returns to the state in terms of tax revenues and other beneficial consequences.

This study will concentrate on only one part of film industry expenditures in New Mexico. The two major incentives are the twenty-five percent production cost rebates and the zero-interest loans. This analysis will primarily be concerned with the effect on spending of the production rebate program and the subsequent returns to the state in terms of tax revenues. The zero-interest loan program provides funds for expenditures that qualify for the rebate. To also include the amount of the loans in the spending process would result in a double count of the effect of the rebate and loan programs.

V.A. Basic Assumptions of the Analysis

Four basic assumptions are made with respect to this analysis. Any change in any one of the assumptions will affect the estimate of the increase in economic activity in the state and, therefore, the returns to the state.

It is first assumed that all projects qualifying for the rebates would not have occurred without the rebates. What needs to be measured is the increase in activity that would take place because of the rebates. If someone would have done the project even if the rebates were not in effect, then the spending for the project does not represent new spending. This assumption generates the largest measure of economic activity and therefore will generate the largest return per dollar of expenditure by the state.

Since the rebate is twenty-five percent of the total qualified spending in the state for any one project, the total new expenditure in the state is estimated at four times the amount of the rebates.

It is being assumed that all projects occur in a physical location that will generate tax revenue to the state. Activities that occur in a tax increment finance (TIF) location will decrease the amount of gross receipts tax revenues received by the state. For example, Albuquerque Studies are located in Mesa del Sol, a tax increment finance area. A portion of the state gross receipts revenues paid by Albuquerque Studios will remain in that TIF district and not go to the state. If the activity occurs in a tax increment finance location, up to seventy-five percent of the gross receipts revenue normally going to the state would remain in that location.

The impact of spending and estimates of revenue to the state will only be done for fiscal year 2008. Similar analysis could be done for each of the fiscal years and would follow the same procedures. The analysis of one year allows an estimate to be made of the returns to expenditures for that particular year.

V.B. New Spending for Fiscal Year 2008

Table 7 is a replication of Table 2 with the addition of a row that indicates the estimate of new spending that occurred in each of the fiscal years. The rebate before January 2007 was fifteen percent and after January 2007 the rebate became 25%. The analysis is being done for fiscal year 2008. During that year $38.195 million in rebates were granted. Given that the rebate was twenty-five percent, the total new spending is estimated at $152.780 million for the fiscal year.

Table 7
Tax Incentives Claimed by Fiscal Year

Fiscal year	FY03	FY04	FY05	FY06	FY 07	FY08*
# of Projects	2	6	6	11	18	31
Amt Claimed (Mil. of $)	$1.108	$1.736	$2.096	$5.709	$18.503	$38.195
Amt. of Spending (Mil. of $)	$7.390	$11.579	$13.980	$38.079	$86.516	$152.780

*projects and amounts claimed through mid-April 2008
Before Jan. 07 the rebate was 15%, after Jan. 07 the rebate became 25%
Data provided by the Department of Taxation and Revenue
Calculations of the amount of spending made by the authors

V.C. Impact of New Spending

Economic impact analysis measures the net changes in economic activity in a geographic area resulting from an increase in spending. The central idea is that a one dollar change in new spending results in more than one dollar in economic activity.

Economic impacts are generally measured in terms of changes in output, income, and employment. Output is measured in dollars and represents the dollar value of gross production. Income is also measured in dollars and contains several components –most importantly labor income including both wages and salaries and proprietors income. Employment is measured in terms of numbers of jobs. In many impact studies including this one, estimates of changes in state taxes as a result of the new economic activity are also presented.

In most economic impact studies, three types of impacts are estimated: direct, indirect and induced. The direct effect is the increase in activity associated with the initial change in spending. Those individuals who were initially affected would then buy supplies, hire labor, etc. This also generates activity and this is called the indirect affect. Finally, if the workers are local residents (even temporarily), additional spending by households will be generated by the project. The additional household spending is known as an induced effect.

This all sounds simple enough. There are only three basic ideas. First, a new dollar of spending (the direct effect) in a given area will generate more than a single dollar's worth of new economic activity in that area. Second, all industries purchase inputs from other industries (the indirect effects). Third, households will spend additional income generated from the new economic activity (induced effects).

There are three main areas of concern in estimating local economic impacts. First, the new spending must, in fact, be new to the geographic area being considered. Second, the size of the local economy matters. To the extent that the direct inputs are imported from other areas, new spending doesn't do much for the local economy. In general, the smaller the local economy under consideration, the more likely it is for firms operating locally to obtain inputs from outside the area. Third, supply constraints in the local economy are important. Given knowledge of a pattern of new spending, the direct, indirect, and induced effects of that spending can be calculated.

The three most commonly used modeling systems to perform the calculations are: RIMS II, REMI, and IMPLAN. The RIMS (regional input-output modeling system) system is produced by the U.S. Department of Commerce, Bureau of Economic Analysis (http://www.bea.gov/regional/rims/index.cfm). The REMI models are produced privately and customized to user specified geography by REMI (Regional Economic Models, Inc. http://www.remi.com/). The IMPLAN model was originally developed for the U.S. Forest Service but for many years it has been maintained and sold by the Minnesota Implan Group (http://www.implan.com/).

Each modeling system has well known advantages and disadvantages. The model used to produce the estimates in this report is IMPLAN PRO II with the latest (2006) data and structural matrices available.

The results of using IMPLAN and the initial spending of $152.780 million are provided in Table 8. The total impact of this spending results in an increase in state product of $344.796 million, an increase in income of $81.167 million and an increase of 2,434 jobs.

Table 8
Impact of FY08 Expenditures

	Direct Impact	Indirect Impact	Induced Impact	Total Impact
State Product (Mil. of $)	$152.780	$143.713	$48.383	$344.796
Income (Mil. of $)	$31.063	$35.349	$14.755	$81.167
Employment	890.6	1,083	460.3	2,434
Impacts calculated by the authors through the use of IMPLAN PRO II				

VI. Estimation of Tax Revenues

This section of the analysis describes the procedures followed to estimate the tax revenues that would be received by the state as a result of the increase in economic activity.

Three types of revenue will be considered: gross receipts taxes, personal income taxes and corporate income taxes. These three taxes represent nearly eighty percent of the tax revenues received by the state in any one year and can be estimated with a high degree of confidence. Table 9 provides an historical picture of these selected taxes relative to the total taxes in New Mexico. From 2001 through 2007, these three taxes, on average, generate 78.63 percent of all New Mexico taxes.

Table 9
Selected New Mexico Taxes 2001-2007

YEAR	All New Mexico Taxes	GRT	GRT Percent of All Taxes	PIT	PIT percent of all taxes	CIT	CIT percent of all taxes	(GRT+ CIT+PIT) percent of all taxes
	($1,000s)	($1,000s)		($1,000s)		($1,000s)		
2001	4,002,246	2,083,196	52.05	830,006	20.74	190,673	4.76	77.55
2002	3,628,055	1,822,878	50.24	982,891	27.09	124,327	3.43	80.76
2003	3,607,156	1,873,420	51.94	923,113	25.59	101,546	2.82	80.34
2004	4,001,780	2,038,440	50.94	1,007,248	25.17	138,196	3.45	79.56
2005	4,478,321	2,170,521	48.47	1,086,015	24.25	242,462	5.41	78.13
2006	5,110,683	2,387,718	46.72	1,123,954	21.99	377,185	7.38	76.09
2007	5,205,322	2,483,021	47.70	1,149,805	22.09	425,087	8.17	77.96
Averages			49.72		23.85		5.06	78.63

Source: State tax data from U.S. Bureau of the Census http://www.census.gov/govs/statetax/

There are a variety of techniques that could be used to estimate the revenues that would be generated by the economic activity resulting from spending in the film industry. To estimate personal income tax receipts, ideally one would estimate the generation of income and the distribution of that income and then apply appropriate rates of taxation. Unfortunately the income data generated in this type of study is not detailed enough to estimate an income distribution. And if multiple years are considered, changes in tax law would have to be incorporated into the study. To overcome these difficulties, the technique used in this study uses historical data and averages. The relationship of each of the taxes to personal income is used to estimate the revenue changes. The relationships between income and tax receipts are surprisingly consistent, and enables the researcher to estimate the revenue changes with a relatively high level of confidence.

VI.A. Personal Income Taxes

Table 10 provides historical data for personal income and NM personal income taxes. From 2001 to 2007, the ratio of NM personal income taxes to NM total personal income varied from 0.01854 to 0.02185. This implies that the effective average tax rate over that time period was between 1.8% and 2.1%. The average effective tax rate over the period was 1.977%. It is this rate that will be used to estimate the change in personal income tax revenues generated through the new economic activity.

Table 10
NM Personal Income Taxes and Personal Income

PIT	NM PIT	NM Total Personal Income	PIT per $ of TPI
2001	830,006,000	44,138,165,000	0.01880
2002	982,891,000	44,986,517,000	0.02185
2003	923,113,000	46,650,275,000	0.01979
2004	1,007,248,000	50,707,317,000	0.01986
2005	1,086,015,000	53,714,363,000	0.02022
2006	1,123,954,000	58,131,416,000	0.01933
2007	1,149,805,000	62,001,991,000	0.01854
Averages			0.01977

Sources: PIT data from U.S. Bureau of the Census http://www.census.gov/govs/statetax/ TPI data from U.S. Department of Commerce, Bureau of Economic Analysis, Regional Economic Information System http://www.bea.gov

VI.B. Corporate Income Taxes

Table 11 provides historical data for personal income and NM corporate income taxes. From 2001 to 2007, the ratio of NM corporate income taxes to NM total personal income varied from 0.002177 to 0.006856. This implies that the effective average tax rate over that time period was between .21% and .68%. The average effective tax rate over the period was .42%. The relationship between personal income and corporate income tax revenues is not very stable. The reason for this is that corporate profits are related to the business cycle and the volatility of the oil and gas industry. The decrease in CIT revenue from 2002 through 2004 is associated with the national downturn in economic activity in 2001 and the subsequent recovery. As the economy came out of recession and oil and gas prices increased, corporate profits increased. Given this volatility and the economy was still somewhat robust during the time period under consideration, this study will use the 2007 average effective tax rate of .68856 to estimate the corporate tax revenue generated by the new economic activity.

Table 11 NM Corporate Income Taxes and Personal Income			
Year	CIT	NM Total Personal Income	CIT per dollar of TPI
	($1,000s)	($1,000)	
2001	190,673	44,138,165	0.004320
2002	124,327	44,986,517	0.002764
2003	101,546	46,650,275	0.002177
2004	138,196	50,707,317	0.002725
2005	242,462	53,714,363	0.004514
2006	377,185	58,131,416	0.006488
2007	425,087	62,001,991	0.006856
Averages			0.004263
Source: U.S. Bureau of the Census and U.S. Department of Commerce, Bureau of Economic Analysis			

VI.C. Gross Receipts Taxes

Table 12 provides historical data for personal income and NM gross receipts taxes. From 2001 to 2007, the ratio of NM gross receipts taxes to NM total personal income varied from 0.04005 to 0.04720. This implies that the effective average tax rate over that time period was between 4% and 4.7%. The average effective tax rate over the period was 4.1%. It is this rate that will be used to estimate the change in gross receipts tax revenues generated through the new economic activity. The total amount of gross receipts revenues reported here is the amount collected by the state. The state collects revenues for local government entities at the same time it collects the revenue for the state. A portion of these receipts will be distributed to local government entities. The local revenue has not been subtracted from the totals reported below.

Table 12 NM Gross Receipts Taxes and Personal Income			
Year	GRT	NM Total Personal Income	GRT per dollar of TPI
	($1,000s)	($1,000s)	
2001	2,083,196	44,138,165	0.04720
2002	1,822,878	44,986,517	0.04052
2003	1,873,420	46,650,275	0.04016
2004	2,038,440	50,707,317	0.04020
2005	2,170,521	53,714,363	0.04041
2006	2,387,718	58,131,416	0.04107
2007	2,483,021	62,001,991	0.04005
Averages			0.04137
Source: U.S. Bureau of the Census and U.S. Department of Commerce, Bureau of Economic Analysis			

VI.D. Estimate of Tax Revenues Due to New Economic Activity

The preceding discussion and data provides the building blocks for the estimation of tax revenues that would be generated because of the increase in economic activity in the film industry. Table 13 indicates the estimated increases in personal income, corporate income and gross receipt tax revenues and the total of all three taxes. Given the effective tax ratios calculated above and using the increase in personal income as a base, total revenue generated by the increase in economic activity total is $5,518,575.

Table 13
Personal Income Taxes, Corporate Income Taxes and Gross Receipts Taxes
Generated by Expenditures in the Film Industry

Tax	Personal Income	Effective Tax Rate	Taxes Generated
Personal Inc. Tax	$81,167,469	0.01977	$1,604,680
Corporate Inc. Tax	$81,167,469	0.00685	$555,997
Gross Receipts Tax	$81,167,469	0.04137	$3,357,898
Total Revenue Generated			$5,518,575

VII. Government Spending and Returns

Some conclusions can be drawn with respect to the government spending and returns for fiscal year 2008. While some of the following comments include estimated dollars of spending and returns, not all of them do. The purpose of this study was to list the spending and returns where possible.

25% Production Rebate: During fiscal year 2008 the NM government granted $38.195 million in rebates. The resulting increase in economic activity generated $5.518 million in revenues. The implied return is 14.44 cents on the dollar. This means that for every one dollar in rebate, the state only received 14.44 cents in return.

The effective rate associated with the rebates provided may be of some concern. If the project qualifies for the rebate, then gross receipts must be paid on expenditures. If the gross receipts rate is seven percent, the effective rate for the rebate would be eighteen percent. Given that labor is a major expenditure with respect to these projects and gross receipts are not paid on labor, the effective rate is probably below twenty-five percent but not as low as eighteen percent. The point is that the companies do get a twenty-five percent rebate on expenditures and the return to the state in terms of gross receipts is calculated in the analysis.

Some may argue that this estimate of return is too low and does not reflect what is really occurring. This result is based on the assumptions used. It is true that this analysis accounts for only half of the job growth in the industry since 2001.

It is possible that the rebates are not only generating projects that qualify for the rebates but that other projects are occurring that do not qualify. For example, the loan amounts provided by the State Investment Council on some projects are less than the total project costs. Total loans are approximately sixty-eight percent of project costs. It is not clear whether or not these extra project costs represent expenditures in New Mexico. If they represent dollars spent in New Mexico then the estimates derived in this study are too small. It should be noted that the estimates of new spending used in this report are virtually equal to the loan amounts provided by the State Investment Council ($152.7 million vs. $161.2 million).

This possible understimate is tempered by the fact that the assumption used in the study that all projects that qualified for rebates would not have occurred without the rebates. Surely some of the projects would have occurred even if the rebates had not been offered. These projects would not represent new spending and should not be included in the analysis.

One may also argue that because state dollars were used on the film industry, there is a foregone return from the use of the funds in some other way. In economic terms this is referred to as opportunity cost. In fact there is always a tradeoff of some sort. Given limited funds and an extended list of projects and programs, there is always the question of which projects or programs should be funded. The purpose of this study was to provide input for that discussion.

Zero Percent Loan Program: During fiscal year 2008, $155.7 million in loans to the film industry are outstanding. Given that the state investment council strives to achieve an eight percent return, the foregone interest for FY 2008 alone is $12.456 million. This does not say that the investment council will not realize any gains, it has received $500,000 as of August 2008. In lieu of interest the council has a participation percentage in each of these projects. One project making a fantastic return may generate enough revenue to make up for the foregone interest. The question to be asked is whether or not the films will make a profit and when will that profit occur.

Capital and Educational Spending: These two categories of spending are lumped together because most of the capital spending through the governor's office has been to institutions of higher learning. An estimate of the spending on educational programs was not provided because of the difficulty of getting data. The returns to this type of spending is the increase in life time income received by community college and college students over what they would have earned as only a high school graduate. The number of individuals drawn into these programs that would not have completed a college education is still to be seen. Generally a high school graduate will doubles his or her lifetime income by graduating from college.

Static vs Dynamic Analysis: This study is a static analysis of the impact of subsidies on the film industry. Most argue that the provision of these subsidies is an economic development question. If the provision of these subsidies transforms the New Mexico economy by building a new industry that can survive once the subsidies are discontinued, long term benefits may outweigh the cost. The question is whether or not the industry will collapse w the subsidies are discontinued sometime in the future.

VIII. Appendices

Appendix A:

Film Industry Incentives by State
As of 07/19/08

Alabama (http://alabamafilm.org/filmakerincentives.htm) - Sales Tax+Lodging Tax abatements. Incentives package in the works but has not yet been passed as of July 2008.
Alaska (http://www.alaskafilm.org) - No state sales and income tax. No Film Industry Specific incentives.
Arizona (http://www.azcommerce.com/film/incentives.asp) - Transaction Privilege Tax Exemption on purchased machinery, equipment, leased or rented lodging space, sales of catered food. Etc. Use Tax Exemption on machinery and equipment. Income tax credit equal to 10%, 15%, or 20% of company's investment in Arizona production costs.
Arkansas (http://www.1800arkansas.com/film/index.cfm?page=tax_information) - Refund of state sales tax paid on AK businesses, services, and residents hired as cast and crew. Minimum of $500k must be spent in AK on one project within 6-months or $1 million on multiple projects within 12 months.

California (http://www.filmcafirst.ca.gov) - Five percent sales tax exemption on the purchase or lease of post-production equipment (Exemption is taken by the seller of the equipment and passed on to the buyer at the point of purchase.)

San Francisco offers a refund on all San Francisco payroll taxes paid and a portion of hotel and sales tax paid to the City during production of a Feature Film or Television program. No State hotel tax on occupancy. Most cities or counties that impose a local hotel tax have a tax exemption for occupancies in excess of 30 days.

The State Theatrical Arts Resources (STAR) Partnership offers filmmakers access to unused, distinctive State-owned properties (e.g., health facilities, vacant office structures, prisons, etc.) for cost recovery expenses only.

Colorado (http://www.coloradofilm.org) **-** No lodging tax on hotel rooms for production companies after 30 days. No other industry specific incentives
Connecticut (http://www.cultureandtourism.org/cct/cwp/view.asp?a=2126&q=302534&cctPNavCtr=|#43532) **-** No lodging tax on hotel rooms for production companies after 30 days

Delaware (http://www.state.de.us/dedo/filmoffice/default.shtml)- No state sales tax.

Florida (http://www.filminflorida.com)- Cash reimbursement of up to 15% (maximum $2 million) on the total Florida budget of a filmed entertainment program that spends at least $850,000 in qualified expenditures. Companies engaged in digital media production can apply for a rebate of up to 5% of the company's annual gross revenues.

A qualified digital media effects company which furnishes digital material to filmed entertainment may be eligible for a rebate of 5% of its annual gross revenues, not to exceed $100,000. A qualified relocation project may be eligible for a rebate of 5% of its first 12 months of gross revenues in Florida, not to exceed $200,000.

May be eligible for a sales and use tax exemption on the purchase or lease of certain items used exclusively as an integral part of the production activities in Florida.

Georgia (http://www.filmgeorgia.org)- Base tax credit to qualified productions- additional credits for employing Georgia talent and shooting in underdeveloped counties. Also available to innovative new industries such as game development and animation. The foundation of the act is a 9 percent investment tax credit available to production companies that spend a minimum of $500,000 in the state on qualified production expenditures in a single year.

Also offers a sales & use tax exemption for film, video, broadcast and music production companies working in Georgia. Qualified companies can get an immediate point-of-purchase sales tax exemption that will save productions up to 8 percent on most below-the-line materials and service purchases, leases or rentals.

Hawaii (http://www.hawaiifilmoffice.com/incentives-tax-credits)- Non-refundable income tax credit applicable to Hawaii taxpayers that invest in qualified companies producing "performing arts products," including film, television, video, audio, and animation products. The credit is equal to 100% of the investment amount, payable over five years.

Also, the Motion Picture, Digital Media and Film Production Income Tax Credit is a refundable tax credit of 15 percent of total production expenditures while filming on Oahu and 20 percent on other islands. Royalties derived from performing arts products are excluded from a Hawaii taxpayer's income and not subject to state income tax.

Idaho (http://www.filmidaho.org)- Rebate of the 6% sales tax on tangible personal property when $200,000 is spent on a wide variety of qualifying expenses. In addition, lodging tax of 2% and sales tax of 6% on lodging is fully waived for all visiting production companies after 30 days.

Illinois (http://www.illinoisbiz.biz/film/index.html)- 20% income tax credit on all production costs, including post-production. The spending requirements are: $100,000 for a production over 30 minutes and $50,000 for a production under 30 minutes. The Hotel/motel tax of 14.9% is rebated if the stay is longer than 30 days. There is also an exemption from all state sales tax on film processing of 35mm film.

Indiana (http://www.in.gov/film)- No fee to film on state property. No lodging tax on hotel rooms for production companies after 30 days.

Iowa (http://www.traveliowa.com/film/)- No fee for use of state property. No lodging tax for continuous stays of 30 days or longer.

Kansas (http://kdoch.state.ks.us/kdfilm/index.jsp)- No lodging tax on hotel rooms for production companies after 28 days.

Kentucky (http://www.kyfilmoffice.com/taxrebateinfo.htm)- Refund of the 6% sales and use tax on expenditures made in connection with a production. Expenditures must be paid through a Kentucky financial institution.

Louisiana (http://www.lafilm.org/incentives/index.cfm)- Three tax incentive programs.

1) A sales and use tax (4%) exclusion available to companies that anticipate spending more than $250,000 in Louisiana within a consecutive 12-month period (only applies to productions that were certified prior to Jan. 1, 2006).

2) Labor tax credit of 10% available to production companies that employ Louisiana residents.

3) If the base investment is greater than $300,000, an investment tax credit of up to 25% can be claimed for investing in Louisiana-based productions.

Maine (http://www.state.me.us/decd/film)- Rebate equal to 10% of amount spent on wages for non-Maine residents and 12% of the amount spent on wages for Maine residents. Wages in excess of $1 million to a single individual are not eligible.

A company that invests in production may be eligible for an income tax credit equal to the amount paid on profits make by the production (must spend at least $250,000 or more on production related expenses in Maine). No lodging tax on hotel rooms for production companies after 28 days.

Maryland (http://www.marylandfilm.org/incentives.htm)- Provides for exemptions on property and services used in connection with filming activity. "Services" that are free of the 5% sales and use tax include editing, film processing, voiceovers, looping, and animation and special effects.

Massachusetts (http://www.massfilmbureau.com/)- 20% tax credit based on a production's total payroll in the state (exception: employees who make more than $1 million.)

Also a 25% tax credit based on all production expenses in the state, as long as at least half of the film is shot in Massachusetts, or half of the expenses are spent in the state.

Companies could carry tax credits forward for up to five years or sell to another corporate taxpayer.

Sales tax exemption on equipment bought in state for any production spending more than $250,000. Total tax credits would be capped at $7 million per production.

Michigan (http://www.michigan.gov/hal/0,1607,7-160-17445_19275_37781---,00.html)- Graduated scale for credits depending on how much a company spends in Michigan. Between $200,000 and $1 million, a company receives a 12% rebate; between $1 million and $5 million, a 16% rebate; between $5 million and $10 million, a 20% rebate; and anything over $10 million is a 20% credit on the first $10 million spent. Rebates limited to a total of $7 million annually and are first come, first served.

To qualify for the tax credits a film company must spend at least $200,000 in Michigan, submit an application to the Michigan Film Office and state treasury for pre-approval of credits, and not owe the state any money, guaranteed loans or be in default with the state.

Minnesota (http://www.mnfilmtv.org)- Television commercial production and post-production companies exempt from the 6.5% state sales tax. Also, no lodging tax on hotel rooms for production companies after 30 days. Minnesota offers a 15% rebate of

Minnesota production costs to eligible producers of feature films, TV series, documentaries, commercials and music videos.

Mississippi (http://www.visitmississippi.org/film/index.asp)- 10% tax credit against payroll available for production companies that hire Mississippi residents. State sales tax is reduced to 1.5% for production company-related equipment purchases. The state sales tax is eliminated for purchases of expendable items. Mississippi also offers a 10% rebate on investment in in-state production related expenditures.

Missouri (http://www.ded.mo.gov/business/filmcommission/html/incentives.htm)- Production company may receive state income tax credits of up to 50% of the company's expenditures in Missouri. The production company must spend $300,000 or more in the state. Up to $1 million in tax credits is available per project.

Montana (http://www.montanafilm.com/taxlaws_03.htm)- 12% rebate based on hired Montana Labor and applies to first $50,000 of wages per Montana resident. 8% rebate based on qualified expenditures- Includes hotel and lodging expenditures, production equipment rental, fuel costs, expendables, lumber/construction materials, vehicle rentals, and food expenditures.

No state sales tax, although local communities may have a local tax of up to 4%. No lodging tax on hotel rooms for production companies after 30 days.

Nebraska (http://www.filmnebraska.org/permits.htm)- No lodging tax on hotel rooms for production companies after 30 days.

Nevada (http://www.nevadafilm.com)- No state income tax. Reduced lodging tax for production companies.

New Hampshire (http://www.nh.gov/film/)- No state income tax or sales tax in New Hampshire.

New Jersey (http://www.njfilm.org)- New Jersey offers a tax credit in an amount equal to 20% of qualified production expenses, available to production companies meeting certain criteria, including (1) At least 60% of the total expenses of a project, exclusive of post-production costs, will be incurred for services performed and goods used or consumed in New Jersey. (2) Principal photography of a project commences within 150 days after the approval of the application for the credit.

Certain tangible property used in the production of films and television programs is exempt from New Jersey's 6% sales tax. The Film Production Assistance Program allows film projects to be eligible for loan guarantees through the New Jersey Economic Development Authority. Loan guarantees cannot exceed 30% of the bank financing cost of the project, or $1.5 million, whichever is less.

New Mexico (http://www.nmfilm.com)- New Mexico offers a tax rebate of up to 25 percent of direct production expenditures made in the state that are subject to taxation. The State also offers an exemption of the 6% gross receipts tax, but you cannot qualify for both of these programs.

New Mexico offers a loan, with participation in lieu of interest, up to $15 million per project, (which can represent 100% of the budget) for qualifying feature films or television projects. Terms are negotiated and budget must be at least $1 million. No lodging tax on hotel rooms for production companies after 30 days.

New York (http://www.nylovesfilm.com/index.asp)- Fully-refundable tax credit equal to 10% of qualified expenditures to qualifying film and television productions.

The program applies to qualified expenditures incurred on or after August 20, 2004), and is currently scheduled to expire in 2011.

New York City provides an additional 5% credit and also provides free permits at public locations as well as location parking for essential production vehicles. In addition, police officers are provided at no cost. Both the State and City of New York provide a comprehensive sales and use tax exemption for machinery, equipment, and services used in production and postproduction.

North Carolina (http://www.ncfilm.com)- 2006 legislation provides for a full 15% tax credit on productions over $250,000, and not exceeding a credit per project over $7.5 million. In addition, motion picture production companies are entitled to a cap of 1% on sales and use tax purchases or rentals of items used in the making of films.

Oklahoma (http://www.otrd.state.ok.us/filmcommission)- Rebate up to 15% of Oklahoma production expenditures to companies filming in the state ($5 million cap per year). Specifics:

The rebate is extended to film, television and commercial productions. Must have a minimum budget of $2 million and spend $1.25 million in Oklahoma. The minimum budget requirement is cumulative so that companies producing multiple projects in a fiscal year with a minimum budget of $300,000 and totaling at least $2 million will qualify.

A company must employ Oklahoma residents for at least 50% of its below-the-line crew to qualify for full 15% rebate. Rebates of 5% are available if a company employs up to 24% Oklahomans and 10% for companies who employ 25 to 49% Oklahomans. If the budget is $30 million or higher, this requirement is waived.

The hiring of Oklahoma expatriates counts toward the tier requirements and the $1.25 million Oklahoma expenditure requirement.

No sales tax on hotel rooms for production companies after 30 days.

Oregon (http://www.oregonfilm.org)- Rebate on 10% of Oregon-based labor and other production expenses. Greenlight Labor Rebate offers qualifying productions an additional cash payment of up to 6.2% of wages paid to production personnel. These incentives are cash rebates.

No state sales tax.

Pennsylvania (http://www.filminpa.com/advantages.html) - 6 % sales tax exemption for film production companies that produce for a national audience. Assignable corporate, partnership or income tax credit equal to 20% of production costs including wages if in-state spending is 60% of aggregate production expenses for features and television productions. Three-year carry forward provision, total annual state credit disbursement capped at $10 million per fiscal year.

Free use of state property.

Rhode Island (http://www.rifilm.com)- 25% Motion Picture Company Transferable Tax Credit for all Rhode Island spending. No caps. It also includes salaries for people working on the ground. The film/TV commercial/video game production must be filmed primarily in the state of Rhode Island and have a minimum budget of $300,000.

South Carolina (http://www.scfilmoffice.com)- Up to a 20% cash rebate on employee wages and up to a 30% cash rebate on supplier expenditures. In addition, all productions spending over $250,000 in SC are exempt from sales and accommodations taxes and are eligible to use state properties location fee-free.

South Dakota (http://www.filmsd.com/)- Tax refund to production companies for projects made in the state with costs over $250,000 in taxable costs incurred in South Dakota. No corporate or personal income tax. No sales tax on hotel rooms for production companies after 28 days.

Tennessee (http://www.state.tn.us/film/incentives.htm)- Tennessee refunds the sales and use tax if production companies spend at least $500,000 during a 12-month period. No lodging tax on hotel rooms for production companies after 30 days. No state or local income tax collected in Tennessee. State-owned buildings and land are available to filmmakers free of charge.

Texas (http://www.governor.state.tx.us/divisions/film/incentives)- Comprehensive sales and use tax exemption for film/video production. Exemptions apply to the entire amount of state sales tax (6.25%) and local sales taxes. No lodging tax on hotel rooms for production companies after 30 days.

Utah (http://film.utah.gov/film_incentives/index.html)- Tax rebate typically offering 10-12% returns. Rebate is dependent on script content and money spent in Utah. The state also has a sales and use tax exemption for the purchase, lease or rental of machinery and equipment used in the production or post production of motion picture, television, music video or commercial productions. State also offers a transient room tax rebate after 30 days.

Vermont (http://www.vermontfilm.com)- Producers spending $1 million can be reimbursed for 10 percent of local spending, capped at $1 million annually. No lodging tax on hotel rooms for production companies after 31 days. Sales and use tax exemption on goods and services purchased and used in the making of a film. Income tax for performers is limited to the amount the performer would pay in their home state.

Virginia (http://www.film.virginia.org/VirginiatheFilmOffice/Incentives.htm)- Broad sales and use tax exemptions for costs involved in production of motion pictures.

Washington (http://www.filmwashington.com/e)- 6.5% Sales and use tax exemption on rental equipment. No state income tax. Local, state, and special use taxes off rental vehicles "used in production." No lodging tax on hotel rooms for production companies after 30 days.

West Virginia (http://www.wvfilm.com)- 6% Consumers Sales and Service Tax exemption on purchases and rentals in West Virginia of tangible personal property directly used in an "Entertainment Production Project and purchases in West Virginia of services directly used in an "Entertainment Production Project".

Wisconsin (http://filmwisconsin.org/sites/filmwi/)- Investment tax credit of 25% that can be claimed for investing in Wisconsin based productions

A comprehensive sales and use tax exemption for machinery, equipment and services used in production and post-production.

0% tax for all film and television services contracted by out of state production companies.

Refundable tax credit of 25% of direct production expenditures for feature films, television movies, episodic and mini-series television, video games and broadcast advertising production.

15% state income tax credit for film, television and electronic game production businesses who make a capital investment by starting a business in Wisconsin.

Further incentives are available on a city-by-city basis including the use of State owned buildings and locations free of charge as available, no fees for permits, a dedicated "traffic control" Police Unit during daylight hours at no cost and internal accounting reports on verification of incentive savings to the production company. In many cases, local "Visitors & Convention" bureaus have created special "Industry Rates" for hotel rooms that will be based on "room nights" for each production, including local hotel occupancy tax in their flat room rates to the individual production.

Wyoming (http://www.wyomingfilm.org)- The State provides a list of Wyoming businesses that offer production companies filming there a 10% discount on production related services including, hotels, catering, restaurants, etc.

Appendix B:

Film or Media Arts Programs in New Mexico Universities

Central New Mexico Community College (http://www.cnm.edu/depts/at/programs/film/) - Film Crew Technician Program located in the School of Applied Technology (AT)

Eastern New Mexico (http://fine-arts.enmu.edu/art/programs/animation.shtml)- A comprehensive program focusing upon moving graphics for broadcast and digital film that is designed to prepare students creatively for the competitive digital video and film production marketplace. Located in the Dept. Of Art

New Mexico Highland (http://www.nmhu.edu/about/academics/undergrad/arts/comm/media_arts.html) - The B.F.A in Media Arts includes concentrations in Design, Interactivity and Multimedia, and Digital Filmmaking, with room for experimentation within each area. Located in the Communication and Fine Arts Dept.

NMSU (http://cmi.nmsu.edu/) Creative Media Institute- The CMI curriculum focuses on the art, craft, and business of storytelling. Our students choose one area of emphasis, but they study all aspects of digital filmmaking and digital arts, whether they are aspiring writers, directors, cinematographers, animators.

Northern New Mexico (http://www.nnmc.edu/academics/departments/fa/film.htm)- Film Technician Certificate. This program prepares students for entry level jobs in the craft and skills portion on the film industry. Part of the Fine Arts Dept.

University of New Mexico (http://finearts.unm.edu/ifdm.htm) - The pending Interdisciplinary Film and Digital Media Program (IFDM) at the University of New Mexico is a model of interdisciplinary education for the twenty-first century that will give our students necessary critical, creative, and technical skills to apply digital technologies in innovative and productive ways. Located in the College of Fine Arts.

Eastern New Mexico-Roswell Branch- (http://www.roswell.enmu.edu/degree_plans.php)- Film Technology Program in the Media Arts Dept. Scarce information available.

NMSU-Alamagordo (http://128.123.115.137/index.ht)- Digital and Creative Arts Center. Contains programs relevant to the film industry including 3D Animation and Art and Graphic Design.

Dona Ana Branch CC
(http://dabcc.nmsu.edu/tsd/creative/) - Creative Media Technology Program. The Creative Media Technology program provides a specialized foundation for students who are looking for professional opportunities in filmmaking, computer animation, digital video production and multimedia. The degree is designed for students to complete their four-year degree at the Creative Media Institute at New Mexico State University or to begin their careers.

Santa Fe Community College
(http://www.sfccnm.edu/sfcc/pages/1378.html) - Media Arts Program in the School of Business and Applied Technologies. Comprehensive program offering AA, AAS, CERT's, or Letter's of qualifications for various forms of media. Concentrations include Film Technician Training and the Moving Image Arts Concentration.