



STATE OF OKLAHOMA
INCENTIVE EVALUATION COMMISSION

TAX INCENTIVE EVALUATION REPORT
2016



STATE OF OKLAHOMA INCENTIVE EVALUATION COMMISSION

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DEPARTMENT OF COMMERCE

Dear Governor Fallin, President Pro Tempore Schulz and Speaker McCall:

We would like to thank you for the opportunity to serve on the Incentive Evaluation Commission. As the five voting members with diverse backgrounds and qualifications, we've taken very seriously our duties and responsibilities as commissioners.

We selected 11 tax incentives for evaluation this year, and then hired as an independent consultant Public Financial Management Inc., a national firm specializing in public sector finances. PFM delivered its evaluations to the commission Nov. 1, 2016. We then scheduled a meeting to receive public comment regarding the consultant's recommendations.

Commissioners considered all the public comments received at the Nov. 22 meeting before voting to approve or disapprove of PFM's recommendations at subsequent meetings. We hope our votes, based on public comments and PFM's fact finding, assist you and the Legislature in making critical decisions.

Pursuant to the Incentive Evaluation Act of 2015, 62 O.S. § 7001-7005, the commission is providing this written report to the governor, president pro tempore and speaker. The report is also being made publicly available on the Oklahoma Department of Commerce website and at documents.ok.gov. Further, we'll post the full report at IEC.ok.gov.

Included in this packet you will find a commission action summation chart on the next page; the PFM reports compiled after the firm spent several months in Oklahoma analyzing data and meeting with stakeholders; and written comments commissioners submitted on the evaluations and incentives.

We hope that this information is helpful to you during the upcoming session.

Respectfully,

The Oklahoma Incentive Evaluation Commission

INCENTIVE EVALUATION COMMISSION ACTIONS

INCENTIVE	EVALUATION RECOMMENDATION	COMMISSION ACTION
Tax Credit for Tuition Reimbursement for Aerospace Employers	Retain.	5-0 to approve recommendation
Tax Credit for Aerospace Employees	Retain.	5-0 to approve recommendation
Tax Credit for Compensation Paid by Aerospace Employers	Retain.	5-0 to approve recommendation
Tax Credit for Electricity Generated by Zero Emission Facilities	Reconfigure the program to cap program credits or accelerate the closing of the program window (currently Jan. 1, 2021) to Jan. 1, 2018. Allow non-wind generating zero emission facilities to continue to claim the credit until Jan. 1, 2021.	4-0 to approve recommendation (Roggow abstained)
Excise Tax Exemption on Aircraft Sales	Reconfigure by focusing the exemptions around a policy goal.	5-0 to approve recommendation
Five Year Ad Valorem Property Tax Exemption	Retain but consider revising program eligibility requirements that have been the same in some cases since program inception.	5-0 to approve recommendation
Historic Rehabilitation Tax Credit	The project team recommends that Oklahoma retain the program and adopt an annual cap to ensure some measure of future budget predictability.	5-0 to approve recommendation
Oklahoma Capitol Investment Board	Retain within its current parameters to allow OCIB to complete its scheduled activities prior to its legislated sunset. There is no compelling conclusion related to reversing the sunset imposed by the Legislature, particularly given short-term budget issues facing the state.	3-2 to approve recommendation (Johnson and Roggow, dissent)
Industrial Access Road Program	Repeal.	5-0 to disapprove recommendation
Oklahoma Film Enhancement Rebate	Allow to sunset as scheduled in 2024.	4-1 to approve recommendation (Johnson, dissent)
Quality Events Program	Reconfigure. The state should (1) eliminate the process of estimating the projected economic impact prior to the completion of the qualifying event; (2) create a standardized application template with clear guidelines; (3) designate a single point person or office to respond to applicant questions.	5-0 to approve recommendation

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Aerospace Engineering Incentives

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- b. Tax Credit for Aerospace Employees
- c. Tax Credit for Compensation Paid by Aerospace Employers

Commissioner Comments

Tax Credit for Electricity Generated by Zero Emission Facilities

Commissioner Comments

Excise Tax Exemption on Aircraft Sales

Commissioner Comments

Five Year Ad Valorem Property Tax Exemption

Commissioner Comments

Historic Rehabilitation Tax Credit

Commissioner Comments

Oklahoma Capitol Investment Board

Commissioner Comments

Industrial Access Road Program

Commissioner Comments

Oklahoma Film Enhancement Rebate

Commissioner Comments

Quality Events Program

Commissioner Comments

State of Oklahoma Incentive Evaluation Commission Aerospace Engineering Incentives Final Report



November 28, 2016

Prepared by



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At a Glance: Aerospace Engineering Incentives

Statute: §68-2357.301 through 304

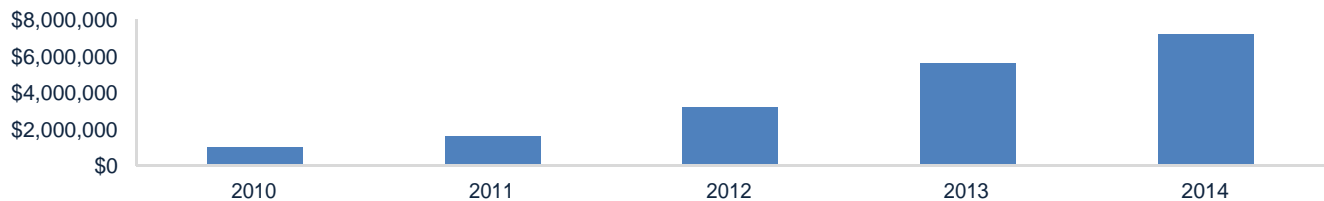
Program Goals

- Promote an increase in the supply of engineers to the aerospace industry in Oklahoma

Fiscal Impact

	2010	2011	2012	2013	2014
Total Dollar Amount	\$979,968	\$1,557,389	\$3,173,803	\$5,581,000	\$7,154,468
Employee Claimants	363	549	895	1,349	1,531
Employer Claimants	15	22	31	22	36

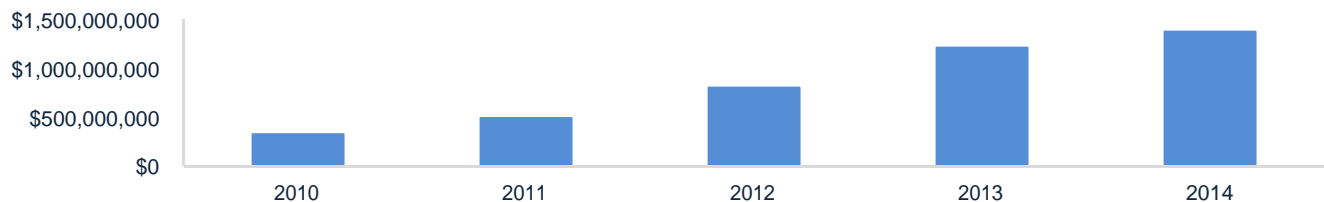
Total Tax Credits Claimed by Year



Economic Impact

	2010	2011	2012	2013	2014
Output	\$327,736,565	\$495,667,698	\$808,055,719	\$1,217,952,139	\$1,382,271,850
Labor Income	\$68,020,030	\$102,873,269	\$167,707,788	\$252,779,672	\$286,883,379
Employment	991	1,498	2,442	3,681	4,178
Total Tax Revenue	\$3,635,538	\$5,417,882	\$9,026,446	\$13,223,745	\$14,986,490

Economic Output by Year



Adequate Protections for Future Fiscal Impact?

- The various benefit limitations, coupled with the fact that these credits are neither transferable nor refundable and have a limited (5 year) carry-forward life provides adequate protection against significant, unanticipated fiscal impact.

Effective Administration?

- Additional reporting by employers that shows the overlap with the Quality Jobs programs Ad Valorem benefit are required.

Achieving its Goals?

- Overall, the aerospace industry in the state is growing and the number of aerospace engineers employed outperforms other type of engineering jobs.
- While the data on decreasing engineering job openings is inconclusive, perhaps for technical reasons, overall the employer and employee incentives seem to be an effective part of growing a key Oklahoma industry. The tuition reimbursement incentive is not widely subscribed, but could be critical in some specific recruiting scenarios.

Retain, Reconfigure, Repeal?

- Retain.

Changes to Improve Future Evaluation?

Enhance employer reporting to show the overlap with Quality Jobs incentives

Executive Summary

The aviation industry in Oklahoma dates back more than a century to a time when Clyde Cessna tested airplanes in the Enid area. While growing steadily in the first few decades of the 20th century, it was not until World War II and the period following that the aviation industry nationwide began to grow in earnest. From that time until the present, owing to a combination of military and commercial activities, the aviation/aerospace industry has become a strong, integral component of the Oklahoma economy. Today, according to the Oklahoma Aeronautics Commission, the aerospace industry is comprised of about 500 aerospace companies that constitute approximately 6% of the state's economy. These firms employ more than 120,000 individuals.

The Oklahoma aerospace industry generates over \$27 billion in sales annually, contributing over \$12.5 billion a year to the state's economy. These companies include marquee firms such as Boeing, American Airlines, NORDAM and Spirit AeroSystems. According to the Oklahoma Department of Commerce, Oklahoma's parts and component industry exports to more than 170 countries around the world, which generates \$4.4 billion in activity within the State.

While engineers may represent a small percentage of the aerospace workforce, they are a critical component in the production of technically-demanding products and services. In the mid-2000s, the aerospace industry increasingly encountered a lack of qualified applicants for engineering positions in the State, and it posed a significant barrier to entry and an impediment to growth.

Enacted by the legislature in 2008, the three aerospace engineering incentives evaluated in this report were designed to address this problem by assisting new and established companies. The incentives provide¹:

- A tax credit to the employer of up to 10 percent of an engineer's salary for up to five years;
- A tax credit to the employer for tuition reimbursements made to newly-graduated engineers of up to 50 percent of the average annual amount they paid for tuition in pursuit of their engineering degree; and
- A tax credit to the qualifying engineer for up to \$5,000 annually for a maximum of 5 years.

All three credits were primarily designed to stimulate the supply of engineers by allowing the employer to offer a higher starting wage and/or recover the cost of transferring the individual to Oklahoma as well as increasing the take-home value of the employee's wages during his or her early years of employment.

To evaluate the effectiveness of these programs the project team examined a variety of data, including the costs and benefits of the incentives, trends on engineering employment, the number of job openings in the field, and the levels of engineering degrees conferred by qualified Oklahoma colleges and universities. The analysis found that:

¹ §68-2357.301 through 304

- Credits were fiscally positive. The taxes generated by the engineering employees exceeded the amount of the credits paid out;
- Incentives were economically positive. The value of the economic activity generated by the engineers receiving credits was soundly positive compared to the cost of the benefits;
- Key jobs significantly increased. The growth of aerospace engineering employment increased 16.7 percent between 2009 (when the incentives took effect) and 2016 as opposed to 2.6 percent for comparable types of engineers during the same period; and
- The supply of graduating engineers increased. The number of engineering degrees conferred by accredited Oklahoma colleges increased by 57 percent.

Based on these results, the study team concluded that the engineering employee and employer tax incentives have been effective, but the tuition reimbursement has not been used to the extent that it would have a material impact. The project team found that the provision confining the required accreditation for the college granting the engineer's degree to American accreditation programs may be limiting the applicant pool from Canada and other countries. Finally, there is possible overlap between the aerospace engineering credits and the Quality Jobs incentive. However, the current data does not support an analysis of this overlap, particularly because the Quality Jobs incentive is not under evaluation until 2017.

Accordingly, the study team recommends:

- The aerospace engineering employee and employer tax credits be retained;
- The tuition reimbursement tax credit should be retained, if deemed critical by the industry;
- The data submitted by employers claiming the employer and tuition reimbursement credit be broadened to identify overlaps with the Quality Jobs programs; and
- The Tax Commission consult with the Oklahoma State Regents for Higher Education (OSRHE) to determine the appropriateness of expanding the acceptable accreditation of degree-granting institutions to certain bodies in Canada and other foreign countries.

Introduction

Note: There are three closely-related aerospace incentives that are included within this evaluation. They are largely inter-related, and the fiscal and economic data regarding them is largely monolithic. With this in mind, the three were combined to facilitate comparing and contrasting their use, impact and outcomes. As a result, this report contains the evaluation of the:

1. *Aerospace Engineering Employer Tax Credit;*
2. *Aerospace Engineering Employee Tax Credit;*
3. *Aerospace Engineering Employee Tuition Tax Credit.*

Overview

HB2182, which was enacted and became law in 2015, requires the Oklahoma Incentive Evaluation Commission (the Commission) to conduct an evaluation of all qualified state incentives. The law provides for the Commission to develop a four-year schedule for review of all qualified incentives and specific criteria to be used for the evaluation. The three aerospace engineering incentives are among those selected for review in 2016 by the Commission. This evaluation provides the Commission with information and analysis to assist in making recommendations to the Governor and the State Legislature.

Introduction

The aviation industry in Oklahoma dates back more than a century to a time when Clyde Cessna tested airplanes in the Enid area. While growing steadily in the first few decades of the 20th century, it was not until World War II and the period following that the aviation industry nationwide began to grow in earnest. From that time until the present (owing to a combination of military and commercial activities), the aviation/aerospace industry has become a strong, integral component of the Oklahoma economy. Today, according to the Oklahoma Aeronautics Commission, the aerospace industry comprises about 6% of the state's economy, made up of about 500 aerospace companies. These firms employ more than 120,000 individuals.

Aerospace generates over \$27 billion in sales annually, contributing over \$12.5 billion a year to the state's economy. These companies include marquee firms such as Boeing, American Airlines, NORDAM and Spirit AeroSystems. According to Oklahoma Department of Commerce, Oklahoma's parts and component industry exports to more than 170 countries around the world which brings \$4.4 billion to the state.

One of the mainstays of the state's aerospace industry is aircraft maintenance and its related supply chain. Oklahoma is home to the largest military aircraft Maintenance, Repair, and Overhaul (MRO) operations in the United States. Moreover, the American Airlines maintenance center in Tulsa is the largest commercial MRO in the world. The MRO industry also supports a robust supply chain of ancillary MRO facilities as well as parts, supplies, support and technical services and transportation.

Other elements of the state's aerospace industry include research and development, manufacturing, and civilian employment at military installations with aerospace missions. Major installations, such as Tinker Air Force Base near Oklahoma City, serve as major magnets for civilian employment, related research and development activities and supply chain companies.

Because there is a diverse base of employment types in Oklahoma’s aerospace industry, it is hard to pinpoint the various data elements necessary to capture the entire industry. For context, the project team researched the North American Industrial Classification System (NAICS) code 3364, Aerospace Products and Parts Manufacturing. The result of that NAICS code 3364 analysis of employment is shown in the following table:

Employment in Oklahoma ²	
Year	NAICS Code 3364
2005	3,677
2006	4,537
2007	5,226
2008	5,595
2009	4,901
2010	5,030
2011	5,600
2012	6,218
2013	6,687
2014	7,085
2015	7,013

There are a variety of other NAICS codes that are likely to include some aerospace incentive recipients. However, the engineering component of those occupations is likely to be even smaller than the data shown above. Accordingly, additional NAICS data is not displayed.

Oklahoma’s aerospace incentives feature three tax credits. Two are employer tax credits for tuition reimbursements and compensation paid to qualified employees. The third credit is an employee tax credit. Statutes authorizing each credit utilize similar language. The table below summarizes important definitions used in each program description.³

² Bureau of Labor Statistics, Quarterly Census of Employment and Wages

³ 68 O.S 2357.301 through 2357.304

Aerospace Sector	Private or public organization engaged in: <ul style="list-style-type: none"> ▪ Manufacture of aerospace defense hardware or software ▪ Aerospace maintenance, repair and overhaul ▪ Supply of parts to the aerospace industry ▪ Research and development for aerospace technology ▪ Education and training of aerospace personnel
Employers	Sole proprietor, general partnership, limited partnership, limited liability company, corporation, other legally recognized business entity, or public entity whose principal business activity involves the aerospace sector
Employees	Regardless of date of hire, employed or contracting in Oklahoma with a qualified employer on or after January 1, 2009 Must have been awarded an undergraduate or graduate degree from a qualified program Must not have been working in aerospace in the state prior to employment or contracting with qualified employer
Qualified Program	ABET accredited program

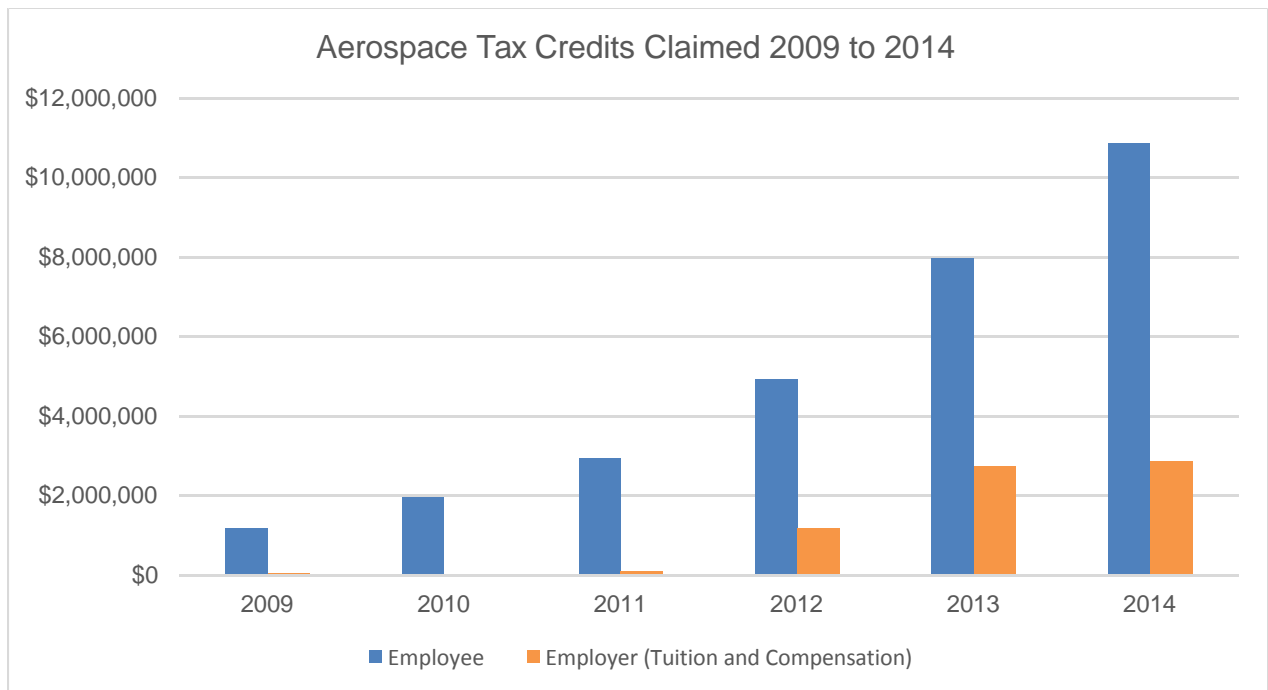
Tuition Reimbursement Credit: Employers in the aerospace sector are eligible for a credit against income tax in the amount of 50 percent of tuition reimbursed to a qualified employee. The employee must have earned an undergraduate or graduate degree within one year of employment with the qualified firm. The amount of the credit is not to exceed 50 percent of the average annual tuition paid at qualified programs at public institutions in Oklahoma. The credit may be taken in each of the first four years of employment.

Credit for Compensation Paid to Qualified Employees: Employers in the aerospace sector are eligible for a credit against income tax equal to a percentage of compensation paid to qualified employees during the first five years of employment. The amount of credit varies depends on where the employee's degree was earned. The amount is 10 percent for employees who graduated from a qualified Oklahoma institution, and 5 percent for employees who graduated from a qualified institution outside of the state. This credit is limited to \$12,500 per year for each employee.

Credit for Employees: Qualified employees may receive an income tax credit of up to \$5,000 per year for up to five years. Credits claimed but not used may be carried forward for up to five years.

Data provided by the Tax Commission claims for both the employee and employer credits increasing over the last five years. In each year, the amount of employee credits claimed far outweighs the amount claimed by employers. A review of tax documents by the Tax Commission revealed there has been no participation in the tuition reimbursement credit for employers. A total of 36 employers claimed the

credit for compensation paid to employees in 2014 compared to just 13 in 2009. Number of claims for the employee tax credit has grown from 257 in 2009 to 1,501 in 2014.



Source: Oklahoma Tax Commission

Criteria for Evaluation

A key factor in evaluating the effectiveness of incentive programs is to determine whether they are meeting the stated goals as established in state statute or legislation. Enacted as part of Chapter 417 of the Laws of 2008, the aerospace engineering credits were said to be intended to address the critical shortage of engineering talent in the industry. While the statute is silent on the intent or purpose, both Legislative commentary and information from industry representatives and groups confirm this intent.

“To address the critical shortage of engineering and technical talent facing the Oklahoma aerospace industry, which could potentially rise to 600 vacancies by 2014, the Legislature passed HB 3239. This measure allows tax credits for aerospace companies hiring new engineering graduates who agree to work for an Oklahoma aerospace company.”

2008 Session in Review, House Committee Research Staff
Oklahoma House of Representatives, May 2008

Industry officials also indicate that the lack of a qualified candidate pool of engineers in the 2000’s posed a significant barrier to entry into the Oklahoma aerospace market and growth of existing companies in that space. Anecdotal information suggests that there were a large number of engineering job openings in the 2000s, despite the fact that these jobs qualified for the Quality Jobs Program. Engineering talent was said to be a critical element of the business process of many types of Oklahoma aerospace companies. As a result, the inability to recruit and hire qualified engineers posed a barrier to entry for

new aerospace firms and an impediment to growth for existing companies.

From the discussion, it appears that a primary purpose of the three credit programs is to stimulate the supply of skilled aerospace labor to combat vacancies in the industry, which will help retain and grow the industry in the State.

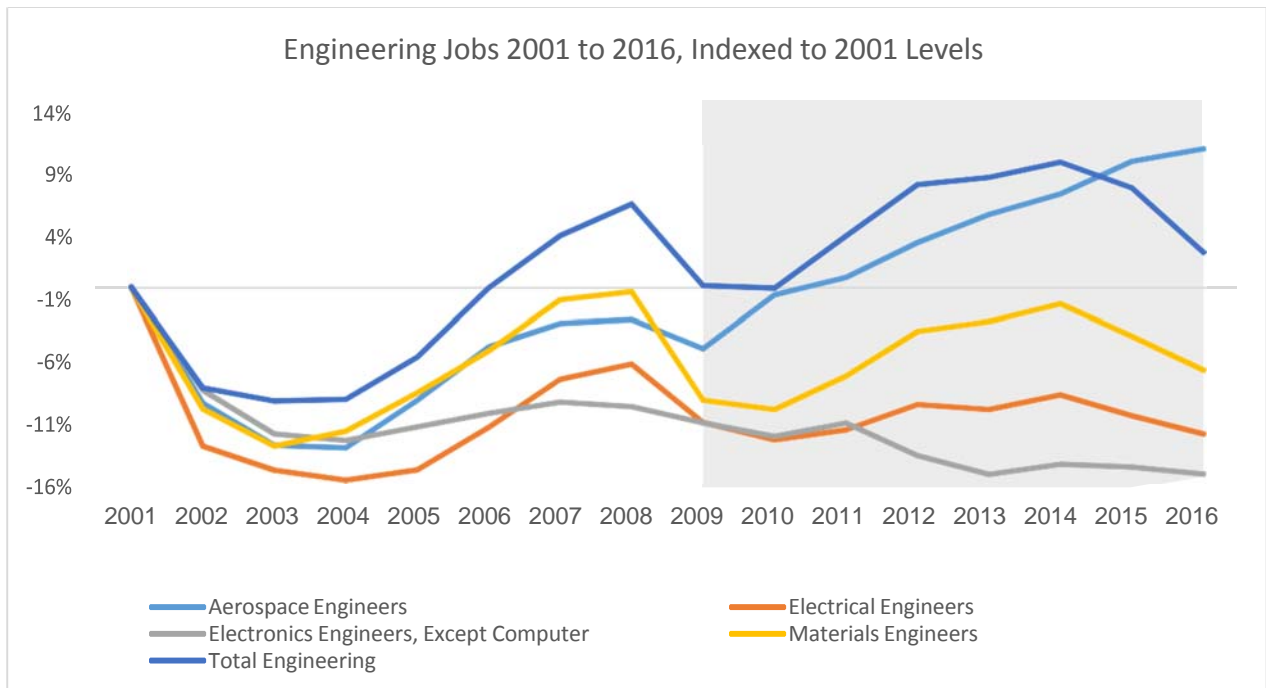
To assist in a determination of the effectiveness of the program, the Incentive Evaluation Commission has adopted the following criteria:

- Number and dollar value of approved credits by year of program
- Employment growth in state aerospace industry - comparison to period prior to the credit
- Payroll growth in state aerospace industry – comparison to period prior to the credit
- Change in measures of the 'skills gap' for engineering and technical skills in the aerospace industry
- Connection with other related business incentives
- Return on investment

Program Background and Benchmarking

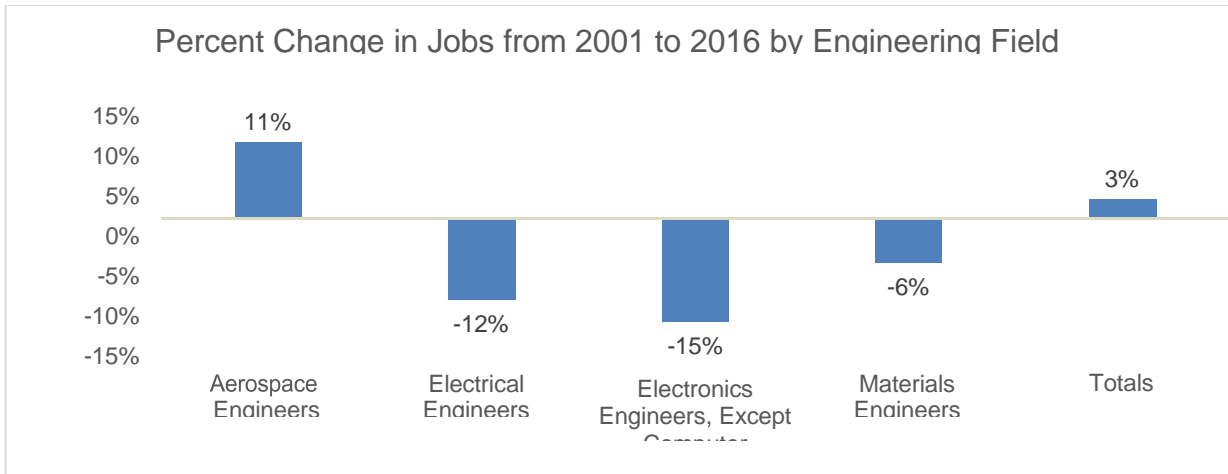
Program Background

As the following chart demonstrates, the Great Recession in 2008 had a significant negative impact on all engineering employment. However, while all other classes of engineers showed an anemic recovery, aerospace engineer employment recovery was notably stronger. That trend has continued to the present.



Source: BLS Quarterly Census of Employment and Wages

From 2009 (the first year in which the aerospace incentives were in effect) to 2016, aerospace engineering jobs increased by about 16.7 percent -- the strongest growth of any of the engineering categories in related occupations. In comparison, the growth of all of these categories over the same timeframe was 2.6 percent.



Source: BLS Quarterly Census of Employment and Wages

Over a longer period (from 2000 to 2016), which is designed to capture more of the economic cycle, aerospace engineers increased by 11 percent, while other engineering types showed slow growth or a decline.

Industry officials indicate that the five-year period of the employer incentive allows companies to offer a higher starting salary, which can then be conformed to the normal salary growth progression over time. Additionally, when larger companies transfer workers into Oklahoma, the five-year incentive payments provide a mechanism for the company to recover relocation costs.

The employee incentive effectively increases the engineer's take-home wages for the five year period, adding to the State's attractiveness for recruitment and retention purposes. Moreover, for individuals coming from states such as Washington (where there is no Personal Income Tax), the incentive serves as a form of personal income tax offset while wage levels grow over the first five years.

While the employer incentive and the tuition reimbursement claims data are combined for reporting purposes, research by the Tax Commission indicates that claims for the tuition incentive are rare, and expenditures for this purpose are not a significant element of the overall cost of the three engineering incentives. There is no available data that would answer the question as to why use of the tuition component is so low.

It should be noted that some component of the jobs that qualified for the aerospace incentives also qualified for Quality Jobs or 21st Century Quality Jobs incentive programs as well. However, the available Quality Jobs data does not support identification of such potential overlaps. Accordingly, the fiscal and economic analysis makes no adjustment for this potential overlap.

From a data perspective, there are two approaches to assessing occupational demand: job postings and job openings. What's the difference between job postings and job openings?

- Job postings can represent the ceiling of demand for a job in your region, but only if employers are actively advertising online

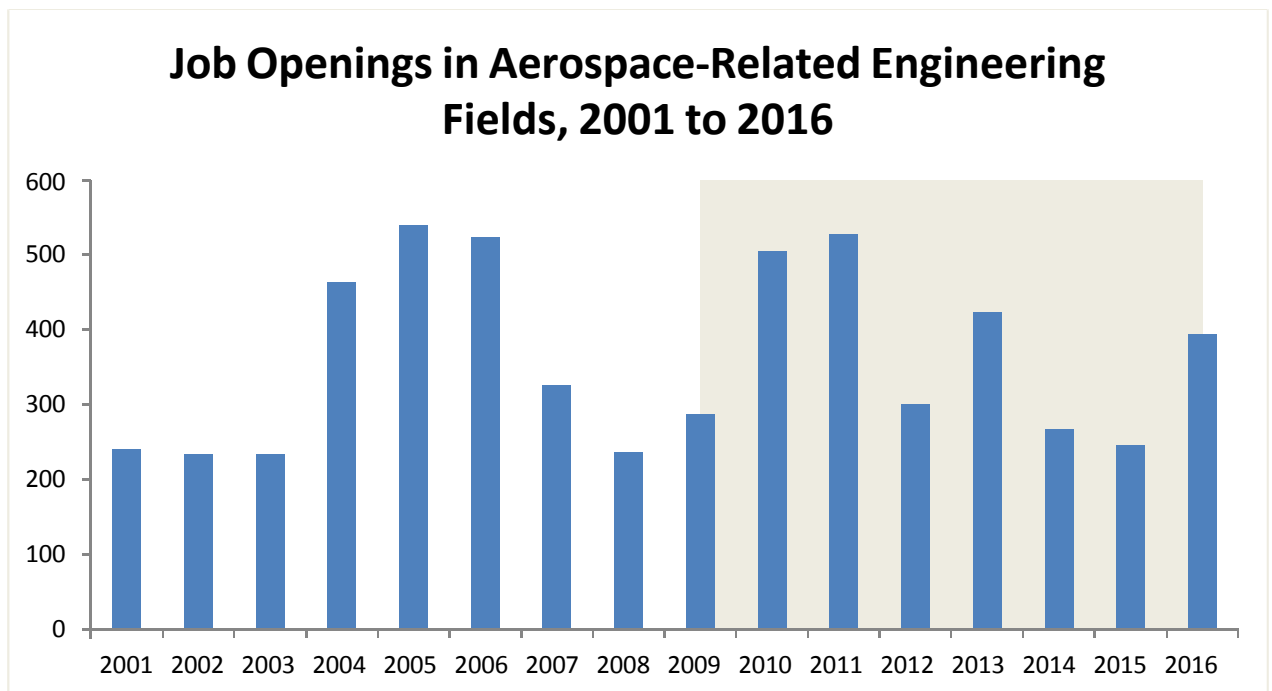
- Job openings take a fairly conservative approach to demand, accounting for job growth and estimating replacement needs for workers who change careers or retire
- It's likely that the true demand for a job is somewhere between job postings and openings

Job postings are placed by companies hoping to attract applicants. Job openings are a measure of demand using actual growth and estimated replacement needs. Both job postings and job openings are helpful for assessing the demand for an occupation, but it's important to understand the strengths and weaknesses of each.

Postings are voluntary, and therefore only represent the jobs that employers choose to advertise. This results in certain jobs being overrepresented by job postings in relation to the actual number of positions available, while other jobs are underrepresented. However, since a posting is designed to attract applicants, it frequently contains much more detailed information about that potential job - information like desired skills, detailed job titles, and the company interested in hiring.

For the purposes of this analysis, the study team selected job openings as a more conservative measure of demand.

In terms of job openings, data from the Department of Commerce is inconclusive. It shows that from 2001 to 2014, the average number of monthly openings showed supply and demand for aerospace engineering positions to generally follow trends in the broader state economy. However, in the most recent five years, openings have been less pronounced even though the aerospace industry employment figures have been trending upward.



The Data on job openings is not perfect. It is drawn from occupation employment data that are based on final industry data and staffing patterns. This data set also uses state data from the Oklahoma

Employment Security Commission. However, the data does not distinguish between new jobs and replacement recruiting, and the reporting can lead to some duplication. Nonetheless, it is the best data available for the time period we wanted to examine.

Benchmarking

A search for comparable state incentive programs yielded few results. There are two key characteristics that appear to set Oklahoma apart from other programs. First, Oklahoma's incentives are strictly focused on the aerospace industry. Second, within the aerospace industry, engineers are the employees receiving the benefit.

Among bordering states, Arkansas and Colorado have programs that are similar to components of Oklahoma's program, but each exhibit key differences that make comparison difficult. Arkansas has an incentive for tuition reimbursement that is targeted generally for employers. However, the Arkansas program it is not industry specific, and it is intended for employees returning to school after being employed, whereas the Oklahoma program has an emphasis on initial employment following graduation.

Colorado has a tax credit for employers for compensation paid to employees in aerospace manufacturing. However, it does not require the employees to be engineers or even employed in highly skilled positions.

While Oklahoma's three aerospace industry incentives appear to be unique, similar incentives have been used for different purposes in other states. Much like the risk of vacancies in the aerospace industry that inspired incentive legislation in Oklahoma, the state of Oregon was facing a potential shortage of medical professionals in rural areas in the late 1980s. To combat this, Oregon created a "three-pronged attack."⁴ First, an income tax credit of up to \$5,000 was created for medical providers. Second, the State created a loan repayment program for practitioners who agreed to operate in a rural area. Third, a financial assistance program was developed where rural hospitals would receive the same Medicaid reimbursement as non-rural hospitals.⁵ These three features are similar to Oklahoma's strategy of incenting both the demand and supply side of the labor market in the affected industry.

Finally, it should be noted that industry representatives indicate that the provision confining the required accreditation for the college granting the engineer's degree to American accreditation programs is limiting the applicant pool from Canada and other countries.

⁴ Oregon's program started in 1989 and expired January 1, 2016

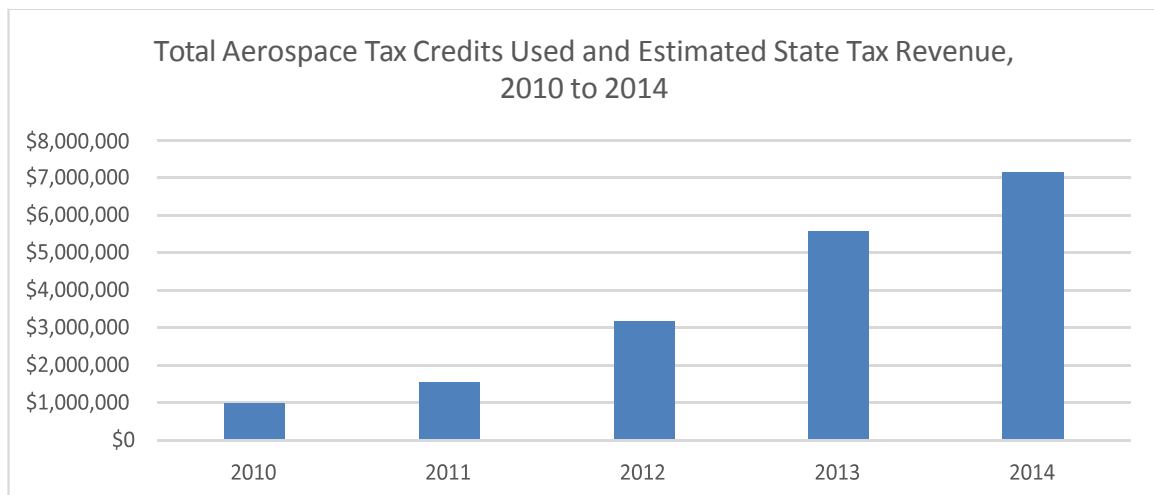
⁵ State of Oregon, 2016 Expiring Tax Credits Report, February 2015

Fiscal Impact

For this evaluation, fiscal impact is considered to be the directly attributable cost impact of the credits on State revenues and expenditures.

As shown in the table and chart below, the fiscal impact of the incentives is mainly attributable to the revenues forgone. Since these incentives are processes as part of overall corporate or personal income tax returns, the administrative cost of the incentives per se is considered not material.

Year	Employee Credits Used	Employer Credits Used	Total Credit Amount Used
2009	\$548,538	\$65,508	\$614,046
2010	\$949,825	\$30,143	\$979,968
2011	\$1,469,491	\$87,898	\$1,557,389
2012	\$2,497,020	\$676,783	\$3,173,803
2013	\$4,323,157	\$1,257,843	\$5,581,000
2014	\$5,153,323	\$2,001,145	\$7,154,468



Section 5C, subsection 2 HB2182 requires an assessment of whether adequate protections are in place to ensure the fiscal impact of the incentives does not increase substantially beyond the state's expectations in future years. While the aerospace incentives trend upward in the future, the five year limitation provides a stabilizing factor as old recipients age-out. Additionally, since the fiscal impact of these incentives is positive, they do not constitute an unplanned budget strain.

Economic Impact

Economic Impact

Methodology

Economists use a number of statistics to describe regional economic activity. Four common measures are “Output” which describes total economic activity and is generally equivalent to a firm’s gross sales; “Value Added” which equals gross output of an industry or a sector less its intermediate inputs; “Labor Income” which corresponds to wages and benefits; and “Employment” which refers to jobs that have been created in the local economy.

In an input-output analysis of new economic activity, it is useful to distinguish three types of expenditure effects: direct, indirect, and induced.

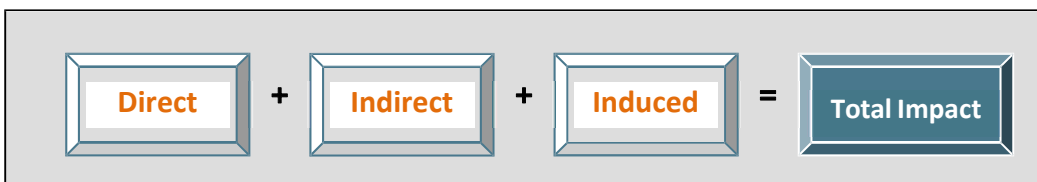
Direct effects are production changes associated with the immediate effects or final demand changes. The payment made by an out-of-town visitor to a hotel operator or the taxi fare paid for transportation while in town are examples of direct effects.

Indirect effects are production changes in backward-linked industries caused by the changing input needs of directly affected industries – typically, additional purchases to produce additional output. Satisfying the demand for an overnight stay will require the hotel operator to purchase additional cleaning supplies and services. The taxi driver will have to replace the gasoline consumed during the trip from the airport. These downstream purchases affect the economic output of other local merchants.

Induced effects are the changes in regional household spending patterns caused by changes in household income generated from the direct and indirect effects. Both the hotel operator and taxi driver experience increased income from the visitor’s stay, as do the cleaning supplies outlet and the gas station proprietor. Induced effects capture the way in which increased income is spent in the local economy.

A multiplier reflects the interaction between different sectors of the economy. An output multiplier of 1.4, for example, means that for every \$1,000 injected into the economy, all other sectors produce an additional \$400 in output. The larger the multiplier, the greater the impact will be in the regional economy.

The Flow of Economic Impacts



For this analysis, the project team used the IMPLAN online economic impact model with the dataset for the State of Oklahoma (2014 Model).

State of Oklahoma Tax Revenue Estimate Methodology

To provide an “order of magnitude” estimate for state tax revenue attributable to the incentive being evaluated, the project team focused on the ratio of state government tax collections to Oklahoma Gross Domestic Product (GDP). Two datasets were used to derive the ratio: 1) U.S. Department of Commerce Bureau of Economic Analysis GDP estimates by state;⁶ and 2) the Oklahoma Tax Commission’s *Annual Report of the Oklahoma Tax Commission* reports.⁷ Over the past ten years, the state tax revenue as a percent of state GDP was 5.5 percent.

State of Oklahoma Tax Revenue as a Percent of State GDP

Year	Oklahoma Tax Revenue*	Oklahoma GDP	Ratio
2005-06	\$8,435,214,025	\$136,804,000,000	6.2%
2006-07	\$8,685,842,682	\$144,171,000,000	6.0%
2007-08	\$9,008,981,280	\$155,015,000,000	5.8%
2008-09	\$8,783,165,581	\$143,380,000,000	6.1%
2009-10	\$7,774,910,000	\$151,318,000,000	5.1%
2010-11	\$8,367,871,162	\$165,278,000,000	5.1%
2011-12	\$8,998,362,975	\$173,911,000,000	5.2%
2012-13	\$9,175,334,979	\$182,447,000,000	5.0%
2013-14	\$9,550,183,790	\$190,171,000,000	5.0%
2014-15	\$9,778,654,182	\$180,425,000,000	5.4%
Average	\$8,855,852,065	\$162,292,000,000	5.5%

Source: U.S. Department of Commerce Bureau of Economic Analysis and Oklahoma Tax Commission

* Gross collections from state-levied taxes, licenses and fees, exclusive of city/county sales and use taxes and county lodging taxes

The value added of an industry, also referred to as gross domestic product (GDP)-by-industry, is the contribution of a private industry or government sector to overall GDP. The components of value added consist of compensation of employees, taxes on production and imports less subsidies, and gross operating surplus. Changes in value added components such as employee compensation have a direct impact on taxes such as income and sales tax. Other tax revenues such as alcoholic beverage and cigarette taxes are also positively correlated to changes in income.

Because of the highly correlated relationship between changes in the GDP by industry and most taxes collected by the state, the ratio of government tax collections to Oklahoma GDP forms the evaluation basis of the fiscal implications of different incentive programs offered by the State. The broader the basis of taxation (i.e., income and sales taxes) the stronger the correlation; with certain taxes on specific activity, such as the gross production (severance) tax, there may be some variation in the ratio year-to-year, although these fluctuations tend to smooth out over a period of several years. This ratio approach is somewhat standard practice, and is consistent with what IMPLAN and other economic modeling software programs use to estimate changes in tax revenue.

⁶ <http://www.bea.gov/regional/>

⁷ https://www.ok.gov/tax/Forms_&_Publications/Publications/Annual_Reports/index.html

To estimate State of Oklahoma tax revenue generated in a given year, TXP multiplied the total value added figure produced by the IMPLAN model by the corresponding annual ratio (about 5.5%). For example, if the total value added was \$1.0 million, then the estimated State of Oklahoma tax revenue was \$55,000 (\$1.0 million x 5.5%).

Impact of Aerospace Incentives

For the purpose of this analysis, we assumed that all the engineering jobs that received the incentives represented marginal employment that would not have occurred without the incentive. While this assumption may give credit to some individuals who would have been employed through organic growth, we found not available data or methodology to separate incented from organic growth. However, at the same time, we calculated marginal employment based solely on the number of employees claiming the income tax credit – assuming that all individuals claimed by the firms collecting the employer compensation and/or the tuition reimbursement credit were duplicates of the employee pool. This methodology may undercount some of the employment generated. Accordingly, based on these assumptions, we then calculated the economic impacts associated with increased employment in the aerospace industry. These impacts, shown below, indicate that the aerospace incentives are positive from an economic perspective.

Year		Output	Value Added	Labor Income	Employment	Estimated OK Tax Revenue
2010	Direct Effect	\$234,451,396	\$21,755,269	\$37,762,128	363	
	Indirect Effect	\$51,728,583	\$26,317,547	\$17,416,607	313	
	Induced Effect	\$41,556,585	\$22,683,290	\$12,841,295	314	
	Total Effect	\$327,736,565	\$70,756,106	\$68,020,030	991	\$3,635,538
2011	Direct Effect	\$354,583,517	\$32,902,597	\$57,111,318	549	
	Indirect Effect	\$78,234,138	\$39,802,571	\$26,340,819	474	
	Induced Effect	\$62,850,042	\$34,306,133	\$19,421,132	475	
	Total Effect	\$495,667,698	\$107,011,300	\$102,873,269	1,498	\$5,417,882
2012	Direct Effect	\$578,055,096	\$53,639,025	\$93,104,972	895	
	Indirect Effect	\$127,540,171	\$64,887,615	\$42,941,773	773	
	Induced Effect	\$102,460,452	\$55,927,120	\$31,661,043	775	
	Total Effect	\$808,055,719	\$174,453,759	\$167,707,788	2,442	\$9,026,446
2013	Direct Effect	\$871,280,809	\$80,848,094	\$140,333,639	1,349	
	Indirect Effect	\$192,236,526	\$97,802,674	\$64,724,527	1,165	
	Induced Effect	\$154,434,804	\$84,296,854	\$47,721,506	1,167	
	Total Effect	\$1,217,952,139	\$262,947,622	\$252,779,672	3,681	\$13,223,745
2014	Direct Effect	\$988,829,443	\$91,755,695	\$159,266,717	1,531	
	Indirect Effect	\$218,172,069	\$110,997,697	\$73,456,821	1,322	
	Induced Effect	\$175,270,337	\$95,669,743	\$54,159,841	1,325	
	Total Effect	\$1,382,271,850	\$298,423,135	\$286,883,379	4,178	\$14,986,490

Source: TXP, Inc. IMPLAN analysis output, October, 2016

Technical and Administrative Issues

Technical and Administrative Issues

The process for administering the AE incentives is fairly straight-forward. Individuals and companies submit forms 564 and 565, respectively, to the Oklahoma Tax Commission as part of their corporate or personal income tax returns, pursuant to 68 Oklahoma Statutes Sec. 2357.301 and 2357.304 and Rule 710:50-15-109 of the Tax Commission.

Employees enter the requisite information regarding their employer, position, tenure, and the name of their college or university. This will be a credit equal to their total state tax liability, or \$5,000 (\$10,000 on a joint return where both filers qualify) whichever is less.

Employers enter the name, social security number, date employed and compensation paid for each qualifying employee they are claiming the employer credit for. The credit is up to 10 percent of the employee's compensation, depending on their eligibility. Credits for tuition reimbursement are entered separately on the same form, using the same information, except the name of the college, the average annual tuition paid by the employee and date graduated are substituted for the compensation information. The tuition reimbursement is then calculated based on the amount the company paid during the year – not to exceed 50 percent of the tuition amount the employee paid to an Oklahoma higher education institution.

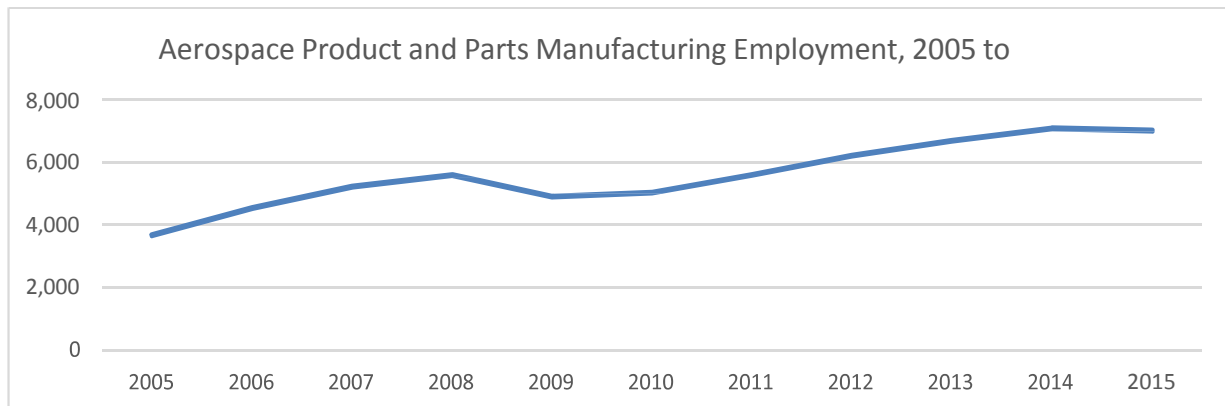
The forms are then received and processed by the Tax Commission, which reviews them for completeness, the proper information on starting dates, credit carry-forward, the appropriate accreditation of the degree-granting college or university, and other requirements found in the statute and Commission rules.

Outcomes

Outcomes

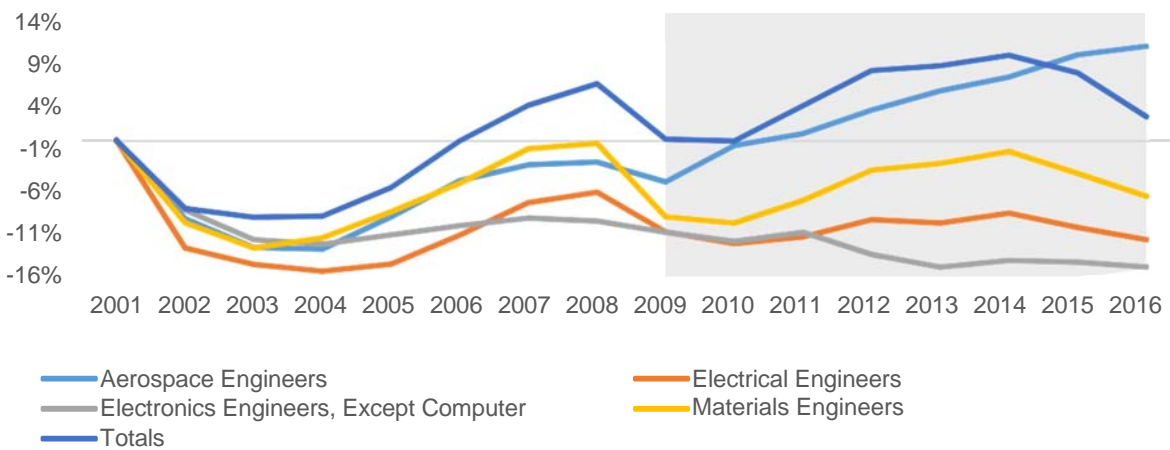
Based on the way that the incentives operate, it can be argued that the aerospace incentives should have helped augment the aerospace engineer labor supply (since the large number of job openings was indicative of already robust demand.) Aerospace industry officials argue that the three enacted incentives did just that. The “split” incentive was designed to encourage more engineers to seek employment in Oklahoma and provided employers with the capacity to offer higher starting wages and/or incur the cost of relocating current employees from other areas of the country. The tuition credit was intended to stimulate enrollment in the Oklahoma colleges and universities conferring engineering degrees. Hence, while the incentives package stimulated both the supply and the demand, it was principally designed to work on the supply side. Moreover, it was tightly confined to a specific employee type seen as the linchpin to the growth and success of this critical industry.

When looking at the data, the last decade has seen robust growth in the aerospace sector in Oklahoma, which remains a substantial and strategic component of the state’s economy. Over the past 10 years, employment in the aerospace product and parts manufacturing sector has grown by more than 90 percent, while total employment in Oklahoma grew by less than 9 percent. According to industry officials, continued growth in aerospace is likely.



From 2009 (the first year in which the aerospace incentives were in effect) to 2016, aerospace engineering jobs increased by about 16.7 percent -- the strongest growth of any of the engineering categories in related occupations. In comparison, the growth of all of these categories over the same timeframe was 2.6 percent.

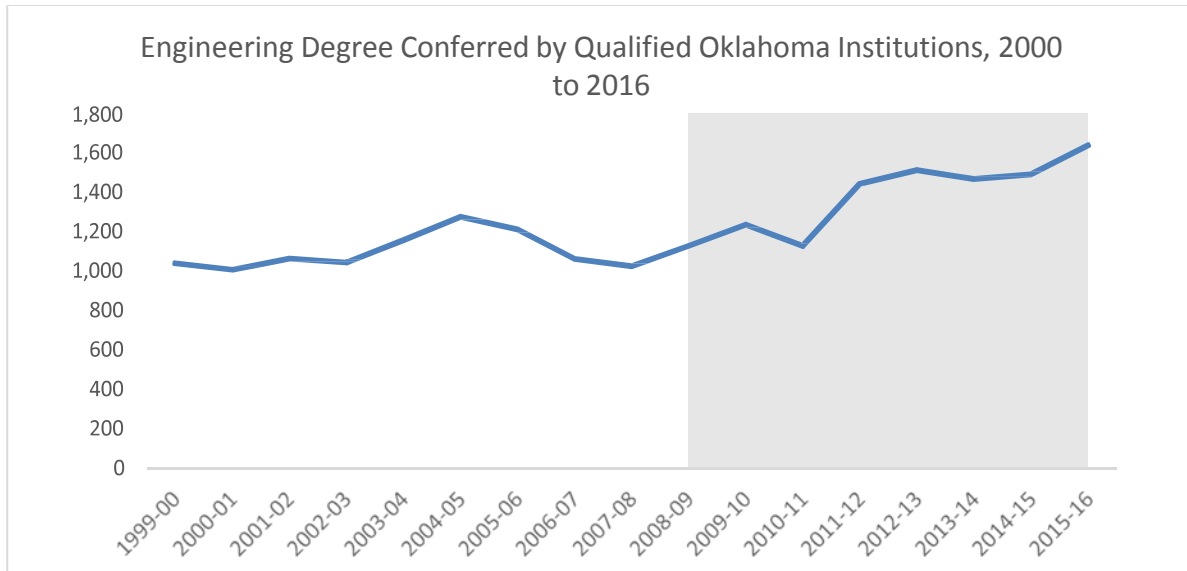
Engineering Jobs 2001 to 2016, Indexed to 2001



As a result of rising demand, the number of engineering degrees conferred in Oklahoma has risen considerably. The chart below indicates that the employer/employee incentives and the opportunity for tuition reimbursement have had a tertiary impact on the state's higher education sector as well.

Additionally, it could be argued that the tuition credit was also intended to provide enrollment support for Oklahoma higher education. To be eligible for the tuition support incentive, the engineer must have graduated from a nationally accredited Oklahoma college or university. The most well-known such accreditation body is the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET). The Sooner State is home to eight total ABET accredited engineering universities. In all, there are more than 30 different ABET accredited engineering programs at different universities throughout the state.

ABET Accredited Colleges and Universities in Oklahoma
Oklahoma Christian University
Oklahoma State University
Oklahoma State University Institute of Technology
Southwestern Oklahoma State University
Oral Roberts University
University of Central Oklahoma
University of Tulsa
University of Oklahoma



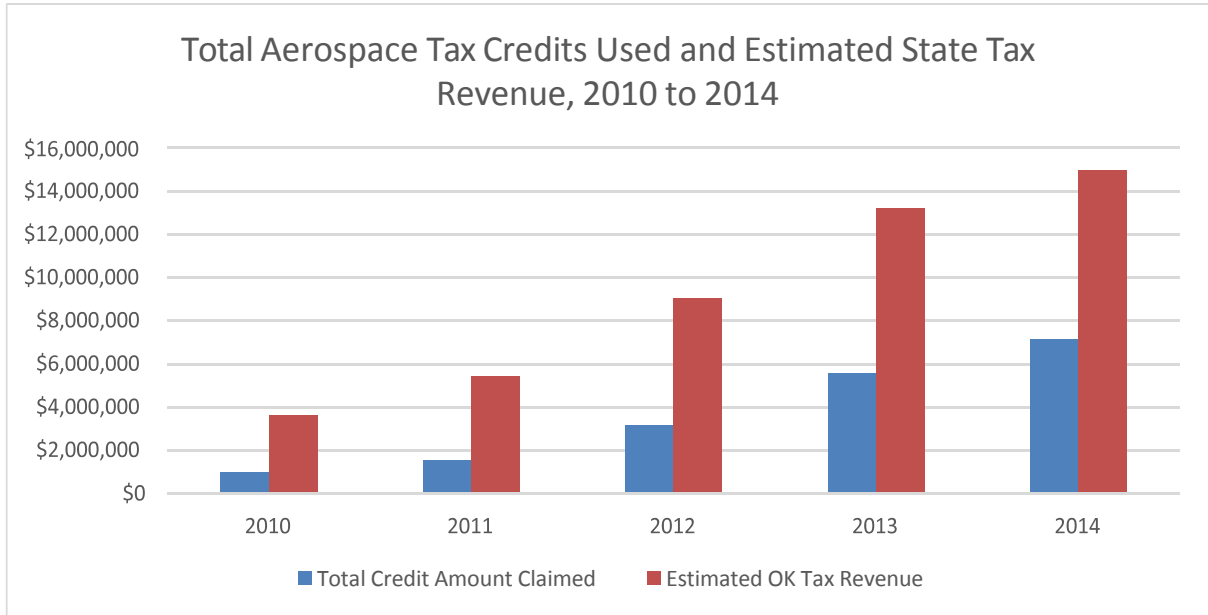
Source: Oklahoma State Regents for Higher Education, 2016

In fact, the number of undergraduate and graduate engineering degrees conferred annually by the 8 Oklahoma ABET schools has grown from 1,040 in 2011 to 1,693 in 2016 – a 57 percent increase.

Cost Benefit Analysis

As discussed in the sections above, the financial analysis suggest that the costs of providing the Aerospace Engineering Incentives are less than the revenue they produce, and that the level of incentive-qualified positions is likely to continue to grow slowly in the future. Moreover, the IMPLAN-generated economic calculation show a similar positive impact.

As shown in the chart below, the fiscal impact of the three engineering tax incentives is a net positive in each of the last five years for which data was available. A key assumption in the calculation of impact is that the engineers who are recipients of the personal income credit are the same individuals as those being claimed by the employer. Accordingly, while the data from the Oklahoma Tax Commission does not identify individuals claiming the credit, we assumed for this analysis that the estimated tax payments generated are based on one individual's income for all three of the incentives. All of the credits claimed in a given year cannot be realized due to lack of adequate tax liability – primarily by filers for the individual employee credit. However, the various benefit limitations, coupled with the fact that these credits are neither transferable nor refundable and have a limited (5 year) carry-forward life provides adequate protection against significant, unanticipated fiscal impact in any future fiscal year.



Source: Oklahoma Tax Commission and TXP, Inc.

It should be noted that some number of the engineering-related positions qualifying for the aerospace incentives would also qualify under the Quality Jobs (QJ) program or the 21st Century Quality Jobs (QJ21) program. However, due to the monolithic nature of the QJ and QJ21 data reported, the capacity does not currently exist to identify where and to what extent these two programs overlap. In general, QJ and QJ21 are broader incentives designed to promote well-paid increased employment in a variety of targeted areas, subject to certain compliance thresholds. Whereas the aerospace credits are more focused on a much narrower category of employment and are subject to more general continuity of employment requirement for the individual rather than specific payroll growth thresholds. Nonetheless, while we cannot calculate a specific value, we would note there would be some fiscal impact discount for the cost of QJ or QJ21 incentives where they do overlap.

Data provided by the Tax Commission indicates claims for both the employee and employer credits have been increasing over the last five years. In each year, the amount of employee credits claimed far outweighs the amount claimed by employers. A review of tax documents by the Tax Commission revealed there has been no participation in the tuition reimbursement credit for employers. A total of 36 employers claimed the credit for compensation paid to employees in 2014 compared to just 13 in 2009. Number of claims for the employee tax credit has grown from 257 in 2009 to 1,501 in 2014.

Comparison with Other States

The development of benchmarks with other state aerospace engineering programs proved difficult. Given the significant differences in the structure and makeup, other programs did not lend themselves to quantitative comparisons. However, several other similar approaches to occupational shortages in other program areas such as healthcare have effective.

Assessment of the Program

Based on the employment data available, the positive fiscal and economic impact analysis the increasing

trend in use of the employer and especially the employee credits and the general health of the aviation/aerospace industry in Oklahoma, the project team believes this program has been an effective catalyst for achieving its goal of stronger employment of engineers in the industry.

The potential overlap with the Quality Jobs (QJ) programs needs to be clarified by better data going forward. However, the fact that QJ was in place in the period leading up to the State's judgement that a specific incentive was needed, and the performance of the data thereafter, suggests that even if there is some overlap, it is not probative of the lack of need for the aerospace engineering program.

Due to data constraints, the analysis assumed that all employees receiving the income tax incentive would not have been employed but for that incentive. However, no additional employment credit was given for employees claimed under the employer compensation and/or tuition reimbursement programs as all those jobs were deemed to be duplicative of the employee recipient pool. While these two assumptions tend to offset each other, it is certainly possible that the methodology counts some jobs that would have been created through organic growth of the industry or the impact of the Quality Jobs or Ad Valorem incentive programs. While we were not define any rational basis for making adjustments to reflect these effects, we would observe that the margin by which these incentives are economically positive is significant – providing a comfortable margin for these factors.

The low subscription levels of the tuition credit are an area of interest and/or concern. It is not clear why this benefit is not more widely subscribed. Additional analysis of this element of the program would be advisable.

Recommendations

Recommendations for the Commission: Retain with Recommendations

Based on the employment data available, the positive fiscal and economic impact analysis, the increasing trend in use of the employer and especially the employee credits and the general health of the aviation/aerospace industry in Oklahoma, the project team believes this program has been an effective catalyst for achieving its goal of stronger employment of engineers in the industry. As a consequence, the credits should be retained.

The tuition reimbursement program is not widely used. It is recommended that the Tax Commission and the Department of Commerce work with the industry to gather data and information related to this outcome. In some of the other occupational demand incentive programs reviewed, tuition reimbursement is a critical factor. Certainly, a policy choice would be to eliminate the tuition reimbursement benefit, since it is under-utilized and the program has proven effective without it. However, since the savings achieved by dropping this element are minimal, the Commission may choose to leave it as an option that employers can use in certain circumstances.

As noted in the report, the same companies (and potentially the same individuals) that are beneficiaries of the aerospace engineering incentives may also be receiving support under the Quality Jobs programs. At the present time, there is not sufficient data to determine the extent of the overlap. However, going forward, the Tax Commission form 465 should be modified to include information regarding the company's use of other incentives in combination with the aerospace engineering credits. Further, it is recommended that the data included on the expanded form be entered into the Tax Commission data systems in a way that the specifics can be used to support analysis of overlaps.

Finally, the Commission may wish to consider recommending that the Legislature modify the definition of "Qualified program" in paragraph 6 of §68-2357.301 to expand the acceptable accreditation of degree-granting institutions to certain substantially equivalent bodies in Canada and other foreign countries.

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INCENTIVE EVALUATION COMMISSION COMMENTS

AEROSPACE ENGINEERING INCENTIVES

General Comments:

CYNTHIA ROGERS

- The analysis does not provide convincing evidence that there's still a critical shortage of aerospace engineers in the state. Thus, the 3 pronged attack may be overkill.
- Whereas this industry diversifies the state economy, the aerospace industry has a limited growth potential. It is unlikely that there will be a significant increase in overall aerospace engineering employment in the future.

Aerospace Tuition Reimbursement

CYNTHIA ROGERS

- It is hard to argue that this is a valuable recruiting tool, when it is not being use very much. In principle the concept of leveraging company investments with a 50% reimbursement is attractive and may have some value for recruiting individuals with degrees.
- However, from a supply standpoint, students need financial assistance while earning their degrees rather than after the fact. To continue to grow the supply of engineers, consider scholarships for juniors and seniors to increase degree completion rates.

Aerospace Employee Tax Credit

CYNTHIA ROGERS

- The analysis does not provide convincing evidence that the employee tax credit is a recruiting tool. Conversations with engineers suggest that employees find out about the tax credit from colleagues after they are hired and that experienced engineers go where the projects are.
- I encourage the legislature to consider limiting this to new in-state graduates for retention of locally grown talent. Plus new graduates have lower salaries, making the credit have a larger marginal impact on location decisions.

Aerospace Employer Tax Credit

CYNTHIA ROGERS

- Since each incented job is counted as new job, employment impact estimates based on this assumption tend to overestimate of the net employment impacts.
- It is hard to attribute the credits to this program given potential layering with the Quality Jobs Program and other programs.

**State of Oklahoma
Incentive Evaluation Commission
Tax Credit for Zero Emission Facilities
Final Report**



November 28, 2016

Prepared by



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At a Glance: Tax Credit for Zero Emission Facilities (68 O.S. Section 2357.32A)

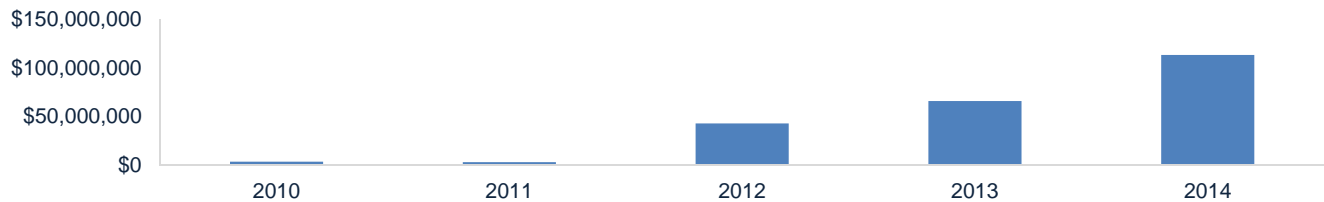
Program Goals

- Increase state share of electricity generated by renewable energy sources to 15 percent by 2015
- Create capital investment, jobs and income associated with increased numbers of zero emission facilities

Fiscal Impact

	2010	2011	2012	2013	2014
Dollar Amount	\$3,698,962	\$3,128,895	\$42,910,343	\$65,993,892	\$113,236,509
Claimants	60	38	114	191	154

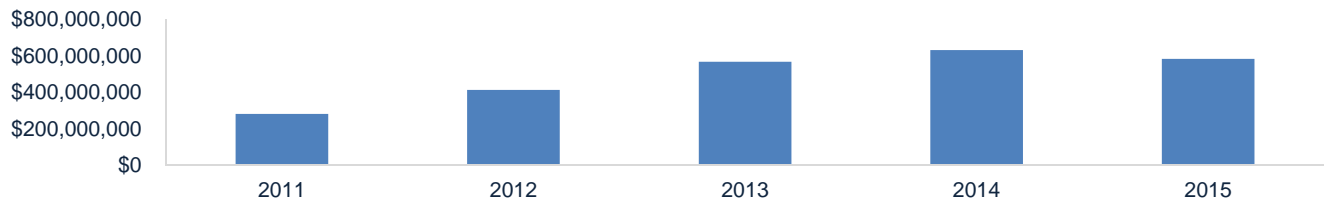
Dollar Amount of Tax Credits Claimed by Year



Economic Impact

	2011	2012	2013	2014	2015
Output	\$281,533,595	\$412,348,832	\$566,620,892	\$630,743,636	\$582,208,433
Labor Income	\$37,928,411	\$55,551,935	\$76,335,580	\$84,974,243	\$78,435,545
Employment	658	964	1,324	1,474	1,361
Total Tax Revenue	\$8,496,298	\$12,261,948	\$17,219,629	\$18,630,857	\$17,172,783

Economic Impact by Year



Adequate Protections for Future Fiscal Impact?

- There has been a significant increase in use of the credit, which may accelerate further in coming years
- While the credit will be closed to new recipients in 2021, the additional possible eligible facilities (and the 10 years of credits for each) create a significant threat to the State budget
- There are not current adequate protections (such as caps) to deal with possible future fiscal impact

Effective Administration?

- Current program administration is straight-forward because of the type of credit
- However, there is concern that the credit reporting is not sufficient for revenue estimating purposes

Achieving its Goals?

- There has been a significant increase in zero emission (particularly wind generating) facilities, and this has assisted the State with reaching its renewable energy goal
- The industry continues to grow (and future expansion is promising), suggesting that the program has achieved its primary goals
- However, the costs associated with achieving these goals are significant – and probably too high

Retain, Reconfigure, Repeal?

- Reconfigure the program to cap program credits or accelerate the closing of the program window (currently January 1, 2021) to January 1, 2018
- Allow non-wind generating zero emission facilities to continue to claim the credit until January 1, 2021

Changes to Improve Future Evaluation?

- Increase reporting requirements related to expected energy generation and use of state credits

Executive Summary

Introduction

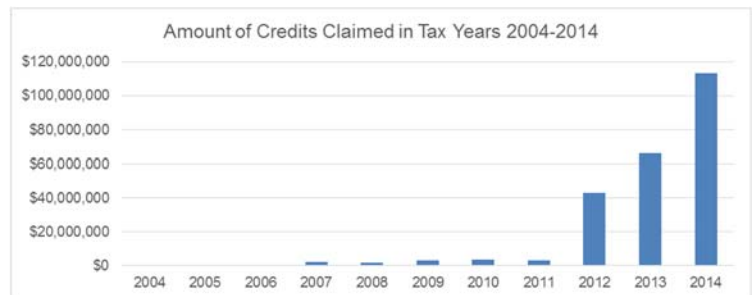
Production tax credits have been part of American energy policy for decades. The Federal Production Tax Credit (PTC) began in 1992, and many states have implemented their own incentives to help the capital-intensive renewable energy industry develop within their borders. In 2003, Oklahoma created its version of a PTC for energy generated by zero-emission facilities, which encompass wind, geothermal, solar and hydropower. As with most states, Oklahoma's PTC for electricity generated by zero-emission facilities is provided on a per kilowatt-hour basis. The credits are valid for a 10 year period following the date the facility is placed in operation. In 2013, an end date of December 31, 2020 for facilities to come on-line and qualify for the credit was added to the statute.

The PTC coincided with other State efforts to expand the use of renewable energy sources. In 2011, the Legislature set a renewable energy goal for the year 2015 that 15 percent of electricity generated within the State be generated by renewable energy sources. That goal was attained, and today, electricity from renewable sources accounts for over 19 percent of all electricity generated in Oklahoma, with approximately 90 percent of it coming from wind.

Program Background and Benchmarking

Since its inception, the use of the State PTC has increased significantly. For example, the capacity of facilities eligible for the credit in 2003 was 176 megawatt hours. In the first year the credits were claimed (2005), those credits totaled \$2.7 million.

Six years later, in 2009, eligible facilities had rated capacity of 1,130 megawatt hours, and the claimed credits totaled \$8.8 million. By 2014, eligible facilities had rated capacity of 3,780 megawatt hours, and claimed credits totaled \$113 million.¹ The graph at right illustrates the dramatic increase in the use of the credit.



According to the US Energy Information Administration, Oklahoma is one of the 10 highest producing states that, in 2015, accounted for 73 percent of the nation's wind energy. In fact, Oklahoma trailed just Texas and Iowa in generation of megawatt hours of electricity from wind. Among the top 10 wind producing states, Oklahoma is the only state with a PTC program that is still accepting new facilities. Five of the six top producing states with PTCs have some form of a program cap in place.

Fiscal Impact

The fiscal impact from the PTC is substantial, and its potential impact in the coming years is also significant. Even with program changes that close the window for new facilities to qualify for the PTC after December 31, 2020, there is significant exposure for the State based on the opportunity for facilities

¹ Claimed credits includes credits generated in the tax year, as well as any credits carried forward from previous tax years

to be placed in service during the remainder of 2016 through the end of calendar year 2020. Given plans for major new transmission lines that can transport Oklahoma wind-generated electricity to out-of-state locations, it is quite possible (perhaps even probable) that the credits per year associated with zero emission wind facilities will approach \$100 million a year by the time the program window closes – and those facilities’ payments will continue for up to 10 years.

Economic Impact

There are a variety of economic impacts associated with the construction and operation of the zero emission facilities. To determine these, the project team developed an input-output model using IMPLAN, which assisted in analyzing direct, indirect and induced effects. These multiple economic impacts are then summed to determine overall economic impact. It is notable that economic impact does not directly translate into state tax revenue, and an adjustment must be made to determine how economic impacts translate into revenue.

Some of the economic impacts associated with this credit include the initial construction of the facilities, their operations and maintenance, and lease payments to landowners on which the facilities are constructed. While these are all substantial and important, they do not (in terms of other state revenue that they generate) come close to the State’s foregone revenue from the PTC.

Outcomes

While the cost-benefit analysis associated with state revenue is an important consideration, there are other outcomes that should also be considered. These include:

- Development and growth of the renewable energy industry
- Increased property valuation
- Reduced costs of electricity

Without a doubt, there has been impressive development and growth in the renewable energy industry within the State of Oklahoma. However, the legislatively enacted goal, renewable energy comprising at least 15 percent of the state portfolio of electricity generation, has been achieved (and exceeded). Given this fact, it is unclear as to whether there is a need to expend additional resources on this priority.

A valid positive outcome related to this incentive is the increase in local property tax valuation associated with the zero emission facilities. Wind turbines are capital intensive facilities, and this increases the overall property tax base for schools and other local governments in Oklahoma. While local schools may benefit from this outcome, it does not replace state finance formula appropriations for these schools so does not improve the State’s budget position. For other local governments, additional assessed valuation may simply reallocate property tax burden rather than increase local tax revenue. To be sure, there is some additional local revenue from leases, but this has been taken into consideration in the economic impact calculations.

Finally, there is evidence that Oklahoma benefits from lower electricity prices in relationship to average prices in the rest of the country. While wind energy may contribute to this factor, it is still a relatively small cohort of the overall mix of sources for electricity within the State. It is likely that plentiful (and relatively cheap) natural gas is still a more important factor in these calculations. To the extent this is an important factor, it is notable that a significant portion of the expected new development in wind facilities is to provide energy for transmission to users in other states. In this case, there is no real benefit for Oklahoma consumers in subsidizing the generation of this electricity.

It is also notable that the State also provides an incentive (related to the Ad Valorem Exemption for Manufacturing Facilities) for these same zero emission facilities. While this eligibility window closes on January 1, 2017, some of the economic and revenue benefit of these facilities must be reduced factoring in this substantial state benefit (which has averaged over \$30 million a year over the past three years) as well.

Recommendations

Given the substantial cost associated with this program, the lack of a PTC cap (as exists in all other major wind energy producing states with this credit) and the very real possibility that the obligation associated with this incentive will continue to increase substantially in coming years, the project team recommends that **the program be reconfigured to either establish a program cap or accelerate closing the window for eligibility**. The project team suggests that this cap and/or accelerated date to close the program should primarily apply to wind facilities; it makes sense to allow other zero emission facilities (such as those that use solar energy) to continue to access the credit through the current statutory close of the program.

The project team also recommends that facilities claiming a credit be required to provide monthly data related to generated energy and projections related to use of the credit.

Introduction

Overview

The Oklahoma Incentive Evaluation Commission (the Commission) was established in HB2182, which was enacted and became law in 2015. It requires the Commission to conduct evaluations of all qualified state incentives over a four-year timeframe. The law also provides that criteria specific to each incentive be used for the evaluation. The Tax Credit for Electricity Generated by Zero-Emission Facilities is one of the incentives reviewed in 2016 by the Commission with recommendations to the Governor and the State Legislature.

Introduction

Production tax credits have been part of American energy policy for decades. The Federal Production Tax Credit (PTC) began in 1992,² and many states have implemented their own incentives to help the capital-intensive renewable energy industry develop within their borders. In 2003, Oklahoma created its version of a PTC for energy generated by zero-emission facilities, which encompass wind, geothermal, solar and hydropower. That year, the State's first utility-scale wind facility began production. Today, electricity from renewable sources accounts for over 19 percent of all electricity generated in Oklahoma, with approximately 90 percent of it coming from wind.³

Oklahoma's PTC for electricity generated by zero-emission facilities is provided on a per kilowatt-hour basis. Facilities placed into operation after June 4, 2001 are eligible for the credit if the facility has a rated production capacity of one megawatt or greater. The Department of Environmental Quality must determine that the construction and operation of the facility will result in no pollution or emissions harmful to the environment. The credits may be claimed in tax years beginning on or after January 1, 2003. The credits are valid for a 10 year period following the date the facility is placed in operation.⁴

The incentive was originally structured with the credit gradually declining from \$0.0075 to \$0.0025 per kilowatt-hour. While the rationale for the reduction over time was not provided in the originating legislation, there are various examples around the country where the value of a credit declines over time.⁵

In 2006, the program was amended and a one-half cent (\$0.005) per kilowatt-hour credit was established for facilities placed in operation on or after January 1, 2007. This credit schedule is still in place today. In

² The federal production tax credit is a per-kilowatt-hour tax (kWh) credit for electricity generated using qualified energy resources. The credit can be claimed for a 10-year period once a qualifying facility is placed in service. The maximum credit amount for 2013, 2014, and 2015 is 2.3 cents per kWh. The maximum credit rate, set at 1.5 cents per kWh in statute, has been adjusted annually for inflation. See Congressional Research Service, "The Renewable Electricity Production Tax," Molly F. Sherlock, July 14, 2015, accessed electronically at <http://nationalaglawcenter.org/wp-content/uploads/assets/crs/R43453.pdf>

³ EIA, Electric Power Industry Generation by Primary Energy Source Back to 1990, Oklahoma

⁴ 68 O.S. Section 2357.32A

⁵ For example, it may be argued that early entrants have greater costs of entry, as capital and suppliers may not be as readily available. In other instances, it may be expected that economies of scale will reduce capital or operating costs for later entrants.

2013, an end date of December 31, 2020 for facilities to come on-line and qualify for the credit was added to the statute.

The following table describes the existing credit:

For Facilities Placed in Operation on or after Jan 1, 2003 and before Jan 1, 2007	
Electricity Generated Between	Credit per kilowatt-hour
Jan 1 2003 – Dec 31 2003	\$0.0075
Jan 1 2004 – Dec 31 2006	\$0.005
Jan 1 2007 – Dec 31 2011	\$0.0025
Facilities placed in operation on or after Jan 1, 2007 and before Jan 1, 2021	
Electricity Generated Between	Credit per kilowatt-hour
On or After Jan 1 2007	\$0.005

Credits generated prior to Jan 1, 2014 may be carried forward for up to 10 years.⁶ Credits generated on or after Jan 1, 2014 are refundable at 85 percent of the face amount of the credit.⁷ Nontaxable entities may transfer or sell earned credits to any individual or corporate taxable entity.⁸

Participation in the program has grown rapidly over the last five years. According to data from the Oklahoma Tax Commission, the amount claimed for the 2014 tax year was over \$113.0 million, compared to over \$3.0 million in 2010.⁹

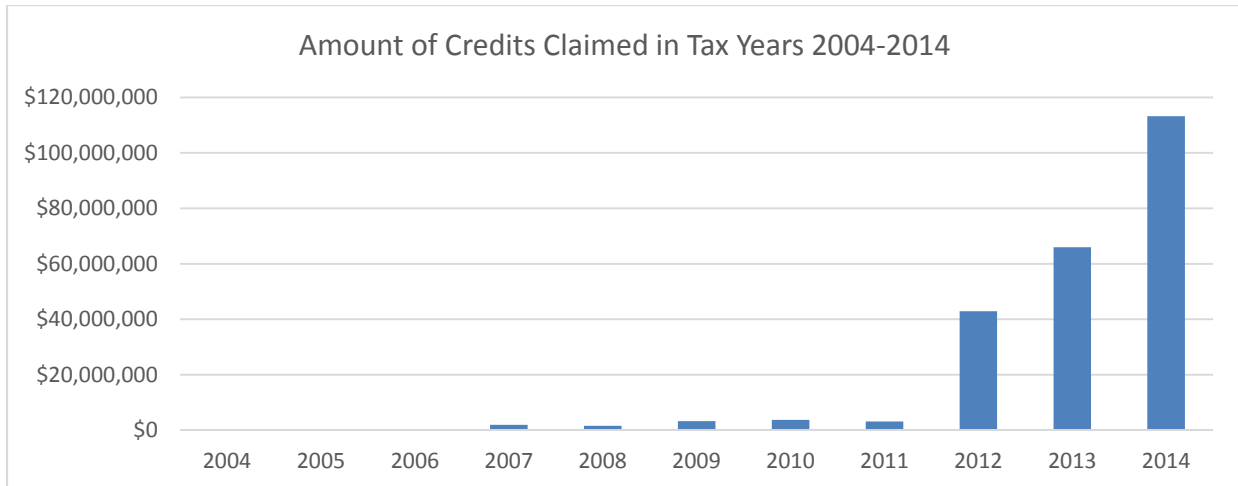
The following graph illustrates the dramatic increase in tax credits claimed in recent years:

⁶ In other words, if the owner of a facility does not have sufficient income tax liability to offset the entirety of the earned production credit, they may apply that remaining credit to income tax liability for up to 10 additional tax years.

⁷ A refundable credit is one where the dollar value of the credit is paid (refunded) to the taxpayer even if they have no income tax liability. In this case, only 85 percent of the value of any refunded credit would be remitted.

⁸ Transferred or sold credits are usually subject to a discount, which will vary depending on factors such as supply and demand. According to one recent general discussion of transferable state tax credits, 'Typically, sellers will receive 85 to 90 cents on the dollar for their credit. However, it is quite possible for sellers to receive less.' Journal of Multistate Taxation and Incentives, March/April 2015, "The Transferability and Monetization of State Tax Credits."

⁹ Claimed amount includes credits generated during the tax year and credits carried forward from previous tax years



Development plans suggest the impact of this incentive will remain high as more wind energy infrastructure is constructed. The most anticipated project is the Plains and Eastern Clean Line, a proposed 700-mile, 3,500 megawatt transmission line that will connect wind energy generated in the Oklahoma panhandle to consumers in the Memphis, Tennessee area. Construction is expected to start on this project in 2017.¹⁰ With this added infrastructure and its ability to connect producers to more consumers (and thus heightening demand), investment in new and existing wind energy facilities should continue to grow.

Criteria for Evaluation

A key factor in evaluating the effectiveness of incentive programs is to determine whether they are meeting the stated goals as established in state statute or legislation. In the case of this credit, the specific goals were not included in the legislation that established it. However, related public policy goals have been articulated. In 2011, the Legislature set a renewable energy goal for the year 2015 that 15 percent of electricity generated within the State be generated by renewable energy sources.¹¹ As a result, it is logical to determine whether the credit has helped the State in accomplishing this goal.

In addition to this goal, there are other criteria that may be used to evaluate this incentive program. To assist in a determination of program effectiveness, the Incentive Evaluation Commission has adopted the following criteria:

- A comparison to the period prior to the credit of renewable energy and wind's share of renewable energy

¹⁰Details of the project may be found on the website of the Center for Rural Affairs at <http://www.cfra.org/plains-and-eastern> and the US Department of Energy, Office of Electricity Delivery & Energy Reliability at <http://energy.gov/oe/services/electricity-policy-coordination-and-implementation/transmission-planning/section-1222-0>

¹¹ 17 O.S. 2011, Section 801.4, Section C. It is notable that the identified renewable energy sources include wind, solar, photovoltaic, hydropower, hydrogen, geothermal, biomass and steam.

- A comparison to the period prior to the credit of renewable energy kilowatt hours generated versus all kilowatt hours generated in the state
- Income generated within the State by eligible projects
- Jobs generated within the state by eligible projects
- Connection with other related business incentives
- State return on investment
- Lease revenue generated by zero-emission facilities
- Change in average price of electricity before and after the tax credit

The criteria focus on what are generally considered goals of incentives programs (such as creating jobs and capital investment in the state) as well as more specific objectives related to this program (greater use of renewable energy within the state and maintaining affordable energy prices). Ultimately, incentive programs have to weigh both the benefits (outcomes related to achieving policy goals and objectives) and the costs, and that is also a criteria for evaluation (State return on investment). These will be discussed throughout the balance of the evaluation.

Program Background and Benchmarking

Background

As noted in the previous section, since its inception in 2003, the use of the tax credit has increased significantly. For example, the capacity of facilities eligible for the credit in 2003 was 176 megawatt hours. In the first year the credits were claimed (2005), the credits totaled \$2.7 million. Six years later, in 2009, eligible facilities had rated capacity of 1,130 megawatt hours, and claimed credits totaled \$8.8 million. By 2015, eligible facilities had rated capacity of 4,346 megawatt hours, and claimed credits totaled \$50.6 million. The following details this history of use:

Inputs	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Existing Wind Capacity in MW	176.0	176.0	474.0	594.0	689.0	708.0	1,130.0	1,480.0	1,810.8	3,132.9	3,132.9	3,779.5
Capacity in MWh	1,541,760	1,541,760	4,152,240	5,203,440	6,035,640	6,202,080	9,898,800	12,964,800	15,862,608	27,444,204	27,444,204	33,108,420
Actual MWh Generated	54,470	572,744	847,773	1,712,441	1,849,144	2,358,080	2,698,199	3,808,083	5,605,265	8,157,585	11,162,493	11,936,833
Capacity Factor	4%	37%	20%	33%	31%	38%	27%	29%	35%	30%	41%	36%
Credit Per kWh for Facilities in Operation Before Jan 1, 2007	\$0.0075	\$0.005	\$0.005	\$0.005	\$0.0025	\$0.0025	\$0.0025	\$0.0025	\$0.0025	\$0.0025	\$0.0025	\$0.0025
Credit per kWh for Facilities in Operation After Jan 1, 2007					\$0.005	\$0.005	\$0.005	\$0.005	\$0.005	\$0.005	\$0.005	\$0.005

This upward trend in wind energy production is expected to continue. As noted in the previous section, there are substantial new wind energy projects in varying stages of planning and execution. At the same time, the production costs associated with wind energy have fallen substantially, which has helped to make it a competitive energy source.

According to the US Department of Energy, when leveling costs among different methods of generating electricity¹² for plants entering service in 2018, the weighted average (in dollars per megawatt hour) for wind is among the lowest (\$51.90), and the federal tax credit available to wind plants reduces the cost to \$34.00. By comparison, conventional natural gas-fired plants are \$48.70, and advanced combined cycle natural-gas fired plants are \$48.00.¹³

Benchmarking

For evaluation purposes, benchmarking provides information related to how peer states use and evaluate similar incentives. At the outset, it should be understood that no states are ‘perfect peers’ – there will be multiple differences in economic, demographic and political factors that will have to be considered in any analysis; likewise, it is exceedingly rare that any two state incentive programs will be exactly the same.¹⁴ These benchmarking realities must be taken into consideration when making

¹² ‘Levelized cost’ measures the per-kilowatt hour cost (in real dollars) of building and operating a generating plant over an assumed financial life and duty cycle. The inputs used to calculate this cost include capital, fuel, fixed and variable operations and maintenance and finance costs as well as an assumed utilization rate for each plant type. The assumptions used by the Department of Energy are given in the “Assumptions to the Annual Energy Output,” available at <http://www.eia.gov/forecasts/aeo/assumptions/>.

¹³ US Energy Information Administration, “Levelized Cost and Levelized Avoided Cost of New Generation Resources in the Annual Energy Outlook 2016,” August 2016, p.

¹⁴ The only real instances of exactly alike state incentive programs occurs when states choose to ‘piggyback’ onto federal programs.

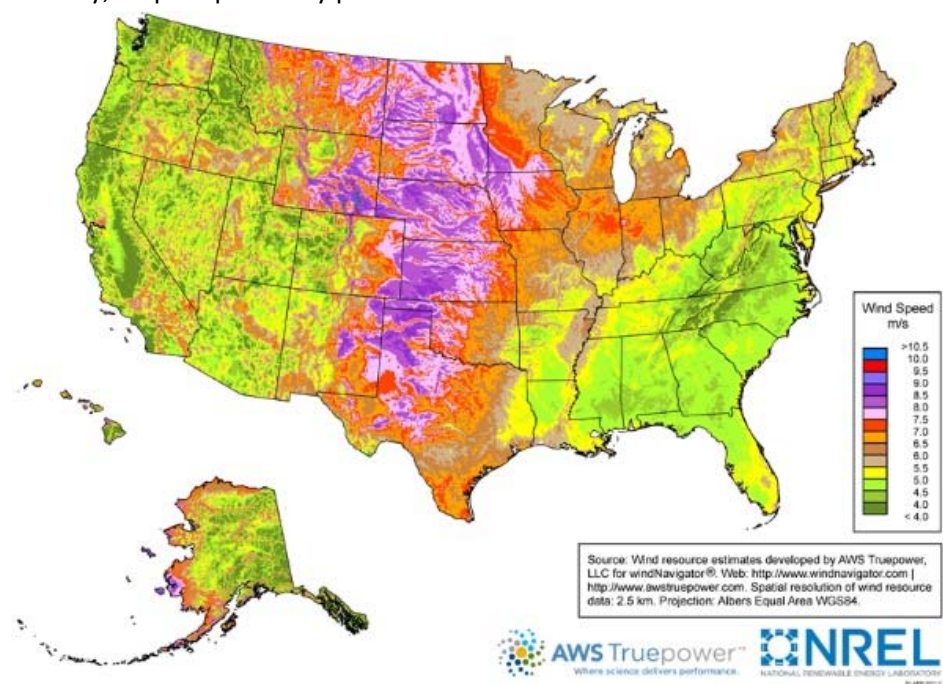
comparisons – and, for the sake of brevity, the report will not continually re-make this point throughout the discussion.

The process of creating a comparison group for incentives typically begins with bordering states. This is generally the starting point, because proximity often leads states to compete for the same regional businesses or business/industry investments. Second, neighboring states often (but not always) have similar economic, demographic or political structures that lend themselves to comparison.

However, the comparison group for certain incentives will be broader than just the neighboring states. In this case (as with several energy-related incentives), the industry the credit seeks to impact is natural resource driven, and the states Oklahoma competes with are those with similar available resources and infrastructure to support the industry.

Although geothermal, solar, and hydropower are also component parts of Oklahoma's renewable energy portfolio, wind was responsible for over 88% of the total renewable energy produced in the State in 2014.¹⁵ Given that it makes up nearly 9/10ths of the existing industry, the following analysis will focus on it.

Many states have potential for wind energy production, but a limited number of states have emerged as the major contributors to production. The following map, which identifies the wind capacity around the country, helps explain why production is concentrated in certain states:¹⁶



¹⁵ EIA, Electric Power Industry Generation by Primary Energy Source Back to 1990, Oklahoma

¹⁶ US Department of Energy, accessed electronically at http://apps2.eere.energy.gov/wind/windexchange/wind_maps.asp

This map supports the claim that neighboring states are not necessarily the major competitors for an industry. In this case, the Great Plains States – from Texas to North Dakota -- are logical optimal placements for wind electrical generation facilities, while neighboring states to the East are less important.

According to the U.S. Energy Information Administration, the 10 highest producing states accounted for 73 percent of the nation’s wind energy in 2015. Besides Oklahoma, the bordering states of Texas (ranked first), Kansas (fifth), and Colorado (seventh) are also in this 10-state cohort.¹⁷

Net Generation from Wind in 2015		
Rank	State	Megawatt-hours
1	Texas	4,464,000
2	Iowa	1,738,000
3	Oklahoma	1,423,000
4	Illinois	1,268,000
5	Kansas	1,062,000
6	Minnesota	911,000
7	Colorado	780,000
8	California	708,000
9	Indiana	656,000
10	North Dakota	565,000

Since most of the competitive states in this industry fall outside the core group of bordering states, the scope of the comparison group has been expanded to include notable programs in the top ten states.

A review of incentive programs in these states reveals that Oklahoma is the only state in the top 10 of wind energy production with a Production Tax Credit (PTC) program still accepting new applicants. Five of the six other states with PTCs for renewable energy have some form of program cap in place. The program caps range from \$10.0 million in Florida to \$40.0 million in New Mexico (New Mexico reached its cap in 2015). Among other states, Minnesota and Iowa have used PTCs to support the renewable

¹⁷ “Electric Power Monthly, with Data for January 2016,” US Energy Information Administration, March 2016, accessed electronically at http://www.eia.gov/electricity/monthly/current_year/march2016.pdf

energy industry. Minnesota's program, designed for wind facilities of 2 megawatt (MW) capacity or less, was closed to new applicants in 2005, with 225 MW of capacity enrolled, and made its final payments at the end of 2015. Iowa caps its program by total nameplate capacity enrolled in order to limit fiscal impact.¹⁸ Iowa's program reached its cap in 2015.¹⁹ Other states using a PTC include Arizona and Maryland.

Each program has similar features to Oklahoma's PTC. In each state, credits are awarded on a per kilowatt-hour basis. The duration of eligibility for the credit is 10 years following the start of production of the qualified facility in every comparison state (with the exception of Florida, where there is no limit in place).²⁰

The following table provides summary data related to the incentive programs for the State of Oklahoma and states with similar programs. It is notable that several of what could be considered competing states for wind generation of electricity do not have similar incentive programs.

¹⁸ It is notable that a dollar cap and cap on nameplate capacity enrolled are essentially the same mechanism expressed in a different way.

¹⁹ "Database of State Incentives for Renewables and Efficiency," DSIRE, North Carolina Clean Energy Technology Center, accessed electronically at <http://www.dsireusa.org/>

²⁰ The 10-year duration is understandable, as there is a significant capital expense associated with facility construction.

State	Energy Sources	Capacity Requirements	Credit per kWh	Aggregate Cap	Duration	Transferrable?	Carry-forward?	Refundable?
Iowa (476B)	Wind	2 to 30 Megawatt (MW)	\$0.01	50 MW of Nameplate Capacity	10 Years	Yes	Yes, 7 years, not to exceed the 10 year pay period	10 Years
Iowa (476C)	Wind, biogas recovery, biomass, methane gas recovery, solar, refuse	Max: 2.5 MW	\$0.015	426 MW of Nameplate Capacity ²¹	10 Years	Yes	Yes, 7 years, not to exceed the 10 year pay period	10 Years
New Mexico	Wind and biomass	Min:1 MW	\$0.01	\$20,000,000 per year	10 Years	No	Only credits earned prior to October 1st, 2007, 5 years	10 Years
	Solar	Min:1 MW	\$0.027 (average) ²²	\$20,000,000 per year				
Minnesota	Hydroelectric, biomass, and wind	Max: 2 MW	\$0.02	No Cap	No Cap	Not Specified	Not Specified	Not Specified
Arizona	Wind and Biomass	Min: 5 MW	\$0.01	\$20,000,000 per year	10 Years	No	Yes, 5 years	No
	Solar	Min: 5 MW	\$0.0275 (average) ²³					
Florida	Hydrogen, biomass, solar energy, geothermal energy, wind energy, ocean energy, waste heat, or hydroelectric power	None	\$0.01	\$10 Million per year	No Limit	In the event of a merger or acquisition	Yes, 5 years	No Limit
Maryland	Solar, Wind, Biomass, hydroelectric, municipal solid waste, landfill gas, tidal, wave, oxygen thermal, anaerobic digestion	None	\$0.0085	\$25 Million per year, removed in 2016	10 Years	No	No	Yes
Oklahoma	Wind, Moving Water, Solar, Geothermal	Min: 1 MW	\$0.005 ²⁴	No Cap	10 Years	Only credits earned prior to January 1st, 2014 are transferrable	Up to 10 years only for credits earned prior to January 1st, 2014	At 85% only for credits earned after January 1st, 2014

²¹ 363 MW for wind and 63 MW for all other sources

²² New Mexico's Solar Incentive Changes throughout the 10-Year pay period

²³ Arizona's solar incentive changes throughout the 10-year pay period

²⁴ This is the current rate for facilities placed in operation on or after 1/1/2007

Benchmarking Program Evaluations

Among the states with active incentive programs, there are three relevant studies that are useful for comparison. These studies were done by the States of Florida, Iowa and New Mexico. All three are among the states that allocate their credit based on the amount of energy generated. Of the three, the study by New Mexico comes closest to replicating the scope of analysis of the Oklahoma evaluations.

For New Mexico, the goal of its report was to ‘comprehensively quantify the costs and benefits of energy tax subsidies and policies.’ It is notable that the report recognizes the difficulty in disentangling factors that contribute to project development (what might be considered a ‘but for’ test of the value of incentives in spurring development), which can include location, renewable portfolio standards, permitting requirements, federal and state financial incentives, power sales opportunities, access to transmission, etc.²⁵

One specific area for analysis within the report is the potential for future claims (New Mexico provides for a five-year carry forward of its PTC). The report applies the tax credit amount to production volumes, in Megawatt hours (MWh) of each certified facility’s actual generation up to their eligible power generation cap. This ‘potential tax expenditure’ then is a proxy for the maximum annual tax liability for the State – which they estimate at about the same amount as is being claimed each fiscal year (realized tax expenditures during the period reviewed was \$61.6 million, and potential tax expenditures in this same period were \$121.6 million).

New Mexico also conducted an economic impact analysis, calculating direct, indirect and induced impacts. The State used an IMPLAN model to generate its estimates. These impacts were categorized related to project and operating expenditures – for both wind and solar facilities. Finally, the report also sought an estimation of the pollution impacts related to volumes and monetary value.²⁶

The Iowa report provides more background discussion, which includes a history of the Iowa credit, the federal PTC as well as credits in other states and a review of the renewable energy industry. The report discusses factors related to the credits themselves, including the tax credit awards and transfers, the state of residence of awardees (Iowa residents accounted for 83 percent of the program’s recipients and 52 percent of the dollar value of the tax credits awarded), the tax credit claims by tax type (because it is transferrable) and energy production statistics. The key findings focus on an economic analysis of the tax credits. Within that analysis, there were three key areas of analysis:

- **Limitations on the Analysis.** In particular, the report recognized the possible value of moving to renewable energy sources as a way to have a positive impact on global climate change and a reliance on fossil fuels; however, the report noted that this was beyond the scope of the study.

²⁵ It is notable that New Mexico has a Renewable Portfolio Standard, which requires investor-owned utilities to produce 20 percent of electricity from renewable sources by 2020. This certainly suggests that some renewable energy projects would have to be undertaken even without the credit.

²⁶ State of New Mexico, “Economic Analysis of the New Mexico Renewable Energy Production Tax Credit, Final Report,” February 2015, New Mexico Energy, Minerals and Natural Resources Department.

The study also did not attempt to assess the nature and extent of an ‘economic ripple effect’ from the credit throughout the Iowa economy.

- **Issues surrounding transferable tax credits.** The report found that ‘nearly all tax credits awarded have been transferred.’ Interestingly, that report references the State of Oklahoma’s decision to shift from transferable credits to refundable (at 85 percent of value) credits. It is notable that the report also discussed the need for tax credits as part of an overall financing strategy to make projects work. The report accepted the premise that ‘substantial upfront capital is generally required to finance renewable energy products and that tax credits are a critical source of investment capital for these projects.’
- **Property tax implications.** The report notes that these facilities result in increases in property tax revenues to local taxing jurisdictions. Based on estimates of acquisition costs (including the costs for turbines, towers, foundations, installation and connection), wind system acquisition costs totaled \$1.65 million per megawatt in 2006 constant dollars and remained at that level at least through 2010. Based on these cost assumptions and the megawatt capacity of wind turbine systems entering service, it is estimated that the aggregate property tax for these facilities will reach \$1.8 million by FY2021.²⁷

Of the three, the State of Florida analysis is the least extensive. For purposes of analyzing impact, the report determined that the program supported the production of 1,000,000,000 kilowatt-hours of electricity in the 2015 production period, computed a state average price (10.64 cents per kilowatt-hours during the prior 24 months) and determined that this amounted to an estimated \$106.4 million in revenue from the sale of electricity. This revenue was entered into the State’s IMPLAN model. The study determined that the \$10.0 million program investment produced an estimated total output contribution of \$167.9 million, total value added contribution of \$94.7 million and total labor income contribution of \$34.0 million. It estimated the program supported or created nearly 120 direct jobs and 399 jobs in related or supporting industries. The study also estimated state and local taxes to total \$15.2 million. The report used two forms of return on investment analysis that were both considered positive.²⁸

²⁷ State of Iowa, “Wind Energy Production Tax Credit and Renewable Energy Tax Credit, Tax Credits Program Evaluation Study,” December 2014, Anthony Girardi, PhD, Tax Research and Program Analysis Section, Iowa Department of Revenue.

²⁸ State of Florida, “2015 Analysis of the Economic Contribution of the Renewable Energy Tax Incentives,” Florida Department of Agriculture and Consumer Services.

Fiscal Impact

For this evaluation, fiscal impact is considered to be the directly attributable impact of the credit on State revenues and expenditures. The evaluation will discuss but not quantify revenue and expenditure impacts on local governments. There is far less attenuation from these local impacts for a discussion of a state incentive program – for a variety of reasons (including the impact of local decision making outside the State’s control on local revenues and expenditures and the widely divergent impacts throughout the State).

As has been noted, the fiscal impact from this tax credit (mostly because of reduced/refunded tax revenue) is substantial, and its potential impact in the coming years is also significant. Based on program changes adopted by the State Legislature in SB343 in 2013, to qualify for the credit, a facility must be placed in service by December 31, 2020 (at which point they would be able to generate the credits for 10 years – and have 10 years to carry forward and use those credits). However, given the recent levels of activity for this credit, there is significant exposure for the State based on the opportunity for facilities to be placed in service during the remainder of 2016 through the end of calendar year 2020.

The following table identifies the claimed and potentially claimed credits for this program, both historic and projected into the future, using historic growth rates and conservative assumptions for future growth rates:

Year	Capacity in Megawatts (MW)	Annual % Growth	Annual Added Capacity (MW)	Generation of New Capacity in Megawatt hours (MWh)	Added Per Year Cost	Cumulative Annual Cost
Actuals						
2003	176	-	-	-	-	-
2004	176	0%	-	-	-	-
2005	474	169%	298	532,988	\$2,664,940	\$2,664,940
2006	594	25%	120	345,948	\$1,729,738	\$4,394,679
2007	689	16%	95	254,962	\$1,274,809	\$3,472,148
2008	708	3%	19	63,282	\$316,409	\$3,788,557
2009	1,130	60%	422	1,007,646	\$5,038,230	\$8,826,787
2010	1,480	31%	350	900,560	\$4,502,801	\$13,329,588
2011	1,811	22%	331	1,023,979	\$5,119,896	\$18,449,485
2012	3,133	73%	1,322	3,442,543	\$17,212,715	\$35,662,200
2013	3,133	0%	-	-	-	\$35,662,200
2014	3,780	21%	647	2,042,163	\$8,679,194	\$44,341,394
2015	4,346	15%	567	1,790,525	\$7,609,731	\$50,618,655
2016	4,998	15%	652	2,059,104	\$8,751,191	\$58,504,976
2017	5,748	15%	750	2,367,969	\$10,063,869	\$67,294,037
2018	6,610	15%	862	2,723,165	\$11,573,450	\$78,551,077
2019	7,271	10%	661	2,087,760	\$8,872,978	\$82,385,825
2020	7,999	10%	727	2,296,536	\$9,760,276	\$87,643,300
2021	7,999	0%	0	0	\$0	\$82,523,404

Year	Capacity in Megawatts (MW)	Annual % Growth	Annual Added Capacity (MW)	Generation of New Capacity in Megawatt hours (MWh)	Added Per Year Cost	Cumulative Annual Cost
2022	7,999	0%	0	0	\$0	\$65,310,689
2023	7,999	0%	0	0	\$0	\$65,310,689
2024	7,999	0%	0	0	\$0	\$56,631,495
2025	7,999	0%	0	0	\$0	\$49,021,764
2026	7,999	0%	0	0	\$0	\$40,270,573
2027	7,999	0%	0	0	\$0	\$30,206,704
2028	7,999	0%	0	0	\$0	\$18,633,254
2029	7,999	0%	0	0	\$0	\$9,760,276
2030	7,999	0%	0	0	\$0	\$0

As previously noted, there is also concern that new facilities associated with the Clean Line Project might add considerably to the financial projections for the impact in future years. The following table provides an estimate of this impact, which would significantly exceed historic growth rate assumptions:

Potential Clean Line Impact	
2014 Existing Wind Capacity	3,779.5
Capacity in MWh	33,108,420
Actual MWh Generated	11,936,833
2014 Capacity Factor	36%
Projected Added Capacity from Clean Line Project	3,500
Capacity in MWh	30,660,000
MWh Generated at 2014 Capacity Factor	11,054,085
Credit per kWh	\$0.005
Total Credit Expense Per Year at Different Completion Percentages	
100%	\$55,270,427
75%	\$41,452,820
50%	\$27,635,213
25%	\$13,817,607

In short, the financial impacts associated with the generated tax credit are substantial and would impact the revenue structure for an additional 10 years thereafter. There is, of course, some additional revenue that would be generated from economic activity associated with this credit, and this will be discussed in the following chapter.

It is also possible that the various requirements for the Clean Line to become operational will not come to fruition prior to the tax credit trigger date of December 31, 2020. That said, there will be significant

incentive for the power producers to get the facilities up and running by that point in time, given that the tax credit generated by the facilities stays in place for 10 years.

As previously discussed, these estimates do not take into consideration new local property (sometimes referred to as ad valorem) tax revenue. The significant capital investment associated with wind facilities increases the overall assessed value of property within a taxing jurisdiction, and in some cases the change is substantial. This provides for a broader base upon which the property tax levy is applied. However, the benefits of that expanded property tax base are primarily local, and, depending on local decisions related to budgets and levies, it may only redistribute the property tax burden rather than actually increase local tax revenue. Those decisions generally fall outside of the discussion of state policy (and are mostly beyond the control of state policymakers), at least related to this evaluation.

It has been suggested that this additional assessed value will increase property revenue for local schools – and, based on the way that state school funding is allocated among school districts, may also benefit school districts that do not have wind facilities within their district. This may well be the case, but it does not reduce the size of the State’s appropriation to school aid – as with local property taxes, it may simply change how those state dollars are allocated among school districts. As a result, it is an issue with local rather than State budget impact.

As previously noted, Oklahoma is in the minority of large wind energy producing states in not having a cap on its credit. It could be argued that these other states have reached the conclusion that, when wind energy generation is already substantial and the industry has taken root, the financial risk to the state is larger than the economic benefit the incentive generates.

One of the requirements of HB2182 is that each evaluation should determine “whether adequate protections are in place to ensure the fiscal impact of the incentive does not increase substantially beyond the state’s expectations in future years.”

Given the significant – and growing – share of the State energy portfolio and the risks associated with significant new wind energy generation, the project team concludes that, absent a compelling argument of economic impact that generates sufficient additional state revenue (or reduces expenditures), there are not adequate safeguards in place to balance the financial risk to the State from this incentive.

Economic Impact

Methodology

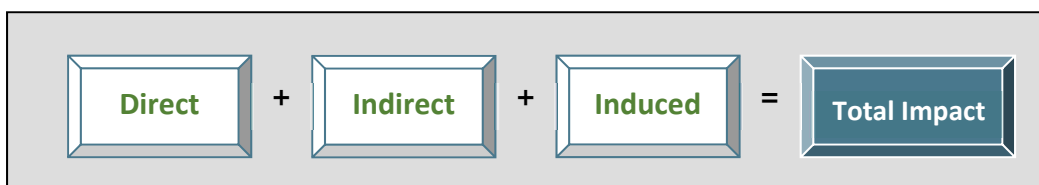
Economists use a number of statistics to describe regional economic activity. Four common measures are “Output” which describes total economic activity and is generally equivalent to a firm’s gross sales; “Value Added” which equals gross output of an industry or a sector less its intermediate inputs; “Labor Income” which corresponds to wages and benefits; and “Employment” which refers to jobs that have been created in the local economy.

In an input-output analysis of new economic activity, it is useful to distinguish three types of expenditure effects: direct, indirect, and induced:

- Direct effects are production changes associated with the immediate effects or final demand changes. The payment made by an out-of-town visitor to a hotel operator or the taxi fare paid for transportation while in town are examples of direct effects.
- Indirect effects are production changes in backward-linked industries caused by the changing input needs of directly affected industries – typically, additional purchases to produce additional output. Satisfying the demand for an overnight stay will require the hotel operator to purchase additional cleaning supplies and services. The taxi driver will have to replace the gasoline consumed during the trip from the airport. These downstream purchases affect the economic output of other local merchants.
- Induced effects are the changes in regional household spending patterns caused by changes in household income generated from the direct and indirect effects. Both the hotel operator and taxi driver experience increased income from the visitor’s stay, as do the cleaning supplies outlet and the gas station proprietor. Induced effects capture the way in which increased income is spent in the local economy.

A multiplier reflects the interaction between different sectors of the economy. An output multiplier of 1.4, for example, means that for every \$1,000 injected into the economy, all other sectors produce an additional \$400 in output. The larger the multiplier, the greater the impact will be in the regional economy.

The Flow of Economic Impacts



For this analysis, the project team used the IMPLAN online economic impact model with the dataset for the State of Oklahoma (2014 Model).

State of Oklahoma Tax Revenue Estimate Methodology

To provide an “order of magnitude” estimate for state tax revenue attributable to the incentive being evaluated, the project team focused on the ratio of state government tax collections to Oklahoma Gross Domestic Product (GDP). Two datasets were used to derive the ratio: 1) U.S. Department of Commerce Bureau of Economic Analysis GDP estimates by state;²⁹ and 2) the Oklahoma Tax Commission’s *Annual Report of the Oklahoma Tax Commission* reports.³⁰ Over the past ten years, the state tax revenue as a percent of state GDP was 5.5 percent.

State of Oklahoma Tax Revenue as a Percent of State GDP

Year	Oklahoma Tax Revenue*	Oklahoma GDP	Ratio
2005-06	\$8,435,214,025	\$136,804,000,000	6.2%
2006-07	\$8,685,842,682	\$144,171,000,000	6.0%
2007-08	\$9,008,981,280	\$155,015,000,000	5.8%
2008-09	\$8,783,165,581	\$143,380,000,000	6.1%
2009-10	\$7,774,910,000	\$151,318,000,000	5.1%
2010-11	\$8,367,871,162	\$165,278,000,000	5.1%
2011-12	\$8,998,362,975	\$173,911,000,000	5.2%
2012-13	\$9,175,334,979	\$182,447,000,000	5.0%
2013-14	\$9,550,183,790	\$190,171,000,000	5.0%
2014-15	\$9,778,654,182	\$180,425,000,000	5.4%
Average	\$8,855,852,065	\$162,292,000,000	5.5%

Source: U.S. Department of Commerce Bureau of Economic Analysis and Oklahoma Tax Commission

* Gross collections from state-levied taxes, licenses and fees, exclusive of city/county sales and use taxes and county lodging taxes

The value added of an industry, also referred to as gross domestic product (GDP)-by-industry, is the contribution of a private industry or government sector to overall GDP. The components of value added consist of compensation of employees, taxes on production and imports less subsidies, and gross operating surplus. Changes in value added components such as employee compensation have a direct impact on taxes such as income and sales tax. Other tax revenues such as alcoholic beverage and cigarette taxes are also positively correlated to changes in income.

Because of the highly correlated relationship between changes in the GDP by industry and most taxes collected by the state, the ratio of government tax collections to Oklahoma GDP forms the evaluation basis of the fiscal implications of different incentive programs offered by the State. The broader the basis of taxation (i.e., income and sales taxes) the stronger the correlation; with certain taxes on specific activity, such as the gross production (severance) tax, there may be some variation in the ratio year-to-year, although these fluctuations tend to smooth out over a period of several years. This ratio approach is

²⁹ <http://www.bea.gov/regional/>

³⁰ https://www.ok.gov/tax/Forms_&_Publications/Publications/Annual_Reports/index.html

somewhat standard practice, and is consistent with what IMPLAN and other economic modeling software programs use to estimate changes in tax revenue.

Data Collection, Model Inputs, and Other Issues

The project team performed the following steps to derive the economic and tax revenue impact:

1. The project team collected existing data and studies from State of Oklahoma agencies including the Oklahoma Tax Commission and Oklahoma Department of Commerce.
2. The project team collected and analyzed studies performed or commissioned by other organizations such as the State Chamber of Oklahoma and Economic Impact Group, LLC.
3. Data on Oklahoma annual wind capacity installed and generation was obtained from the U.S. Energy Information Administration (EIA)³¹ for the years 2013 to 2015.
4. Retail and wholesale electric utility data for the State of Oklahoma and surrounding power regions were downloaded from the EIA website.
5. Based on EIA reported wind generation (not capacity) and estimates on the wholesale price charged by wind companies, it was possible to estimate the annual revenue of Oklahoma windfarms.
6. IMPLAN sector 45 Electric Power Generation – Wind was used to model the economic impact.
7. The National Renewable Energy Laboratory JEDI (Jobs and Economic Development Impact) Model³² was utilized to compare and assess the IMPLAN results.
8. There was not sufficient detail available to model the economic impact of constructing and installing the windfarms. While some studies have made this calculation, there is a tremendous amount of variation between the impacts reported. For example, the JEDI model uses default assumptions regarding if input purchases are made within the region and state. Based on research and conversations with industry representatives, the project team determined that it was not possible to determine the level of instate input purchase. To accurately make this calculation, each windfarm developer would need to be surveyed regarding construction and equipment purchases. Therefore, the project team decided not to calculate the economic impact of construction.

³¹ <http://www.eia.gov/>

³² http://www.nrel.gov/analysis/jedi/about_jedi.html

9. According to employment data obtained from the Oklahoma Employment Security Commission³³ and US Bureau of Labor Statistic³⁴, State of Oklahoma sector NAICS 221115 – Wind Electric Power Generation employed 154 workers in 2015. These figures are consistent with the direct employment values derived from the IMPLAN model.
10. Based on existing studies and conversations, the wind industry pays land owners about \$10,000 per year per turbine to lease the land. This additional household income is included was factored in to the economic impact analysis.

Annual Economic Impact of Wind Farm Operations in the State of Oklahoma

Year		Output	Value Added	Labor Income	Employment	Estimated OK Tax Revenue
2011	Direct Effect	\$186,377,754	\$118,695,707	\$7,537,540	70	
	Indirect Effect	\$72,130,053	\$34,091,681	\$23,274,852	414	
	Induced Effect	\$23,025,788	\$12,570,524	\$7,116,019	174	
	Total Effect	\$281,533,595	\$165,357,912	\$37,928,411	658	\$8,496,298
2012	Direct Effect	\$272,978,610	\$173,847,942	\$11,039,876	102	
	Indirect Effect	\$105,645,449	\$49,932,459	\$34,089,566	606	
	Induced Effect	\$33,724,774	\$18,411,448	\$10,422,494	255	
	Total Effect	\$412,348,832	\$242,191,849	\$55,551,935	964	\$12,261,948
2013	Direct Effect	\$375,108,091	\$238,889,669	\$15,170,224	141	
	Indirect Effect	\$145,170,578	\$68,613,689	\$46,843,494	833	
	Induced Effect	\$46,342,222	\$25,299,722	\$14,321,861	351	
	Total Effect	\$566,620,892	\$332,803,080	\$76,335,580	1,324	\$17,219,629
2014	Direct Effect	\$417,557,921	\$265,924,078	\$16,886,992	156	
	Indirect Effect	\$161,599,086	\$76,378,490	\$52,144,628	927	
	Induced Effect	\$51,586,629	\$28,162,814	\$15,942,622	390	
	Total Effect	\$630,743,636	\$370,465,381	\$84,974,243	1,474	\$18,630,857
2015	Direct Effect	\$385,427,183	\$245,461,439	\$15,587,552	144	
	Indirect Effect	\$149,164,169	\$70,501,228	\$48,132,142	856	
	Induced Effect	\$47,617,081	\$25,995,709	\$14,715,851	360	
	Total Effect	\$582,208,433	\$341,958,375	\$78,435,545	1,361	\$17,172,783

Source: TXP, Inc.

This information is an important component part of the analysis related to several of the criteria for evaluation. First, it is evident that criteria related to employment and labor income associated with this incentive are relatively small. To date, the jobs associated with the credit in the last year with data available are less than 1,400, and the payroll less than \$80 million. Second, the additional income generated by the credit (primarily through leases of the land for the wind turbine facilities) is useful but

³³ <http://www.oesc.state.ok.us/lmi/QCEWHistorical/Default.aspx>

³⁴ <http://www.bls.gov/>

not, in the context of the overall state economy, all that substantial, from an aggregate economic impact standpoint. These factors will be considered in the Outcomes chapter.

Technical and Administrative Issues

Overview

The general operation of this credit is relatively straightforward. There are essentially three components to overall program administration:

1. **Eligibility.** The facility must have a rated production capacity of one megawatt or greater and use wind, moving water, sun, or geothermal energy as its fuel source. It is notable that production capacity is largely a function of the size of the turbine rotor blades. The larger commercial grade blades generally have rotor diameter of 100 feet to more than 325 feet, with a hub height of 164 to more than 260 feet.

The facility must also qualify as a 'Zero Emission Facility.' The Oklahoma Department of Environmental Quality must determine that the construction and operation of the facility will result in no pollution or emissions harmful to the environment.

As amended in 2014, the facility must also be placed into operation by December 31, 2020.

2. **Determining the Credit.** The corporate entity claims the credit on its Oklahoma corporate income tax return, and the Tax Commission is responsible for determining the eligibility for the credit and, if, necessary, administering any refund based on that credit.³⁵
3. **Reporting.** Once the tax year is completed and timely returns have been filed and processed, the Tax Commission is the source for data associated with the use of the tax credit.

Determining eligibility for each of these requirements is the responsibility of the taxpayer claiming the credit (with, as previously noted, a requirement that the Department of Environmental Quality ; ultimately, the Tax Commission is responsible for determining whether the facilities comply with the requirements for claiming the credit – and then claim the proper amount.

Reporting

There is no specific requirement for facility reporting related to the electricity generated that is eligible for the credit. As a result, the only information available for determining its use (or potential financial impact going forward) is from the filed tax returns.

This is complicated by the fact that the mechanisms for determining the amount and use of the credit have changed on more than one occasion. As noted in the introduction, the value of the credit has changed, as has the ability to either transfer the credit or claim a refund above the amount of tax owed.

³⁵ For tax year 2015, for example, those claiming the credit must also file form 511CR, which is Oklahoma's Other Credits Form. Line 15 of that form requires the taxpayer to enter three numbers: unused credit carried over from prior years, credit established during the current tax year, and total available credit.

The primary complication at present relates to the change in the credit for tax year 2014 and beyond compared to prior years. For credits earned prior to January 1, 2014 these credits may be transferred at any time during the 10 years following qualification of the facility to any taxpayer by filing a transfer agreement and getting acknowledgement by the Tax Commission of the credits earned. To obtain acknowledgement, the taxpayer would enclose a schedule showing the number of kilowatt hours of electricity generated during each month of the taxable year and the calculation of the credit.

Any credit generated, but not used, on or after January 1, 2014 may be partially refunded, at 85 percent of the value of the credit, by filing form 578. As a result, it is likely that the amount of credit generated in each tax year from 2014 onward is more readily estimated than to tax years prior to 2014.

There are also questions as to whether the extent of the use of the transferred credits is readily understood. While there is a requirement that the transfer be reported and the amount of the earned credit acknowledged, the actual use of the credit by the taxpayer who purchases it applies it against other taxes. As a result, the data reported on tax collections by type of tax is distorted by this transfer, and it is difficult to ascertain the amount of the zero emissions tax credit used (and remaining to be used) in any tax year. It is notable, of course, that this relates to use of credits earned prior to January 1, 2014, so it will be a declining issue in all succeeding years.

Administration

The legislation that created the credit did not provide for a significant State department role in the overall administration of the credit. As noted, other than determining that a facility has a rated capacity of over 1 megawatts and is a 'zero emission' facility, there are no up-front eligibility requirements. Likewise, determining the amount of the tax credit requires to only know the amount of the energy generated by the facility – there are no job, payroll, capital investment or other requirements. As a result, administration is not a material aspect of the existing program.

Outcomes

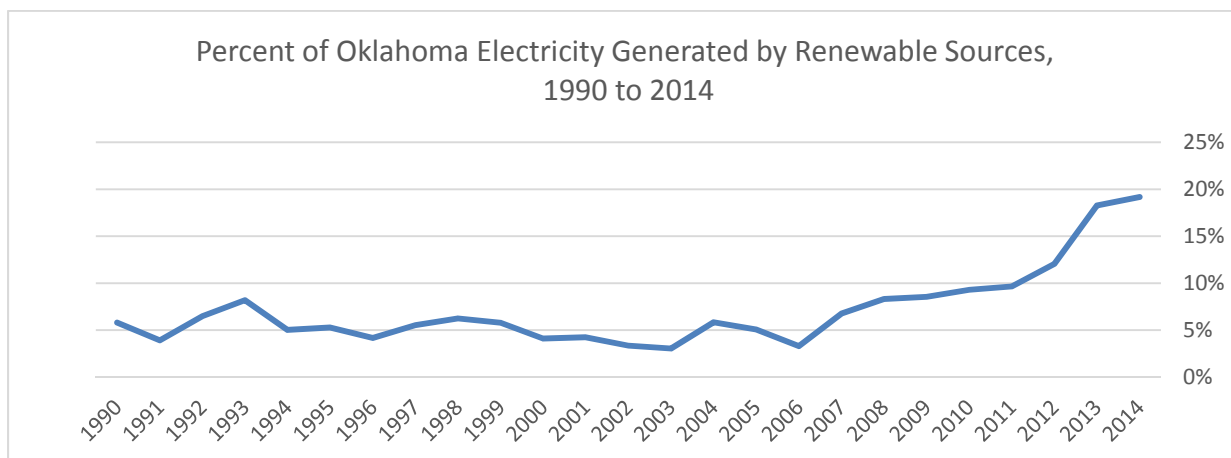
Overview

From the prior discussion, the following have been identified as key issues for evaluation of the Zero Emission Tax Credit:

1. What has been the impact of the credit on identified goals?
2. How does Oklahoma's experience compare to the nation as a whole and other states?
3. How should the identified costs be weighed against the benefits (both quantitative and qualitative)?

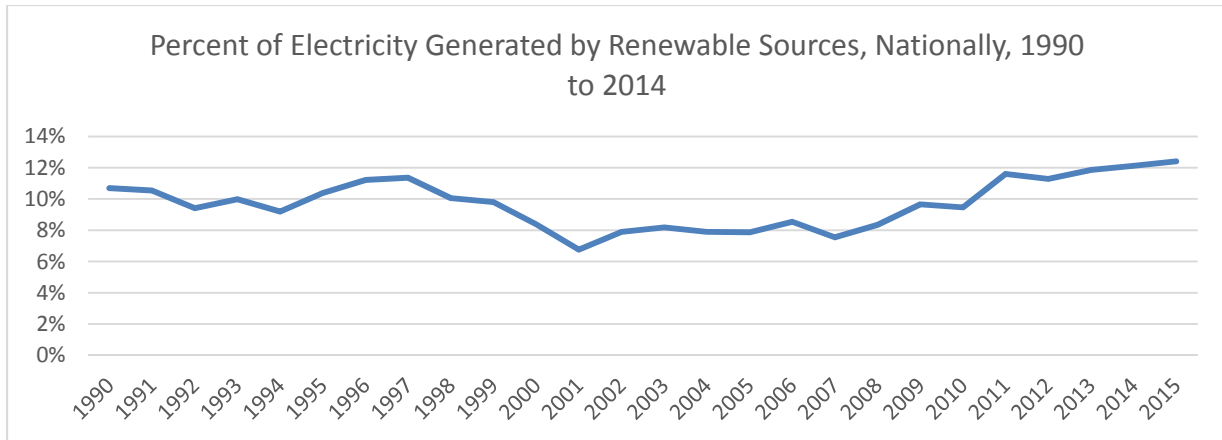
Impact on Identified Goals: Renewable Energy

As already noted, Oklahoma has made significant progress in renewable energy sources as a percent of total electricity generation. While the percentage remained relatively constant from 1990 to 2005, there has been significant positive change, particularly in the past few years. The following chart reflects the share of Oklahoma electricity generated by renewable sources since 1990:



	2010	2011	2012	2013	2014
Percent of Oklahoma Electricity Generated using Renewable Sources	9.29%	9.65%	12.06%	18.28%	19.18%

While this is an impressive improvement – and has helped the State achieve its goal of 15 percent of electricity generated by renewable sources – it (at least partially) mirrors trends across the country. There are a variety of differing energy alternatives that have regional applicability (such as hydroelectric power in some portions of the country as well as wind and solar in others), but nationally, the trend has been toward a greater portion of electricity generated by renewable sources:



Within the wind generation field, there has also been strong growth nationally, and most of that growth has been concentrated in a handful of states. In 2015, there was a surge of new wind power added nationally, totaling 8,598 Megawatts of new capacity. This brings the total for the US to nearly 74,000 Megawatts.³⁶ Texas added the most wind capacity (42 percent of total wind additions), followed by Oklahoma, Kansas, Iowa, and North Dakota. Notably, the wind power capacity installed in Iowa, South Dakota and Kansas supplied more than 31 percent, 25 percent and 24 percent, respectively, of all in-state electricity generation in 2015. A total of 12 states have achieved wind penetration levels of 10 percent or higher. All of these states are located in the central part of the country, where wind resources are most plentiful – new generation capacity in the interior region of the US over the last decade totaled 54 percent. In Texas, new wind power records are continuously being set.³⁷

An important factor is the continued availability of the federal PTC. That credit, \$0.023 per kilowatt hour, is far more substantial than any of the state PTCs. As a result, its impact on the determination of whether to go forward with an eligible project is likely far greater than for any of the state credits. This is important when noting that not all of the states within this region use state production tax credits – Texas is the most notable example of that, and it is the clear national leader in this industry. Texas has certain unique characteristics – including extremely strong winds in West Texas and a mostly self-contained power grid – but is certainly a counterpoint to the claim that PTCs are the primary factor in location of wind facilities.

Impact on Identified Goals: Cost of Electricity

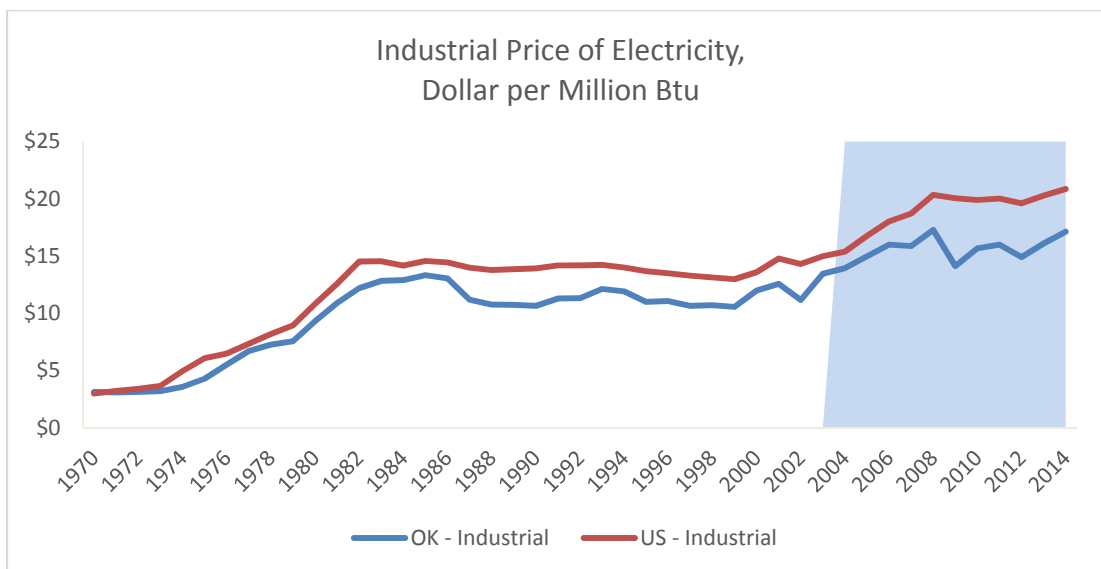
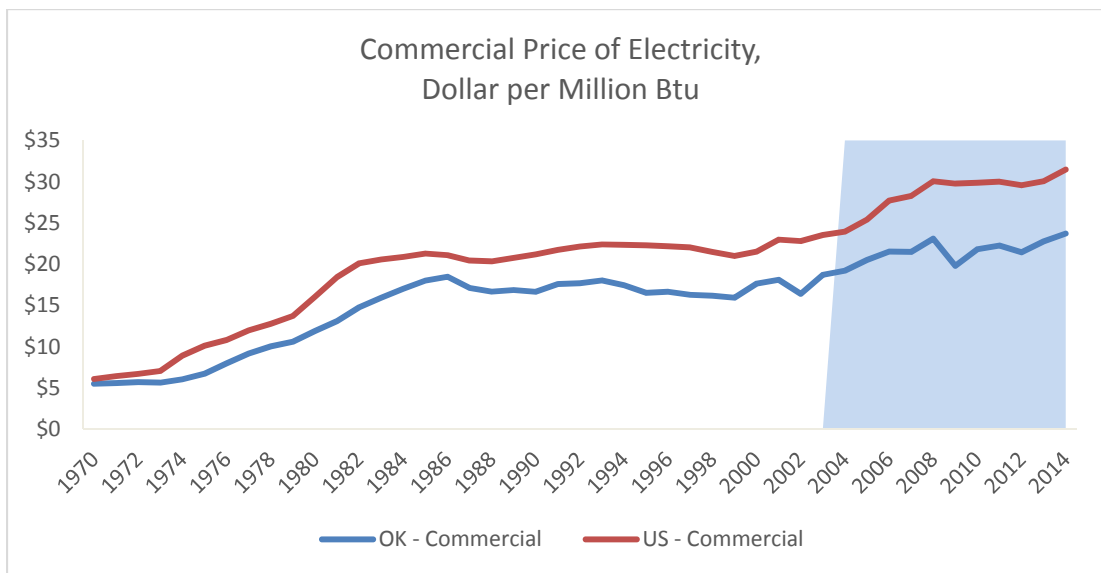
One of the outcomes identified from the growth in the use of renewable energy is its impact on the cost of electricity within the state. The general argument is that renewable sources have lower operating costs (including no or minimal fuel cost and being generally less labor-intensive than other types of facilities), and this lowers the average cost of electricity. It has been pointed out that Oklahoma has among the lowest costs for electricity in the country. In this regard, the State benefits both from its

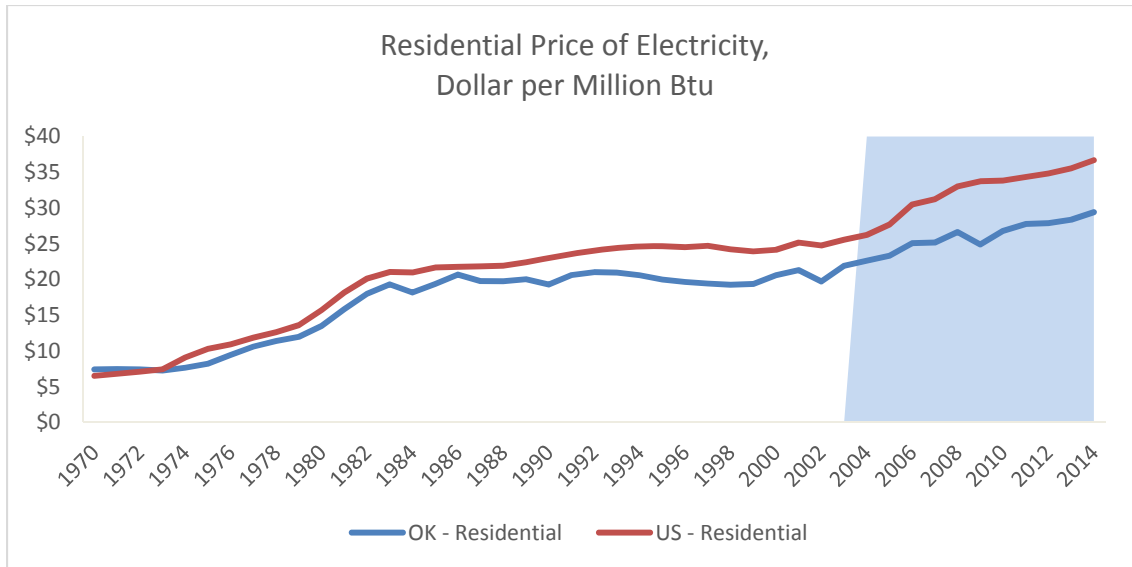
³⁶ "2015 Wind Technologies Market Report," US Department of Energy, August 2016, p. 3.

³⁷ Ibid., pp. 7-9.

wind/solar and its natural gas industries, as readily available natural gas is a perfect complement to wind/solar for when the wind isn't blowing and the sun isn't shining.

The following chart tracks the price of electricity in both Oklahoma and the nation as a whole for the years 1970 through 2014 for commercial, industrial and residential users:





The charts suggest that the price of electricity (for all three sectors) has generally been below the US average since the 1970s. There has been a gradual spread away from the average for the State – which in particular grew in the time around 2010. While this would appear to support the argument that renewable sources have contributed to this relative improvement versus the US as a whole, renewables are a much smaller share of the overall mix than the primary sources – particularly natural gas. In that respect, basic statistics suggests that natural gas (and its low price levels versus historic averages) is likely a larger factor in this recent growing spread.

One of the important considerations related to this industry and the cost of electricity relates to the projected development of the Clean Line: as discussed, that project will transport the generated power out of Oklahoma to the Memphis, Tennessee region. In essence, State tax credits will incent the production of electricity that does not benefit Oklahoma electricity consumers. In this case, these projects provide no spin-off benefit other than the capital investment, lease payments and any construction and ongoing operations and maintenance jobs related to these facilities.

Impact on Identified Goals: the 'But For' Test

An important factor in considering the efficacy of incentives is consideration of whether the incentive is necessary to spur the initial investment. In the theory of incentives, the 'but for' test refers to the argument that a project or a capital investment would not be made without the incentive ('but for the incentive' the zero emission facility would not be built in Oklahoma). In the case of many projects, the existence of incentives in other states can be cited as a need for the Oklahoma incentive – 'but for' the Oklahoma incentive, the project will occur in another state. In the case of this tax credit, there are arguments that this is not the case. Among them are the location of renewable power facilities in specific areas of the country, including in states (like Texas) that do not have similar state credits.

Another 'but for' argument relates to the significant capital costs associated with these facilities. It is generally agreed that the ongoing costs of zero emission facilities are lower than other sources of electricity, but the upfront capital costs are much higher. This is the crux of the argument for the need

for a multi-year production credit. While it is likely that this has been the case, a case can be made that this dynamic is changing.

For example, wind turbine prices are well below prior year levels. While turbine prices were roughly \$750 per kilowatt from 2000 to 2002, and then increased to approximately \$1,500 per kilowatt by the end of 2008, they have dropped substantially, and current pricing is in the \$850–\$1,250 per kilowatt range. These price reductions, coupled with improved turbine technology, have exerted downward pressure on project costs and wind power prices. As a result, the installed project cost in a US Department of Energy sample averaged about \$1,690 per kilowatt — down \$640 per kilowatt from the peak in average reported costs in 2009 and 2010. It appears that costs in 2016 are about the same as for 2015.³⁸ It is also notable that for projects built in 2015, the (windy) Interior region of the country was the lowest-cost region, with a capacity-weighted average cost of \$1,640 per kilowatt. This provides further evidence that there are factors (primarily wind-related) that are critical to the success of wind power projects in this region.

There is also an argument that can be made that the ‘but for’ test for wind power facilities will be impacted by exogenous variables. For example, wind power prices remain very low. After topping out at nearly \$70 per megawatt for power purchase agreements (PPAs) executed in 2009, the national average level-through price of wind PPAs has dropped to around the \$20 per megawatt level, inclusive of the federal PTC, though this latest nationwide average is admittedly focused on a sample of projects that largely hail from the lowest-priced Interior region of the country, where most of the new capacity built in recent years is located. Today’s low PPA prices have been enabled by the combination of higher capacity factors, declining costs, and record-low interest rates.

As a result, the relative economic competitiveness of wind power declined in 2015 with the drop in wholesale power prices. A sharp drop in wholesale power prices in 2015 made it somewhat harder for wind power to compete, notwithstanding the low wind energy PPA prices available to purchasers. This is particularly true in light of the continued expansion of wind development in the Interior region of the U.S., where wholesale power prices are among the lowest in the nation.

Business Attraction

Incentives are frequently created and used to attract a specific industry (in this case the renewable energy industry) and related firms that may be suppliers to or customers of that industry. In the case of renewable fuels, there are major companies that are attracted to States with plentiful renewable energy resources. This claim was made by state economic development professionals, and, as corroboration, it has been cited by major firms as a component of their location decision making. While this provides support for maintaining the renewable energy industry, it could also be argued that the benefit of a strong renewable fuels presence in the State has been achieved with the use of the credits to date, and additional renewable energy may not be needed to make that case to firms considering locating in Oklahoma. This argument is buttressed by the fact that the Clean Line development would not supply the State with additional renewable energy but would transport that electricity to out-of-state users.

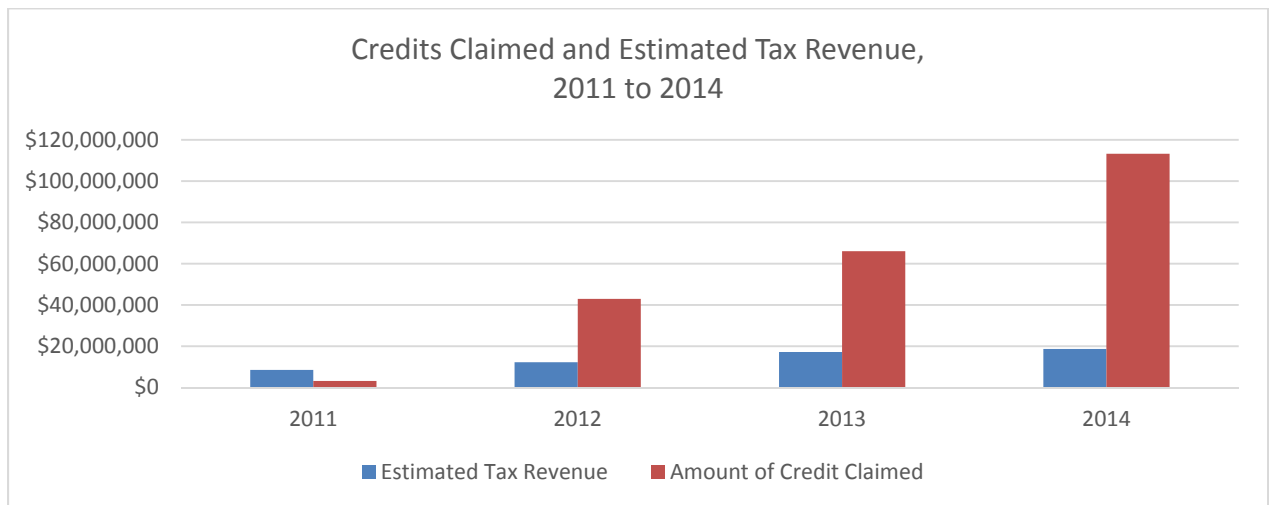
³⁸ Ibid., p. 9.

Connection with other State Incentive Programs

An important topic for discussion is how this program interacts with other State incentive programs. The program with the most intersection is the Ad Valorem Tax Exemption for Qualifying Manufacturing Concerns. Facilities that qualify for the Zero Emission PTC may also qualify for the Exemption for Qualifying Manufacturing Concerns.³⁹ Data from that program indicates that for 2012 through 2016, 213 exemptions under the program were granted, totaling \$117.2 million in State appropriations to replace exempted local ad valorem taxes. While not included in the cost benefit analysis for this specific program, those additional costs should be taken into consideration when determining the fiscal costs and economic impact of both programs.

Cost Benefit Analysis

The financial analysis suggest that the costs of providing the Zero Emission Tax Credit are substantial, and likely to continue to grow in the near future. The economic impact analysis suggests that while there are positive economic impacts associated with the activity generated by the credit, it does not approach the level of the tax incentive. The following chart demonstrates the quantitative components of the cost benefit analysis:



Of course, these are aggregate impacts; there likely are counties in the State where the economic activity (such as the lease revenue) are vitally important for the local economy. However, when viewed from the perspective of the State as a whole, this is not the case.

Besides the quantitative measures as captured in the IMPLAN input-output model, there are factors – such as reduced cost of electricity – that should be taken into consideration as well. However, given the still relatively small portion of the overall energy supply provided by renewable sources, it is difficult to make the case that this is the significant driver in lower priced electricity. Even accepting that this benefit exists, it raises equity issues, as the benefit to large consumers of electricity may be borne by the larger

³⁹ Qualifying concerns receive a five-year ad valorem (property) tax exemption for all real and personal property.

share of overall state tax revenue shouldered by smaller residential consumers of electricity through personal income taxes.

Summary and Recommendations

Recommendation: Partially Repeal and Reconfigure

The renewable fuel industry in Oklahoma has made substantial gains in recent years. Most of the analysis has focused on the wind industry, as it makes up approximately 90 percent of the use of the tax credit for zero emission facilities – but other facilities, particularly solar facilities – should not be entirely overlooked, particularly for how the credit might function in the future.

Within the renewable fuel industry, there has been substantial new investment and new facilities in the years since the enactment of this credit. A reasonable case can be made that the credit has helped to spur the growth of the industry, and this has helped the State achieve its legislative goal of 15 percent of electricity generated from renewable sources.

There have been benefits to the State from the growth of the renewable energy industry: there are jobs and payroll associated with the facilities, as well as lease payments for owners of the land where the facilities are located. Beyond these direct benefits, there is the advantage of a more diversified energy portfolio for the State – although given its abundant energy resources, this may not be as substantial an issue as in some energy importing states. Finally, there may well be an impact on the overall costs for electricity in the State, although given its still relatively small share of the amount of electricity generated in Oklahoma, it certainly cannot be the primary reason for price competitiveness.

Of more substantial concern is the magnitude of the tax benefit. The financial analysis suggests that the impact of the tax credit will continue to grow – and, once facilities are in operation, those credits are available for 10 years. Given the substantial new projects under development (some of which will supply power only to out-of-state consumers), there is substantial risk of continuing the existing credit without some form of cap.

There are also concerns that the information available to state policymakers about the extent of the financial impact from the credit on a year-to-year basis (given the ability for credits earned prior to January 1, 2014 to be transferred to other taxpayers). It is difficult to determine exactly when those earned credits will be used, which complicates budget forecasting and planning.

Recommendations for the Commission:

- **Reconfigure the Existing Credit.**

While the existing credit will not be available to facilities in operation after December 31, 2020, that currently provides over a three year window for additional facilities to be put into operation, including those that may become part of the Clean Line. Given the substantial cost – and less substantial State financial benefit - the project team recommends one of two approaches related to wind facilities and another recommendation for non-wind qualifying facilities. As it relates to wind, the State could cap the amount of new credits for these facilities that are operational after January 1, 2018 at an amount that is considered financially acceptable to the State; this would allow facilities that are currently under construction (and thus having an expectation of receiving credits) to be completed and receive the full benefit of the credit. Those facilities that will not be operational prior to January 1, 2018 are put on notice that they may not receive the full benefit of the existing credit. The alternative would be to accelerate the date where facilities are no

longer eligible for the credit – changing it from January 1, 2021 to January 1, 2018. This would still allow those facilities that are under construction to get into operation by January 1, 2018 (over one year), but would signal that the state credit will not be available to facilities that are operational after that date.

As it relates to other facilities, it may well be in the long-term interest of the State to continue to offer the credit for non-wind generating facilities up to the existing cut-off date of December 31, 2021. These industries (such as solar) are still in their formative stages, and this continued assistance may provide for further diversification of the State's energy sources.

- **Increase Reporting for the Credit.**

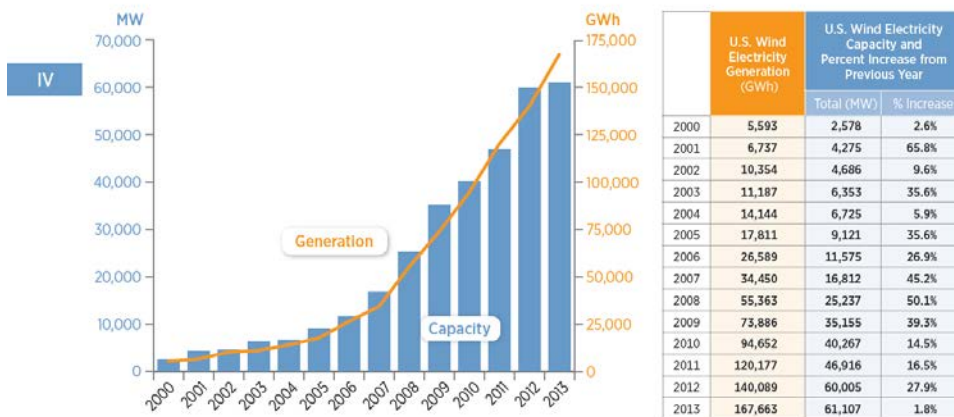
The project team recommends that the statute also be revised to require that, if the credit is maintained, facilities that receive approval as a Zero Emission Facility (and thus eligible for the credit) be required to annually report to the Tax Commission on a schedule developed by the Tax Commission the energy generated by qualified facilities and subject to the credit by month for the tax year.

INCENTIVE EVALUATION COMMISSION COMMENTS TAX CREDIT FOR ZERO EMISSION FACILITIES

CYNTHIA ROGERS

- The federal credit is likely to be the driving factor in wind energy production growth. This is not a new technology anymore. Accordingly, the recommendation to phase out AND shorten rebate period for the wind energy production is warranted.
- In addition, it makes sense to retain the program for non-wind facilities since other technologies are still emerging and no analysis was done. Evaluate these before the December 31, 2021 cut-off date.

U.S. Total Installed Wind Electricity Capacity and Generation



Sources: LBNL, EIA

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Wind | December 2014

**State of Oklahoma
Incentive Evaluation Commission
Aircraft Excise Tax Exemptions
Final Report**



November 28, 2016

Prepared by



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At a Glance: Aircraft Tax Exemptions

Statute: §68-6003

Program Goals

- None stated in legislation
- A total of 18 different exemptions have been added since 1984

Fiscal Impact

- An average of \$2.6 million in excise tax revenue is foregone annually, which is about 40 percent of actual collections
- Collections are earmarked to support operations of the Oklahoma Aeronautics Commission so do not have broad programmatic impact

Economic Impact

- The available data was not sufficient to conduct an economic impact analysis.

Adequate Protections for Future Fiscal Impact?

- The available data was not sufficient to conduct a comprehensive future fiscal impact analysis
- Absent a material change in this industry in Oklahoma, it is unlikely that these exemptions will have a significant future fiscal impact

Effective Administration?

- Useful information related to the identity of the purchaser and the purchased aircraft is collected,
- However, dealers are not required to explain whether the reported sale was taxable or tax exempt, and if exempt, for what reason

Achieving its Goals?

- Goals are not identified and data does not provide a ready method of determining overall impact on the industry in the State

Retain, Reconfigure, Repeal?

- Reconfigure by focusing the exemptions around a policy goal.

Changes to Improve Future Evaluation?

- Require dealer reporting on aircraft transactions to identify the rationale for exempting sales from excise tax

Executive Summary

Introduction

Enacted in 1984, Oklahoma statutes provide for a 3.25 percent excise tax on the purchase price of aircraft sold in the State. Revenue derived from this tax is used to support the Oklahoma Aeronautics Commission.

The statute also provides a series of 18 categories of exemption from the imposition of the excise tax.

In general, aircraft sales are exempt from the aircraft excise tax if the aircraft is:

1. Still owned by the manufacturer or dealer;
2. Belongs to the federal, state or local government;
3. Is sold as a commercial airliner;
4. Is transferred as part of corporate restructuring of various sorts;
5. If reciprocal amount of tax was paid to another state;
6. If the plane is foreclosed or inherited;
7. Is used for agricultural spraying; or
8. Sells for more than \$2.5 million to a non-state resident for use out of state (a restricted “fly-away” exemption).

The excise tax collections, which average just over \$4.0 million a year, are used to support the operations of the Oklahoma Aeronautics Commission.

The data on this exemption is limited, but thanks to direct analysis of tax reporting data by the Tax Commission research staff, some information for the last two years is available. The data shows that the Aircraft Excise Tax is a volatile revenue source, but collections show some growth trends. More than 500 aircraft sale transactions were recorded in each of the last two State fiscal years. Of the transactions, less than 10 percent were tax exempt, but the tax exemptions reflect foregone revenue that is about 40 percent of the total amount that would have been collected if no exemptions existed. This likely reflects the fact that transactions that are exempt from the tax are for higher priced planes. However, the reports used to identify determine the exempt revenue do not indicate the reason why the transaction was exempt.

Regardless of the source of the exemption, in FY2015 and 2016, the State annually had foregone revenue of about \$2.6 million because of the 18 exemptions to the Aircraft Excise Tax.

Even though the exempted revenue is a significant component of what would otherwise be collected were the excise tax applied to all aircraft sales (about 40 percent) the available sales data is insufficient to support an economic impact analysis of any potential benefits resulting from this tax expenditure.

When compared with other states, the project team found that Oklahoma's exemption rules are more numerous and complex than many other and lack a central theme or purpose, which is often found elsewhere. For example, some states exempt aircraft manufactured in their state, and some forego tax on any plane sold for use elsewhere – the so-called “fly-away” exemption.

The project team believes that some of the exemptions, such as technical “paper” transfers, sales between manufacturers and dealers, or sales to a unit of government make sense, are consistent with rational tax policy. Others should be reorganized around a central economic theme such as supporting the manufacturing and/or MRO industry in Oklahoma.

As a result, the project team recommends that the incentive be reconfigured around a specific policy goal or goals that are identified by the Legislature, with those exemptions that do not align with these goals discontinued. The project team also recommends that the reporting of exemptions include specific details related to the source for the exemption.

Introduction, Program Background and Benchmarking

Overview

The Oklahoma Incentive Evaluation Commission (the Commission) was established in HB2182, which was enacted and became law in 2015. It requires the Commission to conduct evaluations of all qualified state incentives over a four-year timeframe. The law also provides that criteria specific to each incentive be used for the evaluation. The Five Year Ad Valorem Tax Exemption for Manufacturing is one of the incentives reviewed in 2016 by the Commission with recommendations to the Governor and the State Legislature.

Introduction

Enacted in 1984, Oklahoma State statute provides for a 3.25 percent excise tax on the purchase price of aircraft sold in the State. Revenue derived from this tax is used to support the Oklahoma Aeronautics Commission.

The statute also provides a series of 18 categories of exemption from the imposition of the excise tax. The exemptions have, in some cases, been added to the statute on multiple occasions.

The following identify the 18 categories of exemption:

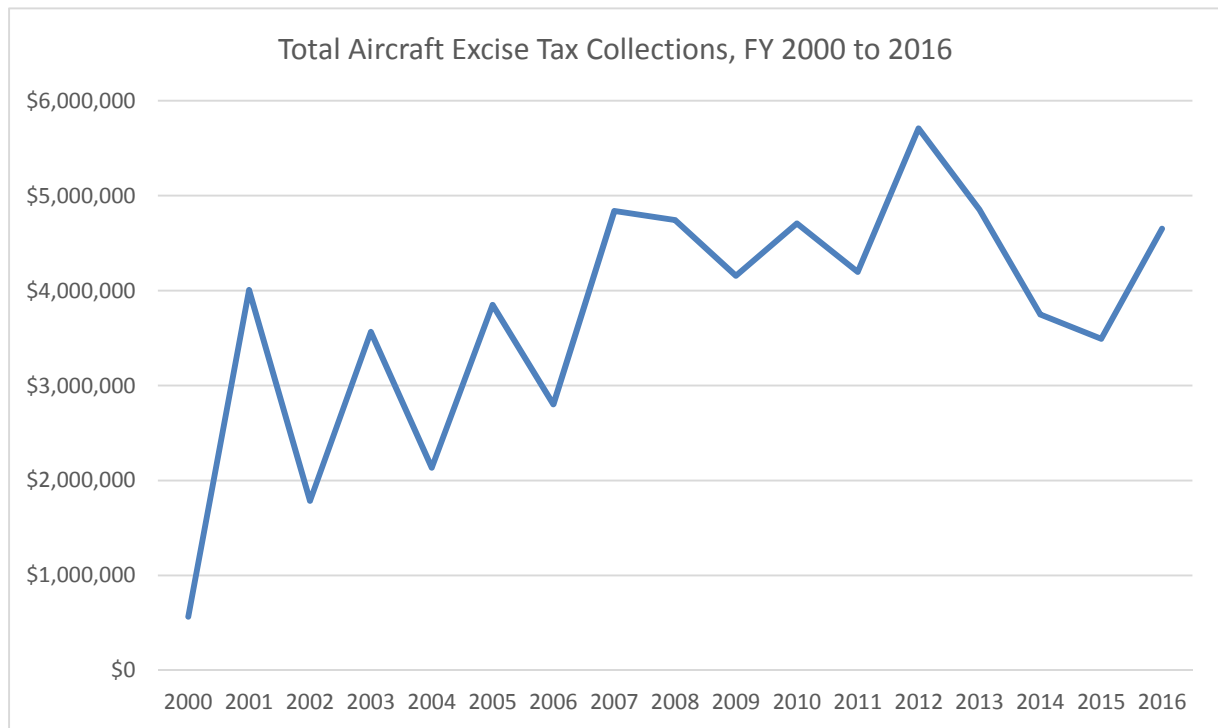
The following types of aircraft are exempt from the Aircraft Excise Tax under Article 68, Section 6001 of the Oklahoma statute:

1. Aircraft manufactured under an F.A.A. approved certificate and which are owned and in the physical possession of the manufacturer of said aircraft. Said aircraft shall have an aircraft exemption license as provided for in Section 254 of Title 3 of the Oklahoma Statutes;
2. Aircraft owned by dealers and in the dealer's inventory, not including aircraft that are used personally or for business. Said aircraft shall have an aircraft exemption license as provided for in Section 254 of Title 3 of the Oklahoma Statutes;
3. Aircraft of the federal government, any agency thereof, any territory or possession, any state government, agency, or political subdivision thereof;
4. Aircraft transferred from one corporation or limited liability company to another corporation or limited liability company pursuant to reorganization of the corporation or limited liability company. For the purpose of this section the term reorganization means a statutory merger, consolidation, or acquisition;
5. Aircraft purchased or used by commercial airlines as defined by paragraph 2 of Section 6001 of this title;
6. Aircraft transferred in connection with the dissolution or liquidation of a corporation or limited liability company and only if included in a payment in kind to the shareholders or members;
7. Aircraft transferred to a corporation for the purpose of organizing such corporation. However, the former owners of the aircraft must have control of the corporation in proportion to their interest in the aircraft prior to the transfer;
8. Aircraft transferred to a partnership or limited liability company when the organization of the partnership or limited liability company is by the former owners of the aircraft. However, the

former owners of the aircraft must have control of the partnership in proportion to their interest in the aircraft prior to the transfer;

9. Aircraft transferred from a partnership or limited liability company to the members of the partnership or limited liability company and if made in payment in kind in the dissolution of the partnership;
10. Aircraft transferred or conveyed to a partner of a partnership or shareholder or member of a limited liability company or other person who after such sale owns a joint interest in the aircraft and on which the sales or use tax levied pursuant to the provisions of this title or the excise tax levied pursuant to the provisions of Section 6002 of this title have previously been paid on the aircraft;
11. Aircraft on which a tax levied pursuant to the provisions of the laws of another state, equal to or in excess of the excise tax levied by Section 6002 of this title, has been paid by the person using the aircraft in this state. Aircraft on which a tax levied pursuant to the laws of another state, in an amount less than the excise tax levied by Section 6002 of this title, has been paid by the person using the aircraft in this state shall be subject to the levy of the excise tax at a rate equal to the difference between the rate of tax levied by Section 6002 of this title and the rate of tax levied by the other state;
12. Aircraft when legal ownership of such aircraft is obtained by the applicant for a certificate of title by inheritance;
13. Aircraft when legal ownership of such aircraft is obtained by the lienholder or mortgagee under or by foreclosure of a lien or mortgage in the manner provided for by law;
14. Aircraft which is transferred between husband and wife or parent and child where no valuable consideration is given;
15. Aircraft which is purchased by a resident of this state and used exclusively in this state for agricultural spraying purposes; provided, if such aircraft is sold, leased or used outside this state or for a purpose other than agricultural spraying at any time within three years from the date of purchase, the excise tax levied pursuant to the provisions of Section 6002 of this title shall be due and payable. For purposes of this subsection, "agricultural spraying" means the aerial application of any substance sold and used for soil enrichment or soil corrective purposes or for promoting the growth and productivity of plants and animals;
16. Aircraft which have a selling price in excess of \$2,500,000 and which are transferred to a purchaser who is not a resident of this state for immediate transfer out of state;
17. Aircraft which is transferred without consideration between an individual and an express trust which that individual or the spouse, child or parent of that individual has a right to revoke; and
18. Rotary wing aircraft purchased to be used exclusively for the purpose of training U.S. military personnel or other training authorized by the U.S. government (expires January 1, 2018).

As shown in the following table, the Aircraft Excise Tax is a somewhat volatile source, but it has generally been trending upward since FY2000 (with notable recent dips in FY2013 through FY2015). The fact that the tax collections are generated by a relatively small number of large-dollar transactions each year likely helps explain the volatility of the tax collections.



Source: Oklahoma Tax Commission

Criteria for Evaluation

A key factor in evaluating the effectiveness of incentive programs is to determine whether they are meeting the stated goals as established in state statute or legislation. In the case of the exemptions to this excise tax, the specific rationale for the exemptions were not included in the legislation that established them.

Given the disparate nature of the exemptions, the project team and the Evaluation Commission struggled with establishing criteria for evaluation. The following were adopted by the Commission:

1. Growth in sales of exempted aircraft within the state – comparison to the period prior to the credit
2. Growth in employment in aircraft industry within the state – comparison to the period prior to the credit
3. Return on investment related to economic impact from exemption versus its cost

The criteria focus on what might be considered the goals of the exemptions, based on what are often considered to be the rationale for exempting an excise tax (which is a specific tax on consumption).

Benchmarking

For evaluation purposes, benchmarking provides information related to how peer states use and evaluate similar exemptions. At the outset, it should be understood that no states are ‘perfect peers’ – there will be multiple differences in economic, demographic and political factors that will have to be considered in any analysis; likewise, it is exceedingly rare that any states’ set of exemptions will be exactly the same. These benchmarking realities must be taken into consideration when making comparisons – and, for the sake of brevity, the report will not continually re-make this point throughout the discussion.

The process of creating a comparison group for incentives typically starts with a look at bordering states. This is generally the starting point because proximity often leads states to compete for the same regional businesses or business/industry investments. Second, neighboring states often (but not always) have similar economic, demographic or political structures that lend themselves to comparison. However, the comparison group for certain incentives will be broader than just the neighboring states.

A common exemption from aircraft sales and/or excise taxes imposed by the state where the aircraft is delivered is what is known as the “fly-away” exemption. This is a state tax exemption that allows non-residents to purchase and take delivery of aircraft without being subject to the state tax as long as they are not a state resident and are not keeping the plane in the state. This approach is used in several states including California, New Jersey, Illinois, Massachusetts, Texas and Pennsylvania. In Oklahoma, the law provides such an exemption for aircraft that sell for more than \$2,500,000.

Various other approaches are used by the benchmark states, including exempting aircraft manufactured in the state. What the exemption policies in many other states have in common is there generally is a specific economic goal that the exemptions strive to achieve.

State	Exemption Requirements ¹
Arkansas	Exemption on parts and maintenance and sales of aircraft to a resident of another state who will base the aircraft outside the state
Washington	Aircraft purchased primarily for interstate or foreign commerce by transporting persons or property for hire
	Aircraft purchased for bare-rental
	Aircraft over 41,000 pounds that are not required to be registered in-state, sold to nonresidents
	Repair and maintenance for nonresidents

1

Arkansas	https://www.nbaa.org/admin/taxes/state/ar/Act1182.pdf
Washington	http://dor.wa.gov/content/findtaxesandrates/othertaxes/tax_aircraft.aspx
Georgia	https://dor.georgia.gov/what-subject-sales-and-use-tax#field_related_links-486-16
Alabama	http://revenue.alabama.gov/salestax/online/40234.cfm
Florida	http://dor.myflorida.com/Forms_library/current/gt800008.pdf
Connecticut	http://www.ct.gov/drs/cwp/view.asp?a=1477&q=269920

State	Exemption Requirements ¹
Georgia	If an aircraft is assembled or manufactured in the state and the aircraft is to be used out of state
Alabama	If manufactured, sold, and delivered in this state if said aircraft are not permanently domiciled in Alabama
	Also exempt are aircraft and parts and components used for aircraft transporting people or property for commerce
Florida	Aircraft sold to nonresidents taking the aircraft out of Florida. Must provide proof of registration in another state to qualify
Connecticut	Must be sold by a manufacturer of aircraft in the state

Fiscal Impact

The following table provides information on the tax collections and taxable transactions related to the Aircraft Excise Tax. Revenue derived from this tax is used to support the Oklahoma Aeronautics Commission. The additional data, from the Tax Commission, for FY2015 and FY2016 reflects the total number of aircraft sales transactions reported in FY2015 and FY2016 and also the number that were tax exempt (listed as net aircraft sales and units).

Fiscal Year	Total Aircraft Sales	Total Units	Taxable Aircraft Sales	Taxable Units	Tax Collected	Exempt Sales	Exempt Units	Tax Foregone
2000	-	-	\$17,431,422	-	\$566,521	-	-	-
2001	-	-	\$123,283,092	-	\$4,006,700	-	-	-
2002	-	-	\$54,955,699	-	\$1,786,060	-	-	-
2003	-	-	\$109,709,159	-	\$3,565,548	-	-	-
2004	-	-	\$65,670,813	-	\$2,134,301	-	-	-
2005	-	-	\$118,474,327	-	\$3,850,416	-	-	-
2006	-	-	\$86,198,100	-	\$2,801,438	-	-	-
2007	-	-	\$148,875,686	-	\$4,838,460	-	-	-
2008	-	-	\$145,949,478	-	\$4,743,358	-	-	-
2009	-	-	\$127,884,125	-	\$4,156,234	-	-	-
2010	-	-	\$144,826,656	-	\$4,706,866	-	-	-
2011	-	-	\$129,136,306	-	\$4,196,930	-	-	-
2012	-	-	\$175,638,060	-	\$5,708,237	-	-	-
2013	-	-	\$149,302,209	-	\$4,852,322	-	-	-
2014	-	-	\$115,345,072	-	\$3,748,715	-	-	-
2015	\$222,454,247	502	\$107,448,770	470	\$3,492,085	\$115,005,477	32	\$3,737,678
2016	\$188,683,155	541	\$143,139,770	505	\$4,652,043	\$45,543,385	36	\$1,480,160

Based on the information in the table, the State is foregoing several million dollars in revenue as a result of the 18 different exemptions under the statute. The source data does not indicate which exemption type was utilized. The data also does not support an analysis of the tax revenue generated by the exemptions. For example, some or all of the exempt transactions could have been generated by planes that were transferred as a result of corporate restructuring or other non-economic transactions. As a result, based on the data limitations, the project team is unable to offer an estimate of State tax liability generated by the exempt transactions. As a result, the fiscal impact cannot be calculated.

Economic Impact

As explained in the previous section, the data available for evaluation does not provide sufficient information to conduct an analysis of the economic impact of this exemption. However, it is unlikely that there is a significant impact attributable to the exempt portion of aircraft transactions.

Technical and Administrative Issues

Exemptions from an excise tax are a much different type of incentive than income tax credits. While those claiming an income tax credit generally do so on their tax return (and provide any specific schedules necessary to justify the claim of the credit), excise taxes are generally collected by the seller, and they are required to gather and submit any supporting information to justify the exemption from the purchaser.

In the case of these exemptions, Chapter 138 of the Laws of 1984 provides: “The Tax Commission shall require every person licensed as a dealer in aircraft pursuant to the provisions of Sections 251 through 257 of Title 3 of the Oklahoma Statutes to make a report to the Tax Commission within a period of thirty (30) days after the transfer by such person of the legal ownership of any aircraft.” This statute requires significant information, including the name and address of the purchaser, a description of the aircraft, including the name of the manufacturer, the Federal Aviation Administration registration number of the aircraft, the type and year manufactured, the serial number, the date of the transfer, and the amount of the sale price. It does not require the dealer to explain whether the sale was taxable or exempt, and if exempt, for what reason.

Moreover, the Tax Commission’s ability to routinely extract information from the dealer filings is limited. It required significant time and effort for the Tax Commission research staff to compile the data needed for this evaluation.

Outcomes

Over the past two fiscal years, there have been 1,043 reported sales of aircraft in Oklahoma. Of that amount, 68, or about 6.5 percent, have been tax exempt. However, on a dollar basis, sales have totaled \$411,137,402, of which \$160,548,862, or about 39 percent, were exempt. This may be caused by the “fly-away” provision that exempts collection of the excise tax for aircraft sales with a price of over \$2.5 million if the plane is immediately leaving the State.

As discussed in preceding sections, the lack of definition in the data reported to the State precludes any practical analysis of policy or programmatic outcomes.

Recommendations

Recommendation: Reconfigure

When viewed in the context of other states or rational tax policy, Oklahoma's 18 exemptions from the application of an excise tax on aircraft are more complex than most. Some of the exemptions – for arm's length/actual retail sales in the common meaning of the word, and sales to units of government are common and make sense. However, the policy rationale for exempting "big ticket" fly-away sales (over \$2.5 million), and some of the other specific exemption is not clear. It appears that other states have provided greater focus that aligns with policy goals in this and other areas.

The project team recommends that the Governor and the Legislature consider the goals of exemptions from this revenue source and construct Section 6003 accordingly. For example, several states, including Connecticut, Alabama, and Georgia limit their exemption to the sale of aircraft that are manufactured in their state.

A review of the proceedings of the Oklahoma Tax Commission and public comments made to the Commission indicate that the use of the commercial airline exemptions by entities operating or allegedly operating charter airlines is an area of compliance concern. In considering the future focus of the exemptions, the Commission might recommend that anti-fraud language such as availability or use standards and possibly compliance reporting be added to the execution of the commercial airline exemption.

Once a rational set of exemptions is in place, the dealer reporting on transactions should be expanded to include additional information on the nature of exempt sales.

INCENTIVE EVALUATION COMMISSION COMMENTS AIRCRAFT EXCISE TAX EXEMPTIONS

LYLE ROGGOW

- Charter Aircraft issue needs to be addressed to limit possible abuse of the program.

CYNTHIA ROGERS

- PFM highlighted important deficiencies in the program: the lack of a specific policy goals, the hodgepodge of exemptions, and potential overlap with other programs. Accordingly, reconfiguring the program along the lines suggested is warranted.
- It is also important to understand how the exempted funds would otherwise be spent by the Oklahoma Aeronautics Commission, since it is the recipient of the excise tax receipts.

**State of Oklahoma
Incentive Evaluation Commission
Five Year Ad Valorem Tax Exemption
for Manufacturing
Final Report**



November 28, 2016

Prepared by



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At a Glance: Ad Valorem Tax Exemption for Manufacturing

Statute: O.S. 68 Section 2902

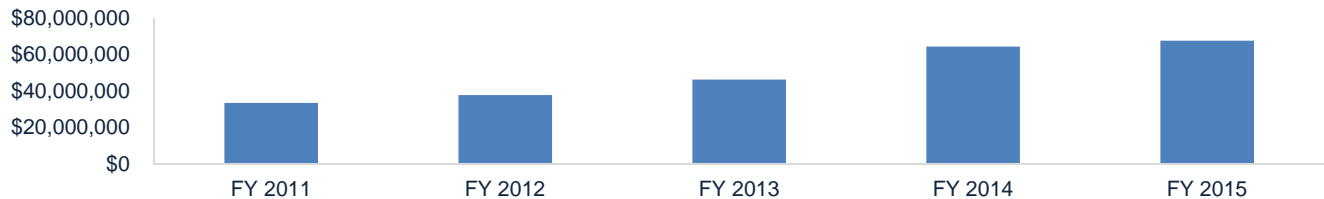
Program Goals

- Induce manufacturing businesses to locate or expand within any county of the State
- Create job and wage growth within the State
- Focus on jobs with health benefits and above average wages

Fiscal Impact

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Dollar Amount	\$33,482,080	\$37,828,753	\$46,342,441	\$64,356,276	\$67,619,201

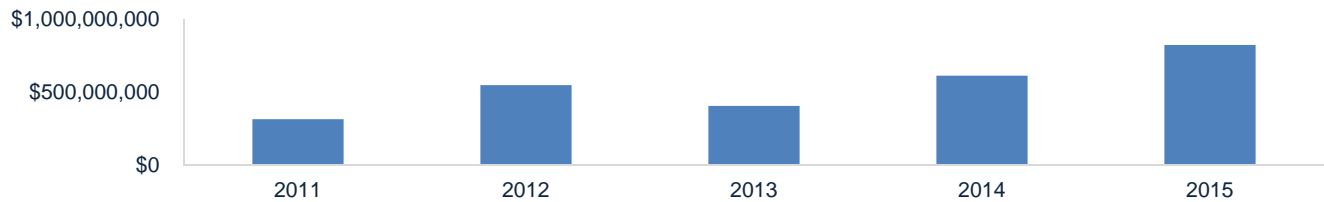
Total Reimbursements by Year



Economic Impact

	2011	2012	2013	2014	2015
Output	\$314,761,520	\$547,638,783	\$405,662,231	\$612,766,321	\$822,001,378
Labor Income	\$92,233,525	\$149,520,621	\$114,415,253	\$164,894,411	\$221,930,526
Employment	1,927	3,025	2,353	3,323	4,494
Total Tax Revenue	\$6,214,492	\$10,610,107	\$7,963,267	\$11,494,073	\$15,296,111

Economic Output by Year



Adequate Protections for Future Fiscal Impact?

- Recent significant growth, but legislative changes should flatten the trajectory in the next few years
- The primary concern is that the Constitution provides little opportunity to limit the exemption, although eligibility requirements can be raised if the fiscal impact grows in future years

Effective Administration?

- The need for local government involvement in the process is a complicating factor, particularly because local governments have no financial stake in paying for the exemption

Achieving its Goals?

- Oklahoma manufacturing is performing somewhat better than the nation as a whole
- Broad use of the program among counties suggest it is meeting that legislative goal
- There has been growth in the number of jobs and reduced cost per job in recent years

Retain, Reconfigure, Repeal?

- Retain but consider revising program eligibility requirements that have been the same in some cases since program inception

Changes to Improve Future Evaluation?

- Increase the information available to evaluate, likely through required non-disclosure agreements

Executive Summary

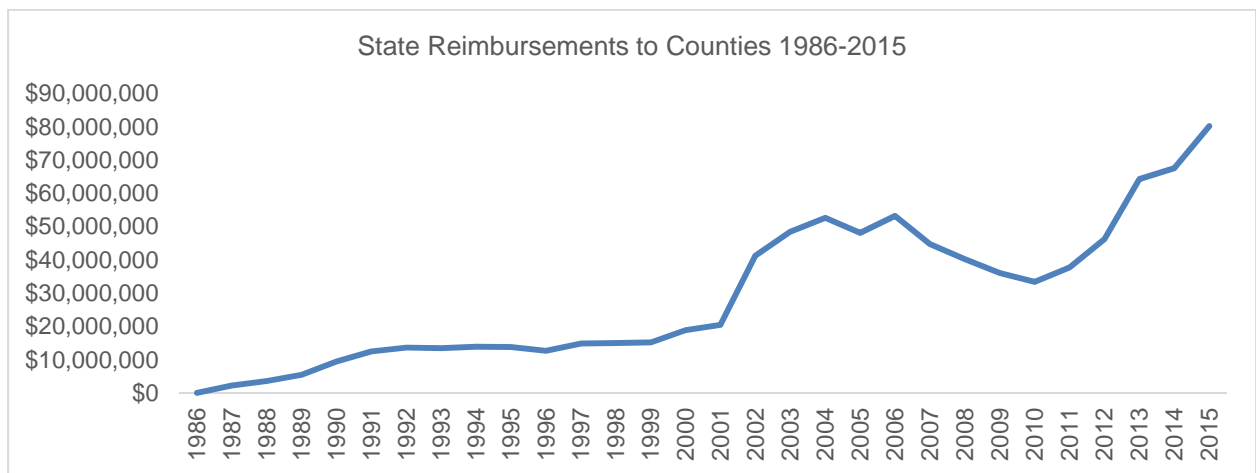
Introduction

The United States manufacturing sector has changed significantly in the last several decades. Since its peak in 1979, employment in manufacturing has declined by 37 percent. In spite of this, the sector remains an important part of the national economy, and manufacturing output has more than doubled over the same period. In Oklahoma, the manufacturing industry makes up 9.3 percent of the state economy. While manufacturing jobs may be declining, those jobs are, on average, higher paying jobs. As manufacturing employment declines while output increases, states across the country have sought to attract manufacturing companies in an effort to retain or expand its share of this shrinking but valuable market.

The Ad Valorem Tax Exemption for Qualifying Manufacturing Concerns was added to the Oklahoma State Constitution by a vote of the people on April 10, 1985. The property tax exemption applies to all real and personal property necessary for the manufacturing of a product and facilities engaged in research and development. The exemption applies to new, acquired or expanded manufacturing facilities in qualified industries. Companies apply for the exemption through the county assessor where the facility is located, and if approved, the State reimburses the county for the amount of exempted property tax for up to five years.

Program Background and Benchmarking

State payments associated with this incentive have increased sharply since returning to pre-recession levels in 2012.



While there are specific references to several industries in the program's authorizing statute, the Oklahoma Tax Commission summarizes program use by five property types in its annual report on the exemption: computer/data processing; distribution centers; large manufacturing; traditional manufacturing and electric wind facilities. While wind facilities have been a major contributor to the upward trend in program use in the last few years, effective January 1, 2017, wind energy facilities will no longer be eligible for the exemption.

There are several competing states that have manufacturing exemptions similar to Oklahoma's, including Alabama, Kansas, Louisiana, Mississippi, South Carolina and Texas. Each offers a full property tax exemption with the exception of Texas, which uses a taxable value limitation of up to 50 percent of total tax due on the property. Texas' incentive is unique among the group in that it is an exemption of school district maintenance and operations property tax. Most of the comparison states offer a 10-year incentive period; Oklahoma and South Carolina limit the exemption to five years.

Fiscal Impact

It is notable that the program experienced relatively stable levels of reimbursement through the end of the recession in FY2001. It then picked up sharply in FY2002 through FY2004, then leveled off and declined during the recession from FY2008 through FY2010. As noted, wind facilities have, as a cohort, been a primary beneficiary of program exemptions, totaling approximately 38 percent of the amount paid by the State in FY2016. These reimbursements took on a more prominent role among the five categories in FY2014 through FY2016.

The program reached a state reimbursement high point of \$53.3 million in FY2007 but, during the Great Recession, fell to \$33.5 million in FY2011. However, it has more than doubled from FY2012 to FY2016, when the reimbursement reached a new high of \$80.2 million. It is likely, however, that the exclusion from the program of electricity generating facilities from wind energy will slow growth in the next several years.

Economic Impact

The economic activity from growth in manufacturing is significant, including direct (such as purchases of manufacturing output), indirect (such as supplier activity) and induced (such as household activity of new payrolled employees) effects. However, economic activity must be distinguished from state tax revenue generated by that economic activity, which is a relatively small percentage of overall activity. Because the State pays the entirety of the payroll tax exemption, those costs are significantly higher than the state tax revenue generated by the additional economic activity. However, over time (since the exemption lasts for five years), there is a reasonable likelihood that the State will 'catch up' in terms of ongoing economic activity.

There are other advantages associated with the economic impact, including the opportunity for additional local tax revenues associated with capital investment and economic activity. These, however, do not generally impact on State revenue collections.

Outcomes

It is often difficult to come to definitive conclusions with this sort of incentive program. While it is a significant investment, it is difficult to compare programmatic results that add (for example in 2015) about 4,500 jobs to the state economy as a whole. When those 4,500 jobs are disaggregated into a wide variety of industries and even more companies and locations, it becomes exceedingly more difficult to draw conclusions without a much more in-depth study that may have to focus on a handful of program components.

Even with these caveats, there are indications that State manufacturing employment and wages have fared better than the nation as a whole. There are also metrics that suggest the cost per job of the program is in line with other similar programs. Finally, the recent growth in some key sectors of the growing economy (such as computing) is encouraging for state economic diversification.

The cost-benefit analysis from the program also benefits from the fact that the State reimbursement is for five years while most similar state programs reimbursement for double that amount. Because of the significant capital investment, it is likely that the recipient firms will maintain their presence in the State in following years, and the State has a strong opportunity to recoup its investment in years six through ten.

Recommendation

One of the factors that sets this program apart from others is its inclusion in the State Constitution. As a result, it is unlikely that the program will be eliminated – and to do so would take considerable time and effort. It is a longstanding part of the economic incentive structure in Oklahoma, and there are no obvious arguments that would support its elimination. Given the use of similar programs in other states that compete with Oklahoma, it is likely that the State would experience some lack of competitiveness with other out-of-state locations if the program ceased.

At the same time, it is worthwhile to consider possible program modifications. The threshold eligibility criteria have not changed in recent years, and the value of the threshold level of investment or increases in payroll have eroded over time. However, if changes are made, they should be done in a way that is statistically valid but also sets clear parameters for the level of investment necessary to qualify for the program.

Based on its performance and long-standing acceptance, the project team recommends retaining the program. At the same time, there is additional information that should be gathered related to program use that will assist in future evaluations of the program's performance. Data that should be routinely collected from applicants and program participants on a year basis (and available for use by the Commission's program evaluators) includes:

- NAICS Code – 4 to 6 digit
- Capital investment (real and BPP)
- Existing payroll
- Net new payroll
- Existing jobs
- Net new jobs

Introduction

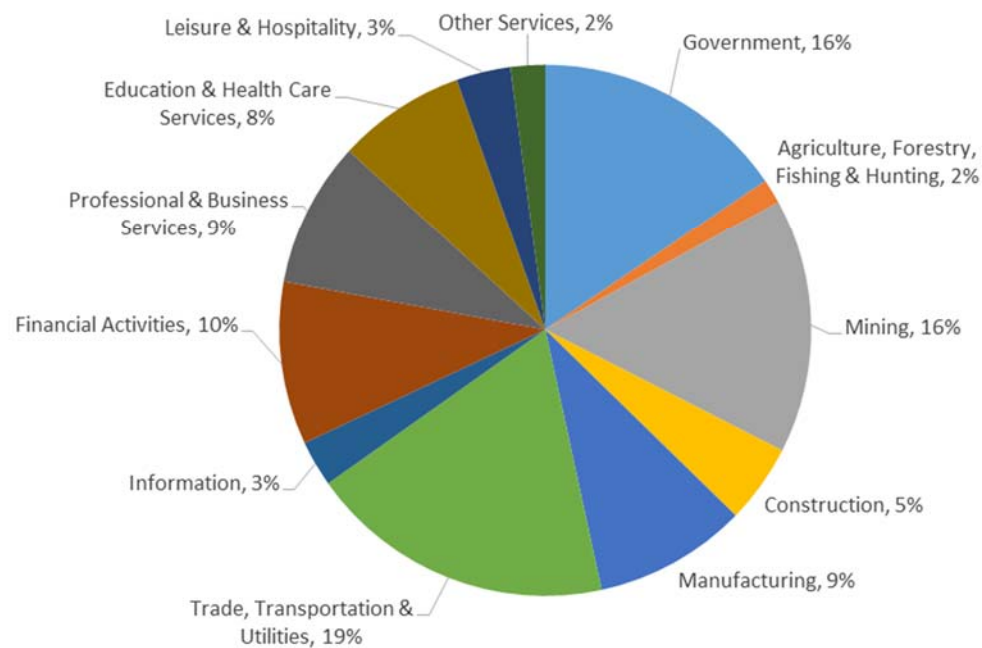
Overview

The Oklahoma Incentive Evaluation Commission (the Commission) was established in HB2182, which was enacted and became law in 2015. It requires the Commission to conduct evaluations of all qualified state incentives over a four-year timeframe. The law also provides that criteria specific to each incentive be used for the evaluation. The Five Year Ad Valorem Tax Exemption for Manufacturing is one of the incentives reviewed in 2016 by the Commission with recommendations to the Governor and the State Legislature.

Introduction

The United States manufacturing sector has changed significantly in the last several decades. Since its peak in 1979, employment in manufacturing has declined by 37 percent.¹ In spite of this, the sector remains an important part of the national economy, and manufacturing output has more than doubled over the same period.² In Oklahoma, the manufacturing industry makes up 9.3 percent of the state economy.³

Industry Share of Oklahoma's Economy, First Quarter 2016

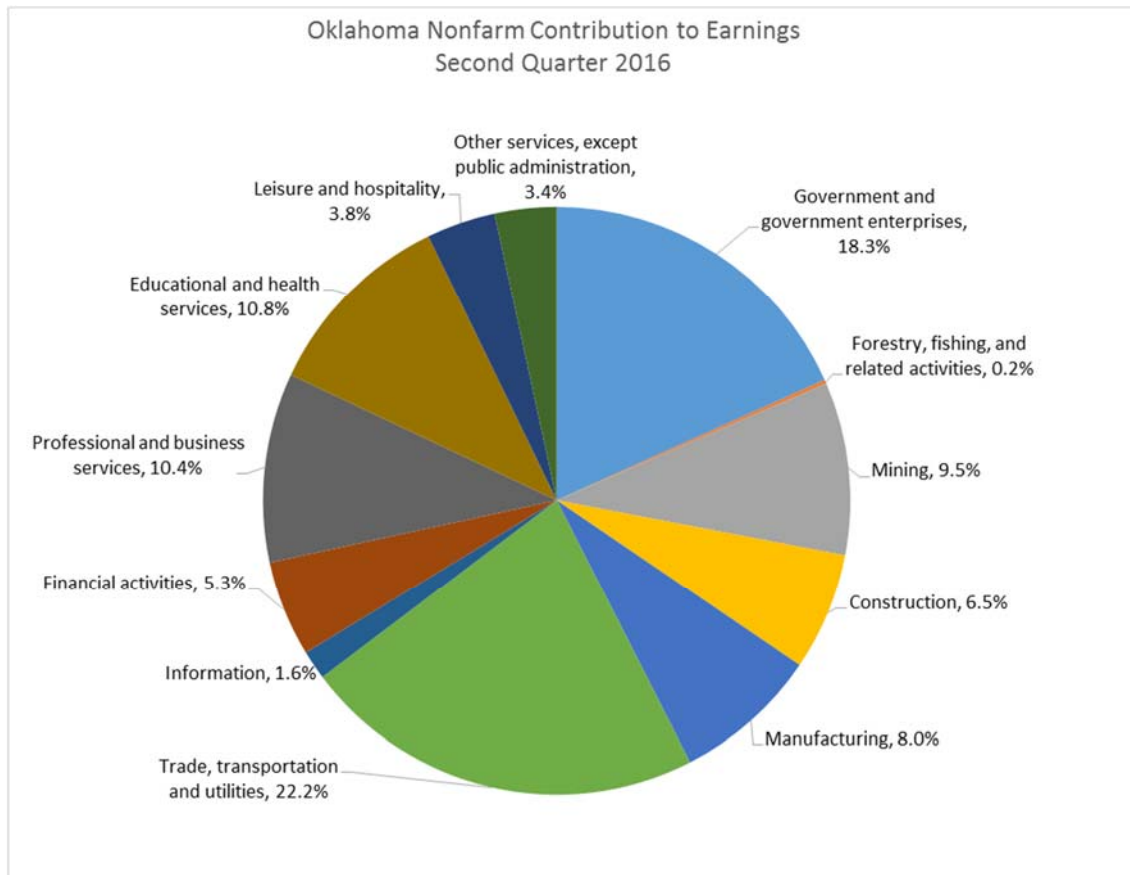


¹ US. Bureau of Labor Statistics, All Employees: Manufacturing [MANEMP], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/MANEMP>, October 16, 2016

² US. Bureau of Labor Statistics, Manufacturing Sector: Real Output [OUTMS], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/OUTMS>, October 13, 2016

³ Oklahoma Economic Indicators, Oklahoma Employment Security Commission, Economic Research and Analysis Division, September 2016, p. 11.

As with the trend for the nation as a whole, manufacturing's share of State earnings is smaller than its share of the overall State economy:



While manufacturing jobs may be declining, those jobs are, on average, higher paying jobs. As manufacturing employment declines while output increases, states across the country have sought to attract manufacturing companies in an effort to capture a share of this shrinking, but valuable market.

There are several benefits to attracting additional manufacturing activity. First, states can both maintain and increase employment by spurring expansion of existing facilities and new construction. Beyond employment, manufacturing investment creates valuable capital assets within the state's borders, and major investments can have a lasting impact on an area. Major facilities often attract other similar investments, leading to a clustering of similar firms that will increase productivity and wages for workers. This is often a driving force for governments at all levels to compete fiercely for manufacturing investment.⁴

The Ad Valorem Tax Exemption for Qualifying Manufacturing Concerns was adopted as an amendment to the Oklahoma State Constitution and adopted by a vote of the people on April 10, 1985. This Constitutional amendment was posed by the General Assembly to the voters via Senate Joint Resolution 9, which was approved on March 12, 1985.

⁴ Lincoln Institute of Land Policy: Rethinking Property Tax Incentives for Business, 2012

The property tax exemption applies to all real and personal property necessary for the manufacturing of a product and facilities engaged in research and development that meet the requirements set forth in the Oklahoma Constitution and State statute as established by the State Legislature.⁵ The property tax exemption applies to new, acquired or expanded manufacturing facilities in qualified industries. Companies apply for the exemption through the county assessor where the facility is located. If approved, the State then reimburses the county for the amount of abated property tax.

While the program in its inception focused on what might be considered ‘traditional’ manufacturing of durable goods, there are other industries that qualify as well. These include aircraft repair and rebuilding, computer services and data processing, distribution and warehousing, research and development, and electric power generation. The following are the minimum qualifications for the initial year of the five-year exemption:

- Capital investment in the new, acquired, or expanded facility of at least \$250,000.
- The investment must also create a net increase in annualized payroll of at least \$250,000 in a county with a population of less than 75,000, and at least \$1,000,000 in a county with a population of 75,000 or more.
- Basic health care benefits must be provided to employees within 180 days of employment.
- To continue receiving the exemption, a company must maintain or increase its payroll each year.

Certain facility types have special requirements and exceptions. As noted in the explanation of asset eligibility, the phrase ‘manufacturing process’ is important. To qualify for the exemption, assets are to be directly involved in the manufacturing process.

A notable exception to the increase in payroll requirements has existed for ‘entities engaged in electric power generation by wind energy.’ These facilities have been able to qualify for the exemption with a \$2.0 million capital investment if the \$250,000 payroll increase requirement is not met. Given that the capital cost for wind turbines are in the range of \$1.3 to \$2.2 million per megawatt, and two megawatt wind turbines are common, it is understandable that these facilities have been able to readily qualify for the exemption. In 2015, the Legislature (in SB 498) stipulated that initial applications for exemption by electric power generation by wind facilities will no longer be accepted, effective January 1, 2018.

Criteria for Evaluation

A key factor in evaluating the effectiveness of incentive programs is to determine whether they are meeting the stated goals as established in state statute or legislation. In this case, the original state question that was approved by the voters and placed into the Constitution provides that:

⁵ State of Oklahoma 2016 Annual Report to the Oklahoma Tax Commission, Exempt Manufacturing Reimbursements, April 14, 2016, p. i.

“For the purpose of inducing any manufacturing concern to locate or expand manufacturing facilities within any county of this state, a qualifying manufacturing concern shall be exempt from the levy of any ad valorem taxes upon new, expanded or acquired manufacturing facilities for a period of five (5) years.”

From this, it is clear that the goal is to induce location or expansion of manufacturing facilities within the State. Given that manufacturing is typically associated with paying above average wages – and that the requirements for the incentive generally require payroll growth - it seems logical to assume that criteria that measure jobs and payroll would align with the intent of the Constitutional amendment.

It also makes sense to look to the nature of the incentive: for there to be value in a property tax exemption, a business would have to have a significant amount of otherwise taxable real or personal property. This is frequently the case for manufacturing operations (as opposed to, for example, finance, insurance or professional services). As a result, it makes sense to also identify the incentive’s impact on capital investment.

With this in mind, the Incentive Evaluation Commission has determined the following criteria:

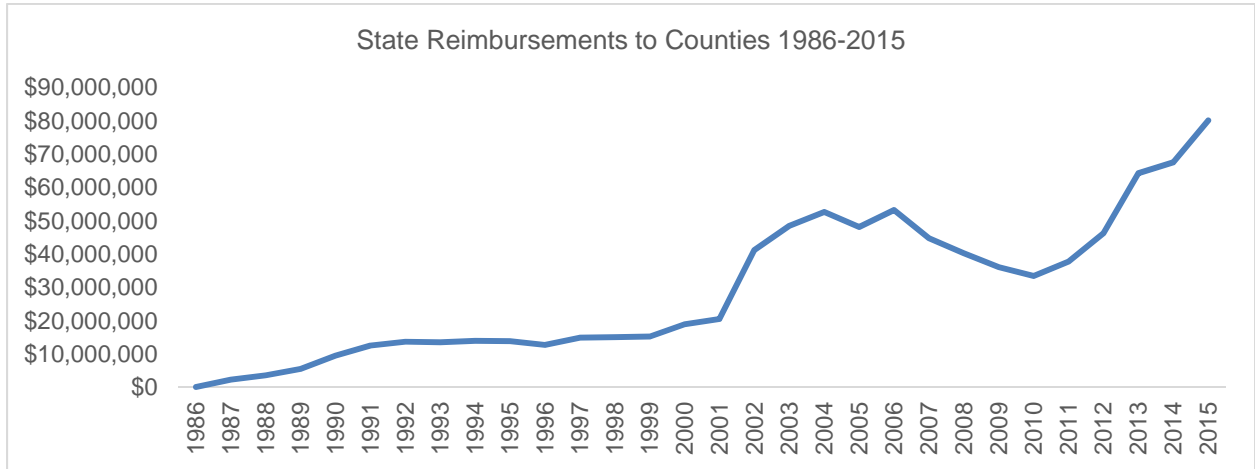
- Change in jobs associated with the exemption
- Change in payroll associated with the exemption
- Change in payroll associated with the exemption
- Change in capital investment associated with the exemption
- But-for test – change in jobs/payroll/capital associated with the exemption versus state growth rates as a whole
- Change in jobs/payroll/capital in the qualifying industries versus state industries as a whole
- Changes to state appropriations associated with facilities receiving an exemption
- Return on investment – economic activity versus financial net cost.

The criteria focus on what are generally considered goals of incentives programs (such as creating jobs and capital investment in the state) as well as more specific objectives related to this program (such as possible changes in state appropriations associated with facilities receiving an exemption). Ultimately, incentive programs have to weigh both the benefits (outcomes related to achieving policy goals and objectives) and the costs, and that is also a criteria for evaluation (State return on investment). These will be discussed throughout the balance of the evaluation.

Program Background and Benchmarking

Background

State payments associated with this incentive have increased sharply since returning to pre-recession levels in 2012.

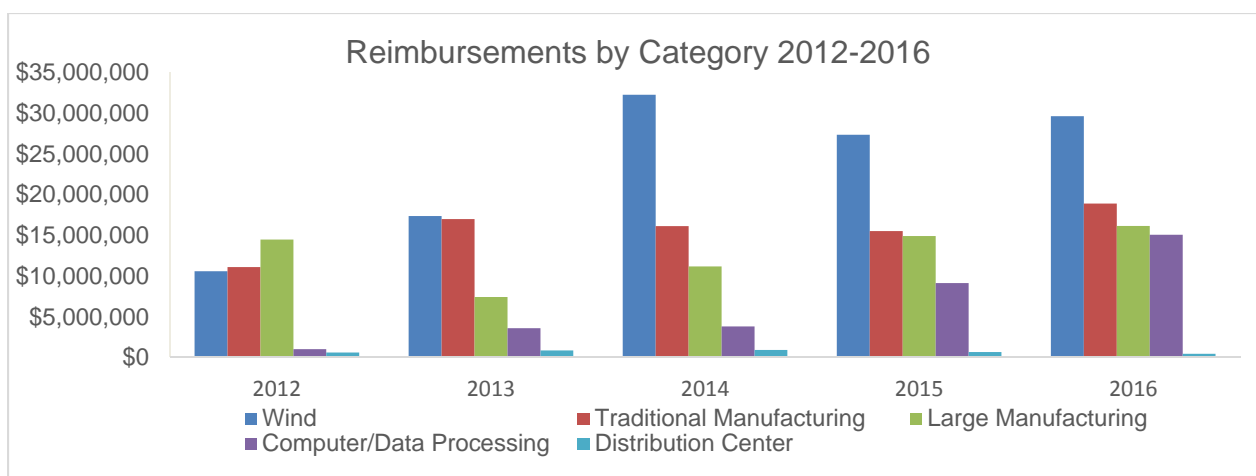


While there are specific references to several industries in the program's authorizing statute, the Oklahoma Tax Commission summarizes program use by five property types in its annual report on the exemption:

- Computer/Data Processing
- Distribution Centers
- Large Manufacturing
- Traditional Manufacturing
- Electric Wind.

Over the last five years, wind facilities have been a major contributor to the upward trend in program use. According to the data breakdown from the Tax Commission, wind facilities have received the highest total exemption amount in each of the last four years. About 38 percent of the total reimbursements paid by the state in 2016 were due to wind exemptions.

The following table details the reimbursement by category:



Reimbursement Amounts					
	2012	2013	2014	2015	2016
Wind	\$10,588,038	\$17,373,296	\$32,270,226	\$27,350,423	\$29,638,916
Traditional Manufacturing	\$11,103,763	\$16,998,205	\$16,146,846	\$15,526,973	\$18,911,401
Large Manufacturing	\$14,482,954	\$7,442,909	\$11,193,353	\$14,925,728	\$16,154,521
Computer/Data Processing	\$1,035,616	\$3,602,276	\$3,824,362	\$9,151,410	\$15,071,134
Distribution Center	\$618,382	\$872,639	\$921,459	\$664,667	\$458,995

As noted in the previous section, effective January 1, 2017, entities that generate electricity by wind will no longer be eligible for the exemption.

Benchmarking

For evaluation purposes, benchmarking provides information related to how peer states use and evaluate similar incentives. At the outset, it should be understood that no states are ‘perfect peers’ – there will be multiple differences in economic, demographic and political factors that will have to be considered in any analysis; likewise, it is exceedingly rare that any two state incentive programs will be exactly the same.⁶ These benchmarking realities must be taken into consideration when making comparisons – and, for the sake of brevity, the report will not continually re-make this point throughout the discussion.

The process of creating a comparison group for incentives typically starts with a look at bordering states. This is generally the starting point because proximity often leads states to compete for the same regional businesses or business/industry investments. Second, neighboring states often (but not always) have similar economic, demographic or political structures that lend themselves to comparison.

However, the comparison group for certain incentives will be broader than just the neighboring states. Discussions with State internal stakeholders indicated that beyond the region, several Southeastern states are prime competitors for manufacturing entities. As a result, Alabama, Louisiana, Mississippi,

⁶ The only real instances of exactly alike state incentive programs occur when states choose to ‘piggyback’ onto federal programs.

South Carolina, and Tennessee have been included. The following peer states were considered, and those with a comparable incentive are also noted:

State	Comparable Program
Alabama	Yes
Arkansas	No
Colorado	No
Florida	No
Kansas	Yes
Louisiana	Yes
Mississippi	Yes
Missouri	No
New Mexico	No
South Carolina	Yes
Tennessee	No
Texas	Yes

Of the 12 states, Alabama, Kansas, Louisiana, Mississippi, South Carolina and Texas have ad valorem tax exemptions similar to Oklahoma. Each offers a full property tax exemption with the exception of Texas, which uses a taxable value limitation of up to 50 percent of total tax due on the property. Texas' incentive is unique among the group in that it is an exemption of school district maintenance and operations property tax. Qualifying companies enter into agreements with local school districts to determine the terms of the value limitation.

Important differentiating characteristics among the state incentives include capital investment requirements, duration of the exemption, eligible industries, and payroll and job requirements.

A significant capital investment is generally necessary for a property tax exemption to have value for the owner of a manufacturing facility. A required minimum amount of capital investment can ensure that the company receiving the incentive has a certain level of commitment to the new or expanded property. Oklahoma's incentive does this with its required minimum capital investment of \$250,000, but minimum investment requirements are rare among comparable state programs. Kansas, Louisiana, and Mississippi have no minimum requirement. Alabama has minimums only for alternative energy producers and

expansion programs. South Carolina has a required minimum for facility additions. Texas has minimum requirements that vary based on school district agreements.

Duration of the incentive is for up to five years in Oklahoma. South Carolina is the only other state in the comparison group to limit the exemption to five years. All other comparable states with a similar incentive provide a 10 year incentive period.

Eligible Industries vary across comparable programs, but each has a general focus on manufacturing. Oklahoma's incentive has emphasized three facility types outside of manufacturing (research and development, aircraft maintenance, and wind energy). Alabama is the only comparable state to include all three of these categories in its incentive. None of these categories qualify for Louisiana's exemption. With the exception of Louisiana, research and development is considered eligible in all comparable states.

Payroll Requirements are rare among the comparison group. Oklahoma is the only state in the group to have a standard annualized payroll requirement for all facilities. Texas requires certain wage targets, but does not have an aggregate payroll requirement. Oklahoma does not have a required number of jobs unless the facility is a distribution center. Texas has variable job requirements based on school district agreements.

Job Creation requirements are used in Texas based on school district agreements. Alabama has requirements in place only for data processing centers, warehousing, and facilities that are headquarters. Oklahoma does not have a job creation requirement, except for distribution facilities.

The table on the following page details the program attributes for Oklahoma and similar property tax exemption initiatives in Alabama, Kansas, Louisiana, Mississippi, South Carolina and Texas.

	Oklahoma	Alabama	Kansas	Louisiana	Mississippi	South Carolina	Texas
Applies to	Property Tax	State sales and use taxes; Non-educational county and city sales and use taxes; Non-educational state, county, and city property taxes; Mortgage and recording taxes to which property is conveyed into or out of a public authority, city or county government.	Property Tax	Property Tax	Property Tax	Property Tax	School District Maintenance and Operations Property Tax
Incentive Type	Exemption	Exemption	Exemption	Exemption	Exemption	Exemption	Taxable Value Limitation
Cap	None	None	None	None	None	None	May not exceed 50% of the total taxes paid on the qualified property during that year
Capital Investment	\$250,000 minimum	Projects owned by utilities which produce electricity from alternative energy resources must have capital costs of at least \$100,000,000 and Hydropower production must have capital costs of at least \$5,000,000. Expansion projects must be at least 30% of the original cost or \$2,000,000	No Requirement	No Requirement	No Requirement	Minimum of \$50,000 for expansions of existing facilities only	Agreements made with local school district mandate the capital investment required, but there is no standard.
Duration	5 Years	10 Years	10 Years	10 Years	10 Years	5 Years	10 Years
Payroll Requirement	Net increase in annualized payroll of at least \$250,000 in a county with a population lower than 75,000 or \$1,000,000 in a county with a population of 75,000 or more	None	None	None	None	None	Must pay 110% of county's average manufacturing wage
Job Creation Requirement	Distribution facilities must employ at least 100 full-time employees	50 new jobs if the facility is a headquarters and 20 new jobs if the facility is a data processing center, 50 jobs for warehousing facilities	None	None	None	None	Varies depending on agreement with school district
Includes:							
Research and Development	Yes	Yes	Yes	No	Yes	Yes	Yes
Aircraft Maintenance	Yes	Yes	No	No	Yes	No	No
Wind	Yes	Yes	No	No	No	No	Yes

Among the states with active similar incentive programs, the project team identified two states with relevant studies that are useful for comparison. These studies were done by the States of Connecticut and Texas. As previously noted, the Texas program is unique in that it applies only to school district property taxes.

For Texas, in 2010, the State Comptroller conducted an analysis of multiple state economic development incentives. These included the Texas Economic Development Act (often referred to as Chapter 313). According to the analysis, ‘realizing that manufacturing has been a vital segment of the state’s economy and that its ability to attract new manufacturing facilities had eroded’ in 2001, legislation gave school districts the ability to attract new taxable property and create jobs through offering a tax credit and an 8-year exemption for school property taxes.’⁷

According to a 2010 report to the Legislature, the program generated 6,239 qualifying jobs proposed in the original applications for 98 active projects with \$47,327 million in estimated capital investment for the life of the active projects. The report estimated total gross tax benefit to recipient companies of \$1,910 million. Based on these figures, it identified \$19.5 million of tax credit/exemption per active project and \$306,086 of tax credit/exemption per job committed to in the original application of the active projects. The report also noted that wind farms have been significant users of the program, making up 64 percent of the active projects. Wind farms were also responsible for 27 percent of total capital investment and just 7.2 percent of the jobs committed, while receiving 37 percent of the tax benefit.

The evaluation identified the following among the program’s strengths:

- The program has a sunset date
- The program has claw-back provisions if performance is below the statutory minimum
- The program encourages investments in school districts/locations that might otherwise have difficulty attracting investment
- To the extent that projects would not have located in the state without the program, it has assisted in an investment of up to \$47.3 billion

The evaluation identifies the following among the program’s weaknesses:

- The impact on state revenue is not capped
- The program has no limit on individual incentive amount
- The program does not require competition for awards – awards are based primarily on eligibility
- The wind projects are disproportionately benefiting when comparing job creation and capital investment

⁷ To qualify, the property must be in a reinvestment zone and must be devoted to manufacturing, research and development, a clean coal project, as defined by Section 5.001, Water Code, an advanced clean energy project, as defined by Section 382.003, Health and Safety Code, renewable energy electric generation, electric power generation using integrated gasification combined cycle technology, nuclear electric power generation, or a computer center used primarily in connection to one of the other categories. “An Analysis of Texas Economic Development Incentives 2010, Texas Comptroller of Public Accounts, p. 17.

The magnitude of the Texas program – and some of its somewhat unique features – have made it a regular topic for discussion and analysis.⁸ An Interim Report by the Texas House Select Committee on Economic Development Incentives (January 2015), established a framework for analyzing the project that is useful as a starting point for considering aspects of the Oklahoma program as well:

- **A clear purpose of expected outcomes.** The report identified several purposes, including encouragement of large scale capital investments in the state, creating new, high-paying jobs and strengthening and improving the overall performance of the economy in the state.
- **Metrics for achieving the outcomes.** The report identified these as the number of qualifying jobs create, the amount of capital investment committed by the companies and the amount of tax revenue benefiting the school district.
- **Timeframe for achieving the purpose.** While the property tax exemption lasts eight years (plus a tax credit that can also reach similar financial results for the recipient in the first two years), each contract establishes a timeline with expectations. According to the report, within 25 years of the agreement’s start, all revenues lost by the school district during the 10-year incentive period should be recovered through the incentivized economic activity in the remaining 15 years of the period.
- **Funding limits.** The report notes that there is no appropriation from the legislature or limitation on the amount of the funding under the program.
- **Competitive and open award selection process.** To qualify, a company files an application with a school district, and the district determines whether the company will receive the benefits. There are requirements for specific industries and a minimum number of jobs to be created at a certain salary or higher, but this can be waived (and, according to the report, is waived about three out of five times). The report suggests that the verification of created jobs and conflicts of interest are areas of concern.
- **Clawbacks.** Provisions were added in 2009 that allows a school district, when companies fail to meet the requirements of the contracted agreement, to recapture an amount up to the amount of the tax benefit provided to the company.
- **Transparency.** School districts collect annual reports from the companies and monitor these reports for compliance with the agreements. The Texas Comptroller releases a report every two years with performance metrics and details for all current agreements.
- **Regular independent audits.** In 2013, the Legislature required annual audits by the State Auditor’s Office. Three agreements are selected by the auditor, and the review is to determine whether the agreement(s)

⁸ The program is sometimes criticized for its lack of state involvement or oversight given the fact that the benefit to manufacturers is entirely borne by the state. It is also suggested that financial ‘side deals’ between the recipient businesses and the impacted school district are evidence that the business did not require the entirety of the property tax benefit to locate there and the school district is not necessarily making a detached decision on the benefits of the deal. See, for example, “Free Lunch,” by Patrick Michels, Texas Observer, March 14, 2016, accessed electronically at <https://www.texasobserver.org/chapter-313-texas-tax-incentive/>

accomplish the purposes and intent of the program. The Auditor will also ‘make recommendations relating to increasing the efficiency and effectiveness of the administration of this chapter,’ The State Auditor’s Office released the first of the required audits in November 2014 and the second in September 2015.⁹

It is notable that the September 2015 audit continues to suggest a need for greater program accountability and transparency – issues that were also raised in the November 2014 audit. Among the identified areas of concern are verification of information, ensuring that agreements meet all statutorily required provisions, the existence of multiple agreements for the same claimed jobs and records retention.

The State of Connecticut publishes regular reports related to its tax credit and abatement programs, most recently in 2014.¹⁰ Connecticut State statute provides that this report include a baseline assessment of the tax credit and abatement programs enacted to encourage business growth in the state, including the number of jobs associated with the incentives, and the annual revenue generated from the incentives through employment and other activities. For State property tax abatements (which are entirely for properties located within state enterprise zones), the annual amount has varied between \$14.5 and \$20.3 million a year from FY2003 to FY2013 – a total of \$169.8 million. The State also reports these abatements by NAICS Industry and Year.

The report uses two separate modeling approaches, one with methodology used in the previous 2010 report that covers years 2005 through 2014 and a second set of results with a new, more inclusive methodology that is only run for fiscal years 2012 through 2014.

The Connecticut study uses varying assumptions for induced investment – equal to 20, 50 and 100 percent of the value of the abatement. Not surprisingly, the results for lower levels of induced investment are less impressive. It is notable that, using the State’s older methodology, the results were negative in terms of net state revenues for all three levels of induced investment.

Under the later methodology, which took another look at various factors, the report demonstrated positive net new revenue for the State at each of the levels of induced investment. While a detailed examination of the differing methodologies is outside the scope of this analysis, it is an indication that determining economic impact (and impact on revenues) is far from an exact science. It should be noted that, based on the new methodology, the report recommended continuing the enterprise zone property tax abatement program.

⁹ “Selected Major Agreements Under the Texas Economic Development Act,” State Auditor’s Office, November 2014 and August 2015.

¹⁰ “An Assessment of Connecticut’s Tax Credit and Abatement Programs,” Connecticut Department of Community and Economic Development, September 2014.

Fiscal Impact

Fiscal Impact

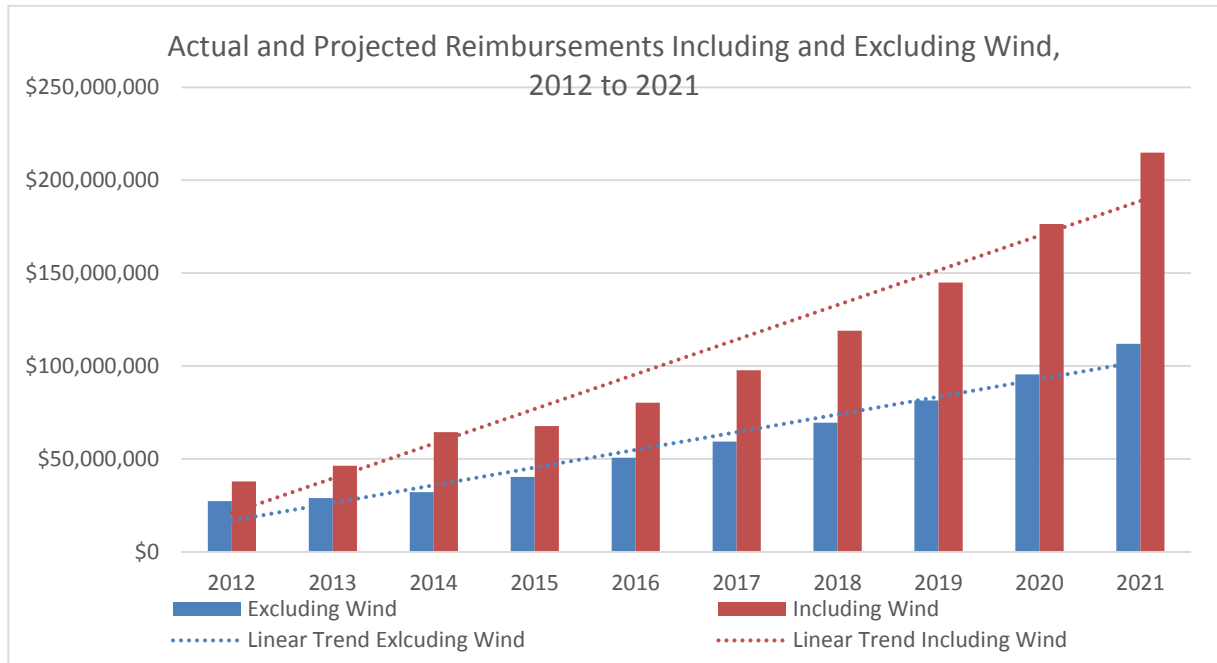
As noted in the program background discussion, payments associated with this incentive have increased sharply since the end of the Great Recession in FY2010. The following table details the fiscal impact by fiscal year:

Fiscal Year	Reimbursements
1987	\$143,257
1988	\$2,346,018
1989	\$3,671,120
1990	\$5,564,981
1991	\$9,573,063
1992	\$12,589,691
1993	\$13,725,074
1994	\$13,555,765
1995	\$13,974,501
1996	\$13,874,217
1997	\$12,764,587
1998	\$14,936,129
1999	\$15,065,099
2000	\$15,265,381
2001	\$18,978,365
2002	\$20,572,439
2003	\$41,306,390
2004	\$48,530,995
2005	\$52,724,671
2006	\$48,192,459
2007	\$53,294,176
2008	\$44,825,245
2009	\$40,306,068
2010	\$36,145,243
2011	\$33,482,080
2012	\$37,828,753
2013	\$46,342,441
2014	\$64,356,276
2015	\$67,619,201
2016	\$80,234,967

The incentive program experienced relatively stable levels of reimbursement through the end of the recession in FY2001. It then picked up sharply in FY2002 through FY2004, and then leveled off and declined during the recession from FY2008 through FY2010. As also noted, wind facilities have, as a cohort, been a major beneficiary of program exemptions, comprising approximately 38 percent of the amount reimbursed by the State in FY2016. These reimbursements took on a more prominent role among the five categories in FY2014 through FY2016.

The program has been modified by the Legislature, and, effective January 1, 2017, facilities engaged in electric power generation by means of wind will no longer qualify for the exemption. This will likely have a significant effect on the overall program fiscal impact.

To help explain this, the following chart details the projected increase in program exemptions (and, thus, state reimbursement) for the next five years using historic growth rates (the red bar) as well as with removing wind (the blue bar). When wind is removed from the data from recent years (and thus projected growth rates), the program's trajectory flattens somewhat:



Even with a major reimbursement driver removed from the program, there is prior evidence that the program has surpassed expectations in terms of the portion of state revenues that must be dedicated to it. At program inception, an Ad Valorem Reimbursement Fund was established to reimburse counties for their lost property tax revenue. The fund was supported by a dedicated revenue stream of one percent of net state personal and corporate income tax collections. While this revenue stream was sufficient to support the program reimbursements in its early years, the Fund had insufficient revenues to pay all its obligations in 2003 and has not covered the full cost of the exemptions in any year since.¹¹

As it relates to fiscal impacts, there are always concerns where key aspects of a program are administered by local governments but the funding responsibility is borne entirely by the State. Given that the tax liability (local ad valorem taxes) is determined and otherwise collected at the local level, it is hard to devise a workable approach that would not have significant local involvement. It is an issue that

¹¹ It should be noted that the Legislature has consolidated some other county payments into this fund (Double Homestead and Buffer Strip ad valorem exemptions), which make up approximately 2.5 percent of the total funds paid to date; the shortfall in the fund exceeds the amount of reimbursement for these other county disbursements.

can lead to differing levels of motivation related to the shared responsibilities for program administration.¹²

As with the production tax credit for zero emission (largely wind) facilities, there is significant benefit that will accrue to local governments related to increased property value from the capital investments associated with projects that receive this benefit. That benefit, depending on local decisions related to budgets and levies, may only redistribute the property tax burden rather than actually increase local revenue. Those decisions generally fall outside of the discussion of state policy, at least related to this evaluation.

It has been suggested that this additional assessed value will increase property revenue for local schools – and, based on the way that state school funding is allocated among school districts, may also benefit school districts that do not have wind facilities within their district. This may well be the case, but it does not reduce the size of the State’s appropriation to school aid – as with local property taxes, it may simply change how those state dollars are allocated among school districts. As a result, it is an issue with local rather than state budget impact.

One of the requirements of HB2182 is that each evaluation should determine “whether adequate protections are in place to ensure the fiscal impact of the incentive does not increase substantially beyond the state’s expectations in future years.” From the project team’s perspective, the modification of the program to eliminate eligibility for facilities engaged in electric power generation by means of wind was a necessary and appropriate step to help ensure that the fiscal impact does not exceed the State’s expectations in future years.

As noted in the chart above, with wind removed from the levels of reimbursement from recent years, the growth trajectory for the program appears manageable, at least in the foreseeable future. That said, in general, some program restrictions on levels of reimbursement (such as a dollar or state per capita or percent of general fund budget reimbursement cap) would provide even greater assurance of reliable levels of future reimbursement. It is also worth considering revisions to the qualifying criteria. The necessary levels of capital investment and change in payroll have remained unchanged for many years; the value to the state of these levels of capital and payroll investment have likely eroded at the same time that the reimbursement levels (associated with local property taxes) have grown. While useful considerations from a programmatic perspective, these types of restrictions are probably not necessary from a fiscal perspective at current levels of program use and reimbursement.

¹² In this respect, it is similar to the issues raised by the Auditor of State reports for the State of Texas’ Chapter 313 program, which also relies on local administration for a state-funded incentive.

Economic Impact

Economic Impact of Methodology

Economists use a number of statistics to describe regional economic activity. Four common measures are “Output” which describes total economic activity and is generally equivalent to a firm’s gross sales; “Value Added” which equals gross output of an industry or a sector less its intermediate inputs; “Labor Income” which corresponds to wages and benefits; and “Employment” which refers to jobs that have been created in the local economy.

In an input-output analysis of new economic activity, it is useful to distinguish three types of expenditure effects: direct, indirect, and induced.

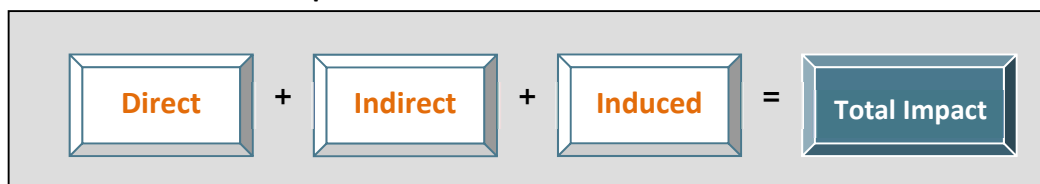
Direct effects are production changes associated with the immediate effects or final demand changes. The payment made by an out-of-town visitor to a hotel operator or the taxi fare paid for transportation while in town are examples of direct effects.

Indirect effects are production changes in backward-linked industries caused by the changing input needs of directly affected industries – typically, additional purchases to produce additional output. Satisfying the demand for an overnight stay will require the hotel operator to purchase additional cleaning supplies and services. The taxi driver will have to replace the gasoline consumed during the trip from the airport. These downstream purchases affect the economic output of other local merchants.

Induced effects are the changes in regional household spending patterns caused by changes in household income generated from the direct and indirect effects. Both the hotel operator and taxi driver experience increased income from the visitor’s stay, as do the cleaning supplies outlet and the gas station proprietor. Induced effects capture the way in which increased income is spent in the local economy.

A multiplier reflects the interaction between different sectors of the economy. An output multiplier of 1.4, for example, means that for every \$1,000 injected into the economy, all other sectors produce an additional \$400 in output. The larger the multiplier, the greater the impact will be in the regional economy.

The Flow of Economic Impacts



For this analysis, the project team used the IMPLAN online economic impact model with the dataset for the State of Oklahoma (2014 Model).

State of Oklahoma Tax Revenue Estimate Methodology

To provide an “order of magnitude” estimate for state tax revenue attributable to the incentive being evaluated, the project team focused on the ratio of state government tax collections to Oklahoma Gross Domestic Product (GDP). Two datasets were used to derive the ratio: 1) U.S. Department of Commerce

Bureau of Economic Analysis GDP estimates by state;¹³ and 2) the Oklahoma Tax Commission's *Annual Report of the Oklahoma Tax Commission* reports.¹⁴ Over the past ten years, the state tax revenue as a percent of state GDP was 5.5 percent.

State of Oklahoma Tax Revenue as a Percent of State GDP

Year	Oklahoma Tax Revenue*	Oklahoma GDP	Ratio
2005-06	\$8,435,214,025	\$136,804,000,000	6.2%
2006-07	\$8,685,842,682	\$144,171,000,000	6.0%
2007-08	\$9,008,981,280	\$155,015,000,000	5.8%
2008-09	\$8,783,165,581	\$143,380,000,000	6.1%
2009-10	\$7,774,910,000	\$151,318,000,000	5.1%
2010-11	\$8,367,871,162	\$165,278,000,000	5.1%
2011-12	\$8,998,362,975	\$173,911,000,000	5.2%
2012-13	\$9,175,334,979	\$182,447,000,000	5.0%
2013-14	\$9,550,183,790	\$190,171,000,000	5.0%
2014-15	\$9,778,654,182	\$180,425,000,000	5.4%
Average	\$8,855,852,065	\$162,292,000,000	5.5%

Source: U.S. Department of Commerce Bureau of Economic Analysis and Oklahoma Tax Commission

* Gross collections from state-levied taxes, licenses and fees, exclusive of city/county sales and use taxes and county lodging taxes

The value added of an industry, also referred to as gross domestic product (GDP)-by-industry, is the contribution of a private industry or government sector to overall GDP. The components of value added consist of compensation of employees, taxes on production and imports less subsidies, and gross operating surplus. Changes in value added components such as employee compensation have a direct impact on taxes such as income and sales tax. Other tax revenues such as alcoholic beverage and cigarette taxes are also positively correlated to changes in income.

Because of the highly correlated relationship between changes in the GDP by industry and most taxes collected by the state, the ratio of government tax collections to Oklahoma GDP forms the evaluation basis of the fiscal implications of different incentive programs offered by the State. The broader the basis of taxation (i.e., income and sales taxes) the stronger the correlation; with certain taxes on specific activity, such as the gross production (severance) tax, there may be some variation in the ratio year-to-year, although these fluctuations tend to smooth out over a period of several years. This ratio approach is somewhat standard practice, and is consistent with what IMPLAN and other economic modeling software programs use to estimate changes in tax revenue.

¹³ <http://www.bea.gov/regional/>

¹⁴ https://www.ok.gov/tax/Forms_&_Publications/Publications/Annual_Reports/index.html

To estimate State of Oklahoma tax revenue generated in a given year, TXP multiplied the total value added figure produced by the IMPLAN model by the corresponding annual ratio (about 5.5%). For example, if the total value added was \$1.0 million, then the estimated State of Oklahoma tax revenue was \$55,000 (\$1.0 million x 5.5%).

Data Collection, Model Inputs, and Other Issues

The project team performed the following steps to derive the economic and tax revenue impact:

1. The project team collected existing data and studies from State of Oklahoma agencies including the Oklahoma Tax Commission and Oklahoma Department of Commerce.
2. The annual tax incentive data provided by the Oklahoma Tax Commission was separated by the following industry sectors:
 - a. Manufacturing
 - b. Data Centers
 - c. Distribution Centers
 - d. Wind Power
3. There was not sufficient detail to determine how much of the spending on real property and personal property was new (ex. existing structure versus new structure) or was purchased from an Oklahoma vendor (ex. was the machinery purchased by applicant made in Oklahoma). Therefore, the impact of constructing the facility and purchasing equipment was excluded from the analysis.
4. The wind power projects were excluded from the analysis because no payroll data was reported in the Oklahoma Tax Commission dataset. In addition, the wind farm impact assessment can be found in the zero emission tax credit assessment.
5. The project team used the *EY 2016 2016 US Investment Monitor*¹⁵ report to convert capital investment (specifically personal property) to direct jobs by industry. This calculation was done because the Oklahoma Tax Commission dataset does not provide information on net new output or net new jobs. Therefore, it was necessary to use capital investment to estimate annual new jobs.

Estimated Direct New Jobs by Industry by Year Company Entered Program

Industry Type	2011	2012	2013	2014	2015
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¹⁵ [http://www.ey.com/Publication/vwLUAssets/ey-2016-us-investment-monitor/\\$FILE/ey-2016-us-investment-monitor.pdf](http://www.ey.com/Publication/vwLUAssets/ey-2016-us-investment-monitor/$FILE/ey-2016-us-investment-monitor.pdf)

Computer	24	235	105	311	411
Distribution	25	162	40	69	31
Large Manufacturing	688	440	468	513	459
Traditional Manufacturing	325	427	529	433	940
Wind Electric Power Generation	0	0	0	0	0
Total	1,062	1,264	1,142	1,325	1,842

6. Because detailed NACIS code data was not available for manufacturing companies, the project team used a general manufacturing sector that reflected the midpoint of IMPLAN multipliers.
7. The following IMPLAN sectors were used to model the impact:
 - a. Manufacturing - 394 All other miscellaneous manufacturing
 - b. Data Centers - 432 Internet publishing and broadcasting and web search portals
 - c. Distribution Centers - 416 Warehousing and storage
8. The project team calculated the annual economic impact by the year companies entered the program. For example, the 2013 economic impact reflects companies claiming the credit for the first time in 2013 (not all companies receiving the credit in 2013).
9. The project team did not produce a total annual economic impact by year for all qualifying firms. This decision allows the reviewer to assess and analyze the program by year (ex. number of companies by industry) rather than trying to disaggregate a five year figure.
10. The total economic and tax revenue impact of the program in a year would be the sum of companies in the 1st, 2nd, 3rd, 4th, and 5th (final) year of the program.
11. Based on a review of the datasets, companies do leave the program. Typically, the year 1 impact represents the largest economic and tax revenue impact.

Annual Economic Impact of the Ad Valorem Tax Exemption by Year Companies Entered Program (not all qualifying companies)*

Year		Output	Value Added	Labor Income	Employment	Estimated OK Tax Revenue
2011	Direct Effect	\$189,481,559	\$54,431,214	\$51,541,538	1,062	
	Indirect Effect	\$189,481,559	\$35,812,632	\$23,309,853	439	
	Induced Effect	\$56,249,563	\$30,704,756	\$17,382,134	425	
	Total Effect	\$314,761,520	\$120,948,602	\$92,233,525	1,927	\$6,214,492
2012	Direct Effect	\$305,818,829	\$79,086,483	\$68,584,783	1,264	
	Indirect Effect	\$150,692,571	\$80,734,826	\$52,775,481	1,072	
	Induced Effect	\$91,127,383	\$49,744,216	\$28,160,357	689	
	Total Effect	\$547,638,783	\$209,565,524	\$149,520,621	3,025	\$10,610,107
2013	Direct Effect	\$235,243,437	\$62,687,049	\$58,068,064	1,142	
	Indirect Effect	\$100,665,811	\$53,142,527	\$34,792,111	683	
	Induced Effect	\$69,752,983	\$38,076,163	\$21,555,078	527	
	Total Effect	\$405,662,231	\$153,905,739	\$114,415,253	2,353	\$7,963,267
2014	Direct Effect	\$339,576,887	\$81,114,201	\$72,883,829	1,325	
	Indirect Effect	\$172,707,037	\$92,588,656	\$60,959,231	1,238	
	Induced Effect	\$100,482,397	\$54,851,104	\$31,051,350	760	
	Total Effect	\$612,766,321	\$228,553,962	\$164,894,411	3,323	\$11,494,073
2015	Direct Effect	\$458,067,997	\$108,435,729	\$99,459,190	1,842	
	Indirect Effect	\$228,690,605	\$122,326,857	\$80,678,259	1,630	
	Induced Effect	\$135,242,776	\$73,825,969	\$41,793,078	1,023	
	Total Effect	\$822,001,378	\$304,588,555	\$221,930,526	4,494	\$15,296,111

Source: TXP, Inc.

* The project team calculated the annual economic impact by the year companies entered the program. For example, the 2013 economic impact reflects companies claiming the credit for the first time in 2013 (not all companies receiving the credit in 2013).

Technical and Administrative Issues

There are key factors that make administration of this program more complicated than most others. First, this program is required by the Oklahoma Constitution; as a result, the legislature is more limited in how it can (or cannot) modify the program. Without changing the Constitution (which is a more laborious and time-consuming process than changing state statute), there will always be a requirement that 'a qualifying manufacturing concern shall be exempt' from property tax levies on new, expanded or acquired manufacturing facilities for five years. Some of the key terms, such as 'a qualifying manufacturing concern' are also spelled out in the Constitution.

The Constitution provides two primary areas of legislative direction over the program:

1. The Legislature is to define the term 'manufacturing facility' 'in order to promote full employment of labor resources within the state;'
2. The Legislature is to enact laws to carry out the provisions of the exemption and to provide for reimbursement for local governments for revenues lost as result of the exemption

Thus, it is clear that, as long as the Constitution exists in its current form, this exemption will exist – and the State will be responsible for reimbursing local governments for lost revenue from the exemption. From the perspective of state government, this complicates the working relationship between state and local government for the program, as local governments have no real financial responsibility related to the program.

As it relates to the program administration, these are split into the following categories:

- **Application and Eligibility.** The program application has been developed and is maintained by the Oklahoma Tax Commission. It is notable, however, that the completed application must be filed by March 15 of each year with the County Assessor. The form requires information related to the program applicant to determine overall program eligibility. Among the information that must be provided is:
 - Facility physical location
 - Applicable NAICS codes and materials used
 - Employee basic health insurance carrier
 - Property owned at the facility and value claimed as a qualifying investment
 - Payroll at the facility for the year prior to the exemption and estimated for all five years of the exemption
 - Appraisal of personal property eligible for the five-year exemption (replacement cost less normal depreciation)¹⁹

¹⁹ It should be noted that both tangible and intangible personal property can be used to reach the required initial capital investment of \$250,000, but intangible personal property (which is not taxable in Oklahoma beginning January 1, 2013) may not be calculated for purposes of claiming the amount of the ad valorem exemption.

In turn, each County Assessor must file all applications to the Tax Commission by June 15. The County Assessor is responsible for basic determination of the validity of the application (related to the same validation done for the Homestead Exemption). Incomplete applications or applications filed after June 15th are null and void.

While the application seeks payroll information for each year of the exemption, that information must be updated and/or re-filed on a yearly basis. In that respect, the out-year payroll information is not critical to the approval of the application. In that case, it may well be that applicants are not spending a lot of time ensuring that these projections are accurate; if this is the case, it reduces the value of these projections for State estimates of future fiscal impact.

- **Administration of the Exemption.** The Tax Commission is responsible for prescribing forms and promulgating rules for the program. It also has the responsibility for verifying payroll information by using reports from the Oklahoma Employment Security Commission.
- **Program Reimbursement.** Based on claims forwarded by the County Assessors and the eligibility determination done by the Tax Commission, the claims for reimbursement by County are approved and payments made to the eligible local governments.
- **Determining Ongoing Eligibility.** The eligibility for the program is to be established by annually filing an affidavit with the Commission stating that the facility qualifies and providing necessary information (such as payroll information).
- **Program Reporting.** The program provides an annual report that includes data on historical and actual reimbursements by type of property and by county. The report also includes a listing of all approved reimbursements by county and by company, including the amount and year of the exemption.

While there is significant data available for the program, there are also parts of the data that cannot at present be provided because of State confidentiality laws, and they limit the analysis (and thus the usefulness) of the data. For example, the Tax Commission is unable to provide information about the employment and salary data submitted by companies or used in the approval process; this, of course, limits the ability to determine the types and quality of jobs that allow the company to qualify for the exemption. This also limits the ability to determine the extent to which other programs may be having an impact on the same types of jobs.

Second, there is limited availability related to the types of capital investments that qualify for the exemption. Again, this limits the ability to understand what the State is incenting in terms of investment. To use an obvious example, facilities that use wind to generate electricity are known to have little associated employment (and, in fact, that requirement is waived for this program), it is not clear how other forms of capital investment may impact on other direct, indirect and induced economic activity. Finally, the program offers no opportunity to 'clawback' reimbursements if claimed payroll levels are not met in future years – which makes the resulting future year data not particularly useful.

Outcomes

Introduction

The Ad Valorem Tax Exemption for Manufacturers program is one of the larger and longstanding incentives offered by the State. It has a (relatively) clear focus on manufacturing, at least within certain segments and eligibility requirements that focus on increases in payroll with some ‘quality jobs’ requirements (health care benefits, average wage requirements) and capital investment as well. As a result, the outcomes will focus on how the program does on these metrics, as also developed within the Commission’s criteria for evaluation.

At the same time, some of the specificity indicated within the Commission’s criteria did not lend themselves to this analysis; because there are so many separate NAICS codes that are eligible (and have received exemptions), and the eligibility criteria differ so much by types of facilities and counties, it is simply not possible within the scope of this project to do the depth of analysis contemplated by some of the criteria. However, there is data available to review key metrics and Oklahoma’s performance versus neighboring states with similar programs and the nation as a whole.

Cost Per Job

A common metric used with incentive programs is to calculate the ‘cost per job’ associated with the incentive, in this case, the property tax exemption. This provides some sense of the size of the ‘job investment’ and how long it might take to ‘pay it off.’

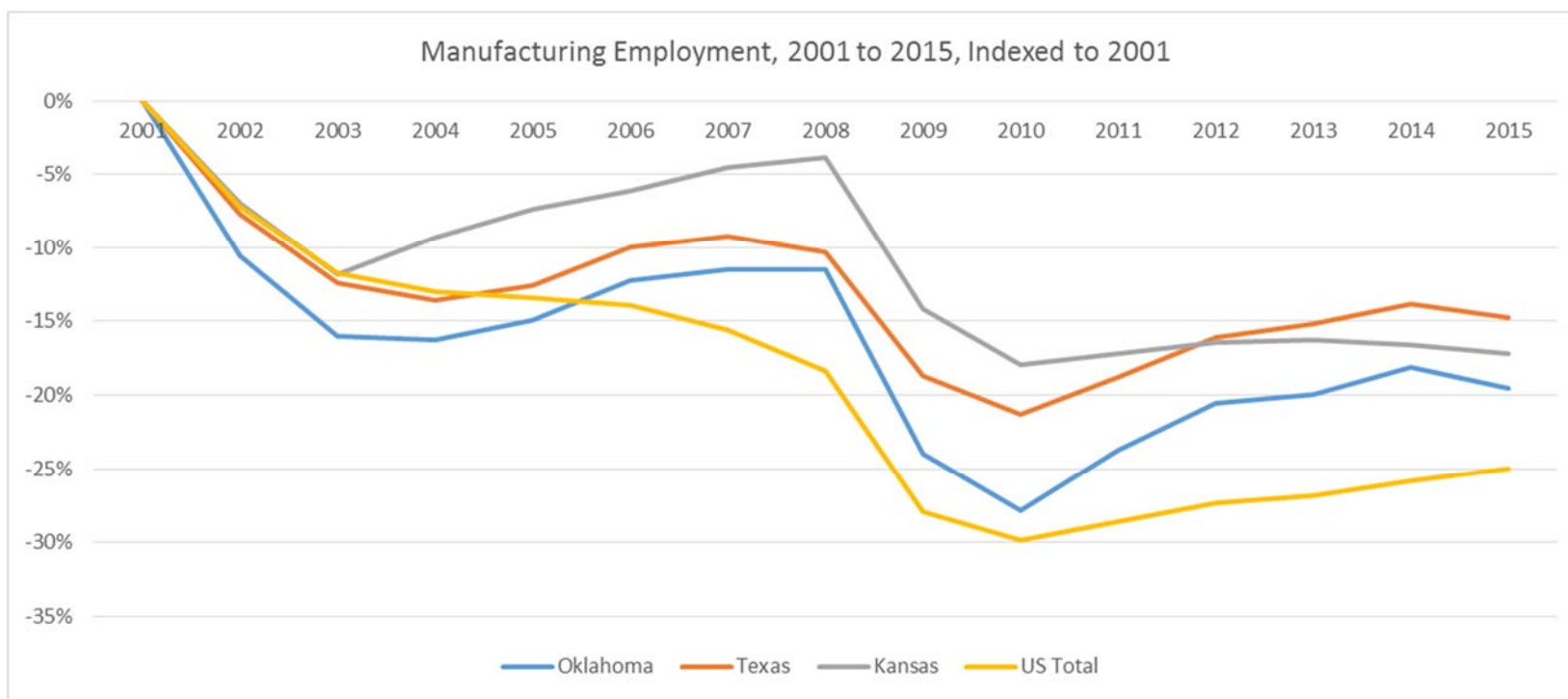
Based on the claimed jobs and reimbursement levels, the average cost per job has varied over the past five years, with no discernable trend. While the cost is certainly not insignificant, it also does not approach the levels of some incentive programs under review, nor does it reach the levels that are encountered in some other states’ reviews.

Year	Reimbursement	Jobs	Cost per Job
2011	\$37,828,753	1,927	\$19,631
2012	\$46,342,441	3,025	\$15,320
2013	\$64,356,276	2,353	\$27,351
2014	\$67,619,201	3,323	\$20,349
2015	\$80,234,967	4,494	\$17,854

By contrast, the example provided in the benchmarking of the similar program in the State of Texas is worth noting. That study found that the program cost per job in the period it studied was \$306,086 – more than ten times the cost per job to Oklahoma in the highest cost per job year included in this table.

Manufacturing Employment

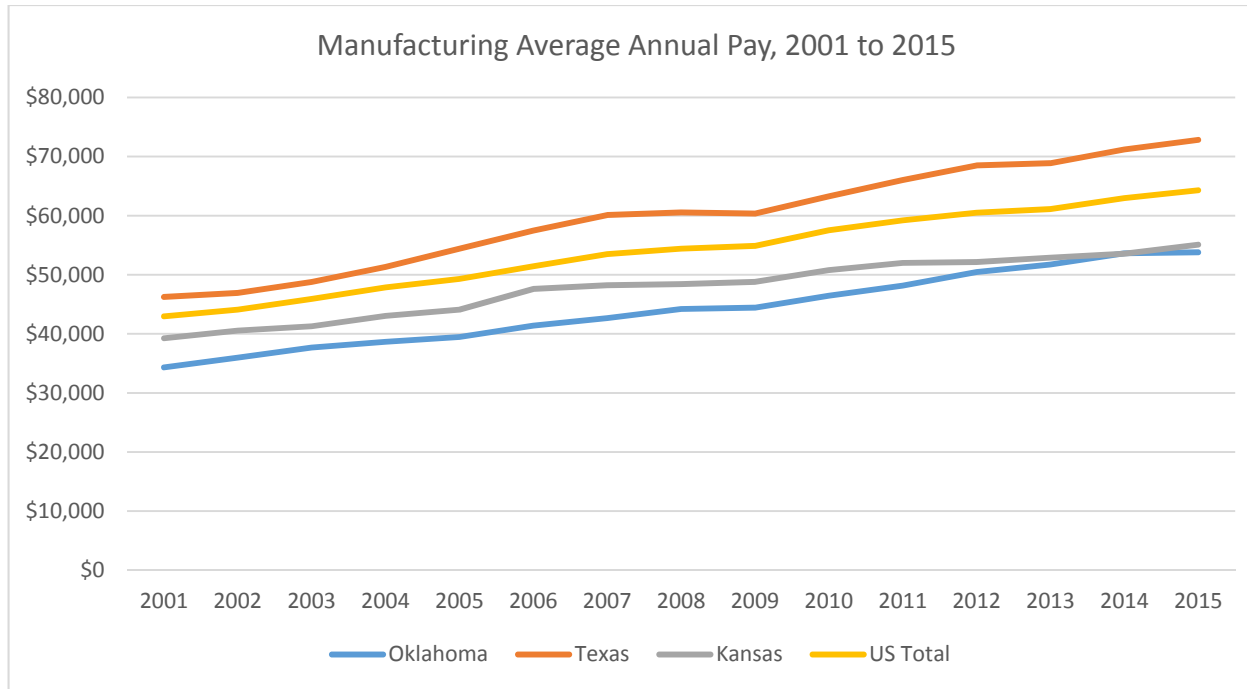
As previously noted, nationally, manufacturing employment has been falling. The following graph suggests that Oklahoma has done better than the national average in this area although not as well as neighboring states with similar incentive programs for manufacturing industries:



For this graph, the y-axis values represent the percent change in total manufacturing wages in that year compared to 2001 levels. For example, the 2015 value represents the percent change from 2001 to 2015.

Manufacturing Average Pay

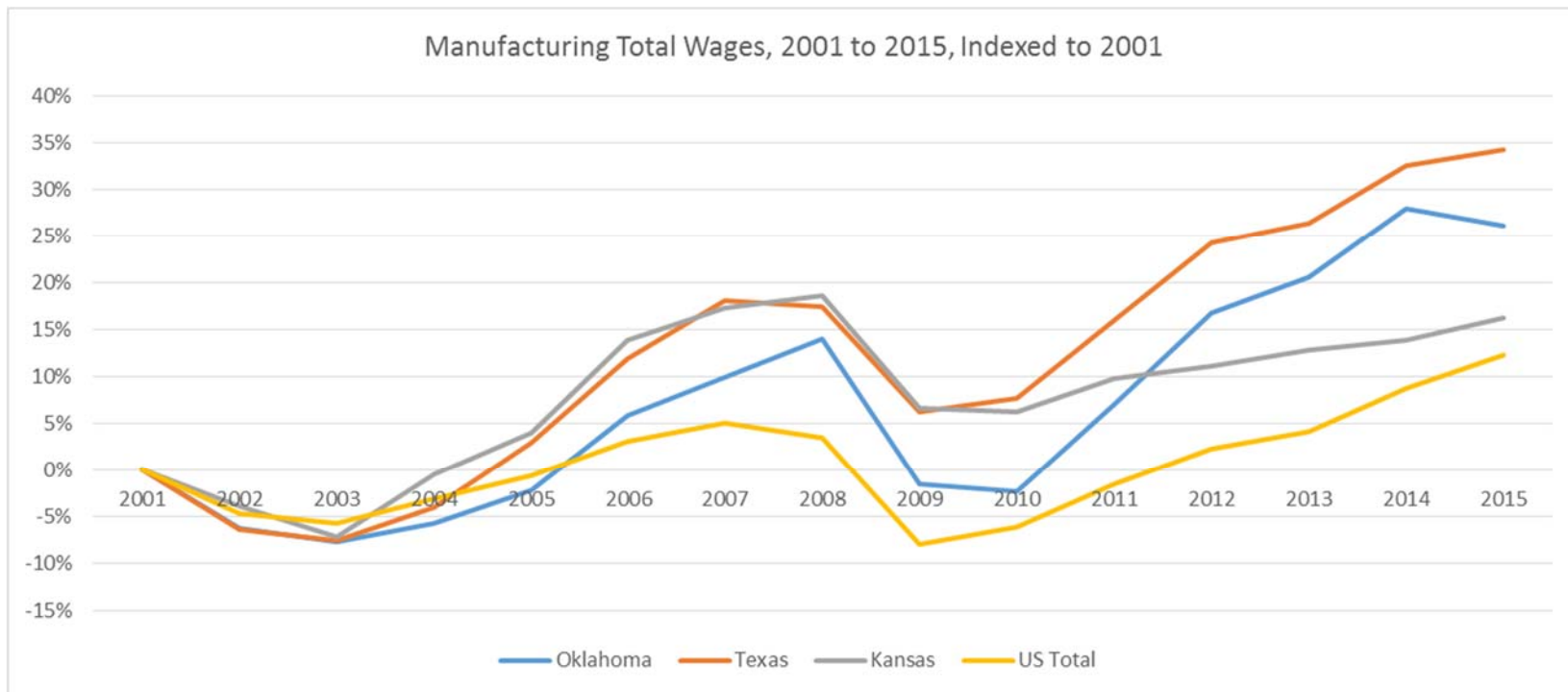
As it relates to manufacturing average pay, Oklahoma has done somewhat better with its comparison states:



	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Oklahoma	\$34,329	\$35,973	\$37,680	\$38,650	\$39,462	\$41,383	\$42,659	\$44,199	\$44,427	\$46,449	\$48,163	\$50,453	\$51,724	\$53,621	\$53,792
Texas	\$46,241	\$46,898	\$48,771	\$51,328	\$54,402	\$57,470	\$60,109	\$60,543	\$60,351	\$63,266	\$66,032	\$68,491	\$68,868	\$71,189	\$72,829
Kansas	\$39,238	\$40,539	\$41,279	\$43,030	\$44,087	\$47,577	\$48,213	\$48,396	\$48,770	\$50,791	\$52,010	\$52,141	\$52,888	\$53,558	\$55,087
US Total	\$42,969	\$44,097	\$45,916	\$47,861	\$49,287	\$51,427	\$53,489	\$54,400	\$54,873	\$57,526	\$59,210	\$60,496	\$61,102	\$62,976	\$64,305

Manufacturing Total Wages

In this category, Oklahoma is also showing better progress than the nation as a whole:



For this graph, the y-axis values represent the percent change in total manufacturing wages in that year compared to 2001 levels. For example, the 2015 value represents the percent change from 2001 to 2015.

Of course, averages are an imperfect way to judge the direct impacts of this program. The data presented here and in the annual report on actual use suggest that it has a widespread use around the State. The criteria generally align with incentive best practices in terms of areas of focus.

There are also, without a doubt, important contributions from the program to local economies – which are, after all, what make up the State economy as a whole. Besides supporting key job generating businesses, it also (especially as it relates to requirements for capital investment) creates a larger property tax base for local governments.

One of the challenges for a statewide program evaluation is how to weigh those local benefits when it is statewide tax dollars that support the program. As already noted, the significant capital investment associated with these manufacturing facilities increases the overall assessed value of property within a taxing jurisdiction, and in some cases the change is substantial. This provides for a broader base upon which the property tax levy is applied. However, the benefits of that expanded property tax base are primarily local, and, depending on local decisions related to budgets and levies, it may only redistribute the property tax burden rather than actually increase local tax revenue. Those decisions generally fall outside of the discussion of state policy (and are mostly beyond the control of state policymakers), at least related to this evaluation.

It has been suggested that this additional assessed value will increase property revenue for local schools – and, based on the way that state school funding is allocated among school districts, may also benefit school districts that do not have similarly large facilities within their district. This may well be the case, but it does not reduce the size of the State's appropriation to school aid – as with local property taxes, it may simply change how those state dollars are allocated among school districts. As a result, it is an issue with local rather than State budget impact.

Cost Benefit Analysis

When comparing the costs to the benefits from a purely state quantitative perspective, the initial costs outweigh the benefits. One of the challenges for any analysis of this type is the fact that there are inevitably start-up costs that will take time to overcome – this is often the private sector issue that would prevent development without support, and it is the case for the public sector as well.

In the case of this incentive, one factor in its favor is the length of time of the incentive: five years is significantly shorter than some similar programs in other states (where the benefit may stretch for up to 10 years). The shorter the time of the incentive, the less risk (and investment) on the part of the State, and the quicker the opportunity to start recouping some of that investment in (it is hoped) corporate tax revenue. The shorter timeframe for the incentive also lessens time value of money issues. On the other hand, the fact that the State is providing the full value of the exemption should also be taken into consideration: often it is viewed as 'best practice' for local government to have some 'skin in the game' as it relates to incentives (of course, it is possible that local incentives will also be a part of an overall package).

The analysis conducted by the project team suggests that over a 10-year horizon, the average incentive related to this program will be neutral or a net benefit to the State, even without including other qualitative or local quantitative impacts.

Recommendation

Recommendations for the Commission: Retain

As previously noted, the Manufacturer's Tax Exemption is atypical, in that its existence is included in the State Constitution. As a result, it is far more difficult to alter or eliminate than programs enacted by the General Assembly and placed into state statute.

Manufacturer's exemptions are widely used around the country, for logical reasons. While the manufacturing sector as a whole has seen employment contractions, industry output is still strong, and it makes up nearly one-tenth of the Oklahoma gross state product. Wages in the manufacturing sector also tend to be higher than the statewide averages.

While the requirement that the State bear the full cost of the exemption is embedded in the Constitution – and thus unlikely to change, it is notable that some of the features of the program stack up well to other state comparisons. For example, the 5-year exemption is shorter than the more common 10-year period for the exemption. In this respect, the State benefits from a shorter time for the exemption and a quicker time to recover tax revenue based on new economic activity once the exemption ends.

The program also has specific requirements related to capital investment, additional payroll and health insurance benefits – as well as requiring wages to be above certain requirements. Each of these helps ensure the program is targeted at certain levels of investment/engagement in return for the incentive.

The program has also benefitted from the recent legislative change that will limit its use going forward for electric generating facilities using wind. These facilities were a significant component of recent exemptions, and their removal will flatten the trajectory for the program going forward. Based on that change, the project team believes that, at least for the next four-year period, the exemption should be manageable.

Within the broad framework and administration of the program, the following key elements (which were described in the Texas State Auditor's report) are worth noting:

- **A clear purpose of expected outcomes.** The Constitution indicates that it is to induce any manufacturing concern to locate or expand manufacturing facilities within any county of the State. The program use, jobs created and number of counties participating would suggest that it has accomplished these outcomes – the extent of which is a discussion from the cost benefit analysis.
- **Metrics for achieving the outcomes.** Eligibility metrics focus on payroll, benefits (health insurance) and capital investment. There is also some requirement that jobs generally be non-minimum wage jobs. There was some 'mixed message' related to payroll for electricity generating facilities using wind, but that exception will be eliminated going forward in 2017. There are, however, concerns about measuring some aspects of the program related to types of jobs and types of capital investment that make this harder to determine than in some other areas.

It is notable, however, that the metrics within the program have remained in place for many years. The requirements for capital investment or additional payroll may no longer represent the magnitude of investment that should be needed for a major state incentive program. On the other hand, indexing requirements can create less certainty about project requirements and substitute unusual metrics for what are currently readily understood (and remembered) hurdles. If changes are to be made, it would make sense to make those changes in major increments spaced well apart to maintain some sense of program requirements stability.

- **Timeframe for achieving the purpose.** As previously noted, the program has a shorter window for the property tax exemption than most. There is not, however, a specific ‘payback analysis’ required (in terms of jobs, economic activity or revenue gains).
- **Funding limits.** This is another area where the State Constitution does not contemplate a funding limit – it requires that the program be in place and that the State reimburse local governments for the foregone revenue. The one area where the Legislature can, to some extent, limit the scope of the program is in determining what is an eligible ‘manufacturing facility’ – although even here the Constitution provides guidance that the definition is ‘in order to promote full employment of labor resources within the State.’
- **Competitive and open award selection process.** The program is not a competitive award process; rather, those companies that meet the criteria receive the exemption.
- **Clawbacks.** There is a provision in statute that should companies fail to meet the eligibility requirements (such as around created payroll), they may be removed from the program and/or be responsible for paying back awarded exemptions. It is notable that, from year to year, there are companies that have received the exemption in earlier years (of the five year eligibility period) who do not receive the exemption for subsequent years. That said, companies that do not qualify for the program from year to year are not required to reimburse the State for the exemption they received in prior years. This is not the case in some state programs.
- **Transparency.** The program annual report provides the totals for the program by industry type, by county and, within each county, by company name, amount of the exemption and year (one through five) of the exemption.
- **Regular independent audits.** There have been prior studies conducted related to the program, including a 2006 study by the State Legislature’s Incentive Review Committee. There is an expectation that the Incentive Evaluation Commission will provide an opportunity to continuous review of this and other incentive programs.

Based on this discussion, the project team recommends that the program be retained. The project team also supports the Legislature’s decision to remove program eligibility going forward for facilities generating electricity from wind effective January 1, 2017.

The project team also recommends that the program be reconfigured to make it more useful for future evaluation. To do so, confidentiality requirements related to certain information should be waived by participating companies as it relates to the program evaluations conducted by the Incentive Evaluation Commission (of course, with appropriate non-disclosure agreements in place and with no otherwise confidential information subject to FOIA requests or other public disclosure). The project team would recommend that the data to be collected from applicants and available for evaluation include:

- NAICS Code – 4 to 6 digit
- Capital investment (real and BPP)
- Existing payroll
- Net new payroll
- Existing jobs
- Net new jobs

INCENTIVE EVALUATION COMMISSION COMMENTS FIVE YEAR AD VALOREM TAX EXEMPTION FOR MANUFACTURING

CYNTHIA ROGERS

- The overall competitiveness of a state depends not just on a single program, but rather on the mix of programs, taxes and expenditures, and locational factors. Accordingly, the overlap with other programs, such as quality jobs, makes it nearly impossible to speculate about the impact of this particular program on state competitiveness.
- The cost per job is not the same as the cost per new job added due to the program. It is likely that the incremental impact of the reimbursement was less than the number of total jobs which were incented leading to higher likely cost per job estimates.
- PFM's recommendations regarding how to reconfigure the program are worth considering. Consider a cap to secure state finances. Increase eligibility requirements and try to target industries with growth potential. Improve tracking to check for overlap with other programs.

State of Oklahoma Incentive Evaluation Commission Historic Rehabilitation Tax Credit Final Report



November 28, 2016

Prepared by



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At a Glance: Historic Rehabilitation Tax Credit

Statute: O.S. 68 Section 2357.41

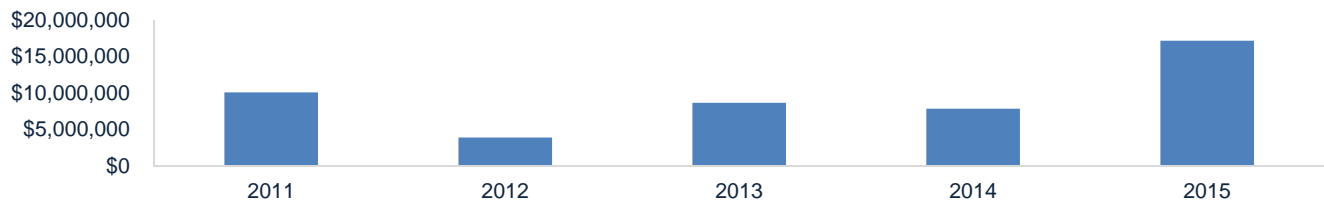
Program Goals

- Increase Historic Rehabilitation Activity

Fiscal Impact

	2011	2012	2013	2014	2015
Dollar Amount	\$10,091,775	\$3,918,729	\$8,666,174	\$7,847,800	\$17,162,851
Claimants	7	6	5	8	13

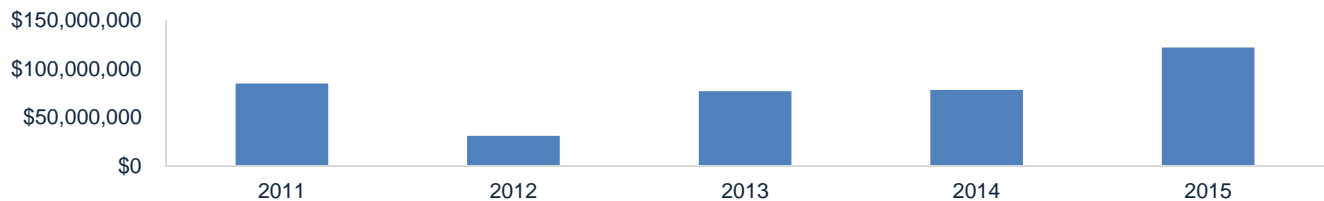
Dollar Amount of Tax Credits Claimed by Year



Economic Impact

	2011	2012	2013	2014	2015
Output	\$84,709,102	\$31,044,069	\$76,822,052	\$78,184,082	\$121,777,262
Labor Income	\$29,737,729	\$10,898,240	\$26,968,925	\$27,447,075	\$42,750,770
Employment	620	227	563	572	892
Total Tax Revenue	\$2,060,753	\$744,166	\$1,881,973	\$1,861,635	\$2,895,507

Economic Output by Year



Adequate Protections for Future Fiscal Impact?

- No. Without an annual cap in place, the cost burden on the State could grow beyond the point of desirability.

Effective Administration?

- Yes. The Oklahoma program is among the most efficient nationwide because it is directly tied to the federal program with not additional administrative burdens or costs. The policies and procedures in place are timely, transparent, and accountable.

Achieving its Goals?

- Yes. Since 2005, the year that the program was tied to the federal process, the average number of historical rehabilitation projects has quadrupled and total development investment has increased by 82 times. This level of growth far exceeds that of most other states.

Retain, Reconfigure, Repeal?

- The project team recommends that Oklahoma retain the program and adopt an annual cap to ensure some measure of future budget predictability.

Changes to Improve Future Evaluation?

- None

Executive Summary

More than 30 states have historic preservation incentives in place. The growth of these programs has been driven in part by interest in leveraging the Federal Historic Preservation Tax Credit, which allows developers to claim 20 percent income tax credits for the rehabilitation expenses incurred while restoring income-producing buildings that are listed on the National Register of Historic Places or certified by the National Parks Service.

Program Requirements, Eligibility, and Administration

In 1992, in the Local Development Act, the Oklahoma Legislature enacted a rehabilitation tax credit available to historic hotels and newspaper plants. In 2005, HB 3024 expanded the program to income-producing historic buildings, and allowed projects that qualify for the federal 20 percent credit to automatically qualify for the same amount of State tax credit without additional paperwork. The State tax credit mirrors the Federal Historic Preservation Tax Credit, and the program is administered by the State Historic Preservation Office (SHPO) in partnership with the National Park Service (NPS). Historic rehabilitation tax credits earned but not used may be carried forward for up to ten years. The credits are also transferrable, if not used, for up to five years after being earned.

Every state bordering Oklahoma has a historic rehabilitation tax credit program in place. Compared to this benchmark group, Oklahoma's credit amount of 20 percent is smaller than most. Oklahoma is also one of the few states to restrict the credit to income-producing structures, a choice that limits the Oklahoma's exposure to some of the program abuses and unintended loopholes that other states have struggled with, such as state-subsidized rehabilitation of luxury private residences.

Without an annual cap or a program cap in place, the cost burden on the State could continue to grow beyond the point of desirability. Other states, such as Missouri, have experienced growth in this program far beyond the initial predicted utilization levels. At present, more than half of all states have an annual cap in place.

Because Oklahoma's program is directly tied to the federal program with no additional administrative burdens or costs, it is among the most efficient nationwide. Each project is vetted and screened by SHPO and the NPS, and the credit is granted only after completion and certification of compliance with the U.S. Secretary of Interior Standards. The incremental burdens to the State above and beyond those involved in the administration of the federal tax credit program are minimal. The policies and procedures in place are timely, transparent, and accountable.

Program Impacts

The 2005 legislative changes – including both the expansion of eligibility and the alignment of administrative procedures with federal requirements – have led to a substantial increase in tax credit utilization. Since 2005 (the year of that the program was tied to the federal process), the average annual historic rehabilitation projects has quadrupled and the total development investment has increased 82 times, from just over \$1.0 million in 2005 to \$85.9 million in 2015. In FY2009, Oklahoma ranked 41st out of 47 states in the number of certified expenses; in FY2015, the state came in at 16th. The program has been exceptionally successful at increasing investment in historic rehabilitation in Oklahoma.

Though not specifically articulated as program goals in Oklahoma State statute, evidence indicates that that historic rehabilitation activities lead to additional economic development benefits at the local level, such as preserving and restoring historic landmarks, restoring vacant building to active and productive use, creating construction-related jobs and bringing long-term jobs to underutilized corridors and neighborhoods, and revitalizing older urban core areas. State program evaluations and academic research have demonstrated a significant and positive effect on property tax values, business attraction, population regrowth, and higher employment. Though not readily quantifiable, the impact on place-making, heritage, and local identity is generally recognized to be significant and of intangible value. As such, historic rehabilitation tax credits are proven tools that help to drive local revitalization and promote more cost effective infill development patterns.

On a statewide level, however, the aggregate benefits of the program are less readily quantifiable. The total effect on job growth is limited to fewer than 900 jobs per year, and the estimated impact on State revenues is less than \$3 million per year, only 17 percent of the cost incurred by the State. This finding is consistent with those reported by other program analyses, largely because new jobs created by the program are limited to temporary construction work. The long-term fiscal impacts are experienced at the local level, through growth in assessed value.

Recommendations

The project team recommends that Oklahoma adopt an annual cap to ensure some measure of future budget predictability. Further, in order to keep administration burdens to a minimum once a cap is in place, the team recommends that projects be accepted on a first-come-first-served basis in lieu of a supplementary assessment procedure.

Introduction

Overview

The Oklahoma Incentive Evaluation Commission (the Commission) was established in HB2182, which was enacted and became law in 2015. It requires the Commission to conduct evaluations of all qualified state incentives over a four-year timeframe. The law also provides that criteria specific to each incentive be used for the evaluation. The Historic Rehabilitation Tax Credit is one of the incentives reviewed in 2016 by the Commission with recommendations to the Governor and the State Legislature.

Introduction

More than 30 states have historic preservation incentives in place. The growth of these programs has been driven in part by interest in leveraging the Federal Historic Preservation Tax Credit, which allows developers to claim 20 percent income tax credits for the rehabilitation expenses incurred while restoring income-producing buildings that are listed on the National Register of Historic Places or certified by the National Parks Service.

In 1992, in the Local Development Act, the Oklahoma Legislature enacted a rehabilitation tax credit available to historic hotels and newspaper plants. In 2005, HB3024 expanded the program to income-producing historic buildings, and allowed projects that qualify for the federal 20 percent credit to automatically qualify for the same amount of State tax credit without additional paperwork.¹ The State tax credit mirrors the Federal Historic Preservation Tax Credit, and the program is administered by the State Historic Preservation Office (SHPO) in partnership with the National Park Service.

Historic rehabilitation tax credits earned but not used may be carried forward for up to ten years. The credits are also transferrable, if not used, for up to five years after being earned.

Criteria for Evaluation

A key factor in evaluating the effectiveness of incentive programs is to determine whether they are meeting the stated goals as established in state statute or legislation. In the case of this credit, the specific goals were not included in the legislation that established it. In other states, articulated goals have included preserving and restoring historic landmarks, restoring vacant building to active and productive use, creating construction-related jobs and bringing long-term jobs to underutilized corridors and neighborhoods, and revitalizing older urban core areas.

There are other criteria that may be used to evaluate this program. To assist in a determination of the effectiveness of the program, the Incentive Evaluation Commission has adopted the following criteria:

- Total amount of rehabilitation expenditures and number of qualified projects
- State tax credit as a percent of total rehabilitation improvement for qualified projects
- Change in assessed value for rehabilitation projects approved for credit.
- Percent of qualified structures on the national registry of historic places that receive assistance

¹ 68 O.S. Section 2357.41

- Economic impact related to tourism, sales tax generated, etc.
- Connection with other related business incentives
- Return on investment (economic impact versus financial impact)

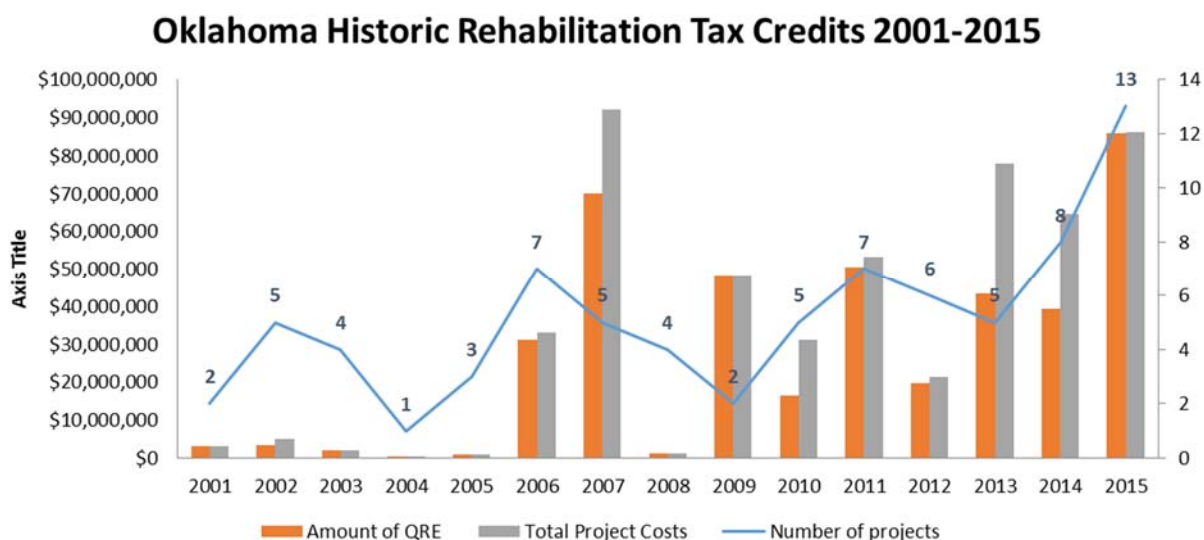
In the course of conducting this analysis, it became clear that local data availability constrained analysis of criteria 3, 5, and 6, though findings pertaining to these criteria produced by other academic research studies are reported in the benchmarking section below. In addition, it was determined that criterion 4 would not provide insight into the percentage of eligible buildings that have utilized the tax credit , as the National Registry of Historic Places is not the sole determination of eligibility.

Program Background and Benchmarking

Background

In 1992, the Oklahoma legislature enacted a rehabilitation tax credit available to historic hotels and newspaper plants in the Local Development Act. In 2005, House Bill 3024 expanded the program to income-producing historic buildings, creating a 20 percent income tax credit incentive for qualified rehabilitation of Oklahoma's certified historic buildings. Additionally, these 2005 amendments allowed projects that qualify for the federal 20 percent credit to automatically qualify for the same amount of state tax credit without additional paperwork.

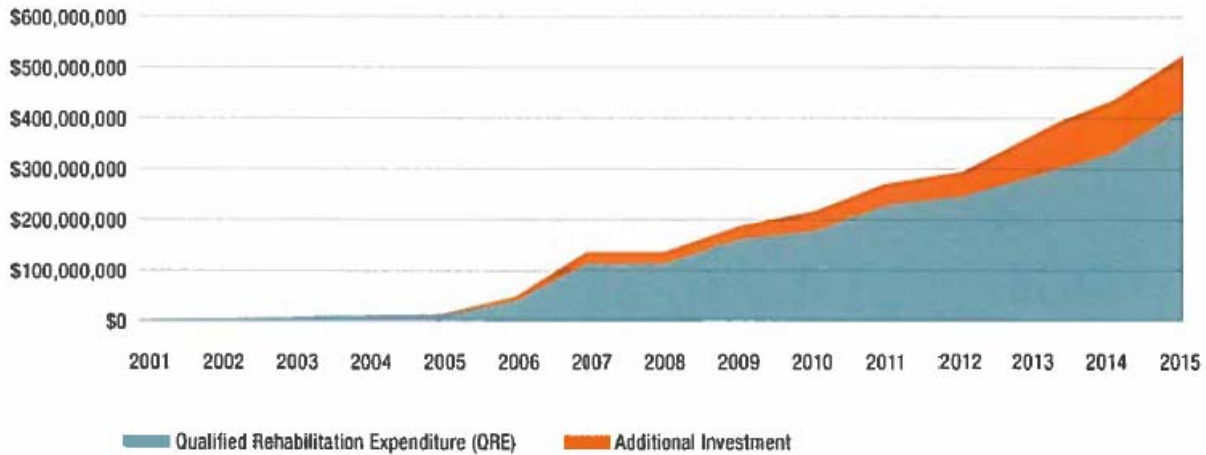
After these changes, the number of tax credit projects expanded significantly until 2008, when development projects of all kinds halted due to the recession. In 2010-2012, the legislature instituted a deferral of the tax credits, which allowed certified projects to move forward but not to claim credits until the deferral was lifted. In 2013, the first year of the reinstated tax credits, the number of completed projects more than doubled. As developers' access to credit has continued to improve and market rents are strengthening, the number of tax credits claimed has grown to \$15.4 million in 2015. There is no cap in place to limit future expenditure growth.



Source: State Historic Preservation Office, 2016

Since 2001, over 77 historic buildings have been rehabilitated using state historic tax credits, for a cumulative total of \$415 million in rehabilitation expenditures and total project investment reaching \$520 million.

Cumulative Investment in Tax Credit Project: FY2011 – FY2015

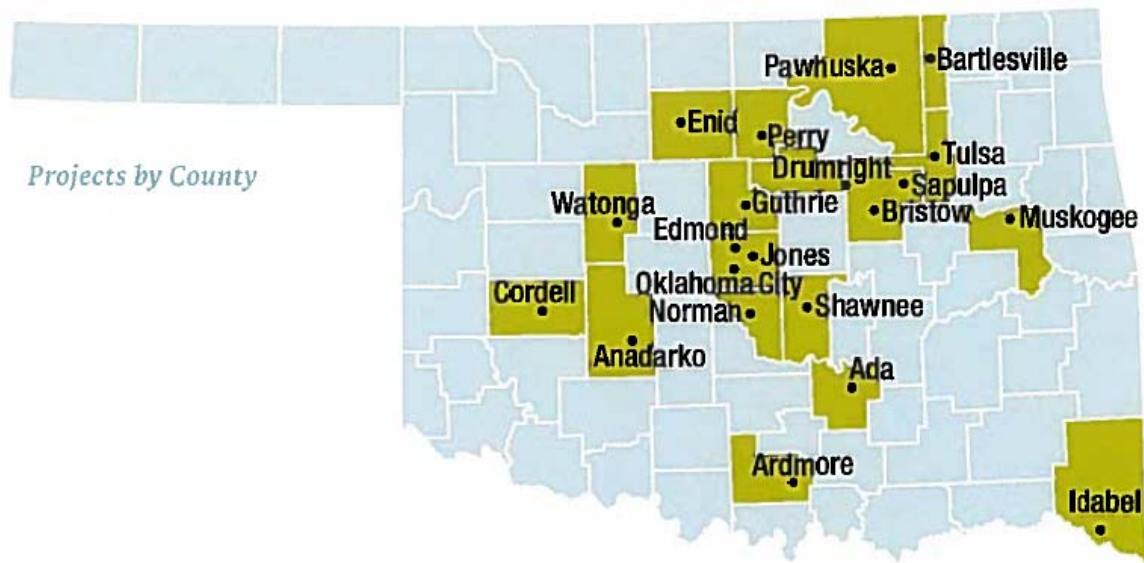


Source: Place Economics 2016

The State tax credit supports the redevelopment of buildings of all sizes and uses. While the average project investment was \$6.8 million, approximately 60 percent of tax credit monies invested to date have supported large projects in excess of \$20.0 million. Examples include the Tulsa Paper Company, Mayo Hotel, and Shawnee's Aldridge Hotel. Though only two percent of all tax credit monies have supported small projects under \$1.0 million, these projects represent 44 percent of all buildings that benefitted from the program. As a result, the program has supported both the redevelopment of market-leader projects that demonstrate the market viability of redevelopment in a particular area and are likely to generate spinoff activity, as well as a significant volume of smaller scale projects.

Approximately 70 percent of rehabilitation projects have been located in Oklahoma City and Tulsa, largely because market rate rents are sufficient to cover the rehabilitation investment, and these cities include the largest number of National Register-listed buildings. Because these projects are typically larger in scale, these two cities account for more than 90 percent of investment dollars (\$242.0 million to Oklahoma City and \$230.0 million to Tulsa). Muskogee, Oklahoma's 11th largest City, comes in third with \$11.0 million in total investment. Since 2001, cities in an additional 15 counties have benefitted from historic rehabilitation tax credit projects.

The following map details these locations across the state:



Source: *Place Economics 2016*

Benchmarking

Over half the states in the U.S. have tax credit programs that supplement federal historic preservation tax credits. In 2014, it was estimated that 48 percent of the completed projects that benefitted from the federal tax credit also received a state historic tax credit.² Every state bordering Oklahoma has a historic rehabilitation tax credit program in place. A review of these states provides insight into the different incentives regional developers weigh when pursuing projects.

Among the group of comparison states, differentiating program characteristics include the credit amount, credit caps, and eligibility that exceed federal limits.

Credit Amount: Oklahoma's credit amount of 20 percent of eligible expenses is low among the comparison group. Arkansas, Kansas, Missouri, and Texas each offer credits of 25 percent of eligible expenses. Colorado's credit is 20 to 30 percent. New Mexico offers up to 50 percent of eligible expenses, but this is limited to \$50,000, which indicates a focus on smaller projects. Looking beyond the region, Connecticut encourages the historic rehabilitation of affordable housing developments by offering a higher (30 percent) credit exclusively for this use.

Credit Caps: Oklahoma is one of 12 (out of 30) states that have chosen not to establish an overall annual program limit. While surrounding states may offer higher levels of subsidies to individual projects, the number of projects that can benefit from these incentives are often limited by a cap. Arkansas, for example has a limit of \$125,000 per project. New Mexico has a cap of the lower of 50

² National Park Services. 2015. Annual Tax Incentive Report. Available at: <https://www.nps.gov/tps/tax-incentives/taxdocs/tax-incentives-2015annual.pdf>

percent of eligible expenses and five years of tax liability. Maryland directly appropriates the aggregate amount of available credits.³

States with caps must decide whether to review applications on a first-come-first-served basis or institute a supplementary review process in order to determine which qualified applicants will receive the state credit. The State of Ohio, for example, conducts a cost-benefit analysis as part of the application process, using a 100-point scoring system measuring a project's economic impact, community benefit and return on investment to state and local governments. The analysis uses estimates of the future, post-rehabilitation property value, anticipated construction and permanent jobs and anticipated economic activity at the project site to estimate future tax revenue to both state and local governments. This additional step creates additional administrative burdens on both the applicant and the state, but it does result in greater available data to document economic impacts.

Carry Forward. To avoid budget challenges, states not only need to know how much incentives will cost over the long-term but also need to be able anticipate how much the programs will cost from year to year. States are more likely to face difficulties predicting the timing if companies are allowed to carry forward unused credits to future years. The Pew Charitable Trust has conducted extensive research on the use of incentives and has found that the longer a business can carry forward an incentive, the harder it generally will be for state officials to predict the timing of the costs to the state. Oklahoma's historic preservation program allows 10-year carryforwards, which is comparable to many other states—though some states allow carryforwards of only five (or fewer) years.

Transferability: All states adjacent to Oklahoma allow for the transferability of tax credits.

Eligibility: Texas is the only bordering state to limit the credit to only income-producing structures. Other states allow private residences to access the tax credit. However, as will be discussed later, an audit of Missouri's state tax credit program found that greater care should be used in extending the program to owner-occupied structures to ensure that the tax credits make a tangible difference to project feasibility.

Given the popularity of the historic rehabilitation tax credit program, several academic studies and programmatic analysis have examined their effectiveness. Some of the overarching findings are summarized below.

Several research studies conducted at the national and state level have found that historic preservation has a positive impact on property values.⁴ The Center for Urban Policy Research at Rutgers University

³ Stennis Institute of Government. The Economic and Fiscal Effects of the Mississippi Historic Preservation Tax Incentives Program: An Overview for Decision-Makers. Mississippi State University. Prepared at the Request of Philip Gunn, Speaker of the House. Available at: <http://www.preservationnation.org/take-action/advocacy-center/additional-resources/The-Economic-and-Fiscal-Effects-of-the-Mississippi-Historic-Preservation-Tax-Incentives-Program.pdf>

⁴ Zahirovic-Herbert, Velma and Chatterjee, Swarn. "Historic Preservation and Residential Property Values: Evidence from Quantile Regression." *Urban Studies* 49.2 (2012): 369-382; Clark, D.E. and Herrin, W.E. "Historical preservation and home sale prices: evidence from the Sacramento housing market." *Journal of Real Estate Finance and Economics* 27 (1997): 29-48.

has found that historic designation is associated with average property value increases ranging between 5 to 20 percent of the total property value.⁵ Based on a review of county auditor and treasurer records, Cleveland State University (CSU) found that the property values of completed historic preservation tax credit projects rose more than 250.0 percent, and parcels adjacent to projects increased an average of 12.1 percent.⁶ These increases in property values lead to additional local tax revenue to help local communities grow and provide services. The CSU study found that taxes collected from properties on project parcels increased by about \$7.2 million overall, or about 355 percent, while taxes rose by about 55 percent on adjacent parcels and by 30 percent on radial parcels.

By linking the addresses of project buildings to granular state employment and business data,⁷ the CSU study also found that the use of the historic rehabilitation led to an increase in employment, in the number of business establishments, and in the wages earned by people working for businesses registered in renovated buildings. From 2008 to 2014 (a period which includes the national recession), total employment of businesses registered at project buildings increased by 3,612 jobs (a 58.3 percent growth) and generated 70 more business establishments (a 50 percent increase), while adding \$201.4 million in total wages (a 57.5 percent increase, accounting for inflation). Similar results were found in a study conducted by the Iowa Department of Revenue, which additionally documented a 352.7 percent increase in total annual sales revenues associated with businesses located in tax credit projects.⁸ In other words, the tax credit has been found to be an important tool in attracting higher quality jobs and businesses to otherwise underutilized neighborhoods and business districts. It is not clear how much of these substantial local benefits translate into an aggregate impact on the statewide economy, though the Iowa Department of Revenue survey did find that an average of 84.3 percent of tax-credit supported project expenditures are spent on in-state goods and services.

Another theme evident in state tax credit assessments is that the historic rehabilitation tax credit program has intangible benefits that are difficult to quantify. Through interviews, case studies, and before/after documentation, many reports attempt to convey that these buildings, while useful economic engines, are also intricately intertwined with the identity, meaning and heritage of the state's neighborhoods, towns and cities. A programmatic assessment conducted by the State of Connecticut directly asserts that any job growth or increase in tax revenue spurred by the tax credit is incidental to

⁵ Leichenko, R., Coulson, E. and Listokin, D. "Historic preservation and residential property values: an analysis of Texas cities." *Urban Studies* 38.11 (2001): 1973-1987.

⁶ Cleveland State University, Center for Economic Development. October 2015. [Ohio Historic Preservation Tax Credit Economic Impact Study](https://development.ohio.gov/files/redev/2015OHPTCComprehensiveReport.pdf). Prepared for the Ohio Development Services Agency. Available at: <https://development.ohio.gov/files/redev/2015OHPTCComprehensiveReport.pdf>

⁷ A government program that publishes a quarterly count of employment and wages reported by employers

⁸ Zhong Jin. December 2014. [Iowa Historic Preservation and Cultural and Entertainment District Tax Credit: Tax Credits Program Evaluation Study](https://tax.iowa.gov/sites/files/idr/Historic%20Preservation%20Tax%20Credit%20Evaluation%20Study.pdf). Iowa Department of Revenue, Tax Research and Program Analysis Section. Available at:

<https://tax.iowa.gov/sites/files/idr/Historic%20Preservation%20Tax%20Credit%20Evaluation%20Study.pdf>

the program's primary purpose, which is to stimulate and support the preservation of historically important buildings.⁹

State assessments generally agree that state tax credit programs that are administered in tandem with the Federal tax credit are the most streamlined, transparent, and easy-to-use. Only one of the state historic tax credit programmatic audits reviewed – that issued by the State of Missouri – issued specific recommendations for improved program administration. These included:¹⁰

- Minimizing the time that passes between project completion and tax credit certificate issuance, which interest costs incurred by developers and reduces equity going toward construction.
- Modifying transferability regulations to increase the proportion of the tax credit dollars allocated specifically towards rehabilitation. Options include: making the tax credit refundable to make the credit more attractive to investors and reduce the incentive to sell the certificates at a discount; requiring credits be assigned to a state agency, local political subdivision or other not-for-profit organization that would sell the credits in the market and grant the proceeds to the project; or eliminating the use of the state tax credits in favor of direct appropriations through a state agency to fund historical rehabilitation projects.
- Disallowing the use of tax credits on high value owner-occupied residences. The Missouri audit found that their credit has been used for renovations to homes with high property values and high renovation costs. Because the tax credits represented a small percentage of total renovation costs, the credits may not have been a significant determining factor in the decision to redevelop the properties. The Audit recommended limiting the maximum tax credit allowed for owner-occupied residences to \$50,000 and prohibiting the tax credit for owner-occupied residences if the home was purchased for more than \$150,000.
- Improving state oversight by conducting site visits, monitoring project approval time, maintaining accurate program activity projections, and ensuring consistency in determining the eligibility of certain costs.

It is worth noting that the Oklahoma administrative processes already incorporate these recommendations, as noted in the administrative process section below.

The Missouri audit is also the only reviewed program assessment that recommends a reduction in the state historic rehabilitation tax credit program. The State of Missouri has led the nation in qualified rehabilitation expenses for historic preservation purposes, with approximately \$80 million in

⁹ Department of Economic and Community Development. September 2014. [An Assessment of Connecticut's Tax Credit and Abatement Programs](http://www.ct.gov/ecd/lib/ecd/decd_sb_501_sec_27_report_revised_2013_final.pdf). Available at:

http://www.ct.gov/ecd/lib/ecd/decd_sb_501_sec_27_report_revised_2013_final.pdf

¹⁰ Missouri State Auditor. March 2014. [Historic Preservation Tax Credit Program](http://app.auditor.mo.gov/Repository/Press/2014018370056.pdf). Report No. 2014-018. Available at: <http://app.auditor.mo.gov/Repository/Press/2014018370056.pdf>

redemptions annually. The state imposed a \$140 million annual program limit in 2010; and the Governor's Tax Credit Review Commission recommended a further reduction of this limit to \$75 million.

The following tables summarize program characteristics for neighboring states, as well as project caps for all state programs currently in place nationwide.

	Credit Amount	Cap	Minimum Investment	Private Residence Eligible	Carry Forward	Transferrable
Oklahoma	20%	No Cap	Greater of \$5,000 or the structure's book value	No	10 Years	Yes
Arkansas	25%	\$125,000 per project, \$4 million state aggregate cap per year	\$25,000	Yes	5 years	Yes
Colorado	20 to 30%	\$1 million annually, per property	25% of the structure's book value	Yes	10 years	Yes
Kansas	25%	No Cap	\$5,000	Yes	10 years	Yes
Missouri	25%	No Cap	None Specified	Yes	10 years	Yes
New Mexico	50%	Lower of \$25,000 or five years of tax liability per project	None Specified	Yes	4 years	Yes
Texas	25%	No Cap	None Specified	No	5 years	Yes

Aggregate and Project Caps on State Historic Tax Credits for Commercial Properties¹¹

State	Aggregate	Per Project Cap	Comments
Alabama	\$20 million	\$5 million	Starts May 15, 2016
Arkansas	\$4 million	\$125,000 in credits	
Colorado	None	\$50,000	
Connecticut	\$50 million over 3 years	\$5 million per project	
Delaware	\$5 million	None	For both homeowners and commercial
Georgia	None	\$300,000	
Illinois	None	None	River Edge Redevelopment Zone only
Indiana	\$450,000	None	
Iowa	\$45 million	None	
Kansas	None	None	
Kentucky	\$5 million	None	For both homeowners and commercial
Louisiana	None	\$5 million per taxpayer	In development district
Maine	None	\$5 million per project	
Maryland	Annual appropriation	\$3 million per project	Approximately \$10 million annual average appropriation
Massachusetts	\$50 million	None	
Minnesota	None	None	
Mississippi	\$60 million	None	
Missouri	\$140 million	None	Projects with eligible costs less than \$1,100,000 are not subject to cap
Montana	None	None	5% add-on to federal
Nebraska	\$15 million	\$1 million in credits	
New Mexico	None	\$25,000 outside \$50,000 in Arts & Cultural District	
New York	None	\$5 million	only in designated distressed areas
North Carolina	None	None	
North Dakota	None	\$250,000	In a "renaissance zone" only
Ohio	\$60 million	\$5 million	
Oklahoma	None	None	
Pennsylvania	\$3 million	\$500,000	Started 2012
Rhode Island	\$34.5 million	None	Cap currently set by legislature
South Carolina	None	None	10% add-on to federal; 25% for other eligible properties
Texas	None	None	Started Jan 1, 2015
Utah	None	None	limited to owner-occupied and residential property
Vermont	\$1.5 million	None	10% add-on to federal
Virginia	None	None	
West Virginia	None	None	10% add-on to federal
Wisconsin	None	None	20% credit

Source: National Trust for Historic Preservation

¹¹ Stennis Institute of Government. The Economic and Fiscal Effects of the Mississippi Historic Preservation Tax Incentives Program: An Overview for Decision-Makers. Mississippi State University. Prepared at the Request of Philip Gunn, Speaker of the House. Available at: <http://www.preservationnation.org/take-action/advocacy-center/additional-resources/The-Economic-and-Fiscal-Effects-of-the-Mississippi-Historic-Preservation-Tax-Incentives-Program.pdf>

Fiscal Impact

For this evaluation, fiscal impact is considered to be the directly attributable impact of the credit on State revenues and expenditures. The evaluation will discuss but not quantify revenue and expenditure impacts on local governments; as noted in the benchmarking section above, research indicates that significant benefits will accrue to local governments related to increased property value and increasing the economic use of formerly underutilized historic properties. However, there is far less attenuation from these local impacts for a discussion of a state incentive program – for a variety of reasons (including the impact of local decision making outside the state’s control on local revenues and expenditures and the widely divergent impacts throughout the state).

The following table identifies the tax credits associated with this program, by year of project completion and final certification. As already noted, the developers may carry forward the tax credits for up to 10 years and transfer them for up to five years.

Year	No. of Projects	Total Development Investment	Eligible Expenses	OK Tax Credits	Annual Growth
2001	2	\$3,191,081	\$3,191,081	\$638,216	
2002	5	\$5,004,763	\$3,275,015	\$655,003	2.6%
2003	4	\$2,152,971	\$2,130,646	\$426,129	-34.9%
2004	1	\$352,480	\$352,480	\$70,496	-83.5%
2005	3	\$1,044,270	\$1,042,724	\$208,545	195.8%
2006	7	\$32,943,797	\$31,188,899	\$6,237,780	2891.1%
2007	5	\$92,002,882	\$70,079,366	\$14,015,873	124.7%
2008	4	\$1,221,769	\$1,157,269	\$231,454	-98.3%
2009	2	\$48,358,427	\$48,342,527	\$9,668,505	4077.3%
2010	5	\$31,177,962	\$16,567,171	\$3,313,434	-65.7%
2011	7	\$53,129,592	\$50,458,876	\$10,091,775	204.6%
2012	6	\$21,364,103	\$19,593,647	\$3,918,729	-61.2%
2013	5	\$77,991,394	\$43,330,869	\$8,666,174	121.1%
2014	8	\$64,477,895	\$39,239,000	\$7,847,800	-9.4%
2015	13	\$85,908,755	\$85,814,255	\$17,162,851	118.7%
Total	77	\$520,322,141	\$415,763,825	\$83,152,765	

There is, of course, some additional revenue that would be generated from economic activity associated with this credit, which will be discussed in the following chapter. Note that the costs of program administration are born by the SHPO and are neither disaggregated from the rest of the Office’s annual expenditures nor included in the table.

One of the requirements of HB2182 is that each evaluation should determine “whether adequate protections are in place to ensure the fiscal impact of the incentive does not increase substantially beyond the state’s expectations in future years.” As illustrated in the table, the financial impacts

associated with this program are growing and will impact the revenue structure for an additional ten years thereafter. Several states have struggled when historic rehabilitation tax credits prove more popular than anticipated. As noted previously, the Missouri tax credit program has averaged \$123.0 million for the past five years, almost 10 times larger than the estimated annual cost of \$14.3 million projected at the time that the program was created.¹² This trend led the State Legislature to introduce an annual cap in 2010, and an additional lowering of the cap has been recommended. Oklahoma may find that a similar modification to the historic rehabilitation program may be a necessary and appropriate step to help ensure that the fiscal impact does not exceed the State's expectation in future years.

¹² Missouri State Auditor. March 2014. Historic Preservation Tax Credit Program. Report No. 2014-018. <http://app.auditor.mo.gov/repository/press/2014018832873.pdf>

Economic Impact

Economic Impact of Methodology

Economists use a number of statistics to describe regional economic activity. Four common measures are “Output” which describes total economic activity and is generally equivalent to a firm’s gross sales; “Value Added” which equals gross output of an industry or a sector less its intermediate inputs; “Labor Income” which corresponds to wages and benefits; and “Employment” which refers to jobs that have been created in the local economy.

In an input-output analysis of new economic activity, it is useful to distinguish three types of expenditure effects: direct, indirect, and induced.

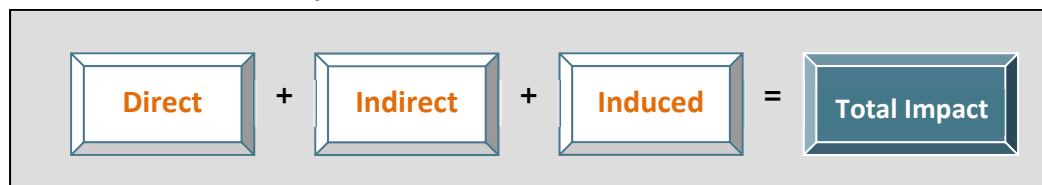
Direct effects are production changes associated with the immediate effects or final demand changes. The payment made by an out-of-town visitor to a hotel operator or the taxi fare paid for transportation while in town are examples of direct effects.

Indirect effects are production changes in backward-linked industries caused by the changing input needs of directly affected industries – typically, additional purchases to produce additional output. Satisfying the demand for an overnight stay will require the hotel operator to purchase additional cleaning supplies and services. The taxi driver will have to replace the gasoline consumed during the trip from the airport. These downstream purchases affect the economic output of other local merchants.

Induced effects are the changes in regional household spending patterns caused by changes in household income generated from the direct and indirect effects. Both the hotel operator and taxi driver experience increased income from the visitor’s stay, as do the cleaning supplies outlet and the gas station proprietor. Induced effects capture the way in which increased income is spent in the local economy.

A multiplier reflects the interaction between different sectors of the economy. An output multiplier of 1.4, for example, means that for every \$1,000 injected into the economy, all other sectors produce an additional \$400 in output. The larger the multiplier, the greater the impact will be in the regional economy.

The Flow of Economic Impacts



For this analysis, the project team used the IMPLAN online economic impact model with the dataset for the State of Oklahoma (2014 Model).

State of Oklahoma Tax Revenue Estimate Methodology

To provide an “order of magnitude” estimate for state tax revenue attributable to the incentive being evaluated, the project team focused on the ratio of state government tax collections to Oklahoma Gross Domestic Product (GDP). Two datasets were used to derive the ratio: 1) U.S. Department of Commerce Bureau of Economic Analysis GDP estimates by state;¹³ and 2) the Oklahoma Tax Commission’s *Annual Report of the Oklahoma Tax Commission* reports.¹⁴ Over the past ten years, the state tax revenue as a percent of state GDP was 5.5 percent.

State of Oklahoma Tax Revenue as a Percent of State GDP

Year	Oklahoma Tax Revenue*	Oklahoma GDP	Ratio
2005-06	\$8,435,214,025	\$136,804,000,000	6.2%
2006-07	\$8,685,842,682	\$144,171,000,000	6.0%
2007-08	\$9,008,981,280	\$155,015,000,000	5.8%
2008-09	\$8,783,165,581	\$143,380,000,000	6.1%
2009-10	\$7,774,910,000	\$151,318,000,000	5.1%
2010-11	\$8,367,871,162	\$165,278,000,000	5.1%
2011-12	\$8,998,362,975	\$173,911,000,000	5.2%
2012-13	\$9,175,334,979	\$182,447,000,000	5.0%
2013-14	\$9,550,183,790	\$190,171,000,000	5.0%
2014-15	\$9,778,654,182	\$180,425,000,000	5.4%
Average	\$8,855,852,065	\$162,292,000,000	5.5%

Source: U.S. Department of Commerce Bureau of Economic Analysis and Oklahoma Tax Commission

* Gross collections from state-levied taxes, licenses and fees, exclusive of city/county sales and use taxes and county lodging taxes

The value added of an industry, also referred to as gross domestic product (GDP)-by-industry, is the contribution of a private industry or government sector to overall GDP. The components of value added consist of compensation of employees, taxes on production and imports less subsidies, and gross operating surplus. Changes in value added components such as employee compensation have a direct impact on taxes such as income and sales tax. Other tax revenues such as alcoholic beverage and cigarette taxes are also positively correlated to changes in income.

Because of the highly correlated relationship between changes in the GDP by industry and most taxes collected by the state, the ratio of government tax collections to Oklahoma GDP forms the evaluation basis of the fiscal implications of different incentive programs offered by the State. The broader the basis of taxation (i.e., income and sales taxes) the stronger the correlation; with certain taxes on specific activity, such as the gross production (severance) tax, there may be some variation in the ratio year-to-year, although these fluctuations tend to smooth out over a period of several years. This ratio approach is

¹³ <http://www.bea.gov/regional/>

¹⁴ https://www.ok.gov/tax/Forms_&_Publications/Publications/Annual_Reports/index.html

somewhat standard practice, and is consistent with what IMPLAN and other economic modeling software programs use to estimate changes in tax revenue.

To estimate State of Oklahoma tax revenue generated in a given year, TXP multiplied the total value added figure produced by the IMPLAN model by the corresponding annual ratio (about 5.5%). For example, if the total value added was \$1.0 million, then the estimated State of Oklahoma tax revenue was \$55,000 ($\$1.0 \text{ million} \times 5.5\%$).

Data Collection, Model Inputs, and Other Issues

The project team performed the following steps to derive the economic and tax revenue impact:

1. The project team collected existing data and studies from State of Oklahoma agencies including the Oklahoma Tax Commission and Oklahoma Department of Commerce.
2. The project team collected and analyzed studies performed or commissioned by other organizations such as the Tulsa Foundation for Architecture and the National Park Service.
3. Data on Oklahoma annual estimated qualified rehabilitation expenditures (QRE) was obtained from the National Park Service – U.S. Department of the Interior¹⁵ for the years 2011 to 2015.
4. The certified rehabilitation costs, reported on the Part 3 application form, represent the estimated amount reported by the applicant to be claimed as qualifying costs associated with the rehabilitation. These costs do not include new construction and other work ineligible for the credit.
5. IMPLAN sector 57 Construction of New Commercial Structures was used to model the economic impact.
6. There was not sufficient detail available to model the economic impact of new construction and other work ineligible for the credit.
7. It was not possible to determine if the project developer would have constructed a new facility in Oklahoma instead of rehabilitating the historic facility. In some situations, the historic building and the tax credit was critical to the project success. In other circumstances, a project developer might have chosen a different building to renovate.
8. Total expenditures (also referred to as “economic activity”) are not the same as the tax historic tax credit. It is common, but not accurate, in economic impact studies to compare economic activity against the incentives offered. This comparison does not provide any insights into if the public sector is making a net profit or loss on the incentive program.

¹⁵ <https://www.nps.gov/tps/tax-incentives/reports.htm>

Annual Economic Impact of the State of Oklahoma Historic Preservation Tax Credit

						Estimated OK
Year		Output	Value Added	Labor Income	Employment	Tax Revenue
2011	Direct Effect	\$48,857,842	\$21,892,657	\$18,945,199	393	
	Indirect Effect	\$17,790,490	\$8,354,573	\$5,210,973	90	
	Induced Effect	\$18,060,769	\$9,859,854	\$5,581,557	137	
	Total Effect	\$84,709,102	\$40,107,084	\$29,737,729	620	\$2,060,753
2012	Direct Effect	\$17,905,351	\$8,023,189	\$6,943,009	144	
	Indirect Effect	\$6,519,833	\$3,061,772	\$1,909,710	33	
	Induced Effect	\$6,618,885	\$3,613,425	\$2,045,521	50	
	Total Effect	\$31,044,069	\$14,698,386	\$10,898,240	227	\$744,166
2013	Direct Effect	\$44,308,812	\$19,854,288	\$17,181,260	357	
	Indirect Effect	\$16,134,063	\$7,576,700	\$4,725,792	82	
	Induced Effect	\$16,379,177	\$8,941,828	\$5,061,873	124	
	Total Effect	\$76,822,052	\$36,372,815	\$26,968,925	563	\$1,881,973
2014	Direct Effect	\$45,094,393	\$20,206,298	\$17,485,878	363	
	Indirect Effect	\$16,420,115	\$7,711,033	\$4,809,579	83	
	Induced Effect	\$16,669,574	\$9,100,363	\$5,151,618	126	
	Total Effect	\$78,184,082	\$37,017,693	\$27,447,075	572	\$1,861,635
2015	Direct Effect	\$70,237,721	\$31,472,744	\$27,235,497	566	
	Indirect Effect	\$25,575,495	\$12,010,481	\$7,491,261	130	
	Induced Effect	\$25,964,046	\$14,174,462	\$8,024,011	196	
	Total Effect	\$121,777,262	\$57,657,688	\$42,750,770	892	\$2,895,507

Source: TXP, Inc

Technical and Administrative Issues

Overview

To qualify for the Oklahoma State tax incentive, projects must qualify for the federal tax credit, meeting the requirements established by both the Internal Revenue Service and the U.S. Department of the Interior. The State Historic Preservation Office (SHPO) serves as the initial point of contact for applicants, and it participates in the determination that a building is a "certified historic structure" and the review of rehabilitation work. The U.S. Department of the Interior, National Park Service (NPS), is the agency responsible for certifying historic structures and rehabilitation work. The Oklahoma Tax Commission (OTC) addresses taxpayer questions regarding the State tax return, State statutes, and OTC rules for using the State tax credits.

The administrative process has three parts:

1. **Building Eligibility.** In order to be eligible for historic preservation tax credits, all projects must be certified as historic structures. A *certified historic structure* is a building that is listed individually in the National Register of Historic Places —OR— a building that is located in a *registered historic district* and certified by the National Park Service as contributing to the historic significance of that district. The "structure" must be a building—not a bridge, ship, railroad car, or dam (A registered historic district is any district listed in the National Register of Historic Places. Buildings individually listed in the National Register of Historic Places are already certified historic structures).

Owners of buildings within historic districts must complete Part 1 of the Historic Preservation Certification Application—Evaluation of Significance. The owner submits this application to SHPO. The SHPO reviews the application within 30 days of receipt and forwards it to the NPS with a recommendation for approving or denying the request. The NPS then has 30 days to determine whether the building contributes to the historic district. If so, the building becomes a certified historic structure. The NPS bases its decision on the U.S. Secretary of the Interior's Standards for Evaluating Significance within Registered Historic Districts.

If the building is not within a historic district but otherwise qualifies for the National Register, NPS will issue a *preliminary determination of significance*. Under such circumstances, formal listing of the building in the National Register must occur within 30 months of the date the tax credits are claimed. The formal National Register listing process is separate from the Historic Preservation Certification Application process, though SHPO serves as the applicant's primary point of contact for both processes.

2. **Preliminary Certification of Qualified Expenses.** The NPS must approve, or "certify," all rehabilitation projects, ensuring that the proposed project will not damage, destroy, or cover materials or features, whether interior or exterior, that help define the building's historic character. Before rehabilitation work begins, the property owner completes a Part II application to receive preliminary certification of the proposed work. SHPO reviews the application within 30

days of receipt, requests additional information if needed, and transmits the application to NPS along with its assessment of eligibility. NPS then has 30 days to review and make a determination of eligibility.

In order to qualify for the federal credit, the following conditions must be met:

- The building must be depreciable. That is, it must be used in a trade or business or held for the production of income. It may be used for offices, for commercial, industrial or agricultural enterprises, or for rental housing. It may not serve exclusively as the owner's private residence.
 - Qualified rehabilitation expenditures (QRE) include costs of the work on the historic building, as well as architectural and engineering fees, site survey fees, legal expenses, development fees, and other construction-related costs, if such costs are added to the property basis and are reasonable and related to the services performed. They do not include acquisition or furnishing costs, new additions that expand the building, new building construction, or parking lots, sidewalks, landscaping, or other related facilities. On average, approximately 20 percent of the funds invested in a historic rehabilitation project are not eligible for the tax credit.
 - Upon receiving preliminary certification, the owner must complete the rehabilitation project within 24 months or in phases with all work completed within 60 months of the approved Part 2. Should changes in the proposed work be deemed necessary, the owner must submit an amendment sheet in the same manner as the original Part II.
 - The property must be placed in service (that is, returned to use). The rehabilitation tax credit is generally allowed in the taxable year the rehabilitated property is placed in service.
3. **Certification of Complete Work.** Upon completion of the rehabilitation project, the property owner completes the Part III application to obtain final project approval. Within 30 days of submission, SHPO conducts an on-site inspection of the completed project, and transmits the application to NPS along with its assessment of eligibility. NPS then has 30 days to review and issue the final certification.
4. **Tax Credit Receipt.** The federal tax credit is equal to 20 percent of QRE. This means that, when coupled with the State credit, 40 percent of eligible expenses may be reimbursed for qualified historic rehabilitation projects in Oklahoma. Owners may begin claiming the tax credits on the basis of their approved Part II application. However, failure to obtain an approved Part 3 application will result in recapture of any credits claimed.

Due to the transferability of the tax credit during the five years following the year of rehabilitation, developers are able to transfer the amount of the tax credit to an entity or person to offset tax liability. Applicants generally sell the credit to third parties and use the proceeds to reduce construction-related debt, but the sale of a HPTC certificate creates taxable income,

resulting in additional income tax due by the seller. As a result, only \$0.80 to \$0.90 of every Oklahoma tax credit dollar issued actually goes towards rehabilitation costs; the remainder goes to investors, tax credit brokers or syndicators, and the federal and state government (in the form of income taxes). This is higher than the nationwide average of \$0.65 to \$0.75 per dollar. Though the length of the transferability period allows the Oklahoma tax credit to convey more “bang for the buck” than those offered by other states, this also introduces a measure of unpredictability into the state budget.

The owner must hold the building for five full years after completing the rehabilitation or pay back the credit. If the owner disposes of the building within a year after it is placed in service, 100 percent of the credit is recaptured. For properties held between one and five years, the tax credit recapture amount is reduced by 20 percent per year. The NPS or the SHPO may inspect a rehabilitated property at any time during the five-year period. The NPS may revoke certification if work was not done as described in the Historic Preservation Certification Application, or if unapproved alterations were made for up to five years after certification of the rehabilitation. Work done after the initial five year period is not subject to review.

5. **Reporting.** Both SHPO and NPS maintain databases with information on tax credit projects, and NPS issues annual reports for each fiscal year. The Federal data on the completed projects is also available through the free data interface PolicyMap, with the name and address of the property, the final estimated qualified cost, and the use available.

Summary

Overall, the decision by legislators to tie the State tax credit to the federal process results in more efficient, streamlined, and accountable program administration. Each project is vetted and screened by SHPO and the NPS, and the credit is granted only after completion and certification of compliance with the U.S. Secretary of Interior Standards. The incremental burdens to the State above and beyond those involved in the administration of the federal tax credit program are minimal.

Outcomes

Outcomes

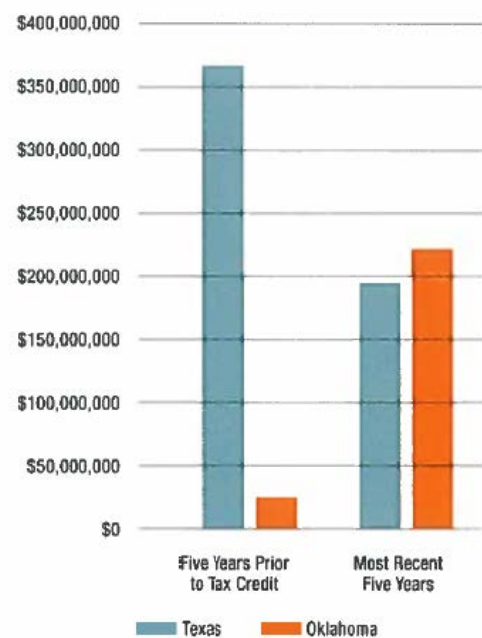
From the prior discussion, the following have been identified as key issues for evaluation:

1. What has been the impact of the credit on identified goals?
2. How does Oklahoma's experience compare to the nation as a whole and other states?
3. How should the identified costs be weighed against the benefits (both quantitative and qualitative)?

Impact: Increase Investment in Historic Rehabilitation

Whether the underlying goal is to increase property investment or support the construction industry or revitalize aging neighborhoods, the stated objective of the historic tax credit program is to increase the number of historic rehabilitation projects in the state of Oklahoma. The State tax credit program has been highly successful in this regard, both compared to the period prior to the tax credit as well as compared to nationwide trends. Since 2005, the year of that the program was tied to the federal process, the average number of annual historic rehabilitation projects has quadrupled, and the total development investment has increased by 82 times the prior investment, from just over \$1.0 million in 2005 to \$85.9 million in 2015. According to National Park Services Data, in FY2009, Oklahoma ranked 41st out of 47 states in the number of certified expenses; in FY2015, the state came in at 16th.¹⁶ Of the six states that border Oklahoma, only Missouri saw more historic property tax investment.

*Historic Preservation Investment
Oklahoma vs. Texas*



Source: Place Economics 2016

According to data compiled from the NPS by Place Economics, between FY2000-FY2005, developers in Texas invested almost 17 times more in historic preservation developments as developers in Oklahoma. These trends have changed demonstratively under Oklahoma's current regulations. In the last five years for which data was available, Oklahoma's historic preservation development was 14 percent higher than that of Texas. The recently-enacted Texas historic tax credit program was modeled after the Oklahoma Credit.¹⁷

¹⁶ U.S. Department of the Interior, National Park Service, Technical Preservation Services. March 2016. "Statistical Report and Analysis for Fiscal Year 2015." Federal Tax Incentives for Rehabilitating Historic Buildings. Available at: <http://www.nps.gov/tps/tax-incentives/taxdocs/tax-incentives-2015statistical.pdf>

¹⁷ Place Economics. 2016. Oklahoma Historic Tax Credit: Impact on the Oklahoma Economy. Prepared for the Tulsa Foundation for Architecture.

Impact on Identified Goals: the “But For” Analysis.

An important factor in considering the efficacy of incentives is the consideration of whether the incentive is necessary to spur the investment. In the theory of incentives, the ‘but for’ test refers to the argument that a project or a capital investment would not be made without the incentive (‘but for the incentive’ the rehabilitation project would not occur in Oklahoma). In the case of many projects, the existence of incentives in other states can be cited as a need for the Oklahoma incentive – ‘but for’ the Oklahoma incentive, the project will occur in other states. Tax incentives provide benefits to states to the extent they change behavior (as opposed to rewarding what a business or individual would have done anyway). In the case of historic preservation credits, the key question is to what extent the incentive caused rehabilitation to occur within the state that wouldn’t have occurred otherwise.

With historic preservation, this question is complicated by the presence of federal tax incentives for rehabilitating historic buildings, the largest of which provides a 20% credit that often stacks with state-provided credits. Evaluations not taking federal credits into account likely overstate the economic impacts of state incentives. However, it is extremely difficult and labor intensive to obtain the data necessary to disaggregate the impacts of these two tax incentives.

Several studies have developed methods to estimate the added value of the state tax credits. One approach is to present the results based on different scenarios, then analyze which scenario is most plausible. An assessment by the State of Connecticut presents four attribution scenarios: the incentive is responsible for 0%, 20%, 50%, and 100% of the measured economic activity.¹⁸ Another approach is to study projects that applied for state incentives but did not receive them. If projects that were rejected for incentives ended up going forward anyway, that could be a sign that the incentives often are not necessary.¹⁹ The State of Oklahoma does not retain this type of data, because it is not required under the federal process.

A third study used survey instruments and focus groups with tax credit users, who reported that very few, if any, of the projects on which they have worked or with which they are familiar would have been completed without tax credits. A few might have been done, but at such a low level of quality that they might not have been able to attract users. Both tax credit users and local-government officials stated that there is ample demand for rehabilitated historic properties in their cities, but the costs of rehabilitation are so great that tax credits are still needed to close the gap between market value after rehabilitation and the costs of rehabilitation.²⁰

¹⁸ Department of Economic and Community Development. September 2014. An Assessment of Connecticut’s Tax Credit and Abatement Programs. Available At:

http://www.ct.gov/ecd/lib/ecd/decd_sb_501_sec_27_report_revised_2013_final.pdf

¹⁹ Ohio Development Services Agency. 2015. Ohio Historic Preservation Tax Credit: 2015 Comprehensive Report. Available at: <https://development.ohio.gov/files/redev/2015OHPTCComprehensiveReport.pdf>

²⁰ Virginia Commonwealth University, Center for Urban and Regional Development. January 2014. Economic Impact of Historic Rehabilitation Tax Credit Programs in Virginia. Available at:

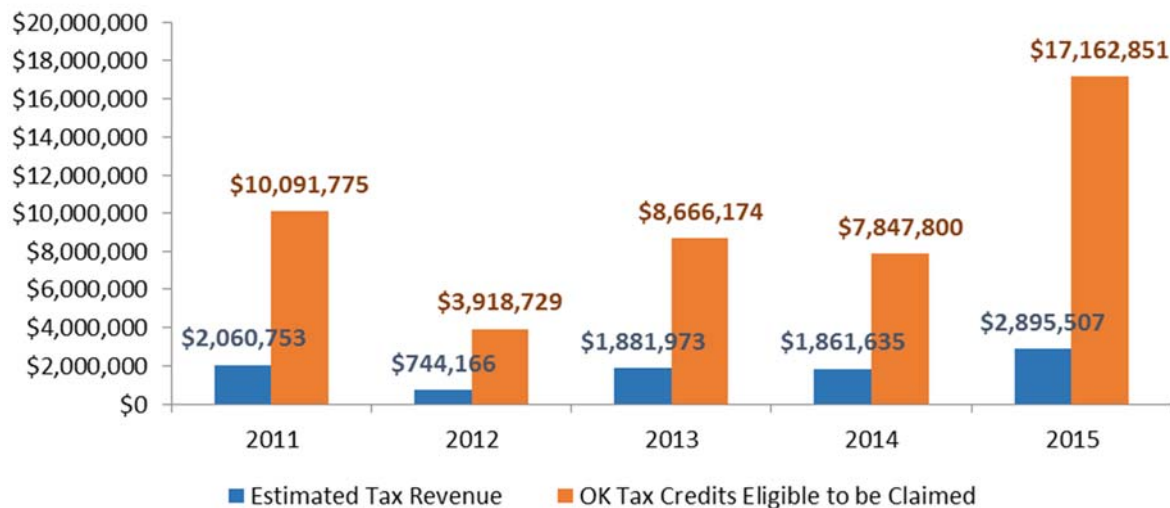
https://preservationvirginia.org/docs/VCU_Historic_Tax_Credit_Report_FINAL_21-1-2014smallpdf.com.pdf

In other words, it is not possible to conclusively demonstrate that the state tax credit changes behavior independently from the developer tax credit. However, self-reported data and findings from academic research indicate that this may be the case.

Cost Benefit Analysis

The financial analysis suggests that the costs of providing the historic tax credit are likely to continue to grow in the near future. The economic impact analysis suggests that the estimated tax revenue to the State of Oklahoma does not approach the level of the tax incentive.

Credits Eligible to be Claimed and Estimated Tax Revenue, 2011 to 2015



These are aggregate impacts, and do not take into account spillover effects on adjacent property values, the tipping point effect of a significant development in an otherwise underutilized retail corridor, or cost savings in local service provision due to infill development. In smaller towns, one building can have a big impact and start a wave of interest for new businesses and privately funded building rehabilitation projects. Local communities benefit from reuse of existing buildings because infrastructure is already in place. Constructing a new building on undeveloped land requires new roads and/ or utility lines. Historic buildings can often take advantage of existing roads and utilities, saving infrastructure costs to local governments. These local effects, which can be vitally important on the neighborhood and city level, are not reflected in the aggregate statewide perspective.

Recommendations

Recommendation: Reconfigure with a Program Cap

The historic rehabilitation tax credit is widely used around the country, and has been generally recognized for its significant and wide ranging impacts on the local level. State program evaluations and academic research have demonstrated a significant and positive effect on property tax values, business attraction, population regrowth, and higher employment. Though not readily quantifiable, the impact on place-making, heritage, and local identity is generally recognized to be significant and of intangible value. As such, historic rehabilitation tax credits are proven tools that help to drive local revitalization and promote more cost effective infill development patterns.

On a statewide level, however, the aggregate benefits of the program are less readily quantifiable. The total effect on job growth is limited to fewer than 900 jobs per year, and the estimated impact on State revenues is less than \$3.0 million per year, only 17 percent of the cost incurred by the State. This finding is consistent with those reported by other program analyses, largely because new jobs created by the program are limited to temporary construction work. The long-term fiscal impacts are experienced at the local level, through growth in assessed value.

The Oklahoma program is among the most efficient nationwide, because it is directly tied to the federal program with no additional administrative burdens or costs. The policies and procedures in place are timely, transparent, and accountable.

The 2005 legislation changes – including both the expansion of eligibility and the alignment of administrative procedures with federal requirements – have led to a substantial increase in tax credit utilization. Since 2005, the year of that the program was tied to the federal process, the average annual historic rehabilitation projects has quadrupled and the total development investment has increased 82 times, from just over \$1.0 million in 2005 to \$85.9 million in 2015. In FY2009, Oklahoma ranked 41st out of 47 states in the number of certified expenses; in FY2015, the state came in at 16th. The program has been exceptionally successful at increasing investment in historic rehabilitation in Oklahoma.

However, without a cap in place, the cost burden on the State could continue to grow beyond the point of desirability. Other states, such as neighboring Missouri, have experienced growth in this program far beyond the initial predicted utilization levels. At present, more than half of all states have an annual cap in place.

The project team recommends that Oklahoma adopt an annual cap to ensure some measure of future budget predictability. Further, in order to keep administration burdens to a minimum, once a program cap is in place, the team recommends that projects be accepted on a first-come-first-serve basis in lieu of a supplementary assessment procedure.

INCENTIVE EVALUATION COMMISSION COMMENTS HISTORIC REHABILITATION TAX CREDIT

LYLE ROGGOW

- A cap on the program to reduce cost exposure for the State of Oklahoma would be beneficial.

CYNTHIA ROGERS

- Whereas the “program has been exceptional successful at increasing investment...” the return on the investment from the state perspective is less clear. Obviously it is hard to put a dollar figure on historic value.
- Oklahoma’s credit is high relative to that of other states. The consultant’s analysis does not evaluate if a lower credit would be effective or not. Hopefully we can think investigate this in the future.
- It makes good sense to cap the program to protect state budget variability. If not on a first-come-first served basis, then establish a rationing criteria to rank projects by probable impact on the state and/or local finances.

**State of Oklahoma
Incentive Evaluation Commission
Oklahoma Capital Investment Board
Final Report**



November 28, 2016

Prepared by



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At a Glance: Oklahoma Capital Investment Board

Statute: 74 O.S. Section 5085.1

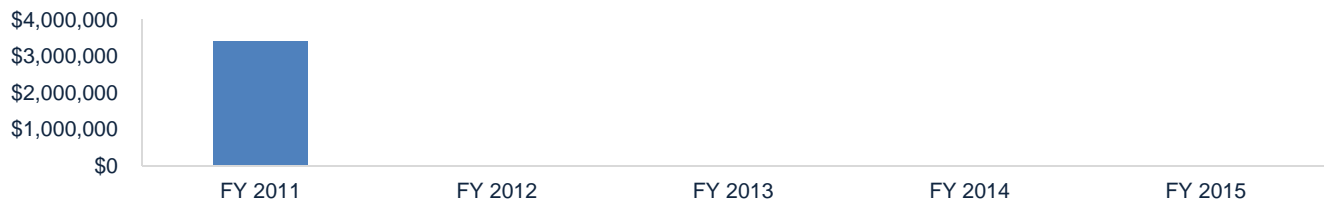
Program Goals

- Mobilize equity and near-equity capital
- Invest in such a manner as to result in significant potential to create jobs and diversity and stabilize the State economy

Fiscal Impact

	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015
Tax Credits Sold	\$3,400,000	\$0	\$0	\$0	\$0

Tax Credits Sold by Year



Economic Impact

- Cannot be calculated with the available data
- Prior economic impact analysis is not sufficiently connected to the size of investments and other factors

Adequate Protections for Future Fiscal Impact?

- Yes, the statute limits the program to total tax credits of \$100 million and use of no more than \$20 million per year – to date, \$31 million expended
- The Legislature has also limited further OCIB investments and program activities in a way that limits future fiscal impact

Effective Administration?

- Yes, the program uses professional management and a 'fund of funds' approach that diversifies investments and risks
- OCIB policies and procedures include industry standard approaches to conflict of interest, reporting and audits of investments and returns

Achieving its Goals?

- As with many public sector venture capital programs, return on investment analysis is more complicated than for private sector investors, and weighing the benefits and opportunity costs does not yield a clear answer
- Past concerns about risk have led the Legislature to constrain OCIB program activities

Retain, Reconfigure, Repeal?

- Retain within its current parameters to allow OCIB to complete its scheduled activities prior to its legislated sunset
- There is no compelling conclusion related to reversing the sunset imposed by the Legislature, particularly given short-term budget issues facing the State

Changes to Improve Future Evaluation?

- Should the program be retained, additional reporting on results related to Oklahoma firms (pre and post-investment payroll, jobs, capital investment) and investments by sectors

Executive Summary

Introduction

Access to capital is a critical need for the development and expansion of businesses, particularly small businesses. Venture capital, which is targeted at start-up firms and small businesses that have long term growth potential, is often cited as a critical need that is in short supply in most areas of the country.

Recognizing that need, in 1991 the Oklahoma Capital Formation Act created the Oklahoma Capital Investment Board (OCIB). Its statutory mission is “to mobilize equity and near-equity capital for investment in such a manner that will result in significant potential to create jobs and diversify and stabilize the economy of the State of Oklahoma.”

As part of the enabling legislation, the State provided OCIB the authority to sell \$100 million in transferrable tax credits to be used to support its programs. To date, OCIB has sold (for transfer on a dollar-for-dollar basis) approximately \$31.9 million of these tax credits.

OCIB provides two programs for providing equity and near-equity capital for investment. Its efforts are focused on the areas of venture capital investment and access to capital. OCIB has been significantly constrained by the Legislature in recent years. In 2012, SB1159 directed the OCIB to not enter into any new or additional contracts, investments or loan guarantees. While OCIB is able to participate in existing investment pools and contracts, no otherwise new activity is taking place. OCIB is scheduled to sunset on June 30, 2018.

Economic Impact

OCIB has produced many reports and studies on the positive economic impacts of its two primary programs. For example, OCIB retained an economics consulting firm to produce a report titled *Economic Impacts of the Oklahoma Capital Investment Board’s Venture Investment Program and Oklahoma Capital Access Program* in 2015. The project team reviewed these reports as part of the incentive program analysis.

In general, the project team determined that there is insufficient data to accurately estimate or verify the total economic or tax revenue impacts of either of OCIB’s two programs. Any attempt to estimate the economic impact would require significant assumptions regarding “but for” these programs, funds would not have been made available to applicant companies in any form. The project team’s perspective is that some companies would have been able to obtain capital (albeit perhaps at a higher rate), while others might have raised funds in multiple rounds.

Many of the assertions regarding the economic impact of the Venture Investment Program, for example, factor in the “leverage” produced by other investments not made by the State of Oklahoma. Given that OCIB is but one of many investors in these funds (and certainly not the primary investor), an alternate approach that might more fully reflect the return on investment to the State of Oklahoma might be to apportion the impact based on the OCIB investment. For example, if OCIB’s Venture Investment Program contributed \$30 million out of a total of \$500 million of new financing, then OCIB should be credited with 6 percent of the total impact (\$30 million / \$500 million) not 100 percent. Similar logic would apply to the Capital Access Program.

Access to capital, whether venture capital or small business loans, is critical to all Oklahoma businesses. However, it is not clear that absent OCIB activity, there would be a material negative economic impact on the overall State economy. This finding is not intended to diminish the role OCIB plays in funding Oklahoma businesses, but rather reflects the complexity in measuring the impact of venture capital funding.

A review of the administrative and other processes in place suggest that the program is managed to the standards required of the enabling legislation as well as industry standards. Based on 'best practices' approaches to public sector venture capital operations, OCIB aligns with most recommendations. There are, however, opportunities to improve on the information reported, and how it is reported. This may allow a more nuanced analysis of the economic impact of the programs.

In the end, public sector venture capital programs are often confronted with short-term fiscal realities that call into question longer-term possible returns. These decisions are made even more difficult by the long timeframes for positive pay-outs and the risks associated with the inevitable investments that do not yield a positive return. Given the short-term financial issues facing the State, the project team believes the Legislature's decision to constrain the program (and ultimately sunset it) is reasonable.

Introduction

Overview

The Oklahoma Incentive Evaluation Commission (the Commission) was established in HB2182, which was enacted and became law in 2015. It requires the Commission to conduct evaluations of all qualified state incentives over a four-year timeframe. The law also provides that criteria specific to each incentive be used for the evaluation. The Oklahoma Capital Investment Board is one of the incentive programs reviewed in 2016 by the Commission with recommendations to the Governor and the Legislature.

Introduction

Access to capital is often a critical need for the development and expansion of businesses – particularly small businesses. Venture capital generally describes money invested in start-up firms and small businesses that have long term growth potential but do not have sufficient access to capital. Because these are early stage investments, they are often considered to be risky but have the potential for above average returns, at least in the long-run. An accepted venture capital model is to generate a sufficient portfolio of strong performing companies to balance the inevitable businesses that fail to provide a positive return on investment. Often, a key consideration for venture capital investors is whether they have sufficient resources to remain a going concern while waiting (sometimes for decades) to receive a return on investments.

While there are many private venture capital investors and firms in the US, they tend to be concentrated in a handful of locations – most recently California and Massachusetts. One study found that in the period from 2008 to 2013, companies headquartered in these two states received more than 60 percent of venture capital investments in the U.S., while these states represent 14 percent of the U.S. population. Firms in these two states also managed 63 percent of the US venture capital under management.¹

This, of course, is a concern for those regions of the country that do not have as easy access to venture capital. Access to capital can be critical to the growth and development of local businesses, and it can also impact on location decisions – firms that are interested in attracting (or would be likely to attract) venture capital investors may well locate or relocate in places where there is a greater opportunity to attract venture capital.

It is for these reasons that a variety of states have undertaken efforts to stimulate or enhance venture capital within their states. These efforts have focused on multiple approaches, and Oklahoma has used more than one method to assist companies at various stages of development.

In 1991, the Oklahoma Capital Formation Act created the Oklahoma Capital Investment Board (OCIB). Its statutory mission is “to mobilize equity and near-equity capital for investment in such a manner that will result in significant potential to create jobs and diversify and stabilize the economy of the State of Oklahoma.”² OCIB is a public trust and is led by five directors appointed by the Governor and confirmed by the State Senate.

¹ “Information and Observations on State Venture Capital Programs, Report for the U.S. Department of the Treasury and Interested Parties in the State Small Business Credit Initiative,” February 2013.

² Oklahoma Statutes, Title 74, Section 5085.3

As part of the enabling legislation, the State provided OCIB the authority to sell \$100 million transferrable tax credits that may be used to support its programs.³ To date, OCIB has sold (on a dollar for dollar basis) approximately \$31.9 million of these tax credits.⁴

OCIB provides two programs for providing equity and near-equity capital for investment. OCIB focuses its efforts in the areas of venture investment and capital access programs.

The Venture Investment Program (VIP) makes targeted investments in venture capital funds in sectors of interest or expected areas of growth within the State. Key areas of focus for VIP have included bio-tech, healthcare, aerospace and manufacturing. Its first investment occurred in March 1993.

The Oklahoma Capital Access Program (OCAP) uses a pooled reserve concept to enable small businesses that may otherwise not be able to do so to access commercial credit. Oklahoma depository institutions may participate in the program by entering into an agreement with OCIB and paying a fee or premium to enroll loans in the program. OCIB then establishes a reserve account equal to the amount of the fee plus an obligation by OCIB for a predetermined portion of the loan. Cash, up to the amount of the reserve account, may then be paid to the participating lender if they incur a loss on the loan.⁵

OCIB has been significantly constrained by the Legislature in recent years. In 2012, SB1159 directed the OCIB to not enter into any new or additional contracts, investments or loan guarantees. While OCIB is able to participate in existing investment pools and contracts, no otherwise new activity is taking place. OCIB is also scheduled to sunset on June 30, 2018.

Criteria for Evaluation

A key factor in evaluating the effectiveness of incentive programs is to determine whether they are meeting the stated goals as established in state statute or legislation. In the case of OCIB, the mission is “to mobilize equity and near-equity capital for investment in such a manner that will result in significant potential to create jobs and diversify and stabilize the economy of the State of Oklahoma.”⁶ As with several State incentives, this is focused on investments with ‘significant potential to create jobs’ as well as to ‘diversify and stabilize the economy.’

In determining whether OCIB is furthering its mission, the Incentive Evaluation Commission has adopted the following criteria:

- Net change in jobs and payroll created in Oklahoma via the Board’s investments
- Loan repayments as a percentage of total loans made
- Loan repayment rates compared to industry/other state metrics

³ These tax credits may not be exercised after July 1, 2020, unless they were purchased or contractually agreed to be purchased prior to December 31, 1995. Title 74, Section 5085.7

⁴ OCIB will only transfer tax credits in the case of a call on an OCIB guarantee.

⁵ “Report for the Year Ending June 30, 2014,” Oklahoma Capital Investment Board, April 15, 2015, p. I-3.

⁶ State Statute, Title 74, Section 5085.3

- Dollars invested in Oklahoma Businesses as a percent of principal guaranteed by the Board
- Return on investment, measuring economic impact versus cost of the program

The criteria focus on what are generally considered goals of incentives programs (such as creating jobs in the State) as well as more specific objectives related to this program (serving as a source of funding for loan guarantees with the goal of increasing access to capital). Ultimately, incentive programs have to weigh both the benefits (outcomes related to achieving policy goals and objectives) and the costs, and that is also a criteria for evaluation (State return on investment).

Program Background and Benchmarking

Background

As previously noted, the OCIB board is able to fund the investments needed to carry out its mission by selling tax credits granted by the State at the time of the board's inception. The board uses funds raised through the sale of tax credits to invest in venture capital funds. OCIB has the freedom to establish its own criteria in the selection of investments in the funds. However, statute requires that the board ensures two dollars is invested in Oklahoma businesses for every one dollar of principal guaranteed.

A total of \$100 million in tax credits were provided. These tax credits may be used to offset income tax or insurance premium tax liability. The credits will expire on July 1, 2020. State statute restricts the amount of credits that may be sold in one year to \$20 million.⁷ To date, OCIB has used over \$30 million of the \$100 million of tax credits originally allotted them.⁸

Benchmarking

Since the 1990s, states have become increasingly more involved in stimulating venture capital investment. States do this in a variety of ways. The most common form of this is state tax credits to encourage private investment.⁹ Many states have also chosen to leverage state funds through the use of either certified capital companies (CAPCOs), or the creation of a fund of funds program. CAPCOs use insurance companies as investors by offering premium tax credits to encourage investment in venture capital companies. CAPCOs have proven controversial in a number of states.¹⁰

Oklahoma does not use the CAPCO model and instead uses the fund of funds program approach, which focuses on investment in venture capital funds that then make investments in individual companies. Other states using this model include Iowa, Ohio, Michigan, and Arkansas. Each of these states have programs that are similar to Oklahoma's. The programs share a goal of increasing venture capital investment in the state in which they operate. Also, each program is funded by the sale of state tax credits. However, the programs are differentiated in three main areas: total credit amount, investment requirements, and per-year tax credit sale limit:

Total Tax Credit Funding: Across the comparison group, total tax credit allotment ranges from \$60 million to \$450 million. Arkansas and Iowa, which recently reduced total tax credits available to its program from \$100 to \$60 million, have the lowest amount. Ohio and Michigan each have much higher allotment amounts compared to Oklahoma, \$380 million and \$450 million, respectively.

Investment Requirements: States have various restrictions related to selection of investments. In each state, guidelines have been included in statute to focus investment within state borders. For example,

⁷ 74 OS Section 5085

⁸ OCIB 2015 Annual Audit

⁹ <http://www.ncsl.org/documents/fiscal/entrepreneurshipFINAL05.pdf>

¹⁰ See for example, "State Financing Incentives for Economic Development," Norton Francis, The Tax Policy Center, Urban Institute, February 2016, p. 5, accessed electronically at <http://www.taxpolicycenter.org/sites/default/files/alfresco/publication-pdfs/2000635-state-financing-incentives-for-economic-development.pdf>

Oklahoma requires two dollars be invested in Oklahoma businesses for every one dollar of principal guaranteed. Michigan has the same requirement in place. Ohio requires a certain percentage of program money be invested in Ohio-based funds.

	Total Credit Allotment	Investment Requirement	Per Year Tax Credit Limit
Arkansas	\$60 million	No specific requirement, just the goal of promoting economic development in the state	\$10 million
Iowa	\$60 million	Funds must make a commitment to invest in Iowa businesses. Five percent of tax credits to be used for rural and small business investment	\$20 million
Michigan	\$450 million	Two dollars invested in seed or early stage businesses in the state for every dollar of principal guaranteed	Not specified
Ohio	\$380 million	At least 75 percent of program fund money must be invested in Ohio-based venture capital funds	\$20 million
Oklahoma	\$100 million	Two dollars invested in Oklahoma businesses for every dollar of principal guaranteed	\$20 million

Benchmarking Program Evaluations

The two OCIB programs are distinctly different and should be viewed from that perspective. Of the two programs, OCAP is more of a traditional loan assistance program that seeks to increase (on the margins) access to loans from traditional lenders by augmenting an insurance-like reserve to be tapped for non-performing loans. This sort of program is in operation in states around the country. The US Treasury Department has written multiple reports on the topic, as under their State Small Business Credit Initiative, 24 states allocate a portion of their federal funding to capital access programs (CAPs). One of the notable features of this program is the fact that states initially allocated \$291 million of these funds to CAPs, but the CAPs were unable to attract the level of interest from financial institutions to justify that level of involvement. As a result, as of June 2015, states had shifted 84 percent of that initial funding allocation to other small business programs, leaving \$46 million allocated to CAPs.¹¹

¹¹ "Best Practices from Participating States: Capital Access Programs," Department of the Treasury, September 2015, accessed electronically at https://www.treasury.gov/resource-center/sb-programs/Documents/CAP%20Best%20Practices_Sept%202015_v%20FINAL.pdf.

An earlier analysis of state-level CAP programs found that they ‘encourage small business lending in a cost-efficient and simple way.’ This review also found that CAPs are less staff intensive than other credit enhancement programs, require little administrative cost for banks, borrowers or the government.¹² This survey of existing programs (19 states and 2 cities) reported loan losses of 3.2 percent of all loan volume extended.

This study also reported some data on job creation. Based on data from six states, the report suggested caution around figures for jobs created or retained through CAP lending as well as the amount of CAP loan dollars per job created or retained. The figures showed considerable variation, from \$28,000 per job at the high end and \$9,000 per job at the low end. The report also suggested this was accomplished with little cost to the state: the average state subsidy for the six reporting states was \$777 per job created/retained.¹³

The State of South Carolina has published several reviews of its CAP program. Its 2010 review reported that there were 44 loans made in 2009 and 31 in 2010 (and noted that economic conditions in these years were challenging for banks). These loans resulted in 40 jobs created and 110 retained, or \$1,478 in reserves per job. For the year, it averaged 4.84 jobs per loan.¹⁴ The State found that its program leveraged \$21.83 in private lending for every \$1.00 provided by the program and created or retained 290 jobs (47 new), an average of 5.9 jobs per loan.¹⁵

As previously noted, there is significant interest and involvement among the states in venture capital efforts. The US Treasury has also been active in providing support for venture capital funds targeted at small businesses. A report commissioned by the Treasury Department in 2013 provided the following recommendations for state programs:

- **Understand the supply of and demand for venture capital.** Program managers with detailed knowledge of the capacity for VC investments in their state (i.e., data on number of resident VC funds, amounts of capital managed, transactions closed, amounts invested, industry focus and preferred development stages, etc.) are more likely to develop programs with targeted investment strategies that “prime the pump” for accelerated private sector investing.
- **Focus on capacity building with an ecosystem approach.** Program managers committed to building long-term entrepreneurial capacity and a sustained venture capital presence, rather

¹² “Capital Access Programs: A Summary of Nationwide Performance,” Department of the Treasury, October 1999, p. 1

¹³ Ibid., p. 8-9.

¹⁴ “South Carolina Capital Access Program, Review of Program’s 2010 Activity,” South Carolina Department of Commerce. Accessed electronically at

http://sccommerce.com/sites/default/files/document_directory/Capital_Access_-_South_Carolina_Capital_Access_Program_Review_of_Year_2010_Activity.pdf

¹⁵ “South Carolina Capital Access Program, Review of Program’s 2007 Activity,” South Carolina Department of Commerce, March 8, 2008, p. 4. Accessed electronically at

http://dc.statelibrary.sc.gov/bitstream/handle/10827/15141/DOC_Capital_Access_Program_Review_2009.pdf?sequence=1&isAllowed=y

than one-off investments, are more likely to design strategies aligned with market-based principles. Several state program managers communicated how they are using SSBCI capital to boost existing development strategies designed to build innovation capacity.

- **Create pathways to the next investment round.** The most successful VC investors are continually planning for the next financing event, actively communicating about investment opportunities and expanding professional networks to the benefit of portfolio of companies. If pathways to the next financing event are not created, small businesses receiving early-stage investments from state VC programs might not survive.
- **Plan for the long-term and manage expectations.** Experienced managers set expectations for achieving “comprehensive returns” across a diverse portfolio of long- term investments that include reasonable projections for both financial returns and indirect economic benefits.
- **Proactively address the potential for conflicts of interest and political influence.** Well- designed initiatives use clearly stated policies and processes to govern activities and investment decisions.
- **Attract the most capable leaders to manage resources.** Successful programs recruit capable fund managers with specialized skills and credibility with elite entrepreneurs and investors.
- **Measure results accurately with defensible logic.** In an industry without recognized standards for measuring results, experienced program managers define credible measurement standards at the outset and then measure results consistently and with third party validations.
- **Align state economic development interests with the financial interests of fund managers and limited partner VC fund investors.** States should participate in the financial returns from successful investments in order to provide future capital resources for new investments.¹⁶

The evaluation will return to these recommendations in the following discussion.

A recent analysis of another state fund-of-fund approach was recently conducted by David Zin, Chief Economist, State of Michigan Senate Fiscal Agency. The analysis acknowledged that the State’s support of venture capital had an impact on overall availability of venture capital in the state, quoting figures that the number of venture capital firms headquartered in Michigan has increased from ‘just a few’ in 2003 to 16 in 2009 and 23 in 2013.¹⁷ However, the balance of the analysis focused on how the State might deal with the significant fiscal impact associated with the venture capital funds. In this respect, the State of

¹⁶ “Information and Observations on State Venture Capital Programs, Report for the U.S. Department of the Treasury and Interested Parties in the State Small Business Credit Initiative,” February 2013.

¹⁷ “Michigan Early Stage Venture Capital Tax Vouchers,” State Notes Topics of Legislative Interest, Winter 2015, p. 7, accessed electronically at <https://venturemichiganfund.com/the-program/fund-metrics/>

Michigan was also in something of the ‘time bind’ that exists between making the financial commitment to venture capital in the early stages when pay-offs are not yet on the horizon.

While there are a variety of reports and surveys that identify state venture capital programs and tax credits that support them, there has been little systematic analysis of program impacts or program evaluations. Part of this may relate the lengthy timeframe necessary to judge the results of early stage venture capital investments and programs. It may also reflect the general lack of knowledge and information related to the programs themselves – or the relatively insulated nature of investments in funds of funds. One assessment of a state program noted that state-sponsored venture capital programs have had mixed results. As this study notes, “measures of the ‘contribution’ of a ‘successful’ public venture capital fund generally did not go beyond counting businesses and jobs and estimating taxes paid. Program assessments rarely considered the opportunity cost of the public funding used or the counterfactual of what likely would have happened to the portfolio of companies in the absence of public venture capital investments.”¹⁸ This point is well taken, and it is discussed in the section on economic impact.

¹⁸ “The Role of a Public Venture Capital Program in State Economic Development: The Case of Kansas Venture Capital, Inc.,” David L. Barkley, Ferdinand DiFurio and John Leatherman, *The Journal of Regional Analysis and Policy*, 2004, p. 84.

Fiscal Impact

As previously noted, OCIB programs have been capitalized by making available \$100 million in transferrable tax credits. To date, OCIB has used approximately \$30.9 million of those credits. The \$100 million represents the entirety of the financial commitment and impact on the State of Oklahoma. This impact reduces revenue collections in the years where the sold credits are used to offset what would otherwise be State tax liability.

The following table provides a year-by-year history of tax credits sold by OCIB:

Tax Credits Sold by OCIB	
Year	Amount
2007	\$8,000,000
2008	\$4,700,000
2009	\$6,815,000
2010	\$8,000,000
2011	\$3,400,000
2012	\$0
2013	\$0
2014	\$0
2015	\$0
Total	\$30,915,000

As also previously noted, in 2012, the Legislature restricted the future activities of OCIB. As a result, no new investments are being made, and the ultimate fiscal impact (absent change in that legislation) will depend on the results of existing investments.

The long-term goal for the State is to leverage the State's contribution in various funds into investments in Oklahoma companies that ultimately become successful and generate payroll and investment in the State that also generate tax revenue. As previously noted, many of the investments are long-term where many businesses have not reached that stage of development.

One of the requirements of HB2182 is that each evaluation should determine "whether adequate protections are in place to ensure the fiscal impact of the incentive does not increase substantially beyond the state's expectations in future years." There appear to be adequate protections in place for this program. They consist of:

- The incentive is limited in its ability to sell and transfer tax credits to fund its operations – the amount, \$100 million, is specified in statute.
- The program is also limited to a yearly cap, \$20 million, on the amount that may be issued.
- The Legislature has also stipulated that additional loans (and the risks associated with it) will not be made under the CAP program.

Economic Impact

As noted in the Program Background, OCIB manages two programs that provide access to capital for Oklahoma businesses:

- **Venture Investment Program** - invests in professional, privately managed partnerships whose managers are willing and have a clear plan for identifying Oklahoma investment opportunities in sectors that are meaningful to the State
- **Capital Access Program** - incentivizes bankers to lend needed capital to Oklahoma's small business borrowers, a majority of which are located in rural areas.

OCIB has produced many reports and studies on the positive economic impacts of these two programs. For example, OCIB retained Applied Economics LLC of Phoenix, Arizona to produce a report titled *Economic Impacts of the Oklahoma Capital Investment Board's Venture Investment Program and Oklahoma Capital Access Program* in 2015. The project team reviewed these reports as part of the incentive program analysis.

In general, there is insufficient data to allow the project team to accurately estimate or verify the total economic or tax revenue impacts of either of OCIB's two programs. Any attempt to estimate the economic impact would require significant assumptions regarding "but for" these programs funds would not have been made available to applicant companies in any form. Some companies would have been able to obtain capital (albeit perhaps at a more expensive rate), while others might have raised funds in multiple rounds.

Many of the assertions regarding the economic impact of the Venture Investment Program, for example, factor in the "leverage" produced by other investments not made by the State of Oklahoma. As described in the *OCIB Fiscal Year 2017 Business Plan*, dated June 20, 2016:

"The Board's programs have exceeded their original goal of mobilizing \$500 million of new financing for Oklahoma businesses. The Board's programs have resulted in approximately \$550 million of risk capital for Oklahoma projects. As of June 2015, the Board had attracted more than \$163 million in venture capital, \$48.7 million in development loans and participated in a \$10 million revenue guarantee resulting in \$221 million of reported capital for Oklahoma companies. It is also estimated that more than \$326 million of leveraged debt was available to the venture backed companies due to the \$163 million in equity capital invested in them. OCIB's total direct impact is currently estimated to be \$547 million of risk capital provided for Oklahoma projects. Achieving this level of impact means OCIB's programs have exceeded their original impact expectations and can clearly do more."

According to the same report:

"Since 1992 the Oklahoma Capital Investment Board has a proven 61 to 1 impact from its investment; meaning for the \$31 million invested by the state, the state's economy has received more than \$1.9 billion in return according to a 2015 independent study by Applied Economics."

An alternate approach that might more fully reflect the return on investment to the State of Oklahoma might be to apportion the impact based on the OCIB investment. For example, if OCIB's Venture Investment Program contributed \$30 million out of a total of \$500 million of new financing, then OCIB should be credited with 6 percent of the total impact ($\$30 \text{ million} / \500 million) not 100 percent. Similar logic would apply to the Capital Access Program.

Access to capital, whether venture capital or small business loans, is critical to all Oklahoma businesses. It is not clear that absent OCIB activity, there would be a material negative economic impact on the overall State economy. This finding is not intended to diminish the role OCIB plays in funding Oklahoma businesses, but rather reflects the complexity in measuring the impact of venture capital funding. The Capital Access Program should be measured by jobs created and retained as well as the percent of loans repaid.

Technical and Administrative Issues

Overview

OCIB operates differently from many of the incentive programs in that its administrative functions aren't focused on determining eligibility for the credits either through an application or tax return. The fund-of-funds approach to investments for the Venture Investment Program is more focused on making good choices of funds that will leverage the involvement in the fund into investments in worthy Oklahoma-based companies.

The best practices identified in the Benchmarking section are a good place to start related to discussions of some of the administrative functions and requirements. Among them are:

- **Proactively address the potential for conflicts of interest and political influence.** Well-designed initiatives use clearly stated policies and processes to govern activities and investment decisions.
- **Attract the most capable leaders to manage resources.** Successful programs recruit capable fund managers with specialized skills and credibility with elite entrepreneurs and investors.

At the start, the legislation creating OCIB has prominent features that seek to ensure that it is managed well and avoid conflicts of interest. The OCIB board includes members with significant experience and expertise in business and investing in businesses. There are strong conflict of interest policies in place. In these areas, there do not appear to be additional administrative needs for OCIB.

Another set of best practices relates to the actual workings of decision making regarding fund investments and considerations of strategic direction:

- **Understand the supply of and demand for venture capital.** Program managers with detailed knowledge of the capacity for VC investments in their state (i.e., data on number of resident VC funds, amounts of capital managed, transactions closed, amounts invested, industry focus and preferred development stages, etc.) are more likely to develop programs with targeted investment strategies that “prime the pump” for accelerated private sector investing.
- **Focus on capacity building with an ecosystem approach.** Program managers committed to building long-term entrepreneurial capacity and a sustained venture capital presence, rather than one-off investments, are more likely to design strategies aligned with market-based principles. Several state program managers communicated how they are using SSBCI capital to boost existing development strategies designed to build innovation capacity.
- **Create pathways to the next investment round.** The most successful VC investors are continually planning for the next financing event, actively communicating about investment opportunities and expanding professional networks to the benefit of portfolio of companies. If pathways to the next financing event are not created, small businesses receiving early-stage investments from state VC programs might not survive.

- **Plan for the long-term and manage expectations.** Experienced managers set expectations for achieving “comprehensive returns” across a diverse portfolio of long-term investments that include reasonable projections for both financial returns and indirect economic benefits.
- **Align state economic development interests with the financial interests of fund managers and limited partner VC fund investors.** States should participate in the financial returns from successful investments in order to provide future capital resources for new investments.¹⁹

In these areas, it is difficult, with the information available, for the project team to make a definitive judgement. Some of the metrics identified are not readily available, but the published annual reports and business plans do identify, for example, sectors of interest for OCIB, and these tend to align with State sector efforts in other programs as well. In other areas, some of these best practices are not measurable but nonetheless important for the strong operation of the program.

The final best practice deals with what are commonly considered performance reporting aspects of a program:

- **Measure results accurately with defensible logic.** In an industry without recognized standards for measuring results, experienced program managers define credible measurement standards at the outset and then measure results consistently and with third party validations.

In this area, there does not appear to be as much focus on measurement reporting as in at least some other state programs. For example, the State of Michigan, on its website for a similar state venture capital program, provides the following information:²⁰

The Michigan early stage venture investment corporation shall publish and make available on the Internet an annual report not more than 3 months after the close of the Michigan early stage venture investment corporation’s fiscal year that includes all of the following:

1. An enumeration of all investment and related activities for the fiscal year.

In fiscal year 2015, ending on December 31, 2015, the Venture Michigan Fund, incorporating both the Venture Michigan Fund I and the Venture Michigan Fund II:

- *There were no new commitment to underlying fund managers. The Venture Michigan Fund is fully committed.*
- *\$22.1 million was drawn by underlying fund managers in the Venture Michigan Fund.*
- *\$8.0 million was distributed by underlying fund managers in the Venture Michigan Fund.*

2. Documentation and analysis of the implementation and status of the Michigan early stage venture investment corporation’s investment plan and the economic impact of the plan on this state, including, but not limited to, the following:

¹⁹ “Information and Observations on State Venture Capital Programs, Report for the U.S. Department of the Treasury and Interested Parties in the State Small Business Credit Initiative,” February 2013.

- **Number of Michigan-based investments made**
- **Total dollars invested in these companies to date**
- **Total amount invested by all other investors in these Michigan companies since the date of the fund manager's first investment in said companies**
- **Investment reserves, if any, associated with these Michigan company transactions**
- **Number of full time equivalent Michigan employees in these companies at the time of investment – as well as number currently employed (or employed at the time of exit)**
- **Number of professionals (investment or otherwise) employed by the underlying fund managers in Michigan**
- **For the Michigan investments and relating to expenses in the State: salary, payroll and other taxes, operating expense, capital expenditures, and legal/audit expenses**

In March 2016, the Venture Michigan Fund undertook a survey from the underlying fund managers in both Venture Michigan I and Venture Michigan II to ascertain impacts to Michigan associated with their investments. This survey specifically asked each fund manager in the Venture Michigan Fund. The following responses are the aggregate summing of the responses provided directly by the fund managers in the programs.

- i. *The number of jobs represented by the investments made in qualified businesses in this state.*
 - *As of March 1, 2016, 1,453 people are employed in Michigan associated with investments made by the Venture Michigan Fund underlying fund managers.*
- ii. *Return on investment generated by investment, the types of activities in which investment was made, and the impact of that investment on the economic base of this state.*
 - *Fund Managers in Venture Michigan Fund I ("VMF I") and Venture Michigan Fund II ("VMF II") have invested \$187.3 million to 46 unique portfolio companies. Note there are several Michigan companies that have received investments from fund managers in VMF I as well as VMF II. Any potential overlap in metrics has been accounted for in the following data.*
 - *The total amount invested in these portfolio companies from VMF managers and other investors in the syndicate was \$1.2 billion, representing a 6.28x leveraging effect to Venture Michigan Fund Investments.*
 - *Total jobs positively impacted across the 46 companies has been 1,453, up from 692 at entry, an increase of 109.8%*
 - *The VMF fund managers directly employ 35.25 FTE employees in Michigan*
 - *Approximately \$185 million in cost of goods sold were appropriated in the State of Michigan*
 - *The approximate payroll expense for the VMF I and VMF II underlying fund managers and the subsequent portfolio company employees was approximately \$147.0 million for the prior 12 month period ending March 31, 2016.*
 - *In total, the positive financial impact on the State of Michigan is approximately \$332 million on an annual basis.*

Venture Michigan Fund I

- Overall, \$1.0 billion of equity has been invested into 31 portfolio Michigan-based companies. This represents a 7.58x leveraging of the VMF I's underlying fund manager investment of \$133.4 million.
- These portfolio companies have exposure across the following sectors: life sciences, manufacturing, healthcare, IT, application software and cleantech.
- Life sciences accounts for 55.5% of the investments on a dollar basis as of April 2016. Healthcare IT is second in size at 28.2%, and Application Software is third at 5.5%.

Venture Michigan II

- Overall, \$414.4 million of equity has been invested into 22 Michigan-based portfolio companies. This represents a 3.72x leveraging of VMF II's underlying fund manager investment of \$111.3 million.
- These portfolio companies have exposure across the following sectors: life sciences, healthcare IT, application software, cleantech, advanced manufacturing and media.
- Healthcare IT being the largest sector on a dollar invested basis as of April 2016 at 38.6%. Application Software is second at 22.7%, and Life Sciences is third at 18.3%.

3. Return through the fiscal year from investments made by each Michigan early stage venture investment fund in venture capital companies.²

As of December 31, 2015, the underlying investment net multiple and internal rate of return of the Venture Michigan I investments were 1.04x and 0.93% on invested capital, respectively.

As of December 31, 2015, the underlying investment net multiple and internal rate of return of the Venture Michigan II investments were 2.05x and 37.45% on invested capital, respectively.

4. The number of seed or early stage businesses that have been funded by venture capital companies.

Venture Michigan Fund I ("VMF I") and Venture Michigan Fund II ("VMF II") have invested \$187.3 million to 46 unique portfolio companies.

5. The aggregate net distributions made to each fund by the venture capital companies that have entered into agreements with each Michigan early stage venture investment fund through the end of the fiscal year and since the inception of each Michigan early stage venture investment fund.

VMF I distributions during calendar year 2015: \$7.3 million

VMF I distributions since inception: \$21.8 million

VMF II distributions during calendar year 2015: \$0.8 million

VMF II distributions since inception: \$6.6 million

6. The total amount invested by each Michigan early stage venture investment fund in venture capital companies.³

VMF I: \$133.4 million equity has been invested into 31 portfolio Michigan-based companies.

VMF II: \$111.3 million of equity has been invested into 22 Michigan-based portfolio companies.

7. Any upcoming use of tax vouchers that is certain and the timing of that use.

Venture Michigan Fund I: It is currently anticipated that during the State's 2017 fiscal year there will be a need for \$40 million of mandatory tax vouchers to be used, pursuant to the amended loan agreements.

8. An estimate of the potential use of tax vouchers over the 5-year period following the end of the fiscal year.

Venture Michigan Fund I: In addition to \$40 million of tax vouchers to be used in the State's 2017 fiscal year previously referenced, there is a possibility that there will be up to \$20 million of tax vouchers used during fiscal year 2018 and up to \$23.4 million during the State's 2019 fiscal year depending on the timing of proceeds of VMF I.

Venture Michigan Fund II: Based on the latest forecasts, it is currently projected that the first year of tax voucher usage for VMF II will be the State's 2020 fiscal year. Over the next five years (calendar year 2016 through calendar year 2020), total estimated tax voucher usage would be approximately \$71 million (if sold at a 10% discount and total return on the portfolio was 1.0x), with \$8.4 million in the fourth quarter of calendar year 2019 and \$62.5 million in the first through third quarters of calendar year 2020.

From the project team's perspective, a similarly public posting of data specific to the OCIB venture investment program would be useful.

Outcomes

From the prior discussion, the following have been identified as key issues for evaluation:

1. What has been the impact of OCIB on identified goals?
2. How does Oklahoma's experience compare to the nation as a whole and other states?
3. How should the identified costs be weighed against the benefits (both quantitative and qualitative)?

An important factor in considering the efficacy of incentives is consideration of whether the incentive is necessary to spur investment. In the theory of incentives, the 'but for' test refers to the argument that a project or a capital investment would not be made without the incentive ('but for the incentive' the film production would not occur in Oklahoma). In the case of many projects, the existence of incentives in other states can be cited as a need for the Oklahoma incentive – 'but for' the Oklahoma incentive, the project will occur in other states. However, as described in the economic impacts section, that may be difficult to prove or disprove in this instance.

First, it should be understood that the State (through OCIB) is not making direct investments in businesses; rather, it is one of a number of investors that are pooling their resources and, based on the decision of professional fund managers, jointly investing in companies that are judged to have the best opportunity to have a return on the investment within the normal timeframe for venture capital funds. As a result, some of the general 'but for' analysis is likely too far removed from business decisions to be effective.

Second, unlike incentive programs that operate entirely within the State of Oklahoma, the funds that are supported by OCIB (for the Venture Investment Program) may make investments in businesses located throughout the United States. This means that any economic impact analysis must consider the fact that Oklahoma resources are also supporting non-Oklahoma business investments.

OCIB seeks to counter this concern by arguing that its investments create a positive return as it relates to cash in and outflows – that the participating funds as a percentage of total investments put more dollars in Oklahoma companies than OCIB provides as a percentage of its total funds. This is a difficult question related to balance of interests: would OCIB return more on the State's investment in it if it focused entirely on funds investing in Oklahoma (to the extent they exist), even if some long-term performance were sacrificed?

These are issues that do not lend themselves to easy answers, and the longer time horizons for determining whether venture capital investments will pay off create additional uncertainty. In the short term, the fact that the State is participating in venture capital funds – as a way of demonstrating its commitment to Oklahoma start-ups and small businesses, is often what is relied upon in discussions of outcomes.

The following table provides an explanation of historic OCIB investments and data relating to involvement in Oklahoma firms or firms identified as fitting an 'Oklahoma strategy':²¹

OCIB Investments (Venture Investment Program) By Year

Fund	2007	2008	2009	2010	2011	2012	2013	2014	2015 Commitments
Acorn Growth Capital Fund III, LLC			\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Blue Sage Capital, LP	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Chisholm Private Capital Partners, LP	\$3,385,700	\$3,385,700	\$3,385,700	\$3,385,700	\$3,385,700	\$3,385,700	\$3,385,700	\$3,385,700	\$3,385,700
Davis, Tuttle Venture Partners, LP	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
Dolphin Communications Fund II, LP	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000
Emergent Technologies Oklahoma, LP	\$1,380,435	\$1,380,435	\$1,380,435	\$1,380,435	\$1,380,435	\$1,380,435	\$1,380,435	\$1,380,435	\$1,380,435
Intersouth Partners III, LP	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000
Mesa Oklahoma Growth Fund I, LP	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
Oklahoma Equity Partners, LLC	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000
Oklahoma Life Sciences Fund II, LLC	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000	\$1,750,000
Oklahoma Seed Capital Fund, LLC	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Pacesetter Growth Fund LP	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000	\$3,500,000
Prolog Capital II, LP	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000	\$5,000,000
Richland Ventures LP	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000	\$4,000,000
Richland Ventures II, PL	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Rocky Mountain Mezzanine Fund II, LP	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
SSM Venture Partners III, LP	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000
Tullis-Dickerson Capital Focus III, LP	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000	\$7,500,000
Ventures Medical II, LP	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Total Commitments	\$68,516,135	\$68,516,135	\$69,516,135	\$69,516,135	\$69,516,135	\$69,516,135	\$69,516,135	\$69,516,135	\$69,516,135
% in OK-Based Funds	32%	32%	33%	33%	33%	33%	33%	33%	33%
% in Funds with OK Strategy	23%	23%	23%	23%	23%	23%	23%	23%	23%
% of in OK-Based Funds or funds with OK Strategy	54.8%	54.8%	55.4%	55.4%	55.4%	55.4%	55.4%	55.4%	55.4%
Gain/Loss	\$2,461,860	-\$559,675	-\$5,259,027	-\$2,182,924	-\$1,352,141	\$1,180,078	\$2,271,042	\$1,341,683	-\$191,508
Distributions Received	\$5,141,671	\$2,585,347	\$1,110,764	\$37,094	\$3,852,596	\$5,200,906	\$3,305,118	\$4,629,014	\$1,132,108
Advances	\$6,521,746	\$7,121,630	\$3,838,625	\$1,585,553	\$1,013,974	\$1,193,668	\$611,382	\$757,418	\$367,705
Net Gain/Loss	-\$1,380,075	-\$4,536,283	-\$2,727,861	-\$1,548,459	\$2,838,622	\$4,007,238	\$2,693,736	\$3,871,596	\$764,403

As can be determined, OCIB has maintained a policy of investing one-third of its available resources in Oklahoma-based funds, as well as 23 percent in funds that are identified as having an Oklahoma strategy. These are funds that invest in industries that are considered expected areas of growth in the State. According to OCIB yearly reports, these have included bio-tech, healthcare, aerospace and manufacturing.

The following table aggregates these investments by fund and also includes the business headquarters of the funds:

Fund	Commitment	Based
Acorn Growth Capital Fund III, LLC	\$1,000,000	Oklahoma
Blue Sage Capital, LP	\$2,000,000	Texas
Chisholm Private Capital Partners, LP	\$3,385,700	Oklahoma
Davis, Tuttle Venture Partners, LP	\$5,000,000	Oklahoma
Dolphin Communications Fund II, LP	\$6,000,000	New York
Emergent Technologies Oklahoma, LP	\$1,380,435	Texas, but focused on technologies licensed from OU Health Sciences Center
Intersouth Partners III, LP	\$4,000,000	North Carolina
Mesa Oklahoma Growth Fund I, LP	\$3,000,000	Oklahoma
Oklahoma Equity Partners, LLC	\$7,500,000	Oklahoma
Oklahoma Life Sciences Fund II, LLC	\$1,750,000	Oklahoma
Oklahoma Seed Capital Fund, LLC	\$1,000,000	Oklahoma
Pacesetter Growth Fund LP	\$3,500,000	Texas
Prolog Capital II, LP	\$5,000,000	Missouri
Richland Ventures LP	\$4,000,000	Tennessee
Richland Ventures II, PL	\$1,000,000	Tennessee
Rocky Mountain Mezzanine Fund II, LP	\$3,000,000	Colorado
SSM Venture Partners III, LP	\$7,500,000	Tennessee
Tullis-Dickerson Capital Focus III, LP	\$7,500,000	Connecticut
Ventures Medical II, LP	\$2,000,000	Not Found
Total	\$69,516,135	
% in OK-Based Funds	32.6%	
% in Funds with OK Strategy	22.8%	
% of in OK-Based Funds or funds with OK Strategy	55.4%	

One of the requirements of the OCIB statute is that Oklahoma investments constitute \$2.00 for every \$1.00 of investment. The following table, from the OCIB annual report, supports the claim that OCIB has met this statutory obligation – and thus generated that positive outcome for the State:

Fiscal Year	Dollars Invested in OK Businesses
2015	\$14,900,000
2014	\$5,000,000
2013	\$1,500,000
2012	\$8,000,000
2011	\$2,100,000
2010	\$1,600,000
2009	\$11,000,000
2008	\$13,500,000
2007	\$5,200,000
Total	\$62,800,000

Total Invested in OK Companies since inception	\$163,000,000
Total Guaranteed Principal	\$69,516,135
Dollars Invested in Oklahoma Businesses per Principal Guaranteed	\$2.34

The primary difficulty with OCIB – and related venture capital fund of funds approaches – is balancing the short term costs and risks, which can be considerable, with the promise of long-term gains. While the State has invested approximately \$31 million and can point to investment ‘leverage’ in the State, it is an open question as to whether similar investments in other programs targeted at, for example, small business assistance to more financially viable businesses located entirely in the State of Oklahoma might yield a larger (or at least more immediate) return on investment – perhaps with less downside risk.

Recommendations

OCIB is one of multiple State of Oklahoma efforts to increase access to capital for start-up firms. A majority of the states have also provided some form of assistance targeted at increasing venture capital in their state. Most of the evaluations of these efforts to date are inconclusive as to the ultimate impact of these programs.

To its credit, OCIB has sought to identify the overall economic impact from its venture capital efforts. It appears, from the information available to the project team, that there have been positive outcomes from some of their programmatic efforts. Of course, given that OCIB has expended approximately \$30 million of the \$100 million in tax credits provided to them, there have been costs associated with these efforts, and not all of the investments have had a positive ROI. This is the nature of venture capital programs, and other states have experienced similar outcomes.

The analysis of OCIB economic impact indicates that the claimed economic benefits appear overstated. It is understood that OCIB does not take a majority position in any particular fund in which it invests (which is no doubt a prudent move on their part), but the economic gains claimed from OCIB's minority stake in these funds is often the entirety of the additional jobs or capital created within the State. It is also notable that economic impact does not translate into dollar-for-dollar tax revenue for the State – which, of course, would only occur if tax rates approached 100 percent of profits or consumption. As a result, the filtering of economic activity that translates into tax revenue must be taken into consideration – including the length of time it takes to recoup any investment, which, for venture capital, is lengthy.

Given these factors, the project team makes no recommendation as to legislative changes to the existing modifications to the program, including its sunset provisions. The very real additional investment (in the range of \$70 million) versus the possible gains, which are likely many years down the road, do not, with the data available, lend themselves to a straightforward cost benefit calculation.

However, to the extent the program will continue for several years, the project team recommends that reporting requirements related to the program, along the lines of those provided for the State of Michigan's venture capital funds, be enhanced. These would include:

- Number of full-time Oklahoma employees and payroll in companies at the time of investment as well as number currently employed and payroll
- Breakdown of Oklahoma investments by sector by year
- Performance of Oklahoma investments by sector by year
- Return on investments in Oklahoma companies
- Any upcoming use of tax credits that is certain, and the timing of that use
- An estimate of the potential use of tax credits over a 5-year period following the end of the fiscal year

INCENTIVE EVALUATION COMMISSION COMMENTS OKLAHOMA CAPITAL INVESTMENT BOARD

LYLE ROGGOW

- Venture Capital is necessary for the attraction of innovation. Over a 25 year span, this program has only cost \$31M. OCIB was one of a few who committed financial backing to support the temporary location for the NBA Hornets. As a result, this assisted the State of Oklahoma in getting the Thunder. OCIB also played a role in the recent \$645M acquisition of Selexys by Novartis. There is a need to review the program and extend the sunset to a later year, place caps on the program and increase aggregate Oklahoma investment from \$2.00 to \$2.50 per \$1.00 of principle.

CYNTHIA ROGERS

- It is difficult to evaluate the efficacy of the program given available data and the nature of the venture capital operations. Thus, it is hard to recommend retaining a program for which there is limited ability to perform a cost-benefit analysis.
- It makes sense to let this program sunset as recommended in the PFM analysis.

State of Oklahoma Incentive Evaluation Commission Industrial Access Road Program Final Report



November 28, 2016

Prepared by



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At a Glance: Industrial Access Road Program

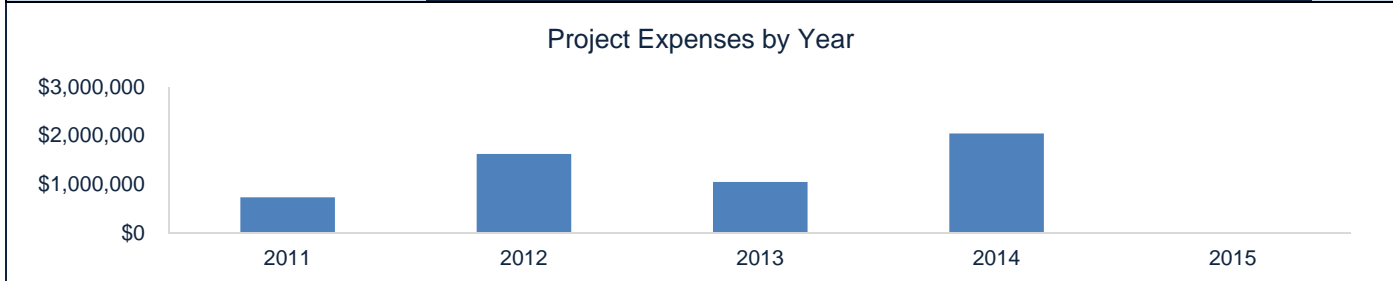
Administrative Code: 730:10-1-14

Program Goals

- Encourage and assist local efforts toward industrial development

Fiscal Impact

	2011	2012	2013	2014	2015
ODOT Expense	\$733,000	\$1,625,000	\$1,050,000	\$2,046,000	\$0
Number of Projects	3	3	4	5	0



Economic Impact

- Available data does not allow for an economic impact analysis

Adequate Protections for Future Fiscal Impact?

- Yes. Because the program is funded through annual appropriations, there is no requirement for ODOT to fund all (or any) projects. Funding can be limited as needed to align with state budget requirements.

Effective Administration?

- The program has been designed to minimize the associated administrative burdens. Maximum flexibility has been preserved so that formal metrics do not unintentionally rule out otherwise promising projects.
- However, the lack of lack of formal metrics, economic data verification and monitoring, or standardized reporting procedures raise concerns about transparency, accountability, and program evaluation.

Achieving its Goals?

- Without more robust data, it is not possible to articulate the economic benefits of this program with any certainty. The data that is available indicated that it is unlikely the Industrial Access Road Program has a meaningful impact on the location decisions of the majority of projects funded.

Retain, Reconfigure, Repeal?

- Repeal.

Changes to Improve Future Evaluation?

- If the State opts to retain the program, changes to program application requirements, metrics, and funding criteria would be necessary.

Executive Summary

The Industrial Access Road program was created in the 1970s, with the stated purpose to “encourage and assist local efforts toward industrial development.”¹ The grant program provides state funding for the construction or improvement of direct access roads to specific industrial operations or areas where operations are scheduled to occur, connecting these industrial areas to the state highway or local road system. The program is administered by the Oklahoma Department of Transportation (ODOT), and funded through monies otherwise dedicated to ODOT construction and maintenance projects. Funding expenditures vary based on levels of need, though average annual allocation is approximately \$2.5 million, allocated to an average of four projects each year. Almost half of Oklahoma Counties have benefited from assistance through the Industrial Access Road program in the past decade.

From the outset, the program was designed to give broad flexibility and decision-making latitude to ODOT staff, so that they could be responsive to requests from other departments related to specific project needs. The administrative processes successfully streamline program administration, which minimizes the burdens on ODOT, the local government, and the benefitting industry. Maximum flexibility has been preserved, so that formal metrics do not unintentionally rule out otherwise promising projects. This design allows the program to respond quickly to unanticipated situations and needs that sometimes arise when industries consider locating or expanding in Oklahoma.

Of all comparable state programs reviewed, Oklahoma’s has the lightest administrative burden and the highest levels of administrative flexibility. Features of other states’ programs include annual or project caps, formal application forms or requirements, the involvement of state economic development entities to evaluate the economic benefits of the proposed project, and clawback measures if subsidized measures fail to achieve the estimated level of job creation.

However, the lack of formal metrics, economic data verification and monitoring, or standardized reporting procedures raise concerns about transparency, accountability, and program evaluation. A review of FY2005 – FY2015 application submissions indicates that the data received by ODOT is neither consistent nor specific enough to allow for a comprehensive evaluation of relative economic benefits, one of the primary considerations for funding decisions. Without more robust data, it is not possible to articulate the economic benefits of this program with any certainty.

Absent such data, there is little indication that the program plays an influential role in industrial business’ decisions of whether to move to Oklahoma, where to locate within the state, or whether to remain within the state. The benefits offered by the ODOT program represent less than 1.6 percent of the total investment associated with the projects. Anecdotal reports indicate the benefitting projects received substantial public support from other sources, further reducing the likelihood that Industrial Access Program plays an important role in location decisions. In some (if not most) cases, local governments would likely have taken on the road surfacing costs in absence of ODOT support, indicating that those considerations would still not have been part of the firm’s location decision. Given these factors, it is

¹ Oklahoma Administrative Code, 730:10-1-14. Available at: <http://ced1.org/wp-content/uploads/2010/03/Industrial-Access-Road-Program.pdf>

unlikely the Industrial Access Road Program has a meaningful impact on the location decisions of the majority of projects funded.

In some instances, it may be appropriate for an incentive to help a struggling local government accommodate the upfront costs associated with an otherwise highly beneficial private investment. However, neither the eligibility criteria nor the applicant data requests allow program administrators to make an informed decision as whether state incentive funding in support of local governments is needed or warranted. Projects are not evaluated based on local governments' ability to pay, nor based on the significance of the proposed investment relative to the local economy.

Recommendations

The project team recommends that the industrial access program be discontinued. Other industrial incentive programs are better aligned with specific state priorities regarding the attraction of specific industries and high quality jobs, and have a demonstrated positive impact on the state economy.

If, however, the Commission believes that the primary purpose of the Industrial Access Road Program is to alleviate some of the upfront cost burdens that local governments must shoulder in order to benefit from the anticipated industrial projects, then it may be beneficial to consider narrowing the program so that funds are allocated only to those local governments that would otherwise face unreasonable fiscal burdens. Changes to program application requirements, metrics, and funding criteria would be necessary. A formal application form should be instituted with guidance on how companies should estimate the economic impact figures, to ensure that the collected data will be comparable across projects. Consideration should be given as to who should be responsible for verifying that the promised levels of economic investment are made within a reasonable timeframe and how such a verification process would occur. In every other benchmark state program reviewed, the State Department of Commerce or other public economic development entity is responsible for reviewing and approving the economic viability of the project in question. Finally, consideration should be given to alternative policy tools that would accomplish the same goal, such as advantageous funding mechanisms.

Introduction

Overview

The Oklahoma Incentive Evaluation Commission (the Commission) was established in HB2182, which was enacted and became law in 2015. It requires the Commission to conduct evaluations of all qualified state incentives over a four-year timeframe. The law also provides that criteria specific to each incentive be used for the evaluation. The Industrial Access Road Program is one of the incentives reviewed in 2016 by the Commission with recommendations to the Governor and the State Legislature.

Introduction

The Industrial Access Road program provides state funding for the construction or improvement of direct access roads to specific industrial operations or areas where operations are scheduled to occur. It is designed to encourage and enhance the efforts of localities in stimulating industrial activity. Specifically, the program funds the construction of connections between industrial facilities and the state highway or local road system. The program is administered by the Oklahoma Department of Transportation (ODOT).

The program was initiated in the 1970s, under Oklahoma Administrative Code, Title 730, Chapter 10. From the outset, the program was designed to give broad flexibility and decision-making latitude to ODOT staff, so that they could be responsive to requests from other departments related to specific project needs. This design allows the program to respond quickly to unanticipated situations and needs that sometimes arise when industries consider locating or expanding in Oklahoma. The program has experienced little change over the past three decades.

Criteria for Evaluation

A key factor in evaluating the effectiveness of incentive programs is to determine whether they are meeting the stated goals as established in state statute or legislation. In the case of this program, the overarching purpose is to “encourage and assist local efforts toward industrial development.”² The means for achieving this stated purpose is through the provision of funds in support of the construction or improvement of direct access facilities to specific industrial operations or designated industrial areas.

To assist in a determination of the effectiveness of the program, the Incentive Evaluation Commission has adopted the following criteria:

- Change in employment at the state level associated with the road access - comparison to the period prior to the credit
- Change in wages at the state level associated with the road access - comparison to the period prior to the credit
- Change in capital investment at the state level associated with the road access
- Return on investment – economic impact versus incentive cost

As will be explained further throughout this report, the types of data collected as part of the administration of this program do not allow for the types of analyses necessary to address the criteria

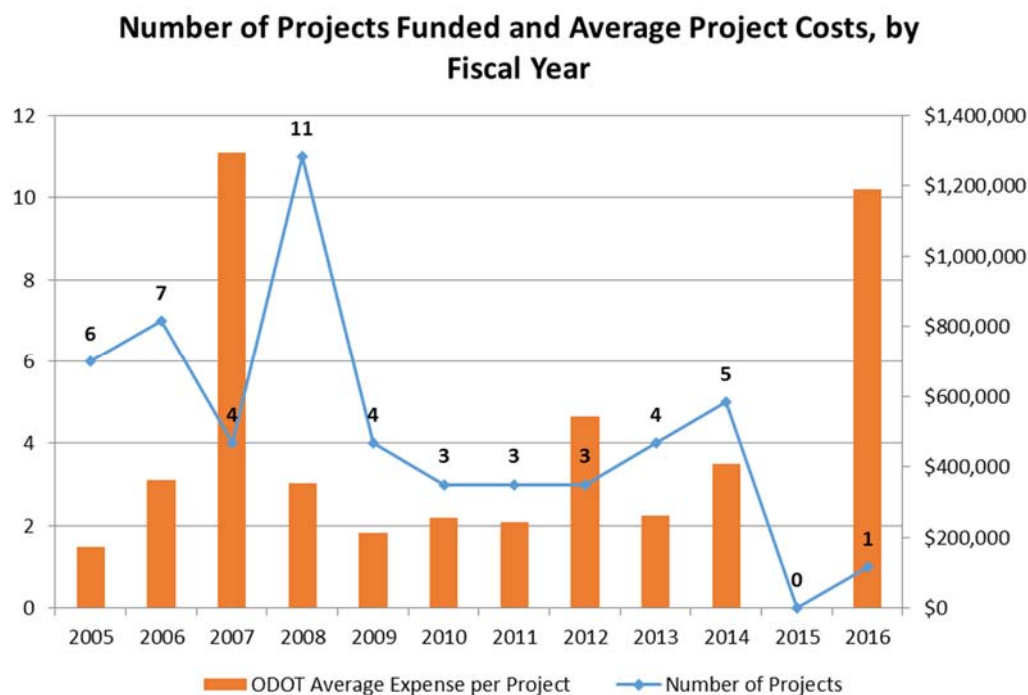
² Oklahoma Administrative Code, 730:10-1-14. Available at: <http://ced1.org/wp-content/uploads/2010/03/Industrial-Access-Road-Program.pdf>

approved by the Incentive Evaluation Commission. This significantly affects the state's ability to quantify the effectiveness of the program.

Program Background and Benchmarking

Background

The program is one of many funded through monies otherwise dedicated to ODOT construction and maintenance projects.³ The budget for the program is approximately \$2.5 million per year, sometimes as much as \$10.0 million per year. Along with the program's budget, its actual program spending has varied in recent years. Since spending over \$5.0 million in 2007, average program spending has been about \$1.3 million per year, funding an average of four projects per year over the same period.

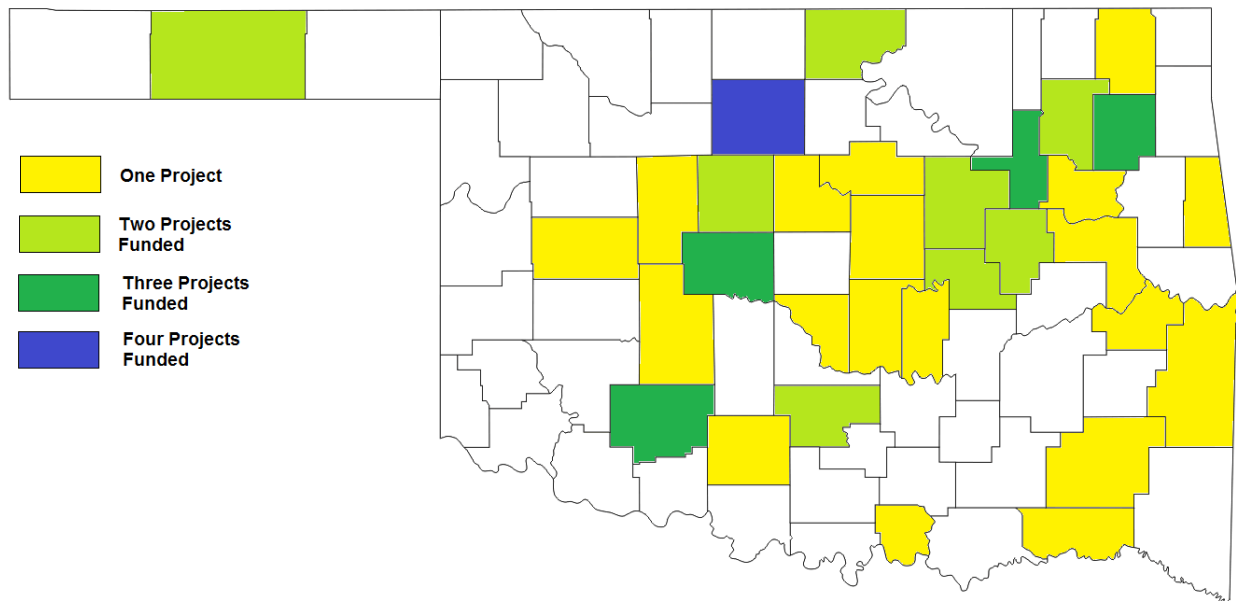


Source: ODOT, 2016

The authorizing legislation recommends minimum single project costs to maximize geographic distribution. Of the 77 Counties in the State of Oklahoma, 32 have received at least one road funded through the Industrial Access program since 2005. Gavin County has been particularly successful in leveraging the resources available to the program over the last decade.

³ Oklahoma counties also have access to the following sources of road and bridge funding through OTOD: the County Equipment Revolving Fund (average \$4.5 million/year), the Lake/Historic Access fund; the County Improvements for Roads and Bridges allocation (averages \$75 million/year, divided evenly between ODOT field divisions). Counties also directly oversee the County Road & Bridge Improvement Fund (averages \$25 million/year), and the County Highway Fund (averages \$260 million/year).

Number of Projects Funded by the Industrial Access Project, FY2005 – FY2016



Source: ODOT 2016.

Benchmarking

Many states provide funding support for local road construction as an economic development tool. Industrial access programs for both rail and road construction that are comparable to Oklahoma's program are found in a number of other states. To focus on more comparable programs, the analysis includes states that exhibit two important characteristics of Oklahoma's program:

- Funding is provided in the form of a grant
- There is an articulated purpose related to economic development, as demonstrated by the use of the program to assist with the recruitment and retention of private business activity.

For example, Kansas' Partnership Fund was not included because it funds programs through low-interest loans. Based on the two bulleted characteristics, the comparable group includes Alabama, New York, Oregon, and Virginia.

As shown in the following table, these state programs are primarily differentiated by funding method, budget, and project caps. While Oklahoma does not have per project caps, its budget is relatively small. It is also worth noting that the New York and Oregon programs are designed for use only if other funding options have been exhausted.

Also important to the analysis are administrative processes and requirements. Alabama's program is set apart from the rest for having an official application form. Oklahoma has only guidelines for what to include in a written application.

A key difference between Oklahoma and every other comparison state program is the involvement of other departments in the application review process. It appears to be common practice for state economic development groups to aid transportation departments in verifying the job creation or retention and economic impact claims of applicants. In other states, applications are sent to the department of transportation, then consultation occurs with economic development groups to determine the economic qualifications of the industrial activity. There is no similar process in place for Oklahoma's program, as this is all done by the ODOT.

The Oregon program is unique in requiring the repayment of funds to the Department of Transportation if the program does not achieve the level of job creation or retention claimed on the application.⁴ Oklahoma has no penalty in place for not achieving the economic impacts claimed on applications.

⁴ Oregon Department of Transportation. March 19, 2015. Immediate Opportunity Fund Policy Guidelines. Available at: <https://www.oregon.gov/gov/admin/regional-solutions/Documents/Mid-Valley/4.3.15.MidValley.IOF.Guidelines.pdf>

	Oklahoma	Alabama	New York	Oregon	Virginia
Application	Request Letter	Official Application Form	Suggested Application Format	None Found	Request Letter
Funding Type	Grant	Grant	60% Grant, 40% interest free loan	Grant	Reimbursement
Budget	\$2.5 million	\$11 million	Not Specified	\$7 million, every two years	Not Specified
Per Project Cap	None	None Specified	\$1 million	50% of the cost of road improvement	20% of investment
Per Locality Cap	None	None Specified	None Specified	None Specified	\$500,000
Joint Administration	None	Alabama Department of Commerce	New York Department of Economic Development	Oregon Economic and Community Development Department	Virginia Economic Development Partnership and Virginia Department of Small Business and Supplier Diversity
Other Restrictions			May only be used if conventional funding options do not result in necessary support	May only be used if other sources of funding are insufficient	

Fiscal Impact

For this evaluation, fiscal impact is considered to be the directly attributable impact of the credit on State revenues and expenditures.

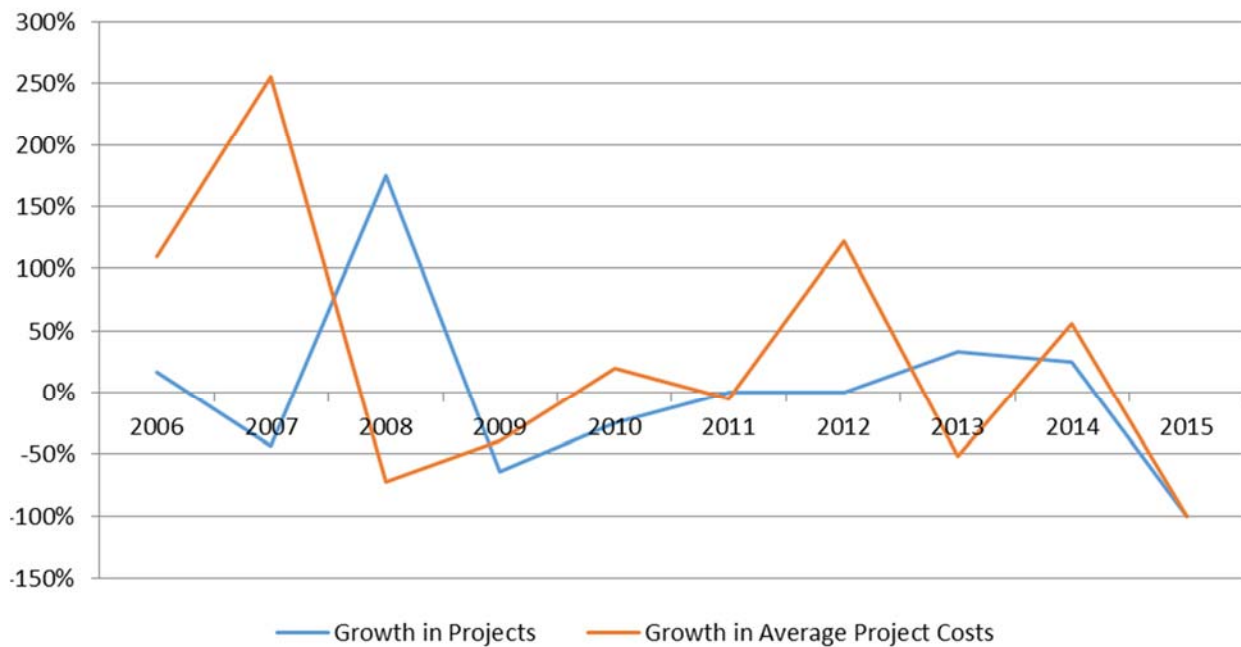
The following table identifies the expenditures associated with this program, by year of project approval.

Year	Number of Projects	ODOT Expense	ODOT Average Expense per Project
2005	6	\$1,037,625	\$172,938
2006	7	\$2,543,600	\$363,371
2007	4	\$5,170,000	\$1,292,500
2008	11	\$3,887,000	\$353,364
2009	4	\$855,000	\$213,750
2010	3	\$768,000	\$256,000
2011	3	\$733,000	\$244,333
2012	3	\$1,625,000	\$541,667
2013	4	\$1,050,000	\$262,500
2014	5	\$2,046,000	\$409,200
2015	0	\$0	-
2016	1	\$1,190,000	\$1,190,000
Total	51	\$20,905,225	\$409,906

It is notable that the costs of program administration are included in the ODOT budget for general administration. As a result, the ODOT expense column included in the table are direct expenses and do not include any indirect costs.

One of the requirements of HB2182 is that each evaluation should determine “whether adequate protections are in place to ensure the fiscal impact of the incentive does not increase substantially beyond the state’s expectations in future years.” As illustrated in the graph below, project costs can vary considerably on a year to year basis, with fluctuations that are not proportional to changes in the number of projects funded. However, there is no requirement for ODOT to fund all (or any) projects that are presented to it. As is generally the case with programs supported by appropriations (as opposed to tax credits), the primary protection in place is the ability of the Governor, legislature or ODOT to limit funding as needed to align with budget requirements.

Year over Year Growth in Funded Projects and Average Project Costs



Source: ODOT 2016

Economic Impact

Economic Impact

Between 2010 and 2016, the Industrial Access Road Program provided \$7.4 million in funding for 18 projects. These 18 projects were associated with \$454.6 million in investment by the requestors. Assuming this was the only incentive offered to the firms, the State of Oklahoma's investment would be 1.6 percent of the total investment. For the majority of projects, the state investment to requester investment was less than 5.0 percent. Given the level of other incentives offered by the State of Oklahoma, it is unlikely the Industrial Access Road Program has a meaningful impact on the location decision of the majority of projects funded. In addition, the datasets available do not indicate that the requestor or local government would not be willing to make the infrastructure improvement assuming the program did not exist. Therefore, it is not appropriate to estimate the economic impact of this program since it is not possible to determine how this limited investment relates to the overall incentives offered by the State of Oklahoma. It is more appropriate to allocate the jobs and tax revenues with the other incentive programs offered by Oklahoma.

Technical and Administrative Issues

The program is administered by the Oklahoma Department of Transportation. The administrative process can be broken down into the following parts:

Qualifying Expenses. Funds cover only paved surfacing of roads or railroad tracks. Local governments must cover costs for the right of way, utility relocation, grading and drainage.

In general, an industrial access road is one where the only justification for its construction or improvement is the existence of a viable industrial operation. Existing general purpose roads serving areas where industry is located are not eligible. The program is restricted to funding roads that are on public property; a road running onto the property of private office parks or industrial parks is not eligible unless the full right-of-way is turned over to a local government. Funded industrial access roads must be off of the state highway system. The road may connect to state roads, but interchanges and ramps with state highways may not be funded. The State of Oklahoma (through ODOT) owns 700 miles of short-line railroad track, so spurs off of those publicly-owned rail lines to industrial facilities are also eligible. However, none of the 51 projects funded since 2005 have included a rail spur.

Application Process. ODOT accepts applications from local governments, not from the companies that require expansion of access in order to locate or expand in a community.

In some cases, an outside business considering the possibility of locating and creating new jobs in Oklahoma, makes direct inquiry to the Oklahoma Department of Commerce (ODOC) about possible sites and available incentives. In that case, the ODOC typically calls ODOT to indicate that there is a party considering sites that may need access road assistance, and ODOT writes a letter of general commitment if the business decides to locate in Oklahoma. Then, after the company picks a site in Oklahoma, the selected community can make a formal application for program funding. In either case, local match funding is required as the ODOT funding does not cover all costs associated with a new road construction.

There is no official application form. According to guidelines shared by ODOT, the local government sponsor (city, county or industrial authority) must submit the following information to DOT for a project to be considered?

- A letter from the company planning to locate or expand in Oklahoma, providing estimates of capital, jobs and payroll. In cases where the company does not yet have active operations at the site in question, the letter should indicate a commitment to locate the new facilities at the site.
- A letter from the local government, affirming their responsibility to maintain the road after its completion. This letter should also confirm that the local government will take on any necessary roadwork beyond surfacing. ODOT previously required that local governments submit formal resolutions as part of their applications. ODOT eliminated that requirement to allow for governments to delay the public announcement about a prospective incoming business.
- A map indicating the location of the road, along with an estimate of costs.

In the past, ODOT has not offered guidance on how companies should calculate the estimated capital investments, jobs, and payroll. As a result, the economic impact estimates included in application records are not necessarily directly comparable. In some cases, the figures reflect the net incremental additions to the local economy. In other cases (particularly when the application is in support of the expansion or retention of an existing industrial operation), it is not clear whether the reported figures represent current totals, anticipated totals after expansion, or incremental additions following expansion. Because the application does not request that industries report on other state or local incentives that they might anticipate leveraging, it is not possible to confirm that the provided estimates of capital, jobs, and payroll represent strictly private investments.

Further, industry letters have not consistently provided the requested estimates, resulting in data gaps that preclude the project's inclusion in quantitative analysis. For example, in one instance, when asked to estimate the projected new jobs, an applicant reported "many."

Funding Decisions. Following the receipt of application materials, ODOT deploys a division field engineer to evaluate the viability of the project and make any necessary revisions to cost estimates. In some cases, the ODOT engineer may advise the local government that the industry's need for heavy load trucks may make a gravel road more appropriate, in which case ODOT does not proceed with the application review.

As mentioned earlier, the administrative processes associated with the Industrial Access Road Program were specifically designed to give broad flexibility and decision-making latitude to ODOT staff, to allow for a quick response to special situations. Project selection is based on a series of factors that confirm the project's significance and need, though not on consistently applied metrics. The factors considered are:

1. The industry being served
2. Private investment for construction or expansion of plant facilities
3. Magnitude of industrial operation, present and potential (including new jobs and estimated payroll)
4. Existing access serving the industrial area
5. Availability of local participation from other funding sources, such as federal program, other state agencies, local sources, etc. Note that ODOT's information requests as part of the application does not include data that would allow for the project to be evaluated based on the criterion.
6. Number of heavy trucks per day which will serve the industry
7. Estimated capital expenditures for construction or expansion of the plant facilities

ODOT assesses its success in leveraging private sector investment, and it reports that recent project funding has provided a better than a 10:1 ratio of private investment per dollar of public investment in access roads or highways. The program also aims to maximize geographic distribution, and is more flexible in terms of leverage ratios in smaller communities where the anticipated industrial development represents a significant local employer or capital investment. These determinations are qualitative and not documented for future program evaluation.

As previously noted, the types of data requested during the application process are not sufficiently specific to ensure that ODOT is considering net new jobs or the levels of private investment.

It should also be noted that the funding decision process does not include any independent verification of the industry-generated estimates regarding future capital investments, jobs, or payroll.

Funding Disbursement. ODOT reimburses the local government for the costs of the road resurfacing once the project has been completed. Because the funds are included in annual departmental allocations and not included in a revolving fund, there is less flexibility than there could be to accommodate unexpected or expedited applications.

Monitoring. ODOT monitors local maintenance of previously funded industrial access roads. If ODOT finds that a funded facility is not adequately maintained, then ODOT policy is that no future access road projects are to be approved for that county or community. In practice, such monitoring may occur only when a subsequent application is submitted by the county or community.

ODOT does not monitor whether the industrial development benefiting from the road fulfills or exceeds its anticipated capital investments, job creation, or payroll estimates. The incentive does not include any clawback provisions.

Reporting. ODOT has preserved records of original applicant submissions, but does not regularly update a database with the information on funded projections and estimated impacts.

Summary

The described processes successfully streamline program administration, which minimizes the burdens on ODOT, the local government, and the benefitting industry. Maximum flexibility has been preserved, so that formal metrics do not unintentionally rule out otherwise promising projects.

However, the lack of formal metrics, economic data verification and monitoring, or standardized reporting procedures raise concerns about transparency, accountability, and program evaluation. A review of FY2005 – FY2015 application submissions indicates that the data received by ODOT is neither consistent nor specific enough to allow for a comprehensive evaluation of relative economic benefits, one of the primary considerations for funding decisions. Without more robust data, it is not possible to articulate the economic benefits of this program with any certainty.

Outcomes

Outcomes

From the prior discussion, the following have been identified as key issues for evaluation:

1. What has been the impact of the credit on identified goals?
2. How does Oklahoma's experience compare to the nation as a whole and other states?
3. How should the identified costs be weighed against the benefits (both quantitative and qualitative)?

Question about Purpose

An important factor in considering the efficacy of incentives is the consideration of whether the incentive is necessary to spur the investment. Incentives provide benefits to the extent that they change behavior (as opposed to rewarding what a business or individual would have done anyway). In the theory of incentives, the 'but for' test refers to the argument that a project or a capital investment would not be made without the incentive ('but for the incentive' the industrial development project would not occur in Oklahoma). In the case of the industrial road access program, the key question is to what extent the incentive caused industrial development to occur within the state that wouldn't have occurred otherwise.

The stated purpose of this credit is to "encourage and assist local efforts toward industrial development."⁵ This broad articulation makes it difficult to identify what specific changes in behavior the program seeks to incentivize. For example, is the intended objective to assist local governments that might otherwise struggle to accommodate a prospective investment? An overlapping but distinct objective might be to help steer industrial developments towards localities that would particularly benefit from the addition to their tax base, independent of those localities' abilities to bear the upfront fiscal costs of the developments. A third goal might be to increase industrial investment statewide, which would focus more on inter-state competition for industrial developments rather than intra-state location decisions. Each goal would entail a slightly different funding allocation focus, different data metrics, and different criteria with which to evaluate whether the program were successful.

Depending on how one interprets the purpose of the incentive program, there are three stand alone "but for" questions:

- But for the public assistance with the road, would the industrial development locate in/remain in Oklahoma?
- But for the public assistance with the road, would the industrial development locate in/remain in the locality envisioned?
- But for the ODOT assistance with the road, would the local government have been invest the upfront road surfacing costs without placing an undue burden on other public services?

⁵ Oklahoma Administrative Code, 730:10-1-14. Available at: <http://ced1.org/wp-content/uploads/2010/03/Industrial-Access-Road-Program.pdf>

Unfortunately, given the data available, none of these questions can be answered with certainty.

Impact on the Location of Industrial Development

The premise underlying the program is that, if a business has already selected a new site in a community, that location decision may be contingent on the community's ability to fund an access road. As indicated in the economic impacts section, it is unlikely the Industrial Access Road Program has a meaningful impact on the location decisions of the majority of projects funded. The benefits offered by the ODOT program represent less than 1.6 percent of the total investment associated with the projects. Though no data is available on how the size of the ODOT per project investment compares with other state and local incentives offered to the same projects, anecdotal reports indicate the benefitting projects received substantial public support from other sources, further reducing the likelihood that Industrial Access Program plays an important role in location decisions. In some (if not most) cases, local governments would likely have taken on the road surfacing costs in absence of ODOT support, indicating that those considerations would still not have been part of the firm's location decision.

As a result, there is little indication that the program plays an influential role in industrial business' decisions of whether to move to Oklahoma, where to locate within the state, or whether to remain within the state.

Impact on Local Governments

Not all state incentives are created to generate net increases in aggregate economic activity statewide; some incentives aim to increase equity and economic opportunity in traditionally underserved and economically struggling parts of the state. In smaller towns or remote counties, a relatively modest business investment can generate an outsized effect on area income, paving the way for additional investment interest and generating a higher multiplier effect than would be seen in larger, more stable communities. For example, the 2005 the industrial access road investment in support of the Garvin County Airport Authority is thought to have contributed to an otherwise pivotal capital investment for the sparsely populated county.

In these instances, it may be appropriate for an incentive to help a struggling local government accommodate the upfront costs associated with an otherwise highly beneficial private investment. However, neither the eligibility criteria nor the applicant data requests allow program administrators to make an informed decision as whether state incentive funding in support of local governments is needed or warranted. Projects are not evaluated based on local governments' ability to pay, nor based on the significance of the proposed investment relative to the local economy.

In other states, local governments turn to different funding mechanisms when struggling with significant upfront capital costs associated with the arrival or expansions of large scale businesses, such as tax increment financing, payment-in-lieu-of-taxation agreements, community benefit agreements, or impact fees. Impact fees, for example, are policy instruments available to Oklahoma local governments under state law but not used as commonly as in other states. During the permitting process associated with the new development, local governments determine the government's infrastructure costs that would be reasonably attributable to the new development, and charge those costs to the development. The

benefit of this approach is that new growth activity does not endanger existing levels of public service, no state or local subsidy is required, and the use of upfront one-time charges ensures that adequate infrastructure is provided to serve new development in a timely manner.

Recommendation

Recommendation: Discontinue (Repeal)

The Industrial Access Road Program was designed to streamline program administration, minimizing the burdens on ODOT, the local government, and the benefitting industry. Maximum flexibility has been preserved, so that formal metrics do not unintentionally rule out otherwise promising projects.

Unfortunately, as the lack of formal metrics, economic data verification and monitoring, or standardized reporting procedures raise concerns about transparency and accountability. A review of FY2005 – FY2015 application submissions indicates that the data received by ODOT is neither consistent nor specific enough to allow for a robust evaluation of relative economic benefits, one of the primary considerations for funding decisions. Without more robust data, it is not possible to quantify the effectiveness of the program.

Given the magnitude of other industrial incentives offered by the State of Oklahoma, it is unlikely the Industrial Access Road Program has a meaningful impact on the location decision of the majority of projects funded. In addition, the datasets available do not indicate that the requestor or local government would not be willing to make the infrastructure improvement assuming the program did not exist. In other words, based on the data currently available, it is unlikely that the incentive is necessary to spur the investment.

The project team recommends that the industrial access program be discontinued. Other industrial incentive programs are better aligned with specific state priorities regarding the attraction of specific industries and high quality jobs, and have a demonstrated positive impact on the state economy.

If, however, the Commission believes that the primary purpose of the Industrial Access Road Program is to alleviate some of the upfront cost burdens that local governments must shoulder in order to benefit from the anticipated industrial projects, the project team would make the following alternate recommendations related to reconfiguring the existing program:

- Focus the program so that funds are prioritized to those local governments that would otherwise face unreasonable fiscal burdens. Change the program application requirements, metrics, and funding criteria.
- Create a formal application process and form that provides guidance on how companies should estimate the economic impact of projects, to ensure that the collected data will be comparable across projects.
- Applicants should be responsible for reporting annually for five years after award on the levels of economic investment, jobs and other claimed benefits have occurred.
- As with every other benchmark state program reviewed, a State Department (likely either Commerce or Transportation) should be responsible for reviewing and approving the economic viability of the project in question as well as verifying the information in the annual reports.

INCENTIVE EVALUATION COMMISSION COMMENTS INDUSTRIAL ACCESS ROAD PROGRAM

LYLE ROGGOW

- The program is managed by ODOT, therefore decisions to improve the application process and reporting should be done by their agency and board. Implementing the short-falls listed in the PFM report will provide transparency to the results of the program.

CYNTHIA ROGERS

- It is troubling that there is insufficient data to properly evaluate the efficacy of the program for the purpose of economic development.
- Based on the rough data estimates this program represents less than 1.6 percent of total investment associated with the projects. It is hard to imagine that this provides much leveraging of local government investments.
- As part of the ODOT budget, this is not a typical incentive program. ODOT does not have the capacity to evaluate economic impact potential when deciding among possible projects.

State of Oklahoma Incentive Evaluation Commission Film Enhancement Rebate Program Final Report



November 28, 2016

Prepared by



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At a Glance: Film Enhancement Rebate Program

Statute: O.S. 68 Section 3621

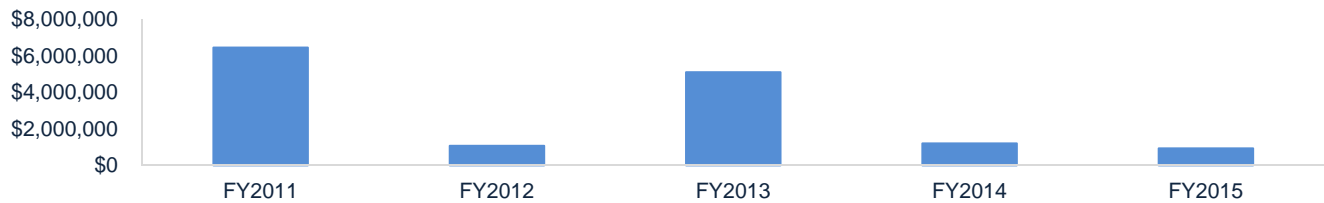
Program Goals

- Attract Film and Television production to the State
- Generate jobs for Oklahoma residents and investment in Oklahoma businesses
- Enhance the state's image nationwide

Fiscal Impact

	FY2011	FY2012	FY2013	FY2014	FY2015
Total Rebate Amount	\$6,458,611	\$1,074,309	\$5,110,337	\$1,208,471	\$932,327
Productions	5	4	2	5	6

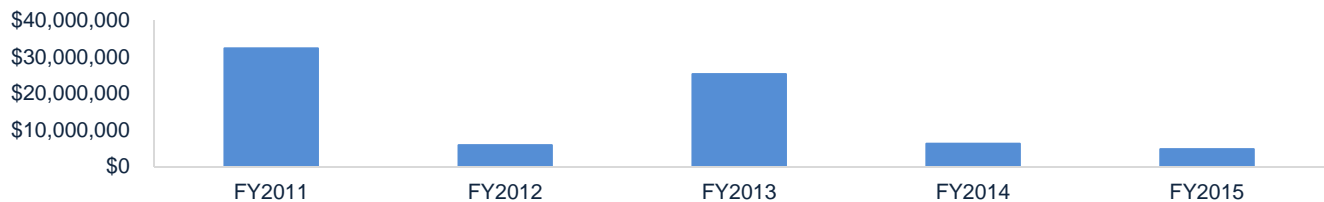
Total Rebate Amount by Year



Economic Impact

	FY2011	FY2012	FY2013	FY2014	FY2015
Output	\$32,379,595	\$5,864,899	\$25,314,340	\$6,276,561	\$4,788,023
Labor Income	\$13,264,151	\$2,241,966	\$10,175,685	\$2,399,332	\$1,856,675
Employment	838	139	640	149	116
Total Tax Revenue	\$854,711	\$143,417	\$661,607	\$152,457	\$117,622

Economic Output by Year



Adequate Protections for Future Fiscal Impact?

- Yes, the program has a cap of \$5.0 million per fiscal year. Claims exceeding the cap can be paid in following years.

Effective Administration?

- Yes, the Oklahoma Film + Music office have established processes that are smooth, fair, and verifiable. A clear and comprehensive set of guidelines is available to applicants.
- Unlike many other state programs, eligible costs are defined narrowly to maximize in-state benefits.

Achieving its Goals?

- No. There is no evidence that the Oklahoma film industry has strengthened during the time period when the rebate has been available.
- Documented job creation is neither stable nor sustainable absent state support.
- The effect on Oklahoma's image nationwide is unclear, but likely limited.

Retain, Reconfigure, Repeal?

- Allow to sunset as scheduled in 2024.

Changes to Improve Future Evaluation?

Should the State opt to preserve the program, program administrators should supplement existing data reporting practices by retaining the following information shared by rebate recipients: (1) duration of film shoot or employment period; (2) in-state goods and services expenditures by type; and (3) rebate expenditures associated with Oklahoma "expatriates" and Oklahoma Production Service Entities. To the extent possible, administrators should also increase reporting consistency when documenting film productions not receiving state incentives.

Executive Summary

In the early 2000s, film incentives rapidly became one of the more widely adopted types of economic incentives, spurring a subsidy war as states became increasingly aggressive with their offered film incentive packages. Oklahoma's program, approved in 2001 and funded starting in 2005, offers direct rebates for documented in-state expenditures on Oklahoma goods and services, wages and fees. In 2009, the rebate amount was increased from 15 percent to 35 percent, with an additional two percent available for expenditures related to music and recording in Oklahoma. The overall goals of the program, as articulated in State statute, are to attract film and television productions to Oklahoma and thereby provide jobs for state residents, dollars for local businesses, and enhance the state's image. The program has been renewed through FY2024.

Program Requirements, Eligibility, and Administration

With a cap of \$5.0 million per fiscal year, Oklahoma's film incentive program is among the most conservative of all state programs reviewed. Given that Oklahoma lacks the depth and breadth of film support industries available in other states, the program has been narrowed to target lower budget film series or independent films. Required production budgets are among the lowest of all state programs reviewed, and the rebate offers the highest percentage of production expenses and payroll among benchmark states. In addition, Oklahoma offers two loopholes – the Oklahoma expatriate program and the Oklahoma Production Service Entities program – to encourage productions to hire pre-approved out-of-state crew members and businesses for otherwise hard-to-fill positions. As such, despite a narrow definition of eligible costs compared to other states, at least some portion of Oklahoma monies are flowing to non-residents and non-resident businesses.

The administrative processes associated with the rebate program have been designed to ensure that no Oklahoma tax payer dollars are allocated toward ineligible expenses or towards productions that are unlikely to be completed and distributed as planned. Staff at the Oklahoma Film + Music Office have established a calendar and set of requirements to ensure that the process is smooth, fair, and verifiable. Guidelines for eligibility and program administration are set forth clearly and comprehensively in the state statute, the administrative rules, and the guidelines and application instructions that have been prepared for prospective applicants.

The program has considerable reporting and verification requirements; however much of that information cannot be shared with program evaluators, either because it is protected from disclosure due to State confidentiality laws, or because the Oklahoma Film + Music Office does not maintain particular data points in electronic databases so as to streamline information retrieval. Future evaluations would benefit if the Oklahoma Film + Music office were able to report the following information:

- **Duration of the film shoot or employment period.** If such data were readily accessible, program evaluators could convert production employment figures into Full Time Equivalents (FTE), which would allow for a computation of the state cost per FTE position created.
- **Rebate expenditures associated with registered Oklahoma "expatriates" and Oklahoma Production Service Entities,** neither of which are permanently located in Oklahoma.

- **In-state good and services expenditures by type.** Many of the businesses that benefit from motion picture shoots are not film production businesses per se but support companies ranging from food and lodging, to transportation, logistics, and insurance. Some of these sectors may be important targets that merit State support; others may already be thriving components of the local economic base and subsidized support may not be a cost effective use of State resources.
- **Motion picture projects not receiving state subsidies.** If the data were collected and reported using consistent categories, it would be possible to determine how Oklahoma's film industry is evolving over time, particularly compared to peer states, and draw conclusions about whether the rebate has been successful in extending the depth and breadth of the local film industry.

The Effects on Oklahoma's Film Industry, In-State Jobs, and National Exposure

For the time period from FY2011 through FY2015, the State of Oklahoma expended \$14,784,055 and received a return of \$1,929,854, for a return on investment of 13 cents for every dollar expended in rebates. Of the 15 independent film incentive audits or program evaluations reviewed by the project team, all reported negative return on investment for state monies, often cents on the dollar. Regardless of how efficiently film incentives are administered, the return on investment to the state will likely always be negative.

The film industry is highly elastic, with site selection decisions based predominately on a comparison of the incentives available in different states. Film incentive programs are generally considered to be one of the most important factors considered by production companies when deciding on location.

Unfortunately, given the data currently available, it is difficult to demonstrate unequivocally that Oklahoma's film industry has strengthened during the time period when the rebate has been available. Given the strong correlation found in other studies between the existence of competitive incentive programs and film location activity, the inconclusive trends about Oklahoma film production activity raises doubts about the effectiveness of the state's film incentive program.

Film productions that have been leveraging Oklahoma cash rebates have been employing increasingly large numbers of Oklahoma residents. However, due to the temporary nature of film employment, these new jobs are short-term. Absent data on the length of employment, it is not possible to convert these employment numbers into full time equivalents (FTE), which would allow for a comparison of job quality, quantity, and cost across other subsidized industries.

The experience of other states indicates that – even if Oklahoma were to succeed in fostering a robust film and television industry – the resulting job creation would neither be stable nor self-sustaining. The economic impacts of film production are temporary – any prolonged impact necessitates continued production spending and requisite incentive commitments. Unlike manufacturing plants, film production is quite episodic; after a film is produced, more rebate expenditures are needed in subsequent years to retain and attract new activity. In essence, continued funding of this activity creates an industry whose business model is dependent on ongoing state subsidies. This is in contrast to most other economic development business incentives, which aim to provide ongoing benefits.

Some films can be useful promotional devices, a valuable advertisement or marketing tool for a region, especially immediately after released and in cases where the film has lasting popularity. However, the consensus among academic researchers and independent state auditors is that films that lead to notable film tourism are the exception. The effect on tourism, if any, depends on a host of idiosyncratic factors such as the popularity of the film, whether the filming location is shown in an attractive way, and the accessibility of the filming location. The project team was not able to identify any independent film program evaluation that attempted to quantify the value of heightened national exposure or the benefits of film tourism.

The mounting evidence against the economic viability of such programs has prompted 13 states to discontinue their film incentive programs in recent years. Even states with the strongest hubs of film production – including Louisiana and New York -- have acknowledged film incentives' mixed economic effects and have instituted caps and narrowed eligibility to limit potential losses.

Recommendation

Since the credit does not provide sustainable economic development and provides little return on investment to the State of Oklahoma, the project team recommends that the State allow the film enhancement rebate to sunset as scheduled in 2024. A more promising use of these incentive monies would be to redirect the funds towards incentives that create permanent and lasting employment rather than temporary jobs.

Introduction

Overview

The Oklahoma Incentive Evaluation Commission (the Commission) was established in HB2182, which was enacted and became law in 2015. It requires the Commission to conduct evaluations of all qualified state incentives over a four-year timeframe. The law also provides that criteria specific to each incentive be used for the evaluation. The Film Enhancement Rebate Program is one of the incentives reviewed in 2016 by the Commission with recommendations to the Governor and the State Legislature.

Introduction

Until the late 20th century, film production activities were predominantly located near Los Angeles and New York City, industry hubs with clusters of specialized infrastructure and workforce. In 1998, Canada began to offer generous film subsidies and tax credits designed to attract film production activities, with local hire provisions meant to spark growth in local film crews. When combined with a favorable exchange rate and lower wages, these incentives rapidly changed the location patterns of U.S. film production activities and prompted the development of a strong Canadian base of “below the line” crew members, such as production crew, set designers, and extras. Seeking to emulate Canada’s success, Louisiana and New Mexico approved or modernized their film incentive programs in 2002 and reported immediate benefits: by 2005, both states were among the top ten production locations in the country.

The popularity of film incentives grew rapidly, spurring a subsidy war as states became increasingly aggressive with their offered incentives. By 2010, a total of 43 states offered film incentives. These incentives were highly effective in influencing location decisions: the number of new network dramas filmed in California fell from 79 percent in 2005 to 8 percent in 2012.¹ Film incentive programs are now considered to be one of the most important factors considered by production companies when deciding on location.

Oklahoma’s Compete with Canada Film Act was passed in 2001, allowing for a cash rebate to films that met certain in-state spending requirements. However, it wasn’t until 2005 that the State allocated an annual \$5.0 million to fund the rebate program, having arguably missed an opportunity to become one of the first hubs of film production outside of California. Between 2005 and 2009, the State’s film incentive program provided a direct 15 percent rebate for documented in-state expenditures on Oklahoma goods and services, wages and fees. Qualified expenses include wages and salaries of state residents, cost of construction, wardrobe, photography, sound synchronization, lighting, editing, facility rentals, and other direct costs of production. In 2009, the rebate amount was increased to 35 percent, with an additional two percent available for expenditures related to music and recording in Oklahoma. The additional two percent rebate requires that at least \$20,000 is spent on music created by an Oklahoma resident recorded in Oklahoma, or for the cost of recording in Oklahoma.

The Oklahoma Film + Music Office administers the program, including verification of all eligible expenses. Productions must have a budget of at least \$50,000 and spend at least \$25,000 in-state to qualify for the

¹ McDonald, A. "Down the Rabbit Hole: The Madness of State Film Incentives as a "Solution" to Runaway Production." University of Pennsylvania Law School Journal of Business Law (2011): 101-81. Available at: http://www.stoprunaway-production.com/wp-content/uploads/2009/07/McDonald_To-Send-toAuthor.pdf

rebate. The program has a rolling cap of \$5.0 million per fiscal year; claims exceeding the cap can be paid in following years. The program has been renewed through FY2024.

Criteria for Evaluation

A key factor in evaluating the effectiveness of incentive programs is to determine whether they are meeting the stated goals as established in state statute or legislation. In this case, the legislative intent as articulated in the statute is to attract film and television productions to the state, in order to:

“provide jobs for Oklahomans and dollars for Oklahoma businesses, [and] also enhance the state’s image nationwide. [...] It is therefore the intent of the Legislature that Oklahoma provide an incentive that will stand out among those of other states and increase film production in this state.”²

To assist in a determination of the effectiveness of the program, the Incentive Evaluation Commission has adopted the following criteria:

- Marginal wages and salaries paid to Oklahoma residents by films eligible for the rebate – comparison to period prior to the rebate
- Film-related expenditures in Oklahoma by films eligible for the rebate – comparisons to period prior to the rebate
- Additional identifiable business activity directly or indirectly produced by films eligible for the rebate
- Additional identifiable benefits that accrue to the State by films eligible for the rebate
- Return on investment (economic activity versus rebates paid)

These criteria are discussed throughout the report, to the extent possible given data availability.

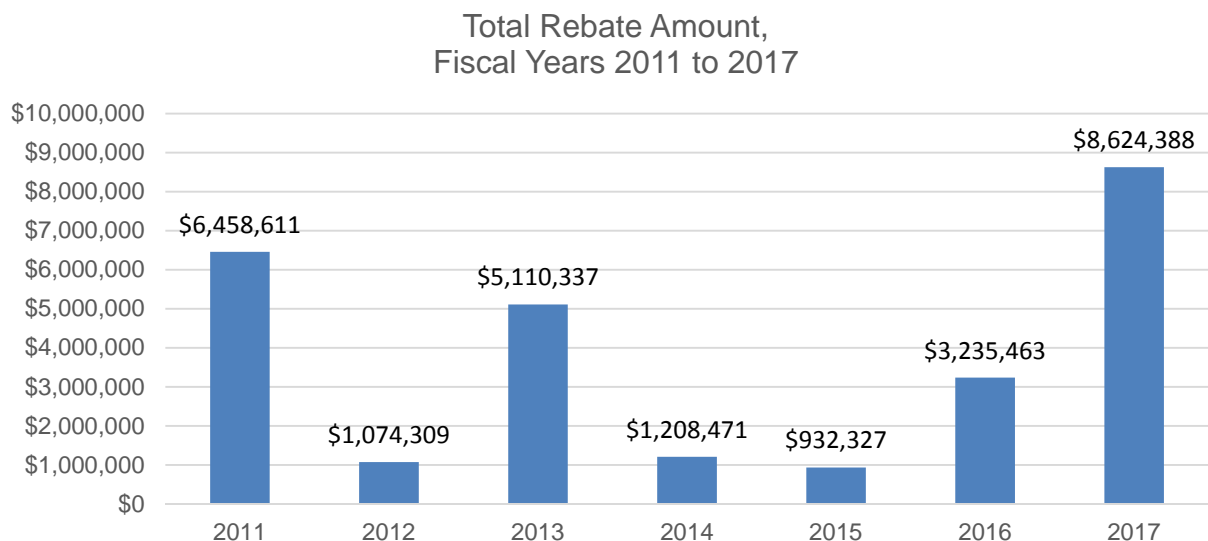
² 68. O.S., Section 3621-3626

Program Background and Benchmarking

Background

Participation in the film rebate program has varied substantially from year to year. In FY 2016, there are 11 productions in the state qualifying for a total rebate amount of over \$3.2 million. The Film + Music Office reported that there are already six productions for FY 2017 that are expected to qualify for a total rebate amount of up to \$8.6 million, including one major film that may qualify for over \$4.3 million in rebates. As noted previously, claims exceeding the \$5.0 million annual cap can be paid in following years, in the order in which the claims are approved.

As illustrated by the following graph, annual rebate levels have varied from year to year, and it is not possible to predict how funding trends will continue beyond FY2017.



Source: Oklahoma Film + Music Office, 2016.

Benchmarking

As noted in the introduction, most states provide incentives to attract film and video production activity. In 2009, the year Oklahoma's rebate amount was increased from 15 percent to up to 37 percent, 42 states, Puerto Rico and Washington D.C. offered film tax incentives.³ As competition has increased and states began offering increasingly generous programs, questions have arisen about the impact of film incentives on economic development and state finances, as discussed later in this section. That said, inter-state competition for film productions remains strong.

For evaluation purposes, benchmarking provides information related to how peer states use and evaluate similar incentives. At the outset, it should be understood that no states are 'perfect peers' – there will be multiple differences in economic, demographic and political factors that will have to be considered in any analysis; likewise, it is exceedingly rare that any two state incentive programs will be exactly the same.

³ William Luther, "Movie Production Incentives: Blockbuster Support for Lackluster Policy," Tax Foundation Special Report 173 (January 2010), http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1538687.

For example, many states offer a suite of film incentives programs in addition to a tax credit or rebate structure. These may include grants, sales and use tax exemptions, lodging exemptions, and an assortment of other offers tailored to attract production companies. These benchmarking realities must be taken into consideration when making comparisons – and, for the sake of brevity, the report will not continually re-make this point throughout the discussion.

The process of creating a comparison group for incentives typically starts with a look at bordering states. This is generally the starting point because proximity often leads states to compete for the same regional businesses or business/industry investments. Second, neighboring states often (but not always) have similar economic, demographic or political structures that lend themselves to comparison.

In this case, the comparison group has been extended beyond the neighboring states to include Louisiana, Massachusetts, Minnesota, Georgia, and Alabama, all states that have a rebate program comparable to Oklahoma's, with some important differences. Key differentiating factors in state programs include the amount of rebate (or credit), spending requirements, program caps, and in-state labor requirements.

Program Caps: Six of the nine comparison states have annual program caps. Oklahoma's \$5.0 million cap is on par with that of Arkansas, but significantly more conservative than all other caps. The next lowest cap in the group is \$20.0 million in Alabama, and the highest is Louisiana at \$120.0 million.

With an annual cap of \$5.0 million, Oklahoma has narrowed its program to target lower budget film series or independent films. High budget productions with greater market distribution rarely consider Oklahoma for film production.⁴ Though not included in this comparison group, the State of Mississippi also targets smaller productions and independent films with an annual program cap twice the size of Oklahoma's.⁵

Spending Requirements: Seven of the nine comparison states have production spending requirements of \$100,000 or more. Oklahoma's requirement of a \$50,000 production budget is among the lowest in the comparison group. In conjunction with the state's annual cap, Oklahoma's lower spending requirement makes the program accessible to smaller budgeted productions that would not be eligible to receive incentives in neighboring states.

Amount of Credit/Rebate: States in the comparison group provide rebates or tax credits ranging from 20 to 40 percent of production expenses and payroll. With a total rebate of 37 percent, Oklahoma has the second most generous rebate percentage in the comparison group.

It is notable that, unlike Oklahoma, several states have separate rebate or credit amounts for production expenses versus payroll expenses. For example, Louisiana offers a tax credit of 30 percent of production

⁴ Interview with Tava Sofsky, Director of the Oklahoma Film + Music Office. September 16, 2016.

⁵ Source: Joint Legislative Committee on Performance Evaluation and Expenditure Review. December 15, 2015. [An Evaluation of the Effectiveness of the Mississippi Film Office](http://www.peer.state.ms.us/reports/rpt602.pdf). Report to the Mississippi Legislature. Available at: <http://www.peer.state.ms.us/reports/rpt602.pdf>

expenses and a separate payroll tax credit equal to 10 percent of compensation paid directly to state residents.

In-State Labor Requirements: Oklahoma's rebate requires payroll to be paid to Oklahoma residents, expatriates, or Oklahoma registered companies. This restriction is rare among comparison programs. The only comparison states with labor restrictions are Colorado, Texas, and Mississippi, which specify only that a certain percentage of the cast and crew must be state residents.

	Oklahoma	Alabama	Arkansas	Colorado	Georgia	Louisiana	Massachusetts	Minnesota	New Mexico	Texas
Rebate Amount	35% with an additional 2% if \$20,000 or more is spent on music in-state	25% of qualified expenditures and 35% of payroll paid to state residents	20% of qualified costs and an additional 10% for payroll paid to state residents	20%	20% tax credit, with an additional 10% for embedding a Georgia promotional logo in the title or credits of the production	Transferrable income tax credit equal to 30% of eligible expenditures. An additional 10% payroll tax credit is offered based on compensation paid directly to state residents	25% tax credit for production expenses, 25% payroll tax credit	20 to 25%	25% with an additional 5% for television series or pilots if documentation of intention to continue producing the series in New Mexico is provided	5 to 20% of eligible costs. Additional 2.5% for projects locating in economically distressed areas
Qualified Productions	Film, television, commercials	Films, soundtracks, documentaries, television, sound recording, music videos, commercials, and video games	Films, documentaries, television, music videos, video games, commercials	Films, television, commercials, music videos, industrials, documentaries, video games and others	Film, television, commercials, music videos, animation and game development	Films, television, webisodes, documentaries, commercials	Film, television, commercials	Films, documentaries, television, commercials, music videos, internet, and post production	Films, television, commercials, documentaries, video games and post-production	Films, television, commercials, video games, and post-production
Minimum Expenditure	Total production budget of \$50,000, with at least \$25,000 spent in-state	\$500,000 generally. \$50,000 for soundtracks and music videos	\$500,000	\$100,000 for Colorado production companies \$1 million for out-of-state production companies	\$500,000	\$300,000	\$50,000 in-state for payroll credit, 50% of total production cost for expense based credit	\$100,000 for 20% credit, \$1 million or shoot 60% of days outside of the metro area and spend at least \$100,000 for 25% credit	No minimum	\$250,000 for a 5% rebate, over \$1 million for 10% rebate, over \$3.5 million for 20%
Maximum Expenditure	No per project cap	\$20 million	No per project cap	No per project cap	No per project cap	No per project cap	No per project cap	No per project cap	\$2 million annually, per project	No per project cap
Annual Program Cap	\$5 million	\$20 million	\$5 million	Colorado film office requests program funding annually. The program cap for fiscal year 2015 to 2016 is \$3.5 million	No annual cap	\$180 million	No annual cap	No annual cap	\$50 million	\$32 million
In-state Labor Requirement	Only Oklahoma residents, expatriates, or wages paid to companies registered to do business in Oklahoma may be included as qualified payroll	None	None	Cast and crew must be at least 50% state residents	None	None	None	None	None	70% of paid crew and 70% of paid cast, including extras must be state residents

Evaluations of other State Film Incentives

Prompted by the 2008 recession and increased budgetary pressures, several states have sought to quantify the economic impacts of their film incentive programs. These programs have become increasingly controversial, as most independent return on investment studies conducted by individual state auditing agencies have found a net loss in revenue to the state treasury. The table below summarizes a sample of these independent program evaluations, most of which concluded that states receive less than 50 cents for each dollar spent on film incentives and often significantly less:

State	Company/Organization Reviewing the Program and Date of the Study	Return on Investment of State Film Industry Incentive Program
Alaska*	Legislative Budget & Audit Committee (2012)	\$0.07
Arizona*	Arizona Department of Commerce (2009)	\$0.28
California	Legislative Analyst Office (2014)	\$0.65
Connecticut	Department of Economic and Community Development (2008)	\$0.07
Florida	Florida Office of Economic and Demographic Research (2015)	\$0.43
Louisiana	Louisiana Department of Economic Development (2015)	\$0.23
Maryland	Department of Legislative Services (2015)	\$0.06
Massachusetts	Massachusetts Department of Revenue (2013)	\$0.13
Michigan*	Michigan Senate Fiscal Agency (2010)	\$0.11
Mississippi	Joint Legislative Committee on Performance Evaluation and Expenditure Review (2015)	\$0.49
New Jersey*	New Jersey Economic Development Authority (2011)	\$0.55
New Mexico	Department of Finance & Administration (2014)	\$0.33
North Carolina	North Carolina General Assembly's Fiscal Research Division (2014)	\$0.46
Pennsylvania	Independent Fiscal Office	\$0.14
Rhode Island	Department of Revenue (2008)	\$0.28

* These states have recently cancelled their incentive programs

Sources: State program evaluations as listed.

Findings from studies commissioned by film industry advocates typically vary from those performed by independent entities because of different analytical assumptions. Studies commissioned by film industry advocates often do not distinguish between resident and nonresident activity, such as employment of out-of-state actors and filmmakers. Some studies account for local revenues while others do not. Additionally, some studies make questionable assumptions when estimating the economic impacts of film tourism. The actual impact of film tourism will depend on several variables, including how many people view the films made in state, the demographics of the audience, whether particular motion pictures include recognizable scenery, and whether the films portray the state in a positive, negative, or neutral light. Obviously, such a study would also have the task of accurately measuring these and other important factors affecting tourism industry, and would have to be able to isolate impacts due to a particular film and/or films on tourism.

The project team is not aware of any published and peer-reviewed study from a non-interested party that measures the direct and indirect impact of the film credit induced tourism. Independent film incentive evaluations typically do not attempt to quantify film tourism or the economic effects of heightened state visibility through film.

In addition to poor return on investment, several program evaluations have concluded that the quality and number of in-state jobs supported by film incentive programs are not cost effective. A 2016 Massachusetts study found that each net new Massachusetts resident FTE job cost the State \$109,762 in film incentive payments.⁶ A 2014 North Carolina study found that \$30.0 million in credits created 55 to 70 new jobs with a total payroll of \$2.0 million.⁷ In other words, each job cost the State of North Carolina between \$429,000 and \$545,000, but these positions paid an average salary of \$36,000 a year. As a recent Wall Street Journal article noted, “it would be more sensible to give 100 unemployed people briefcases with \$100,000 in cash.”⁸

The jobs created by film incentives are temporary and of short duration, not dissimilar from the construction industry. In many cases, workers on film productions are employed for only a few weeks (or days). As soon as the film production ends, all positive economic impacts generally cease as well. Due to the fierce competition with other states for film productions, it is difficult if not impossible to determine how much funding a state would have to provide each year in order to develop a sustainable film industry that is also cost effective to the state and local governments. Major motion picture studios have advised state entities – including the Oklahoma Film + Music Office – that states with competitive film incentive programs are considered as viable film production options, while those without are not considered at all.

⁶ Commonwealth of Massachusetts, Department of Revenue. April 20, 2016. Report on the Impact of Massachusetts Film Industry Tax Incentives through Calendar Year 2013. Available at:

<http://www.mass.gov/dor/docs/dor/news/reportcalendaryear2013.pdf>

⁷ Patrick McHugh and Barry Boardman. April 3, 2014. “Preliminary Review of Handfield Film Study.” Memorandum to Representative Rick Catlin. North Carolina General Assembly Legislative Services Office, Fiscal Research Division. Available at: <http://s3.amazonaws.com/site-docs/cjonline/ReviewofHandfieldFilmStudy-RepCatlin.pdf>

⁸ Chris Hudson and Donald Bryson. September 18, 2015. “Yelling ‘Cut!’ for Movie Making Tax Breaks.” Wall Street Journal. Available at: <http://www.wsj.com/articles/yelling-cut-for-moviemaking-tax-breaks-1442613935>

Given the volatility of film industry employment, states with both large and small film incentive programs have concluded that it is not possible to generate an independent, self-sustaining film industry. Several audits of Louisiana's film programs – one of the largest in the country – have concluded that despite the allocation of over \$1.3 billion in tax incentives since 2003, the industry's mobility is such that Louisiana's gains can be sustained only with ongoing subsidies.⁹ A 2016 Massachusetts study estimates that only \$12.0 million out of a total of \$277.2 million in production spending would have occurred in the absence of film incentives.¹⁰ A 2015 study produced by the Maryland Department of Legislative Services cited the lack of stable and sustainable job creation as the primary rationale behind its recommendation that the state allow the incentive to sunset.¹¹

The inherent mobility of the film industry raises questions about whether Oklahoma's goal of fostering the State's relatively small film industry is either achievable or sustainable. Like Oklahoma, the State of Mississippi has designed its film incentive program with the goal of spurring the development of its nascent film industry. As noted earlier, Mississippi has a low minimum expenditure budget requirement identical to that of Oklahoma. A 2015 state evaluation found that the program had had only limited success in creating industry depth and breadth its first decade, and posited that significant coordination with state workforce training entities would be necessary to expand the number and size of film productions that the state would be able to support.¹² Recommended initiatives included:

- Planning and implementing a certification program for local businesses that have demonstrated necessary skills and competence to support the film industry. The Oklahoma Film + Music Office already maintains a similar list.
- The State Workforce Investment Board should partner with the State Film Office to develop, for inclusion in the State's workforce development plans, a program for educational certification of technical specialists needed in the film industry.
- Developing a plan to coordinate efforts with the existing film studios in the State to enhance their continued use.

If Mississippi is struggling to grow its film industry without additionally supporting the industry's workforce development pipeline, it likely that Oklahoma would also be limited in its ability to grow significantly absent such investments. Given the volatility of film industry employment, it is not clear that generating a long-term pipeline for film industry jobs is the most beneficial use of workforce training

⁹ See annual or repeating evaluations of Louisiana's film incentive programs produced by the Legislative Fiscal Office, the Louisiana Economic Development Agency, and the Legislative Audit Office.

¹⁰ Commonwealth of Massachusetts, Department of Revenue. April 20, 2016. Report on the Impact of Massachusetts Film Industry Tax Incentives through Calendar Year 2013. Available at: <http://www.mass.gov/dor/docs/dor/news/reportcalendaryear2013.pdf>

¹¹ Department of Legislative Services, Office of Policy Analysis. Sept 2015. Evaluation of the Maryland Film Production Activity Tax Credit. Annapolis, MD.

¹² Source: Joint Legislative Committee on Performance Evaluation and Expenditure Review. December 15, 2015. An Evaluation of the Effectiveness of the Mississippi Film Office. Report to the Mississippi Legislature. Available at: <http://www.peer.state.ms.us/reports/rpt602.pdf>

resources. There is real concern that such an investment might be preparing Oklahoma residents for jobs that fail to materialize in the future.

One of the strengths of Oklahoma's film rebate program is that eligible costs are defined narrowly, excluding wages paid to out-of-state residents and out-of-state businesses (with a few exceptions outlined in the administrative processes section). Given the administrative burdens required to document and verify these in-state expenditures, few state incentives mandate these in-state labor requirements. Other policy tools are more typical, such as local hire preferences, minimum local hire requirements, or more favorable rebates for locally paid wages. The disadvantage of these approaches is that film production companies have little incentive to minimize the "leakage" of incentive monies out of state. Payments to in-state residents have much higher "multiplier" effects than payments to non-residents, as a significantly higher proportion of income earned by residents is spent on local businesses, which in turn generates additional local economic activity. Payments made to non-residents – especially workers who spend only a short time in the state on film projects – will be spent almost entirely elsewhere, likely in the state or states where the worker regularly resides. This is particularly true of wages paid to highly-compensated actors, directors, producers, writers and their staff, whose local expenses – including in-state travel, food, lodging, entertainment, and ancillary expenses – are already included in the film production budget, thereby reducing the amount of income that such highly compensated non-residents need to spend in while in state for film shoots.

Given that many film production workers live in other states and may be on location only for a matter of weeks, there are high costs associated with film incentive program designs that fail to confine qualified expenditures to in-state costs and resident wages. Before Governor Snyder discontinued Michigan's film incentive program, nearly half of the spending that qualified for the film tax credit in the 2009 fiscal year "effectively left Michigan and did not contribute to the State's economic activity."¹³ Likewise, prior to the termination of the Alaska film incentive, up to 84 percent of wages at qualifying productions went to non-residents.¹⁴ A 2009 study commissioned by the Massachusetts Department of Revenue found that 84 percent all compensation paid to individuals employed in Massachusetts-based productions between 2006 and 2008 flowed to out-of-state workers, and that the state subsidized approximately \$116.3 million on wages paid to non-residents.¹⁵

This uncertainty regarding the program's economic viability has prompted several states to either cut back or cancel their film industry incentive programs in recent years. Thirteen states -- Alaska, Arizona, Arkansas, Idaho, Indiana, Iowa, Kansas, Maine, Michigan, Missouri, New Jersey, Washington, and Wisconsin -- have cancelled their film industry incentive programs since the beginning of the 2008

¹³ David Zin. September 2010. "Film Incentives in Michigan." Issue Paper: Papers Examining Critical Issues facing the Michigan Legislature. Senate Fiscal Agency. Available at: <http://www.senate.michigan.gov/sfa/publications/issues/filmincentives/filmincentives.pdf>

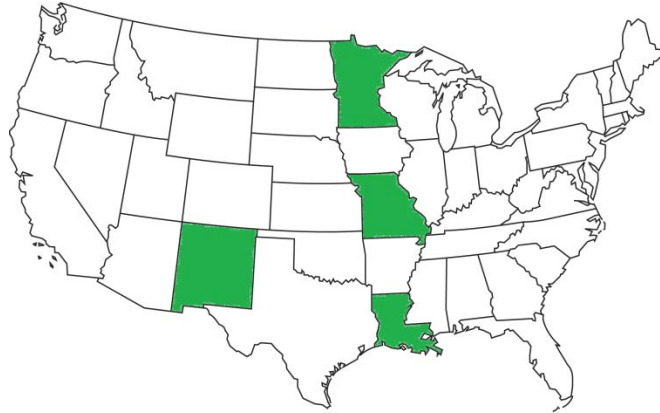
¹⁴ Northern Economics Inc. June 2012. Economic Analysis of the Alaska Film Production Incentive Program. Prepared for the Division of Legislative Audit. Available at: http://www.akleg.gov/basis/get_documents.asp?session=28&docid=3336

¹⁵ Commonwealth of Massachusetts, Department of Revenue. April 20, 2016. Report on the Impact of Massachusetts Film Industry Tax Incentives through Calendar Year 2013. Available at: <http://www.mass.gov/dor/docs/dor/news/reportcalendaryear2013.pdf>

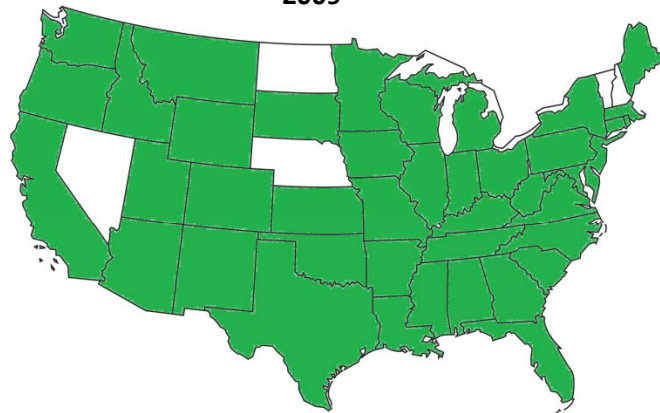
recession. Notably, both New Mexico and Louisiana, the two states that first issued highly leveraged film incentive programs, have acknowledged the mixed economic effects of the film incentive and have instituted a cap on their programs to limit potential losses. The following illustrations identify states with film incentives (shaded in green):

States with Film Incentives, 2002, 2009, and 2016

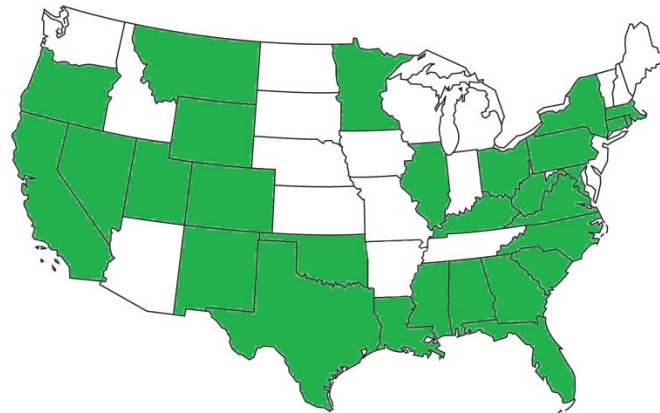
2002



2009



2016



Adapted from: *Department of Legislative Services, Office of Policy Analysis. Sept 2015. Evaluation of the Maryland Film Production Activity Tax Credit. Annapolis, MD.*

Fiscal Impact

For this evaluation, fiscal impact is considered to be the directly attributable impact of the rebate on State revenues and expenditures. The evaluation does not quantify revenue and expenditure impacts on local governments. Possible local government revenues are not included because there is far less attenuation from these local impacts for a discussion of a state incentive program – for a variety of reasons (including the impact of local decision making outside the state’s control on local revenues and expenditures and the widely divergent impacts throughout the state).

The following table identifies the claimed and potentially claimed rebates for this program, both historic and anticipated. The production company submitted the counts of state residents employed and their aggregate wage expenditures (salary + benefits), along with documentation to support the qualified total direct in-state expenditures (wages + goods and services). These are not estimates but exact figures verified by the third party reviewer and approved by the Oklahoma Film + Music Office. FY2017 figures include projects that have been pre-certified for the amounts listed; the production company may choose to delay or cancel these projects. The rebate amounts are listed by the fiscal year in which they were approved, not by the year of payment. Between FY2005 and FY2010, the Oklahoma Film + Music Office used a different calculation methodology to determine the qualified total direct in-state spend; as a result, the older data is not directly comparable to the more recent figures.

Year	No. of Films	No. of TV spots	OK Jobs Created (a)	OK Wage Expenditure	Qualified Total Direct OK spend	Rebate Amount
FY2011	5	0	1,256	\$7,111,321	\$17,561,167	\$6,458,611
FY2012	4	0	295	\$1,707,934	\$2,929,042	\$1,074,309
FY2013	2	0	461	\$8,319,712	\$13,811,723	\$5,110,337
FY2014	4	1	348	\$1,395,427	\$3,301,395	\$1,208,471
FY2015	6	0	668	\$1,113,761	\$2,641,325	\$932,327
FY2016	8	3	1,420	\$4,567,314	\$8,979,466	\$3,235,463
FY2017	6	0	1,806	\$11,823,784	\$23,330,798	\$8,624,388
Total	35	4	6,254	\$36,039,253	\$72,554,916	\$26,643,908

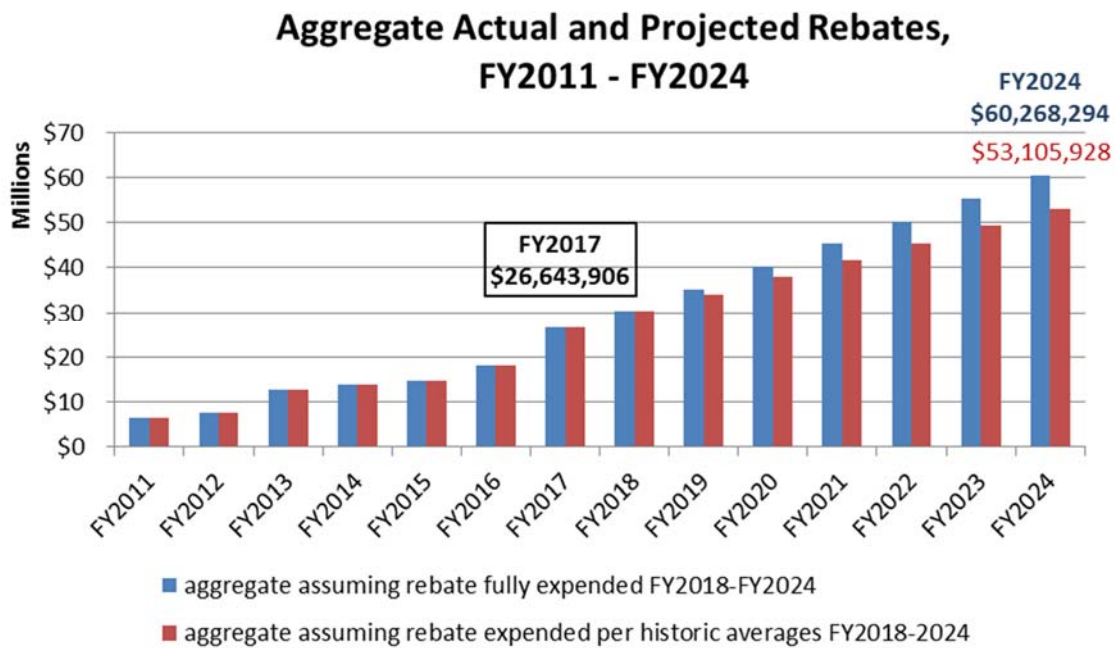
(a) data reflect temporary jobs, not FTEs

Source: Oklahoma Film + Music Office, 2016.

The costs of program administration are included in the Oklahoma Office of Film + Music budget for general administration. The above table does not include any indirect costs.

With the \$5.0 million rebate cap in place, the maximum fiscal impact of this program between FY2018 and program expiration in FY2024 would be an additional \$31,375,612, assuming all the preapproved FY2017 projects receive the full amount of the rebate for which they have been qualified. If, on the other hand, future program usage aligns with historical averages (\$3,806,272 per year), the FY2018-FY2024 state fiscal impact would be closer to an additional \$23,019,520. The graph below illustrates how these

two projected expenditure patterns would affect the program’s aggregate fiscal impact from FY2011 through its sunset date in FY2024.



Source: Oklahoma Film + Music Office 2016; PFM 2016.

There is, of course, some additional revenue that would be generated from the economic activity associated with this rebate, as discussed in the following chapter.

Economic Impact

Methodology

Economists use a number of statistics to describe regional economic activity. Four common measures are “Output” which describes total economic activity and is generally equivalent to a firm’s gross sales; “Value Added” which equals gross output of an industry or a sector less its intermediate inputs; “Labor Income” which corresponds to wages and benefits; and “Employment” which refers to jobs that have been created in the local economy.

In an input-output analysis of new economic activity, it is useful to distinguish three types of expenditure effects: direct, indirect, and induced.

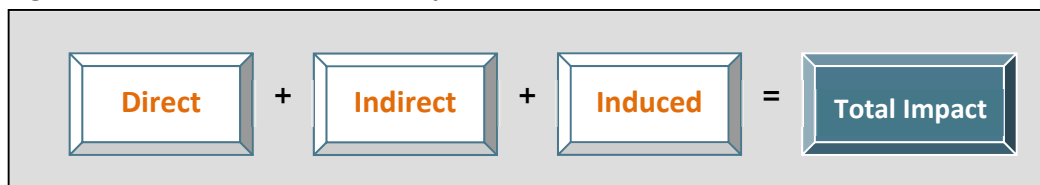
Direct effects are production changes associated with the immediate effects or final demand changes. The payment made by an out-of-town visitor to a hotel operator or the taxi fare paid for transportation while in town are examples of direct effects.

Indirect effects are production changes in backward-linked industries caused by the changing input needs of directly affected industries – typically, additional purchases to produce additional output. Satisfying the demand for an overnight stay will require the hotel operator to purchase additional cleaning supplies and services. The taxi driver will have to replace the gasoline consumed during the trip from the airport. These downstream purchases affect the economic output of other local merchants.

Induced effects are the changes in regional household spending patterns caused by changes in household income generated from the direct and indirect effects. Both the hotel operator and taxi driver experience increased income from the visitor’s stay, as do the cleaning supplies outlet and the gas station proprietor. Induced effects capture the way in which increased income is spent in the local economy.

A multiplier reflects the interaction between different sectors of the economy. An output multiplier of 1.4, for example, means that for every \$1,000 injected into the economy, all other sectors produce an additional \$400 in output. The larger the multiplier, the greater the impact will be in the regional economy.

Figure X: The Flow of Economic Impacts



For this analysis, the project team used the IMPLAN online economic impact model with the dataset for the State of Oklahoma (2014 Model).

State of Oklahoma Tax Revenue Estimate Methodology

To provide an “order of magnitude” estimate for state tax revenue attributable to the incentive being evaluated, the project team focused on the ratio of state government tax collections to Oklahoma Gross Domestic Product (GDP). Two datasets were used to derive the ratio: 1) U.S. Department of Commerce Bureau of Economic Analysis GDP estimates by state;¹⁶ and 2) the Oklahoma Tax Commission’s *Annual Report of the Oklahoma Tax Commission* reports.¹⁷ Over the past ten years, the state tax revenue as a percent of state GDP was 5.5 percent.

State of Oklahoma Tax Revenue as a Percent of State GDP

Year	Oklahoma Tax Revenue*	Oklahoma GDP	Ratio
2005-06	\$8,435,214,025	\$136,804,000,000	6.2%
2006-07	\$8,685,842,682	\$144,171,000,000	6.0%
2007-08	\$9,008,981,280	\$155,015,000,000	5.8%
2008-09	\$8,783,165,581	\$143,380,000,000	6.1%
2009-10	\$7,774,910,000	\$151,318,000,000	5.1%
2010-11	\$8,367,871,162	\$165,278,000,000	5.1%
2011-12	\$8,998,362,975	\$173,911,000,000	5.2%
2012-13	\$9,175,334,979	\$182,447,000,000	5.0%
2013-14	\$9,550,183,790	\$190,171,000,000	5.0%
2014-15	\$9,778,654,182	\$180,425,000,000	5.4%
Average	\$8,855,852,065	\$162,292,000,000	5.5%

Source: U.S. Department of Commerce Bureau of Economic Analysis and Oklahoma Tax Commission

* Gross collections from state-levied taxes, licenses and fees, exclusive of city/county sales and use taxes and county lodging taxes

The value added of an industry, also referred to as gross domestic product (GDP)-by-industry, is the contribution of a private industry or government sector to overall GDP. The components of value added consist of compensation of employees, taxes on production and imports less subsidies, and gross operating surplus. Changes in value added components such as employee compensation have a direct impact on taxes such as income and sales tax. Other tax revenues such as alcoholic beverage and cigarette taxes are also positively correlated to changes in income.

Because of the highly correlated relationship between changes in the GDP by industry and most taxes collected by the state, the ratio of government tax collections to Oklahoma GDP forms the evaluation basis of the fiscal implications of different incentive programs offered by the State. The broader the basis of taxation (i.e., income and sales taxes) the stronger the correlation; with certain taxes on specific activity, such as the gross production (severance) tax, there may be some variation in the ratio year-to-

¹⁶ <http://www.bea.gov/regional/>

¹⁷ https://www.ok.gov/tax/Forms_&_Publications/Publications/Annual_Reports/index.html

year, although these fluctuations tend to smooth out over a period of several years. This ratio approach is somewhat standard practice, and is consistent with what IMPLAN and other economic modeling software programs use to estimate changes in tax revenue.

To estimate State of Oklahoma tax revenue generated in a given year, TXP multiplied the total value added figure produced by the IMPLAN model by the corresponding annual ratio (about 5.5%). For example, if the total value added was \$1.0 million, then the estimated State of Oklahoma tax revenue was \$55,000 ($\$1.0 \text{ million} \times 5.5\%$).

Data Collection, Model Inputs, and Other Issues

The project team performed the following steps to derive the economic and tax revenue impact:

1. The project team collected existing data and studies from State of Oklahoma agencies including the Oklahoma Tax Commission and Oklahoma Department of Commerce.
2. The project team collected and analyzed studies performed or commissioned by other organizations such as the Oklahoma Film + Music Office and the Economic Research & Policy Institute at Oklahoma City University.
3. Data on the Oklahoma Film Enhancement Rebate Program was obtained from the Oklahoma Film + Music Office for fiscal years 2011 to 2017.
4. IMPLAN sector 492 Independent Artists, Writers, and Performers was used to model the economic impact.
5. The Oklahoma Film Enhancement Rebate Program offers a rebate of 35 to 37 percent on qualified Oklahoma expenditures to film and television productions.
6. **Total expenditures (also referred to as “economic activity”) are not the same as tax revenue generated by the public sector.** It is common, but not accurate, in film economic impact studies to compare economic activity against the incentives offered. This comparison does not provide any insights into if the public sector is making a net profit or loss on the incentive program.
7. For example, \$100 in retail sales (economic activity) might generate \$8 in new sales tax revenue (assuming an 8 percent sales tax rate). If an incentive program for retailers rebated 50 percent of economic activity or sales, the public sector would rebate \$50. Under this scenario, the public sector has a net loss of \$42 on the incentive program ($\$50 - \8)
8. Media exposure and advertising value are benefits usually claimed by film and television production incentive programs above and beyond the economic impact results. While it is true

that some productions might generate additional media exposure for the community, it is not possible to place an economic value on the exposure other than not having to purchase a similar level of exposure (ex. TV or radio commercials). For example, the viewers watching a video produced in Oklahoma might not be the target market for the region's tourism assets. If these viewers do not come to Oklahoma and spend money, then it is difficult to monetize the value of this media exposure.

Annual Economic Impact of Film Industry Qualified Oklahoma Direct Spending

Year		Output	Value Added	Labor Income	Employment	Estimated OK Tax Revenue
FY 2011	Direct Effect	\$16,674,115	\$8,127,553	\$7,986,226	698	
	Indirect Effect	\$7,796,193	\$4,187,088	\$2,832,715	80	
	Induced Effect	\$7,909,288	\$4,320,041	\$2,445,209	60	
	Total Effect	\$32,379,595	\$16,634,682	\$13,264,151	838	\$854,711
FY 2012	Direct Effect	\$3,084,866	\$1,327,427	\$1,304,345	114	
	Indirect Effect	\$1,442,368	\$774,650	\$524,079	15	
	Induced Effect	\$1,337,665	\$730,619	\$413,543	10	
	Total Effect	\$5,864,899	\$2,832,695	\$2,241,966	139	\$143,417
FY 2013	Direct Effect	\$13,114,061	\$6,179,069	\$6,071,624	531	
	Indirect Effect	\$6,131,645	\$3,293,112	\$2,227,908	63	
	Induced Effect	\$6,068,634	\$3,314,664	\$1,876,153	46	
	Total Effect	\$25,314,340	\$12,786,845	\$10,175,685	640	\$661,607
FY 2014	Direct Effect	\$3,301,395	\$1,420,600	\$1,395,898	122	
	Indirect Effect	\$1,543,609	\$829,023	\$560,864	16	
	Induced Effect	\$1,431,557	\$781,901	\$442,570	11	
	Total Effect	\$6,276,561	\$3,031,524	\$2,399,332	149	\$152,457
FY 2015	Direct Effect	\$2,507,820	\$1,107,455	\$1,088,198	95	
	Indirect Effect	\$1,172,563	\$629,746	\$426,046	12	
	Induced Effect	\$1,107,640	\$604,984	\$342,431	8	
	Total Effect	\$4,788,023	\$2,342,185	\$1,856,675	116	\$117,622

Source: TXP, Inc.

Technical and Administrative Issues

Overview

The Oklahoma Film Enhancement Rebate Program is administered by the Oklahoma Film + Music Office and the Oklahoma Tax Commission. Guidelines for eligibility and program administration are set forth clearly and comprehensively in the state statute, the administrative rules, and the guidelines and application instructions that have been prepared by the Film + Music Office for prospective applicants.¹⁸ The essential components to overall program administration are summarized below:

1. **Eligibility.** Eligible film and television productions as well as commercials with a national broadcast reach must have a minimum overall budget of \$50,000 and spend at least \$25,000 in Oklahoma. Certain obscenity restrictions apply.
2. **Determining the Rebate.** The program offers a 35 percent to 37 percent cash rebate on Oklahoma expenditures. The base rebate of 35 percent is increased to 37 percent if a production company spends a minimum of \$20,000 for music created by an Oklahoma resident that is recorded in Oklahoma. Other qualifying expenditures may occur during scouting, production, or post-production and generally aim to encompass most major costs associated with production activity in Oklahoma. Eligible expenses may include lodging, building rentals, food expenses, equipment rental/purchase, studio rentals, permit fees, materials rental/purchase (including wardrobe and accessories), per diem, vehicle rentals, overnight courier service, airline tickets, contracted services, insurance, and wages paid to Oklahoma residents or Oklahoma expatriates¹⁹ registered as such with the Oklahoma Film + Music Office. No more than 25 percent of the total Oklahoma qualifying spend can be compromised of aggregate Above-The-Line personnel wages.²⁰

The production must retain the services of an independent certified public accountant based in Oklahoma to serve as a third party reviewer.

¹⁸ Administrative Rules are contained in Title 725, Chapter 35. A copy of the guidelines and instructions for application can be found here:

<https://www.ok.gov/oklahomafilm/documents/Oklahoma%20Film%20Enhancement%20Rebate%20Guidelines%20January%2016%202015%20revision.pdf>

¹⁹ An individual registered as an "Oklahoma expatriate" with the Oklahoma Film + Music Office counts as qualifying "in-state crew" for the purposes of determining in-state wages and salary. Eligible individuals are Oklahoma below-the-line crew not currently residing in Oklahoma. The expatriate roster is made available to producers in an effort to supplement Oklahoma's existing crew base. In exchange for utilizing a crew member from the expatriate roster as a qualifying local expenditure, the production must accept assignment of an intern provided by an Oklahoma institute of higher learning, to be assigned to the expatriate or other appropriate personnel.

²⁰ Above the Line cast and crew members include the Director, Producer, Writer, and Principal Cast. Below the Line crew include technical crew members such as department heads, such as Production Manager, Production Accountant, Production Designer, Costume Designer, Director of Photography, Editor, Casting Director, Art Director, First Assistant Director, Key Grip, Gaffer, Construction Coordinator, Transportation Coordinator, Extras Coordinator, etc

3. **Pre-Qualification.** At least 60 days but no more than 180 days prior to the start of pre-production, applicants must submit information on the project and production company, a breakdown of estimated Oklahoma expenditures, and a full production budget. Upon review of these materials, the Oklahoma Film + Music Office will issue written notice of either conditional prequalification or disapproval.

In addition, 60 days prior to the start of principal photography, the production must show proof that 50 percent of the production budget is in place, followed by proof of 100 percent of production budget 30 days later. Acceptable documentation could include a signed letter of intent from Production Financiers, executed equity investor agreements, letter from production entity bank stating the funds available for production, etc.

At the 30 day mark, productions must submit revised production budgets, script, shooting schedules, crew list tagged for resident and non-resident with full contact information, cast list tagged for resident and non-resident hires, payroll agreement, and location list.

At the 10 day mark, the producers and the Oklahoma Film + Music Office will develop a joint press release announcing the production in Oklahoma.

If principal photography is delayed twice, the production is moved to the back of the eligibility queue; if delayed three times, prequalification is null and void and the production cannot reapply until the following fiscal year. There may be no more than one application per fiscal year per specific production (based on production title, script, and budget).

4. **Final Rebate Review.** Prior to final approval of the rebate, the third party reviewer must submit final budget totals for overall expenditures and Oklahoma expenditures, along with verification of crew members' residency status, logs that demonstrate at least three unsuccessful attempts to rent or purchase items from Oklahoma vendors, supporting expenditure documentation, final cast, crew, and extras list with local hires annotated, final vendor list, final location list, signed contracts, deal memos, or vouchers for all weekly and daily cast and crew, daily production reports for all filming days, final shooting schedule, final payroll report, DVD of final released film or TV spot, and a film poster if available.

The final rebate amount will not exceed the rebate pre-qualification amount. Within 30 days of all requirements being met, the Oklahoma Film + Music Office will request the rebate payment of the Oklahoma Tax Commission, which will issue the payment.

5. **Reporting.** The Oklahoma Film + Music office is the source of all data associated with the rebate program.

Summary

The administrative processes associated with the rebate program have been designed to ensure that no Oklahoma tax payer dollars are allocated toward ineligible expenses or towards productions that are unlikely to be completed and distributed as planned. Staff at the Oklahoma Film + Music Office have established a calendar and set of requirements to ensure that the process is smooth, fair, and verifiable.

While there are significant data available to the program administrators, much of that information cannot be disclosed to program evaluators, either because it is protected from disclosure due to State confidentiality laws, or because the Oklahoma Film + Music Office does not maintain particular data points in electronic databases so as to streamline information retrieval. In a few cases, the inaccessibility of such data hinders an analysis of economic impacts. Specifically:

- **Duration of the film shoot or employment period.** If such data were readily accessible, program evaluators could convert production employment figures into Full Time Equivalents (FTE), which would allow for a computation of the state cost per FTE position created. Without this information, it is difficult to directly compare the number of jobs created and the associated payroll with the jobs and payroll amounts created by other state incentives.
- **Rebate expenditures associated with registered Oklahoma “expatriates” and Oklahoma Production Service Entities,²¹** neither of which are permanently located in Oklahoma. As described earlier in this evaluation, payments made non-residents (even former Oklahoma residents) and out-of-state vendors will have a significantly smaller multiplier effect on the State economy than wages paid to residents and payments made to local businesses. Given the acknowledged limits of the Oklahoma industry base, it is important to understand how significant these expatriate and Oklahoma Production Service Entities payments are as a proportion of the total Oklahoma direct spend.
- **In-state good and services expenditures by type.** As noted elsewhere in this report, many of the businesses that benefit from motion picture shoots are not film production businesses per se but are support companies ranging from food and lodging, to transportation, logistics, and insurance. Some of these sectors may be important targets that merit State support; others may already be thriving components of the local economic base and subsidized support may not be a cost effective use of State resources. In order to understand how film productions actually affect Oklahoma’s economy by sector, it is important to consider these expenditures by type. For example, annual audits produced by the State of Massachusetts include detail on 22 categories

²¹ As with the expatriate program, the designation of “Oklahoma Production Services Entities” are an acknowledgment that certain equipment and services are not readily available from the state’s nascent film industry. In an effort to grow local support service companies while still being able to meet the needs of incoming productions, the Film + Music Office allows incoming productions to contract with pre-approved local vendors to procure specific equipment, raw stock, and expendables not readily available in the state, and count those purchases and rentals as in-state expenditures for the purpose of the rebate. These pre-approved vendors must be established within the state, with state income tax liability, and charge state and local sales taxes. Production companies must first document at least three unsuccessful attempts to rent or purchase the needed product from an Oklahoma vendor.

of non-wage spending categories, each of which has a separate multiplier effect on the state economy.²²

- **Motion picture projects not receiving state subsidies.** To the extent possible, a critical data point for evaluation is the quantity of investment associated with film productions not receiving state incentives, whether due to ineligibility or other reasons. The Film + Music Office maintains data on all feature films, short films, student films, live television productions, industrials, recorded television, documentaries and commercials. Unfortunately, because the Office changed how it grouped these categories twice in the past ten years, the information is not directly comparable as a time series dataset. If the data were collected and reported using consistent categories, it would be possible to determine how Oklahoma's film industry is evolving over time, particularly compared to peer states, and draw conclusions about whether the rebate has been successful in extending the depth and breadth of the local film industry.

²² Examples include: Fringe benefits/taxes; production and professional services; hotel/motel; costumes/clothing/props; location fees; cameras/film; food/restaurant/catering; set lighting/electrical; special effects; private security/police details; set construction; mobile dressing rooms; transportation/moving services; parking, fuel, and auto repair; computer/telecom equipment; local travel/car rental; office rent/supplies; cleaning and repair; producer/director fees; other lodging; extras; miscellaneous.

Outcomes

Outcomes

From the prior discussion, the following have been identified as key issues for evaluation:

1. What has been the impact of the rebate on identified goals?
2. How does Oklahoma's experience compare to the nation as a whole and other states?
3. How should the identified costs be weighed against the benefits (both quantitative and qualitative)?

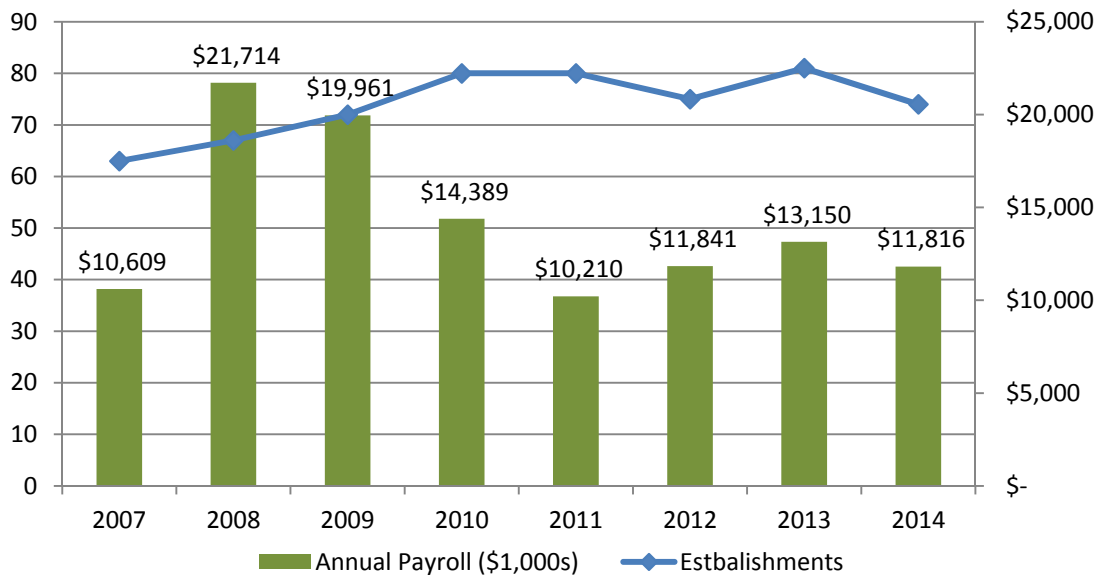
Impact on Identified Goals: Oklahoma Film Industry

One of the stated goals of the Film Enhancement Rebate Program is to increase film production in Oklahoma. As other studies have shown, the film industry is highly elastic, with site selection decisions based predominately on a comparison of the incentives available in different states. Film incentive programs are generally considered to be one of the most important factors considered by production companies when deciding on location.

Unfortunately, given the data currently available, it is difficult to demonstrate unequivocally that Oklahoma's film industry has strengthened during the time period when the rebate has been available. Given the strong correlation found in other studies between the existence of competitive incentive programs and film location activity, the inconclusive trends about Oklahoma film production activity raises doubts about the attractiveness of the state's film incentive program.

According to the U.S. Census County Business Patterns (CBP) data, the number of Oklahoma businesses classified as part of the Motion Picture and Video Production industry (NAICS code 512110) appears to have increased from 63 (in 2007) to a height of 81 (in 2013). Annual payroll activity during the same time period indicates a surge in film production activity in 2008 and 2009 - which may explain the increased in the number of businesses - followed by a return to what appears to be a natural equilibrium of \$11.0 million to \$13.0 million in direct annual payroll.

OK Motion Picture and Video Production Industry Trends, 2007-2014



Source: U.S. Census, County Business Patterns, 2007-2014

Though the number of paid employees is not available in each year due to confidentiality reasons (further confirming that Oklahoma’s film industry remains small), the years where data is available evoke a similar trend to the payroll data. From a height of 418 employees in 2008, the Oklahoma Film industry has contracted to 217 employees in 2014 (-92.6 percent). By comparison, a similar analysis conducted by the Massachusetts Department of Revenue reported a net positive growth of 1,503 jobs following the implementation of the state’s film incentive program (+34 percent).²³ In other words, while there appears to have been modest growth in the number of film production businesses located in Oklahoma, the film rebate program does not appear to have succeeded in growing the number of jobs or payroll associated with those businesses.

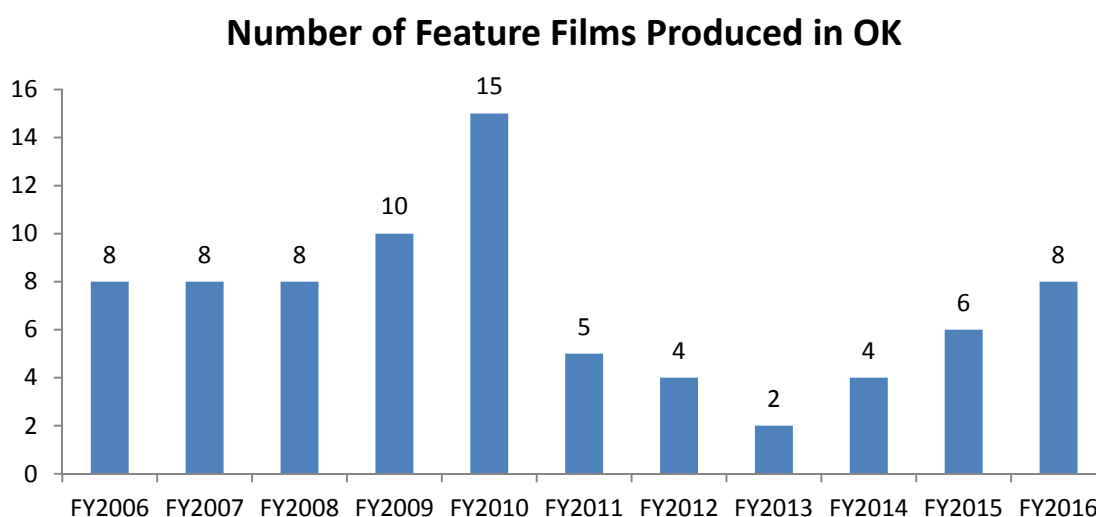
It is worth noting that, while the Census County Business Patterns (CBP) data is useful for analyzing year over year trends, it likely undercounts the total number of businesses and jobs affected by film production activity. The data captures only the number of employees on payroll during the week of March 12st, a disadvantage when studying an industry that relies on a large number of temporary workers for short term production schedules at other points during the year. The CBP figures also count only businesses that work directly and exclusively in film production; other businesses likely to experience economic benefits -- such as caterers and logistics -- are not included in the dataset.

The Oklahoma Film + Music Office collects data on the number of films and other productions produced in state. Unfortunately, the office modified its data reporting methodology in FY2009 and again in

²³ Commonwealth of Massachusetts, Department of Revenue. April 20, 2016. [Report on the Impact of Massachusetts Film Industry Tax Incentives through Calendar Year 2013](http://www.mass.gov/dor/docs/dor/news/reportcalendaryear2013.pdf). Available at: <http://www.mass.gov/dor/docs/dor/news/reportcalendaryear2013.pdf>

FY2012, precluding any granular time series data analysis. According to aggregated data collected by the office, the number of productions almost doubled from 772 in 2006 to 1,510 in 2014. However, over 70 percent of these productions are commercials, live television, industrial, or new media – all types of productions that likely generate little net new in-state job creation activity or business investments.

The graph below displays only the Oklahoma Film + Music Office counts of full length film productions, as these types of productions are likely to have lead a national site selection process and therefore are most likely to determine their filming location based on the availability of state film incentives. The number of full-length films that located production activities in Oklahoma – including those that did not receive any state rebates -- oscillates between a high of 15 in FY2010 and a low of two in FY2011, with recent trends approximating the 10-year average of seven film productions per year.



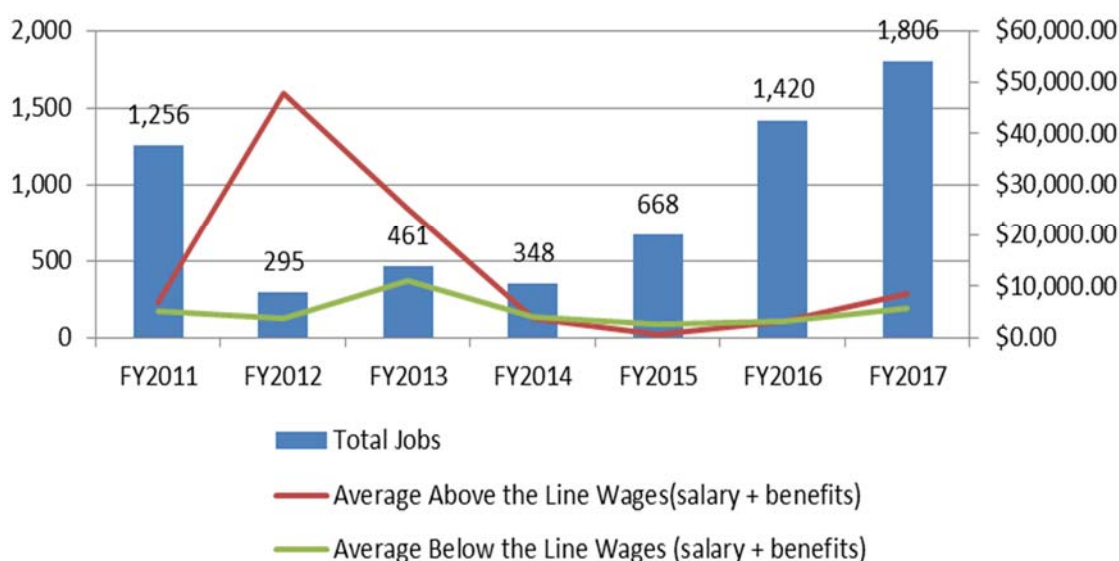
Source: Oklahoma Film + Music Office, 2016.

As with the CBP data, the data maintained by the State do not unequivocally demonstrate a correlation between the existence of the film rebate and an increase in film production activity in Oklahoma.

Impact on Identified Goals: Direct Employment of In-State Residents

The film rebate program is unusual, in that the high level of precision associated with applicant data submissions generates specific and documented counts of the number of Oklahoma jobs created by the productions, along with the wages paid for this temporary in-state work. As depicted by the following chart, the film productions that have been leveraging Oklahoma cash rebates have been employing increasingly large numbers of Oklahoma residents.

Total Jobs and Average Wages for Films supported by OK Tax Rebates, FY2011-FY2017



Source: Oklahoma Film + Music Office, 2016.

Due to the temporary nature of film employment, it is important to specify that “total jobs” refers to the total number of individuals employed, not to the number of full time equivalent jobs that have been created. The difference between the two figures is likely substantial; for example, a 2010 Michigan evaluation found that the 2,350 workers that film productions hired in 2008 and the 3,867 workers hired in 2009 translated into 216 and 355.5 full-time equivalents, respectively.²⁴ Using a metric such as FTEs can facilitate an apples-to-apples comparison to other economic development programs for which a greater proportion of the jobs may be ongoing, rather than temporary. Unfortunately, given data availability constraints, it is not possible to convert these “total jobs” into FTEs and comment on the overall trends in direct industry employment or compare the remuneration levels to that of other occupations supported by state incentives.

With the exception of FY2012, which included an abnormally small sample size of Above the Line cast and crew, average wages (salary + benefits) paid to Oklahoma residents are relatively modest regardless of position. On average, Above the Line hires are paid \$8,020 per film production and Below the Line hires are paid \$5,271. These payments reflect the short-term nature of film employment periods.

Impact on Identified Goals: Nationwide Exposure and Film Tourism

Per state statute, one of the goals of the program is to enhance the state’s image nationwide, presumably with the goal of increasing the state’s appeal to potential visitors. Images of and positive associations with locales as presented in films and television programs are argued to be a useful

²⁴ David Zin. September 2010. “Film Incentives in Michigan.” Issue Paper: Papers Examining Critical Issues facing the Michigan Legislature. Senate Fiscal Agency. Available at: <http://www.senate.michigan.gov/sfa/publications/issues/filmincentives/filmincentives.pdf>

promotional device, a valuable advertisement or marketing tool for the region. Films can raise awareness, form images, develop expectations, and aid in making decisions on visiting a location. There has been some anecdotal evidence of films increasing tourism in a particular location, and there is general consensus that films have the potential to promote tourism, especially after a film is initially released and if the film proves to have lasting popularity.

However, while some films can have a positive effect on tourism, not every production can be assumed to create an economic impact from tourism. The physical site must be a prominent feature that is favorably shown, as an essential “character” or component of the show. While there are a few individual prominent exceptions, most productions fail to satisfy these criteria. It is common for productions to film in one location even though the film plot places the action in a different location. To cite just one example, many viewers are unaware that the television show *House of Cards* is filmed in Maryland, because the show depicts its plotline as taking place in Washington D.C. Even in a 2012 study commissioned by the Motion Picture Association of America, Ernst and Young authors acknowledged that “a film that is a commercial success but portrays locations in a state as being in another jurisdiction will not generate positive tourism impacts.” Additionally, Ernst and Young note that “a film that prominently features a state’s tourism assets but is not widely viewed will have a limited tourism impact.”²⁵ Again, while there are a few notable productions that do satisfy all of the above criteria, most state programs do not generate enough of the exceptions to have a material effect on state tourism trends.

There is limited academic research on the direct impacts of film tourism, and the project team was not able to identify an independent film program evaluation that attempts to measure its impact. The tourism benefits generated by any particular film largely depend on a host of idiosyncratic factors such as the popularity of the film, whether the filming location is shown in an attractive way, and the accessibility of the filming location. There is no way to extrapolate from evidence about any specific film to an average expectation of film-based tourism. Some out-of-state tourists may visit filming locations, but if they were attracted to Oklahoma for other reasons, it would be inaccurate to attribute their tourist spending solely to film production activity. Moreover, much of the income spent on visiting filming locations by Oklahoma residents would likely have been spent on other recreational activities in the State. Given the challenges in determining the motivational factors behind tourism, the Federal Reserve Bank of Boston reports that “attributing tourism spending to a film credit is difficult, if not impossible.”²⁶

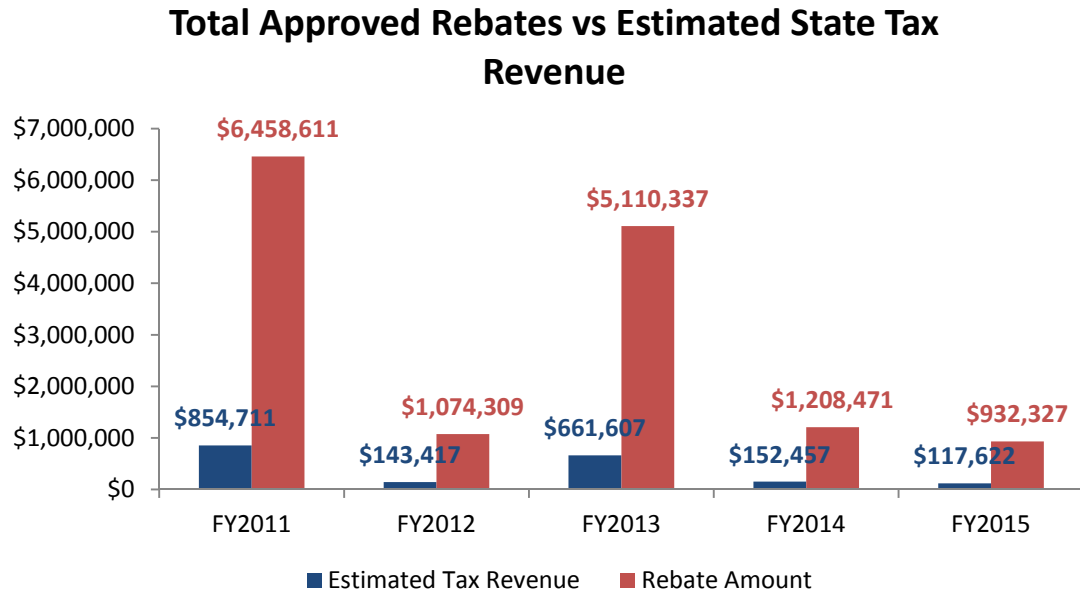
It should be acknowledged that, while the economic benefits associated with film tourism are likely insubstantial, a positive, widely viewed depiction of the state will promote civic pride and through association make the areas more attractive places to live and work.

²⁵ Ernst & Young. 2012. Evaluating the effectiveness of state film tax credit programs: issues that need to be considered. Prepared for the Motion Picture Association of America. Available at: https://pmcdeadline2.files.wordpress.com/2012/05/motion-picture-assoc-film-credit-study__120510071748.pdf

²⁶ Jennifer Weiner. April 2, 2009. Memorandum. “Ernst & Young Analyses of New Mexico and New York Film Tax Credits.” New England Public Policy Center. Prepared on behalf of the Federal Reserve Bank of Boston.

Cost Benefit Analysis

The costs of providing the Film Enhancement Rebate have been modest relative to other states and are capped at \$5.0 million per year. However, the positive economic impacts generated by the rebate do not approach the level of the tax incentive. The following chart summarizes the quantitative components of the cost benefit analysis.



Source: Oklahoma Film + Music Office, 2016; TXP 2016

In aggregate, for the time period from FY2011 through FY2015, the state expended \$14,784,055 and received a return of \$1,929,854. In other words, the program's return on investment is approximately 13 cents for every dollar expended in rebates, placing Oklahoma's program on par with that of most other states.

Of course, these are aggregate impacts; there likely are counties in the State where the economic activity (such as the lease revenue and sales) are important for the local economy during the brief period in which the in-state filming activities take place. However, when viewed from the perspective of the State as a whole, this is not the case.

Recommendation

Recommendation: Retain with Scheduled Sunset

The goals of Oklahoma’s film rebate program, as articulated in the state statute, are to (1) attract film and television productions to the state, in order to (2) provide jobs for Oklahomans and dollars for Oklahoma businesses and (3) enhance the state’s image nationwide.

Even if the rebate program were to succeed in materially strengthening Oklahoma’s film and television industry – a goal which does not appear to have materialized yet, based on available data – evaluations conducted by other states indicate that any resulting job creation will be neither stable nor sustainable. The economic impacts of film production are temporary – any prolonged impact necessitates continued production spending and requisite incentive commitments. Substantial film production incentives by other countries and most states have further encouraged “runaway production,” the industry term for film production flight. Unlike manufacturing plants, film production tends to be quite episodic, so that attracting production is a year-by-year endeavor. After a film is produced, more rebate expenditures are needed in subsequent years to retain and attract new activity. In essence, continued funding of this activity creates an industry whose business model is dependent on ongoing state subsidies. This is in contrast to most other economic development business incentives, which aim to provide ongoing benefits.

Most if not all independent audits of state film incentive programs have concluded that film incentive programs result in a net loss in revenue to the state treasury. The mounting evidence against the economic viability of such programs has prompted 13 states to discontinue their film incentive programs in recent years. Even states with the strongest hubs of film production – including Louisiana and New York -- have acknowledged film incentives’ mixed economic effects and have instituted caps and narrowed eligibility to limit potential losses.

Since the credit does not provide sustainable economic development and provides little return on investment to the State, the project team recommends that the State allow the film enhancement rebate to sunset as scheduled in 2024. A more promising use of these incentive monies would be to redirect the funds towards incentives that create permanent and lasting employment rather than temporary jobs.

INCENTIVE EVALUATION COMMISSION COMMENTS FILM ENHANCEMENT REBATE PROGRAM

LYLE ROGGOW

- A cap on the program to reduce cost exposure for the State of Oklahoma would be beneficial.

CYNTHIA ROGERS

- It is important to acknowledge that academic research questions the efficacy of these programs. Few jobs are created, related employment tend to be part-time, much of the money involved flows out of state, cash subsidies are not best practice. It is clear that these cash subsidies do not lead to an entrenchment of the industry in the state.
- There is a good argument for repealing these immediately rather than waiting for the sunset date.

**State of Oklahoma
Incentive Evaluation Commission
Quality Events Incentive Act
Final Report**



November 28, 2016

Prepared by



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At a Glance: Quality Events Incentive Act

Statute: O.S. 68 Section 4301

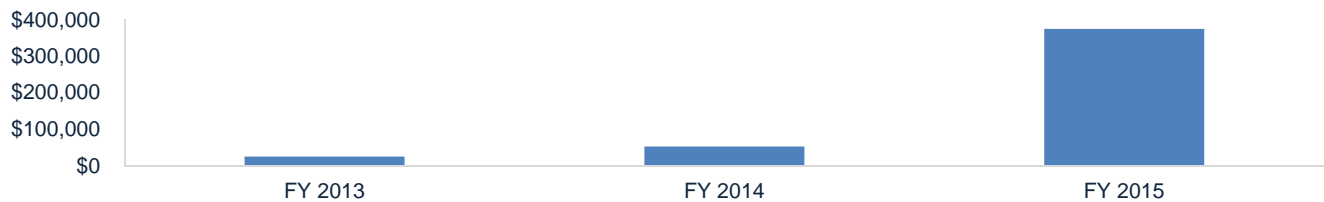
Program Goals

- Support eligible counties or municipalities in competing successfully to bring qualifying events to Oklahoma

Fiscal Impact

	FY 2013	FY 2014	FY 2015
Total Reimbursements	\$25,000	\$52,576	\$374,559
Number of Events	1	1	5

State Reimbursements Made by Fiscal Year



Economic Impact

- Available data does not support a full economic impact analysis

Adequate Protections for Future Fiscal Impact?

- Yes. The program has a project cap and an annual cap in place. In addition, communities cannot receive reimbursements in excess of the quantity of sales tax revenues generated by the event.

Effective Administration?

- No. The administrative process were designed to emphasize verification and oversight. Unfortunately, the verification requirements have resulted in a process that is cumbersome, costly, inefficient, and ultimately undermines the ability of the program to achieve its goals.

Achieving its Goals?

- No. The outsized administrative burdens associated with the current processes and requirements generate uncertainty about the magnitude and timeliness of reimbursement. As a result, local hosting entities cannot rely on support from this program when developing bids to compete nationally for events.

Retain, Reconfigure, Repeal?

- Reconfigure. The State should (1) eliminate the process of estimating the projected economic impact prior to the completion of the qualifying event; (2) create a standardized application template with clear guidelines; (3) designate a single point person or office to respond to applicant questions.

Changes to Improve Future Evaluation?

- The State should maintain a database with essential project information.

Executive Summary

Many states seek to incentivize the attraction of large scale events, such as festivals, conventions, or conferences. These events have been found to have a significant positive economic impact on both the hosting locality and the state as a whole; Florida's event attraction program, for example, has generated over \$5 in returns for each \$1 in state funds invested. Competition among states for major events can be significant, with hosting cities and states offering a variety of incentives to event organizers.

In order to become more competitive in attracting quality events to the state, the Oklahoma Quality Events Incentive Act was passed in 2010 to assist governmental entities with costs related to event attraction and promotion. As both the state and the local government may benefit from a qualifying event, the program seeks to create a means for both the state and the local government to share the costs associated with attracting and promoting events. The Act went into effect on July 1, 2012, and was amended in 2016 to allow an event's impact to be determined by a qualified economic analysis. The program is set to expire on June 30, 2018.¹

The Quality Events Act allows local convention and visitors bureaus (CVBs), in partnership with their local communities, to capture a portion of the State sales tax generated by the qualifying event. Expenses eligible for reimbursement include government expenses made for the purpose of attracting, promoting, advertising, organizing, conducting or otherwise supporting a quality event. CVBs are eligible to receive up to \$250,000 per event from the Oklahoma Tax Commission, based upon the event's economic impact. The total amount that may be spent by the program was capped at \$2 million for FY2013, \$2.5 million for FY2014, and \$3 million annually for FY2015 through FY2018.

The administrative processes associated with the Quality Events program are designed to emphasize verification and oversight. Oklahoma's decision to tie reimbursements to the incremental state sales tax receipts associated with the event essentially serves as a project cap, customized to the magnitude of an individual quality event. This is a positive and important characteristic of the program design, from a budgetary standpoint and for allocation fairness considerations. However, the administratively burdensome process of first estimating this cap prior to the event, then finalizing the rebate amount after the event, is redundant given that statute has already set a project cap and an annual cap.

The project team was able to identify only one other state that links its quality events program payouts to state receipts associated with the event in question. Other states provide support to hosting organizations through traditional grant programs, some of which are formula-driven to improve predictability and circumvent the administrative burdens associated with documenting eligible expenditures. Other state grants provide upfront funding, to allow local entities more flexibility in designing their bids for potential event. Of all the states reviewed, the Oklahoma Quality Events program has the highest administrative burden; processes in place are cumbersome, inefficient, and opaque for both the applicant and the program administrators.

Unfortunately, the outsized administrative burdens associated with the current processes and requirements generate uncertainty about the magnitude and timeliness of reimbursement. As a result, hosting entities cannot count on state support when calculating final bids to prospective event

¹ 68 OS 4301 through 4311

organizations. In other words, due to ongoing struggles with the administrative process, the program has not been able to change the behavior of local hosting entities and allow them to be more competitive nationally. In order to be effective, a reimbursement program must be predictable and transparent.

Recommendations

The project team recommends retaining the Quality Events due to its strong potential to generate significant returns on investment for each state dollar invested, but reconfiguring key parts of the administrative process and requirements, as outlined below:

- **Eliminate the process of estimating the projected economic impact prior to the completion of the qualifying event**, including both the required applicant economic impact submission and ODOC's economic impact evaluation. The purpose of precertification is to provide CVBs with information about the maximum reimbursement amount for which they are likely to be eligible. At present, the administrative burdens imposed on both the State and hosting agencies by this precertification are out of proportion with the value of knowing the maximum reimbursement figure ahead of the event, particularly because timeliness issues preclude the CVBs' ability to modify their behavior based on the information received. One of the benefits of eliminating the precertification process is that program administration can be confined to OTC, which will result in a more streamlined and more transparent process. Under this new design, the cap on the payout would be determined after the event by OTC, based on actual documentation as opposed to estimates.
- **Create a standardized application template and clear guidelines on the types of "proof" documentation that are acceptable**, complete with FAQs that will provide applicants with the information they need to submit all requirement documentation following the completion of the event. Though every event is different, there appear to be a consistent set of best practices in terms of documenting standard data needs, such as the number of out-of-state attendees, the number of hotel nights associated with each out-of-state attendee, etc.
- **Designate a single point person or office at to serve as applicants' primary point of contact** for questions regarding the specific circumstances of an event.
- **Maintain a database on projects**, including such information as: the hosting community, name of the event, number of attendees, number of out-of-state attendees, total number of hotel nights, reimbursement requested, incremental state sales tax receipts associated with the event, approved payout, as well as the dates of the event, the date of documentation submission, and the date of final payout. Annual reports should include this information.

The State may choose to further streamline the incentive by converting it to a straightforward grant program like that run by many other states, designed specifically to support the attraction of events with large numbers of out-of-state attendees. There is particular value in this sort of grant program if it can provide funds upfront (as Texas and Illinois do), or a straightforward way for calculating the exact monies that the CVB can expect to receive (as New York and Mississippi do). Though such a structure would not

guarantee a positive ROI, it would be much more effective in helping Oklahoma event bids to be more competitive.

Introduction

Overview

The Oklahoma Incentive Evaluation Commission (the Commission) was established in HB2182, which was enacted and became law in 2015. It requires the Commission to conduct evaluations of all qualified state incentives over a four-year timeframe. The law also provides that criteria specific to each incentive be used for the evaluation. The Quality Events Incentive Program is one of the incentives reviewed in 2016 by the Commission with recommendations to the Governor and the State Legislature.

Introduction

Many states seek to incentivize the attraction of large scale events, such as festivals, conventions, or conferences. These events have been found to have a significant positive economic impact on both the hosting locality and the state as a whole. Competition among states for major events can be significant, with hosting cities and states offering a variety of incentives to event organizers.

In order to become more competitive in attracting quality events to the state, the Oklahoma Quality Events Incentive Act was passed in 2010 to assist governmental entities with costs related to event attraction and promotion. As both the state and the local government may benefit from a qualifying event, the program seeks to create a means for both the state and the local government to share the costs associated with attracting and promoting events. The Act went into effect on July 1, 2012, and was amended in 2016 to allow an event's impact to be determined by a qualified economic analysis. The program is set to expire on June 30, 2018.²

The Quality Events Act allows local convention and visitors bureaus (CVBs), in partnership with their local communities, to capture a portion of the State sales tax generated by the qualifying event. Expenses eligible for reimbursement include government expenses made for the purpose of attracting, promoting, advertising, organizing, conducting or otherwise supporting a quality event. CVBs are eligible to receive up to \$250,000 per event from the Oklahoma Tax Commission, based upon the event's economic impact. The total amount that may be spent by the program was capped at \$2 million for FY2013, \$2.5 million for FY2014, and \$3 million annually for FY2015 through FY2018.

Criteria for Evaluation

A key factor in evaluating the effectiveness of incentive programs is to determine whether they are meeting the stated goals as established in state statute or legislation. In the case of this incentive, the goal is to support hosting communities in competing successfully to attract quality events to the state. The statute seeks to create a mechanism by which the local entities charged with promoting such events can tap into a portion of the funds that the state will derive from such events. Much as both the state and the local government will benefit from the quality event, the program seeks to create a means by which both the state and the local government can share the costs associated with attracting and promoting that event.

² 68 OS 4301 through 4311

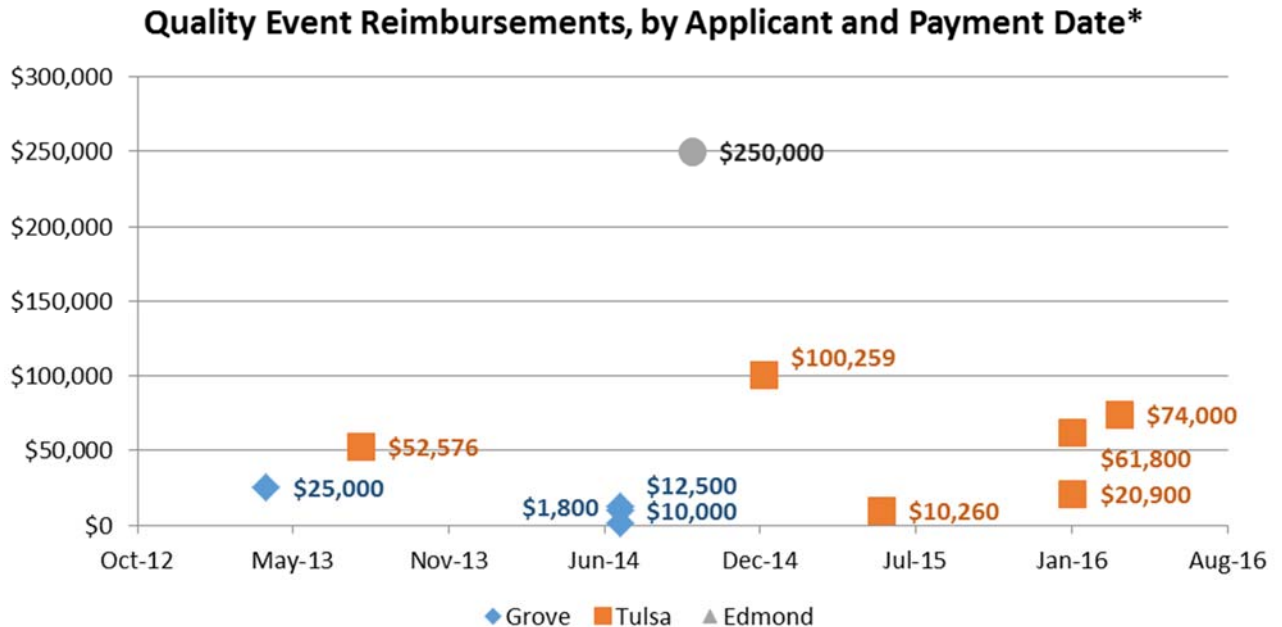
To assist in a determination of the effectiveness of the program, the Incentive Evaluation Commission has adopted the following criteria:

- Economic impact of qualifying events
- Revenue impact of qualifying events
- Existing versus new qualifying events
- Additional quantifiable impacts for the State from qualifying events
- Return on investment for qualifying events

Program Background and Benchmarking

Background

As noted in the following chart, three CVBs have received reimbursements from this program to date: the Cities of Grove, Tulsa, and Edmond. The City of Edmond received a particularly large award (\$250,000) in connection with the 2014 U.S. Senior Open Championship, one of five major national championships in senior golf. Excluding that event, the average event reimbursement has been \$36,910. The Tulsa Convention and Visitors Bureau has an additional nine applications under review by OTC and ODOC, and the Oklahoma City Visitor's Bureau has its first application currently under review.



*note: The State has not yet issued its FY2016 annual report, so reimbursement data for the period after June 2015 may not be comprehensive.

Source: Oklahoma Department of Commerce, *Annual Reports on the Quality Events Initiative, FY2014 and FY2015*; Tulsa Convention and Visitors Bureau; 2016.

Benchmarking

Many states have created incentive programs to assist in attracting events to their state. Events can have a positive impact on social aspects of the community in which they take place as well as state and local finances. Methods of funding for these incentives vary. Mississippi, Florida, New York, Wisconsin, and Illinois each have grant programs for qualifying events. Oklahoma's method of reimbursement based on incremental tax revenue is used less often. A review of state incentive programs found that only Texas has a directly comparable incentive funding mechanism.

The following analysis compares and contrasts Oklahoma's Quality Events program with Texas' Events Trust Fund. Texas has three distinct trust funds created to help fund events for municipalities and counties: the Events Trust Fund, Major Events Reimbursement Program, and Motor Sports Racing Trust Fund. The Major Events Reimbursement Program is designed to help Texas host major professional sports events like all-star and championship games. Oklahoma is fundamentally different from Texas in having a smaller number of major professional sports teams and venues. Since Oklahoma's Quality

Events program has mostly been used to host events that would not qualify as major under Texas' rules, the Texas Major Events Reimbursement Program is not used for comparison purposes. Instead, the Oklahoma Quality Events program is compared to the Texas Events Trust Fund, which is more broadly defined to support a range of event types and sizes.

Texas' Events Trust Fund Program

Texas' Events Trust Fund is designed to help counties and municipalities pay costs related to preparing for and conducting an event. Events may qualify as long as it is a one-time event or is held no more than once per year. A site selection organization must select the event location after considering other states in a competitive process. Once a site is selected, the county or municipality where the event is being held may apply for funding through the state Comptroller's office, no later than three months before the event date.

The county or municipality must provide estimates of non-state resident attendance and estimates of the economic impact of the event, as well as any other relevant information requested by the Comptroller. The Comptroller then uses this information to determine the incremental increase in State tax receipts directly attributed to the event over a 30 day period, ending one day after the last day of the event. Within 30 days of receiving this information, the department makes a determination of the incremental impact on state revenue. The applicant remits the amount of local tax revenue that it expects to receive during the 30 day event period to the State Comptroller, and it is deposited in the Events Trust Fund. The State then contributes 6.25 times the amount contributed by the applicant.

The host county or municipality benefits from the funds in the Events Trust Fund by using them to fulfill requirements of contracts made with site selection organizations. For example, they may pay the costs of constructing temporary structures and temporary maintenance of facilities required to host an event.

Following an event, the host county or municipality is provided a disbursement of the incremental tax revenue deposited in the trust fund. The Comptroller reviews attendance estimates with actual attendance figures, and if there is a significant difference, the applicant may not receive the full amount deposited. The maximum amount a county or municipality may receive is \$200,000 in a twelve month period.³

Texas' Events Trust Fund does not explicitly require that an economic impact study be done on the event in order to apply. Statute provides a guideline that information regarding the economic impact should be provided to the state. Oklahoma's requirement of a state-approved impact study is a more stringent requirement. It should be recognized that providing a professionally conducted economic impact study for each application can be both costly and time consuming for interested host communities.

Beyond the application process, there is a significant difference in the way funding is provided by Texas in comparison to Oklahoma. Texas allows counties and municipalities to access funds upfront, before the event occurs. The Oklahoma program provides reimbursement only after the event has taken place, and after the impact has been confirmed. This is a critical difference, because the upfront funding that Texas provides facilitates spending on improvements needed in order for an event to take place. The host contributes the expected local revenues to the fund and then is provided access to 6.25 times the local

³ https://fm.xcpa.texas.gov/fm/statewise/archive/rules_attraction_10.php
Texas Civil Statutes, Article 5190.14

contribution, added by the State. This can be a powerful incentive for hosts, as it provides support while they making expenditures needed to host the event, rather than qualifying for reimbursements after the expenditures have been made.

Other State Incentives Related to Event Attraction

Many states administer grant programs to support local hosting organizations in their efforts to attract national conventions, festivals, and other events. Below are a few examples of programs that have comparable overall goals to Oklahoma's Quality Events Program but opt to administer the program through substantially more streamlined and predictable mechanisms.

The Mississippi Meeting and Convention Incentive Program offers grants of between \$2,500 and \$10,000 to contracting organizations. Funding levels are based on clear and quantified criteria: applicants that guarantee 1,500 room nights are eligible for a grant of \$2,500; 2,500 room nights are eligible for grants of \$5,000; and 4,500 room nights corresponds to a grant of \$10,000. Mississippi requires a significantly longer timeline than Oklahoma. To help ensure that state funds are applied to events that would not otherwise be held, applications are due at least a year prior to the date of the meeting, and no contracts may have been signed with the meeting organizer. Unlike with the Oklahoma program, applicants do not need to inventory and document eligible expenses beyond proof of the number of hotel rooms used as part of the event.⁴

Florida offers a small Minority Convention Grant program with a cap of \$40,000. This reimbursable grant program requires applicants (including CVBs but also nonprofits) to submit a proposal and budget of its event attraction marketing plan, and estimate the economic impact of the proposed conference. In order to receive reimbursement, applicants must submit documentation of project cost, copies of the deliverables produced, and an estimate of ROI. Unlike in Oklahoma, reimbursement levels are not based on the estimated economic impacts of the event, and therefore applicants face less burdensome documentation and estimate requirements.⁵ Wisconsin has a joint effort marketing grant program that operates similarly, but with more inclusive eligibility metrics and lower project caps than Florida: new events, existing events targeting new audiences, and one-of-a-kind events are all eligible, but the maximum grant varies between \$28,250 and \$39,550.⁶

Market New York is another state program that makes grant funding available for the recruitment and execution of conferences, festivals, and athletic competitions. Applicants include a project plan that outlines the specifics of the project, the budget and how the grant funding will be used. Eligible costs are more expansive than in Oklahoma, and include eligible travel costs, 10% administrative costs, website maintenance, etc. The match requirement is generous, with New York State funding up to 75 percent of

⁴ Visit Mississippi "Meeting & Convention Incentive Program." Handout. Available at: <http://www.visitmississippi.org/app/webroot/files/MC%20INCENTIVE%20COPY.pdf>

⁵ Visit Florida. September 27, 2016. "Minority Convention Grant Program Guidelines." Available at: http://www.visitflorida.org/media/28333/minority-convention-grant_application-package_fy1718.pdf

⁶ Paul Ferguson. January 2015. State Tourism Promotion. Wisconsin Legislative Fiscal Bureau. Informational Paper 94. Available at: https://docs.legis.wisconsin.gov/misc/lfb/informational_papers/january_2015/0094_state_tourism_promotion_informational_paper_94.pdf

total costs. Grant awards are paid on a reimbursable basis, with a maximum six-month delay associated with payment processing.⁷

Illinois provides financial support to local CVBs through a formula grant program, which provides local organizations with the consistency and reliability that they need to sustain long-term, strategic, and proactive investments. The formula (which excludes the City of Chicago) takes into account populations served, number of hotel rooms in a service territory, and prior year industry economic results. CVBs are required to obtain local matching funds of at least 50 percent of the grant amount. Because a majority of Illinois CVBs access these funds every year, Illinois' program is more costly than Oklahoma's; In FY2014, allocations totaled \$12.3 million.⁸ The Kentucky Tourism Marketing Incentive Program operates similarly, with a fixed amount of grant funding made available to each county by formula. Counties must then submit reimbursement requests to access the available funding. Kentucky reimburses 80 percent of fees associated with convention bids that guarantee room nights and 50 percent of fees associated with bids with no guarantee of room nights.⁹

In all of the above cases, the decision to provide state support for local event attraction activities through a grant program allows for more straightforward administration processes than those required for the Oklahoma Quality Events program. Reimbursement amounts are dictated by formula or by expenses incurred by the applicant and are not contingent on a state-approved estimate of the economic impacts of the event in question. As a result, local entities are able to better rely on the state-issued funds and upgrade their attraction efforts accordingly.

⁷ New York State Division of Tourism. "Market New York: 2016 – 2017 Program Guidelines." Available at: <http://www.iloveny.com/includes/content/docs/media/MarketNYRd6FinalGuidelines.pdf>

⁸ Tourism Economics. February 201. "Competitive Analysis of Illinois Tourism Marketing Funding." Prepared for the Illinois Council of Convention & Visitor Bureaus. Available at: http://www.iccvb.org/assets/docs/te-il-budget-analysis_2016_feb.pdf

⁹ Kentucky Department of Travel. "Tourism Marketing Incentive Program: Allowable Projects Description."

Fiscal Impact

For this evaluation, fiscal impact is considered to be the directly attributable impact of the reimbursement on State revenues and expenditures. The evaluation will discuss but not quantify revenue and expenditure impacts on local governments. There is far less attenuation from these local impacts for a discussion of a state incentive program – for a variety of reasons (including the impact of local decision making outside the state’s control on local revenues and expenditures and the widely divergent impacts throughout the state).

The following table identifies the known reimbursements associated with this program, by fiscal year of payment. As already noted, the data available for 2015 reimbursements is provisional, as it includes only payments awarded to the City of Tulsa and may not be comprehensive.

Reimbursement Year	Total Reimbursements	Statutory Cap	Percent of Available Funds Awarded
2013	\$77,576	\$2,000,000	3.9%
2014	\$374,559	\$2,500,000	15.0%
2015	\$166,960	\$3,000,000	5.6%
Total	\$619,095	\$7,500,000	8.3%

One of the requirements of HB2182 is that each evaluation should determine “whether adequate protections are in place to ensure the fiscal impact of the incentive does not increase substantially beyond the state’s expectations in future years.” The statutory cap eliminates any budgetary concerns regarding runaway future costs. That said, usage of the program has been relatively limited in these first three fiscal years, with less than 10 percent of all available funds being allocated. This may simply be a reflection of the newness of the program – as more CVBs become aware of the incentive, applications may increase. It may also indicate that the total state sales tax revenue benefits derived from quality events are lower than anticipated – in other words, that the amount of revenue eligible to be shared with local CVBs is sufficiently low that a modification to the statutory cap may be appropriate. However, as indicated later in the evaluation, there is also reason to believe that high administrative burdens, extended reimbursement wait periods, and documentation hurdles may be disqualifying valid reimbursement requests and discouraging applicants.

There is, of course, some additional revenue that would be generated from economic activity associated with this credit, which will be discussed in the following chapter. Note that the costs of program administration are born by OTC and ODOC are not included in the above table.

Economic Impact

Sales Tax Revenue Retained after Reimbursing Qualified Expenses

Quality Event	Incremental Sales Tax Revenue	Event Expenses Reimbursed	Sales Tax Revenue Retained by State
2012 American Bass Anglers Fishing Tour National Championship	\$45,230	\$25,000	\$20,230
2013 Conference USA Basketball Championship	\$1,246,727	\$52,576	\$1,194,151
2014 EverStart Fishing Tournament	\$57,826	\$12,500	\$45,326
2014 TBF (Bass Federation, Inc.) National Championship	\$57,826	\$10,000	\$47,826
2014 National Bass Anglers Association National Championship	\$57,826	\$1,800	\$56,026
2014 U.S. Senior Open Championship	\$340,393	\$250,000	\$90,393
2014 USA BMX Grand Nationals	\$100,259	\$100,259	\$0
Total	\$1,906,087	\$452,135	\$1,453,952

Source: Oklahoma Quality Events Incentive Annual Reports

Technical and Administrative Issues

The administrative process associated with the Quality Events program is outlined as follows:

Eligibility. Successful applications must comply with eligibility requirements for both the type of event as well as the type of expenses eligible for reimbursement that are incurred by the host community.

Oklahoma State Statute defines a Quality Event as:¹⁰

1. A new event or a meeting of a nationally recognized organization or its members
2. A new or existing event that is a national, international or world championship, or
3. A new or existing event that is managed or produced by an Oklahoma- based national or international organization

Expenses eligible for reimbursement include government expenses made for the purpose of attracting, promoting, advertising, organizing, conducting or otherwise supporting a quality event.

Pre-qualification process. Six months prior to the start of an event, the community hosting the event must pass an ordinance authorizing the application and submit both the ordinance and an economic impact study on the event to the Tax Commission for approval. The economic impact study must include:

- a description and, if applicable, history of the quality event,
- information regarding the site selection process for the quality event,
- an estimate of the expenses anticipated to be incurred in connection with hosting the quality event,
- an estimate of the total gross sales made by vendors during any period of time during which no quality event activity occurs,
- a detailed estimate of the anticipated increase in sales tax revenue directly attributable to the quality event,
- the general economic impact likely to occur as a result of the preparation for, occurrence of and activity occurring in connection with the dissolution of, a quality event, and
- any additional information the Oklahoma Tax Commission may require

The impact study is then reviewed by the Oklahoma Department of Commerce (ODOC), which may require additional documentation or explanation in order to verify that the estimates and assumptions provided by the applicant are reasonable and consistent with state economic impact modeling practices. ODOC will approve an estimate of the projected economic impacts on state sales tax revenue, which may differ the estimate submitted by the applicant.

As currently administered, the prequalification process is somewhat duplicative. An economic impact assessment must be prepared by the applicant and then replicated or redone by ODOC. This can lead to disputes over economic impact assumptions, at times resulting in time-consuming documentation searches and debates over reasonableness. Though some pertain to the specific nature of a particular

¹⁰ 68 OS 4301 through 4311

event, other disputes have come up repeatedly and could be preempted by better upfront guidance to applicants about documentation needs or the limits of economic impact assessments. Examples of these disputes include how to correctly count the number of out-of-state visitors and visitors' length of stay.

Another frequent dispute is over what are appropriate points of comparison. If a community has lost an event that usually takes place in the month of June and is seeking to leverage the Quality Events program to help attract a new event for the next month of June, the incremental economic impact on State tax receipts will likely not be fully captured in the economic impact assessment. This is because the economic impact assessment relies on year-over-year changes and misses the fact that the lost event revenue will not reoccur in the coming year.

Another consideration is that the program is administered by the Tax Commission, but most conflicts arise during the Department of Commerce's efforts to verify the economic impact assumptions. As a result, applicants are often uncertain who their primary point of contact is at the state level and struggle to gain the clarity needed to develop successful applications.

Post-event verification of economic impact. Following the event, the Tax Commission compares the total amount of eligible expenses to the incremental State sales tax revenues. If the difference between these two is zero, no payment is made to the host community. If the incremental revenues are greater than the expenses, the host community is paid the difference. The local community must provide attendance figures or other public information that the Tax Commission considers necessary to evaluate the actual economic impact of the event. The Tax Commission then has 90 days after the conclusion of a quality event to determine the amount of additional State sales tax revenue located within the designated quality event area.

To date, this verification process has not always met the timeliness standards set out in the administrative rules. This is often due to conflicts with the applicant over documentation.

Given that the Tax Commission must identify the actual incremental sales tax revenues prior to reimbursement, the benefits of the pre-qualification process are unclear. Many of the disputes that arise out of the pre-qualification process arise from disagreements over how to estimate projected attendance figures. Once the event has occurred, the applicant is often able to secure actual receipts, which render the previous disagreements over estimates moot.

Reporting. According to the statute, the Executive Director of the Department of Commerce is to provide a yearly report every December to the Speaker of the House and President Pro Tempore of the Senate regarding the program's impact. Two reports have been submitted to date. The reporting process is not as streamlined or consistent as it could be, since the Tax Commission maintains the data associated with the program, but the Department of Commerce is charged with preparing the reports. Neither entity preserves the original applications or the applicants' economic impact assessments.

Summary

The administrative processes associated with the Quality Events program are designed to emphasize verification and oversight. Under the current system, State reimbursements cannot exceed the State sales tax benefits derived from the event.

However, the verification requirements have resulted in an administrative process that is cumbersome, costly, inefficient, and ultimately undermines the ability of the program to achieve its goals. Both

applicants and program administrators have reported that the processes and requirements associated with pre-qualification and expenditure verification are opaque, and communication is disjointed. Even after successfully completing the process at least once, applicants remain uncertain about how to assemble a successful proposal that may be approved with minimal requests for additional information. No application guidelines have been issued with specific information regarding the types of documentation and economic impact assumptions that will be acceptable to the State. One applicant estimates that each application requires at least 70 staff hours to prepare, not counting time devoted to dispute resolution or document submission after the event has concluded. Program administrators at both the Tax Commission and Department of Commerce struggle to provide the level of case management needed to address the specific questions related to the unique characteristics of each separate quality event. Significant staff resources are being expended on compliance at both the state and the local level, undermining the timeliness of all aspects of project administration.

Outcomes

Outcomes

From the prior discussion, the following have been identified as key issues for evaluation:

- What has been the impact of the credit on identified goals?
- How does Oklahoma's experience compare to the nation as a whole and other states?
- How should the identified costs be weighed against the benefits (both quantitative and qualitative)?

Potential Impact on Event Attraction and Spinoff Economic Development

In the case of this incentive, the goal is to support hosting communities in competing successfully to attract quality events to the state. The statute seeks to create a mechanism by which the local entities charged with promoting such events can tap into a portion of the funds that the state will derive from such events.

Substantial academic research has been devoted to studying the impacts of significant tourism events, finding that one of the largest benefits of such events is the high spike in resulting tax revenues to all levels of government.¹¹ Higher levels of tourism promotion spending can trigger higher levels of tourist activity and enhanced employment growth for states. In states like Oklahoma that are less well-known as tourism destinations, the incremental increases in job creation, hotel tax revenues, and sales tax revenues have been shown to be particularly high.¹²

Most events that have qualified to participate in Oklahoma's Quality Event Initiative are sports events, a type of event that can generate significant return on investment so long as neither local governments nor the state undertake major public works projects solely to support sports tourism. The Florida Office of Economic and Demographic Research found that the relatively small grants (average \$15,000) allocated in support of sporting events have a return of investment of \$5.61 for each dollar invested, largely because the grant monies supported the operational costs of attracting events with large numbers of out-of-state participants, rather than facility construction.¹³

The experience of other states indicates that a program like Oklahoma's Quality Events incentive should be able to increase the number of out-of-state visitor dollars spent in Oklahoma, leading to increased revenues to the hospitality and accommodations sector, to local governments, and to the state.

¹¹ Donald Getz. July 31, 2007. "Event Tourism: Definition, Evolution, and Research." *Tourism Management* 29 (2008) 403 – 428. Available at: http://www.academia.edu/2020851/Event_tourism_Definition_evolution_and_research

¹² Deskins, John and Matthew Seevers. 2011. "Are State Expenditures to Promote Tourism Effective?" *Journal of Travel Research* 50(2) 154-170

¹³ Florida Office of Economic and Demographic Research. January 2015. Return on Investment for the Florida Sports Foundation Grants and Related Programs. Available at: <http://edr.state.fl.us/Content/returnoninvestment/SportsGrantsandPrograms.pdf>

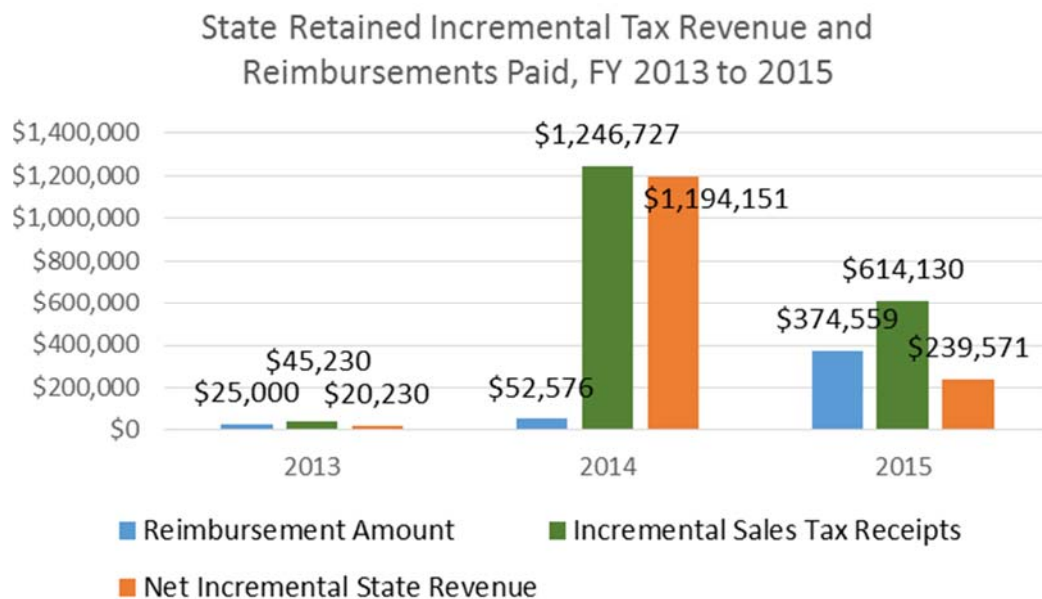
Actual Impact on Event Attraction and Spinoff Economic Development

According to applicants interviewed, the uncertainty and timeliness concerns associated with the program mean that hosting entities cannot count on state support when calculating final bids to prospective event organizations. In other words, due to ongoing struggles with the administrative process, the program has not been able to change the behavior of local hosting entities and allow them to be more competitive nationally.

The project team was able to identify only one other state that links its quality events program payouts to state receipts associated with the event in question. Other states provide support to CVBs through traditional grant programs, some of which are formula-driven to improve predictability and circumvent the administrative burdens associated with documenting eligible expenditures. Of all the states reviewed, the Oklahoma Quality Events program has the highest administrative burden, for both the applicant and the program administrators.

Cost Benefit Analysis

For the purpose of this report, the term return on investment (ROI) is synonymous with economic benefit, and is used in lieu of the statutory term. This measure does not address issues of overall effectiveness or societal benefit; instead, it focuses on tangible financial gains or losses to state revenues and is ultimately conditioned by the state's tax policy.



The financial analysis suggests that the estimated tax revenue to the State of Oklahoma exceeds the level of the tax incentive, substantially so in FY2014. This further confirms that local efforts to attract quality events has significant positive ROI for the State, and investments in such events is a good use those funds insofar as the investments do not exceed anticipated revenues.

Not reflected in the above chart are the net impacts that such events have had on Oklahoma businesses and local governments. Large events spur increased expenditures in hospitality sector businesses (such

as hotels, food establishments, rental car companies, etc.), as well as impulse/convenience spending at businesses situated in close proximity to the event location. There are also intangible benefits associated with such events, including the heightened level of activity and vitality in the area immediately surrounding the major event site, improved brand awareness associated with the locality, and civic pride.

Recommendations

The Quality Events Program, as currently administered, has not been able to change the behavior of local hosting entities and allow them to be more competitive nationally. This is largely due to the outsized administrative burdens associated with the current processes and requirements, which in turn generate uncertainty about the magnitude and timeliness of reimbursement. In order to be effective, a reimbursement program must be predictable and transparent.

Oklahoma's decision to tie reimbursements to the incremental State sales tax receipts associated with the event essentially serves as a project cap, customized to the magnitude of an individual quality event. This is a positive and important characteristic of the program design, from a budgetary standpoint and for allocation fairness considerations. However, the administratively burdensome process of first estimating this cap prior to the event, then finalizing the rebate amount after the event, may be redundant given that statute has already set a project cap and an annual cap. Should the Commission choose to retain the customized project cap as part of the Quality Events program, the project team recommends the following modifications:

- **Eliminate the process of estimating the projected economic impact prior to the completion of the qualifying event**, including both the required applicant economic impact submission and ODOC's economic impact evaluation. The purpose of precertification is to provide CVBs with information about the maximum reimbursement amount for which they are likely to be eligible. At present, the administrative burdens imposed on both the State and hosting agencies by this precertification are out of proportion with the value of knowing the maximum reimbursement figure ahead of the event, particularly because timeliness issues preclude the CVBs' ability to modify their behavior based on the information received. One of the benefits of eliminating the precertification process is that program administration can be confined to OTC, which will result in a more streamlined and more transparent process. Under this new design, the cap on the payout would be determined after the event by OTC, based on actual documentation as opposed to estimates.
- **Create a standardized application template and clear guidelines on the types of "proof" documentation that are acceptable**, complete with FAQs that will provide applicants with the information they need to submit complete documentation following the completion of the event. Though every event is different, there appear to be a consistent set of best practices in terms of documenting standard data needs, such as the number of out-of-state attendees, the number of hotel nights associated with each out-of-state attendee, etc.
- **Designate a single point person or office at to serve as applicants' primary point of contact** for questions regarding the specific circumstances of an event.
- **Maintain a database on projects**, including such information as: the hosting community, name of the event, number of attendees, number of out-of-state attendees, total number of hotel nights, reimbursement requested, incremental state sales tax receipts associated with the event, payout to the City, as well as the dates of the event, the date of documentation submission, and the date of final payout. Annual reports should include this information.

The State may choose to further streamline the program by converting it to a straightforward grants program like that run by many other states, designed specifically to support the attraction of events with large numbers of out-of-state attendees. There is particular value in this sort of grant program if it can provide funds upfront (as Texas and Illinois do), or a straightforward way for calculating the exact monies that the CVB can expect to receive (as New York and Mississippi do). Though such a structure would not guarantee a positive ROI, it would be much more effective in helping Oklahoma event bids to be more competitive. The grant criteria could be crafted to take into account the historic ROI of local events, for example.

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- It is important to make sure this is a leveraging program with local buy-in and that it targets out-of-state attendance. Events with regional or local attendance merely shift spending around venues within the state and don't create net new spending.
- As PFM point out this program would benefit from reconfiguration. The upfront economic impact assessment should be eliminated. It is cumbersome and is not needed if rebates are based on documented/estimated increases in OUT OF STATE spending.