



STATE OF OKLAHOMA
INCENTIVE EVALUATION COMMISSION

TAX INCENTIVE EVALUATION REPORT
2017



STATE OF OKLAHOMA INCENTIVE EVALUATION COMMISSION

VOTING MEMBERS

LYLE ROGGOW
CHAIRMAN

CARLOS JOHNSON, CPA
VICE-CHAIRMAN

RON BROWN
COMMISSIONER

DR. CYNTHIA ROGERS
COMMISSIONER

JIM DENTON
COMMISSIONER

STEVE BURRAGE
EX-OFFICIO COMMISSIONER

DENISE NORTHRUP
EX-OFFICIO COMMISSIONER

DEBY SNODGRASS
EX-OFFICIO COMMISSIONER

The Honorable Governor Fallin, President Pro Tempore Schulz and Speaker McCall:

We would like to thank each of you for the opportunity to serve as members on the Incentive Evaluation Commission (IEC). As the five voting members with diverse backgrounds and qualifications, we have taken our duties and responsibilities very seriously as Commissioners.

In our second year, IEC reviewed 12 incentives during this evaluation process. We have continued our contractual relationship with Public Financial Management Inc. (PFM), who won the bid in 2016. They are a nationally recognized firm specializing in public sector finances. IEC members received draft evaluation reports on facts and findings on Sept. 29, 2017, with a formal presentation to the Commission Meeting on Oct. 12, 2017. As required in statute, a public hearing meeting took place on Nov. 3, 2017, to receive public comments regarding the consultant's recommendations.

The commission took into consideration all public comments received at the November meeting before deciding the final vote to retain, repeal or modify incentives under review. It is in hope that our votes, based on public comments and PFM's facts and findings, help in assisting each of you and the Legislature in making imperative decisions. This year, PFM made alternative recommendations for improvement on all incentives if IEC chose to not follow the final PFM report.

Pursuant to the Incentive Evaluation Act of 2015, 32 O.S. § 7001-7005, the commission is providing the honorable governor, president pro tempore and speaker with the 2017, year two report. The report will also be made publicly available on the Oklahoma Department of Commerce website and at documents.ok.gov.

Enclosed in the packet is a commission action summation chart immediately following the letter and the compiled reports by PFM.

We hope the information provided you is helpful during the upcoming 2nd Session of the 56th Legislature.

Respectfully,

The Oklahoma Incentive Evaluation Commission

INCENTIVE EVALUATION COMMISSION ACTIONS

INCENTIVE	EVALUATION RECOMMENDATION	COMMISSION ACTION
Quality Jobs Program	Retain with modifications: 1) require filing for incentive payments each quarter; 2) Regularly review eligible industries; 3) Centralize data tracking.	4-0 to approve to adopt the recommendations, as modified by the Oklahoma Department of Commerce (Brown absent)
Small Employer Quality Jobs Program	Retain with modifications: 1) require filing for incentive payments each quarter; 2) Regularly review eligible industries; 3) Centralize data tracking.	4-0 to approve recommendation, inclusive of the recommendations as modified by the Oklahoma Department of Commerce (Brown absent)
21 st Century Quality Jobs Program	Retain with modifications: 1) require filing for incentive payments each quarter; 2) Regularly review eligible industries; 3) Centralize data tracking.	4-0 to approve recommendation (Brown absent)
High Impact Quality Jobs Program	Reconfigure by decreasing the job creation requirement and increasing the benefit.	4-0 to repeal incentive (Brown absent)
Capital Gains Deduction	Repeal.	3-1 to retain incentive (Brown, absent; Rogers, against)
Home Office Tax Credit	Reconfigure by tying the credit to job creation and collecting payroll data from companies receiving credits to improve future evaluations.	3-1 to approve recommendation (Brown, absent; Johnson, against)
Clean-Burning Fuel Vehicle Credit	Reconfigure by retaining the infrastructure credit while sunseting the vehicle credit; structuring the program to phase out; and improving reporting on credit.	4-0 to approve with modifications to not sunset the vehicle credit and retain it, and retain the infrastructure of the program (Brown absent)
Ethanol Fuel Retailer Tax Credit	Repeal.	4-0 to approve recommendation (Brown absent)
Economically At-Risk Lease Tax Rebate	Repeal.	4-0 to approve recommendation (Brown absent)
Production Enhancement Rebate (Gross Production)	Repeal.	4-0 to approve recommendation (Brown absent)
Re-Established Production Rebate (Gross Production)	Repeal.	4-0 to approve recommendation (Brown absent)
Coal Tax Credits	Repeal.	Split vote due to a member absent. (Brown, absent; Johnson, against; Roggow against).

**Incentive Evaluation Commission
Special Meeting Minutes
Nov. 3, 2017
Oklahoma State Capitol
Rm. 419-C, 1:00 p.m.
Oklahoma City, Oklahoma**

A meeting notice was filed with the Secretary of State and an agenda posted in accordance with the Open Meeting Act.

MEMBERS PRESENT: Ron Brown, Layperson
Jim Denton, CPA, Auditor of Private Firm
Dr. Cynthia Rogers, Economist
Lyle Roggow, President of the OK Professional Economic
Development Council
Commissioner Burrage, Ex Officio; Non-voting (Tax Commission)
Secretary Snodgrass, Ex Officio; Non-voting (Dept. of Commerce)

MEMBERS ABSENT: Carlos Johnson, Certified Public Accountant
Denise Northrup, Ex Officio; Non-voting (OMES)

STAFF/GUESTS: Beverly Hicks, OMES Recording Secretary
Mary Ann Roberts, OK Tax Commission
John Gilbert, OMES
Denise White, OMES Public Affairs
Kalen Taylor, Senate
Randall Bauer, PFM
Leslie Blair, ODOC
Jamie J. Herrera, ODOC
Jon Chiappe, ODOC
Scott Minton, OnCue
Justis Huddleston, Guest
Lundy Kiger, AES Shady Point
Russell Riecken, CNG Interstate
Nathan Moles, PSCNG
Jim Dunlap, Guest
Dr. Russell Evans, OCU, Meinders School of Business
Rod Cleveland, Cleveland County Commissioner
Rae Rice, OGE
Rocky Chavez, ONG
Sherrie Merrow, NGV America
Danny Smith, UPS, Vice President of Public Affairs
Jeff Shockley, Mayor of the City of Poteau
Michael Teague, Secretary of Energy and Environment
Katie Lippoldt, Office of the Secretary of Energy and Environment
Rep. Rick West, District 3
Rep. Meloyde Blancett, District 78

STAFF/GUESTS: David Blatt, OK Policy Institute
Craig Jackson, GCI Mining
Ryan Kenny, Clean Energy Fuels
Dave Bond, OCPA
Dave Miller, ONG
Norman Herrera, Sparq Natural Gas
Richy Marson, PSCNG
Matt Richardson, GCI
Kurt Foreman, Greater OKC Chamber of Commerce
Mike Jackson, OK State Chamber of Commerce
Robert Cooper, Farrell-Cooper Mining
Bud and Cynthia Kelley, Bob Cooper of Farrell Cooper Mining
Shawn Ashley, ECapitol

1. Call to order and establish a quorum. [Lyle Roggow, chairman]

Chairman Lyle Roggow called the meeting to order at 1:03 p.m. A roll call was taken and a quorum established. The Chair was advised that notice of the meeting was given and an agenda posted in accordance with the Open Meeting Act.

2. Approval of minutes from the Oct. 12, 2017 Commission meeting. [Lyle Roggow]

Mr. Brown moved to approve meeting minutes of October. Mr. Denton seconded the motion; the motion passed and the following votes recorded:

Mr. Brown, aye; Mr. Denton, aye; Dr. Rogers, aye; Mr. Roggow, aye.

3. Discussion and possible action on the 2017 Twelve Incentives. [Lyle Roggow]

Quality Jobs:

Speaker: Jon Chiappe, Oklahoma Department of Commerce.

Mr. Chiappe said in order to improve oversight and administration of the incentive, the Oklahoma Department of Commerce request the Commission consider the following:

- 1) Codifying in statute, current administrative practices that would increase stability and continuity, provide certainty to current and future participants and protect taxpayers, by ensuring program oversight includes other state agencies.
- Requiring all potential incentive projects are reviewed by the Incentive Approval Committee (IAC). The Incentive Approval Committee is defined in statute (68 O.S. § 3603). It consists of the Executive Director of the Department of Commerce, the Director of the Office of Management and Enterprise Services (OMES) and a member from the Oklahoma Tax Commission. However, the statute currently requires only companies with a limited number of NAICS or those with an out-of-state sales requirement to be reviewed by IAC. The agency's current practice requires every company be fully reviewed by IAC after an initial examination by the Commerce Review Team (CRT). This additional layer of review strengthens the integrity of program.

- Requiring a company representative be present at an Incentive Approval Committee (IAC) meeting prior to a contract award. To warrant the award of a taxpayer-funded state incentive, applicants should be willing to address a representative of Commerce, the Tax Commission and OMES in person and answer questions about their financial stability, business plans and commitment to the state. Commerce believes that both of these practices enhance transparency and accountability. To ensure they continue beyond the existing administration, they request they be set in statute.
- 2) To improve the fiscal performance of the Quality Jobs program and ensure the incentive is used to foster growth and job creation, they recommend eliminating the change-in-control provision, which allows existing companies at risk for leaving the state after a change in ownership, to qualify retained jobs for the QJ program without adding any new jobs in the state. Commerce believes this is problematic. Firstly, the state has imperfect information about whether the company actually intends to leave; secondly, some of the companies that have participated in the QJ program under this provision have been in a compromised financial situation; and/or thirdly, some of the companies qualified utilizing this provision are part of cyclical or declining industries. Commerce estimates that the state could have saved \$2.2 million over the last 5 fiscal years if this provision were not a part of the QJ Program. More importantly, the state has a superior tool for business retention. The Oklahoma Pooled Finance incentive permits the utilization of retained jobs for companies that are planning significant investments in the state.

Small Employer Quality Jobs:

Speaker: Jon Chiappe, Oklahoma Department of Commerce.

Mr. Chiappe stated the mission of the Oklahoma Department of Commerce is to deliver high-impact solutions that lead to prosperous lives and communities for all Oklahomans. In accordance with that mission, we endeavor to ensure that:

- The state has the tools to attract new jobs and investment in a competitive marketplace.
- The program is not a fiscal burden and remains revenue neutral or revenue positive to the state.

Commerce appreciates PFM's recommendation to retain the Small Employer Quality Jobs Program with modifications. They recommend utilizing a different employment threshold to increase participation. Specifically, they request the committee consider amending the statutory requirement that qualifying companies have no more than 90 jobs, stating, there are a number of mid-sized companies and projects for which Oklahoma could compete if the threshold was increased.

21st Century Quality Jobs: No speaker.

High Impact Quality Jobs:

Speaker: Jon Chiappe, Oklahoma Department of Commerce.

Mr. Chiappe made known the Oklahoma Department of Commerce appreciates the Incentive Evaluation Commission's review of incentives established by HB 2182, as well as PFM's time and effort devoted to the analyses and recommendations. The mission of the Oklahoma Department of Commerce is to deliver high-impact solutions that lead to

prosperous lives and communities for all Oklahomans. In accordance with that mission, we endeavor to ensure that:

- The state has the tools to attract new jobs and investment in a competitive marketplace.
- The program is not a fiscal burden and remains revenue neutral or revenue positive to the state.

Commerce appreciates PFM's recommendation to retain the High-Impact Quality Jobs Program with modifications and the confidence that the consultant has in the Quality Jobs family of programs. However, Commerce recommends repealing this incentive. The State does not need a variation of QJ for every eventuality; we would rather strengthen the regular QJ Program, the 21st Century QJ Program and the Small Employer QJ Program than leave an incentive on the books that is not being used.

Capital Gains Deduction:

Speaker: David Blatt, Executive Director of the Oklahoma Policy Institute.

Mr. Blatt is in support of the recommendation to eliminate the capital gains tax exemption. As a public policy think-tank committed to the fair and adequate funding of public services, they are very concerned by the erosion of the state's revenue base as a result, and in part, of ineffective tax breaks and are strongly supportive of efforts to repeal those incentives that do not have a positive economic impact.

Speaker: Mike Jackson, OK State Chamber, Exec. VP of Government & Political Affairs. Mr. Jackson spoke on the importance of the capital gains tax policy and the lack of data cited in the report and spoke on the differences between voter-approved tax policy and incentives.

Speaker: Dave Bond, Oklahoma Policy Institute.

Mr. Bond expressed his support for keeping the deduction and why doing so would be beneficial for Oklahoma.

Home Office Tax Credit:

Speaker: Kurt Foreman, Greater OKC Chamber, Executive VP of Economic Development. Mr. Foreman spoke on the Chamber's support of the incentive. The Chamber is a premiere economic development organization for the Regional Home Office and Insurance Premium Tax Credit. Focusing on the program's importance to economic diversification in their region and the priority of major employers. The Chamber utilizes a number of the state's incentive programs, but only lists six on their agenda to protect. This program is one of the six on their list, because of its importance to economic development.

Speaker: Mike Jackson, OK State Chamber, Executive VP of Govt. & Political Affairs. Mr. Jackson spoke on the importance of the incentive and the role it plays in growing industry and jobs.

Speaker: Dr. Evans, Ph.D., Associate Professor of Economics, Executive Director, Economics Research & Policy Institute.

Dr. Evans reported that the tax credit is not intended as a short run economic development incentive tied to the annual change in employment, or job creation, rather, as a permanent long-run tax differential commitment to firms who maintain a sizeable employment base

in the state with the commitment defined by the level of employment. Viewed from its proper perspective the success of the program is clear. The tax credit provides a modest differential tax burden between those firms that write policies in the state but elect not to locate a significant employment presence here and those that commit to the state with home office employment of at least 200. The credit is successful in maintaining and deepening these relationships and in securing a base of high compensation jobs in the state.

Clean-Burning Fuel Vehicle Credit:

Speaker: Scott Minton, OnCue Express, Director of Business Development.

Mr. Minton provided feedback from a station developer's viewpoint regarding the recommendation to keep the infrastructure incentive and sunset the vehicle incentive. In his opinion, the State of Oklahoma has enough stations to support the market in most areas of the state (there are still some areas which need improvement), but without a large increase in the number of vehicles on the road, there will be no need for the current number of stations in operation, let alone more stations. He would like see the focus of the incentive strengthen to improve the number of vehicles buying fuel, especially in saturated areas.

Speaker: Secretary Teague, Secretary of Energy and Environment.

Secretary Teague believes there are additional opportunities available for alternative fuel vehicles in the future. He is convinced it is an incentive not ready to close, with even greater opportunities beyond what natural gas has already accomplished, looking forward, toward electric vehicles. He agrees on the infrastructure recommendation to retain the credit, but would modify to allow for public use. Five years ago, electric vehicles were removed from the vehicle tax credit, due to the misuse of the program on transportation that was not intended for, such as golf carts. In looking towards the future of electric vehicles for the state and around the country, popularity is rising and the cost is lowering. The Secretary believes electric vehicles should be included in the incentive, but be caveated to exclude low or medium speed vehicles, which would be golf carts and utility vehicles. The next generation of electric vehicles are coming and the state should be on the front-end of the development, and use the incentive to spur development and be seen as an opportunity. Secretary Teague provide a letter to the Commission on the Volkswagen settlement. Earlier in the week, Governor Fallin signed a Beneficiary Agreement and an executive order for the Volkswagen Trust. The State of Oklahoma will receive an allocation from a national settlement reached between Volkswagen and the United States Environmental Protection Agency. The State will receive approximately \$21 million from the settlement, and is to be administered by the Department of Environmental Quality with oversight from his office. In closing, Secretary Teague said if that amount were planned towards reducing the NOx emissions from the transportation sector, coupled with the Clean Burning Fuel Infrastructure and Vehicle Tax Credit, it would make a huge impact across the state on things that would get done.

Speaker: Sherrie Merrow, Director of State Government Advocacy for NGV America.

Ms. Merrow stated that Oklahoma's leaders had a vision when they decided to promote the expanded use of natural gas in transportation and the promise of that vision has already achieved clear benefits to the state. That is why NGV America and its members of the Oklahoma NGV Coalition are calling for the continuation of natural gas vehicle, fuel and station incentives in Oklahoma. The incentives for natural gas vehicles and stations are working and Oklahoma is a leader for clean and sustainable transportation, but there is

much still to be done. It is a true success story that Oklahoma should be proud to tell and she encourages the State of Oklahoma to not turn back now.

Speaker: Norman Herrera, Chief Exec. Officer of Sparq Natural Gas.

Mr. Herrera stated Sparq supports PFM's recommendation to retain the CNG tax credit and improve tax credit reporting with the Oklahoma Tax Commission. Retaining the Clean Burning Motor Fuel Property tax credit allows Sparq to continue its forward business planning into 2018 and 2019, as they desire legislative certainty for their future businesses decisions. Vehicles, and not infrastructure, are the means to continue Oklahoma's national leadership in the CNG market. Government subdivisions need public/private partnerships, and infrastructure developers such as Sparq, that make private investments to support their full fleet deployment particular in areas of refuse and sanitation collection, landfills, and the state's Department of Transportation. Sparq estimates the current incentive to be a net positive for the State of Oklahoma when you factor in fuel cost savings, Department of Labor fees, state fuel excise taxes, and sales taxes.

Speaker: Rod Cleveland, Cleveland County Commissioner.

Commissioner Cleveland discussed his counties development of natural gas vehicles. He expressed his support for the Commission's work with the CNG industry and the conclusion to retain the incentive. He supports the continuation of the tax credit in its current form until expiration in December 2019, allowing for CNG fueling station development and increased infrastructure for Oklahoma's county governments to access. Cleveland County relies on natural gas stations by private sector for natural gas fueling. In closing, he would like to express his support for improved reporting that allows better analysis of the impact of the tax credit.

Speaker: Danny Smith, UPS VP of Public Affairs.

Mr. Smith spoke in favor of the Commission's recommendation to retain the credit, citing UPS's alternative fuel vehicle/infrastructure presence in Oklahoma.

Speaker: Ryan Kenny, Clean Energy, Senior Public Policy & Regulatory Affairs Advisor. Mr. Kenny discussed the value of the fuel, fueling stations and the supporting tax credits.

Speaker: Russell Riecken, Managing Partner of CNG Interstate of Oklahoma.

Mr. Riecken spoke on the need to continue, and improve, the alternative fuels incentive program. Due to current economics of gasoline vs. alternative fuels, the incentive program needs to be strengthen, or the alternative fuels industry will disappear in Oklahoma. They have had two conversion business close recently, and will see the investment made in fueling stations go to waste as older vehicles are taken out of service, if nothing is done to encourage the use of these cleaner, greener fuel sources.

Speaker: Rae Rice, OGE

Mr. Rice spoke on behalf of their customers who drive electric vehicles; OGE would support adding electric vehicles back into the incentive in the Oklahoma first energy plan in its entirety. They are in support of both infrastructure and vehicles of the incentive, but, if posed with sacrificing one, they would adopt the recommendations made in today's meeting to be in support of the vehicles. In reference made to the public/private partnership, they would support allowing municipalities, government entities to take advantage of the incentive.

Ethanol Fuel Retailer Tax Credit: No speaker.

Economically At-Risk Lease Tax Credit: No speaker.

Production Enhancement Rebate: No speaker.

Re-Established Production Rebate: No speaker.

Coal Tax Credit Program:

Speakers: Craig Jackson, GCI Mining - Bob Cooper, Farrell Cooper Mining - Lundy Kiger, AES Shady Point.

These men came in support of one another and spoke on behalf of the coal producers that make up the two largest coal-mining companies in the state. Mr. Kiger represented the coal consumers for AES Shady Point, as the state's largest purchaser of Oklahoma Coal. Mr. Cooper and Mr. Jackson spoke on behalf of the coal producers that make up the two largest coal-mining companies in the state. Mr. Kiger provided the Commission with several supportive documents for both coal consumers and producers outlining their comments; and many supportive letters from the community, companies, and elected officials on behalf of both credits. Seven other speakers were present that voiced their support of the Program.

Speaker: Mike Jackson, OK State Chamber, Exec. VP of Government & Political Affairs. Mr. Jackson spoke on the importance of the coal industry in Oklahoma and the inaccuracies of some of the data provided in the report generated in the PFM Group report.

4. Adjourn. [Lyle Roggow]

There being no further business, Mr. Brown made the motion to adjourn. Mr. Roggow seconded the motion. Seeing no opposition, the meeting adjourned at 2:55 p.m.

**Incentive Evaluation Commission
Special Meeting Minutes
Nov. 17, 2017
Oklahoma State Capitol
Rm. 419-C, 1:00 p.m.
Oklahoma City, Oklahoma**

AMENDED

A meeting notice was filed with the Secretary of State and an agenda posted in accordance with the Open Meeting Act.

MEMBERS PRESENT: Jim Denton, CPA, Auditor of Private Firm
Carlos Johnson, Certified Public Accountant
Dr. Cynthia Rogers, Economist
Lyle Roggow, President of the OK Professional Economic
Development Council
Commissioner Burrage, Ex Officio; Non-voting (Tax Commission)
Secretary Snodgrass, Ex Officio; Non-voting (Dept. of Commerce)

MEMBERS ABSENT: Ron Brown, Layperson
Denise Northrup, Ex Officio; Non-voting (OMES)

STAFF/GUESTS: Beverly Hicks, OMES Recording Secretary
Mary Ann Roberts, Deputy General Counsel, OTC
John Gilbert, OMES
Shelley Zumwalt, Gov/OMES
Randall Bauer, PFM
Leslie Blair, ODOC
Jamie J. Herrera, ODOC
Senator Julie Daniels
Denise Crosswhite Hader, House of Representatives
Dennis Adkins, A&A Advocates
Haley Blood, A&A Advocates
Craig Jackson, GCI
Eric Pollard, ACOG
Ryan Kilpatrick, FKG Consulting
Scott Minton, OnCue
Norman Herrera, Sparq
Lundy Kiger, AES Shady Point
Shawn Ashley, ECapitol
Molly Fleming, The Journal Record
Samantha Kiger, OK.Biz
Tres Savage, NonDoc Media

1. Call to order and establish a quorum. [Lyle Roggow, chairman]

Chairman Lyle Roggow called the meeting to order at 1:05 p.m. A roll call was taken and a quorum established. The Chair was advised that notice of the meeting was given and an agenda posted in accordance with the Open Meeting Act.

2. Approval of minutes from the Nov. 3, 2017 Commission meeting. [Lyle Roggow]

Mr. Denton moved to approve. Dr. Rogers seconded the motion; the motion passed and the following votes recorded:

Mr. Denton, aye; Mr. Johnson, abstain; Dr. Rogers, aye; Mr. Roggow, aye.

3. Discussion and possible action to approve 2018 meeting dates. [Lyle Roggow]

Jan. 25, 1:00 P.M.	Oct. 4, 10:00 A.M.	Nov. 15, 10:00 A.M.
April 26, 1:00 P.M.	Oct. 18, 10:00 A.M.	Dec. 6, 10:00 A.M.
Aug. 23, 1:00 P.M.	Nov. 1, 10:00 A.M.	

Mr. Denton moved to approve. Dr. Rogers seconded the motion; the motion passed and the following votes recorded:

Mr. Denton, aye; Mr. Johnson, aye; Dr. Rogers, aye; Mr. Roggow, aye.

4. Discussion and possible action on the 2017 Twelve Incentives. Possible action may include to approve, disapprove, modify or take no action. [Lyle Roggow]

Discussion and possible action on Quality Jobs:

PFM: Recommend to retain, with modifications.

Secretary Snodgrass asked that the Commission accept the Department of Commerce's recommended changes as outlined in the November 3, 2017, meeting minutes.

Dr. Rogers moved to adopt the recommendations from the PFM Group as modified by the Oklahoma Department of Commerce. Mr. Denton seconded the motion; the motion passed and the following votes recorded:

Mr. Denton, aye; Mr. Johnson, aye; Dr. Rogers, aye; Mr. Roggow, aye.

Discussion and possible action on Small Employer Quality Jobs:

PFM: Recommend to retain, with modifications.

Secretary Snodgrass said the Department of Commerce believes this incentive is important, particularly, to rural Oklahoma. They have changed their process, tightened up and have applied several restrictions. If there are concerns of a contractor breaching job protection, they have stipulations in place, where no money is received, until, they contact the Commission.

The Department of Commerce is doing everything they can to protect taxpayers in rural Oklahoma through their methodic process that is performance based.

Chairman Roggow reiterated that Commerce is supposed to create certain amount of jobs gauged against the size of a community before they receive any incentive. It is performance based; they have to go through the various established protocols and is essentially, a program that does work, is incentive driven and meant to help small businesses to add jobs.

Mr. Denton moved to recommend retaining with modifications, inclusive of the recommendations as modified by the Oklahoma Department of Commerce. Dr. Rogers seconded the motion; the motion passed and the following votes recorded:

Mr. Denton, aye; Mr. Johnson, aye; Dr. Rogers, aye; Mr. Roggow, aye.

Discussion and possible action on 21st Century Quality Jobs:

PFM: Recommend to retain, with modifications.

There was some concern about the cost per jobs being too high; even though they are good jobs, there still should be some leveraging and modifications to address those concerns. Mr. Bauer stated the primary projects have been with Aerospace Industry and Boeing. They are jobs in the Oklahoma City area that would be \$150 thousand dollars a year, three times the average comp rate. They are good jobs, which also brings the remainder of the jobs as well. They fit into the Quality Jobs model and not the point per incentive. The programs are two different not meant to overlap one another. Mr. Bauer indicated there is some definite overlap and clearly, of the incentives reviewed from last year, when it comes to the aerospace credits, there would be some layering between the both of them, with a direct alignment to where some of the benefit goes to the employees, although a fair amount goes to the employers.

Dr. Rogers raised a point of developing a centralized database, which can be accessed for any of the programs in terms of differing employers and would be helpful for this type of analysis.

Mr. Denton motioned to retain with modifications. Mr. Johnson seconded the motion; the motion passed and the following votes recorded:

Mr. Denton, aye; Mr. Johnson, aye; Dr. Rogers, aye; Mr. Roggow, aye.

Discussion and possible action on High Impact Quality Jobs:

PFM: Recommend to reconfigure.

The Department of Commerce recommendation is to repeal this incentive. It is an incentive that is not being used and therefore no reason to keep it on the books.

Mr. Bauer said he would defer to the recommendation of the Department of Commerce.

Dr. Rogers motioned to repeal the High Impact Quality Jobs Program. Mr. Denton seconded the motion; the motion passed and the following votes recorded:

Mr. Denton, aye; Mr. Johnson, aye; Dr. Rogers, aye; Mr. Roggow, aye.

Discussion and possible action on Capital Gains Deduction:

PFM: Recommend to repeal.

There was some debate amongst the members if this incentive is a tax policy or a true incentive. Some discussed to refer it to the legislature for legislative action. Commissioner Johnson said, "Even though it appears to be a tax policy, when you read the definition in the Act (HB2182), it is defined as a tax deduction and therefore it is an incentive as defined in HB2182." Dr. Rogers discussed the lack of theoretical and empirical research supporting the efficacy of the program. She also noted the lack of data needed to evaluate. Mr. Denton mentioned the use of the program for tax planning purposes.

Mr. Denton motioned to retain. Mr. Johnson seconded the motion; the motion passed and the following votes recorded:

Mr. Denton, aye; Mr. Johnson, aye; Dr. Rogers, nay; Mr. Roggow, aye.

Discussion and possible action on Home Office Tax Credit:

PFM: Recommend to reconfigure.

Mr. Bauer referred to comments in a memo that members had received related to some of what was discussed in the public hearing, and had also provided them with a report of some best practices prepared by a couple of practitioners in the area for the State of Alabama. In their report, they spoke on competitiveness for incentives and not just making them something that is a low bar for a specific industry with a specific tax and the incentive is why the insurance premium tax is just for an insurance industry, it is a gross receipts tax and is not related to creation of new jobs. It is a low bar of a number for jobs that they are required to have in a state to be eligible. PFM finds that kind of incentive to be generally a poor incentive, because it does not focus on what generally incentives are supposed to do, which is build an industry, create new jobs and grow payroll.

This is why PFM has issue with this tax credit and is why they suggest reconfiguring as it relates to making it a payroll-related incentive for specific employment improvement in the industry. His second suggestion for reconfiguration relates to improving the data.

Dr. Rogers motioned to accept PFM's recommendation to reconfigure this program as stated in the meeting. Mr. Denton seconded the motion; the motion passed and the following votes recorded:

Mr. Denton, aye; Mr. Johnson, nay; Dr. Rogers, aye; Mr. Roggow, aye.

Discussion and possible action on Clean-Burning Fuel Vehicle Credit:

PFM: Recommend to retain.

Dr. Rogers motioned to modify the recommendation to not sunset the vehicle credit and retain it, to retain the infrastructure of the program and improve the reporting on the credit. Mr. Johnson seconded the motion; the motion passed and the following votes recorded:

Mr. Denton, aye; Mr. Johnson, aye; Dr. Rogers, aye; Mr. Roggow, aye.

Discussion and possible action on Ethanol Fuel Retailer Tax Credit:

PFM: Recommend to repeal.

Mr. Bauer stated there is no real return on investment or an ethanol industry in the State of Oklahoma and is the reason for the recommendation.

Dr. Rogers motioned to accept the recommendation of PFM to repeal. Mr. Denton seconded the motion; the motion passed and the following votes recorded:

Mr. Denton, aye; Mr. Johnson, aye; Dr. Rogers, aye; Mr. Roggow, aye.

The chair made known that the next three agenda items have been sunset by the legislature. When the schedule was initially set, the items were scheduled to review this year. The legislature took action, the Commission had already commenced the process of reviewing them and decided to go forward as planned in agreement with the legislature.

Discussion and possible action on Economically At-Risk Lease Tax Credit:

PFM: Recommended to repeal.

Dr. Rogers motioned to accept the recommendation of PFM to repeal and follow the legislation. Mr. Denton seconded the motion; the motion passed and the following votes recorded:

Mr. Denton, aye; Mr. Johnson, aye; Dr. Rogers, aye; Mr. Roggow, aye.

Discussion and possible action on Production Enhancement Rebate:

PFM: Recommend to repeal.

Dr. Rogers motioned to accept the recommendation of PFM to repeal and follow the legislation. Mr. Denton seconded the motion; the motion passed and the following votes recorded:

Mr. Denton, aye; Mr. Johnson, aye; Dr. Rogers, aye; Mr. Roggow, aye.

Discussion and possible action on Re-Established Production Rebate:

PFM: Recommend to repeal.

Dr. Rogers motioned to accept the recommendation of PFM to repeal and follow the legislation. Mr. Denton seconded the motion; the motion passed and the following votes recorded:

Mr. Denton, aye; Mr. Johnson, aye; Dr. Rogers, aye; Mr. Roggow, aye.

Discussion and possible action on Coal Tax Credit Program:

PFM: Recommended to repeal.

Mr. Bauer addressed discussion made at the public hearing on the questioning of the data they used for their analysis. He made known they always rely on public source data for the analysis they conduct, to be sure that it has been duly vetted and compared to other public resource data. As it relates to the credit as a whole, it is also something along the lines of what was discussed about on the insurance industry. It is an industry specific credit, not competitive in nature in terms of how the industry will receive it. It relates to the price of coal.

Upon conclusion of their metrics, as it relates to the industry as a whole and when viewed in relationship to other incentives, PFM concluded in relationship to other incentives, it does not stand up in terms of what it provides to the state. Understanding, that there is a component of the state, where the industry is important; it is not clear that the credit going away is going to make the industry go away. There are aspects of the industry that will continue, particularly, as it relates to parts of the coal production used for non-generational electricity. There is strong indication that parts of the industry will continue to do well. In terms of jobs and payroll of what would normally be the kind of metrics they use for incentives, PFM could not justify nor identify it as being a high performer compared to other high performing incentives that had been analyzed in the past couple of years.

Commissioner Burrage respected and appreciated the recommendation of PFM, but strongly advocated for the coal industry and begged the Commission to retain the credit, due to the hardship it would cause on the people living in rural Southeastern Oklahoma. He pointed out some of those jobs are the highest paying jobs in that part of the state, but also has a high unemployment rate. The benefit of the incentive to that part of the state is tremendous, as it relates to filling stations, schools, truck drivers, sales tax and withholding tax. He implored the Commission not put another nail in the coffin of rural Oklahoma, and the people who benefit from the credit. The economic benefit that industry produces is a tremendous benefit to that part of the state.

It is debatable if it is much of an incentive. Oklahoma is the only state that provides a credit for consumers. Mr. Bauer reported it gives benefit to the power company that uses Oklahoma coal. Whether or not the industry will exist, with or without the power company burning the coal is in question. Who receives the benefit could not be determined, due to insufficient data information provided to PFM, on not being able to separate the consumer from the producer. Therefore, the voting members are not able to determine who is getting the credits and whether this is a net benefit, or a net cost to the state.

It was clear that during testimonies given at the public hearing, that the change of employment had a lot more to do with federal legislation and the ability to get permits to do mining. The job of the Commission is to assess whether the incentive gets a return on investment and whether it does what it is supposed to do, which is to increase employment in coal.

Commissioner Burrage argued that the incentive has been beneficial, maybe not to this area or the whole State of Oklahoma, but it has been beneficial to the people in four counties in Southeastern Oklahoma.

Mr. Denton motioned to accept the PFM report on the repeal of the coal credit. Dr. Rogers seconded the motion; the motion split and the following votes recorded:

Mr. Denton, aye; Mr. Johnson, nay; Dr. Rogers, aye; Mr. Roggow, nay.

*The Commission vote was split due to one of the voting members being absent.

5. Discussion and possible action on the acceptance of the final report provided by PFM. [Lyle Roggow]

Note: The Chair asked this agenda item be moved up in front of agenda item 4.

The Commission members received a copy of the report ahead of time for review before the meeting. The only changes to the report were Mr. Bauer added a paragraph to the discussion on the Capital Gains Deduction, to reflect a common perception that it could be considered a tax policy issue, as opposed to an incentive issue. There were no changes to the specific recommendations for each of the twelve incentives.

Mr. Denton motioned to accept. Dr. Rogers seconded the motion; the motion passed and the following votes recorded:

Mr. Denton, aye; Mr. Johnson, aye; Dr. Rogers, aye; Mr. Roggow, aye.

Secretary Snodgrass arrived at 1:08 p.m.

6. Adjourn. [Lyle Roggow]

There being no further business, Mr. Denton made the motion to adjourn. Dr. Rogers seconded the motion. Seeing no opposition, the meeting adjourned at 3:28 p.m.

INCENTIVE EVALUATION COMMISSION

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State of Oklahoma

Incentive Evaluation Commission

Quality Jobs Program Evaluation

November 14, 2017

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Executive Summary



Overview

State incentives focused on job creation are common across the United States. During and following the Great Recession, these programs increased in use as ways to help start and sustain economic recovery. A list compiled by the National Conference of State Legislatures in 2013 showed 40 states with some form of job creation incentive program.¹ Oklahoma created a key job creation incentive in 1993, the Quality Jobs Program. The program has since incentivized hundreds of companies across various industries that have chosen to locate a new facility or expand existing facilities in the State.

The goal of the program, according to State statute, is to focus incentives on establishments in basic industries with potential for “significant development of the economy of the State of Oklahoma.” It offers qualifying companies quarterly cash rebates for up to 5 percent of newly created taxable payroll for up to 10 years. In order to qualify, a company must operate in an eligible industry and meet requirements related to the amount of payroll associated with new jobs created, health insurance coverage, and wages.

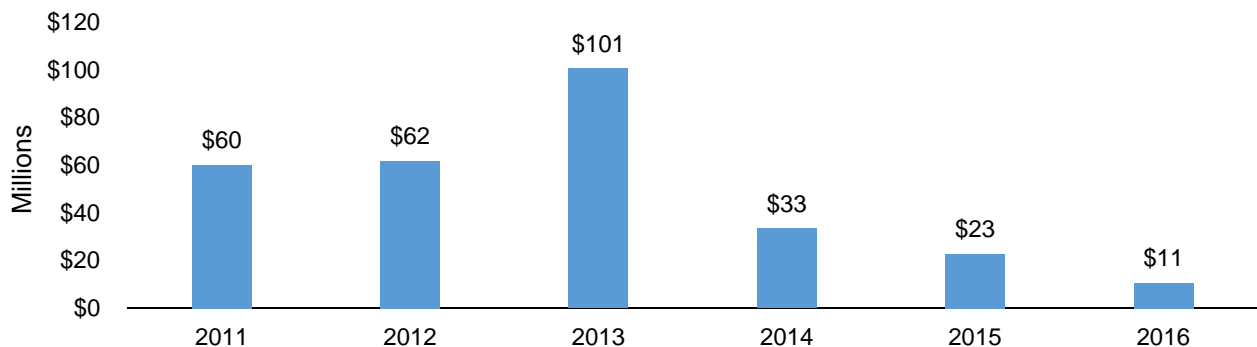
Primary Recommendation: Retain, with modifications

The Quality Jobs program has incented thousands of jobs in various industries since its first payment was issued in 1994. In recent history, the program has performed well in terms of economic impact and appears to be a net benefit to the State. However, there are aspects of the program that may be improved to enhance its performance and better meet the State’s goals.

Key Findings

- **The program is a net benefit to the State in terms of economic impact.** If each company that entered the program in 2011 qualified for full payments that year, the economic activity generated by those companies would have an economic impact, net of incentive costs, of over \$60 million.² In each year since 2011, the same calculation is consistently positive.

Figure 1: Estimated Net Fiscal Impact of Contracts Issued Each Year, 2011 to 2016³



- **Cost controls associated with the administrative process have been effective.** Over the life of the program, the administrative process and the statutory requirements involved in it have saved the State billions of dollars.

¹ National Conference of State Legislatures, “Job Creation Tax Credits – 50 State Table”, 2013

² This analysis assumes jobs would not be created if not for the incentive

³ This represents the annual tax revenue as a result of economic activity generated by the incentive, net of incentive costs. This analysis assumes each company offered a contract qualifies for payments in each quarter of the year



- **The cost per job over the life of the program is approximately \$13,000.** According to Oklahoma Tax Commission (OTC) data, companies received incentive payments for 86,711 qualifying jobs from 1994 to June 2017.⁴ Payments made over the same period total \$1,140 million. However, it should be noted that this job count represents the total number of jobs reported by a company on its last payment claim. It is unclear for how long the jobs were maintained before or after the final incentive payment.
- **Industries incentivized by Quality Jobs have shown slower growth in employment and annual average pay over the last five years, compared to the State as a whole.** Employment in incentivized industries contracted by 2.9 percent, while the State as a whole expanded by 2.5 percent.
- **Most payments over the last five years have gone to industries lagging behind State growth in employment and annual average pay.** A total of 27 percent of payments were made to establishments in industries with growth in employment, total wages, and average annual wage exceed the growth of the State as a whole in those categories.
- **Data collection and storage methods complicate the evaluation process.** More uniform data collection and storage among the databases maintained by the OTC and the Department of Commerce (Department) would ease the data analysis process in the future.

The program can be improved by:

- **Requiring companies to file information for payment each quarter.** Adding a requirement that companies file quarterly claims for payment may improve both the predictability of costs to the state, and the efficacy of the program.
- **Establishing a schedule for regular review of eligible industries.** Over the last five years, industries that have received Quality Jobs payments have been growing at a slower rate than the State as a whole in terms of employment and average annual pay. This may indicate a need to realign the list of qualifying industries with the State's intent of incentivizing establishments in industries with the potential to bring significant development to the economy. Establishing a regular review of eligible industries as well as clear criteria for an industry to qualify for the program may help in achieving the State's goal. Keeping in mind that the establishments that qualify today may receive payments for the next 10 years, it is important that the State focuses on the industries it sees as playing a part in future development.
- **Maintaining a centralized database of information collected by the Department and the OTC.** Maintaining a single database of Quality Jobs program information that includes the data collected by both the Department and the OTC can improve future evaluations. This centralized database should include the following information:
 - A unique identifier for each establishment/contract;
 - Location;
 - NAICS code;
 - Contract terms;
 - Dollar amount for each quarterly payment made;
 - Number of jobs and payroll information reported by companies for each quarterly payment.

⁴ Job count represents the total of the jobs reported during the last quarter a company received a payment



Key Findings and Recommendations



Key Findings

The Quality Jobs program has incented thousands of jobs in various industries since its first payment was issued in 1994. In recent history, the program has performed well in terms of economic impact and appears to be a net benefit to the State. However, there are aspects of the program that may be improved to enhance its performance and better meet the State's goals.

The following provides an analysis of the program's performance related to the criteria established for its evaluation.

- **The program is a net benefit to the State.** If each company that entered the program in 2011 qualified for full payments that year, the economic activity generated by those companies would have an economic impact, net of incentive costs, of over \$60 million.⁵ In each year since 2011, the same calculation is consistently positive.
- **The cost per job over the life of the program is approximately \$13,000.** According to OTC data, 86,711 qualifying jobs have been created by companies that received a payment from 1994 to June 2017.⁶ Payments made over the same period total \$1,140 million. However, it should be noted that this job count represents the total number of jobs reported by a company on its last payment claim. It is unclear for how long the jobs were maintained before or after the final incentive payment.
- **Industries incentivized by Quality Jobs have shown slower growth over the last five years, compared to the State as a whole.** One of the established criteria for evaluating the Quality Jobs program is payroll and job growth associated with the incentive.

Examining qualifying industry performance can be helpful for evaluating this. This is a relevant criteria not only because the incentive is focused on quality job creation, but also because it has a stated goal of incentivizing industries with the potential to bring significant growth to the State economy.

Between 2012 and 2016, over \$361 million was paid to participating companies across 33 different three-digit NAICS codes. The following table shows a comparison of the growth rates of the incentivized industry group and overall State and national employment, average annual pay, and total wages growth rates.

Table 1: Growth of Industries Receiving Quality Jobs Payments 2012 to 2016

	Incentivized Industries	OK Total	US Total
Employment	-2.9%	2.5%	5.7%
Average Annual Pay	6.0%	7.2%	8.9%
Total Wages	7.1%	5.0%	15.7%

Source: BLS Quarterly Census of Employment and Wages

Although incentivized industries have grown at a faster rate than the State as a whole (in terms of total wages), they have grown at slower rates compared to the State in employment and average annual pay. In the case of employment, incentivized industries actually contracted by 2.9 percent, while the State as a whole expanded by 2.5 percent.

- **Most payments over the last five years have been to industries lagging overall State growth.** To determine how successful the program has been in incenting growth industries, it is important to evaluate how much is being paid to growing and declining industries. The following chart shows the

⁵ This analysis assumes jobs would not be created if not for the incentive

⁶ Job count represents the total of the jobs reported during the last quarter a company received a payment



breakdown of how payments are distributed among industries outperforming State trends and those that are lagging behind. An industry is deemed “outperforming” by experiencing growth in employment, total wages, and average annual wage, which exceed the growth of the State as a whole.

Table 2: Payments by Industry Performance Relative to the Overall State Growth, 2012 to 2016

	Total Payments	Percent of Total
Underperforming Industries	\$262,918,019	73%
Outperforming Industries	\$98,607,317	27%

Source: Oklahoma Tax Commission and BLS Quarterly Census of Employment and Wages

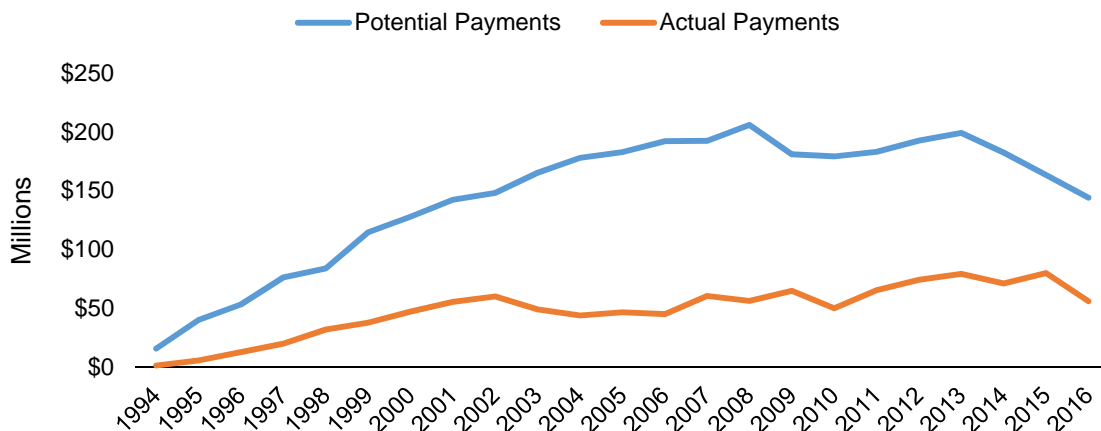
Although the intent of the program is to incentivize industries with the potential for growth in Oklahoma, 73 percent of payments over the last five years have gone to industries that are underperforming relative to State growth overall.

- **Cost controls associated with the administrative process have been effective.** The Quality Jobs program’s administrative process is designed to control costs to the State. The net benefit rate is a significant cost control built into the program. This rate and the maximum benefit amount that limit total payments made to establishments in the program are intended to ensure the State does not spend more than each project is expected to return to the State in new tax revenue. The Department models projected costs and revenues resulting from projects to determine these amounts.

After contract parameters are set by the Department, the OTC further controls costs to the State by verifying that each establishment filing for quarterly payments is meeting program criteria and that payments are only made to qualifying establishments. The State is also protected by controls written in statute, such as the requirement that \$2.5 million payroll threshold is met for 4 consecutive quarters within the first 12 quarters of program participation. If this threshold is not met, the establishment is removed from the program.

The impact of these cost controls is demonstrated in the following chart, which shows potential payments based on cumulative maximum contract amounts spread evenly over a 10-year period versus the actual payments made each year.

Figure 2: Total Quality Jobs Program Payments, 1994-2016



Source: Oklahoma Department of Commerce and Tax Commission Data



A comparison of Department records on contracts issued and OTC data recording all program payments revealed about 17 percent of companies that enter into a Quality Jobs program contract never receive a payment. There are several reasons for this, including companies not meeting payroll requirements, or failing to file claims for payment with the OTC. Even companies that stay in the program for a full 10-year term may contribute to the difference between potential and actual payments due to lower than expected job creation or payroll growth. The OTC has recorded reasons for companies ending program participation. The primary reasons are shown in the following table.

Table 3: Reasons for Ending Program Participation

Reason	Number of Contracts
Did Not Meet Statutory Requirement	208
Voluntarily Withdrew	181
Reached Statutory Limit	116
Other	32
Total	537

Source: Oklahoma Tax Commission

Overall, 60 percent of the recorded reasons for ending program participation are related to statutory limits or requirements. This number highlights the importance and effectiveness of administrative process in protecting the State from making excessive payments to companies who enter the program.

- **Data collection and storage methods complicate the evaluation process.** Although the Department and the OTC collaborate effectively to accomplish the administrative tasks associated with the program, there appears to be a lack of communication when compiling data associated with the incentive.

The Department has files detailing the terms of each contract issued. Separately, the OTC maintains records of payments made to qualifying companies. Each of these databases hold key information for evaluating the incentive. However, there is no unique identifier that can be used to track one company from the Department's contract database to the OTC's payment database. This is particularly challenging when a company has changed its name since entering a contract or is known by multiple names. The project team was able to reconcile the two files by combining identifying information in each file (such as the net benefit rate, location, or projected jobs).

A notable weakness in the data available for evaluation is that while the OTC tracks payment data by year, it does not maintain a complete database of program payments by quarter. That information, combined with the job and payroll information each company must report in order to receive quarterly payments, would be very helpful.

Overall Recommendation: Retain the Quality Jobs Program

The project team recommends retaining the Quality Jobs program, but suggests reviewing the following areas where the program can be improved.

Recommendation 1: Require filing for incentive payments each quarter. When the program was created, companies were not required to file quarterly claims. Over time, some requirements were put in place. For example, in 2001 changes were made requiring companies to make an initial claim for payment within the first three years of enrollment. An additional restriction was put in statute in 2012 that provided for a company to be dismissed from the program if it has made one claim for payment but has since failed to file a claim in the next two years. Even with these added restrictions, a company can file for multiple quarterly payments at once.



This creates two disadvantages for the Quality Jobs Program. First, the lack of a quarterly filing requirement creates irregular payment schedules that create a challenge in predicting State liabilities associated with the program. The inability to forecast incentive payments due to irregular payment schedules is a significant budget risk for state incentive programs.⁷ Second, allowing participants to defer payments earned in one quarter to a later date diminishes the impact of the payment. New and expanding businesses generally apply a significant discount rate to future cash flows.⁸ Given that payments are significantly more valuable to them the faster they are received, it is unclear why companies would choose to defer these payments to a later date. Interviews with both the OTC and representatives of the State Chamber of Commerce suggest the process of filing for payment is not overly burdensome for participating companies. However, it is clear that the value of these payments for both participating companies and the State is highest when received as soon as possible. Adding a requirement that companies file quarterly claims for payment may improve both the predictability of costs to the state, and the efficacy of the program.

Recommendation 2: Regularly review eligible industries. Over the last five years, industries that have received Quality Jobs payments have been growing at a slower rate than the State as a whole in terms of employment and average annual pay. This may indicate a need to realign the list of qualifying industries with the State's intent of incentivizing establishments in industries with the potential to bring significant development to the economy. Establishing a regular review of eligible industries as well as clear criteria for an industry to qualify for the program may help in achieving the State's goal. Keeping in mind that the establishments that qualify today may receive payments for the next 10 years, it is important that the State focuses on the industries it sees as playing a part in future development.

Recommendation 3: Centralize data tracking. Maintaining a single database of Quality Jobs program information that includes the data collected by both the Department of Commerce and the OTC can improve future evaluations. This centralized database should include the following information:

- A unique identifier for each establishment/contract;
- Location;
- NAICS code;
- Contract terms;
- Dollar amount for each quarterly payment made;
- Number of jobs and payroll information reported by companies for each quarterly payment.

Much of this information is already tracked by either the Department or the OTC, but centralizing data tracking will make the information more useful.

⁷ The Pew Charitable Trusts, "Reducing Budget Risks" December 2015

⁸ Anderson Economic Group, "The Economic Impact of Business Tax Credits in Tennessee" December 26, 2016



Introduction



Overview

In 2015, HB2182 established the Oklahoma Incentive Evaluation Commission (the Commission). 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 first set of 11 evaluations was conducted in 2016.

The Quality Jobs Program is one of 12 incentives scheduled for review by the Commission in 2017. Several off-shoots of the Quality Jobs Program – the Small Employer Quality Jobs Program, the 21st Century Quality Jobs Program and the High Impact Quality Jobs Program – are also evaluated separately this year. Based on this evaluation and their collective judgement, the Commission will make recommendations to the Governor and the State Legislature related to each of these incentives.

Introduction

State incentives focused on job creation are common across the United States. During and following the Great Recession, these programs increased in use as ways to help start and sustain economic recovery. A list compiled by the National Conference of State Legislatures in 2013 showed 40 states with some form of job creation incentive program.⁹

Whether they are provided as tax credits or rebates, job creation incentives like Oklahoma's Quality Jobs program often seek to reduce employee costs (primarily related to wages). Reduction in wage costs can make it easier for firms to expand operations and/or hire more employees at existing locations.

Labor costs in general can be a critical factor in location decisions. A 2016 survey of corporate executives conducted by Area Development found that labor cost is the third most important factor in location decisions, trailing only highway accessibility and availability of skilled labor.¹⁰ This supports the approach of concentrating incentives on reducing the cost of employment to promote economic growth.

While many job creation incentives target new or maintained jobs, there has been a trend to create specific incentives that target high wage jobs, often in targeted industries and/or with additional requirements (in many instances the provision of health care or other employee benefits). For example, many states target job creation in high-technology industries that help diversify the economy and help establish a foundation in developing industries.

Incentive Characteristics

Oklahoma's Quality Jobs Program was created in 1993. It offers qualifying companies quarterly cash rebates for up to 5 percent of newly created taxable payroll for up to 10 years. In order to qualify for the rebates, a company must operate in an eligible industry and meet requirements related to the amount of payroll associated with new jobs created, health insurance coverage, and wages.

Evaluation Criteria

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:

⁹ National Conference of State Legislatures, "Job Creation Tax Credits – 50 State Table", 2013

¹⁰ Area Development, "31st Annual Survey of Corporate Executives: Confidence in U.S. Economy, Need for Investment in Infrastructure Reflected", 2016



“provide appropriate incentives to support establishments of basic industries that hold the promise of significant development of the economy of the State of Oklahoma”

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

- Change in jobs associated with the cash rebates;
- Change in payroll associated with the cash rebates;
- Ability of program administrative processes to establish the factual basis for claims related to hours, wages and benefits;
- But-for test – change in jobs/payroll associated with the cash rebates versus state growth rates as a whole;
- Change in jobs/payroll in the qualifying industries versus state industries as a whole;
- Return on investment – economic activity versus financial net cost.

The criteria address the key goals of the program, primarily focusing on job creation and payroll growth. Return on investment is also part of the criteria to determine whether the benefits to the State outweigh the cost of incentives. These criteria will be discussed throughout the balance of the evaluation.



Administration and Use of the Incentive



Program Administration

The Quality Jobs Program is jointly administered by the Oklahoma Department of Commerce (Department) and the Oklahoma Tax Commission (OTC). Eligibility guidelines and administrative responsibilities are set forth in State statutes and administrative rules.¹¹ The essential components of program administration are summarized below.

1. **Eligibility.** An establishment starts the qualification process by submitting an application to the Department. The application must show that the establishment meets program requirements:
 - Must operate in a basic industry as defined in statute;
 - Must provide a plan to reach \$2.5 million in new payroll within the next three years;¹²
 - The average wage of newly created jobs must be greater than or equal to the average wage of the county where the establishment is located;¹³
 - Must provide health care benefits to new employees which requires employees to pay no more than 50 percent of premiums.¹⁴
2. **Determining Payments.** Once the initial application is approved, the Department prepares a project profile. This profile summarizes information about the establishment and its plans, including the project start date, projected employment over the next five years, projected average salary of new employees hired in new direct jobs in the first and third year of program participation, and the health benefits plan to be offered to new employees. This information is analyzed by the Department and used to calculate two key factors in Quality Jobs Program benefits: the **net benefit rate** and the **maximum benefit amount**. These figures determine the quarterly payments the project may receive and the maximum sum of these payments over the contract term.

The **net benefit rate** is a percentage representing the amount of benefit the State expects to receive in excess of projected costs. It is calculated as the projected tax revenue to be received as a result of the new jobs less the projected costs to the State associated with those jobs, including the cost of education, public safety, and transportation. This rate is capped at 5 percent, with some exceptions:

- Firms with certain Department of Defense contracts may receive up to 6 percent;
- Firms with veterans accounting for at least 10 percent of gross payroll may receive between 5 and 6 percent;
- Firms already receiving Quality Jobs payments for one year and expanding operations with new jobs paying at least 150 percent of the average wage of incentivized jobs at the firm the previous year;
- A net benefit rate of 5 percent is guaranteed for firms locating in:
 - An opportunity zone within a high-employment county;
 - A county where the per capita personal income is 85 percent or less of the State average;
 - A county where the population has decreased over the previous 10 years;
 - A county where the unemployment rate exceeds the lesser of 5 percent or two percentage points above the State average.

¹¹ Administrative rules for the Department of Commerce are contained in Title 150, Chapter 65. Tax Commission administrative rules are contained in Title 710, Chapter 85

¹² This threshold is \$1.5 million for certain food processing, research and development projects or firms that locate on certain former military bases. Payroll threshold is zero for businesses locating within 10 acres of a Superfund site or a location on the National Priorities List, or being remediated by the Oklahoma Department of Environmental Quality

¹³ This requirement must be met in all quarters of participation, regardless of payroll

¹⁴ Establishments must provide such coverage within 180 days of employment



Quarterly benefit payments are calculated as the net benefit rate multiplied by the quarterly payroll of newly created jobs. The maximum benefit amount is the net benefit to the State as a dollar amount rather than a percentage. The sum of quarterly payments made to the project may not exceed this dollar amount.

If the Department recommends a contract offer, the Office of the General Counsel prepares a contract to be reviewed by the Director of the Department and issued to the eligible establishment.¹⁵ The contract details the net benefit rate, maximum benefit amount, project start date, initial employment, employment projections, and average annual wage levels needed to qualify for quarterly payments.

The OTC is responsible for issuing payments during the term of the contract. Establishments submit quarterly reports to the OTC that include the number of new employees hired and the new payroll associated with these jobs. The OTC verifies that each reporting company is meeting the requirements set forth in its contract. Payments are only issued if an establishment is meeting contract criteria. Establishments meeting program criteria are able to receive quarterly payments for up to 10 years.

3. **Reporting.** The OTC maintains records of payments made by year to each participating company. The Department separately maintains records of each company that has entered the program. The Department also issues monthly press releases listing all new enrollees, including benefit rates and the maximum benefit amounts for each.

Changes Over Time

Since the program was created in 1993, several changes have been made regarding qualifying industries and the administration of the program. A timeline of industry additions and significant administrative changes is shown in the following table.

Table 4: Quality Jobs Program Changes Over Time

Year	Industries Added	Administrative Change
1996	Adjustment and Collection firms; Electrical generation.	None.
1997	Communication Services; Refuse Systems (generating methane gas).	None.
2001	None.	Participants required to file initial claim for payment within 3 years of project start date.
2003	Oil & Gas Extraction (field jobs excluded).	Average wage requirement introduced
2005	None.	Allows currently participating companies to qualify for a second contract with up to 6 percent net benefit rate if certain requirements are met and new jobs pay 150 percent of the average wage of incentivized jobs in the previous year.
2006	Web Portals; Professional, Scientific, Technical Services; Dairy Cattle & Milk Production Chicken Egg Production	Change in Control qualification introduced. Allows existing companies in the state that have fully changed ownership and are at risk of leaving the state to qualify for the program, counting existing employees as qualifying for benefits.

¹⁵ Establishments may also be required to receive additional approval by the Incentive Approval Committee. This committee includes representatives from the Department of Commerce, the Tax Commission, and the Office of State Finance.

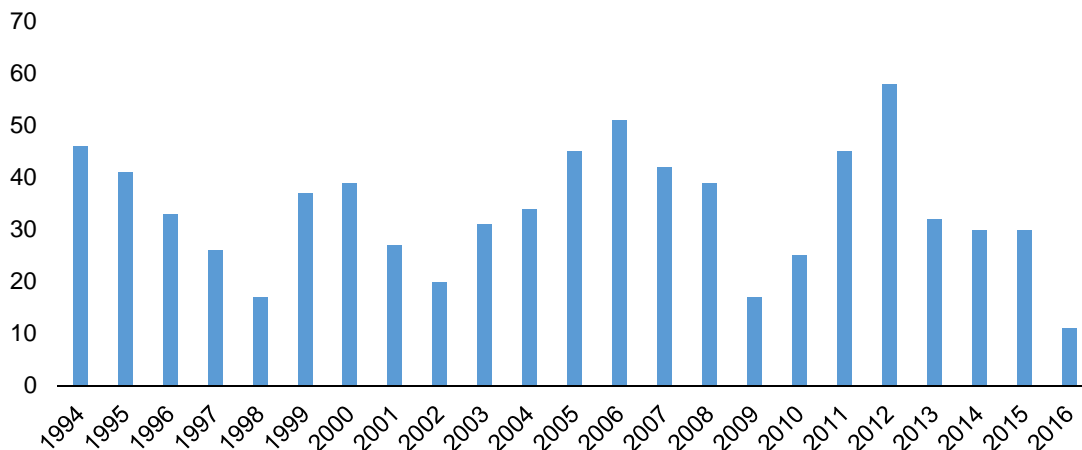


Year	Industries Added	Administrative Change
2008	Sports Teams & Clubs; Other Support Activities for Air Transport; Professional Organizations; Offices of Real Estate Agents/Brokers.	Duration of benefits extended to 15 years for Sports Teams & Clubs. Net benefit rate allowed to exceed 5 percent for Sports Teams & Clubs, but may not exceed the personal income tax rate.
2009	Wind Power Equipment Maintenance/Repair.	None.
2010	Construction of Renewable Energy Structures; Installation of Solar Reflective Coating; Solar Heating Equipment Installation; Support Activities for Rail Transport; Support Activities for Barge Transport.	None.
2012	Drilling Oil & Gas Wells.	Company dismissed if it files at least one claim but fails to file again within the next two years.
2013	Rail Transportation; Wired Telecommunications; Securities, Commodities, Investments; Support Activities for Oil & Gas; Pipeline Transportation;	Any participant that ends operations in the state within 3 years of first claim must repay all benefits received. Any establishment that does not ramp up to the required payroll threshold and is dismissed may not reapply to the program for a minimum of 12 months from the last day of the month in which they were dismissed.
2015	Chicken Egg Production.	None.

Use of the Incentive

The program's fiscal impact is driven by contracts issued to companies. As the following figure shows, participation in the program (in terms of new contracts awarded) has fluctuated over time. The highest number of contracts issued in any year was 58 in 2012, but the number of annual contracts in the following years have been lower. In 2016, 11 were issued.

Figure 3: Quality Jobs Contracts, 1994 to 2016

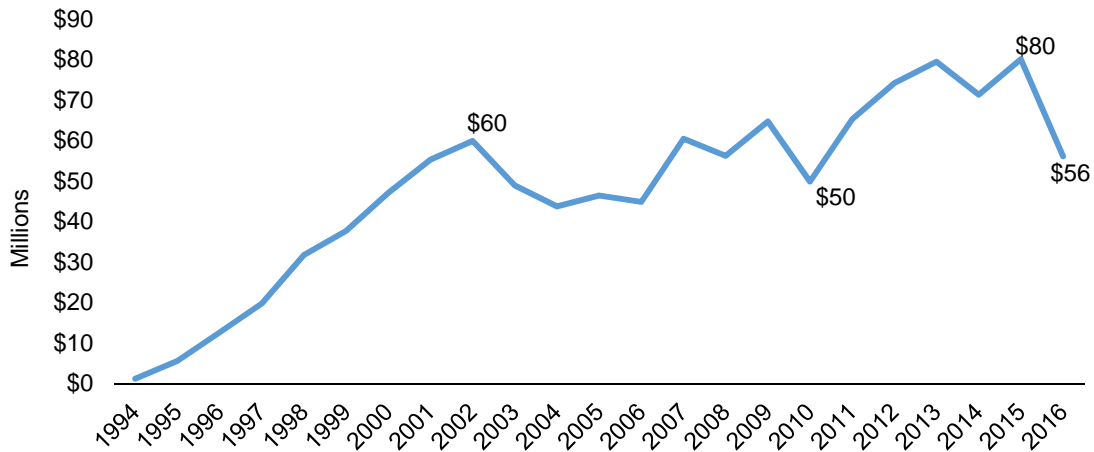


Source: Oklahoma Department of Commerce



The following figure shows how State program payments have grown over time. Payments grew rapidly from a low point of \$50 million in 2010 to its peak of \$80 million in 2015. This was followed by the largest year-over-year decline in program payments in 2016, when payments fell by \$56 million.

Figure 4: Quality Jobs Program Payments, 1994 to 2016



Source: Oklahoma Tax Commission

The greatest concentration of program payments are to companies located in the State's two largest population centers. More than half of the contracts have been awarded to establishments in the cities of Oklahoma City and Tulsa. The following table lists the most common locations of Quality Jobs establishments through the history of the program. For comparison purposes, Broken Arrow is part of the Tulsa Metropolitan Statistical Area (MSA) and Norman is part of the Oklahoma City MSA.

Table 5: Location of Quality Jobs Contracts, 1994 to 2017

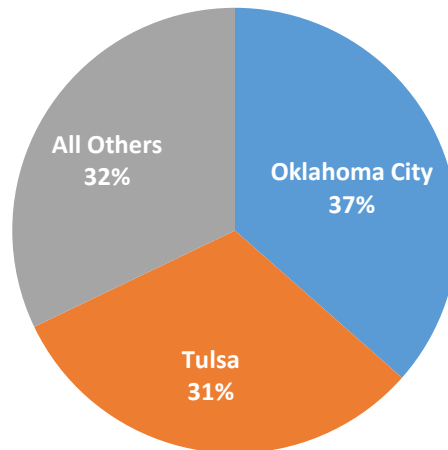
City	Contracts	Percent of Total
Tulsa	257	32.8%
Oklahoma City	195	24.9%
Broken Arrow	22	2.8%
Norman	21	2.7%
Ponca City	16	2.0%

Source: Oklahoma Department of Commerce

The following pie chart shows that Oklahoma City and Tulsa companies make up more than two-thirds of the combined program payments.



Figure 5: Total Quality Jobs Program Payments by City



Source: Oklahoma Tax Commission

Manufacturing industries are the most common Quality Jobs contract recipients, with a total of 428 since 1994. This is also where the most jobs associated with program payments have been created.¹⁶

Table 6: Industries Receiving Quality Jobs Contracts, 1994 to 2017

2-Digit NAICS	Description	Contracts	Total Contract Amounts	Jobs Created	Percent of Total Jobs
31-33	Manufacturing	428	\$1,568,238,438	40,510	46.7%
56	Administrative and Support and Waste Management and Remediation Services	103	\$832,066,421	21,200	24.4%
21	Mining, Quarrying, and Oil and Gas Extraction	51	\$357,703,751	5,327	6.1%
51	Information	33	\$259,996,948	4,995	5.8%
55	Management of Companies and Enterprises	21	\$211,258,507	2,699	3.1%
42	Wholesale Trade	25	\$95,920,342	2,696	3.1%
48 to 49	Transportation and Warehousing	25	\$89,407,439	2,171	2.5%
53	Real Estate and Rental and Leasing	4	\$6,668,770	1,651	1.9%
52	Finance and Insurance	11	\$39,198,176	882	1.0%
71	Arts, Entertainment, and Recreation	2	\$98,655,921	248	0.3%
62	Health Care and Social Assistance	2	\$3,826,574	91	0.1%
61	Educational Services	2	\$10,037,089	40	0.0%
81	Other Services (except Public Administration)	1	\$4,043,412	0	0.0%
	Total	790	\$3,901,644,100	86,711	

Source: Oklahoma Department of Commerce

¹⁶ Job count represents the total of the jobs reported during the last quarter a company received a payment



Fiscal and 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 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 6: 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).¹⁷ Two datasets were used to derive the ratio: 1) US Department of Commerce Bureau of Economic

¹⁷ Gross State Product (GSP) is the state counterpart of Gross Domestic Product (GDP) for the nation. To assist the reader, the project team has decided to use GDP throughout this section of the report instead of mixing the two terms. This decision was made because more people are familiar with the term GDP.



Analysis GDP estimates by state;¹⁸ and 2) the OTC's Annual Report of the Oklahoma Tax Commission.¹⁹ Over the past 10 years, the state tax revenue as a percent of state GDP was 5.4 percent.

Table 7: State of Oklahoma Tax Revenue as a Percent of State GDP

Year	Oklahoma Tax Revenue ²⁰	Oklahoma GDP	Ratio
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%
2015-16	\$8,963,894,053	\$182,937,000,000	4.9%
Average	\$8,908,720,068	\$166,905,300,000	5.4%

Source: US Department of Commerce Bureau of Economic Analysis and Oklahoma Tax Commission

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.

To estimate State of Oklahoma tax revenue generated in a given year, the project team multiplied the total value added figure produced by the IMPLAN model by the corresponding annual ratio (about 5.4 percent). For example, if the total value added was \$1,000,000, then the estimated State of Oklahoma tax revenue was \$54,000 (\$1,000,000 x 5.4 percent).

¹⁸ <http://www.bea.gov/regional/>

¹⁹ https://www.ok.gov/tax/Forms_&_Publications/Publications/Annual_Reports/index.html

²⁰ Gross collections from state-levied taxes, licenses and fees, exclusive of city/county sales and use taxes and county lodging taxes.



Economic Impact

The Quality Jobs program provides qualifying companies quarterly cash rebates of up to 5 percent for newly created taxable payroll for up to 10 years. Each company goes through a formal application with the Department in which payroll and employment thresholds are established. In addition, the Department uses an in-house methodology and model to deduct some of the expenses incurred by the State for employees who will likely move to Oklahoma to work at these companies. The net effect of this calculation is to reduce the incentive amount offered. This approach is a best practice used in many states to help ensure a positive return on investment, while creating an incentive program that achieves its goals of jobs creation and higher wages. For this program, there is a clear and transparent linkage between new payroll and jobs creation and the incentive amount offered.

To evaluate the economic impact of the incentive program, firms were grouped based on when they entered the program. For example, all firms that entered in 2013 were grouped together. From a state perspective, the economic impact of the program is the aggregate impact of these cohort firms over 10 years. However, data limitations and firms dropping out of the program at various stages hamper this type of analysis. To provide an order of magnitude impact, the project team estimated the annual economic impact of firms based on the project year cohort. The calculations were made using information related to the 3-year employment target, total project new jobs, benefit rate, incentive contract amount, and NAICS code. The IMPLAN model was used to calculate each firm's program impact.

The following tables provide the average annual economic and tax impact of each cohort. For example, the 2013 table data illustrates the estimated annual economic and tax impact of all firms that entered the program in 2013. This annual impact would occur for ten years assuming no firms drop out of the program.

This approach is also appropriate when evaluating the average annual cost of the incentive program. From the State's perspective, the goal is for all applicant companies to remain eligible and create new jobs and payroll. If this occurs, the aggregate incentive contract amount for each cohort is the maximum "cost" to the State. If this occurs, one should compare the aggregate or average annual cash rebate amount against the new tax revenue generated by the firms over 10 years or the average annual new tax revenue.

Table 8: Economic Impact

Year		Output	Value Added	Labor Income	Employment	Estimated Oklahoma Tax Revenue
2011	Direct Effect	\$2,276,453,110	\$773,851,125	\$531,674,184	7,183	
	Indirect Effect	\$767,502,515	\$401,066,362	\$253,397,743	4,890	
	Induced Effect	\$604,219,288	\$331,004,630	\$187,194,568	4,805	
	Total Effect	\$3,648,174,913	\$1,505,922,117	\$972,266,495	16,878	\$78,307,950
2012	Direct Effect	\$2,523,907,355	\$701,660,670	\$470,795,652	5,885	
	Indirect Effect	\$893,970,852	\$506,092,689	\$337,677,929	4,944	
	Induced Effect	\$616,353,103	\$337,899,625	\$191,036,414	4,817	
	Total Effect	\$4,034,231,310	\$1,545,652,984	\$999,509,995	15,646	\$77,282,649
2013	Direct Effect	\$2,792,945,809	\$1,459,005,167	\$1,111,995,154	7,099	
	Indirect Effect	\$752,167,296	\$426,719,141	\$297,107,248	4,506	
	Induced Effect	\$1,069,600,444	\$585,035,064	\$330,530,773	8,208	
	Total Effect	\$4,614,713,549	\$2,470,759,372	\$1,739,633,175	19,813	\$124,255,509



Year		Output	Value Added	Labor Income	Employment	Estimated Oklahoma Tax Revenue
2014	Direct Effect	\$1,010,202,769	\$467,438,325	\$349,365,986	4,088	
	Indirect Effect	\$336,059,662	\$173,883,367	\$114,021,412	2,170	
	Induced Effect	\$355,695,364	\$194,064,172	\$109,736,909	2,674	
	Total Effect	\$1,701,957,795	\$835,385,864	\$573,124,307	8,932	\$45,110,837
2015	Direct Effect	\$1,127,654,903	\$324,712,287	\$252,335,171	4,121	
	Indirect Effect	\$372,948,661	\$190,999,601	\$118,245,201	2,105	
	Induced Effect	\$292,178,528	\$160,111,658	\$90,609,813	2,183	
	Total Effect	\$1,792,782,092	\$675,823,546	\$461,190,185	8,410	\$33,115,354
2016	Direct Effect	\$356,771,987	\$167,638,124	\$76,760,973	1,327	
	Indirect Effect	\$120,422,498	\$63,648,661	\$38,738,336	746	
	Induced Effect	\$88,828,974	\$48,699,032	\$27,556,758	660	
	Total Effect	\$566,023,459	\$279,985,817	\$143,056,067	2,732	\$13,719,305

As the preceding table shows, the Quality Jobs Program results in increased economic activity in multiple industry sectors. The level of economic activity varies each year and is directly linked to the industry sector of the applicant firm as well as net new employment and wages. Multiplying the total value added figure produced by the IMPLAN model by the corresponding annual tax ratio provides an estimate for total annual State tax revenue. Over the past 5 years, the Quality Jobs Program (direct + indirect + induced economic effects) has committed about \$822.0 million in total state incentives. Over this same period, the state should collect \$3.7 billion in state tax revenue assuming all companies reach their employment and payroll targets.

Table 9: Estimated Annual Net Impact of Each Cohort

Year	Average Annual Incentive	Estimated State of OK Tax Revenue	Net Impact	Return (%)
2011	\$18,291,399	\$78,307,950	\$60,016,551	76.6%
2012	\$15,402,084	\$77,282,649	\$61,880,565	80.1%
2013	\$23,648,067	\$124,255,509	\$100,607,443	81.0%
2014	\$11,620,205	\$45,110,837	\$33,490,632	74.2%
2015	\$10,218,226	\$33,115,354	\$22,897,128	69.1%
2016	\$3,028,889	\$13,719,305	\$10,690,416	77.9%

Based on the economic and fiscal impact analysis, it appears the tax revenue generated exceeds the annual incentives offered under this program. As a result, it is the project team's conclusion that the ROI for the Quality Jobs program is positive.



Incentive Benchmarking

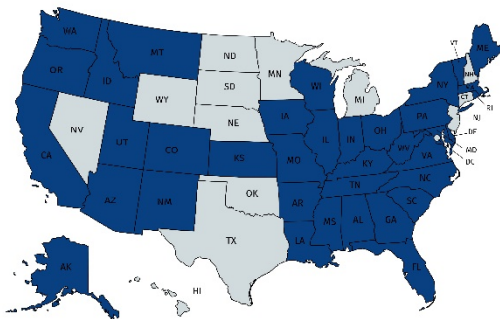


Benchmarking

A detailed description of comparable state programs can be found in **Appendix A**.

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 rare for any two state incentive programs to be exactly the same.²¹ 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.

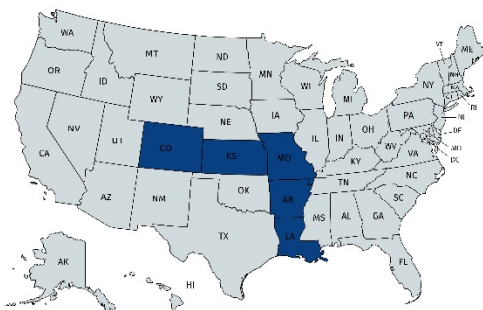
Figure 7: Other States Offering Job Creation Incentives



For many states, job creation programs are seen as a key tool for economic development. A review of other state incentive offerings showed 38 states have incentives related to job creation. The prevalence of similar kinds of incentives suggests a high level of competition among state programs.

Approaches to incenting job creation vary among the states. The most common approach is to offer tax credits in return for jobs created, but many states use Oklahoma's method of offering cash rebates instead of tax credits. Within these common incentive types, variation is found in the duration of the incentive benefit, and in points of emphasis like capital investment and employee benefits.

Figure 8: States Chosen for Comparison



Although job creation incentives are found in most states across the country, the comparison group for Oklahoma's Quality Jobs Program starts with neighboring states. This is a typical starting point, as states often compete with nearby states for the same opportunities. Neighboring states also typically share similar economic and demographic characteristics that lend themselves to comparison. Four bordering states have a similar job creation incentive program. In addition to bordering states, Louisiana was included based on its proximity to Oklahoma. Louisiana is also of interest because its program, titled “Quality Jobs,” shares similar features with Oklahoma's.

In general, the distinguishing characteristics of these programs fall into three categories: qualification requirements, benefit types, and benefit terms.

Qualification Requirements: Four of the total of five comparison states feature a job creation requirement. For example, Colorado generally requires 20 new jobs to be created in order to receive program benefits. By contrast, although Oklahoma's Quality Jobs program does require that new jobs are created, there is no specific number of jobs that needs to be reached in order to qualify for payments. Instead, a payroll threshold is used to measure job creation.

²¹ The instances of exactly alike state incentive programs mostly occur when states choose to ‘piggyback’ onto federal programs.



Of the four comparison states requiring a certain number of jobs be created, only Louisiana couples that requirement with a payroll threshold. Colorado, Kansas, and Missouri each determine benefits based on the number of jobs, not total new payroll.

Benefit Types: Only one program in the comparison group, Louisiana's Quality Jobs, also offers a cash rebate as its benefit. Tax credits are more commonly used.

Benefit Terms: Most benchmark states offer benefits for approximately five years. Oklahoma's incentive is the most generous, providing program benefits for up to 10 years.

Benchmarking Program Evaluations

Several benchmark states have conducted useful program evaluations. The evaluations help to determine the economic efficacy of job creation incentives in general, and they offer examples of how administrative efficiency and control over similar programs has been addressed in other states.

In general, evaluations have found job creation programs similar to Oklahoma's Quality Jobs to be a net benefit for states. In 2008, Arkansas evaluated its Create Rebate program and found that it returned \$1.82 for every \$1.00 spent by the State.²² Louisiana evaluated its Quality Jobs program in 2009 and also found it to be an overall benefit to the State; the evaluation found that the program returned \$2.32 for each \$1.00 the State spent.²³ However, Louisiana's analysis makes a significant assumption that all incentive beneficiaries would not have located in the state but for the incentive. Under the same assumption, Oklahoma's Quality Jobs program was found to return \$6.60 for each \$1.00 spent by the State, according to a report published in 2004.²⁴

In 2016, Mississippi evaluated its program and used a more conservative approach to this calculation. The report offers figures for return on investment at different levels of influence over business decisions. For example, assuming none of the participating companies would have located in Mississippi if not for the incentive (this was assumed in Louisiana's evaluation), the return to the State was estimated to be \$1.9 million.²⁵ However, if 50 percent of the companies would have located in the state even without the incentive, the net return to the State would have decreased by nearly 74 percent, to \$496,000. Mississippi determined that the return to the State becomes negative once 68 percent or more of the companies receiving program benefits would have located in the State without the incentive.

Beyond the calculation of return on investment, other evaluations offer information on program administration issues and potential improvements to program performance. Missouri's State Auditor issued a report on the state's Quality Jobs Tax Incentive Program in 2012.²⁶ The report explained that the number of new jobs expected to be created, which is collected during the application process as a requirement to qualify for program benefits, was vastly overstated. The program as a whole was expected to create over 45,000 jobs based on approved participants from 2005 through 2011, but this figure was reduced to 26,000 due to companies not meeting their stated goals. Level of investment by participating companies was also found to be greatly overstated.

Louisiana's 2009 evaluation suggests keeping program requirements as clear as possible. This helps both the applicant and the administrative body. The evaluation also recommended taking a closer look at

²² Arkansas Economic Development Commission, "Performance Audit: Selected Programs of the Consolidated Incentive Act of 2003" October 8, 2009

²³ Louisiana Economic Development, "Quality Jobs Program 2009 Report" December 2010

²⁴ Oklahoma 21st Century, Inc., "State Policy & Economic Development in Oklahoma: 2004" 2004

²⁵ State of Mississippi, "Annual Tax Expenditure Report", January 2016

²⁶ Missouri State Auditor, "Economic Development: Missouri Quality Jobs Tax Incentive Program July 2012



whether a project would take place without the incentive during the application review process to help control costs and improve return on investment.

A 2016 evaluation of Tennessee's Job Tax Credit emphasized the timing of credit redemption. Under Tennessee's program, a company creating 25 new jobs and making a capital investment of at least \$500,000 may be awarded a tax credit of \$4,500 per new job created. The credit is earned in the year the job creation takes place and can be carried forward for up to 15 years. The evaluation found many companies were delaying the redemption of the credit for years. The evaluation noted that this delayed redemption devalues the payments for businesses and, in turn, diminishes the impact the credit can have on business expansion. Instead of a carry forward credit, the evaluation recommended making the credit refundable to ensure companies benefit from the credit in the period when it is earned.²⁷

²⁷ Anderson Economic Group, "The Economic Impact of Business Tax Credits in Tennessee" December 26, 2016



Appendices



Appendix A: Quality Jobs Benchmarking

Quality Jobs Benchmarking						
	Oklahoma	Arkansas	Colorado	Kansas	Louisiana	Missouri
Program Name	Quality Jobs	Advantage Arkansas	Job Growth Incentive Tax Credit	PEAK	Quality Jobs	Missouri Works
Job Creation Requirement	None	None	20 new jobs 5 new jobs if business is located in an Enhanced Rural Enterprise Zone	10 or more new jobs in metropolitan areas 5 new jobs in other areas	5 New Jobs	10 or more new jobs 2 or more if located in rural area or other designated zone
New Payroll Requirement	\$2.5 Million	\$50,000 to \$125,000, depending on county	None	None	\$500,000 for businesses with 50 or more employees \$250,000 for businesses with under 50 employees	None
Wage Requirement	Wages paid to new jobs must be greater than or equal to the average County wage where the business is located	Average hourly wage of the company must be greater than or equal to the lowest county average hourly wage	Average wage greater than or equal to the county average wage	Wages must be greater than or equal to the county median wage where the company is located	\$14.50 per hour for 5 percent rebate \$19.10 per hour for 6 percent rebate	90% of County Avg Wage*
Health Insurance Requirement	Employees must pay no more than 50% of the premium cost	None	None	Full-time employees must be offered health insurance and the company must pay at least 50 percent of premium	\$1.25 per hour in health care benefits for full-time employees Must offer coverage for dependents of full-time employees At least 50 percent of employees in new jobs must accept coverage	Full-time employees must be offered health insurance and the company must pay at least 50 percent of premium
Capital Investment Requirement	None	None	None	None	None	Capital investment of \$100,000 required if company is located in rural area or other designated zone where the job creation requirement is 2
Benefit Type	Cash Rebate	Income Tax Credit	Income Tax Credit	Retention of State payroll withholding tax	Cash Rebate	Retention of State payroll withholding tax and tax credits
Benefit Amount	5 or 6 percent of Qualified Payroll	1 to 4 percent of new payroll, depending on county	50 percent of FICA paid on new jobs	Retention of 95 percent of State payroll withholding tax	5 or 6 percent of payroll	Retention of 100 percent of State payroll withholding tax and tax credit of 5 to 6 percent of new payroll
Benefit Period	Up to 10 Years	5 Years	8 Years	5 to 7 Years	5 Years	5 or 6 Years
Aggregate Program Cap	None	None	None	None	None	\$116 million



Appendix B: Quality Jobs Basic Industries

Quality Jobs Basic Industries	
Industry	NAICS Codes
Adjustment and Collection Services (75% out-of-state debtors)	561440
Agricultural Production	112120
Alternative Energy Equipment Installation	238160
	238220
Alternative Energy Structure Construction	237130
Arrangement of Passenger Transportation	561510
	561599
Central Administrative Offices, Corporate Offices and Technical Services	5611
	5612
	51821
	519130
	52232
	56142
	524291
	551114
Certain Communications Services	517110
	51741
	51791
Certain Jobs Related to the Mining of Oil and Gas	2111
	213111
	213112
	486
Certain Refuse Systems that distribute methane gas	5622
Certain Warehouse/Distribution Operations Where 40% of inventory is shipped out-of-state	No Codes Listed
Computer Programming, Data Processing and other Computer Related Services	5112
	5182
	5191
	519130
	5415



Appendix B: Quality Jobs Basic Industries

Quality Jobs Basic Industries (continued)	
Electric Service Companies (90% of energy input sourced in-state, 90% of sales out-of-state)	221111- 221122
Engineering, Management and Related Services	5412
	5414-5417
	54131
	54133
	54136
	54137
	541990
Federal Civilian Workforce of the FAA Where jobs are migrating to Oklahoma from other Federal sites, or expansion here	No Codes Listed
Flight Training Services	611512
Grocery Wholesale Distributing	4244
	4245
Insurance Carriers	5241
Insurance Claims Processors Only	524210
	524292
Manufacturing	31
	32
	33
	5111
	11331
Miscellaneous Business Services	561410
	56142
	51911
Miscellaneous Equipment Rental	5324
Motor Freight Transportation and Warehousing	493
	484
	4884-4889
Offices of Real Estate Agents & Brokers (75% of transaction out-of-state)	53120
	6215
Other support activities for air transportation	488190
Professional Organizations	813920
Rail Transportation	482



Appendix B: Quality Jobs Basic Industries

Quality Jobs Basic Industries (continued)	
Research, development and testing Labs	541711
	541712
	541380
Securities, Commodities, Investments	523
Sports Teams & Clubs	711211
Support Activities for Rail and Water Transport	4882
	4883
Transportation by Air, If corporate HQ and some reservation activities are within the state or 75% of air transport sales are to out-of-state consumers	4811
Transportation of Freight or Cargo	541614
Wind Power Electric Generation Equipment Repair & Maintenance	811310

State of Oklahoma

Incentive Evaluation Commission

Small Employer Quality Jobs Program Evaluation

November 14, 2017

PFM Group Consulting LLC
BNY Mellon Center
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Executive Summary



Overview

State incentives focused on job creation are common across the United States. A list compiled by the National Conference of State Legislatures in 2013 showed 40 states with some form of job creation incentive program.¹

Oklahoma's Small Employer Quality Jobs program was created in 1997 under the Small Employer Quality Jobs Act. The legislative intent is to support the creation of quality jobs, specifically by small businesses. In pursuit of this goal, the program offers quarterly cash payments to qualifying small employers equaling up to five percent of newly created payroll for up to seven years.

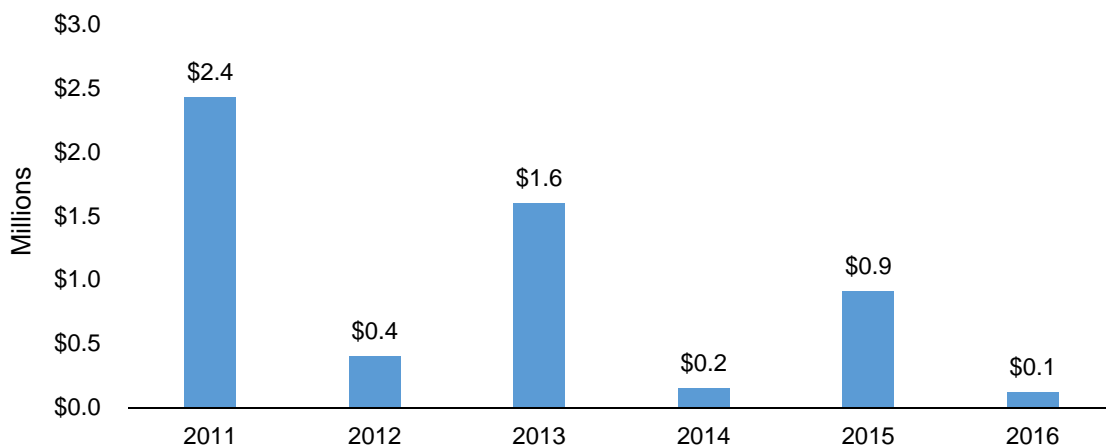
Primary Recommendation: Retain, with modifications

The Small Employer Quality Jobs program has incented over 1,000 jobs in various industries since it was created in 1997. In recent history, the program has performed well in terms of economic impact and appears to be a net benefit to the State. However, there are aspects of the program that may be improved to enhance its performance and better meet the State's goals.

Key Findings

- **The program is a net benefit to the State.** If each company that entered the program in 2011 qualified for full payments that year, the economic activity generated by those companies would have an economic impact, net of incentive costs, of \$2.4 million. In each year since 2011, the same calculation is consistently positive.

Figure 1: Estimated Net Fiscal Impact of Contracts Issued Each Year, 2011 to 2016²



- **The cost per job over the life of the program is approximately \$6,700.** Over the life of the program, 1,292 jobs have been incented and \$8.7 million in payments have been made. This job count represents the total number of jobs reported by a company on its last payment claim. It is unclear for how long the jobs were maintained before or after the final incentive payment.
- **Cost controls associated with the administrative process have been effective.** Over the life of the program, the administrative process and the statutory requirements have protected the State from excessive payments to participating companies.

¹ National Conference of State Legislatures, "Job Creation Tax Credits – 50 State Table", 2013

² This represents the annual tax revenue as a result of economic activity generated by the incentive, net of incentive costs. This analysis assumes each company offered a contract qualifies for payments in each quarter of the year



- **Industries incentivized by the Small Employer Quality Jobs program have exhibited slower growth in employment and average annual pay over the last five years, compared to the State as a whole.** The industry group decreased employment over the last five years, as overall State employment expanded. The group fell short of State growth in average annual pay but exceeded State growth in terms of total wages.
- **About half of the total payments made over the last five years have been to establishments in industries outperforming the growth of the State overall.** This may be improved by revising the program targeted industries.
- **Data collection and storage methods complicate the evaluation process.** More uniform data collection and storage among the databases maintained by the Oklahoma Tax Commission (OTC) and the Department of Commerce (Department) would ease the data analysis process in the future.

The program can be improved by:

- **Requiring companies to file information for payment each quarter.** Adding a requirement that companies file quarterly claims for payment may improve both the predictability of costs to the state, and the efficacy of the program.
- **Establishing a schedule for regular review of eligible industries.** Over the last five years, industries that have received Quality Jobs payments have been growing at a slower rate than the State as a whole in terms of employment and average annual pay. This may indicate a need to realign the list of qualifying industries with the State's intent of incentivizing establishments in industries with the potential to bring significant development to the economy. Establishing a regular review of eligible industries as well as clear criteria for an industry to qualify for the program may help in achieving the State's goal. Keeping in mind that the establishments that qualify today may receive payments for the next 10 years, it is important that the State focuses on the industries it sees as playing a part in future development.
- **Maintaining a centralized database of information collected by the Department and the OTC.** Maintaining a single database of Quality Jobs program information that includes the data collected by both the Department and the OTC can improve future evaluations. This centralized database should include the following information:
 - A unique identifier for each establishment/contract
 - Location
 - NAICS code
 - Contract terms
 - Dollar amount for each quarterly payment made
 - Number of jobs and payroll information reported by companies for each quarterly payment



Key Findings and Recommendations



Key Findings

The Small Employer Quality Jobs program has created over 1,000 jobs in various industries since its creation in 1997. In recent history, the program has performed well in terms of economic impact and appears to be a net benefit to the State. However, there are aspects of the program that may be improved to enhance its performance and better meet the State's goals.

The following provides an analysis of the program's performance related to the criteria established for its evaluation.

- **The program is a net benefit to the State.** If each company that entered the program in 2011 qualified for full payments that year, the economic activity generated by those companies would have an economic impact, net of incentive costs, of \$2.4 million. In each year since 2011, the same calculation is consistently positive.
- **The cost per job over the life of the program is approximately \$6,700.** Over the life of the program, 1,292 jobs have been created and \$8.7 million in payments have been made. This job count represents the total number of jobs reported by a company on its last payment claim. It is unclear for how long the jobs were maintained before or after the final incentive payment.
- **Industries incentivized by Small Employer Quality Jobs have exhibited slower growth in employment and average annual pay over the last five years, compared to the State as a whole.** One of the established criteria for evaluating the Small Employer Quality Jobs program is payroll and job growth associated with the incentive. This is relevant criteria not only because the incentive is focused on quality job creation, but also in that it has a stated goal of incentivizing industries with the potential to bring significant growth to the State economy.

Between 2012 and 2016, over \$1.7 million was paid to participating companies across 8 different three-digit NAICS codes. This group of NAICS codes as a whole decreased employment by 1.0 percent over this period. At the same time, overall State employment and national employment expanded by 2.5 and 5.7 percent, respectively. The following table shows these rates as well as comparisons to overall State and national average annual pay and total wages growth rates.

Table 1: Growth of Industries Receiving Small Employer Quality Jobs Payments, 2012 to 2016

	Incented Industries	OK Total	US Total
Employment	-1.0%	2.5%	5.7%
Average Annual Pay	6.4%	7.2%	8.9%
Total Wages	8.7%	5%	15.7%

Source: BLS Quarterly Census of Employment and Wages

While the industry group underperformed in employment growth, it nearly matched State growth in average annual pay and exceeded State growth in terms of total wages.

- **About half the payments made over the last five years have gone to establishments in industries outperforming the growth of the State overall.** To determine how successful the program has been in incenting growth industries, it is important to evaluate how much is being paid growing and declining industries. The following chart shows the breakdown of how payments are distributed among industries outperforming national trends and those that are lagging behind. An industry is deemed "outperforming" by experiencing growth in employment, total wages, and average annual wage, which exceeds the industry's national growth rate.



Table 2: Payments by Industry Performance Relative to the Overall State Growth, 2012 to 2016

	Total Payments	Percent of Total
Underperforming Industries	\$910,516	52%
Outperforming Industries	\$856,700	48%

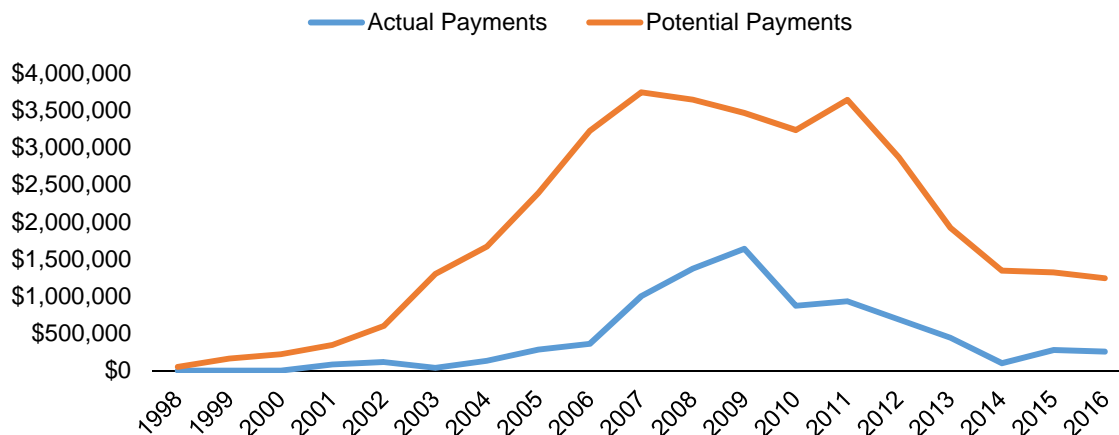
Source: Oklahoma Tax Commission and BLS Quarterly Census of Employment and Wages

- **Cost controls associated with the administrative process have been effective.** The Small Employer Quality Jobs program's administrative process is designed to control costs to the State. The net benefit rate is a significant cost control built into the program. This rate and the maximum benefit amount limiting total payments made to establishments in the program are intended to ensure the State does not spend more than each project is expected to return to the State in new tax revenue. The Department performs thorough modeling of projected costs and revenues resulting from projects to determine these amounts.

After contract parameters are set by the Department, the OTC further controls costs by verifying that each establishment filing for quarterly payments is meeting program criteria and that payments are only made to qualifying establishments. The State is further protected by controls written in statute, such as the requirement that the job creation threshold is met for four consecutive quarters within the first two years of program participation. If this threshold is not met, the establishment is removed from the program.

The following chart shows the impact these restrictions have on the amount the State actually pays to enrolled companies. The potential payments line represents the amount of payments needed to pay out each contract at an even rate over the maximum seven year period from the year of qualification. From 1998 to 2016, the State was liable to pay about \$36.4 million to program participants, but actual payments were about \$8.6 million.

Figure 2: Total Small Employer Quality Jobs Payments, 1998-2016



Source: Oklahoma Department of Commerce and Tax Commission

The majority of companies offered a Small Employer Quality Jobs contract never receive actual payments. The Department has recorded 108 companies entering into contracts, while the OTC reports only 41 companies have received a payment over the life of the program. There are several reasons for this including companies not meeting payroll requirements, or failing to file claims for payment with the OTC. Even companies that stay in the program for a full seven year term may contribute to the difference between potential and actual payments due to lower than expected job creation or payroll growth. The OTC has recorded 69 reasons for companies ending program



participation. These reasons are listed in the following table. The most common reason is voluntary withdrawal, followed by failure to file claims within the first three years, as required in statute.

Table 3: Reasons for Ending Program Participation

Reason	Number of Contracts
Voluntarily Withdrew	34
Did Not Meet Statutory Requirement	22
Reached Statutory Limit	13
Total	69

Source: Oklahoma Tax Commission

Overall, more than half of the recorded reasons for ending program participation are related to statutory limits or requirements. This highlights the importance and effectiveness of administrative process in protecting the State from making excessive payments to companies who enter the program.

- **Data collection and storage methods complicate the evaluation process.** Although the Department and the OTC collaborate effectively to accomplish the administrative tasks associated with the program, there appears to be a lack of communication when compiling data associated with the incentive.

The Department has files detailing the terms of each contract issued. Separately, the OTC maintains records of payments made to qualifying companies. Each of these databases hold key information for evaluating the incentive. However, there is no unique identifier that can be used to track one company from the Department's contract database to the OTC's payment database. This is particularly challenging when a company has changed its name since entering a contract or is known by multiple names. The project team was able to reconcile the two files by combining identifying information in each file such as the net benefit rate, location, or projected jobs.

A notable weakness in the data available for evaluation is that while the OTC tracks payment data by year, it does not maintain a complete database of program payments by quarter. That information, combined with the job and payroll information each company must report in order to receive quarterly payments would be very helpful.

Overall Recommendation: Retain the Small Quality Jobs Program

The project team recommends retaining the Small Employer Quality Jobs program. While the program is providing sufficient benefit to the State to be retained, there are also areas where the program can be improved.

- **Recommendation 1: Require filing for incentive payments each quarter.** When the program was created, companies were not required to file quarterly claims. Over time, some requirements were put in place. For example, in 2001 changes were made requiring companies to make an initial claim for payment within the first three years of enrollment. An additional restriction was put in statute in 2012 that provided for a company to be dismissed from the program if it has made one claim for payment but has since failed to file a claim in the next two years. Even with these added restrictions, a company can file for multiple quarterly payments at once.

This creates two disadvantages for the Small Employer Quality Jobs Program. First, the lack of a quarterly filing requirement creates irregular payment schedules that create a challenge in predicting State liabilities associated with the program. Inability to forecast incentive payments due to irregular



payment schedules is a significant budget risk for state incentive programs.³ Second, allowing participants to defer payments earned in one quarter to a later date diminishes the impact of the payment. New and expanding businesses generally apply a significant discount rate to future cash flows.⁴ Given that payments are significantly more valuable to them the faster they are received, it is unclear why companies would choose to defer these payments to a later date. Interviews with both the OTC and representatives of the State Chamber of Commerce suggest the process of filing for payment is not overly burdensome for participating companies. However, it is clear that the value of these payments for both participating companies and the State is highest when received as soon as possible. Adding a requirement that companies file quarterly claims for payment may improve both the predictability of costs to the State, and the efficacy of the program.

- **Recommendation 2: Regularly review eligible industries.** Program payments are almost evenly split between industries that are outperforming the State as a whole and those that are not. This may indicate a need to realign the list of qualifying industries with the State's intent of incentivizing establishments in industries with the potential to bring significant development to the economy. Establishing a regular review of eligible industries as well as clear criteria for an industry to qualify for the program may help in achieving the State's goal. Keeping in mind that the establishments that qualify today may receive payments for the next 7 years, it is important that the State focuses on the industries it sees as playing a part in future development.
- **Recommendation 3: Centralize data tracking.** Maintaining a single database of Small Employer Quality Jobs program information that includes the data collected by both the Department and the OTC can improve future evaluations. This centralized database should include the following information:
 - A unique identifier for each establishment/contract
 - Location
 - NAICS code
 - Contract terms
 - Dollar amount for each quarterly payment made
 - Number of jobs and payroll information reported by companies for each quarterly payment

Much of this information is already tracked by either the Department or OTC, but centralizing data tracking will make the information more useful.

³ The Pew Charitable Trusts, "Reducing Budget Risks" December 2015

⁴ Anderson Economic Group, "The Economic Impact of Business Tax Credits in Tennessee" December 26, 2016



Introduction



Introduction

Overview

In 2015, HB2182 established the Oklahoma Incentive Evaluation Commission (the Commission). 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 first set of 11 evaluations was conducted in 2016.

The Small Employer Quality Jobs Program is one of the 12 incentives scheduled for review by the Commission in 2017. It is one of the off-shoots of the Quality Jobs Program – which also includes the 21st Century Quality Jobs Program, and the High Impact Quality Jobs Program. Each of these, as well as the original Quality Jobs Program are also being evaluated separately this year. Based on this evaluation and their collective judgement, the Commission will make recommendations to the Governor and the State Legislature related to each of these incentives.

Introduction

State incentives focused on job creation are common across the United States. During and following the Great Recession, these programs increased in use as ways to help start and sustain economic recovery. A list compiled by the National Conference of State Legislatures in 2013 showed 40 states with some form of job creation incentive program.⁵

Whether they are provided as tax credits or rebates, job creation incentives like Oklahoma's Quality Jobs program often seek to reduce employee costs (primarily related to wages). Reduction in wage costs can make it easier for firms to expand operations and/or hire more employees at existing locations.

Labor costs in general can be a critical factor in location decisions. A 2016 survey of corporate executives conducted by Area Development found that labor cost is the third most important factor in location decisions, trailing only highway accessibility and availability of skilled labor.⁶ This supports the approach of concentrating incentives on reducing the cost of employment to promote economic growth.

While many job creation incentives target new or maintained jobs, there has been a trend to create specific incentives that target high wage jobs, often in targeted industries and/or with additional requirements (in many instances the provision of health care or other employee benefits). For example, many states target job creation in high-technology industries that help diversify the economy and help establish a foundation in developing industries.

Incentive Characteristics

Oklahoma's Small Employer Quality Jobs program was created in 1997 under the Small Employer Quality Jobs Act. The legislative intent is to support the creation of quality jobs, specifically by small businesses. In pursuit of this goal, the program offers quarterly cash payments to qualifying small employers equaling up to five percent of newly created payroll for up to seven years.

A small employer is defined in statute as a company having no more than 90 employees in the State. To qualify for benefits, the small employer must create 5 to 15 jobs, depending on the location of the company, and pay wages that are at least 110 percent of the average wage of small employers in the county where the

⁵ National Conference of State Legislatures, "Job Creation Tax Credits – 50 State Table", 2013

⁶ Area Development, "31st Annual Survey of Corporate Executives: Confidence in U.S. Economy, Need for Investment in Infrastructure Reflected", 2016



establishment locates. If all requirements are met, a small employer may receive a rebate of up to five percent of newly created payroll for a period of seven years.

Evaluation Criteria

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:

“provide appropriate incentives to support the creation of quality jobs, particularly by small businesses, in basic industries in this state”

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

- Change in jobs associated with the cash rebates
- Change in payroll associated with the cash rebates
- Ability of program administrative processes to establish the factual basis for claims related to hours, wages and benefits
- But-for test – change in jobs/payroll associated with the cash rebates versus state growth rates as a whole
- Change in jobs/payroll in the qualifying industries versus state industries as a whole
- Return on investment – economic activity versus financial net cost

The criteria address the key goals of the program, primarily focusing on job creation and payroll growth. Return on investment is also part of the criteria to determine whether the benefits to the State outweigh the cost of incentives. These criteria will be discussed throughout the balance of the evaluation.



Administration and Use of the Incentive



Incentive Administration

The Quality Jobs Program is jointly administered by the Oklahoma Department of Commerce (Department) and the Oklahoma Tax Commission (OTC). Eligibility guidelines and administrative responsibilities are set forth in State statutes and administrative rules.⁷ The essential components of program administration are summarized below.

1. **Eligibility.** An establishment starts the process by submitting an application to the Department. The application must show that the establishment meets program requirements:
 - Must operate in a basic industry as defined in statute.
 - Must have no more than 90 employees at the time of application.
 - Depending on the population of the city in which the establishment locates, it must create between 5 and 15 new jobs within two years.

Table 4: Job Creation Requirements by Population

City Population	New Job Requirement
Less than 3,500	5
3,500 to 7,000	10
Greater than 7,000	15

- The average wage of newly created jobs must be greater than or equal to 110 percent of the average wage of small employers in the county where the establishment is located.⁸
 - Must provide health care benefits to new employees which require employees to pay no more than 50 percent of premiums.⁹
 - At least 75 percent of sales must be made out-of-state within two years of entering the program.
2. **Determining Payments.** Once the initial application is approved, the Department prepares a project profile. This profile summarizes information about the establishment and its plans including the project start date, projected employment over the next five years, projected average salary of new employees hired in new direct jobs in the first and third year of program participation, and the health benefits plan to be offered to new employees. This information is analyzed by the Department and used to calculate two key factors in Quality Jobs Program benefits: **the net benefit rate and the maximum benefit amount**. These figures determine the quarterly payments the project may receive and the maximum sum of these payments over the contract term.

The **net benefit rate** is a percentage representing the amount of benefit the State expects to receive in excess of projected costs. It is calculated as the projected tax revenue to be received as a result of the new jobs less the projected costs to the State associated with those jobs including the cost of education, public safety, and transportation. For Small Employer Quality Jobs, this rate is capped at five percent. Quarterly benefit payments are calculated as the net benefit rate multiplied by the quarterly payroll of newly created jobs. The **maximum benefit amount** is the net benefit to the State as a dollar amount rather than a percentage. The sum of quarterly payments made to the project may not exceed this dollar amount.

⁷ Administrative rules for the Department of Commerce are contained in Title 150, Chapter 65. Tax Commission administrative rules are contained in Title 710, Chapter 85

⁸ This requirement is reduced to 100 percent for companies locating in a county with an unemployment rate more than 10 percent higher than the State overall, or a personal poverty rate above 15 percent

⁹ Establishments must provide such coverage within 12 months of employment



If the Department recommends a contract offer, the Office of the General Counsel prepares a contract to be reviewed by the Director of the Department and issued to the eligible establishment. The contract details the net benefit rate, maximum benefit amount, project start date, initial employment, employment projections, and average annual wage levels needed to qualify for quarterly payments.

The OTC is responsible for issuing payments during the term of the contract. Establishments submit quarterly reports to the OTC that include the number of new employees hired and the new payroll associated with these jobs. The OTC verifies that each reporting company is meeting the requirements set forth in its contract. Payments are only issued if an establishment is meeting contract criteria. Establishments meeting program criteria are able to receive quarterly payments for up to seven years.

3. **Reporting.** The OTC maintains records of payments made by year to each participating company. The Department separately maintains records of each company that has entered the program.

Changes Over Time

Since the program was created in 1998, the Small Employer Quality Jobs program has undergone several changes to both the list of eligible industries and the administrative process. The following table summarizes significant changes

Table 5: Changes to the Small Employer Quality Jobs Program Over Time

Year	Industries Added	Administrative Change
2001	None.	Participants required to file initial claim for payment within 3 years of project start date.
2003	Oil & Gas Extraction (field jobs excluded).	Average wage requirement introduced
2005	None.	Allows currently participating companies to qualify for a second contract with up to 6 percent net benefit rate if certain requirements are met and new jobs pay 150 percent of the average wage of incentivized jobs in the previous year.
2006	Web Portals; Professional, Scientific, Technical Services; Dairy Cattle & Milk Production; Chicken Egg Production.	Change in Control qualification introduced. Allows existing companies in the state that have fully changed ownership and are at risk of leaving the state to qualify for the program, counting existing employees as qualifying for benefits.
2008	Sports Teams & Clubs; Other Support Activities for Air Transport; Professional Organizations; Offices of Real Estate Agents/Brokers.	Duration of benefits extended to 15 years for Sports Teams & Clubs. Net benefit rate allowed to exceed 5 percent for Sports Teams & Clubs, but may not exceed the personal income tax rate.
2009	Wind Power Equipment; Maintenance/Repair.	None.
2010	Construction of Renewable Energy Structures; Installation of Solar Reflective Coating; Solar Heating Equipment Installation; Support Activities for Rail Transport; Support Activities for Barge Transport.	Allows companies 24 months to create required jobs, increased from 12 months. Average wage requirement changed to average wage of small employers in the county, rather than overall county average.



Year	Industries Added	Administrative Change
2012	None.	Company dismissed if it files at least one claim but fails to file again within the next two years.
2013	Rail Transportation; Wired Telecommunications; Securities, Commodities, Investments; Support Activities for Oil & Gas; Pipeline Transportation.	Any participant that ends operations in the state within 3 years of first claim must repay all benefits received. Any establishment that does not ramp up to the required payroll threshold and is dismissed may not reapply to the program for a minimum of 12 months from the last day of the month in which they were dismissed.
2015	Chicken Egg Production.	None.

Use of the Incentive

The following table summarizes the number of contracts issued as well as the total maximum benefit amounts and job thresholds associated with the contracts in each year of the program. The highest number of contracts was 15 issued in 2006. Since then, the program has averaged less than 5 contracts per year.

Table 6: Small Employer Quality Jobs Contracts Awarded Since 1998

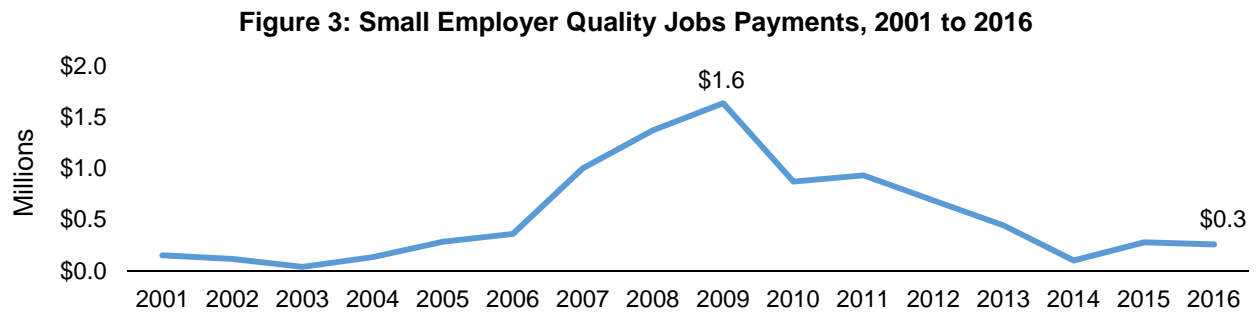
Year	Number of Contracts	Total Maximum Contract Amounts	Total Job Threshold
1998	1	\$364,509	10
1999	2	\$788,738	25
2000	2	\$396,760	20
2001	2	\$871,740	20
2002	5	\$1,796,317	75
2003	13	\$4,893,075	145
2004	8	\$2,567,448	60
2005	14	\$5,413,466	170
2006	15	\$6,630,688	140
2007	8	\$4,025,157	95
2008	1	\$170,039	5
2009	1	\$545,625	15
2010	8	\$3,296,401	75
2011	8	\$5,400,647	110
2012	4	\$1,534,857	45
2013	9	\$3,306,454	110
2014	1	\$524,686	5
2015	5	\$2,964,916	75
2016	1	\$165,307	5
Total	108	\$45,656,830	1,205

Source: Oklahoma Department of Commerce

The State makes payments to companies based on contract terms. The first actual payment made to a program participant was in 2001. Total payments made by year are shown in the following chart. Total



payments peaked in 2009 at \$1.6 million. Since then, total payments have remained relatively low. In 2016, the program cost the State less than \$260,000.



Source: Oklahoma Tax Commission



Fiscal and 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 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 4: 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).¹⁰ Two datasets were used to derive the ratio: 1) US Department of Commerce Bureau of Economic

¹⁰ Gross State Product (GSP) is the state counterpart of Gross Domestic Product (GDP) for the nation. To assist the reader, the project team has decided to use GDP throughout this section of the report instead of mixing the two terms. This decision was made because more people are familiar with the term GDP.



Analysis GDP estimates by state;¹¹ and 2) the OTC's Annual Report of the Oklahoma Tax Commission.¹² Over the past 10 years, the state tax revenue as a percent of state GDP was 5.4 percent.

Table 7: State of Oklahoma Tax Revenue as a Percent of State GDP

Year	Oklahoma Tax Revenue ¹³	Oklahoma GDP	Ratio
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%
2015-16	\$8,963,894,053	\$182,937,000,000	4.9%
Average	\$8,908,720,068	\$166,905,300,000	5.4%

Source: US Department of Commerce Bureau of Economic Analysis and Oklahoma Tax Commission

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.

To estimate State of Oklahoma tax revenue generated in a given year, the project team multiplied the total value added figure produced by the IMPLAN model by the corresponding annual ratio (about 5.4 percent). For example, if the total value added was \$1,000,000, then the estimated State tax revenue was \$54,000 (\$1,000,000 x 5.4 percent).

Economic Impact

The Small Employer Quality Jobs program provides qualifying companies quarterly cash rebates of up to 5 percent for newly created taxable payroll for up to 7 years. Each company goes through a formal application with the Department where payroll and employment thresholds are established. In addition, the Department uses an in-house methodology and model to deduct some of the expenses incurred by the State of Oklahoma

¹¹ <http://www.bea.gov/regional/>

¹² https://www.ok.gov/tax/Forms_&_Publications/Publications/Annual_Reports/index.html

¹³ Gross collections from state-levied taxes, licenses and fees, exclusive of city/county sales and use taxes and county lodging taxes.



for employees who will likely move to the State to work at these companies. The net effect of this calculation is to reduce the incentive amount offered. This approach is a best practice used in many states to help ensure a positive return on investment, while creating an incentive program that achieves its goals of jobs creation and higher wages. For this program, there are clear and transparent linkages between new payroll and jobs creation and the incentive amount offered.

To evaluate the economic impact of the incentive program, firms were grouped based on when they entered the program. For example, all firms that entered in 2013 were grouped together. From a state perspective, the economic impact of the program is the aggregate impact of these cohort firms over seven years. However, data limitations and firms dropping out of the program at various stages hamper this type of analysis. To provide an order of magnitude impact, the project team estimated the annual economic impact of firms based on the project year cohort. The calculations were made using information related to the 3-year employment target, total project new jobs, benefit rate, incentive contract amount, and NAICS code. The IMPLAN model was used to calculate the impact of each firm in the program.

The following tables highlight the average annual economic and tax impact of each cohort. For example, the 2013 table data illustrates the estimated annual economic and tax impact of all firms that entered the program in 2013. This annual impact should occur for ten years assuming no firms drop out of the program.

This approach is also appropriate when evaluating the average annual cost of the incentive program. From the State perspective, the goal is for all applicant companies to remain eligible and create new jobs and payroll. If this occurs, the aggregate incentive contract amount for each cohort is the maximum “cost” to the state. If this occurs, that state should compare the aggregate or average annual cash rebate amount against the new tax revenue generated by the firms over 10 years or the average annual new tax revenue.

Table 8: Economic Impact

Year		Output	Value Added	Labor Income	Employment	Estimated Oklahoma Tax Revenue
2011	Direct Effect	\$100,951,817	\$28,241,893	\$10,591,288	216	
	Indirect Effect	\$35,554,209	\$18,576,792	\$11,265,497	201	
	Induced Effect	\$16,857,062	\$9,228,541	\$5,223,215	134	
	Total Effect	\$153,363,088	\$56,047,226	\$27,080,000	551	\$2,914,456
2012	Direct Effect	\$10,858,656	\$6,302,885	\$3,621,066	87	
	Indirect Effect	\$4,646,820	\$2,566,593	\$1,679,206	34	
	Induced Effect	\$4,080,919	\$2,235,505	\$1,265,133	32	
	Total Effect	\$19,586,395	\$11,104,983	\$6,565,405	153	\$555,249
2013	Direct Effect	\$72,987,482	\$15,936,811	\$12,792,121	338	
	Indirect Effect	\$32,941,613	\$16,233,018	\$10,833,483	310	
	Induced Effect	\$18,133,278	\$9,909,860	\$5,604,721	139	
	Total Effect	\$124,062,373	\$42,079,689	\$29,230,325	787	\$2,116,205
2014	Direct Effect	\$6,355,041	\$2,434,387	\$1,686,819	50	
	Indirect Effect	\$1,617,219	\$814,623	\$517,271	10	
	Induced Effect	\$1,709,948	\$932,141	\$527,633	13	
	Total Effect	\$9,682,208	\$4,181,151	\$2,731,723	73	\$225,782



Year		Output	Value Added	Labor Income	Employment	Estimated Oklahoma Tax Revenue
2015	Direct Effect	\$50,798,502	\$11,395,195	\$8,908,459	170	
	Indirect Effect	\$17,549,913	\$9,477,313	\$5,922,098	107	
	Induced Effect	\$11,704,159	\$6,411,832	\$3,629,841	87	
	Total Effect	\$80,052,574	\$27,284,340	\$18,460,398	364	\$1,336,933
2016	Direct Effect	\$4,474,127	\$1,727,780	\$1,199,402	39	
	Indirect Effect	\$1,139,259	\$575,772	\$365,604	7	
	Induced Effect	\$1,208,173	\$661,869	\$374,648	9	
	Total Effect	\$6,821,559	\$2,965,421	\$1,939,654	55	\$145,306

Table 9: Estimated Annual Net Impact of Each Cohort

Year	Average Annual Incentive	Estimated State of OK Tax Revenue	Net Impact
2011	\$486,071	\$2,914,456	\$2,428,384
2012	\$150,851	\$555,249	\$404,398
2013	\$513,588	\$2,116,205	\$1,602,617
2014	\$74,955	\$225,782	\$150,827
2015	\$423,559	\$1,336,933	\$913,373
2016	\$23,615	\$145,306	\$121,690

As depicted in the preceding table, the Small Employer Quality Jobs Program results in increased economic activity in multiple industry sectors. The level of economic activity varies each year and is directly linked to the industry sector of the applicant firm as well as net new employment and wages. Multiplying the total value added figure produced by the IMPLAN model by the corresponding annual tax ratio, provides an estimate for total annual State of Oklahoma tax revenue. Over the past 6 years, the Small Employer Quality Jobs Program (direct + indirect + induced economic effects) has committed about \$16.7 million in total state incentives. Over this same period, the state should collect \$72.9 million in state tax revenue assuming all companies reach their employment and payroll targets.



Incentive Benchmarking



participating companies to pay competitive wages. Since benefits are a percentage of new payroll, the benefits the small business receives will grow along with growth in wages.



Appendices



Appendix A: Small Employer Quality Jobs Benchmarking

Small Employer Quality Jobs Benchmarking						
	Oklahoma	Alabama	Illinois	Kentucky	Louisiana	South Carolina
Program Name	Small Employer Quality Jobs	Full Employment Act of 2011	Small Business Job Creation Tax Credit*	Kentucky Small Business Tax Credit	Quality Jobs	Annual Small Business Job Tax Credit
Size Requirement	90 or fewer full-time employees in Oklahoma	No more than 50 employees	No more than 50 full-time employees worldwide	No more than 50 employees	No more than 50 employees	99 or fewer employees worldwide
Job Creation Requirement	5 to 15 new jobs, depending on location	Any net increase from previous tax year qualifies	None	At least one new job	5 new jobs	Monthly average of two new jobs per month of operation during the tax year
Payroll Requirement	N/A	None	None		Greater than or equal to \$250,000	None
Wage Requirement	100, 110, or 125 percent of the average county wage of small employers, depending on the location of the company	More than \$10 per hour	\$10 per hour	150 percent of the federal minimum wage	\$14.50 per hour for 5 percent rebate \$19.10 per hour for 6 percent rebate	Greater than or equal to 120 percent of per capita income for lesser of state and county If job pays less than 120 percent but still greater than the applicable per capita income, company qualifies for 50 percent of credit amount for that job
Health Insurance Requirement	Employees must pay no more than 50% of the premium cost	None	None	None	Company must offer health care benefits of \$1.25 per hour and at least 50 percent of the employees holding new direct jobs must have accepted such benefits	None
Capital Investment Requirement	None	None	None	\$5,000	None	None
Benefit Type	Cash Rebate	Tax Credit	Tax Credit	Tax Credit	Cash Rebate	Tax Credit
Benefit Amount	5 percent of new job payroll	\$1,000 per employee	Maximum of \$2,500 per employee	\$3,500 to \$25,000	5 or 6 percent of payroll	\$1,500 to \$8,000 per job
Benefit Period	7 Years	None	1 Year	Can re-apply annually	5 Years	5 Years
Aggregate Program Cap	None	None	None	\$3,000,000	None	None



Appendix B: Small Employer Quality Jobs Basic Industries

Small Employer Quality Jobs Basic Industries	
Industry	NAICS Codes
Adjustment and Collection Services (75% out-of-state debtors)	561440
Agricultural Production	112120
Alternative Energy Equipment Installation	238160
	238220
Alternative Energy Structure Construction	237130
Arrangement of Passenger Transportation	561510
	561599
Central Administrative Offices, Corporate Offices and Technical Services	5611
	5612
	51821
	519130
	52232
	56142
	524291
	551114
Certain Communications Services	517110
	51741
	51791
Certain Refuse Systems that distribute methane gas	5622
Certain Warehouse/Distribution Operations Where 40% of inventory is shipped out-of-state	No Codes Listed
Computer Programming, Data Processing and other Computer Related Services	5112
	5182
	5191
	519130
	5415
Electric Service Companies (90% of energy input sourced in-state, 90% of sales out-of-state)	221111- 221122



Appendix B: Small Employer Quality Jobs Basic Industries

Small Employer Quality Jobs Basic Industries (continued)	
Engineering, Management and Related Services	5412
	5414-5417
	54131
	54133
	54136
	54137
	541990
Federal Civilian Workforce of the FAA Where jobs are migrating to Oklahoma from other Federal sites, or expansion here	No Codes Listed
Flight Training Services	611512
Grocery Wholesale Distributing	4244
	4245
Insurance Carriers	5241
Insurance Claims Processors Only	524210
	524292
Manufacturing	31
	32
	33
	5111
	11331
Miscellaneous Business Services	561410
	56142
	51911
Miscellaneous Equipment Rental	5324
Motor Freight Transportation and Warehousing	493
	484
	4884-4889
Offices of Real Estate Agents & Brokers (75% of transaction out-of-state)	53120
	6215
Other support activities for air transportation	488190
Professional Organizations	813920
Rail Transportation	482



Appendix B: Small Employer Quality Jobs Basic Industries

Small Employer Quality Jobs Basic Industries (continued)	
Research, development and testing Labs	541711
	541712
	541380
Securities, Commodities, Investments	523
Sports Teams & Clubs	711211
Support Activities for Rail and Water Transport	4882
	4883
Transportation by Air, If corporate HQ and some reservation activities are within the state or 75% of air transport sales are to out-of-state consumers	4811
Transportation of Freight or Cargo	541614
Wind Power Electric Generation Equipment Repair & Maintenance	811310

State of Oklahoma

Incentive Evaluation Commission

21st Century Quality Jobs Program Evaluation

November 14, 2017

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Executive Summary



Overview

State incentives focused on job creation are common across the United States. During and following the Great Recession, these programs increased in use as ways to help start and sustain economic recovery. A list compiled by the National Conference of State Legislatures in 2013 showed 40 states with some form of job creation incentive program.¹ Oklahoma created a key job creation incentive in 1993, the Quality Jobs Program. The program has since incentivized hundreds of companies across various industries that have chosen to locate a new facility or expand existing facilities in the State.

Oklahoma's 21st Century Quality Jobs program was created in 2009 under the 21st Century Quality Jobs Incentive Act. The intent of the legislation is to "provide appropriate incentives to attract growth industries and sectors to Oklahoma in the twenty-first century through a policy of rewarding businesses with a highly skilled, knowledge-based workforce". The program offers quarterly payments of up to 10 percent of newly created payroll for a period of 10 years.

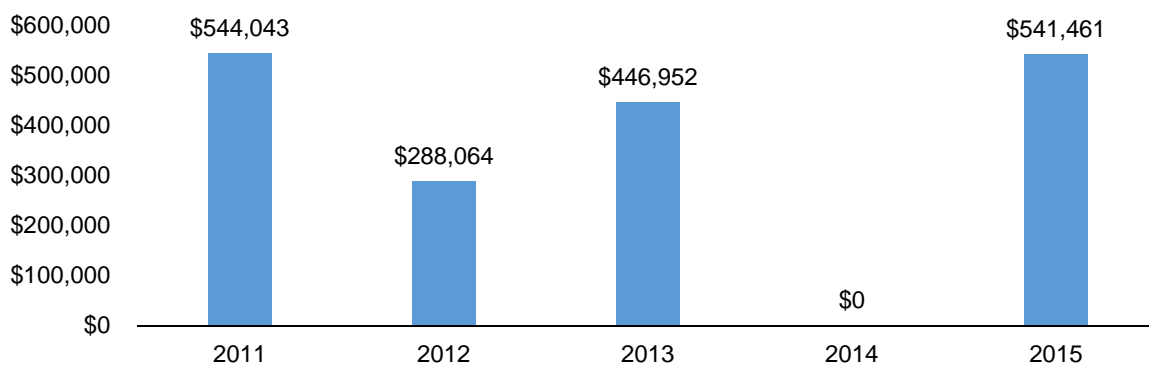
Primary Recommendation: Retain, with modifications

Since its inception, the 21st Century Quality Jobs program has incented almost 900 jobs in various industries. The program has performed well in terms of economic impact and appears to be a net benefit to the State. However, there are aspects of the program that may be improved to enhance its performance and better meet the State's goals.

Key Findings

- **The program is a net benefit to the State.** If each company that entered the program in 2011 qualified for full payments that year, the economic activity generated by those companies would have an economic impact, net of incentive costs, of over \$544,000. The same calculation is consistently positive in each year a contract was issued since 2011.

Figure 1: Estimated Net Fiscal Impact of Contracts Issued Each Year, 2011 to 2016²



- **The cost per job over the life of the program is approximately \$45,000.** A total of \$40.8 million has been paid to participating companies. Companies receiving payments created a total of 895 qualifying jobs. The cost per job is significantly higher than the standard Quality Jobs program and the Small Employer Quality Jobs program. This higher cost is likely driven by the higher wages associated with these jobs, and the higher net benefit rates offered by the program.

¹ National Conference of State Legislatures, "Job Creation Tax Credits – 50 State Table", 2013

² This represents the annual tax revenue as a result of economic activity generated by the incentive, net of incentive costs. This analysis assumes each company offered a contract qualifies for payments in each quarter of the year



- **Industries incentivized by the 21st Century Quality Jobs Program have exceeded or matched overall State growth in employment, average annual wages, and total wages over the last five years.** In this respect, the program has outperformed the other Quality Jobs programs; given the higher wage levels associated with it, this is not surprising.
- **Almost all payments over the last five years have gone to industries outperforming State growth.** This suggests the program is meeting its goal of incentivizing growth industries in Oklahoma.
- **Cost controls associated with the administrative process have been effective.** Over the life of the program, the administrative process and the statutory requirements involved in it have done a good job of safeguarding State investments.
- **Data collection and storage methods complicate the evaluation process.** Specifically, more uniform data collection and storage among the databases maintained by the Oklahoma Tax Commission (OTC) and Department of Commerce (Department) would ease the data analysis process in the future.

The program can be improved by:

- **Requiring companies to file information for payment each quarter.** Adding a requirement that companies file quarterly claims for payment may improve both the predictability of costs to the state, and the efficacy of the program.
- **Establishing a schedule for regular review of eligible industries.** Although the incentive has been succeeding in incentivizing growing industries in the State, reviewing the eligible industries regularly and creating clear criteria for an industry to qualify for the program can help ensure this success continues. Keeping in mind that the establishments that qualify today may receive payments for the next 10 years, it is important that the State focuses on the industries it sees as playing a part in future development.
- **Maintaining a centralized database of information collected by the Department and the OTC.** Maintaining a single database of Quality Jobs program information that includes the data collected by both the Department and the OTC can improve future evaluations. This centralized database should include the following information:
 - A unique identifier for each establishment/contract;
 - Location;
 - NAICS code;
 - Contract terms;
 - Dollar amount for each quarterly payment made;
 - Number of jobs and payroll information reported by companies for each quarterly payment.



Key Findings and Recommendations



Key Findings

The 21st Century Quality Jobs program has incented almost 900 jobs in various industries since its inception in 2009. The transportation equipment manufacturing sector has been responsible for over 90 percent of the jobs created under the program. The program has performed well in terms of economic impact and appears to be a net benefit to the State. However, there are aspects of the program that may be improved to enhance its performance and better meet the State's goals.

The following provides an analysis of the program's performance related to the criteria established for its evaluation.

- **The program is a net benefit to the State.** If each company that entered the program in 2011 qualified for full payments that year, the economic activity generated by those companies would have an economic impact, net of incentive costs, of over \$544,000. The same calculation is consistently positive in each year a contract was issued since 2011.
- **The cost per job over the life of the program is approximately \$45,000.** A total of \$40.8 million has been paid to participating companies. Companies receiving payments created a total of 895 qualifying jobs. The cost per job is significantly higher than the standard Quality Jobs program and the Small Employer Quality Jobs program. This higher cost is likely driven by the higher wages associated with these jobs, and the higher net benefit rates offered by the program.
- **Industries incentivized by the 21st Century Quality Jobs Program have exceeded or matched overall State growth in employment, average annual wages, and total wages over the last five years.** One of the criteria for evaluating the 21st Century Quality Jobs program is payroll and job growth associated with the incentive. This is relevant both for quality job creation and also for the stated goal of incentivizing industries with the potential to bring significant growth to the State economy.

Between 2012 and 2016, over \$32.4 million was paid to participating companies across five different three-digit NAICS codes. This group of NAICS codes in Oklahoma increased employment by 5.2 percent over this period. At the same time, overall State employment and national employment expanded by 2.5 and 5.7 percent, respectively. The following table shows these rates as well as comparisons to overall State and national average annual pay and total wages growth rates.

Table 1: Growth of Industries Receiving Payments, 2012 to 2016

	Incented Industries	OK Total	US Total
Employment	5.2%	2.5%	5.7%
Average Annual Pay	7.2%	7.2%	8.9%
Total Wages	10.9%	5%	15.7%

Source: Bureau of Labor Statistics Quarterly Census of Employment and Wages

- **Nearly all payments over the last five years have gone to industries outperforming State growth.** A closer look at how much of the total payments has gone to industries growing faster than the State as a whole is shown below. The results of this analysis suggest the program is meeting its goal of incentivizing industries with the potential to bring growth to the State economy.



Table 2: Payments by Industry Performance Relative to Oklahoma Overall

	Total Payments	Percent of Total
Outperforming Industries	\$32,234,404	99%
Underperforming Industries	\$186,537	1%

Source: Bureau of Labor Statistics Quarterly Census of Employment and Wages

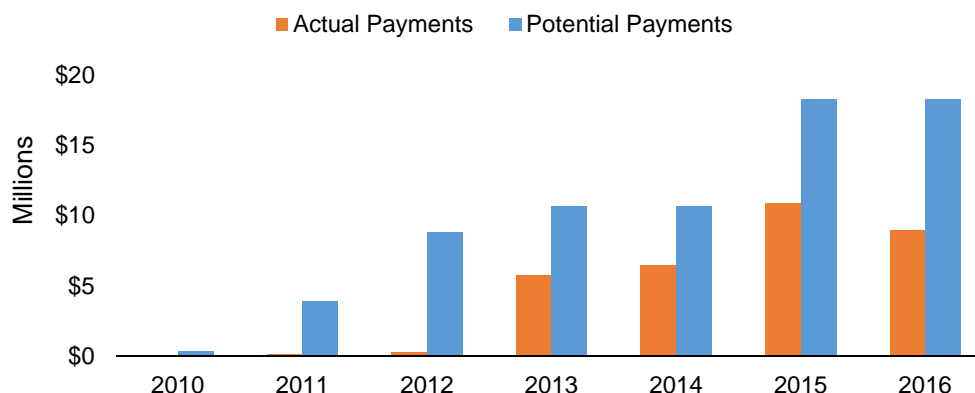
- **Cost controls associated with the administrative process have been effective.** The 21st Century Quality Jobs program's administrative process is designed to control costs to the State. The net benefit rate is a significant cost control built into the program. This rate and the maximum benefit amount limiting total payments made to establishments in the program are intended to ensure the State does not spend more than each project is expected to return to the State in new tax revenue. The Department of Commerce (Department) performs thorough modeling of projected costs and revenues resulting from projects to determine these amounts.

The 21st Century Quality Jobs program furthers these cost controls by using an initial benefit rate as companies grow toward required thresholds. The initial benefit rate, with a lower cap than the fulfillment net benefit rate, protects the State from paying excessive amounts to companies who may not reach the required thresholds.

After contract parameters are set by the Department, the Oklahoma Tax Commission (OTC) further controls costs to the State by verifying that each establishment filing for quarterly payments is meeting program criteria and that payments are only made to qualifying establishments.

The following chart shows the impact of these cost controls. Between 2010 and 2016, a total of \$32.6 million in payments were issued. The estimated potential payments over the same period based on contract amounts spread evenly over a 10-year time period total about \$71 million.

Figure 2: Actual vs Potential 21st Century Quality Jobs Payments, 2010 to 2016



Source: Oklahoma Department of Commerce and Tax Commission

Four out of twelve total companies that have entered into a 21st Century Quality Jobs contract have never received a payment. One company has been removed from the program due to failure to meet the job creation requirement. Failure to file for payment within the first three years of the program caused one company to be removed from the program. Other factors, such as lower than expected payroll growth, can cause actual payments to be significantly lower than projections based on the maximum contract amount.



- **Data collection and storage methods complicate the evaluation process.** Although the Department and the OTC collaborate effectively to accomplish the administrative tasks associated with the program, there appears to be a lack of communication when compiling data associated with the incentive.

The Department has files detailing the terms of each contract issued. Separately, the OTC maintains records of payments made to qualifying companies. Each of these databases hold key information for evaluating the incentive. However, there is no unique identifier that can be used to track one company from the Department's contract database to the OTC's payment database. This is particularly challenging when a company has changed its name since entering a contract or is known by multiple names. The project team was able to reconcile the two files by combining identifying information in each file such as the net benefit rate, location, or projected jobs.

A notable weakness in the data available for evaluation is that while the OTC tracks payment data by year, it does not maintain a complete database of program payments by quarter. That information, combined with the job and payroll information each company must report in order to receive quarterly payments would be very helpful.

Overall Recommendation: Retain the 21st Century Quality Jobs Program

The project team recommends retaining the Quality Jobs program. While the program is providing sufficient benefit to the State to be retained, there are also areas where the program can be improved.

- **Recommendation 1: Require filing for incentive payments each quarter.** Irregular payments create two disadvantages for the 21st Century Quality Jobs Program. First, this creates a challenge in predicting State liabilities associated with the program. Inability to forecast incentive payments due to irregular payment schedules is a significant budget risk for state incentive programs.³ Second, allowing participants to defer payments earned in one quarter to a later date diminishes the impact of the payment. New and expanding businesses generally apply a significant discount rate to future cash flows.⁴ Given that payments are significantly more valuable to them the faster they are received, it is unclear why companies would choose to defer these payments to a later date. Interviews with both the OTC and representatives of the State Chamber of Commerce suggest the process of filing for payment is not overly burdensome for participating companies. However, it is clear that the value of these payments for both participating companies and the State is highest when received as soon as possible. Adding a requirement that companies file quarterly claims for payment may improve both the predictability of costs to the State, and the efficacy of the program.
- **Recommendation 2: Regularly review eligible industries.** Although the incentive has been succeeding in incentivizing growing industries in the State, reviewing the eligible industries regularly and creating clear criteria for an industry to qualify for the program can help ensure this success continues. Keeping in mind that the establishments that qualify today may receive payments for the next 10 years, it is important that the State focuses on the industries it sees as playing a part in future development.
- **Recommendation 3: Centralize data tracking.** Maintaining a single database of Quality Jobs program information that includes the data collected by both the Department and the OTC can improve future evaluations. This centralized database should include the following information:
 - A unique identifier for each establishment/contract;

³ The Pew Charitable Trusts, "Reducing Budget Risks" December 2015

⁴ Anderson Economic Group, "The Economic Impact of Business Tax Credits in Tennessee" December 26, 2016



- Location;
- NAICS code;
- Contract terms;
- Dollar amount for each quarterly payment made;
- Number of jobs and payroll information reported by companies for each quarterly payment.

Much of this information is already tracked by either the Department or the OTC, but centralizing data tracking will make the information more useful.



Introduction



Introduction

Overview

In 2015, HB2182 established the Oklahoma Incentive Evaluation Commission (the Commission). 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 first set of 11 evaluations was conducted in 2016.

The 21st Century Quality Jobs Program is one of the 12 incentives scheduled for review by the Commission in 2017. It is one of the off-shoots of the Quality Jobs Program – which also include the Small Employer Quality Jobs Program, and the High Impact Quality Jobs Program. Each of these, as well as the original Quality Jobs Program are being evaluated separately this year. Based on this evaluation and their collective judgement, the Commission will make recommendations to the Governor and the State Legislature related to each of these incentives.

Introduction

State incentives focused on job creation are common across the United States. During and following the Great Recession, these programs increased in use as ways to help start and sustain economic recovery. A list compiled by the National Conference of State Legislatures in 2013 showed 40 states with some form of job creation incentive program.⁵

Whether they are provided as tax credits or rebates, job creation incentives like Oklahoma's Quality Jobs program often seek to reduce employee costs (primarily related to wages). Reduction in wage costs can make it easier for firms to expand operations and/or hire more employees at existing locations.

Labor costs in general can be a critical factor in location decisions. A 2016 survey of corporate executives conducted by Area Development found that labor cost is the third most important factor in location decisions, trailing only highway accessibility and availability of skilled labor.⁶ This supports the approach of concentrating incentives on reducing the cost of employment to promote economic growth.

While many job creation incentives target new or maintained jobs, there has been a trend to create specific incentives that target high wage jobs, often in targeted industries and/or with additional requirements (in many instances the provision of health care or other employee benefits). For example, many states target job creation in high-technology industries that help diversify the economy and help establish a foundation in developing industries.

Incentive Characteristics

Oklahoma's 21st Century Quality Jobs program was created in 2009 under the 21st Century Quality Jobs Incentive Act. The intent of the legislation is to "provide appropriate incentives to attract growth industries and sectors to Oklahoma in the twenty-first century through a policy of rewarding businesses with a highly skilled, knowledge-based workforce". The program offers quarterly payments of up to 10 percent of newly created payroll for a period of 10 years.

The program generally functions similarly to the Quality Jobs program. It has a few key differences that target high-skill employment. These are:

⁵ National Conference of State Legislatures, "Job Creation Tax Credits – 50 State Table", 2013

⁶ Area Development, "31st Annual Survey of Corporate Executives: Confidence in U.S. Economy, Need for Investment in Infrastructure Reflected", 2016



- Qualifying companies must be operating in a “basic” industry as defined in statute. All industries qualifying under the standard Quality Jobs program are included in the list, **except that oil and gas companies are excluded.** Several industries were also added, including certain hospitals, performing arts companies, financial vehicles, insurance carriers, certain engineering, motion picture and video, scientific and technical services, and sound recording. This industry list reflects the desire to target high-skill fields, and to help diversify the State’s economy as other growth industries emerge. The full list of eligible basic industries is found in Appendix B.
- 21st Century Quality Jobs program **does not require companies to meet a specific payroll threshold** to qualify for benefits. Instead, a qualifying project must create at least 10 new jobs, **each paying at least 300 percent of the average county wage.** If a qualifying company fails to meet this requirement within three years, it is ineligible to receive future payments. The employer must also offer employees in these new jobs health insurance which requires an employee to pay no more than 50 percent of premiums.

Evaluation Criteria

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:

“provide appropriate incentives to attract growth industries and sectors to Oklahoma in the twenty-first century through a policy of rewarding businesses with a highly skilled, knowledge-based workforce”

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

- Change in jobs associated with the cash rebates;
- Change in payroll associated with the cash rebates;
- Ability of program administrative processes to establish the factual basis for claims related to hours, wages and benefits;
- Number/amount of incentives by industry;
- Ability of program administrative processes to establish the factual basis for claims related to hours, wages and benefits;
- But-for test – change in jobs/payroll associated with the cash rebates versus state growth rates as a whole;
- Change in jobs/payroll in the qualifying industries versus state industries as a whole;
- Return on investment – economic activity versus financial net cost.

The criteria address the key goals of the program, primarily focusing on job creation and payroll growth. Return on investment is also part of the criteria to determine whether the benefits to the State outweigh the cost of incentives. These criteria will be discussed throughout the balance of the evaluation.



Administration and Use of the Incentive



Program Administration

The 21st Century Quality Jobs program is jointly administered by the Oklahoma Department of Commerce (Department) and the Oklahoma Tax Commission (OTC). Eligibility guidelines and administrative responsibilities are established in State statute and administrative rules.⁷ The essential components of program administration are summarized below.

1. **Eligibility.** An establishment starts the qualification process by submitting an application to the Department. The application must show that the establishment meets program requirements:
 - Operate in a basic industry as defined in statute. This list notably excludes oil and gas industries.
 - Provide a plan to 10 new jobs within the next three years.
 - The average wage of newly created jobs must be greater than or equal to 300 percent of the average wage of the county where the establishment is located.
 - Provide health care benefits to new employees which requires employees to pay no more than 50 percent of premiums.⁸
2. **Determining Payments.** Once the initial application is approved, the Department prepares a project profile. This profile summarizes information about the establishment and its plans including the project start date, projected employment over the next five years, projected average salary of new employees hired in new direct jobs in the first and third year of program participation, and the health benefits plan to be offered to new employees. This information is analyzed by the Department and used to calculate two key factors in the 21st Century Quality Jobs program benefits: **the net benefit rate and the maximum benefit amount**. These figures determine the quarterly payments the project may receive and the maximum sum of these payments over the contract term.

The **net benefit rate** is a percentage representing the amount of benefit the State expects to receive in excess of projected costs. It is calculated as the projected tax revenue to be received as a result of the new jobs less the projected costs to the State associated with those jobs including the cost of education, public safety, and transportation. Quarterly benefit payments are calculated as the net benefit rate multiplied by the quarterly payroll of newly created jobs. The **maximum benefit amount** is the net benefit to the State as a dollar amount rather than a percentage. The sum of quarterly payments made to the project may not exceed this dollar amount.

The 21st Century Quality Jobs program benefits differ from other Quality Jobs program benefits in that **the net benefit rate may vary over the term of the contract**. Establishments have three years to reach the job creation threshold in order to stay in the program for the maximum 10 year period. During this three year period, if an establishment has not reached this threshold, it receives payments calculated using an initial net benefit rate, which is capped at seven percent. Once the establishment creates 10 new jobs while meeting all other program requirements, payments are calculated using the fulfillment net benefit rate, which is capped at 10 percent.

If the Department recommends a contract offer, the Office of the General Counsel prepares a contract to be reviewed by the Director of the Department and issued to the eligible establishment. The contract details the net benefit rates, maximum benefit amount, project start date, initial employment, employment projections, and average annual wage levels needed to qualify for quarterly payments.

⁷ Administrative rules for the Department of Commerce are contained in Title 150, Chapter 65. Tax Commission administrative rules are contained in Title 710, Chapter 85

⁸ Establishments must provide such coverage within 12 months of employment



The OTC is responsible for issuing payments during the term of the contract. Establishments submit quarterly reports to the OTC that include the number of new employees hired and the new payroll associated with these jobs. The OTC verifies that each reporting company is meeting the requirements set forth in its contract. Payments are only issued if an establishment is meeting contract criteria. Establishments meeting program criteria are able to receive quarterly payments for up to 10 years.

3. **Reporting.** The OTC maintains records of payments made by year to each participating company. The Department separately maintains records of each company that has entered the program.

Use of the Incentive

The following table shows how contracts have been issued over the life of the program and the total maximum benefit amounts associated with those contracts.

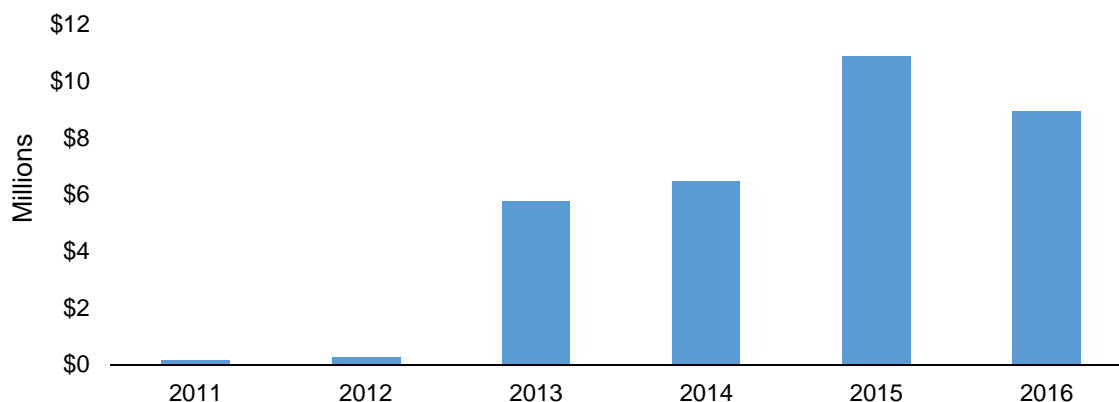
Table 3: 21st Century Quality Jobs Contracts

Year	Contracts	Total Maximum Contract Amount
2010	1	\$3,600,000
2011	6	\$36,000,000
2012	2	\$48,600,000
2013	2	\$18,200,000
2014	0	\$0
2015	1	\$76,600,000
2016	0	\$0

Source: Oklahoma Department of Commerce

Since the first payment was made in 2011, total payments have generally increased. A total of \$32.6 million was paid to 21st Century Quality Jobs program participants between 2011 and 2016. Payments reached their peak at \$10.9 million in 2015 and declined to \$8.9 million in 2016.

Figure 3: 21st Century Quality Jobs Payments, 2011-2016



Source: Oklahoma Tax Commission



Businesses located in the Cities of Oklahoma City and Tulsa have been the most frequent users of the program. Oklahoma City's projected job total accounts for 81.5 percent of the total projected jobs and is largely driven by three Boeing projects.⁹

Table 4: 21st Century Quality Jobs Projects by Location, 2010-2015

City	Contracts	Projected Jobs
Oklahoma City	5	1,363
Tulsa	4	152
Altus	1	110
Edmond	1	28
Lawton	1	19

Source: Oklahoma Department of Commerce

The distribution of actual jobs created by industry is shown in the following table. Similarly, these figures are driven by the Boeing projects in the Transportation Equipment Manufacturing industry.

Table 5: Jobs Created by Industry

336	Transportation Equipment Manufacturing	812	90.7%
541	Professional, Scientific, and Technical Services	61	6.8%
324	Petroleum and Coal Products Manufacturing	11	1.2%
523	Securities, Commodity Contracts, and Other Financial Investments and Related Activities	6	0.7%
611	Educational Services	5	0.6%

Source: Oklahoma Tax Commission

⁹ It is worth noting that Boeing is also a recipient of Aerospace Engineering Incentives. These incentives were evaluated in 2016.



Fiscal and 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 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 4: 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).¹⁰ Two datasets were used to derive the ratio: 1) US Department of Commerce Bureau of Economic

¹⁰ Gross State Product (GSP) is the state counterpart of Gross Domestic Product (GDP) for the nation. To assist the reader, the project team has decided to use GDP throughout this section of the report instead of mixing the two terms. This decision was made because more people are familiar with the term GDP.



Analysis GDP estimates by state;¹¹ and 2) the OTC's Annual Report of the Oklahoma Tax Commission.¹² Over the past 10 years, the state tax revenue as a percent of state GDP was 5.4 percent.

Table 6: State of Oklahoma Tax Revenue as a Percent of State GDP

Year	Oklahoma Tax Revenue ¹³	Oklahoma GDP	Ratio
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%
2015-16	\$8,963,894,053	\$182,937,000,000	4.9%
Average	\$8,908,720,068	\$166,905,300,000	5.4%

Source: US Department of Commerce Bureau of Economic Analysis and Oklahoma Tax Commission

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.

To estimate State of Oklahoma tax revenue generated in a given year, the project team multiplied the total value added figure produced by the IMPLAN model by the corresponding annual ratio (about 5.4 percent). For example, if the total value added was \$1,000,000, then the estimated State of Oklahoma tax revenue was \$54,000 (\$1,000,000 x 5.4 percent).

¹¹ <http://www.bea.gov/regional/>

¹² https://www.ok.gov/tax/Forms_&_Publications/Publications/Annual_Reports/index.html

¹³ Gross collections from state-levied taxes, licenses and fees, exclusive of city/county sales and use taxes and county lodging taxes.



Table 7: Economic Impact

Year		Output	Value Added	Labor Income	Employment	Estimated Oklahoma Tax Revenue
2011	Direct Effect	\$161,425,215	\$25,197,496	\$29,980,670	295	
	Indirect Effect	\$38,223,857	\$19,729,614	\$12,905,318	244	
	Induced Effect	\$33,133,785	\$18,136,963	\$10,266,954	263	
	Total Effect	\$232,782,857	\$63,064,073	\$53,152,942	802	\$3,279,332
2012	Direct Effect	\$279,549,125	\$39,979,736	\$49,534,547	499	
	Indirect Effect	\$63,906,500	\$33,004,032	\$21,428,371	391	
	Induced Effect	\$54,811,854	\$30,018,705	\$16,993,397	428	
	Total Effect	\$398,267,479	\$103,002,473	\$87,956,315	1,317	\$5,150,124
2013	Direct Effect	\$44,670,586	\$22,180,343	\$19,623,027	143	
	Indirect Effect	\$20,613,917	\$11,643,768	\$7,233,088	159	
	Induced Effect	\$20,746,142	\$11,331,589	\$6,413,121	159	
	Total Effect	\$86,030,645	\$45,155,700	\$33,269,236	461	\$2,270,899
2014	Direct Effect	\$0	\$0	\$0	0	
	Indirect Effect	\$0	\$0	\$0	0	
	Induced Effect	\$0	\$0	\$0	0	
	Total Effect	\$0	\$0	\$0	0	\$0
2015	Direct Effect	\$490,319,321	\$61,631,138	\$77,415,090	574	
	Indirect Effect	\$109,967,907	\$57,275,814	\$37,058,292	637	
	Induced Effect	\$88,418,094	\$48,433,492	\$27,418,363	660	
	Total Effect	\$688,705,322	\$167,340,444	\$141,891,745	1,871	\$8,199,682

Table 8: Estimated Annual Net Impact for Each Cohort

Year	Average Annual Incentive	Estimated State of OK Tax Revenue	Net Impact
2011	\$2,735,289	\$3,279,332	\$544,043
2012	\$4,862,060	\$5,150,124	\$288,064
2013	\$1,823,947	\$2,270,899	\$446,952
2014	\$0	\$0	\$0
2015	\$7,658,221	\$8,199,682	\$541,461

As depicted in the table above, the 21st Century Quality Jobs program results in increased economic activity in multiple industry sectors. The level of economic activity varies each year and is directly linked to the industry sector of the applicant firm as well as net new employment and wages. Multiplying the total value added figure produced by the IMPLAN model by the corresponding annual tax ratio, provides an estimate for total annual State of Oklahoma tax revenue. Over the past 5 years, the 21st Century Quality Jobs program (direct + indirect + induced economic effects) has committed about \$170.8 million in total state incentives. Over this same period, the state should collect \$189.0 million in state tax revenue assuming all companies reach their employment and payroll targets.

Based on the economic and fiscal impact analysis, it appears the annual incentives offered under this program do not exceed the tax revenue generated. The ROI for this program is positive.



Incentive Benchmarking

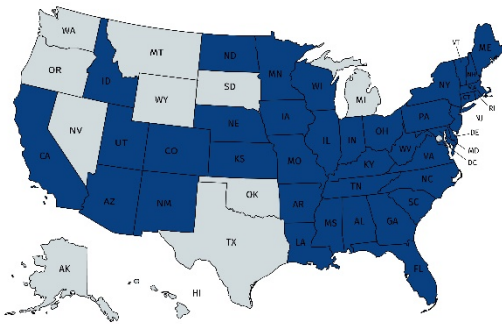


Benchmarking

A detailed description of comparable state programs can be found in **Appendix A**.

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 rare that any two state incentive programs will be exactly the same.¹⁴ 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.

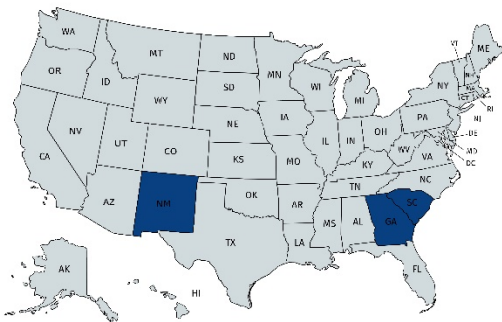
Figure 5: Other States Offering Job Creation Incentives



The search for comparable programs begins with Oklahoma’s neighboring states. This is a typical starting point since states often compete with nearby states for the same opportunities. Neighboring states also typically share similar economic and demographic characteristics that lend themselves to comparison. Oklahoma’s 21st Century Quality Jobs program is a relatively uncommon approach to incentivizing business investment. Only one neighboring state, New Mexico, has a similar program. Aside from New Mexico, Georgia and South Carolina also have comparable programs.

The notable feature of Oklahoma’s program is its requirement that new jobs pay a wage that is equal to or greater than 300 percent of the average county wage. While three states have incentives that strongly emphasize high-wage job creation, none require this high of a relative wage level.

Figure 6: States Chosen for Comparison



South Carolina offers a tax credit for companies creating at least 25 new jobs that earn a wage equal to at least 2.5 times the lesser of county and state average wage. This is the program in the comparison group that comes the closest to matching Oklahoma’s 300 percent requirement.

Georgia’s Quality Jobs Tax Credit has the ability to provide special incentives to jobs paying 200 percent or more of the average county wage. Georgia’s program is fundamentally different from Oklahoma’s in that at least 50 jobs need to be created in order to participate; however, not all 50 jobs need to pay 200 percent or more of the average county wage.

New Mexico’s program also has a focus on high-wage jobs. Participants must create at least one new job and must pay at least \$40,000 or \$60,000 in annual salary, depending on the location of the company.¹⁵ Similar to Oklahoma’s 21st Century Quality Jobs program, New Mexico offers 10 percent of new payroll for qualifying companies.

¹⁴ The primary instances of exactly alike state incentive programs occur when states choose to ‘piggyback’ onto federal programs.

¹⁵ \$60,000 if the job is performed or based in or within ten miles of the external boundaries of a municipality with a population of sixty thousand or more according to the most recent federal decennial census or in a class H county; and \$40,000 if the job is performed or based in a municipality with a population of less than sixty thousand according to the most recent federal decennial census



In general, Oklahoma's incentive is highly competitive among the comparable programs. In Oklahoma, a company creating 10 new jobs each paying \$100,000 per year would receive up to \$100,000 per year in cash rebates. While that same company could also receive \$100,000 in tax credits per year in New Mexico, it would only be able to receive the benefit for 4 years, compared to 10 in Oklahoma. In Georgia, the same company is only eligible for \$50,000 per year in tax credits. The same company would not qualify for the South Carolina program due to the job creation requirement.



Appendices



Appendix A: 21st Century Quality Jobs Benchmarking

21st Century Quality Jobs Benchmarking				
	Oklahoma	Georgia	New Mexico	South Carolina
Name	21st Century Quality Jobs	Quality Jobs Tax Credit	High-wage Job Tax Credit	Job Tax Credits
Job Creation Requirement	10 new jobs	At least 50	At least 1 new job	25 new jobs
Payroll Requirement	N/A	None	None	None
Wage Requirement	300 percent of the average county wage, not including healthcare	110 to 120 percent of the average county wage for \$2,500 credit 120 to 150 percent of the average county wage for \$3,000 credit 150 to 175 percent of the average county wage for \$4,000 credit 175 to 200 percent of the average county wage for \$4,500 credit 200 percent or more for \$5,000 credit	\$40,000 or \$60,000 annual salary, depending on location	2.5 times the lesser of county and State average
Health Insurance Requirement	Companies must offer employees health insurance and pay at least 50 percent of premiums	None	None	None
Capital Investment Requirement	None	None	None	None
Benefit Type	Cash Rebate	Tax Credit	Tax Credit	Tax Credit
Benefit Amount	Up to 10 percent of qualifying new payroll	\$5,000 per job	10 percent of qualifying new payroll	\$1,500, \$2,750, \$4,250, or \$8,000 per job depending on county development tier
Benefit Period	Up to 10 Years	5 Years	A job may qualify for the credit for 4 years	5 years
Aggregate Program Cap	None	None	None	None



Appendix B: 21st Century Quality Jobs Industries

21st Century Quality Jobs Basic Industries	
Industry	NAICS Codes
Adjustment and Collection Services (75% out-of-state debtors)	561440
Agricultural Production	112120
Alternative Energy Equipment Installation	238160
	238220
Alternative Energy Structure Construction	237130
Arrangement of Passenger Transportation	561510
	561599
Central Administrative Offices, Corporate Offices and Technical Services	5611
	5612
	51821
	519130
	52232
	56142
	524291
	551114
Certain Communications Services	517110
	51741
	51791
Certain Refuse Systems that distribute methane gas	5622
Certain Warehouse/Distribution Operations Where 40% of inventory is shipped out-of-state	No Codes Listed
Computer Programming, Data Processing and other Computer Related Services	5112
	5182
	5191
	519130
	5415
Electric Service Companies (90% of energy input sourced in-state, 90% of sales out-of-state)	221111-
	221122



Appendix B: 21st Century Quality Jobs Industries

21st Century Quality Jobs Basic Industries (continued)	
Engineering, Management and Related Services	5412
	5414-5417
	54131
	54133
	54136
	54137
	541990
Federal Civilian Workforce of the FAA Where jobs are migrating to Oklahoma from other Federal sites, or expansion here	No Codes Listed
Flight Training Services	611512
Grocery Wholesale Distributing	4244
	4245
Insurance Carriers	5241
Insurance Claims Processors Only	524210
	524292
Manufacturing	31
	32
	33
	5111
	11331
Miscellaneous Business Services	561410
	56142
	51911
Miscellaneous Equipment Rental	5324
Motor Freight Transportation and Warehousing	493
	484
	4884-4889
Offices of Real Estate Agents & Brokers (75% of transaction out-of-state)	53120
	6215
Other support activities for air transportation	488190
Professional Organizations	813920
Rail Transportation	482

Appendix B: 21st Century Quality Jobs Industries



21st Century Quality Jobs Basic Industries (continued)	
Research, development and testing Labs	541711
	541712
	541380
Securities, Commodities, Investments	523
Sports Teams & Clubs	711211
Support Activities for Rail and Water Transport	4882
	4883
Transportation by Air, If corporate HQ and some reservation activities are within the state or 75% of air transport sales are to out-of-state consumers	4811
Transportation of Freight or Cargo	541614
Wind Power Electric Generation Equipment Repair & Maintenance	811310
NAICS Codes added for 21st Century Quality Jobs Only	
Specialty Hospitals	62231
Performing Arts Companies	7111
50% out-of-state sales requirement for:	
Funds, Trusts, and other Financial Vehicles	525
Insurance Carriers and Related Activities	524
Heavy and Civil Engineering Construction	237
Motion Picture and Video Industries	5121
Professional, Scientific, and Technical Services	5411
	5412
	5413
	5414
	5418
	5419
Sound Recording Industries	5122

State of Oklahoma

Incentive Evaluation Commission

High Impact Quality Jobs Program Evaluation

November 14, 2017

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Executive Summary



Overview

State incentives focused on job creation are common across the United States. During and following the Great Recession, these programs increased in use as ways to help start and sustain economic recovery. A list compiled by the National Conference of State Legislatures in 2013 showed 40 states with some form of job creation incentive program.¹

Oklahoma's High Impact Quality Jobs program was created in 1994, one year after the original Quality Jobs program was created, as part of the Saving Quality Jobs Act. It functions similarly to the Quality Jobs program in that it provides cash rebates based on new payroll for qualifying firms. The rebate amount is 2.5 percent of gross payroll of newly created jobs. Companies must have an annual payroll for new jobs of at least \$1.0 million, but less than \$2.5 million.

Primary Recommendation: Reconfigure. While it is clear that the program is not succeeding in its goal of attracting high impact investment to rural parts of the State, the program is not having a negative impact on the State. Since the program is not helping or hurting the State, there would not be any significant benefit to repealing it. Instead, the State may be able to reconfigure the program in order to better help meet its goals.

Key Findings

The program has never been used. High Impact Quality Jobs has existed for over 20 years and has never been used. The Department of Commerce (Department) no longer promotes the program on its website due to lack of interest.

The benefit rate is lower than all other Quality Jobs variations. At just 2.5 percent of payroll, the benefit is half of the maximum available for standard Quality Jobs projects. This low benefit, combined with its high job creation requirement, is likely what has led to the lack of interest in the program.

The program has had no fiscal or economic impact. No payments have been issued through the program, so the State has not incurred any cost. There have also been no jobs created as a result of participation in the program, so no additional economic activity can be attributed to the program.

Recommended Changes

Recommendation 1: Decrease the job creation requirement. Based on discussions with the Department, the job creation requirement of one percent of the county workforce is a deterrent for most companies who may have an interest in the program. If the State's goal is to create more employment in these areas, it may be best to reduce the job requirement. Many States offer rural job creation tax credits with low job creation requirements. Some examples include Oregon, Utah, and Florida. While this may not lead to the "high impact" investment Oklahoma's program currently targets, this strategy is more likely to attract participants.

Recommendation 2: Increase the benefit. While the program requires a significant investment in terms of job creation, **it offers a smaller reward than all other variations of Quality Jobs.** It is likely that any company considering use of the program would prefer to participate in the Small Employer or standard Quality Jobs program instead. The restrictions the program imposes on job creation (one percent of county labor force) and payroll (between \$1.5 million and \$2.5 million) narrow the scope of the program to counties like Marshall or Choctaw County, where one percent of county labor force would equal 68 and 60 employees, respectively. This number of jobs is well below the maximum limit of 90 employees required to participate in the Small Employer Quality Jobs program. In order to attract the significant investment the High Impact Quality Jobs program targets, the benefit offered by the program needs to increase.

¹ National Conference of State Legislatures, "Job Creation Tax Credits – 50 State Table", 2013



Key Findings and Recommendations



Key Findings

Although the High Impact Quality Jobs program has existed since 1994, it has never been used. The program is intended to attract employment and investment to parts of the State where the addition of one facility could make a significant (i.e., high) impact. Unfortunately, the program has not met this goal and no State economic or fiscal impact can be attributed to the program.

Primary Recommendation: Reconfigure

While it is clear that the program is not succeeding in its goal of attracting high impact investment to rural parts of the State, the program is not having a negative impact on the State. Since the program is not helping or hurting the State, there would not be any significant benefit to repealing it. Instead, the State may be able to reconfigure the program in order to better meet its goals.

Key Findings

The program has never been used. High Impact Quality Jobs has existed for over 20 years and has never been used. The Department of Commerce (Department) no longer promotes the program on its website due to lack of interest.

The benefit rate is lower than all other Quality Jobs variations. At just 2.5 percent of payroll, the benefit is half of the maximum available for standard Quality Jobs projects. This low benefit combined with its high job creation requirement is likely what has led to the lack of interest in the program.

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Introduction



Overview

In 2015, HB2182 established the Oklahoma Incentive Evaluation Commission (the Commission). 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 first set of 11 evaluations was conducted in 2016.

The High Impact Quality Jobs Program is one of 12 incentives scheduled for review by the Commission in 2017, the second year of evaluations. It is one of the off-shoots of the Quality Jobs Program – which also include the Small Employer Quality Jobs Program, and the 21st Century Quality Jobs Program. Each of these, as well as the original Quality Jobs Program are also being evaluated separately this year. Based on this evaluation and their collective judgement, the Commission will make recommendations to the Governor and the State Legislature related to each of these incentives.

Introduction

State incentives focused on job creation are common across the United States. During and following the Great Recession, these programs increased in use as ways to help start and sustain economic recovery. A list compiled by the National Conference of State Legislatures in 2013 showed 40 states with some form of job creation incentive program.²

Whether they are provided as tax credits or rebates, job creation incentives like Oklahoma's Quality Jobs program often seek to reduce employee costs (primarily related to wages). Reduction in wage costs can make it easier for firms to expand operations and hire more employees at existing locations.

Labor costs in general can be a critical factor in location decisions. A 2016 survey of corporate executives conducted by Area Development found that labor cost is the third most important factor in location decisions, behind only highway accessibility and availability of skilled labor.³ This tends to support the concept of concentrating incentives on reducing the cost of employment to promote economic growth.

While many job creation incentives target new or maintained jobs, there has been a trend to create specific incentives that target high wage jobs, often in targeted industries and/or with additional requirements (in many instances the provision of health care or other employee benefits). For example, many states target job creation in high-technology industries that provide diversify their economy and provide a chance to establish a foundation in developing industries.

Incentive Characteristics

Oklahoma's High Impact Quality Jobs program was created in 1994, one year after the original Quality Jobs program was created, as part of the Saving Quality Jobs Act. It functions similarly to the Quality Jobs program in that it provides cash rebates based on new payroll for qualifying firms. The rebate amount is 2.5 percent of gross payroll of newly created jobs. Companies must have an annual payroll for new jobs of at least \$1.0 million, but less than \$2.5 million.

The primary difference between the High Impact Quality Jobs and the original Quality Jobs program is the type of projects it targets. In order to be considered "high impact" a project must create a number of new jobs equal to at least one percent of the total labor force of the county where it locates. In this way, the program narrows its focus to attracting investment to parts of the State where the addition of one facility could make a significant (i.e., high) impact.

² National Conference of State Legislatures, "Job Creation Tax Credits – 50 State Table", 2013

³ Area Development, "31st Annual Survey of Corporate Executives: Confidence in U.S. Economy, Need for Investment in Infrastructure Reflected", 2016



Evaluation Criteria

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:

- Support companies that hold promise of retaining and gaining jobs when the State of Oklahoma is in competitive situations with other states or nations;
- Provide appropriate incentives to support establishments that hold the promise of growth in strategic industries that yield higher long-term benefits for job retention and increasing the wealth of the state and which create competitive advantages for the State of Oklahoma in attracting and retaining industries and thus jobs;
- Provide appropriate incentives to establishments that locate in areas of the state that would be highly impacted statistically in their labor forces when establishments locate in such an area;
- Provide appropriate incentives to establishments that reduce continuing unemployment for citizens by employing the chronically unemployed.

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

- Change in jobs associated with the quarterly payments;
- Change in payroll associated with the quarterly payments;
- Ability of program administrative processes to establish the factual basis for claims related to hours, wages and benefits;
- But-for test – change in jobs/payroll associated with the cash rebates versus state growth rates as a whole;
- Change in jobs/payroll in the qualifying industries versus state industries as a whole;
- Return on investment – economic activity versus financial net cost.

The criteria address the key goals of the program, primarily focusing on job creation and payroll growth. Return on investment is also part of the criteria to determine whether the benefits to the State outweigh the cost of incentives. These criteria will be discussed throughout the balance of the evaluation.



Administration and Use of the Incentive



Program Administration

The Quality Jobs Program is jointly administered by the Oklahoma Department of Commerce (Department) and the Oklahoma Tax Commission (OTC). Eligibility guidelines and administrative responsibilities are established in State statute and administrative rules.⁴ The essential components of program administration are summarized below.

- 1. Eligibility.** An establishment starts the qualification process by submitting an application to the Department. The application must show that the establishment meets program requirements:
 - Operate in a basic industry as defined in statute;
 - Create an annual gross payroll for newly created jobs greater than or equal to \$1.0 million but less than \$2.5 million;
 - Create a number of new jobs equal to one percent of the total county labor force;
 - The average wage of newly created jobs must be greater than or equal to the average wage of the county where the establishment is located;
 - Provide health care benefits to new employees which requires employees to pay no more than 50 percent of premiums.⁵

The job creation requirement based on county labor force, combined with a payroll range of \$1.0 to \$2.5 million, makes it practically impossible for the program to be used for major investments in the most populous counties. To illustrate this, the table below shows how a company employing one percent of the workforce in Oklahoma or Tulsa County would not qualify for the program, but one in Marshall or Choctaw County would.

Table 1: Example Payrolls of Firms in Tulsa and Choctaw Counties

County	1% of Labor Force	100% of Average County Wage	Total Payroll
Oklahoma	3,783	\$50,107	\$189,554,781
Tulsa	3,180	\$48,794	\$155,164,920
Marshall	68	\$33,000	\$2,244,000
Choctaw	60	\$30,620	\$1,837,200

Source: Bureau of Labor Statistics Quarterly Census of Employment and Wages

- 2. Determining Payments.** Once the initial application is approved, the Department prepares a project profile. This profile summarizes information about the establishment and its plans including the project start date, projected employment over the next five years, projected average salary of new employees hired in new direct jobs in the first and third year of program participation, and the health benefits plan to be offered to new employees. This information is analyzed by the Department and used to decide whether the project qualifies as a high impact project. If approved, the project may receive quarterly payments of 2.5 percent of newly created payroll.

The OTC is responsible for issuing payments once a project is approved. Establishments submit quarterly reports to the OTC that include the number of new employees hired and the new payroll associated with these jobs. Payments are only issued if an establishment is meeting program requirements. The minimum payroll threshold of \$1.0 million must be met within three years of the establishment enrolling in the program. If the establishment fails to meet this threshold, it is removed

⁴ Administrative rules for the Department of Commerce are contained in Title 150, Chapter 65. Tax Commission administrative rules are contained in Title 710, Chapter 85

⁵ Establishments must provide such coverage within 180 days of employment



from the program. Establishments meeting all requirements are able to receive quarterly payments for up to six years.

3. **Reporting.** The Tax Commission maintains records of payments made by year to each participating company. The Department of Commerce separately maintains records of each company that has entered the program. The Department of Commerce also issues monthly press releases listing all new enrollees including benefit rates and maximum benefit amounts for each.

Incentive Use

Although the High Impact Quality Jobs program has existed since 1994, the program has never been used, and no payments have been issued.



Fiscal and Economic Impact



Fiscal and Economic Impact

The High Impact Quality Jobs program has resulted in no fiscal or economic impact. No payments have been issued through the program, so the State has not incurred any cost. There have also been no jobs created as a result of participation in the program, so no additional economic activity can be attributed to the program.



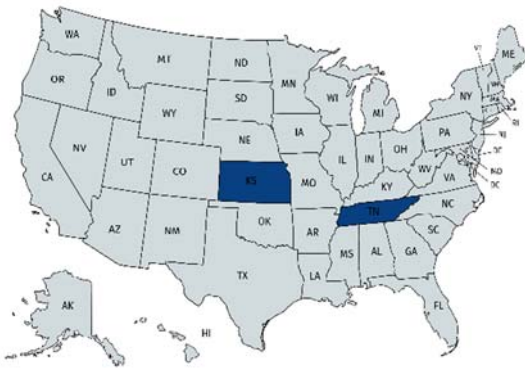
Incentive Benchmarking



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 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.

Figure 1: States offering similar incentives



The search for comparable programs started with Oklahoma’s neighboring states. This is a typical starting point, as states often compete with nearby states for the same opportunities. Neighboring states also typically have similar economic and demographic characteristics that lend themselves to comparison.

While many states have some form of job creation tax incentive in place, programs as specifically targeted as Oklahoma’s High Impact Quality Jobs are rare. Only one bordering state, Kansas, was found to have a comparable program. Expanding the search geographically revealed Tennessee to also have a similar program. Beyond relative proximity, these programs were also chosen due to similar intent to High Impact Quality Jobs. Each one is intended to attract major investment similar to High Impact Quality Jobs. However, there are important differences among the programs.

The primary difference between Oklahoma’s High Impact Quality Jobs program and the comparison group is the job creation requirement. Oklahoma’s requirement is very high, and a look at the comparison group emphasizes that point. A project locating in the average county in Oklahoma would have to create 239 jobs in order to qualify, while it would only need 100 in Kansas and Tennessee. In other words, the job creation requirement in Oklahoma is more than twice the next highest requirement in the comparison group.

The comparison states also offer differing benefits. For example, Kansas offers retention of up to 95 percent of State withholding tax, while Tennessee offers a per job excise and franchise tax credit. Both are different from Oklahoma’s rebate that is a percent of new payroll. The length of benefit periods is also an important distinguishing characteristic. Kansas offers its benefit for up to 10 years compared to Oklahoma’s 6 years. Tennessee’s credit is only available in the year the job is created.

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



Appendices



Appendix A: High Impact Quality Jobs Benchmarking

High Impact Quality Jobs Benchmarking			
	Oklahoma	Kansas	Tennessee
Program Name	High Impact Quality Jobs	PEAK - "High Impact" Benefits	Super Jobs Tax Credit
Job Creation Requirement	Equal or greater to 1% of the total labor force in the establishment's county	100, within 2 years	Minimum of 100 new jobs. Varies based on capital investment and facility type
Payroll Requirement	\$1 million to \$2.5 million	None	None
Wage Requirement	110% of average county wage, including healthcare	100 percent of county median wage for 7 year benefit 110 percent of county median wage for 8 year benefit 120 percent of county median wage for 9 year benefit 140 percent of county median wage for 10 year benefit	None
Health Insurance Requirement	Companies must provide healthcare and pay no less than 50% of premiums	Companies must offer health insurance to full-time employees and pay at least 50 percent of the employee's premium	None
Capital Investment Requirement	None	None	\$1,000,000
Benefit Type	Cash Rebate	Retention of State Withholding Tax	Excise and Franchise Tax Credit
Benefit Amount	2.5 percent of payroll of new jobs	Up to 95 percent of State Withholding Tax	\$5,000 per job
Benefit Period	Up to 6 Years	Up to 10 Years	Maximum of 20 Years, varies based on capital investment and facility type

State of Oklahoma

Incentive Evaluation Commission

Capital Gains Deduction Evaluation

November 14, 2017

PFM Group Consulting LLC
BNY Mellon Center
1735 Market Street
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Philadelphia, PA 19103



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Executive Summary



Overview

Oklahoma's capital gain deduction became effective January 1, 2005 for personal income and January 1, 2006 for corporate income. It allows certain gains from the sale of Oklahoma capital to be fully deductible from state taxable income. The sale of Oklahoma-based real or tangible property, or stock or ownership interest in an Oklahoma-based business entity is eligible to be deducted from State income tax. Real or tangible property must be owned for at least five years prior to the sale. Stock or ownership interest must be in a business entity that has had a primary headquarters in Oklahoma for at least three years prior to the sale and must be owned for at least two uninterrupted years prior to the sale.

A goal of the deduction is to encourage capital investment in the State. The argument would be that eliminating the tax on qualified capital gains makes investments more profitable, and this higher reward leads to greater capital investment. As a result, with more capital investment, there is a greater likelihood of additional job creation and innovation.

The incentive overall cannot, with the data available, be credibly shown to have significant economic impact or a positive return on investment for the State.

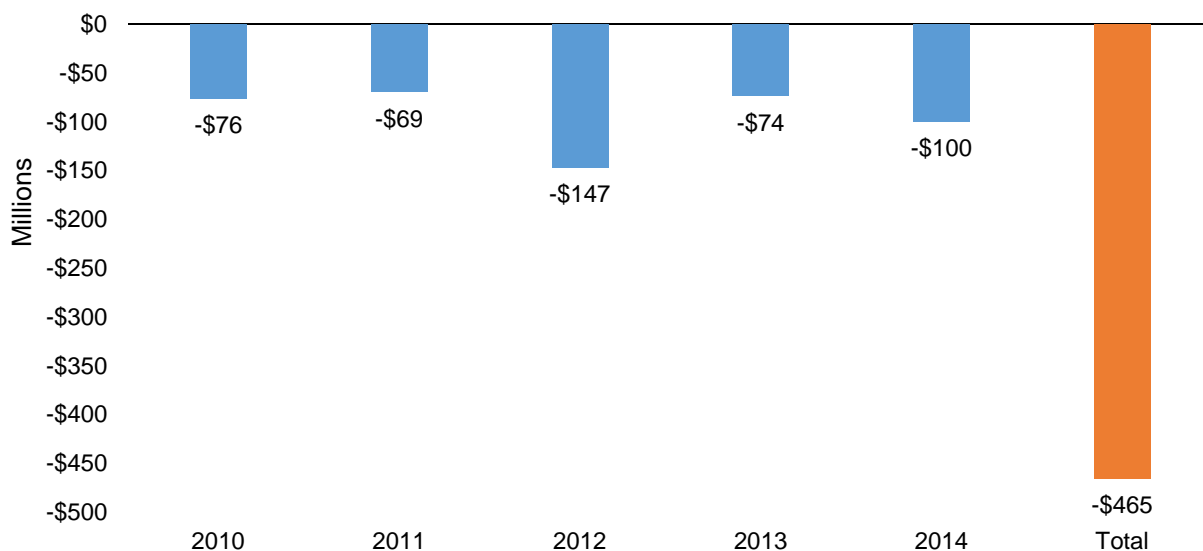
Recommendation: Repeal

For the reasons described in this and following sections, this incentive is more difficult to evaluate than most incentives. It can be argued that it is really a tax policy choice, and it is true that states treat capital gains in widely varying ways. However, there are specific requirements attached to this deduction that suggest it is to drive business behavior, and that qualifies it as a business incentive. If that is the case, it is hard to justify the magnitude of the foregone revenue based on the available information. While the evaluation team believes this dearth of data is reason to repeal the existing deduction (given its high cost to the State), there are other recommendations provided that could also be something of a middle ground.

Key Findings

- **The program has been a significant net cost to the State.** From 2010 to 2014, the program is estimated to have reduced State tax revenue by \$474 million, while creating an estimated \$9 million in additional tax revenue. This results in a net cost to the State of \$465 million.

Figure 1: Estimated Net Fiscal Impact, 2010 to 2014





- **After an initial spike in the second year, deduction claims have shown no consistent pattern of growth.** After the first year of the program, the number of returns claiming the deduction showed a sharp increase from 10,828 in 2005 to 18,379 in 2006, which remains the highest annual number of claims in the deduction's history. Throughout the life of the program, total deduction amounts have varied widely with no consistent growth trend.
- **Individuals reporting \$200,000 or more in income account for the majority of deductions.** A review of the distribution of total deductions by income level shows individuals reporting income of \$200,000 or more benefit most from the program. Over the life of the program, an average of 85.8 percent of the total deduction amount was taken by individuals with income equal to or more than \$200,000.

Recommended Changes

If the program does remain in place, the project team recommends the following improvements to enhance the program and its future evaluations:

- **Recommendation 1: Target the incentive to a specific industry.** Six of the states chosen for benchmarking have similar incentives with a specific focus. For example, Virginia's deduction is for small technology firms based in the State. Virginia's deduction is an example of an incentive with a clear, narrowly focused goal. This makes determining the success of the program easier, and reduces the cost of the program.
- **Recommendation 2: Require gains to be re-invested in Oklahoma.** The deduction does not currently impose any requirements as to how the gains exempted from tax are used. There is no guarantee that the extra income taxpayers receive as a result of the deduction is re-invested or spent within the State. However, a comparable state program offers a solution to this. Utah's deduction requires that at least 70 percent or more of the proceeds of the capital gain transaction be used to purchase qualifying stock in Utah small business corporations. Adding a similar requirement that aligns with a development goal of the State may be a good option to ensure better return to the State and improve the focus on the incentive.
- **Recommendation 3: Improve data aggregation.** The Oklahoma Tax Commission (OTC) already collects useful information on Form 561, but this information needs to be easily aggregated for future evaluation. Data that would improve future evaluation include the type of capital (real property or stock/ownership interest), the industry associated with any corporate claims, and the holding period of the capital.



Key Findings and Recommendations



Recommendation: Repeal

The goal of the capital gains tax deduction is likely to stimulate capital investment in the State in an effort to create economic growth and job creation. Unfortunately, there is little evidence to show that the incentive has met this goal. Instead, it appears the incentive has been a net cost to the State. Due to the lack of data to support the effectiveness of the incentive, the project team recommends repealing the incentive.

Given the size of the deduction (foregone revenue of over \$100 million a year on average), it is concerning that so little hard data can be gathered and analyzed to determine the value of the deduction in terms of economic activity in the State. Given the amount of time and effort required to qualify for other large dollar incentives (such as the Quality Jobs Program), there should be a correspondingly high bar set for this deduction, considering the amount of foregone state revenue involved. It is also notable that there are a large number of deductions that are most likely relatively small sales of qualified stocks or other assets where it is hard to make a compelling case that the deduction spurs capital investment or other economic activity in the State.

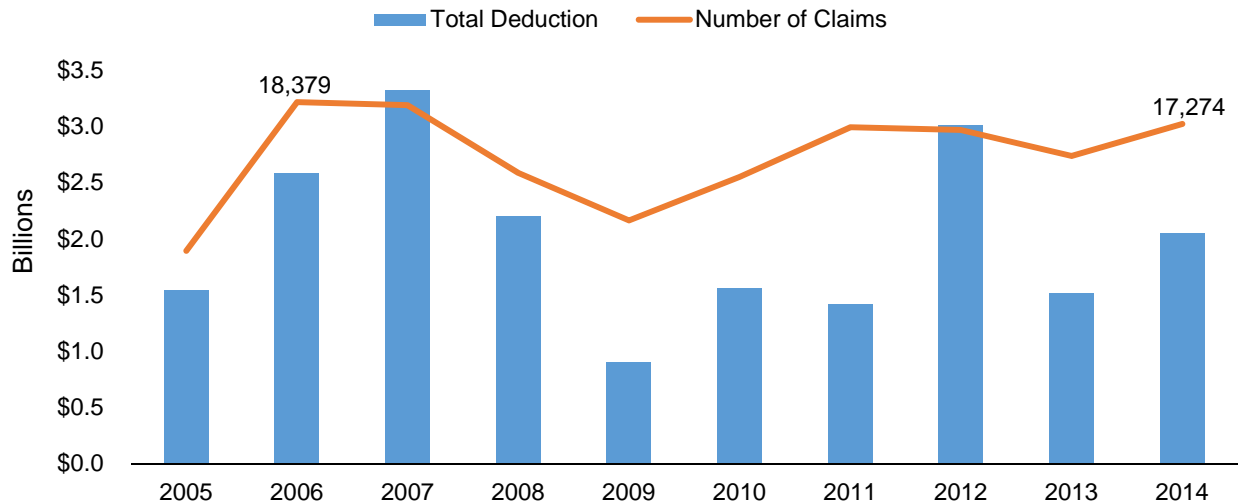
For the reasons described in this and following sections, this incentive is more difficult to evaluate than most incentives. It can be argued that it is really a tax policy choice, and it is true that states treat capital gains in widely varying ways. However, there are specific requirements attached to this deduction that suggest it is to drive business behavior, and that qualifies it as a business incentive. If that is the case, it is hard to justify the magnitude of the foregone revenue based on the available information. While the evaluation team believes this dearth of data is reason to repeal the existing deduction (given its high cost to the State), there are other recommendations provided that could also be something of a middle ground.

Key Findings

- **The program has been a significant net cost to the State.** From 2010 to 2014, the program is estimated to have cost the State \$474 million in foregone tax revenue, while creating only an estimated \$9 million in additional tax revenue. This results in a net cost to the State of \$465 million. While it is likely that some economic activity is not captured in these estimates, the data is not sufficient to further develop this estimate.
- **After an initial spike in the second year, deduction claims have shown no consistent growth.** After the first year of the program, the number of returns claiming the deduction showed a sharp increase from 10,828 in 2005 to 18,379 in 2006, which remains the highest annual number of claims in the deduction's history. Throughout the life of the program, total deduction amounts have varied widely with no consistent growth trend.



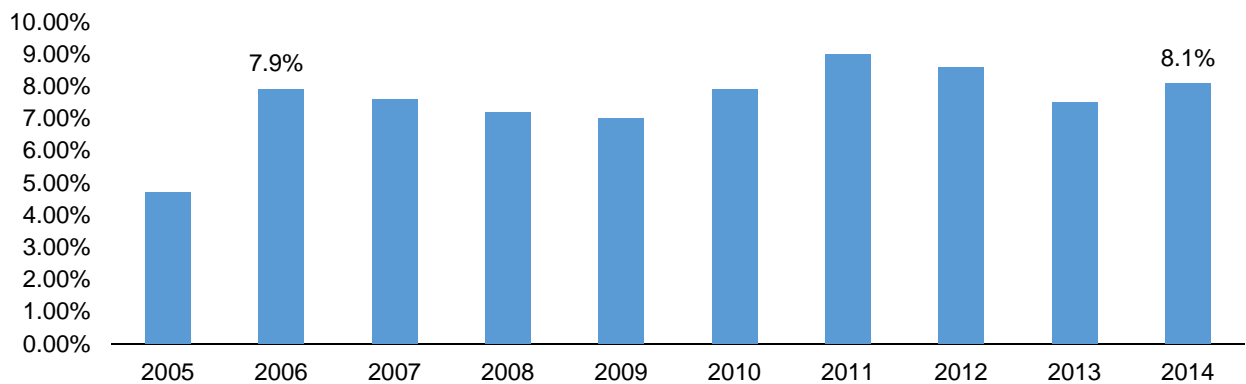
Figure 2: Deduction Claims, 2005 to 2014



Source: Oklahoma Tax Commission

While the legislation creating the deduction is silent, a logical goal of the program would be to increase investment in Oklahoma capital. Viewing claims for the Oklahoma deduction as a percent of overall tax returns by Oklahoma residents reporting capital gains may be helpful in determining whether the program has done this. The following chart shows the number of deduction claims as a percentage of Oklahoma income tax returns reporting capital gains:

Figure 3: Deduction Claims as a Percent of Total Oklahoma IRS Income Tax Returns Reporting Capital Gain, 2005 to 2014

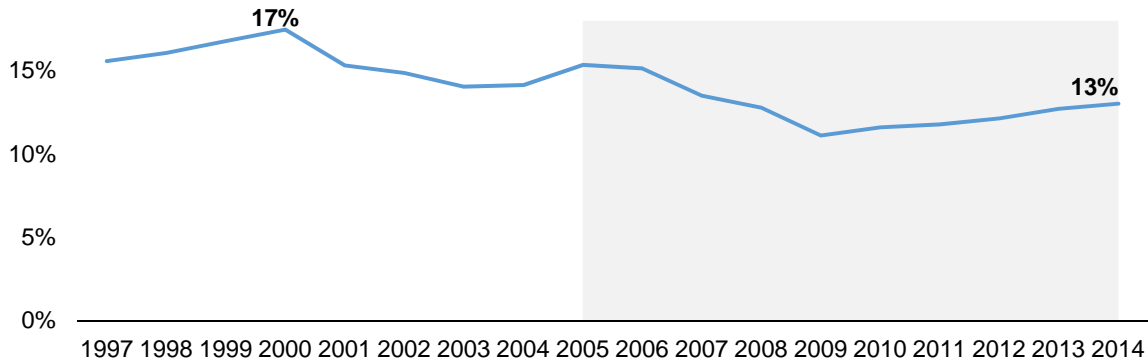


Source: Internal Revenue Service Sources of Income Data and Oklahoma Tax Commission

The proportion of capital gain returns claiming the Oklahoma deduction has shown little change since the second year of the program. In general, the program appears to have had little impact on the percentage of Oklahoma residents claiming capital gains as income. As the following chart shows, the percentage of IRS Oklahoma income tax returns reporting capital gains has, in fact, decreased since the program was introduced in 2005.



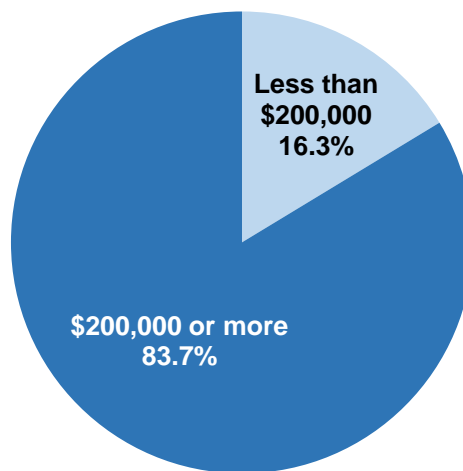
Figure 4: Percentage of Oklahoma Federal Income Tax Returns Reporting Capital Gains, 1997 to 2014



Source: Internal Revenue Service Sources of Income Data

- **Individuals reporting \$200,000 or more in income account for the majority of deductions.** A review of the distribution of total deductions by income level shows individuals reporting income of \$200,000 or more benefit most from the program. Over the life of the program, an average of 83.7 percent of the total deduction amount was made by individuals with income of equal to or more than \$200,000.

Figure 5: Average Distribution of Total Deduction Amount by Income, 2005 to 2014



Source: Oklahoma Tax Commission

Recommended Changes

If the program does remain in place, the project team recommends the following improvements to enhance the program and its future evaluations:



- **Recommendation 1: Target the incentive to a specific industry.** Six of the States chosen for benchmarking have similar incentives that have a specific focus. For example, Virginia's deduction is for small technology firms based in the state. Virginia's deduction is an example of an incentive with a clear, narrowly focused goal. This makes determining the success of the program easier, and puts the state at less risk in terms of cost.
- **Recommendation 2: Require gains to be re-invested in Oklahoma.** The deduction does not currently impose any requirements as to how the gains exempted from tax are used. There is no guarantee that the extra income taxpayers receive as a result of the deduction is re-invested or spent within the State. However, a comparable state program offers a solution to this. Utah's program requires that at least 70 percent or more of the proceeds of the capital gain transaction be used to purchase qualifying stock in a Utah small business corporations. Adding a similar requirement that aligns with a development goal of the State may be a good option to ensure better return to the State and improve the focus on the incentive.
- **Recommendation 3: Improve data aggregation.** The Oklahoma Tax Commission (OTC) already collects useful information on Form 561, but this information needs to be easily aggregated for future evaluation. Data that would improve future evaluation include the type of capital (real property or stock/ownership interest), the industry associated with any corporate claims, and the holding period of the capital.



Introduction



Overview

In 2015, HB2182 established the Oklahoma Incentive Evaluation Commission (the Commission). 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 first set of 11 evaluations was conducted in 2016.

The Capital Gains Deduction is one of 12 incentives scheduled for review by the Commission in 2017. Based on this evaluation and their collective judgement, the Commission will make recommendations to the Governor and the State Legislature related to this incentive

Background

Oklahoma state income tax applies to income derived from the sale of capital.¹ At the federal level, there is a separate tax rate for this type of income. However, at the State of Oklahoma level, capital gains are treated as ordinary income. In Oklahoma, the tax rate that applies to capital gains is the general income tax rate. The highest marginal Oklahoma income tax rate is 5 percent.

The tax treatment of capital gains is a regular topic of discussion and debate among policymakers and taxation subject matter experts. There are supporters for federal proposals to lower or raise the capital gains tax rate at the federal level. The debate hinges on whether or not the tax rate on capital gains has a significant impact on economic activity and capital investment. Proponents of lower rates and tax breaks argue that a lower tax rate stimulates investment and economic activity by reducing the cost of realizing gains on capital investment. Conversely, those who call for maintaining or raising the capital gains tax rate argue there is no significant link between the tax rate and economic growth. Over time, federal and state governments have frequently adjusted the rate of taxation on capital gains in an effort to either stimulate economic growth or raise revenue.

Incentive Characteristics

Oklahoma's capital gain deduction became effective January 1 2005 for personal income January 1, 2006 for corporate income. It allows certain gains from the sale of Oklahoma capital to be fully deductible from state taxable income. The sale of Oklahoma-based real or tangible property, or stock or ownership interest in an Oklahoma-based business entity is eligible to be deducted from income subject to State tax. Real or tangible property must be owned for at least five years prior to the sale. Stock or ownership interest must be in a business entity that has had a primary headquarters in Oklahoma for at least three years prior to the sale and must be owned for at least two uninterrupted years prior to the sale.

The deduction may be interpreted as encouraging capital investment in the State. The argument would be that eliminating the tax on capital gains makes investments more profitable, and this higher reward leads to greater capital investment. As a result, with more capital investment, there is a greater likelihood of additional job creation and innovation.

Evaluation Criteria

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, no specific legislative intent or goals are established in the statute. However, to assist in a determination of program effectiveness, the Incentive Evaluation Commission has adopted the following criteria:

- Number of qualified realized capital gains;

¹ Capital includes real or tangible property and stock or ownership interest in business entities



- Employment/capital/payroll associated with these realized capital gains deductions;
- Change in the realized capital gains before/after the deduction;
- Return on investment – economic activity versus financial net cost.



Administration and Use of the Incentive



Program Administration

The OTC administers the deduction. Taxpayers claiming the deduction submit a form along with other income tax forms. The following summarizes the essential components of this process:

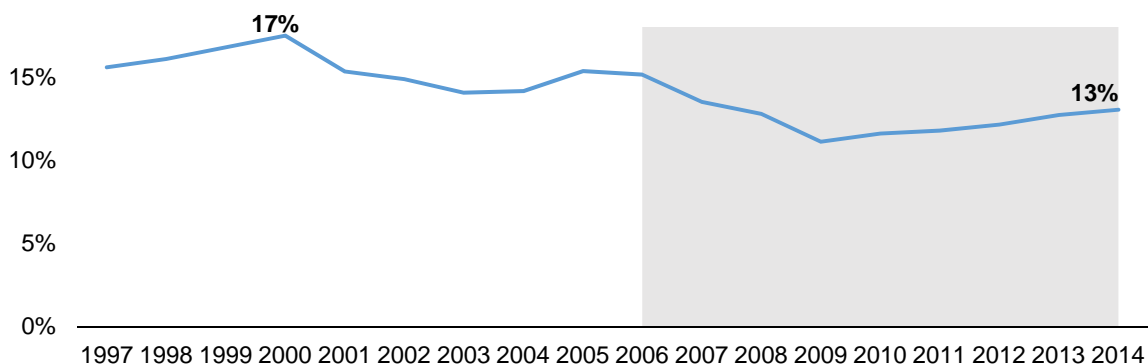
1. **Eligibility.** The sale of Oklahoma-based real or tangible property, or stock or ownership interest in an Oklahoma-based business entity is eligible to be deducted from State income tax. Real or tangible property must be owned for at least five years prior to the sale. Stock or ownership interest must be in a business entity that has had a primary headquarters in Oklahoma for at least three years prior to the sale and must be owned for at least two uninterrupted years prior to the sale.
2. **Deduction Claims.** Taxpayers may claim the deduction by completing Tax Form 561. Taxpayers report qualifying gains by location or address for tangible property or Federal ID number for stock or ownership interests. Information asked for on the form includes acquisition date, sale date, and associated gain.
3. **Reporting.** Estimates of the cost of the capital gain deduction are reported in the Tax Expenditure report published bi-annually by the OTC. Due to difficulties in aggregating the data associated with corporate tax deductions, estimates are only made for the sum of personal income tax deductions.

The OTC does not aggregate information collected on Form 561 such as the holding period of capital, the industry that corporations benefiting from the deduction operate in, or data identifying deduction amounts for real property versus stock or ownership interests.

Use of the Incentive

Capital gains are not commonly claimed as individual income by Oklahoma taxpayers. An analysis of IRS income tax return data found that an annual average of 14.1 percent of tax returns from Oklahoma reported capital gains as income from 1997 to 2014. The following chart shows this percentage decline from its high point of 17 percent in 2000 to 13 percent in 2014. Over the same period, an average of 75 percent of the annual gains reported were on returns with total income of \$200,000 or more.

Figure 6: Percentage of Oklahoma Federal Income Tax Returns Reporting Capital Gains, 1997 to 2014

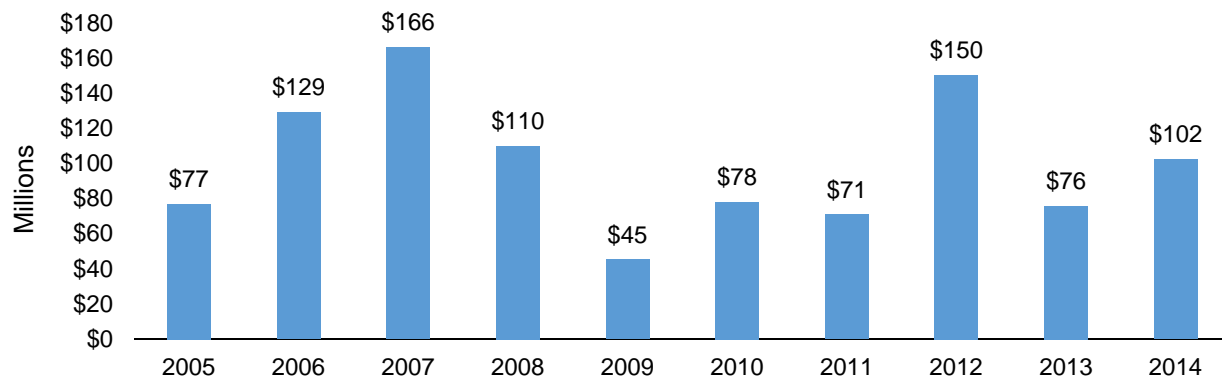


Source: Internal Revenue Service Sources of Income Data

While there has been significant fluctuation, use of the deduction has been significant since its inception, along with foregone tax revenue associated with its use:



Figure 7: Foregone Capital Gain Tax Revenue Estimates, 2005 to 2014



Source: Oklahoma Tax Commission

As shown in the previous figure, there is no consistent trend in foregone revenue, and it is unclear what is causing this variability.



Fiscal and 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 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 8: 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).² Two datasets were used to derive the ratio: 1) US Department of Commerce Bureau of Economic



Analysis GDP estimates by state;³ and 2) the Oklahoma Tax Commission's Annual Report of the Oklahoma Tax Commission reports.⁴ Over the past 10 years, the state tax revenue as a percent of state GDP was 5.4 percent.

Table 1: State of Oklahoma Tax Revenue as a Percent of State GDP

Year	Oklahoma Tax Revenue ⁵	Oklahoma GDP	Ratio
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%
2015-16	\$8,963,894,053	\$182,937,000,000	4.9%
Average	\$8,908,720,068	\$166,905,300,000	5.4%

Source: US Department of Commerce Bureau of Economic Analysis and Oklahoma Tax Commission

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.

To estimate State of Oklahoma tax revenue generate in a given year, the project team multiplied the total value added figure produced by the IMPLAN model by the corresponding annual ratio (about 5.4 percent). For example, if the total value added was \$1,000,000, then the estimated State of Oklahoma tax revenue was \$54,000 (\$1,000,000 x 5.4 percent).

² Gross State Product (GSP) is the state counterpart of Gross Domestic Product (GDP) for the nation. To assist the reader, the project team has decided to use GDP throughout this section of the report instead of mixing the two terms. This decision was made because more people are familiar with the term GDP.

³ <http://www.bea.gov/regional/>

⁴ https://www.ok.gov/tax/Forms_&_Publications/Publications/Annual_Reports/index.html

⁵ Gross collections from state-levied taxes, licenses and fees, exclusive of city/county sales and use taxes and county lodging taxes.



Economic Impact

There are two primary ways to evaluate the economic and tax revenue impact of this program. One method is to examine in detail the type of investments linked to the capital gains deduction, determine the new economic activity, if any, associated with the investment, and use an economic impact model to determine the statewide impact. However, that analysis is not possible. First, the data collected by the OTC does not allow for this type of analysis, because the tax forms do not require detailed information on the capital gain investment. Second, the capital gains deduction does not necessarily create new jobs. An investment, for example, could be made in an asset such as real estate that has no direct employees yet increases in value. Third, there is insufficient evidence to determine if the possibility of 5 percent capital gains deduction used 5, 10, or 20 years after the initial investment changes any behaviors. Finally, there is no requirement that the tax deduction be reinvested in Oklahoma.

The other approach to calculate the economic and tax impact of the capital gains deduction is to assume these gains are treated like ordinary income by the recipient. For example, some of the tax savings an individual claims might be spent in the local economy, while other monies might be reinvested in stocks, bonds, real estate, etc. If the capital gains deduction was eliminated, there should be less money spent each year in the Oklahoma economy. Even though the incentive is not directly related to job creation, ending the program might result in jobs loss.

Assuming Oklahoma residents spend a portion of the taxes saved through the capital gains deduction, this generates additional economic activity that has a positive impact on the State. These total expenditures (also referred to as “economic activity”) are not the same as the tax deduction. 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.

The appropriate IMPLAN Institutional Households Incomes Sectors were used to model the economic impact. The model takes in to account “leakages” in the economy as well as savings. Therefore, the amount saved by residents and businesses from the tax credit is not equal to the direct economic activity used in the econometric model. The following tables depict the statewide annual impact of how spending based on the tax credit ripples through the economy.

Table 2: Economic Impact

Year		Output	Value Added	Labor Income	Employment	Estimated Oklahoma Tax Revenue
2010	Direct Effect	\$30,017,387	\$17,385,072	\$9,188,047	244	
	Indirect Effect	\$11,675,719	\$6,091,627	\$3,645,690	79	
	Induced Effect	\$9,850,238	\$5,398,424	\$3,054,247	74	
	Total Effect	\$51,543,345	\$28,875,122	\$15,887,984	396	\$1,501,506
2011	Direct Effect	\$27,641,954	\$15,988,525	\$8,468,762	224	
	Indirect Effect	\$10,768,077	\$5,615,921	\$3,361,243	72	
	Induced Effect	\$9,079,840	\$4,976,207	\$2,815,370	68	
	Total Effect	\$47,489,871	\$26,580,653	\$14,645,376	364	\$1,329,033
2012	Direct Effect	\$56,970,110	\$33,061,865	\$17,413,202	464	
	Indirect Effect	\$22,106,925	\$11,540,884	\$6,906,135	149	
	Induced Effect	\$18,665,772	\$10,229,777	\$5,787,666	139	
	Total Effect	\$97,742,807	\$54,832,526	\$30,107,003	752	\$2,757,550



Year		Output	Value Added	Labor Income	Employment	Estimated Oklahoma Tax Revenue
2013	Direct Effect	\$29,302,754	\$16,957,677	\$8,976,820	238	
	Indirect Effect	\$11,407,469	\$5,950,398	\$3,561,387	77	
	Induced Effect	\$9,623,427	\$5,274,118	\$2,983,919	72	
	Total Effect	\$50,333,650	\$28,182,193	\$15,522,127	386	\$1,521,838
2014	Direct Effect	\$39,001,144	\$22,603,919	\$11,938,084	317	
	Indirect Effect	\$15,155,479	\$7,909,098	\$4,733,351	102	
	Induced Effect	\$12,795,832	\$7,012,753	\$3,967,582	96	
	Total Effect	\$66,952,455	\$37,525,770	\$20,639,017	515	\$1,838,763

Table 3: Estimated Net Impact

Year	Deduction During Current Tax Year	Estimated State of OK Tax Revenue	Net Impact
2010	\$77,472,487	\$1,501,506	(\$75,970,981)
2011	\$70,596,404	\$1,329,033	(\$69,267,372)
2012	\$149,438,066	\$2,757,550	(\$146,680,516)
2013	\$75,248,888	\$1,521,838	(\$73,727,049)
2014	\$101,488,168	\$1,838,763	(\$99,649,405)
Total	\$474,244,014	\$8,948,690	(\$465,295,323)

As depicted in the tables above, the Capital Gains Deduction does likely result in increased statewide household spending. The level of economic activity varies each year and is directly linked to the amount of the deduction and the IMPLAN model's assumptions about the savings rate by income levels. Multiplying the total value added figure produced by the IMPLAN model by the corresponding annual tax ratio, provides an estimate for total annual State of Oklahoma tax revenue. Over the past 5 years, the Capital Gains Deduction program (direct + indirect + induced economic effects) has generated approximately \$8.9 million in state tax revenue. Over this same period, the state has provided \$474.2 million amount in rebates.

The 'But for' Test for the Value of the Incentive

There was insufficient evidence to determine the level of direct new economic activity and job creation associated with the Capital Gains Deduction. It was also not possible to evaluate if a 5 percent capital gains deduction used 5, 10, or 20 years after the initial investment changes any behaviors. While a tax deduction does increase household income, household spending does not have the same long-term economic impact as investing in a new company, hiring employees, or increasing factory output.

Based on the economic and fiscal impact analysis, it appears the annual incentives offered under this program exceed the tax revenue generated. The return on investment for this program is negative.



Incentive Benchmarking



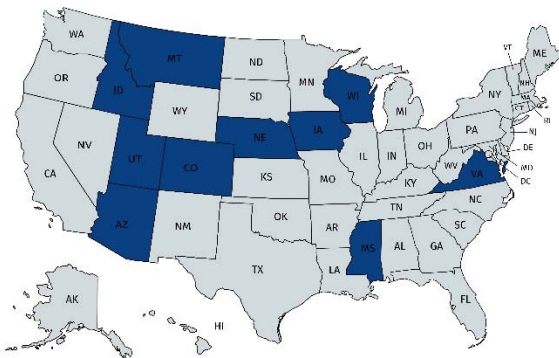
Benchmarking

A detailed description of comparable state programs can be found in **Appendix A**.

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 rare for any two state incentive programs to 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.

Ten states were found to have capital gains treatment that are comparable to Oklahoma’s. Two characteristics are particularly important in distinguishing the different programs: qualification requirements and targets.

Figure 9: States offering similar incentives



Qualification Requirements: Real property qualifies for deduction in six of ten comparison states. Of the five states where real property does qualify for deduction, only one, Idaho, also requires that the property be located in-state.

Oklahoma’s holding period requirement is longer than most comparison states. Three of the ten comparison states have a one year requirement, and four have no minimum holding period requirement.

Targets: While Oklahoma’s program has the broad target of stimulating capital investment across the State, six of the ten comparison states that allow stock or ownership interest to qualify for deduction have more narrowly-targeted programs.

- Arizona allow a deduction only for investment in small businesses with operations in the state.
- Iowa is only for employee stock ownership plans for Iowa corporations or when stock is acquired as part of a company’s assets.
- Mississippi is only for stock in Mississippi-domiciled financial institutions.
- Nebraska is only for gains from stock acquired by being employed by a corporation doing business in the state.
- Utah is specifically for small businesses in the state.
- Virginia is only for investments in small technology firms based in-state.

Benchmarking Program Evaluations

The project team could not find examples of evaluations of capital gains deductions at the state level. Most research on the topic of capital gains taxation is focused on federal policy. While there are notable differences between state and federal taxation of capital gains, the same fundamental incentives and effects are seen at each level. The federal capital gains tax rate has changed several times throughout history, so there is useful empirical evidence regarding its economic impact.

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



The driving force for many proposals to reduce or eliminate the tax on capital gains is that lower taxation of capital gains will stimulate more investment, and that investment will grow the economy. A 2010 Congressional Research Service report suggested economic growth is difficult to accomplish by reducing a tax that is paid largely by high income individuals.⁷ Economic theory generally concludes that high income individuals are likely to save a greater percentage of any tax break provided, so the tax reduction may not be enough to stimulate higher aggregate demand needed for economic growth. A 2014 report by the Brookings Institution furthers this argument by showing changes in the capital gains rate at the federal level are not associated with increases or decreases in GDP.⁸

Central to the debate surrounding capital gains taxation is the concept that a higher tax rate discourages realization of capital gains. The reluctance of investors to sell assets and realize gains causes them to hold them for longer periods. This is known as the “lock-in” effect. Proponents of lower capital gains tax rates argue that a lower rate reduces the lock-in effect. As a result, more gains are realized, which creates the potential for more revenue to be collected. A 2010 report by the Congressional Research Service noted that reduction in the capital gains rate is associated with large increases in revenue collection.⁹ However, this appears to be a short-term effect, and collections have returned to normal levels each time this has happened. A 1993 analysis by the National Bureau of Economic Research across all 50 states found an inverse relationship between the capital gains tax rate and state tax revenue but doubted that the relationship was strong enough to be self-financing.¹⁰

Another major area of research on capital gains taxation is who benefits from a reduction in the tax. The vast majority of those reporting capital gains income are high income individuals. At the federal level, capital gains are taxed at a lower rate than ordinary income. Income from investments that produce capital gains account for a higher percentage of income at higher levels of income, meaning that more income for high income individuals is taxed at a lower rate than ordinary income. This commonly leads to questions of whether it is fair to tax investments at a lower rate than income from wages. This debate was recently popularized by investor Warren Buffett, who publicly stated in 2011 that because most of his income is derived from capital gains, he pays a lower tax rate than his secretary.

Another key concept in the capital gains tax discussion, venture capital activity, is discussed in a 1998 report published by the Brookings Institution.¹¹ It found that increases in the capital gains tax at both the state and federal level weaken venture capital activity. Venture capital and entrepreneurship are seen as important factors in economic growth. This idea is expanded in a 2011 report published by the American Action Forum.¹² It notes that private employment has grown more rapidly from 1990 to 2010 in the nine states providing preferential treatment of capital gains than the rest of the country. It also details a statistical analysis of state tax and employment to suggest private employment would increase by 40,000 if the state were to eliminate its capital gains tax.

A review of literature on the topic suggests there are theoretical arguments to be made on each side of the debate. Based on data at the federal level, reductions in capital gains tax appear to have short-term impact, but it is less clear whether a capital gains reduction has a significant impact on long-term growth.

⁷ Congressional Research Service, “The Economic Effects of Capital Gains Taxation” June 18, 2010

⁸ Brookings Institution, “Effects of Income Tax Changes on Economic Growth” September 2014

⁹ Congressional Research Service, “The Economic Effects of Capital Gains Taxation” June 18, 2010

¹⁰ National Bureau of Economic Research, “Capital Gains Taxes and Realizations: Evidence From Interstate Comparisons” January 1993

¹¹ Brookings Institution, “What Drives Venture Capital Fundraising?” 1998

¹² American Action Forum, “Employment Effect of Reducing Capital Gains Tax Rates in Ohio” June 2011



Appendices



Appendix A: Capital Gain Deduction Benchmarking

Capital Gains Deduction Benchmarking								
State	Incentive	Real Property	Real Property Location Requirement	Holding Period Requirement	Cap	Stock or Ownership Interest	Stock or Ownership Interest Requirement	Other Requirements
Oklahoma	Full deduction	Qualifies	Must be located in Oklahoma	At least 5 years for real property At least 3 years for stock or ownership interest	None	Qualifies	Must be stock of ownership interest in an entity with a primary headquarters located in Oklahoma for 3 years prior to the transaction	-
Arizona	Full deduction	Qualifies	Must be as a result of investment in a small business with operations in Arizona	None	None	Qualifies	Stock or ownership interest must be in a small business with operations in Arizona	-
Colorado	Full deduction	Qualifies	None	5 consecutive years	Up to \$100,000, per deduction	Does not qualify	N/A	-
Idaho	60 percent deduction	Qualifies	Must be located in Idaho	At least 1 Year**	None	Does not qualify	N/A	-
Iowa	Full deduction	Qualifies	None	At least 10 years	None	Qualifies	Qualifies only when stock transaction is considered acquisition of a company's assets. 50% of the gain from the sale/exchange of employer securities of an Iowa corporation to a qualified Iowa employee stock ownership plan (ESOP) may be eligible for the Iowa capital gain deduction	-
Mississippi	Full deduction	Does not qualify	N/A	1 Year	None	Qualifies	Only stock in Mississippi-domiciled financial institutions	-
Montana	Full deduction	Qualifies	None	None	None	Qualifies	Gain must be from investment in a small business	All gains must be as a result of investment in a small business

**Cattle, horses, and timber must be held 24 months



Capital Gains Deduction Benchmarking

State	Incentive	Real Property	Real Property Location Requirement	Holding Period Requirement	Cap	Stock or Ownership Interest	Stock or Ownership Interest Requirement	Other Requirements
Nebraska	Full deduction	Does not qualify	N/A	None	None	Qualifies	<p>Must be stock in a corporation acquired by the individual on account of employment by the corporation or while employed by such corporation.</p> <p>The corporation has to have been doing business in Nebraska for at least 3 years</p>	Individuals are only permitted to use the deduction once.
Utah	Tax Credit equal to 5 percent of qualified gain	Qualifies	None	None	None	Qualifies	Must be issued by a Utah Small Business Corporation*	70 percent or more of the proceeds of the capital gain transaction must be expended to purchase qualifying stock in a Utah small business corporation within a 12 month period after the transaction
Virginia	Full deduction	Does not qualify	N/A	At least 1 Year	None	Qualifies	Must be investment in a technology firm primarily engaged and substantially producing in Virginia	The qualifying company's annual gross revenues cannot exceed \$3 million and the amount of more than \$3 million in aggregate cash proceeds from the issuance of equity and debt
Wisconsin	Full deduction	Does not qualify	N/A	5 Years	None	Qualifies	Must be stock in a Wisconsin registered business	-

*According to Section 1244(c)(3), Internal Revenue Code:

In general a corporation shall be treated as a small business corporation if the aggregate amount of money and other property received by the corporation for stock, as a contribution to capital, and as paid-in surplus, does not exceed \$1,000,000. The determination under the preceding sentence shall be made as of the time of the issuance of the stock in question but shall include amounts received for such stock and for all stock theretofore issued.

INCENTIVE EVALUATION COMMISSION COMMENTS

CAPITAL GAINS DEDUCTION

CYNTHIA ROGERS

There are very good reasons to support PFM's recommendation to repeal this program. Simply put, there is no way evaluate if the program works in its current form.

1. The program does not follow best practices because it is not possible to link incentive spending to measurable outcomes. There is simply no way to link the deductions to gains in investment or employment in Oklahoma.
2. The program is very large, with an estimated cost of over \$100 million in latest year.
3. There is no cap on the program which does not provide protection for State revenues.
4. At best, this program takes a shotgun approach rather than focusing on growth or strategic industries. There are better and more direct approaches to targeting innovation and employment in strategic industries.
5. Few states have such a program, and none to my knowledge are able to offer evidence of the program's efficacy. There are no empirical studies which provide evidence of the efficacy of state capital gains tax deduction as an incentive program.
6. There are no theoretical models which connect the capital gains tax deduction to economic growth outcomes.
7. The anecdotal story is that people use the capital gains tax deduction for tax planning purposes. Indeed they do take advantage of the tax deduction. Unfortunately, this does not mean they invest more. It may just be that they make more from investments.

Recommendations:

(1) Sunset the Program. It would be strategic to prohibit new investments from qualifying for the capital gains tax deduction. This would allow for an analysis of the impact of the program on capital gains taxes. If capital gains and/or investments fall, then there would be evidence of the efficacy of the program. On the other hand, a lack of noticeable change in investing behavior would suggest that the program was not effective. Based on such an analysis, the State would have cause to eliminate the program or renew it in the future.

(2) Target deductions. PFM suggested targeting the credit to specific industries. It would make sense to consider new innovation or specific high value/high growth industries. We have programs that do this. Targeting would reduce the program costs, protect the budget, and improve the potential for the program to generate a net positive return on investment.

State of Oklahoma

Incentive Evaluation Commission

Home Office Tax Credit Evaluation

November 14, 2017

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Executive Summary



Since its creation in 1987, the Home Office Tax Credit has been available to insurance company employers establishing home or regional home offices in Oklahoma that meet certain employment levels. The credit varies based on the number of employees at the home or regional home office and may be used to offset premium tax liability. Although the legislative intent of the incentive is not provided in statute, based on the characteristics of the incentive and its narrow focus on the insurance industry, it is reasonable to infer that the intention of the program is to attract the insurance industry to locate and/or expand in Oklahoma. The fact that the percentage of the credit is based on the number of full-time employees located within the State also suggests that employment is a key outcome of the incentive.

Foregone insurance premium tax revenue associated with the Home Office Tax Credit has grown over the last 10 years (2005-2015) and has outpaced employment gains. While the companies using the credit have shown growth in employment, industry employment overall has declined over the last 10 years. The current structure of the program does not connect increased costs incurred by the State to increased economic benefits (at least as evidenced by levels of employment).

Overall Recommendation: Reconfigure

Key Findings

- **The credit appears to have had little impact on the State's insurance industry employment in recent years.** Insurance industry employment in Oklahoma has declined by 4.2 percent since 2001, while neighboring states, most of which do not have a similar home office incentive, have experienced growth ranging from 6 to 30 percent.
- **Program benefits show little connection to employment growth.** While program costs have increased 43 percent since 2009, the number of employees reported by the qualifying companies has grown by 11 percent. In four of the last six years, the credit amount used has increased, even while net employment at participating companies has declined.
- **The program is a net cost to the State.** Because the credits awarded are not closely related to job growth, it is difficult to connect any significant economic activity to the program. Given this, the fiscal impact of the program is equal to the cost to the State, which has averaged \$18 million annually from 2011 to 2015.

Recommended Changes

- **Recommendation 1: If the intent of the State is to attract insurance industry jobs to Oklahoma, the program should be reconfigured to better relate to job creation.** As currently configured, the State is providing an ongoing incentive for companies that are, in some years, decreasing employment. The State could reverse this course by calculating the credit amount as a percentage of payroll, or by limiting the credit to companies that have created (or at least retained) jobs or payroll over the last year.
- **Recommendation 2: Collect payroll data from companies receiving credits to improve future evaluations.** Future program evaluations would be improved by requiring detailed data regarding payroll of companies qualifying for the credit. Currently, the only requirement when filing for the credit is to report the number of employees at the company. More information regarding wages and job function could provide better evidence of the program's economic impact.



Key Findings and Recommendations



Recommendation: Reconfigure

It appears that the costs associated with the program are not aligned with the benefits that accrue to the State. As program costs grow, both employment and the number of establishments have witnessed declines that do not negatively impact on program eligibility. The project team recommends reconfiguring the program to better align with the fiscal and economic development interests of the State.

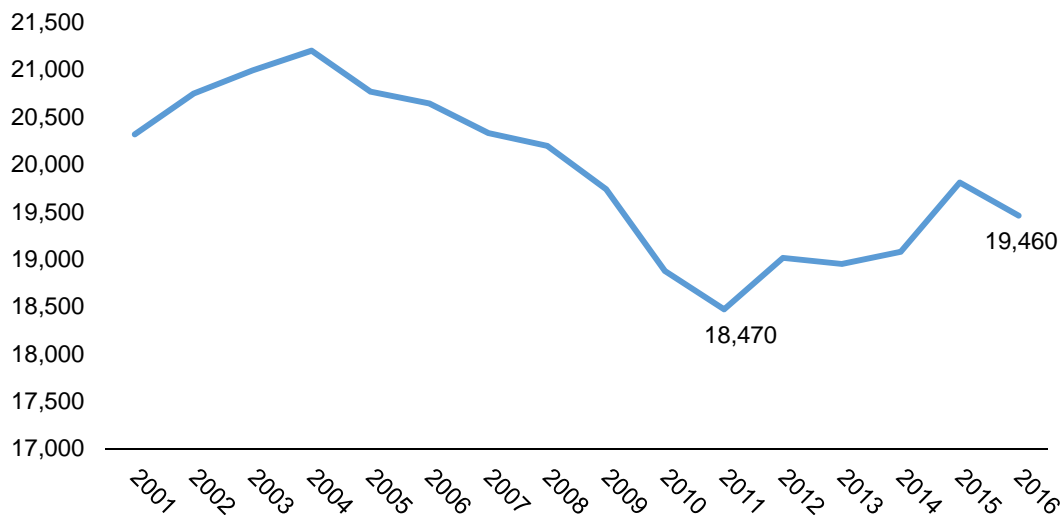
Key Findings

Costs associated with the Home Office Tax Credit have grown significantly over the last 10 years (2005-2015) and have outpaced employment gains. While the companies using the credit have shown growth in employment, the industry overall has declined over the last 10 years. The current structure of the program does not appear to connect costs incurred by the State to economic benefits, particularly as it relates to job creation.

The following analyzes the program's performance in relation to the established criteria for evaluation.

- **The credit appears to have had little impact on the State's insurance industry employment in recent history.** Insurance industry employment overall has declined in Oklahoma over the last 15 years. Employment reached a low point of 18,470 in 2011 before increasing to 19,460 in 2016.

Figure 1: Insurance Industry Employment in Oklahoma, 2001 to 2016



Source: Bureau of Labor Statistics Quarterly Census of Employment and Wages

The following table shows growth in employment in the insurance industry in Oklahoma alongside each of its neighboring states. Oklahoma is the only State in the group that experienced a decline in employment from 2001 to 2016. Neighboring states expanded insurance industry employment by an average of 17.2 percent, while Oklahoma's industry employment contracted by 4.2 percent.



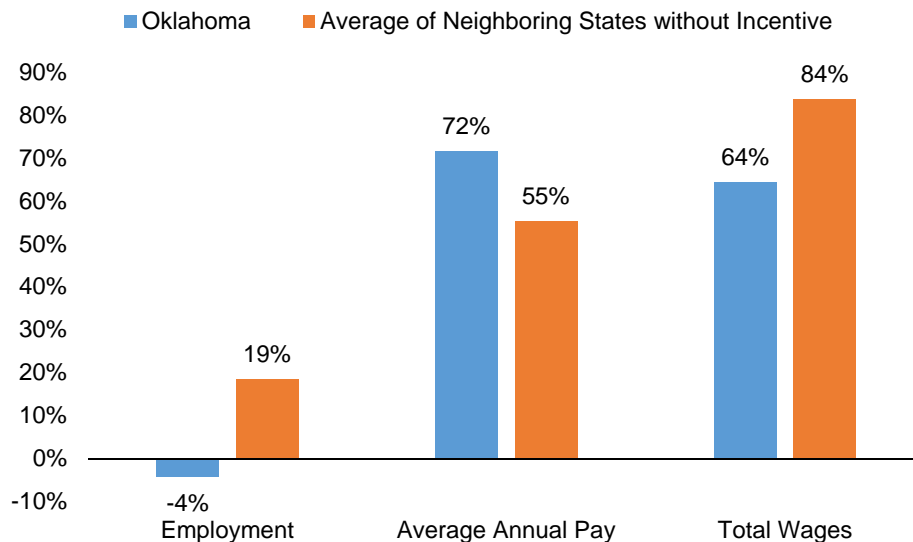
Table 1: Insurance Industry Employment Growth in Oklahoma and Neighboring States, 2001 to 2016

State	Employment Growth
Texas	30.3%
Arkansas	26.0%
Kansas	21.8%
Colorado	10.7%
Missouri	8.1%
New Mexico	6.4%
Oklahoma	-4.2%
Average excluding Oklahoma	17.2%

Source: Bureau of Labor Statistics Quarterly Census of Employment and Wages

The Home Office Tax Credit does not appear to have provided an advantage to Oklahoma over the last 15 years in terms of employment growth relative to neighboring states. Of neighboring states, Colorado is the only one that offers an incentive to home offices. If Colorado is excluded, examining employment, average annual pay, and total wage growth in Oklahoma compared to neighboring states without a home office incentive suggests that Oklahoma's incentive has not provided any net benefit.

Figure 2: Insurance Industry Growth, 2001 to 2016



Source: Bureau of Labor Statistics Quarterly Census of Employment and Wages

The effective credit percentage was reduced in 2010 as a result of excluding premium tax apportioned for pension funds from the calculation of the credit. This change reduced the value of the credit by about half. Despite this significant reduction, the insurance industry employment on a percentage basis has actually grown since that change (after declining the prior 10 years with a more significant credit).



Table 2: Employment Growth Before and After Credit Reduction

State	2001 to 2009	2010 to 2016
Texas	4.2%	26.3%
New Mexico	-7.9%	19.8%
Arkansas	5.2%	18.9%
Colorado	-0.6%	15.5%
Kansas	11.9%	10.2%
Missouri	-0.4%	9.2%
Oklahoma	-2.8%	3.1%
Average excluding Oklahoma	2.1%	16.6%

Source: Bureau of Labor Statistics Quarterly Census of Employment and Wages

Of course, that there may be other, exogenous variables that have impacted on these results. However, the credit, whether viewed in terms of Oklahoma performance or versus its peer states, does not appear to have had a significant positive impact on the industry in the State.

- **Program benefits show little connection to employment growth.** The Oklahoma Insurance Department has data tracking employment reported by Home Office Tax Credit applicants since 2009. An analysis of employment change over this period relative to the change in total credit amounts is shown in the following table. The analysis suggests that the amount of credits provided to participating companies does not relate to employment growth. Between 2010 and 2015, there were four years when the State paid for a net decrease in employment. In 2012, for example, the State essentially paid over \$19,000 per lost job. In total, from 2009 to 2015, participating companies added 604 new jobs, and the total credit amount paid by the State grew by over \$6.2 million, resulting in a cost per new job of \$10,373.

Table 3: Job Creation and Credit Amount Comparison

2009	\$14,673,798	5,370	-	-	-
2010	\$15,738,329	6,323	\$1,064,531	953	\$1,117
2011	\$16,849,045	5,829	\$1,110,716	(494)	\$2,248
2012	\$17,959,069	5,772	\$1,110,024	(57)	\$19,474
2013	\$18,831,786	5,626	\$872,717	(146)	\$5,978
2014	\$20,057,870	6,032	\$1,226,084	406	\$3,020
2015	\$20,938,807	5,974	\$880,937	(58)	\$15,189

Source: Oklahoma Insurance Department

- **It does not appear that companies are using a strategy of employing just enough people to meet program requirements.** On average, companies at each level of credit percentage employ well over the required amount.



Table 4: Distribution of Companies by Credit Percentage in 2015

Credit Amount	Employee Threshold to Qualify	Number of Companies	Average Number of Employees Above Threshold
15%	200	3	37
25%	300	0	-
35%	400	3	54
50%	500	4	409

Source: Oklahoma Insurance Department

- **The program is a net cost to the State.** As discussed in the economic impact analysis, the industry has not grown in terms of employment over the last 10 years. Program costs continue to grow, even in years where employment has declined. The lack of a connection between employment growth and credit amounts awarded leaves no impact economically as a result of job creation. Since the economic impact appears insignificant, the cost to the State equals the amount it pays out in credits annually. Over the last five years (2011-2015), this amount has averaged over \$18 million.

Recommended Changes

- **Recommendation 1: If the intent of the State is to attract insurance industry jobs to Oklahoma, the State should tie the credit to job creation.** At present, the State may pay yearly credits for net decreases in employment. The State could calculate the credit amount as a percentage of payroll, or only allow the credit for companies that have created jobs (or at least retained them) over the last year.
- **Recommendation 2: Collect payroll data from companies receiving credits to improve future evaluations.** Future evaluations would be enhanced by collection of detailed data regarding payroll of companies qualifying for the credit. The only requirement when filing for the credit currently is reporting the number of employees at the company – which may be minimum wage workers as well as the home office general manager. More information regarding wages and job function could provide better evidence of the program's economic impact. Indeed, it may well be that in some years with reductions in net jobs, payroll actually increased. That type of information is not currently required for payment of the credit.



Introduction



Overview

In 2015, HB2182 established the Oklahoma Incentive Evaluation Commission (the Commission). 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 first set of 11 evaluations was conducted in 2016.

The Home Office Tax Credit is one of 12 incentives scheduled for review by the Commission in 2017. Based on this evaluation and their collective judgement, the Commission will make recommendations to the Governor and the State Legislature related to this incentive.

Incentive Characteristics

Oklahoma's Home Office Tax Credit was created in 1987. Insurance companies who establish or expand a home or regional home office in Oklahoma and hire at least 200 employees (for foreign insurers) and 400 employees (for insurers based in the State) are eligible for a credit against premium tax.¹ The credit amount ranges from 15 to 50 percent depending on the number of employees and whether the insurer is foreign or domestic.

In 2010, the calculation of the credit amount was adjusted to protect the amount of insurance premium tax apportioned for the Oklahoma Firefighters Pension and Retirement Fund, the Oklahoma Police Pension and Retirement System and the Law Enforcement Retirement Fund. Since the change, the credit percentage is applied to the amount remaining after 53 percent of the tax collected is allocated to these funds.

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 is not provided in statute. However, based on the characteristics of the incentive and its narrow focus on the insurance industry, it is reasonable to infer that the intention of the program is to attract insurance industry location and expansion in Oklahoma. The fact that the percentage of the credit is based on the number of full-time employees also suggests that employment is a key feature of the incentive.

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

- Change in employment for eligible insurers before/after credit
- Distribution within the categories of number of full-time employees claimed
- Change in payroll for eligible insurers before/after credit
- Average wage for eligible insurers before/after credit
- Change in employment for industry versus other states without credit
- Return on investment – economic activity versus financial net cost

¹ In this context, foreign refers to insurers based outside Oklahoma

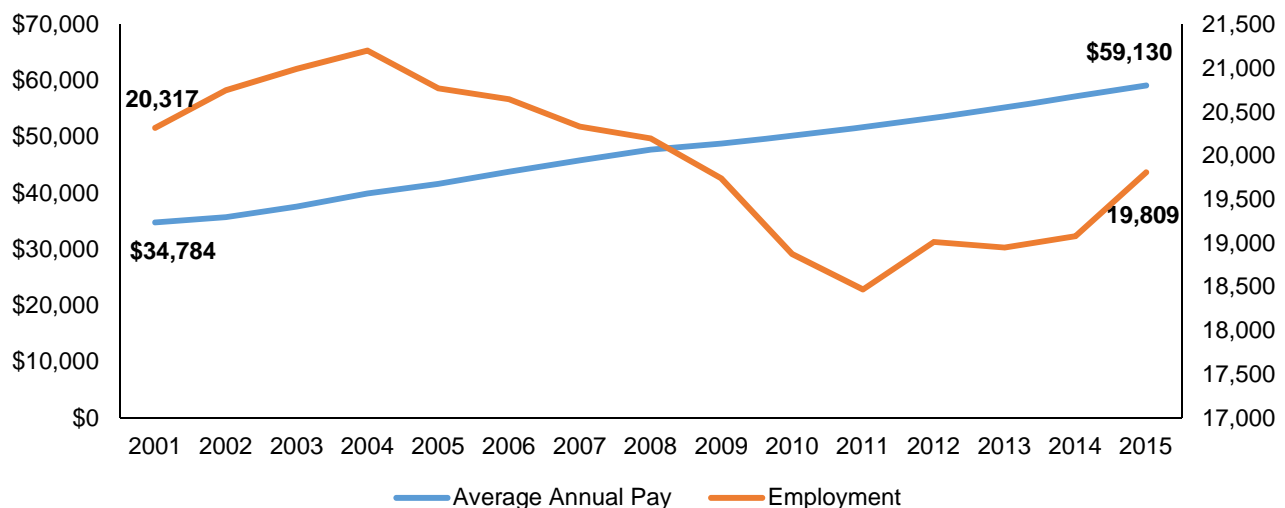


Industry Background



The U.S. insurance industry is a small but valuable portion of the nation's workforce. Insurance industry employment accounts for 1.9 percent of private employment in the U.S. In fact, the industry's share of private employment declined by 1.5 percent from 2001 to 2015. While the quantity of insurance industry jobs is small, the quality of insurance industry jobs (in terms of wages) is more substantial. Average annual pay for insurance industry employees, \$81,146, is 53 percent greater than the average private sector annual pay in the U.S.

Figure 3: Insurance Industry Employment and Average Annual Pay in Oklahoma, 2001 to 2015



Source: Bureau of Labor Statistics Quarterly Census of Employment and Wages

Oklahoma's insurance industry largely mirrors the national trends. Insurance industry employees make up less than 1.25 percent of total private employment in the State, and this share has declined by more than 10 percent from 2001 to 2015. At the same time, average annual pay in the industry is 33.5 percent higher than the average private sector annual pay, statewide. This wage premium is the highest it has been in the period from 2001 to 2015. Growth of the industry in Oklahoma (in terms of premiums written) has outpaced growth nationwide. A 2015 report from the National Association of Insurance Commissioners (NAIC) shows 10-year growth in the industry nationwide at about 17 percent while growth in Oklahoma over the same period was more than 47 percent.²

Although representing a small percentage of overall employment, the quality of the jobs has motivated some states to compete for insurance industry investment. One of the ways states can directly compete with one another for insurance industry investment is through credits or other incentives related to insurance premium taxes.

All but one state impose a tax on insurance premiums. In all but 10 states, these taxes are imposed in lieu of corporate income taxes.³ In general, the tax is imposed on gross premiums written, collected or received within the state. Insurance premium taxes are similar to a gross receipts tax and do not have a relationship to firm profitability. Insurance premium tax rates range from 0.5 to 4.35 percent, with the average being slightly

² National Association of Insurance Commissioners, 2014 Competition Database Report, 2015.

³ In states with both an income tax and an insurance premium tax, the provide some mechanism to limit double taxation, such as a premium tax credit for income taxes or a cap related to instate premiums.



above 2 percent.⁴ The Oklahoma insurance premium tax is 2.25 percent per insurance policy premium up to \$100,000 and an additional one-tenth of one percent of insurance policy premium over \$100,000 per year.⁵

From a fiscal policy perspective, insurance premium tax is a reliable source of revenue. Collections are relatively stable over time compared to the more cyclical corporate income tax. The stability of collections is beneficial to states, as premium taxes accounted for an average of 2.6 percent of total state revenues in FY2016. In Oklahoma, they accounted for 3.8 percent (over \$322 million) of total state tax revenue in FY2016.⁶

⁴ NCSL Task Force on State and Local Taxation, "State Taxation of the Insurance Industry" August 19, 2014.

⁵ National Association of Insurance Commissioners, December 2016, accessed electronically at http://www.naic.org/documents/industry_ucaa_retaliatory_OK_retaliatory.pdf

⁶ U.S. Census Bureau Annual Survey of State Government Tax Collections 2016



Administration and Use of the Incentive



Technical and Administrative Issues

The Oklahoma Insurance Department (Department) takes a lead role in administering the credit. The essential components of program administration are summarized below:

1. **Eligibility.** Insurance companies that have established a regional or home office in the State with at least 200 employees for foreign insurers and 400 employees for insurers based in Oklahoma qualify for the credit.
2. **Determining Credit Amount.** Eligible insurance companies qualify for varying credit amounts depending on the number of employees. The credit amount depends on the number of employees and whether the insurance company is foreign or domestic.⁷ The following table summarizes credit amounts and requirements:

Table 5: Tax Credit Percentages and Requirements

Qualifying Insurers	Number of Full-time Employees	Credit Percentage
Foreign Insurers Only	200 to 299	15%
Foreign Insurers Only	300 to 399	25%
Foreign and Domestic Insurers	400 to 499	35%
Foreign and Domestic Insurers	500 or more	50%

For the first year the credit is claimed, the company must maintain the regional home office continuously from on or before August 1 of that year through the end of the calendar year. In subsequent years, the home office must be maintained for the entire calendar year.

In 2010, the calculation of the credit amount was adjusted to protect the amount of insurance premium tax apportioned for the Oklahoma Firefighters Pension and Retirement Fund, the Oklahoma Police Pension and Retirement System and the Law Enforcement Retirement Fund. Since the change, the credit percentage is applied to the amount remaining after 53 percent of the tax collected is allocated to these funds.

This new calculation means that a 15 percent tax credit applied to a qualified insurer's full premium tax liability is now applied to 47 percent of the total liability. This significantly reduces the effective tax credit percentage. The table below shows how the change impacts the effective rate at each tax credit level:

Table 6: Nominal and Effective Tax Credit Amounts

Nominal	Effective
15%	7.05%
25%	11.75%
50%	23.50%

3. **Reporting.** The Department maintains records of companies enrolled in the program and associated credit amounts.

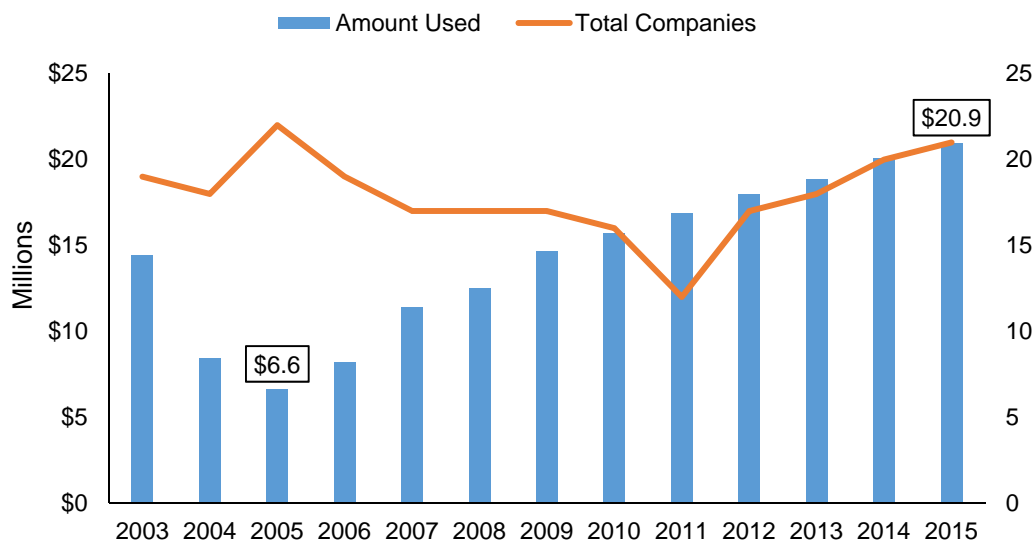
⁷ The full-time employee count may include employees from multiple offices in the state associated with one insurance group



Use of the Incentive

Even with the change in calculation of the credit in 2011, the amount of credits used has increased consistently in recent years; the 2015 total credits claimed (\$20.9 million) is more than three times the total credits claimed in 2005 (\$6.6 million). Meanwhile, the number of companies receiving the credits has been relatively stable:

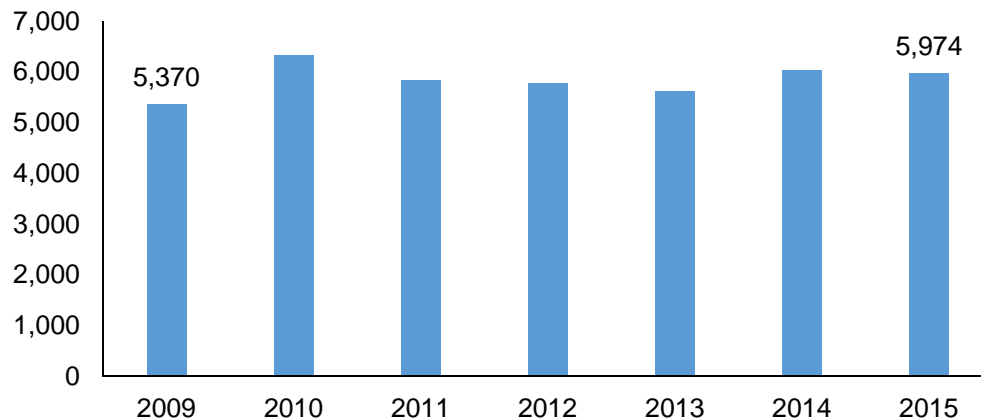
Figure 4: Amount of Home Office Tax Credits Used, 2003 to 2015



Source: Oklahoma Insurance Department

From 2009 to 2015, the total number of employees reported on Home Office Tax Credit applications has increased by 11 percent.

Figure 5: Employees Reported on Home Office Tax Credit Applications, 2009 to 2015

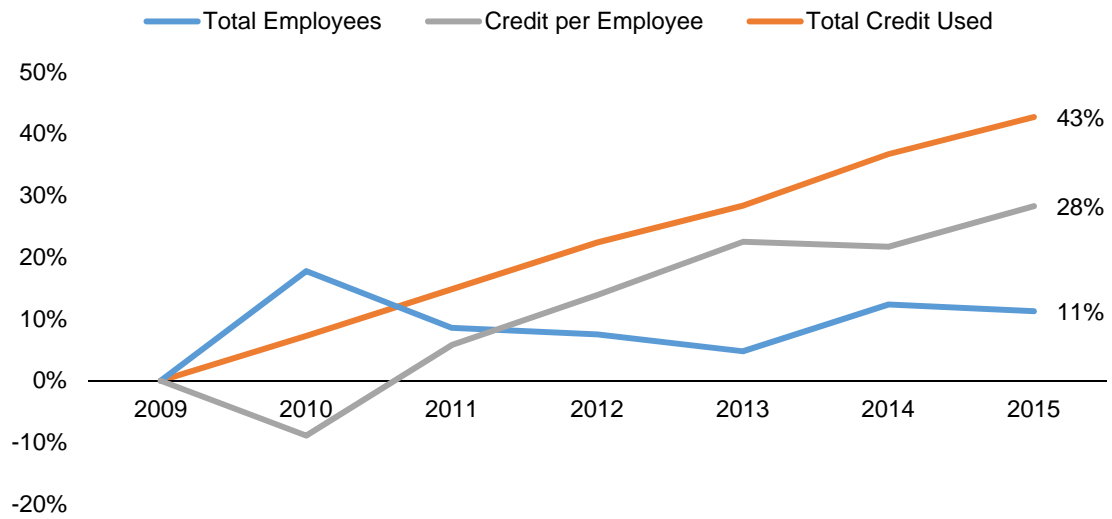


Source: Oklahoma Insurance Department

While employment growth of 11 percent is notable, it is significantly less than the 43 percent growth in the total credit amount claimed over the same period. The following chart illustrates how growth in the total amount of credit used has grown at a steady rate since 2009, which does not appear to be connected to employment growth.



Figure 6: Cumulative Growth in Employees, Credits Used and Credit per Employee, 2009 to 2015



Source: Oklahoma Insurance Department



Fiscal and Economic Impact



Economic Impact

Over the past 10 years, employment in Oklahoma's insurance sector has declined while tax credits have increased. Because the tax credit is not directly linked to net new employment, does not have a maximum credit per job, and does not have a time limit, it is not possible to determine how this credit has influenced long-term employment patterns. Therefore, it is not possible to run a traditional economic impact analysis based on net new employment in this sector. It is likely that the insurance sector is appropriately sized to meet consumer demand within Oklahoma. It is unclear how this program, based on policies written for Oklahoma consumers, would influence employment patterns for positions not linked to selling or servicing policies in Oklahoma.

If the tax credit was ended, there are a few logical outcomes. First, there might be a reduction in Oklahoma insurance sector employment if relocating or shifting employment to another state offered substantially lower costs. Second, insurance companies might absorb the loss of these incentives and not pass along their higher costs related to the tax to consumers through higher premiums. Third, the insurance companies might pass along the loss of incentives to consumers in the form of higher premiums. If this occurs, consumer might buy less expensive coverage, pay the higher costs or shop around for lower priced coverage. If consumers pay more for the same insurance product with no additional benefits, residents will have less money to spend in the economy on other services and goods. Finally, all of the above might occur in varying degrees with no meaningful negative or positive impact on the economy.

Based on the available information, there is insufficient data to accurately estimate or verify the total economic or tax revenue impacts of the home office tax credit.



Incentive Benchmarking



Benchmarking

Of the 49 states that levy an insurance premium tax, 44, including Oklahoma, levy a general premium tax rate. The remaining states apply different rates depending on what type of premium is written. Of the 44 states with a general premium tax, Oklahoma is tied for having the ninth highest rate. Oklahoma's rate is also the third highest among neighboring states with a general insurance premium tax.

Table 7: Neighboring states insurance premium tax rates

State	Insurance Premium Tax Rate
New Mexico	3.00%
Arkansas	2.50%
Oklahoma	2.25%
Colorado	2.00%
Kansas	2.00%
Missouri	2.00%

Colorado, Maryland, Nevada and South Dakota were found to have programs comparable to Oklahoma's Home Office Tax Credit. The distinguishing characteristics of each program fall into four categories: qualifications, benefit type, benefit amount, and spending caps.

Qualifications: None of the comparable programs require a certain number of jobs to be created in order to receive benefits.

Benefit Type: Maryland and Nevada offer a tax credit. Colorado and South Dakota offer a reduced rate and tax deduction.

Benefit Amount: Oklahoma's benefit amount is relatively low compared to other states. The maximum benefit in Oklahoma is 50 percent of premium tax. However, the effective percentage is 23.5 percent, due to apportionments made to pension funds. Colorado, Nevada, and South Dakota offer 50 percent of full premium tax. Nevada and South Dakota also offer an amount up to an additional 30 and 20 percent of premium tax, respectively. However, Nevada's program has an aggregate spending cap of \$5 million, which reduces the overall amount of benefit available. After discounting Nevada's program due to its cap, Oklahoma incentive provides the second lowest benefit amount among the comparison states.

Cap: Maryland and Nevada cap aggregate program spending at \$1 million and \$5 million, respectively.

Overall, Oklahoma's Home Office Tax Credit distinguishes itself among the comparison group by emphasizing job creation in its requirements. Oklahoma's effective credit percentages are significantly lower than Colorado and South Dakota. However, Oklahoma's tax credit is more generous than Maryland and Nevada, because there is no cap on its credit.

Benchmarking Program Evaluations

From 2003 to 2007, Iowa gradually reduced its insurance premium tax rate from 2 percent to 1 percent. In a 2009 report, the state evaluated the impact of this change on state revenue and employment.⁸ It found that the State experienced significant revenue losses as a result of the lower rates. Over a five year period from 2004 to 2008, while the rate was being reduced, the report estimates that total insurance premium tax collections were 28 percent, or \$245.4 million, less than they would have been without the rate reduction.

⁸ Iowa Legislative Services Agency, "Impact of the Insurance Premium Tax Rate Reduction" January 21, 2009.



However, the state did see benefits in the form of greater employment in the industry. Prior to the tax reduction, there were nearly 28,000 employees in the insurance industry in Iowa. By 2007, this number increased to over 30,000. Furthermore, the state saw its share of national insurance industry employment increase. It is notable that the Des Moines, Iowa MSA is the corporate headquarters of multiple insurance companies, including Principal Financial Group, a Fortune 250 corporation.



Appendices



Appendix A: Home Office Tax Credit Benchmarking

Home Office Tax Credit Benchmarking					
	Oklahoma	Colorado	Maryland	Nevada	South Dakota
Job Creation Requirement	Yes	No	No	No	No
Home Office	Qualify	Qualify	Qualify	Qualify	Qualify
Regional Office	Qualify	Qualify	Do not qualify	Qualify	Qualify
Benefit Type	Tax Credit	Reduced Rate	Tax Credit	Tax Credit	Tax Deduction
Benefit Amount	15 to 50 percent of premium tax*	50 percent of standard premium tax	Amount of Retaliatory Tax	50 percent of premium tax, plus an amount equal to ad valorem tax on the property, up to an additional 30 percent of premium tax	50 percent of premium tax, plus an amount equal to ad valorem tax on the property, up to an additional 20 percent of premium tax
Aggregate Program Cap	None	None	\$1 million	\$5 million	None

*Amount depends on number of full-time employees and whether the insurer is foreign or domestic. Credit is calculated after an allocation is made to Police Pension and Fire Retirement Funds

State of Oklahoma

Incentive Evaluation Commission

Clean-Burning Fuel Vehicle Credit Evaluation

November 13, 2017

PFM Group Consulting LLC
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Executive Summary



The purpose of the Clean Burning Fuel Vehicle Credit is to increase the number of clean burning fuel vehicles in use in Oklahoma and encourage development of clean burning fuel vehicle infrastructure.

Overall Recommendation: Based on its analysis of available data, the project team recommends retaining and reconfiguring the Clean Burning Fuel Vehicle Credit.

Key Findings

- **Total credits claimed peaked in 2013 but declined in the most recent two tax years.** The Oklahoma Tax Commission (OTC) does not track the number of qualified credits at a detailed level; however, in 2014, it began to separate vehicle claims from all other claims.¹ Data suggest increasing investment in infrastructure.
- **The number of compressed natural gas (CNG) and electric fueling stations has increased significantly in recent years.** It is difficult to track the total number of alternative fuel vehicles owned at any given time, so the project team has used alternative fueling stations as a proxy. The number of CNG and electric fueling stations has increased significantly in recent years. The compound annual growth rate (CAGR) of total CNG stations was 8.9 percent between 1996 and 2010; between 2010 and 2017, that rate was 15.1 percent.
- **Oklahoma has an above average share of CNG stations.** Using fueling stations as a proxy, Oklahoma accounted for 6.8 percent of total CNG stations in the U.S. in 1996. While that share fluctuated over time, as of 2017, the State has 7.3 percent of all CNG fueling stations. Given that the state has just 1.2 percent of the total U.S. population,² this percentage suggests a higher than average share of stations.
- **There is insufficient data to accurately estimate or verify the total economic or tax revenue impacts of the clean-burning fuel vehicle credit.** An attempt to estimate the economic impact would require significant assumptions regarding “but for” these programs residents would not have purchased another type of vehicle. In addition, there is limited data to support that these vehicles are manufactured or modified in Oklahoma.
- **Oklahoma’s program is comparable to other states and was not found to be an outlier in any aspects.** Interestingly, the federal government offers a similar credit but has structured it to phase out over time as sales increase and the desired result is achieved (which is consistent with the ‘best practices’ approach to incentives targeted at building an industry ‘critical mass’ and, once achieved, phasing the incentive out).
- **Adequate protections are not in place.** One of the statutory requirements 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 currently constructed, the program has no cap and no other thresholds that would limit the potential cost to the State. Given the increasing public interest in alternative fuel vehicles, it can be expected that the program demands will increase in coming years.

¹ As noted in the prior section, the all other claims category includes including vehicles which were purchased with qualified property installed by the manufacturer for which the taxpayer is unable or elects not to determine the cost.

² Per ACS 2016 Annual Estimate of Resident Population.



- **Data collection and reporting issues exist, but improvements are being made.** Currently, it is difficult (if not impossible) to analyze the number of and change in qualified vehicles as a result of the credit, in alignment with the approved evaluation criteria. However, improvements in data collection and reporting are being made.

Recommended Program Changes

- **Recommendation 1: Retain the infrastructure credit; sunset the vehicle credit.** The feasibility of purchasing an alternative fuel vehicle is largely dependent upon the ability to refuel the vehicle, assuming the taxpayer does not have access to a private fueling source. Recent data suggest an increasing interest in the infrastructure portion on the credit, and prior administrative changes to the program are indicative of the prioritization of infrastructure investment over vehicles.
- **Recommendation 2: Structure the program to phase out.** The State should consider structuring its program in a similar manner the federal government's Qualified Plug-In Electric Drive Motor Vehicle Tax Credit Program, which will phase out as electric vehicle sales increase.
- **Recommendation 3: Improve reporting on the credit.** For infrastructure claims, the State should require the taxpayer to disclose on the application form whether the claim is for property related to the delivery of natural gas into a fuel tank for commercial purposes or public access recharging systems for electric vehicles (currently the two are reported in a single line and not distinguished). The State should produce annually a report that provides a detailed accounting of the number and total payment of qualified credits claimed for each of the following categories:
 - Vehicle purchases;
 - Vehicle modifications;
 - Property related to the delivery of natural gas into a fuel tank for commercial purposes;
 - Public access recharging systems for electric vehicles;
 - Property related to the compression of natural gas for private residences or noncommercial purposes.



Key Findings and Recommendations



Overall Recommendation: Based on its analysis of available data, the project team recommends retaining and reconfiguring the Clean Burning Fuel Vehicle Credit.

Key Findings

Regarding the program's successes in meeting the Incentive Evaluation Commission's approved criteria:

- **Total credits claimed peaked in 2013 but declined in the most recent two tax years.** The Oklahoma Tax Commission (OTC) does not track the number of qualified credits at a detailed level; however, in 2014, it began to separate vehicle claims from all other claims.³ The total number of claims peaked in 2013 at more than 1,600 but declined in the most recent two tax years.
- **The number of compressed natural gas (CNG) and electric fueling stations has increased significantly in recent years.** It is difficult to track the total number of alternative fuel vehicles owned at any given time. This is largely because many of these vehicles are original gasoline/diesel fueled vehicles that have been converted to run on alternative fuels – and this conversion is not recorded in any database. Additionally, the State does not track fuel type or other detailed data in its administration of this tax incentive.

The feasibility of purchasing an alternative fuel vehicle is largely dependent upon the ability to refuel the vehicle, assuming the taxpayer does not have access to a private fueling source. For this reason, in lieu of data regarding the number of vehicles in Oklahoma, it is logical to analyze the number of alternative fueling stations in the State.

The number of CNG and electric fueling stations has increased significantly in recent years. The compound annual growth rate (CAGR) of total CNG stations was 8.9 percent between 1996 and 2010; between 2010 and 2017, that rate was 15.1 percent.

- **Oklahoma has a higher than average share of CNG stations.** While detailed data regarding the number of alternative fuel and electric vehicles is not available, it can be useful to examine the number of alternative fueling stations in existence, as it is a reasonable proxy for the usage of clean burning fuel and electric vehicles. Oklahoma accounted for 6.8 percent of total CNG stations in the U.S. in 1996. While that share fluctuated over time, as of 2017, the State has 7.3 percent of all CNG fueling stations. Given that the state has just 1.2 percent of the total U.S. population,⁴ this percentage suggests a higher than average share of stations. Regarding annual growth, the incidence of new stations in Oklahoma is closely aligned with nationwide trends, both between 1996-2010 and 2010-2017.

Other Findings

- **There is insufficient data to accurately estimate or verify the total economic or tax revenue impacts of the clean-burning fuel vehicle credit.** Any attempt to estimate the economic impact would require significant assumptions regarding "but for" these programs residents would not have purchased another type of vehicle. In addition, there is limited data to support that these vehicles are manufactured or modified in Oklahoma.

³ The all other claims category includes including vehicles which were purchased with qualified property installed by the manufacturer for which the taxpayer is unable or elects not to determine the cost.

⁴ Per ACS 2016 Annual Estimate of Resident Population.



In terms of retail activity, consumers are most likely purchasing the clean burning fuel at a filling station - but substituting gasoline for compressed natural gas. Both of these purchases generate retail sector sales. In the short-term, it is reasonable to assume that retail outlets adding clean burning fuel options have generated some construction sectors jobs. There are also positive environmental benefits associated with usage of clean burning vehicles. While some studies and models put a dollar figure on the environmental and health benefits associated with cleaner burning vehicles, that analysis was not performed as part of this effort.

- **Oklahoma's program is comparable to other states and was not found to be an outlier in any aspects.** Interestingly, the federal government offers a similar credit but has structured it to phase out over time as sales increase and the desired result is achieved. This is consistent with a 'best practices' approach to incentives targeted at building an industry 'critical mass' and, once achieved, phasing the incentive out.
- **Adequate protections are not in place.** One of the statutory requirements 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 currently constructed, the program has no cap and no other thresholds that would limit the potential cost to the State.
- **Data collection and reporting issues exist but improvements are being made.** Currently, it is difficult (if not impossible) to analyze the number of and change in qualified vehicles as a result of the credit, in alignment with the approved evaluation criteria. However, improvements are being made. In 2014, the OTC began including refundable credits in reported totals, and began reporting on credits carried over and credits established in the current year to generate a total amount claimed, and total amount used. The OTC also began separating purchase and modification of vehicle claims from all other claims. While the project team feels these changes are an improvement to the reporting process, it makes analyzing activity pre- and post-2014 challenging.

Recommendations

The purpose of the Clean Burning Fuel Vehicle Credit is to increase the number of clean burning fuel vehicles in use in Oklahoma and encourage development of clean burning fuel vehicle infrastructure.

It should be noted that in October 2017, the Oklahoma Supreme Court ruled unconstitutional a \$100 fee on electric vehicles and \$30 fee on hybrid cars that was passed in the final days of the 2017 legislative session. As a result, the proposed new fee will not impact consumer purchasing and infrastructure investment trends.

With that in mind, the project team provides the following recommendations to improve the program.

- **Recommendation 1: Retain the infrastructure credit; sunset the vehicle credit.** The feasibility of purchasing an alternative fuel vehicle is largely dependent upon the ability to refuel the vehicle, assuming the taxpayer does not have access to a private fueling source.

Recent data suggests an increasing interest in the infrastructure portion on the credit. Prior to 2014, vehicle claims were not tracked separately from infrastructure claims. In 2014, 46 percent of credits established and 32 percent of those claimed were related to infrastructure; by 2015, those shares were 92 percent and 88 percent, respectively.



Additionally, prior administrative changes suggest the prioritization of infrastructure investment over vehicles. Prior to July 1, 2010, the State offered a credit for investment in qualified electric motor vehicle property. The current clean burning fuel incentive continues to offer credits for metered-for-fee, public access recharging systems for motor vehicles propelled by electricity.

- **Recommendation 2: Structure the program to phase out.** The federal government's Qualified Plug-In Electric Drive Motor Vehicle Tax Credit Program is structured to phase out as electric vehicle sales increase. The credit begins to phase out for each manufacturer in the second quarter following the calendar quarter in which a minimum of 200,000 qualified plug-in electric drive vehicles have been sold by that manufacturer in the U.S.⁵ The State should consider structuring its own program in a similar manner, whereby it would continue to offer credits for infrastructure until the market reaches a certain saturation point.
- **Recommendation 3: Improve reporting on the credit.** Currently, the State reports claims in two high-level categories: credits related to vehicles (the aggregate total of purchases and modifications) and all other claims. This level of reporting makes it difficult to analyze the number of and change in qualified vehicles as a result of the credit, in alignment with the approved evaluation criteria.

The project team recommends that the application process be revised to disclose on the application form (Form 567-A, Credit for Investment in Clean-Burning Motor Vehicle Fuel Property) the type of alternative fuel being used in the vehicle and whether the claim is for a purchase or modification.

For infrastructure claims, the State should require the taxpayer to disclose on the application form whether the claim is for property related to the delivery of natural gas into a fuel tank for commercial purposes or public access recharging systems for electric vehicles (currently the two are reported in a single line and not distinguished).

The State should produce annually a report that provides a detailed accounting of the number and total payment of qualified credits claimed for each of the following categories:

- Vehicle purchases;
- Vehicle modifications;
- Property related to the delivery of natural gas into a fuel tank for commercial purposes;
- Public access recharging systems for electric vehicles;
- Property related to the compression of natural gas for private residences or noncommercial purposes.

⁵ Alternative Fuels Data Center. Available at <https://www.afdc.energy.gov/laws/409>.



Introduction



Overview

In 2015, HB2182 established the Oklahoma Incentive Evaluation Commission (the Commission). 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 first set of 11 evaluations was conducted in 2016.

The Clean-Burning Fuel Vehicle Credit is one of 12 incentives scheduled for review by the Commission in 2017. Based on this evaluation and their collective judgement, the Commission will make recommendations to the Governor and the State Legislature related to this incentive

Incentive Background

The State offers a one-time tax credit for investment in clean burning fuel vehicles and infrastructure used in the delivery or compression of clean burning fuel or electricity to such vehicles. The incentive is multifaceted and applies to the following investments:

- **Vehicles:** 45 percent of the cost of either modifications to vehicles originally propelled by gasoline or diesel to enable them to be propelled by CNG, liquefied natural gas or liquefied petroleum gas; or the purchase of a vehicle originally equipped to be propelled by clean burning fuel. If no credit is claimed by the prior owner of originally equipped vehicle, the new owner is entitled to the lesser of 10 percent or \$1,500.
- **Delivery Property:** 75 percent of the cost of either property directly related to the delivery of clean burning fuel for commercial purposes or for a fee or charge; or a metered-for-fee public access recharging system for electric vehicles.
- **Compression Property:** The lesser of 50 percent or \$2,500 per location for property directly related to the compression and delivery of natural gas from a private home or residence for noncommercial purposes into a motor vehicle propelled by CNG.

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

- Number of qualified credits by the categories identified;
- Change in number of qualified vehicles versus prior to credit;
- Change in clean burning fuel vehicles in Oklahoma versus other states.

The criteria focus on specific objectives related to this program (change in number of qualified vehicles, change relative to other states). 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 criterion for evaluation (State return on investment). These will be discussed throughout the balance of the evaluation.



Industry Background



History of Clean Burning Fuel in the U.S.

In 1973, Arab members of the Organization of Petroleum Exporting Countries (OPEC) imposed an oil embargo on the U.S. This created a significant strain on a U.S. economy that had grown increasingly dependent on foreign oil. As the price of oil doubled – and eventually quadrupled – it dramatically increased prices for a variety of products, including gasoline. As a result, the resulting crisis necessitated a more comprehensive approach to federal energy policy. Over the next 25 years, Congress and Presidents took numerous actions intended to reduce the impact of foreign oil on the U.S. economy.

The Energy Policy Conservation Act of 1975 added Title V, Improving Automotive Efficiency, to the Motor Vehicle Information and Cost Savings Act, which established Corporate Average Fuel Economy (CAFE) standards for passenger cars and light trucks. The near-term goal was to double new car fuel economy by 1985 to 27.5 miles per gallon.⁶ In 2008, the National Biofuel Action Plan (NBAP) was established in response to President Bush's "Twenty in Ten" goal, which called for reducing U.S. gasoline consumption by 20 percent over 10 years by investing in renewable and alternative fuel sources, increasing vehicle efficiency and developing alternative fuel vehicles. In 2009, President Obama issued a presidential directive to the USDA to aggressively accelerate the investment in and production of biofuels; with the directive came \$786.5 million in funding and the establishment of the Biofuels Interagency Working Group, which worked to develop policies to increase flexible fuel vehicle production and assist in retail marketing efforts.

The Rise of Clean Burning Fuel Vehicles

At present, more than a dozen alternative fuels are in production or under development for use in alternative fuel vehicles and advanced technology vehicles. Government and private-sector vehicle fleets are the primary users of these fuels and vehicles, but consumers are increasingly using them. Table 1 displays the estimated number of on-road alternative fueled and hybrid vehicles produced in 2016.

Table 1: Estimated Number of On-Road Alternative Fueled and Hybrid Vehicles Produced, 2016

Fuel Type	Total	% of Total
Ethanol (E85)	1,272,091	71.7%
Gasoline-Electric Hybrid	327,641	18.5%
Electricity	162,951	9.2%
Compressed Natural Gas	7,840	0.4%
Liquefied Petroleum Gas (LPG)	1,932	0.1%
Diesel-Electric Hybrid	1,583	0.1%
Hydrogen	29	0.0%
Liquefied Natural Gas (LNG)	10	0.0%
Total	1,774,077	100.0%

Source: U.S. Energy Information Administration

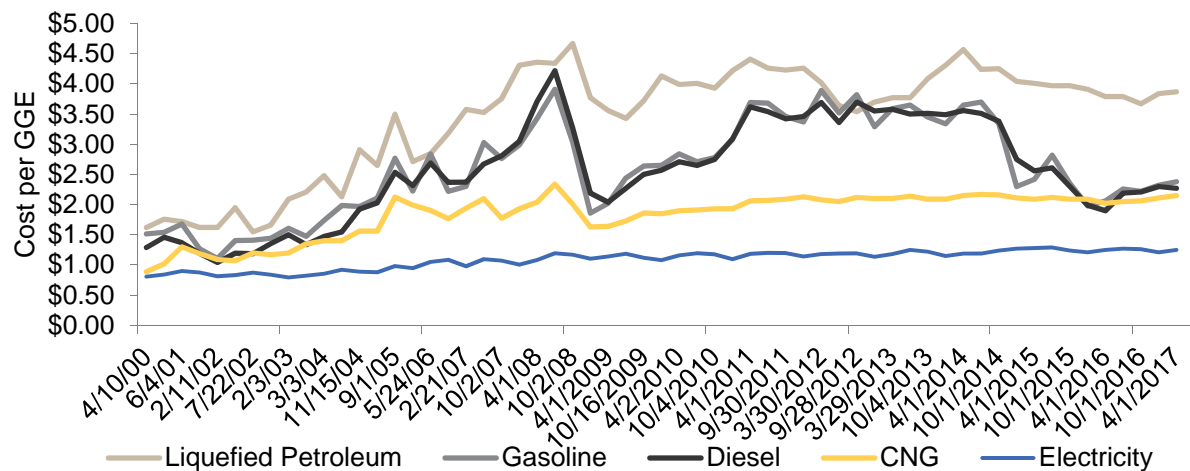
As gasoline prices increase, alternative fuels appeal more to vehicle fleet managers and consumers. Like gasoline, alternative fuel prices can fluctuate based on location, time of year and political climate. As shown in Figure 1, of the fuels included under the State's incentive program, CNG and electricity (for hydrogen fuel cell powered vehicles) generally provide a cost-effective and predictably-priced alternative to traditional gasoline and diesel, while liquefied petroleum is typically more expensive per gasoline gallon equivalent and tends to

⁶ U.S. Departments of Transportation and Energy and U.S. Environmental Protection Agency – Report to Congress: Effects of Alternative Motor Fuels Act, CAFE Incentives Policy (March 2002).



fluctuate in a way similar to gasoline and diesel. It should be noted that fuel efficiency is not factored into this calculation, as this is the cost of fuel alone.

Figure 1: U.S. Average Retail Fuel Prices, April 2000-April 2017⁷



Source: Alternative Fuels Data Center Clean Cities Alternative Fuel Price Reports

Of course, the feasibility of purchasing an alternative fuel vehicle is largely dependent upon the ability to refuel the vehicle, assuming the purchaser does not have access to a private fueling source. Table 2 displays the number of fueling stations, in the U.S. and Oklahoma, available for each type of alternative fuel currently included under the State's incentive program.

Table 2: Alternative Fueling Stations

Alternative Fuel Type	Fueling Stations in U.S.	Fueling Stations in OK
Liquefied Petroleum	388	8
Compressed Natural Gas	1,695	123
Liquefied Natural Gas	131	1
Electric Stations	18,833	53
Charging Outlets	50,357	115

Source: Alternative Fuel Data Center; data as of 9/7/2017

Nationwide, tax credits (including federal credits) have been developed to encourage the purchase of and conversion to clean burning fuel vehicles. The U.S. Energy Policy Act of 2005 established a federal income tax credit of up to \$3,400 for the purchase of new hybrid vehicles purchased or placed into service between January 1, 2006 and December 31, 2010.

National Outlook

According to the Fuels Institute, natural gas, propane, electric vehicles and fuel cell vehicles are projected to grow exponentially between now and 2023. Due to starting from a very modest market position, they will make up just 1.0 to 1.4 percent of the light duty vehicle pool in 2023. The number of medium and heavy duty (M/HD)

⁷ LNG was first tracked in July 2016 but data is not available per GGE.



vehicles powered by CNG is forecast to increase from 0.3 percent to between 1.7 and 3.8 percent. Liquefied natural gas and liquefied petroleum will also gain M/HD market share, but both will remain below 1.0 percent.⁸

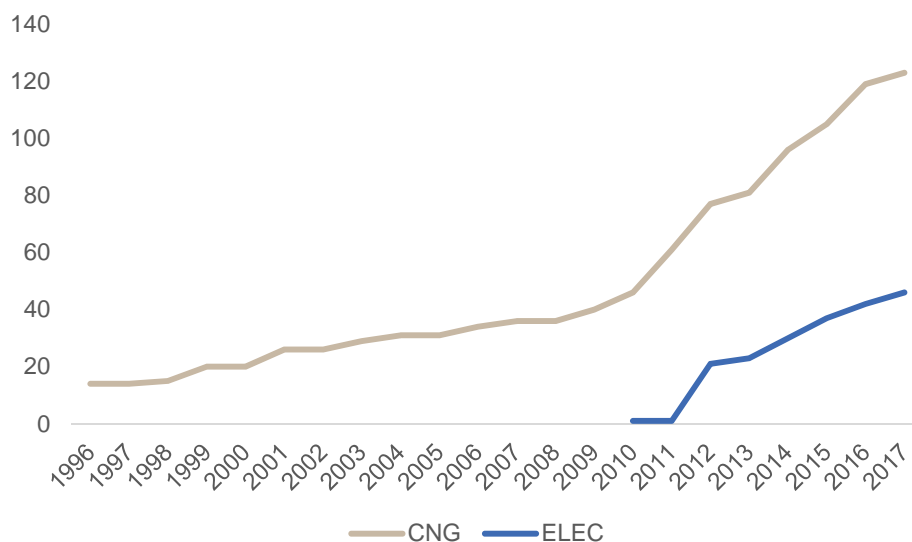
Clean-Burning Fuel and Electric Vehicles in Oklahoma⁹

It is difficult to track the total number of alternative fuel vehicles owned in Oklahoma at any given time. Many of these vehicles are original gasoline/diesel fueled vehicles that have been converted to run on alternative fuels – and this conversion is not recorded in any official database. Additionally, the State does not track fuel type or other detailed data in its administration of this incentive, making it difficult to derive a total count.

The feasibility of purchasing an alternative fuel vehicle is largely dependent upon the ability to refuel the vehicle, assuming the taxpayer does not have access to a private fueling source. For this reason, in lieu of data regarding the number of vehicles in Oklahoma, it is logical to analyze the number of alternative fueling stations in the State.

As displayed in the following figure, the number of CNG and electric fueling stations has increased significantly in recent years. The compound annual growth rate (CAGR) of total CNG stations was 8.9 percent between 1996 and 2010; between 2010 and 2017, that rate was 15.1 percent.

Figure 2: Oklahoma Alternative Fueling Stations, 1996-2017



Source: Alternative Fuels Data Center (as of Sept 7, 2017)

Note: excludes seven electric fueling stations for which the open date is unknown.

Clean-Burning Fuel and Electric Vehicles versus Other States

As shown in the following table, Oklahoma accounted for 6.8 percent of total CNG stations in the U.S. in 1996. While that share fluctuated over time, as of 2017, the State has 7.3 percent of all CNG fueling stations. Given

⁸ Fuels Institute – Tomorrow's Vehicles: What Will We Drive in 2023?

⁹ Electric vehicles are included in this section due to the inclusion in this incentive of metered-for-fee, public access recharging systems for electric cars.



that the state has just 1.2 percent of the total U.S. population,¹⁰ this percentage suggests a higher than average share of stations. Regarding annual growth, the incidence of new stations in Oklahoma is closely aligned with nationwide trends, both between 1996-2010 and 2010-2017.

Table 3: CNG Fueling Stations, U.S. and OK (1996-2017)¹¹

Year	U.S.	OK	OK % of U.S.
1996	206	14	6.8%
1997	229	14	6.1%
1998	248	15	6.0%
1999	278	20	7.2%
2000	300	20	6.7%
2001	330	26	7.9%
2002	356	26	7.3%
2003	390	29	7.4%
2004	413	31	7.5%
2005	436	31	7.1%
2006	468	34	7.3%
2007	496	36	7.3%
2008	529	36	6.8%
2009	577	40	6.9%
2010	623	46	7.4%
2011	737	61	8.3%
2012	912	77	8.4%
2013	1,075	81	7.5%
2014	1,309	96	7.3%
2015	1,494	105	7.0%
2016	1,641	119	7.3%
2017	1,695	123	7.3%
1996-2010 CAGR	8.2%	8.9%	0.6%
2010-2017 CAGR	15.4%	15.1%	0.0%
1996-2017 CAGR	10.6%	10.9%	0.3%

Source: Alternative Fuels Data Center (as of Sept 7, 2017)

¹⁰ Per ACS 2016 Annual Estimate of Resident Population.

¹¹ Analysis excludes electric stations, as the open date is unknown for 10,284 (54 percent) electric stations nationwide.



Incentive Usage and Administration



Incentive Characteristics

The State offers a one-time tax credit for investment in clean burning fuel vehicles and electric vehicles and property used in the delivery of clean burning fuel to such vehicles. Applicable purchases are broad, and the incentive is multifaceted, which applies to:

- **Vehicles:** 45 percent of the cost of either modifications to vehicles originally propelled by gasoline or diesel to enable them to be propelled by compressed natural gas (CNG), liquefied natural gas or liquefied petroleum gas; or the purchase of a vehicle originally equipped to be propelled by clean burning fuel. If no credit is claimed by the prior owner of originally equipped vehicle, the new owner is entitled to the lesser of 10 percent or \$1,500.
- **Delivery Property:** 75 percent of the cost of either property directly related to the delivery of clean burning fuel for commercial purposes or for a fee or charge; or a metered-for-fee public access recharging system for electric vehicles.
- **Compression Property:** The lesser of 50 percent or \$2,500 per location for property directly related to the compression and delivery of natural gas from a private home or residence for noncommercial purposes into a motor vehicle propelled by CNG.

The following alternative fuels (in addition to electricity) are acceptable under the State's incentive program:¹²

- **Hydrogen Fuel Cell:** Fuel cell electric vehicles (FCEVs) are more efficient than conventional internal combustion engine vehicles and produce no tailpipe exhaust – instead, they emit water vapor and warm air. Similar to conventional vehicles, they can fuel in less than 10 minutes and have a driving range of around 300 miles. Note: hydrogen fuel cell property was only eligible for credits in the 2010 tax year.
- **Compressed Natural Gas and Liquefied Natural Gas:** Natural gas powers more than 150,000 vehicles in the United States. Natural gas vehicles (NGVs) are good choices for high-mileage, centrally fueled fleets. Compressed natural gas (CNG) can provide adequate range for required vehicle application. For vehicles needing to travel long distances, liquefied natural gas (LNG) is a good choice. The advantages of natural gas as a transportation fuel include its domestic availability, widespread distribution infrastructure, and reduced greenhouse gas emissions compared to conventional gasoline and diesel fuels. The driving range of NGVs is generally less than that of comparable conventional vehicles because of the lower energy density of natural gas.
- **Liquefied Petroleum:** Also known as propane, liquefied petroleum is a cleaner-burning alternative fuel that has been used for decades to power light, medium, and heavy-duty propane vehicles. In addition to its clean-burning qualities, benefits include its domestic availability, high-energy density and relatively low cost. It is the world's third most common transportation fuel.

Any credit allowed but not used may be carried forward for a period of five years; the credit has been available since 1990 and is to sunset on January 1, 2020.

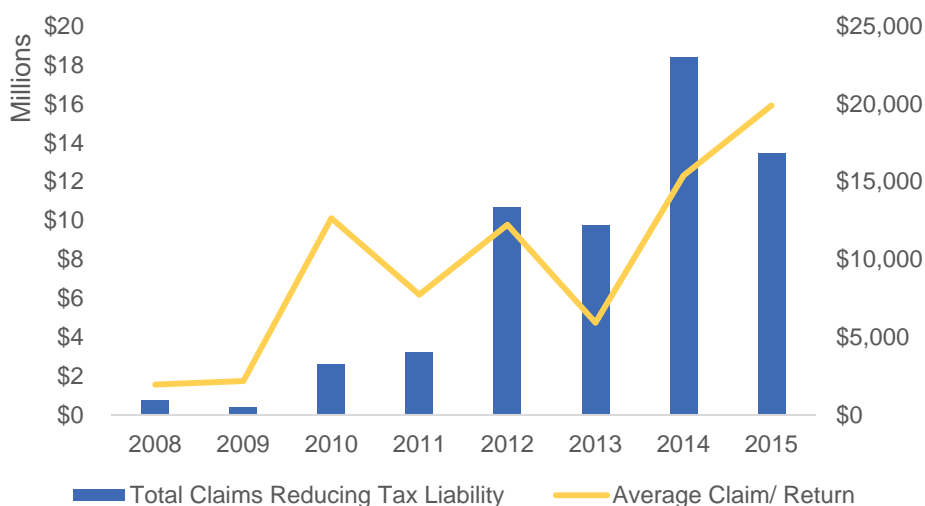
¹² All descriptions come from the U.S. Department of Energy's Alternative Fuels Data Center.



Historic Use of Clean Burning Fuel Credits

As shown in the following figure, aggregate claims used to reduce tax liability have grown significantly in recent years, increasing at a CAGR of 50 percent between 2008 and 2015. The average claim per return has also increasing during this time frame (with a CAGR of 39 percent), peaking in 2015 at nearly \$20,000 per return.¹³

Figure 3: Clean Burning Fuel Claims, 2008-2015



Source: OTC Form 511CR data, 2008-2015

The OTC does not track the number of qualified credits at a detailed level; however, in 2014, it began to separate vehicle claims from all other claims.¹⁴ As shown in the following table, the total number of claims peaked in 2013 at more than 1,600 but declined in the most recent two tax years.

According to Oklahoma Revised Statute, if the tax credit allowed exceeds the amount of income taxes due or if there are no state income taxes due on the income of the taxpayer, the amount of the credit not used as an offset against the income taxes of a taxable year may be carried forward as a credit against subsequent income tax liability for a period not to exceed five years. As illustrated in the following table, approximately two-thirds of the available credits in 2014 were used to reduce current year tax liability; in 2015, just over 40 percent of available credits reduced current tax liability. The amount used to offset tax liability (i.e. the tax expenditures incurred by the State) as a percent of total available credits typically ranges from 40 to 70 percent and averaged 54 percent between 2008 and 2015.

¹³ It should be noted that a single return can contain multiple vehicles.

¹⁴ As noted in the prior section, the all other claims category includes including vehicles which were purchased with qualified property installed by the manufacturer for which the taxpayer is unable or elects not to determine the cost.



Table 4: Clean Burning Fuel Credits and Claims, 2008-2015

Year	Number of Returns	Total Credits Earned ¹⁵	Total Claims Used ¹⁶	Average Claim/Return	Claims as % of Credits Earned
2008	395	\$1,371,847	\$778,729	\$1,971	56.8%
2009	198	\$648,882	\$435,050	\$2,197	67.0%
2010	207	\$5,674,122	\$2,621,173	\$12,663	46.2%
2011	419	\$5,717,764	\$3,245,106	\$7,745	56.8%
2012	872	\$21,986,243	\$10,674,376	\$12,241	48.6%
2013	1637	\$18,533,894	\$9,749,056	\$5,955	52.6%
2014	1196	\$29,125,776	\$18,405,031	\$15,389	63.2%
2015	677	\$31,840,403	\$13,464,676	\$19,889	42.3%

Source: OTC data

Oklahoma Special Fuel Decal and CNG Tax Revenues

Oklahoma levies an annual Alternative Fuel Flat Fee in Lieu of Motor Fuel Taxes in exchange for a special fuel decal. Prior to January 1, 2012, the structure of the fee was as follows:

- \$50 per year in lieu of use tax on LPG used to propel automobiles, vans and pickup trucks not exceeding 1 ton capacity;
- \$100 for the same using CNG or LNG;
- \$150 for those exceeding 1 ton capacity.

Since January 1, 2012, however, the \$100 flat fee on CNG was replaced by a tax of \$0.05 per gasoline gallon equivalent (GGE) of CNG. Upon expiration of the tax credit, the CNG tax will become equal to the tax rate imposed on diesel fuel (currently \$0.13 per gallon).

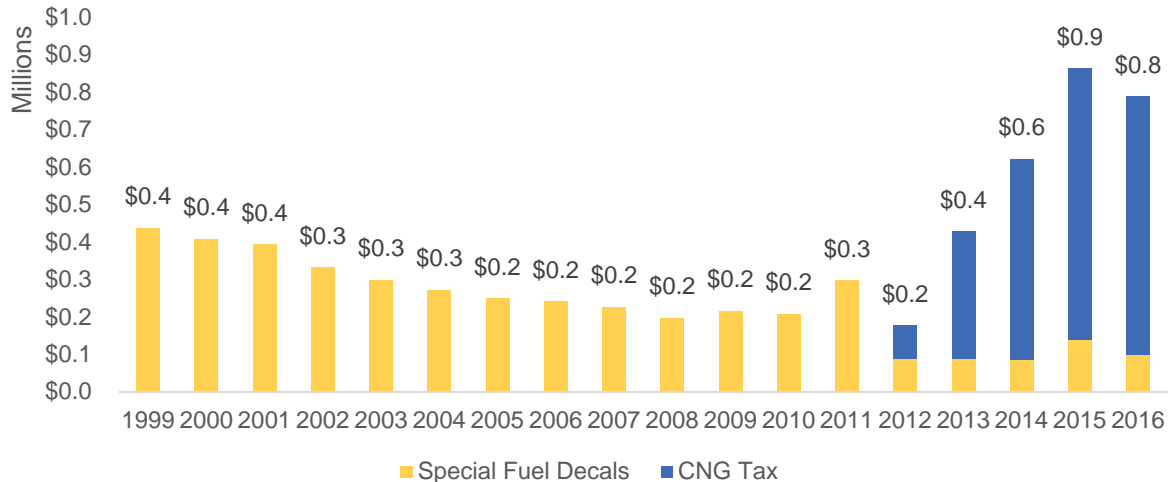
As shown in the following table, special fuel fees and CNG taxes (minor revenue sources) declined by half between 1999 and 2012. Since the introduction of the CNG tax, however, revenues have increased, totaling \$0.8 million in 2016 (a slight decline from 2015 totals).

¹⁵ Prior to 2014, "Total Credits Earned" was the amount of the credit (including any carryover credit) claimed on a tax return eligible to be used to offset any tax liability.

¹⁶ Based upon a taxpayer's final liability as calculated, the "Total Claims Used" is the amount used to offset any tax liability.



Figure 4: Special Fuel Decal and CNG Tax Revenues, 1999-2016



Source: OTC Annual Reports, 1999-2016

Incentive Administration

There are three components to overall program administration:

1. **Determining eligibility.** No qualified establishments or its contractors or subcontractors that has received or is receiving an incentive payment in accordance in the Quality Jobs Program Act and/or Small Employer Quality Jobs Incentive Act are eligible to receive this credit in connection with the activity and establishment for which incentive payments have been, or are being, received.¹⁷
2. **Determining the credit.** Eligible taxpayers apply for the credit by submitting Form 567-A, Credit for Investment in Clean-Burning Motor Fuel Vehicle Property. The totals generated in this form are then carried over to Form 511CR, Other Credits. In addition to the forms, taxpayers must also submit the associated invoice(s) and purchasing agreement(s).

Applications for the credit are processed alongside their associated income tax returns; the credit forms are not reviewed unless the income tax return is flagged. In these instances, the Tax Policy division reviews the returns and associated applications for accuracy.

3. **Reporting.** Estimates from Form 511CR are reported in Open Books and in the State's Tax Expenditures report, which is produced every two years (most recently 2015-2016 for Tax Year 2014). Estimates are calculated using the OTC's microsimulation model. The model is SAS-based and determines rate change and other changes on IIT.

Annual Transfer

Effective 2014, the OTC transfers five percent of the cost of qualified clean burning motor vehicles to the Compressed Natural Gas Conversion Safety and Regulation Fund.

¹⁷ See Oklahoma Administrative Code 710:50-15-81(b).



Reporting Issues

Currently, the State reports claims in two high-level categories: credits related to vehicles (the aggregate total of purchases and modifications) and all other claims. This makes it difficult (if not impossible) to analyze the number of and change in qualified vehicles as a result of the credit, in alignment with the approved evaluation criteria. For instance, in 2015, 677 claims were submitted. A total of 407 (60 percent) were for vehicle claims, while 270 (40 percent) were for all other claims – but it is unclear how many of the 407 vehicle claims were for original purchases versus modifications, and unclear how many of the 270 other claims were for commercial purposes, electric vehicle recharging stations, or residential/noncommercial purposes.

Additionally, the 511CR data reporting changed between tax years 2013 and 2014. In 2013, the OTC reported on the number of returns and total amounts claimed and used for each incentive. Effective in 2014, the OTC began including refundable credits in the totals, and began reporting on credits carried over and credits established in the current year to generate a total amount claimed, and total amount used. The OTC also began separating purchase and modification of vehicle claims from all other claims (including vehicles which were purchased with qualified property installed by the manufacturer for which the taxpayer is unable or elects not to determine the cost). While the project team feels these changes are an improvement to the reporting process, it makes analyzing activity pre- and post-2014 challenging.



Economic and Fiscal 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 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 5: 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).

Fiscal Impact

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).¹⁸ Two datasets were used to derive the ratio: 1) U.S. Department of Commerce Bureau of Economic

¹⁸ Gross State Product (GSP) is the state counterpart of Gross Domestic Product (GDP) for the nation. To assist the reader, the project team has decided to use GDP throughout this section of the report instead of mixing the two terms. This decision was made because more people are familiar with the term GDP.



Analysis GDP estimates by state;¹⁹ and 2) the Oklahoma Tax Commission's *Annual Report of the Oklahoma Tax Commission*.²⁰ Over the past ten years, the state tax revenue as a percent of state GDP was 5.5 percent.

Table 5: State of Oklahoma Tax Revenue as a Percent of State GDP

Year	Oklahoma Tax Revenue ²¹	Oklahoma GDP	Ratio
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%
2015-16	\$8,963,894,053	\$182,937,000,000	4.9%
Average	\$8,908,720,068	\$166,905,300,000	5.4%

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

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.

To estimate State of Oklahoma tax revenue generated in a given year, the project team multiplied the total value added figure produced by the IMPLAN model by the corresponding annual ratio (about 5.4 percent). For example, if the total value added was \$1,000,000, then the estimated State of Oklahoma tax revenue was \$54,000 (\$1,000,000 x 5.4 percent).

Impact of Clean Burning Fuel Incentives

There is insufficient data to accurately estimate or verify the total economic or tax revenue impacts of the clean-burning fuel vehicle credit. Any attempt to estimate the economic impact would require significant assumptions

¹⁹ U.S. Department of Commerce Bureau of Economic Analysis. Available at <http://www.bea.gov/regional/>.

²⁰ Oklahoma Tax Commission. Available at https://www.ok.gov/tax/Forms_&_Publications/Publications/Annual_Reports/index.html.

²¹ Gross collections from state-levied taxes, licenses and fees, exclusive of city/county sales and use taxes and county lodging taxes.



regarding “but for” these programs residents would not have purchased another type of vehicle. In addition, there is limited data to support that these vehicles are manufactured or modified in Oklahoma.

In terms of retail activity, consumers are most likely purchasing the clean burning fuel at a filling station - but substituting gasoline for compressed natural gas. Both of these purchases generate retail sector sales. In the short-term, it is reasonable to assume that retail outlets adding clean burning fuel options have generated some construction sectors jobs. There are also positive environmental benefits associated with usage of clean burning vehicles. While some studies and models put a dollar figure on the environmental and health benefits associated with cleaner burning vehicles, that type analysis was not performed as part of this effort.



Incentive Benchmarking



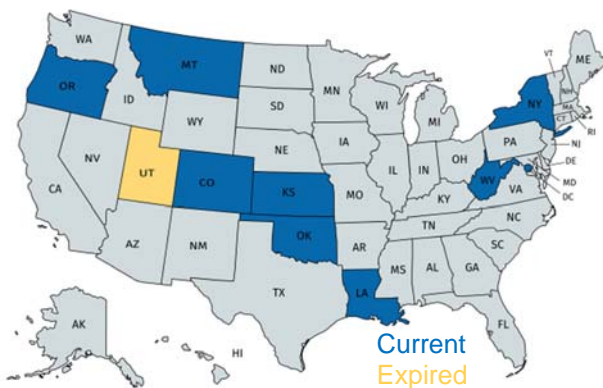
Benchmarking

A detailed description of comparable state programs can be found in **Appendix A**.

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 rare that any two state incentive programs will be exactly the same.²² 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 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,

Figure 6: States Offering Clean Burning Fuel Vehicle Tax Credits



demographic or political structures that lend themselves to comparison. In the case of the clean burning fuel tax credit, the states offering comparable incentives are located throughout the United States, as shown in Figure 6.

Including Oklahoma, the 11 similar state incentives have their own nuances. For instance, four states offer tiered credits based on the type or weight of vehicle:

- Colorado’s credits range from \$5,000 on the purchase or conversion of an eligible light-duty passenger vehicle to \$20,000 on the purchase or conversion of a heavy-duty truck;
- Kansas, Montana and West Virginia each base the

amount of the credit on the gross vehicle weight rating (GVWR). Kansas uses 10,000 and 26,000 pounds as tier thresholds; Montana uses 10,000 pounds; and West Virginia uses 26,000 pounds.

Another distinguishing factor is whether the incentives are applicable to the cost of purchasing an eligible vehicle, the cost of converting a vehicle not originally manufactured as an alternative/clean-burning fuel vehicle, and/or the cost of alternative fueling equipment and infrastructure.

- States honoring vehicle purchases and conversion and equipment/infrastructure include Oklahoma, Louisiana, Utah (now expired), Washington DC and West Virginia;
- States honoring vehicle purchases and conversion include Colorado and Kansas;
- Montana offers the credit solely for conversion; and
- New York and Oregon offer credits solely for the purchase of alternative fuel devices, such as charging stations or fuel systems.

Additionally, each state bases the incentive amount on a flat dollar credit and/or a percentage of the cost of the investment – and many include a percentage credit with a cap.

²² The primary instances of exactly alike state incentive programs occur when states choose to ‘piggyback’ onto federal programs.



- Only Colorado bases its credits on a flat dollar amount (credits ranging from \$5,000 for light duty vehicles to \$20,000 for heavy-duty trucks);
- Oklahoma and Louisiana base their credits on an uncapped percentage of the cost of purchase or conversion: Oklahoma (45 percent of vehicle or conversion cost or 75 percent of fuel delivery equipment); Louisiana (36 percent of vehicle, conversion or equipment cost);
- Several states offer a capped credit based on a percentage of cost: Kansas (40 percent of the cost up to \$40,000 for vehicles over 26,000 pounds); Montana (50 percent of the cost of equipment up to \$1,000); New York (50 percent of property cost up to \$5,000); Oregon (50 percent of charging station or fuel system up to \$750); Washington, DC (50 percent of the cost up to \$19,000 for vehicles or conversion, up to \$1,000 for residential electric charging stations and \$10,000 for publicly accessible AFV fueling stations) and West Virginia (35 percent of the purchase cost and 50 percent of the conversion cost, up to \$25,000 for the heaviest vehicles);
- Though now expired, Utah's program offered very specific credits based on vehicle or equipment type. For example, plug-in hybrid vehicles were eligible for \$1,000, while conversion equipment was eligible at 50 percent of the cost up to \$1,500.

Finally, states offer varying carry-forward policies. Oklahoma's carry forward provision (five years) is matched by Oregon and West Virginia. While Kansas allows a credit to be carried forward for three years and Washington DC for two years, several (Colorado, Louisiana, Montana and Utah) do not allow any carry forward. Only New York, which provides unlimited carry forward, has a more generous carry forward policy.

Other distinguishing factors include:

- Oklahoma offers a credit of the lesser of \$2,500 or 50 percent of the cost of property directly related to the compression and delivery of natural gas from a home into a fuel tank of a vehicle propelled by CNG;
- Oklahoma offers the lesser of \$1,500 or 10 percent to second owners if no credit is claimed by the original purchaser;
- In Colorado, the cost of leasing is credited at half the rate;
- Kansas offers an alternative tax credit of 5 percent of the cost of the alternative fuel vehicle, up to \$750. Similarly, Louisiana offers an alternative credit of 7.2 percent of the cost of the vehicle, up to \$1,500;
- Though now expired, Utah covered the purchase of electric motorcycles.

The federal government also offers several grants, tax exemptions and incentives related to alternative fuels. In fact, 17 incentives related to alternative fuels and vehicles, advanced technologies or air quality are currently offered. The Qualified Plug-In Electric Drive Motor Vehicle Tax Credit is most comparable to the State's current program. This incentive makes available a tax credit for the purchase of a new qualified plug-in electric drive motor vehicle that meets the qualification criteria. The minimum credit amount is \$2,500, and the credit may be up to \$7,500, based on the vehicle's traction battery capacity and the gross vehicle weight rating. Interestingly, **the program is structured to phase out as electric vehicle sales increase** – the credit begins to phase out for each manufacturer in the second quarter following the calendar quarter in which a minimum of 200,000 qualified plug-in electric drive vehicles have been sold by that manufacturer in the U.S.²³

²³ Alternative Fuels Data Center. Available at <https://www.afdc.energy.gov/laws/409>.



Benchmarking Program Evaluations

Among the states with comparable incentive programs, two relevant studies have been conducted: a study of the economic impacts of Oregon's Residential and Business Energy Tax Credits in 2007 and 2008, and a 2014 evaluation of Connecticut's Clean Alternative Fuels Tax Credit.

The State of Oregon offers tax credits to residents and businesses that invest in energy conservation and renewable energy projects. The Oregon study²⁴ sought to estimate the economic impact on employment, outputs and wages, as well as revenue in Oregon that resulted from 2007 and 2008 tax credits and the subsequent spending on activity and labor that these credits create. The evaluation compared all impacts against a base case scenario in which the tax credits did not exist and the tax credit funds were spent on other Oregon government programs.

The evaluation found that in 2007, a total of \$4.3 million in claims was paid out for the purchase of more than 2,900 vehicles, resulting in a net annual energy savings of more than \$1.0 million and a net annual CO₂ reduction of 3,910 tons. In 2008, a total of \$4.3 million in claims was again paid out for the purchase of more than 2,900 vehicles; net annual energy savings totaled nearly \$1.0 million, and the net annual CO₂ reduction was 3,833 tons.

Connecticut's Clean Alternative Fuels Tax Incentive (eliminated effective January 1, 2008) provided a tax credit of 10 percent of the difference in cost between the purchase of a vehicle exclusively powered by clean alternative fuel and the MSRP of a comparably-equipped, non-alternative fuel vehicle.

The 2014 program evaluation²⁵ used the full value of the associated investment to calculate the range of activity related to the credit. The evaluators presented four scenarios (0, 20, 50 and 100 percent) to model a range of outcomes, where a given percent times the full investment associated with the credit represents the range of created target activity.

The report also recognized that credits and abatements reduce total State revenue, and offset the increased economic activity resulting from the use of the credits, abatements and exemptions claimed by reducing state government spending by the amount of foregone revenue.

The analysis found that nearly all (96 percent) of the total credits were claimed in the first six years of the program, after which claims declined precipitously. The evaluation also found that the incentive spurred the purchase of more than \$28 million in alternative fuel vehicles, but did not report on the emissions reduction or exact number of vehicles purchased.

²⁴ ECONorthwest, Economic Impacts of Oregon Energy Tax Credit Programs in 2007 and 2008 – Final Report (February 2009).

²⁵ Connecticut Department of Economic and Community Development, An Assessment of Connecticut's Tax Credit and Abatement Programs (September 2014).



Appendices



Appendix A: Comparable State Programs

State	Program Name	For Vehicles Placed in Service On or After	Sunset Date	Credit	Carry Forward
Oklahoma	Clean-Burning Fuel Vehicle Tax Credits	July 1, 1990	December 31, 2019	<ul style="list-style-type: none"> - 45% of the cost of converting vehicles to be propelled by clean burning fuel; or the cost of purchasing a vehicle originally equipped to be propelled by clean burning fuel. If no credit is claimed by prior owner of originally equipped vehicle, credit of lesser of 10% or \$1,500 is available - 75% of the cost of property directly related to the delivery of alternative fuels, such as compression equipment and storage tanks; or a metered-for-fee, public access recharging system for vehicles propelled in whole or part by electricity - The lesser of \$2,500 or 50% of the cost of property directly related to the compression and delivery of natural gas from a home into the fuel tank of a vehicle propelled by CNG 	5 years
Arkansas	Gaseous Fuels Vehicle Rebate Program	Unknown	Expired	<ul style="list-style-type: none"> - 50% of the incremental cost up to \$4,500 - 50% of conversion costs up to \$2,500 - 75% of the cost of natural gas and propane fueling stations 	None
Colorado	Alternative Fuel Tax Credit	January 1, 2012	December 31, 2021	<p>Between 2017 and 2019:</p> <ul style="list-style-type: none"> - Light-duty passenger vehicles eligible for \$5,000 credit on purchase or conversion; \$2,500 on lease - Light-duty trucks eligible for \$7,000 credit on purchase or conversion; \$3,500 on lease - Medium-duty trucks eligible for \$10,000 credit on purchase or conversion; \$5,000 on lease - Heavy-duty trucks eligible for \$20,000 credit on purchase or conversion; \$10,000 on lease 	None
Delaware	Alternative Fuel Vehicle Rebate	November 1, 2016	June 30, 2018	<ul style="list-style-type: none"> - \$3,500 for all-electric vehicles - \$1,500 for plug-in hybrid vehicles and electric vehicles with gasoline range extenders - \$1,500 for dedicated propane or natural gas vehicles - \$1,350 for bi-fuel propane or natural gas vehicles - \$20,000 for dedicated heavy-duty natural gas vehicles 	None



State	Program Name	For Vehicles Placed in Service On or After	Sunset Date	Credit	Carry Forward
Georgia	Commercial Alternative Fuel Vehicle Tax Credit	Unknown	June 30, 2017	<ul style="list-style-type: none"> - Tax credit for new commercial medium-duty or heavy-duty AFVs that operate using at least 90 percent alternative fuel - medium-duty hybrid electric vehicles also qualify - Eligible medium-duty AFVs with a GVWR between 8,500 and 26,001 pounds may qualify for a credit of up to \$12,000 - Heavy-duty AFVs with a GVWR over 26,001 pounds may qualify for a credit of up to \$20,000 	None
Illinois	Alternative Fuel Vehicle and Alternative Fuel Rebates	Unknown	Suspended indefinitely	<ul style="list-style-type: none"> - 80%, up to \$4,000, of the cost of purchasing an AFV - 80%, up to \$4,000, of the cost of converting a conventional vehicle to an AFV using a federally certified conversion - The incremental cost of purchasing alternative fuels 	None
Kansas	AFV and Alternative Fueling Infrastructure Tax Credits	January 1, 1996	None	<ul style="list-style-type: none"> - 40% of the cost of purchasing an AFV or converting a vehicle to alternative fuels; credits are \$2,400 for vehicles less than 10,000 pounds, \$4,000 for vehicles between 10,000 and 26,000 pounds, and \$40,000 for vehicles over 26,000 pounds - Alternatively, tax credit of 5% of the cost of the AFV, up to \$750, is available 	3 years
Louisiana	AFV and Fueling Infrastructure Tax Credit	January 1, 2009	None, extension granted effective July 1, 2018	<ul style="list-style-type: none"> - 36% of the cost of purchasing an AFV or alternative fueling equipment, or converting a vehicle to run on alternative fuels - Alternatively, taxpayer may take credit of 7.2% of the cost of the vehicle, up to \$1,500 	None
Montana	Alternative Fuel Vehicle Conversion Tax Credit	January 1, 2009	None	<ul style="list-style-type: none"> - 50% of the equipment and labor costs of conversion, up to \$500 for vehicles with GVWR less than 10,000 pounds and \$1,000 for vehicles with GVWR more than 10,000 pounds 	None



State	Program Name	For Vehicles Placed in Service On or After	Sunset Date	Credit	Carry Forward
Nebraska	Alternative Fuel Vehicle Rebate	January 4, 2016	When funds are depleted	<ul style="list-style-type: none"> - 50% of the incremental cost of the vehicle compared to the MSRP of the conventional fuel equivalent, up to \$4,500 - For vehicles that do not have a conventional fuel equivalent, the rebate amount is up to \$4,500 per vehicle - 50% of the cost of conversion equipment and installation, up to \$4,500 - Qualified vehicle conversions includes new equipment that is installed in Nebraska by a certified installer to convert a conventional fuel vehicle to operate using a qualified clean-burning motor fuel. These fuels include hydrogen, compressed natural gas and propane 	None
New York	Alternative Fuels and Electric Vehicle Recharging Property Credit	January 1, 2013	December 31, 2017	- The lesser of \$5,000 or 50% of the cost of alternative fuels refueling property or electric vehicle recharging property	Unlimited
Oregon	Residential Energy Tax Credit	January 1, 2006	December 31, 2017	- 50% of the cost of an alternative fuel device (charging station or fuel system), not to exceed \$750	5 Years
Pennsylvania	Alternative Fuel Vehicle Funding	Unknown	250 rebates disbursed or June 30, 2017	- \$1,000 for the incremental cost of the purchase of new AFVs	None
Texas	Clean Vehicle Replacement Vouchers	Unknown	Unknown	- \$3,500 vouchers for the purchase of hybrid electric, battery electric or natural gas vehicles up to three model years old	None
Utah	Clean Fuel Vehicle Tax Credits (Expired)	January 1, 2009	December 31, 2016	<ul style="list-style-type: none"> - \$1,000 for the cost of a qualified plug-in hybrid vehicle - 35% of the cost, up to \$1,500, of an alternative fuel or electric vehicle - \$1,000 for plug-in hybrid and \$1,500 for alternative fuel or electric vehicle leases - 50% of the cost of conversion equipment, up to \$1,500 - \$1,000 for special equipment converted to operating using alternative fuel or electricity - \$750 for the cost of an electric motorcycle 	None



State	Program Name	For Vehicles Placed in Service On or After	Sunset Date	Credit	Carry Forward
	Qualified Heavy-Duty Alternative Fuel Vehicle Tax Credit	Unknown	December 31, 2020	Qualified taxpayers are eligible for a tax credit for the purchase of qualified heavy-duty AFVs as follows: - 2017: \$25,000 - 2018: \$20,000 - 2019: \$18,000 - 2020: \$15,000	None
Washington	Alternative Fuel Tax Exemption	Unknown	July 1, 2019	Sales tax exemption on passenger cars, light-duty trucks and medium-duty passenger vehicles that are dedicated AFVs; applies up to \$32,000 of a vehicle's selling price or total lease payment	None
Washington, DC	AFV Infrastructure and Conversion Tax Credits	January 1, 2014	December 31, 2026	- 50% of the cost, up to \$19,000, to purchase an alternative fuel vehicle or convert a vehicle to alternative fuels - 50% of the equipment and labor costs for the purchase and installation of alternative fuel infrastructure on qualified AFV fueling property; limits are \$1,000 per residential electric charging station and \$10,000 per publicly accessible AFV fueling station	2 Years
West Virginia	Alternative Fuel Motor Vehicle Tax Credit	January 1, 2011	December 31, 2017	- 35% of the cost to purchase an alternative fuel vehicle - 50% of the cost to convert a vehicle to alternative fuels - Limits are \$7,500 for vehicles with GVWR up to 26,000 pounds and \$25,000 for vehicles with GVWR more than 26,000 pounds	5 Years

State of Oklahoma

Incentive Evaluation Commission

Ethanol Fuel Retailer Tax Credit Evaluation

November 13, 2017

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Executive Summary



Overview

The Ethanol Fuel Retailer Tax Credit was created to help increase the sale of ethanol blended gasoline. Established in 2006, it is a \$0.016 credit for each gallon of ethanol contained in gasoline sold by a retailer.¹ In order to receive the credit, the retailer must reduce the price of the ethanol sold by the amount of the credit, providing the cost savings to the purchaser, thereby making ethanol more financially attractive to consumers.

While there is some evidence that the credit had some initial effect on increasing the use of ethanol, there is little evidence that the incentive continues to ‘grow the base’ of those using ethanol blended fuels. Even if this is the case, Oklahoma is not a major corn producing state (which is used to produce ethanol), nor does it have ethanol production facilities. Given the debatable evidence regarding ethanol’s environmental and economic impact,² and the state’s significant oil and gas industry, there is little reason to provide an incentive for the use of ethanol blended rather than regular gasoline.

In fact, given the incentive’s construction (where the credit must be passed along to the consumer), it is an open question as to whether this credit qualifies as an incentive under the definition in HB2182, which created the incentive review process. That bill notes that an incentive “means a tax credit, tax exemption, tax deduction, tax expenditure, rebate, grant, or loan that is **intended to encourage businesses to locate, expand, invest, or remain in Oklahoma, or to hire or retain employees in Oklahoma**’ (*emphasis added*). This incentive appears to be targeted at consumers, not businesses, and under any measure of encouraging businesses to expand/invest/remain in the State or hire or retain employees, the evidence around this incentive is lacking.

Recommendation: Based on its analysis of available data, the project team recommends repealing the Ethanol Fuel Retailer Tax Credit.

Key Findings

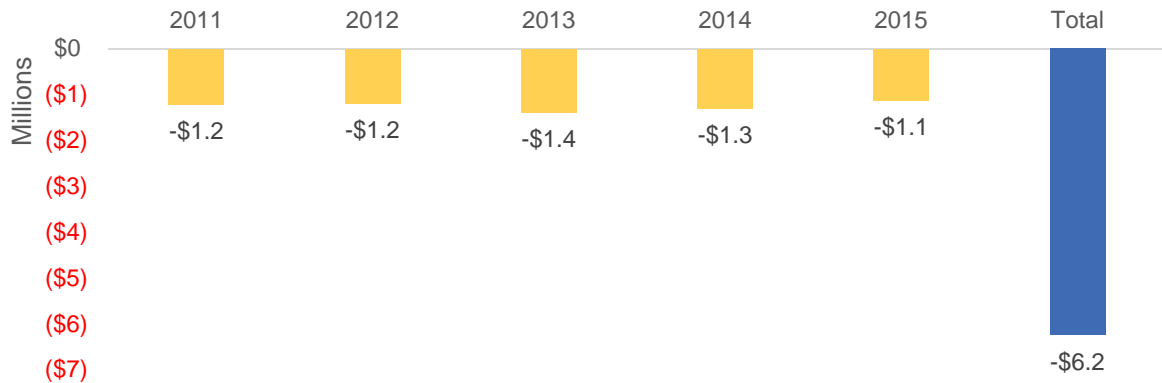
- **Consumption of ethanol in Oklahoma has increased significantly, while consumption of gasoline has flattened.** Between the incentive’s introduction in 2006 and 2015, consumption of ethanol blended gasoline increased by a CAGR of 16.4 percent, while consumption of regular gasoline decreased by a CAGR of -0.3 percent.
- **Previously lagging the nation, per capita ethanol consumption in Oklahoma now mirrors the U.S., but its per capita gasoline consumption continues to exceed the national average.** Per capita consumption of fuel ethanol has increased significantly since the program’s inception, but gasoline consumption per capita has been higher than the U.S. average for at least the last decade.
- **The return on investment (ROI) for this program is negative.** Based on the economic and fiscal impact analysis, it appears the annual incentives offered under this program exceed the tax revenue generated by additional household spending by Oklahoma residents. The net impact to the State is estimated to be -\$6.2 million between 2011 and 2015.

¹ Ethanol means a blend of gasoline and ethyl alcohol consisting of not more than fifteen percent ethyl alcohol by volume.

² The effect that increased ethanol use has on net CO2 emissions depends on how ethanol is made and whether or not indirect impacts on land are included in the calculations. Additionally, some believe the resources used to grow biofuel crops would be better used growing food crops. See, for example, the U.S. Energy Information Administration discussion at https://www.eia.gov/energyexplained/index.cfm?page=biofuel_ethanol_environment.



Figure 1: Net Fiscal Impact³



- **Oklahoma's program is not as robust as other states' incentives.** Oklahoma's program inherently incentivizes selling gasoline with higher blends of ethanol, but State law limits blending to 15 percent ethanol. Additionally, Oklahoma's program is not based upon meeting a threshold of ethanol as a percentage of total fuel sales, a measure that further incentivizes ethanol sales. Finally, Oklahoma is the only state to require that the benefit be passed to the consumer.
- **The program does not provide specific financial protections – but the State is unlikely to be at risk of significant increases.** Currently there are no controls or caps built into the program to limit the fiscal impact on the State. However, it appears unlikely that the credits claimed will increase significantly. In fact, given that the credit is passed along directly to the consumer, retailers do not have an added incentive to increase ethanol sales at their stores in order to receive refunds that exceed their investments.
- **Reporting and administrative issues exist.** Applications must be submitted on a location-by-location basis, as opposed to a retailer-by-retailer basis. Additionally, there is no requirement regarding the frequency of submissions. As a result, large retailers regularly submit hundreds of applications in a given month (many for less than \$100). Finally, there is no specific reporting requirement associated with this credit. As a result, the only information available for determining its use (or potential financial impact going forward) is from submitted applications.

Changes to Improve Future Evaluations (if the Program is Retained)

- **Recommendation 1: Reconfigure the tax credit application process.** Currently, a retailer must submit a refund application for each location, increasing the administrative burden for OTC staff as well as companies with multiple locations. Allowing each company to submit a single application across all locations, along with the required supporting documentation, should result in reduced administrative burden for both the State and retailers.

³ Net fiscal impact is defined as the total tax revenue generated minus the annual credits claimed.



Key Findings and Recommendations



Overall Recommendation: Based on its analysis of available data, the project team recommends repealing the Ethanol Fuel Retailer Tax Credit.

Key Findings

The following analyzes the incentive based on the evaluation criteria:

- **Consumption of ethanol in Oklahoma has increased significantly while consumption of gasoline has flattened.** Between the incentive's introduction in 2006 and 2015, consumption of ethanol increased by a CAGR of 16.4 percent, while consumption of motor gasoline decreased by a CAGR of -0.3 percent. Of course, many factors may have contributed to the increase in ethanol sales and flattening of gasoline consumption. For example, the price of gasoline has varied widely over the past ten years – a factor that may have influenced fuel type used as well as the amount of miles drivers were logging. Additionally, increases in fuel efficiency require fewer gallons of fuel to drive the same distance.
- **Per capita ethanol consumption in Oklahoma mirrors the U.S., while its per capita gasoline consumption exceeds the national average.** In 2005 and 2006, prior to the establishment of the ethanol retailer credit, per capita consumption of fuel ethanol lagged the U.S. average. However, in 2008, when the program began processing credits, the Oklahoma average increased significantly (43.8 gallons), exceeding the U.S. average (31.9). Since then, with the flattening out of Oklahoma's consumption trends, the state has generally been in alignment with U.S. totals – and in 2014 and 2015, exceeded U.S. per capita consumption. Despite the increase in ethanol consumption in the State, Oklahoma's gasoline consumption per capita has been higher than the U.S. average for at least the last decade.
- **The value of the incentive must be passed along to the consumer and appears more intended to increase ethanol consumption than grow an industry or create jobs in the State.** It is an open question as to whether this credit qualifies as an incentive under the definition in HB2182, which created the incentive review process. That bill notes that an incentive “means a tax credit, tax exemption, tax deduction, tax expenditure, rebate, grant, or loan that is **intended to encourage businesses to locate, expand, invest, or remain in Oklahoma, or to hire or retain employees in Oklahoma**” (*emphasis added*). This incentive appears to be targeted at consumers, not businesses, and under any measure of encouraging businesses to expand/invest/remain in the State or hire or retain employees, the evidence around this incentive doing so is lacking.

Other Findings

- **The return on investment (ROI) for this program is negative.** Based on the economic and fiscal impact analysis, it appears the annual incentives offered under this program exceed the tax revenue generated by additional household spending by Oklahoma residents. The net impact to the State is estimated to be -\$6.2 million between 2011 and 2015.
- **The program does not provide adequate protections – but the State is unlikely at risk of significant increases.** One of the statutory requirements 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.”



Currently there are no controls or caps built into the program to limit the fiscal impact of the incentive on the State. However, it appears unlikely that the credits claimed will increase significantly. In fact, given that the credit is passed along directly to the consumer, retailers do not currently have an added incentive to increase ethanol sales at their stores in order to receive refunds that exceed their investments.

- **Oklahoma's program is structured differently than other states' ethanol incentives.** Oklahoma's program inherently incentivizes selling gasoline with higher blends of ethanol, but State law limits blending to 15 percent ethanol. Additionally, Oklahoma's program is not based upon meeting a threshold of ethanol as a percentage of total fuel sales, a measure that further incentivizes ethanol sales. Finally, Oklahoma is the only state to require the benefit be passed to the consumer.
- **There are significant reporting and administrative issues that should be addressed.** Applications must be submitted on a location-by-location basis, as opposed to a retailer-by-retailer basis. Additionally, there is no requirement regarding the frequency of submissions. As a result, large retailers regularly submit hundreds of applications in a given month (many for less than \$100). Finally, there is no specific reporting requirement associated with this credit. As a result, the only information available for determining its use (or potential financial impact going forward) is from submitted applications.

Changes to Improve Future Evaluations (if the Program is Retained)

The project team recommends repealing the Ethanol Fuel Retailer Tax Credit. Should the program be retained, the project team provides the following recommendations to improve future evaluations.

- **Recommendation 1: Reconfigure the tax credit application process.** Currently, a retailer must submit a refund application for each location, increasing the administrative burden for OTC staff as well as companies with multiple locations. Allowing each company to submit a single application across all locations, along with the required supporting documentation, would presumably result in reduced administrative burden for both the State and retailers.



Introduction



Overview

In 2015, HB2182 established the Oklahoma Incentive Evaluation Commission (the Commission). 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 first set of 11 evaluations were conducted in 2016.

The Ethanol Fuel Retailer Tax Credit is one of 12 incentives scheduled for review by the Commission in 2017. Based on this evaluation and their collective judgement, the Commission will make recommendations to the Governor and the State Legislature related to this incentive.

Industry and Incentive Background

The Ethanol Fuel Retailer Tax Credit was created to help increase ethanol sales for Oklahoma ethanol retailers. Established in 2006, it is a \$0.016 credit for each gallon of ethanol contained in gasoline sold by a retailer.⁴ In order to receive the credit, the retailer must reduce the price of the ethanol sold by the amount of the credit, providing the cost savings to the purchaser, thereby making ethanol more financially attractive to consumers.

Oklahoma does not produce fuel ethanol or biomass inputs (feedstock) for the production of fuel ethanol. Because the state is not a producer of ethanol, the credit is not associated with the creation of jobs or support of a significant component of the state agricultural industry. As a result, it does not align with most incentives that are under review by the Incentive Evaluation Commission. HB2182 noted that incentives for review were defined as “a tax credit, tax exemption, tax deduction, tax expenditure, rebate, grant, or loan that is intended to encourage businesses to locate, expand, invest, or remain in Oklahoma, or to hire or retain employees in Oklahoma.” This incentive appears to be targeted at consumers, not businesses. There is no real ethanol business in Oklahoma (either in terms of providing raw materials or its production), and under any measure of encouraging businesses to expand/invest/remain in the State or hire or retain employees, the evidence around this incentive is lacking.

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

- Change in production and consumption of blended versus non-blended fuel;
- Change in production and consumption of blended versus non-blended fuel relative to other states.

The ethanol industry within Oklahoma is relatively small. While many incentive programs are focused on increasing jobs and investment in an existing Oklahoma industry (or, in cases where it makes sense, creating a new one), that opportunity is not present in Oklahoma.

As a result, the criteria focus on specific objectives related to this program (increased production and consumption of blended fuel). 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 criterion for evaluation (State return on investment). These will be discussed throughout the balance of the evaluation.

⁴ Ethanol means a blend of gasoline and ethyl alcohol consisting of not more than fifteen percent ethyl alcohol by volume.



Industry Background



U.S. Ethanol Background and History

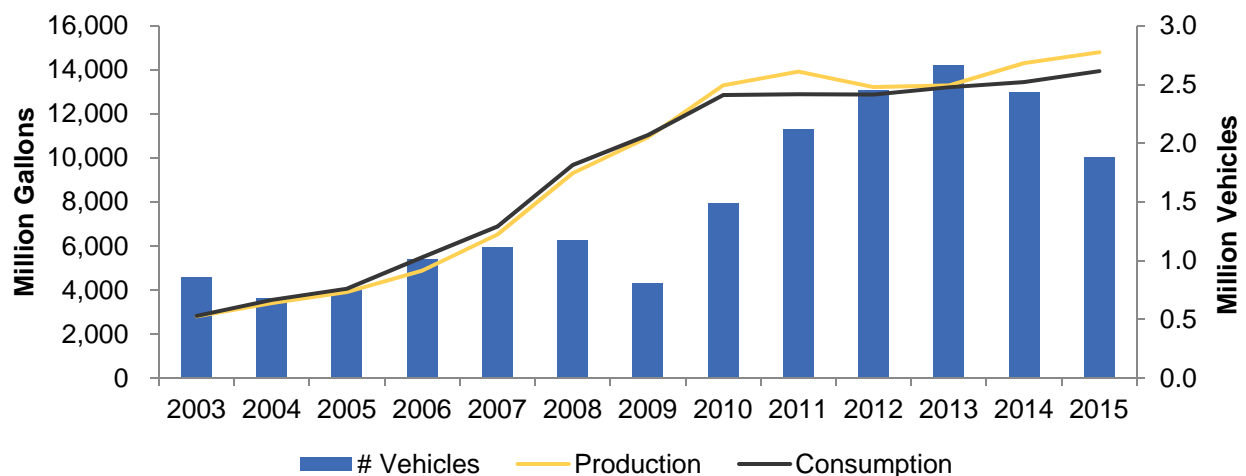
Under the Energy Policy Act of 2005, Congress enacted the Renewable Fuel Standard (RFS) Program, a national policy that requires a certain volume of renewable fuel to replace or reduce the quantity of petroleum-based transportation fuel, heating oil or jet fuel. The Energy Independence and Security Act of 2007 established a goal of 36 billion gallons of renewable fuel produced in the U.S. by 2022.

As part of its requirements, each renewable fuel category in the RFS program (cellulosic biofuel, biomass-based diesel, advanced biofuel and conventional biofuel) must emit lower levels of greenhouse gases (GHGs) than the petroleum fuel it replaces.⁵

The RFS category of conventional biofuel typically refers to ethanol derived from corn starch. The most common blend of ethanol is E10, which consists of 10 percent ethanol and 90 percent gasoline. E15 is also available, which is defined by the Environmental Protection Agency as a blend of between 10.5 and 15.0 percent ethanol with gasoline. E15 is an approved ethanol blend for use in model year 2001 and newer light-duty conventional gas vehicles.⁶ Ethanol is also available as E85 – a blend containing between 51 and 83 percent ethanol depending on season and geography – for use in flexible fuel vehicles.

Since 2003, the number of E85 vehicles in the U.S. has more than doubled, growing by an average of 6.7 percent annually, as shown in [Figure 2](#).

Figure 2: U.S. Fuel Ethanol Production and Consumption and E85 Vehicles, 2003-2015



Source: EIA Fuel Ethanol Overview and Yearly E85 Totals

The use of ethanol to supplement gasoline is widespread. More than 97 percent of gasoline in the U.S. contains some ethanol to oxygenate the fuel and reduce air pollution. E85 fuel can be found at many gas stations (2,905 across the U.S. and 27 in Oklahoma as of April 20, 2017⁷). In 2015, about 14 billion gallons of ethanol were added to the gasoline consumed in the United States.⁸ While the percentage is rising, ethanol still makes up a small percentage of the content of finished gasoline.

⁵ U.S. Department of Energy Alternative Fuels Data Center. Available at <http://www.afdc.energy.gov/laws/RFS>.

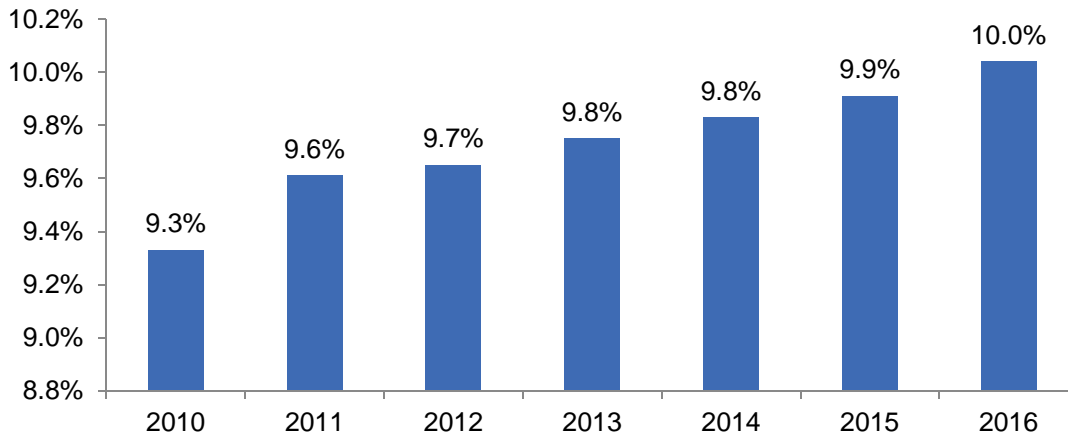
⁶ U.S. Department of Energy Alternative Fuels Data Center. Available at <http://www.afdc.energy.gov/fuels/ethanol.html>.

⁷ Stations selling E85. 2 of those stations offer mid-level blends. Source: http://www.afdc.energy.gov/fuels/ethanol_locations.html.

⁸ U.S. Energy Information Administration. Available at https://www.eia.gov/energyexplained/print.cfm?page=biofuel_ethanol_home.



Figure 3: Annual U.S. Average Ethanol Content of Finished Gasoline, 2010-2016



Source: EIA

U.S. Ethanol Industry Outlook

Through the first six months of 2017, U.S. weekly ethanol production averaged 1.02 million barrels per day (b/d), an increase of 5 percent over the same period in 2016. On a weekly basis, U.S. ethanol production set a record of 1.06 million b/d in the week of January 27, 2017, and it has averaged near or above 1.00 million b/d in nearly every week of 2017. If ethanol production remains relatively high through the second half of the year, as EIA's *Short-Term Energy Outlook* (STEO) expects, 2017 will set a new record for annual fuel ethanol production.⁹ However, as previously noted, Oklahoma is not a producer of ethanol.

Oklahoma Ethanol Industry

While Oklahoma is not a producer of ethanol, it ranks in the middle among states in ethanol consumption. According to the EIA, the state was responsible for the consumption of 4.1 million barrels of fuel ethanol in 2014, equal to one percent of the national total and ranking 28th among all states and 24th on a per capita basis. Unlike gasoline, Oklahoma is not a major provider of the raw materials that go into ethanol or an ethanol producer. The primary raw material for producing ethanol in the U.S. is corn, and Oklahoma is a relatively minor corn producing state. In 2016, according to the U.S. Department of Agriculture, total corn for grain harvested in the U.S. totaled over 15.2 billion bushels. Five states (Iowa, Illinois, Indiana, Minnesota and Nebraska) each produced over 1 billion bushels and collectively combined for over 9.2 billion bushels. By contrast, Oklahoma ranked 27th among the states in corn production, with a total of 47 million bushels – which is three-tenths of one percent of U.S. production.¹⁰ Besides being a minor corn producer, Oklahoma has no ethanol refineries.¹¹ By contrast, Oklahoma has four operating petroleum refineries with a crude oil distillation capacity of 511,000 barrels per day.¹²

⁹ U.S. EIA – U.S. Fuel Ethanol Production Continues to Grow in 2017. July 21, 2017. Available at <https://www.eia.gov/todayinenergy/detail.php?id=32152>.

¹⁰ USDA, National Agriculture Statistics Service, 'Crop Production (August 2016)' p. 5.

¹¹ Renewable Fuels Association 2017 Ethanol Outlook.

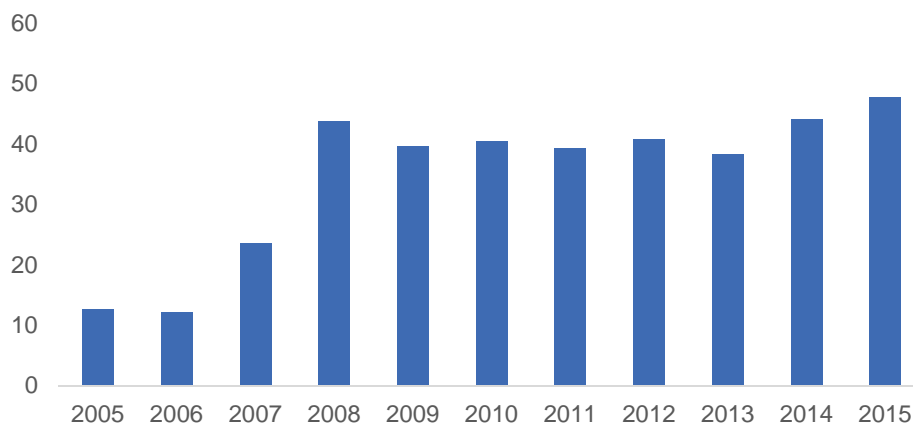
¹² U.S. EIA, accessed electronically at https://www.eia.gov/dnav/pet/pet_pnp_cap1_dcu_SOK_a.htm.



Oklahoma Ethanol and Gasoline Consumption

Since the credit was implemented in 2006, Oklahoma ethanol consumption has increased significantly. As shown in the following figure, in 2006, Oklahomans consumed an average of 12.2 gallons per capita. In 2007, that figure nearly doubled, reaching 23.6 gallons per capita. In 2008 (the year the first credit was claimed), statewide consumption nearly doubled again, averaging 43.8 gallons per capita. Since that time, consumption has remained relatively stable in that range (38-47 gallons annually per capita) – and between when the incentive was introduced in 2006 and 2015, consumption of ethanol increased by a compound annual growth rate (CAGR) of 16.4 percent.

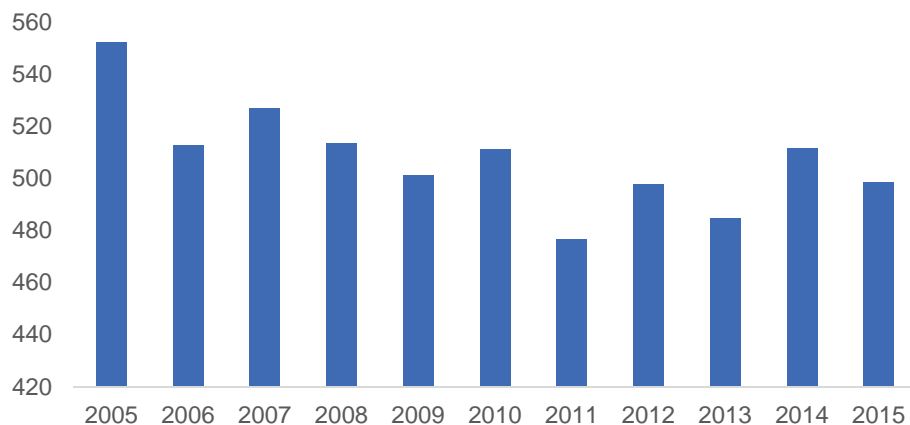
Figure 4: Oklahoma Fuel Ethanol Consumption (gallons per capita), 2005-2015



Source: EIA State Profiles and Energy Estimates, American Community Survey 1-Year Estimates

During the same time frame, consumption of gasoline has stagnated. As shown in the following figure, in 2006, per capita consumption of gasoline was 513 gallons. Since that time, consumption has remained between 477 and 527 gallons per capita – and between when the ethanol retailer incentive was introduced in 2006 and 2015, consumption of motor gasoline decreased by a CAGR of -0.3 percent.

Figure 5: Oklahoma Motor Gasoline Consumption (gallons per capita), 2005-2015



Source: EIA State Profiles and Energy Estimates, American Community Survey 1-Year Estimates

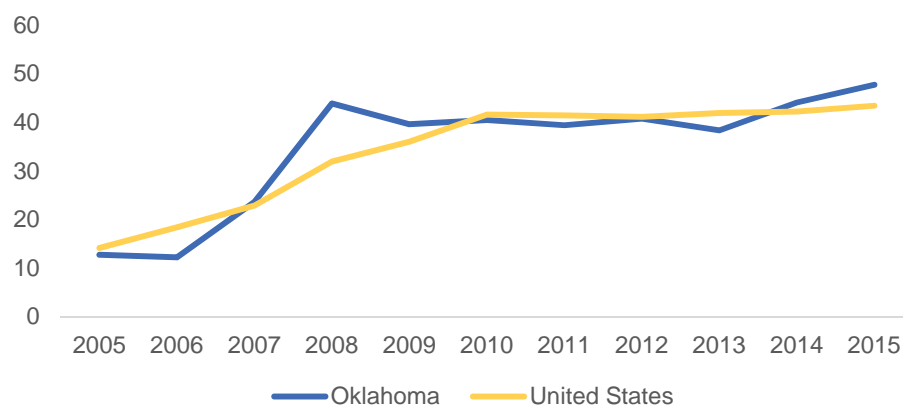


Of course, many factors may have contributed to the increase in ethanol sales and flattening of gasoline consumption. For example, the price of gasoline has varied widely over the past 10 years – a factor that may have influenced fuel type used as well as the amount of miles drivers were logging. Additionally, increases in fuel efficiency require fewer gallons of fuel to drive the same distance.

Oklahoma Ethanol and Gasoline Consumption Relative to Other States

In 2005 and 2006, prior to the establishment of the ethanol retailer credit, per capita consumption of fuel ethanol lagged the United States average. However, in 2008, when the program began processing credits, the Oklahoma average increased significantly (43.8 gallons), exceeding the U.S. average (31.9). Since then, with the flattening out of Oklahoma's consumption trends, the state has generally been in alignment with U.S. totals – and in 2014 and 2015, exceeded U.S. per capita consumption.

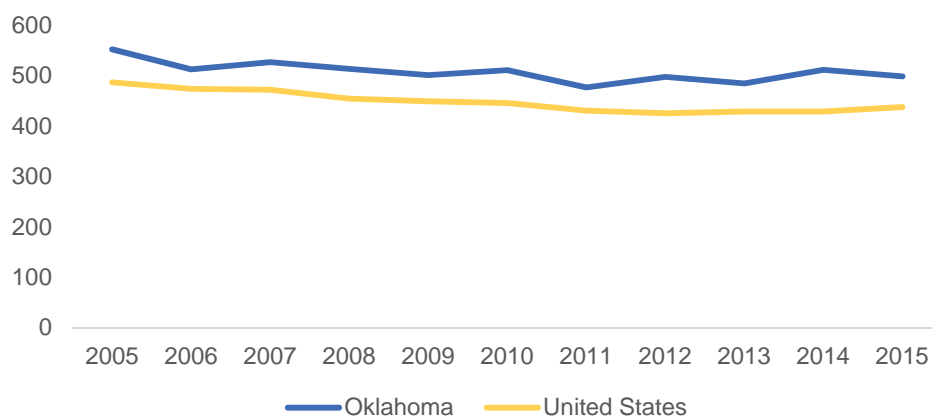
Figure 6: Fuel Ethanol Consumption (gallons per capita), 2005-2015



Source: EIA State Profiles and Energy Estimates, American Community Survey 1-Year Estimates

Despite the increase in ethanol consumption in the state, Oklahoma's gasoline consumption per capita has been higher than the U.S. average for at least the last decade.

Figure 7: Motor Gasoline Consumption (gallons per capita), 2005-2015



Source: EIA State Profiles and Energy Estimates, American Community Survey 1-Year Estimates



Incentive Usage and Administration



Incentive Characteristics

Oklahoma's Ethanol Fuel Retailer Tax Credit, established in 2006, is a \$0.016 credit for each gallon of ethanol contained in gasoline sold by a retailer.¹³ In order to receive the credit, the dealer must reduce the price of the ethanol sold by the amount of the credit, providing the cost savings to the purchaser, thereby making ethanol more financially attractive to consumers. It is an open question, of course, whether this level of incentive (which, at current gasoline prices translates into a benefit of less than one-tenth of one percent of the purchase price) is effectively incenting consumer behavior.¹⁴

Historic Use of the Credit

Use of the Ethanol Fuel Retailer credit has fluctuated over time; while the number of companies claiming the credit decreased by a CAGR of -4.4 percent between 2008 and 2016, the total credits claimed have increased by a CAGR of 3.0 percent. This implies that the average credit claimed per company is increasing – and this is supported by the data, which shows that the average claim per company increased by a CAGR of 7.8 percent during the time frame.

Table 1: Ethanol Fuel Retailer Tax Credit Claims, 2008-2016

Year	Number of Companies	Amount of Credits Used/Claimed	Average Claim/ Company
2008	46	\$927,050	\$20,153
2009	48	\$885,825	\$18,455
2010	45	\$1,128,537	\$25,079
2011	43	\$1,246,588	\$28,990
2012	40	\$1,226,997	\$30,675
2013	41	\$1,424,302	\$34,739
2014	52	\$1,352,461	\$26,009
2015	41	\$1,163,215	\$28,371
2016	32	\$1,176,110	\$36,753

Source: OTC data

The tax expenditures associated with this credit are relatively small, averaging approximately \$1.2 million annually since the first credits were claimed in 2008. Total claims peaked in 2013 at \$1.4 million but have since flattened, with totals nearly unchanged from 2015 to 2016. Between January 1 and September 6, 2017, 47 companies have submitted more than 2,800 claims totaling \$1.1 million.¹⁵

While the number of companies claiming the credit decreased by a CAGR of -4.4 percent between 2008 and 2016, the total credits claimed have increased by a CAGR of 3.0 percent – resulting in an increase in the average aggregate credit per company over time. The following table illustrates the history of the claims since 2008.

¹³ Ethanol means a blend of gasoline and ethyl alcohol consisting of not more than fifteen percent ethyl alcohol by volume.

¹⁴ If the federal government mandates the use of reformulated fuel in an area within the State in nonattainment with the National Ambient Air Quality Standards, the credit does not apply. Currently, there are no areas within Oklahoma in nonattainment areas.

¹⁵ 2017 is not included in the table or chart because it represents a partial year.



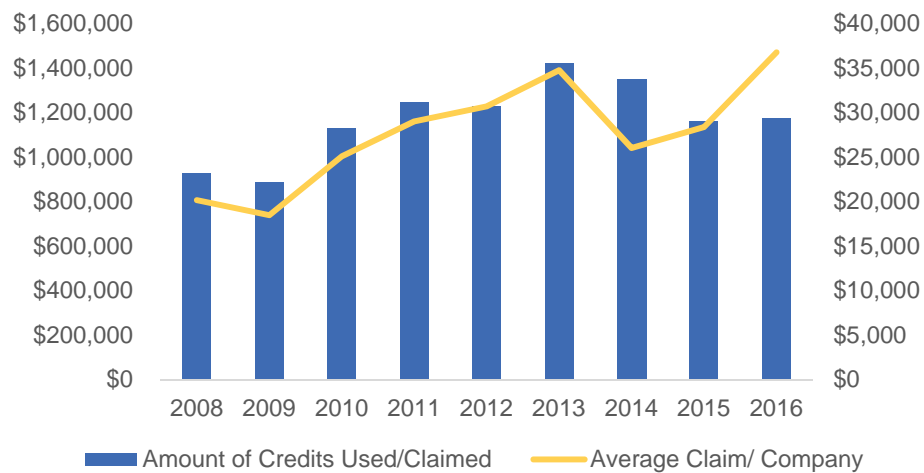
Table 2: Ethanol Fuel Retailer Claims, 2008-2016

Year	Number of Companies	Amount of Credits Used/Claimed	Total Gallons	Average Claim/ Company	Median Claim/ Company	Largest Company Claim	Smallest Company Claim
2008	46	\$927,050	58,368,632	\$20,153	\$884	\$396,466	\$46
2009	48	\$885,825	56,436,869	\$18,455	\$831	\$367,404	\$71
2010	45	\$1,128,537	71,336,708	\$25,079	\$1,979	\$350,083	\$31
2011	43	\$1,246,588	78,322,644	\$28,990	\$1,616	\$427,759	\$46
2012	40	\$1,226,997	92,907,118	\$30,675	\$3,602	\$418,431	\$14
2013	41	\$1,424,302	89,927,939	\$34,739	\$4,395	\$387,834	\$29
2014	52	\$1,352,461	85,982,427	\$26,009	\$2,521	\$499,279	\$1
2015	41	\$1,163,215	71,842,682	\$28,371	\$3,143	\$405,554	\$16
2016	32	\$1,176,110	74,446,254	\$36,753	\$3,401	\$499,946	\$371
Avg	43	\$1,170,121	75,507,919	\$27,692	\$2,486	\$416,973	\$69

Source: OTC data

While trends in the total credits claimed annually have generally aligned with trends in the average claim per company, in 2016, the average claim per company increased by 30 percent while the total claims were flat, increasing by just 1 percent. This is primarily due to a decline in the number of companies submitting claims, which dropped from 41 in 2015 to 32 in 2016.

Figure 8: Total Ethanol Fuel Retailer Credits and Average Claim per Company, 2008-2016



Source: OTC data

Incentive Administration

The program is administered by the Oklahoma Tax Commission (OTC). There are essentially two components to overall program administration:

1. **Eligibility.** The credit is available to retail dealers who sell fuel grade ethanol (a blend of gasoline and not more than 15 percent ethanol by volume) and who provide the same cost savings to consumers.



The incentive is effective unless the federal government mandates the use of reformulated fuel in an area within the state that is in non-attainment with the National Ambient Air Quality Standards; there are currently no such areas in Oklahoma.

2. **Determining the Credit.** The retail dealer claims the credit by filing Form 130-35, Application for Refund of Ethanol Credit for Retail Dealers. The completed form is remitted to the Account Maintenance Division, Credit and Refunds Section of the OTC for review and processing.

As part of the application process, the retail dealer must provide total gallons of ethanol purchased. That amount is multiplied by the blend percentage (E10 is 10 percent, E15 is 15 percent, etc.). That figure is used to calculate total gallons to be refunded, which is then multiplied by \$0.016 in order to generate a total refund.

To verify claims, OTC employees generally spot-check applications, ensuring applicants are motor fuel licensees and checking the math found in the application. In the event that errors or questions arise, staff follow up with claimants to correct applications before refunds are issued. The OTC has 20 days from the receipt of an application to refund the amount of the credit.

It is notable that applications must be submitted on a location-by-location basis, as opposed to a retailer-by-retailer basis. Additionally, there is no requirement regarding the frequency of submissions. As a result, large retailers regularly submit hundreds of applications in a given month (many for less than \$100). The following table displays the average claims submitted per month since 2008. The average monthly claims increased annually between 2008 (132) and 2013 (401), but has decreased each year since.

Table 3: Average Monthly Claims, 2008-2016

Year	Total Claims	Avg. Monthly Claims
2008	1,578	132
2009	2,230	186
2010	3,268	272
2011	4,304	359
2012	4,624	385
2013	4,809	401
2014	4,783	399
2015	4,235	353
2016	3,864	322

Source: OTC data

Reporting Issues

There is no specific reporting requirement associated with this credit. As a result, the only information available for determining its use (or potential financial impact going forward) is from applications submitted by retailers.



Economic and Fiscal 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 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 9: 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).¹⁶ Two datasets were used to derive the ratio: 1) U.S. Department of Commerce Bureau of Economic

¹⁶ Gross State Product (GSP) is the state counterpart of Gross Domestic Product (GDP) for the nation. To assist the reader, the project team has decided to use GDP throughout this section of the report instead of mixing the two terms. This decision was made because more people are familiar with the term GDP.



Analysis GDP estimates by state;¹⁷ and 2) the OTC's *Annual Report of the Oklahoma Tax Commission*.¹⁸ Over the past 10 years, the state tax revenue as a percent of state GDP was 5.5 percent.

Table 4: State of Oklahoma Tax Revenue as a Percent of State GDP

Year	Oklahoma Tax Revenue ¹⁹	Oklahoma GDP	Ratio
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%
2015-16	\$8,963,894,053	\$182,937,000,000	4.9%

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

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.

To estimate State of Oklahoma tax revenue generated in a given year, the project team multiplied the total value added figure produced by the IMPLAN model by the corresponding annual ratio (about 5.0 percent). For example, if the total value added was \$1,000,000, then the estimated State of Oklahoma tax revenue was \$50,000 (\$1,000,000 x 5.0 percent).

Impact of Ethanol Fuel Retailer Incentives

The State of Oklahoma ethanol fuel retailer tax credit is directly passed along to the consumer. As a result, consumers have more disposable income that can be spent elsewhere in Oklahoma or invested in savings accounts. Assuming Oklahoma residents spend these savings elsewhere, this generates additional economic

¹⁷ U.S. Department of Commerce Bureau of Economic Analysis. Available at <http://www.bea.gov/regional/>.

¹⁸ Oklahoma Tax Commission. Available at https://www.ok.gov/tax/Forms_&_Publications/Publications/Annual_Reports/index.html.

¹⁹ Gross collections from state-levied taxes, licenses and fees, exclusive of city/county sales and use taxes and county lodging taxes.



activity that has a positive impact on the state. These total expenditures (also referred to as “economic activity”) are not the same as the 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.

To evaluate the economic impact of the ethanol fuel retailer tax credit, it was assumed Oklahoma residents spend these savings elsewhere in the economy less an estimated savings rate of 8 percent. The IMPLAN Institutional Sector Households \$40 to \$50K was used to model the economic impact. The model takes in to account “leakages” in the economy as well as retail margining. Therefore, the amount saved by consumers from the tax credit is not equal to the direct economic activity used in the econometric model. The following tables depict the statewide annual impact of how the ethanol fuel retailer tax credit ripples through the economy.

Table 5: Impact of Ethanol Fuel Retailer Incentives

Year		Output	Value Added	Labor Income	Employment	Estimated Oklahoma Tax Revenue
2011	Direct Effect	\$638,046	\$355,648	\$196,507	5	
	Indirect Effect	\$259,619	\$133,715	\$80,108	2	
	Induced Effect	\$212,440	\$116,339	\$65,820	2	
	Total Effect	\$1,110,105	\$605,702	\$342,435	9	\$31,497
2012	Direct Effect	\$650,440	\$362,199	\$200,126	5	
	Indirect Effect	\$262,307	\$136,178	\$81,584	2	
	Induced Effect	\$216,239	\$118,482	\$67,032	2	
	Total Effect	\$1,128,986	\$616,859	\$348,742	9	\$30,843
2013	Direct Effect	\$661,921	\$368,048	\$203,358	5	
	Indirect Effect	\$268,156	\$138,377	\$82,901	2	
	Induced Effect	\$220,362	\$120,395	\$68,115	2	
	Total Effect	\$1,150,439	\$626,820	\$354,374	9	\$31,523
2014	Direct Effect	\$808,229	\$448,976	\$248,073	6	
	Indirect Effect	\$328,463	\$168,805	\$101,130	2	
	Induced Effect	\$269,308	\$146,869	\$83,092	2	
	Total Effect	\$1,406,000	\$764,650	\$432,295	10	\$41,291
2015	Direct Effect	\$698,839	\$390,304	\$215,655	5	
	Indirect Effect	\$284,513	\$146,745	\$87,914	2	
	Induced Effect	\$232,962	\$127,676	\$72,234	2	
	Total Effect	\$1,216,314	\$664,725	\$375,803	9	\$32,572

Source: TXP, Inc. IMPLAN analysis output, September 2017



Table 6: Annual Tax Revenue Generated, 2011-2015

Year	Credit Established During Current Tax Year	Estimated State of OK Tax Revenue	Net Impact
2011	\$1,246,588	\$31,497	(\$1,215,092)
2012	\$1,226,997	\$30,843	(\$1,196,154)
2013	\$1,424,302	\$31,523	(\$1,392,779)
2014	\$1,352,461	\$41,291	(\$1,311,170)
2015	\$1,163,215	\$32,572	(\$1,130,644)
Total	\$6,413,564	\$167,725	(\$6,245,839)

Source: TXP, Inc. IMPLAN analysis output, September 2017

As depicted in the preceding tables, increased household spending based on the ethanol fuel retailer tax credit supports approximately 10 total jobs each year. Multiplying the total value added figure produced by the IMPLAN model by the corresponding annual tax ratio provides an estimate for total annual State tax revenue. Over the past 5 years, the savings passed along to consumers from the ethanol fuel retailer tax credit (through direct, indirect and induced effects) has generated approximately \$167,725 in state tax revenue. Over this same period, the state has provided \$6.4 million in tax credits. Each year, the state's return on investment (ROI) is a loss of approximately \$1.2 million – equal to a net loss of \$6.2 million between 2011 and 2015. In some cost-benefit analyses, the environmental implications of energy policies or programs are monetized. This evaluation, however, focused more narrowly on ROI.



Incentive Benchmarking

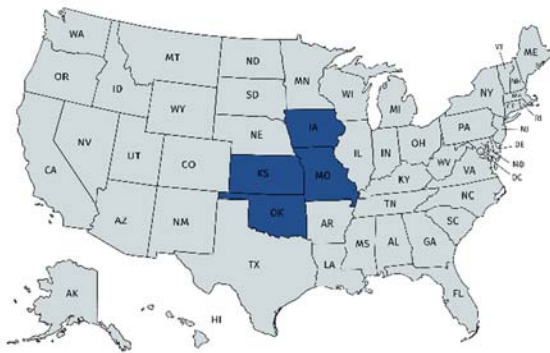


Benchmarking

A detailed description of comparable state programs can be found in **Appendix A**.

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.²⁰ 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.

Figure 10: States Offering Ethanol Fuel Retailer Incentives



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.

In the case of ethanol fuel retailer tax credits, there are only three other states offering or proposing comparable incentives (Iowa, Kansas and Missouri – which proposed but ultimately did not enact a program). All three states are in relatively close proximity to Oklahoma, as shown in [Figure 10](#).

10.

Oklahoma’s credit is based on gallons of pure ethanol sold. With the exception of Iowa’s Ethanol Promotion Tax Credit, all other comparable incentives are based upon gallons of blended gasoline sold. Oklahoma’s program inherently incentivizes selling gasoline with higher blends of ethanol, but State law limits blending to 15 percent ethanol. Additionally, as previously discussed, Oklahoma’s program is not based upon meeting a threshold of ethanol as a percentage of total fuel sales, a measure that further incentivizes ethanol sales.

Of the three states offering comparable incentives, Iowa’s is by far the most comprehensive. In its current state, the program offers three separate incentives:

- **Ethanol Promotion Tax Credit:** Credit is based on meeting a threshold (17 or 21 percent in 2017²¹) of renewable fuel as a percentage of total fuel sales; a reduced credit can be earned by retailers within 4 percent of meeting target
- **E85 Gasoline Promotion Tax Credit:** A credit of \$0.16 per gallon of blended fuel sold in calendar years 2012 through 2017
- **E15 Plus Gasoline Promotion Tax Credit:** For every gallon of ethanol-blended gasoline sold, a credit of between \$0.03 and \$0.10 (depending on season) is available

²⁰ The primary instances of exactly alike state incentive programs occur when states choose to ‘piggyback’ onto federal programs.

²¹ 2017 threshold is 21 percent for retailers selling 200,000 or more gallons of fuel or 17 percent for retailers selling fewer than 200,000 gallons.



Similar to Iowa's Ethanol Promotion Tax Credit, Kansas' Renewable Fuel Retailer Tax Credit is based on meeting a threshold of renewable fuel as a percentage of total sales (increasing from 10 percent in 2009 to 25 percent by 2024). The credit is \$0.065 if the percentage is met; a reduced incentive of \$0.045 per gallon is available if the threshold is missed by 2 percent or less. This program is unfunded through June 30, 2018.

Though ultimately not enacted, the State of Missouri proposed an Ethanol-Blended Fuel Tax Credit that, as with Iowa's E15 incentive, would have provided between \$0.03 and \$0.10, depending on season, for every gallon of 15-50 percent ethanol blended gasoline sold.

Among states with or proposing comparable incentives, Kansas' E85 profile is very similar to Oklahoma's. While Oklahoma's total E85 consumption is increasing at a more rapid pace than Kansas, the two states have a comparable number of E85 fueling locations, number of E85 vehicles, and levels of E85 fuel consumption, as shown in [Table 7](#):

Table 7: E85 Profile, States with Comparable Incentives²²

State	Mandate	E85 Stations	E85 Stations Per 100k Residents	2015 E85 Vehicles	2010 E85 Consump	2015 E85 Consump	% Change
Iowa	No	225	7.27	895	3,394	4,241	4.6%
Kansas	No	18	0.62	199	2,693	3,073	2.7%
Missouri	Yes	94	1.55	600	8,809	9,715	2.0%
Oklahoma	No	27	0.70	240	2,975	3,882	5.5%

Source: U.S. Department of Energy Alternative Fuels Data Center

Many states offer infrastructure incentives or sales tax reductions to ethanol retailers as an alternative to or in addition to credits on ethanol sales. Examples include:²³

- In Illinois, sales and use taxes apply to 80 percent of the proceeds from the sale of fuels containing 10 percent ethanol between July 1, 2003 and December 31, 2018. However, if at any time these taxes are imposed at a rate of 1.25 percent, the tax will apply to 100 percent of the proceeds of sales. Additionally, state sales and use taxes do not apply to fuels containing between 70 percent and 90 percent ethanol sold during the same time frame.
- In addition to the incentives described above, the State of Iowa offers biofuel infrastructure grants to qualified E85 or dual E15 and biodiesel retailers. Three-year cost-share grants up to 50 percent of the total cost of the project and 5-year grants up to 70 percent are available to upgrade or install new infrastructure.
- In addition to Kansas' Renewable Fuel Retailer Tax Incentive, the State provides a 10-year state property tax exemption on qualified equipment used for storing and blending petroleum-based fuel with biodiesel, ethanol or other biofuel.
- In North Carolina, the retail sale, use, storage and consumption of alternative fuels is exempt from the state retail sales and use tax.
- The State of North Dakota Department of Commerce administers a Biofuels Infrastructure Partnership grant program that works with retailers and state and local government fleets to install infrastructure for

²² Data only available for E85 – information is intended to be representative of other blends of ethanol-blended gasoline

²³ All examples are found in the U.S. Department of Energy's Alternative Fuels Data Center repository of state laws and incentives.



higher blends of ethanol; available funds are based on pump type and range from 33 percent of the costs of installation up to \$14,985 to 50 percent of the costs of installation up to \$15,000.

- In South Carolina, a taxpayer that purchases, constructs, or installs, and places into service a qualified commercial facility for distributing or dispensing biofuels is eligible for an income tax credit of up to 25 percent of the purchase, construction, and installation costs.

Benchmarking Program Evaluations

Among the states with comparable incentive programs, one useful study was found: the Iowa Department of Revenue's December 2014 study of the State's Biofuel Retailers' Tax Credits.

In 2006, the State of Iowa established a goal to replace 25 percent of all petroleum used in gasoline by 2020. In order to help the State promote biofuel sales to meet that goal, various refundable tax credits (mentioned in the previous section) were enacted for ethanol retailers.

To gauge the effectiveness of the State's Ethanol Promotion Tax Credit (EPTC) program, the study sought to determine if the State's goal of promoting the sale of biofuels was being met. The study measured the change in biofuel distribution percentage for EPTC claimants. Out of 260 large retailers who earned the EPTC in 2009 with a biofuel distribution percentage less than 10 percent, 87.3 percent dropped out by 2012, and 77.8 percent of 72 small retailers dropped out. The study determined that since they have claimed the EPTC before, it is likely they stopped claiming the tax credit because they were no longer able to meet the rising biofuel threshold percentage. Additionally, the study found that the ratio of pure ethanol to total gasoline reported by retailers earning the EPTC increased from 8.5 percent in 2008 to 9.7 percent in 2012.

Because Oklahoma's incentive is a flat amount offering the same incentive regardless of ethanol sales as a percent of total fuel sales (rather than a tiered refund based on total ethanol sales), the State has not experienced that same decline in total claims due to reduced eligibility.

A key takeaway for the State is that in order to drive a more impactful change, it could consider establishing ethanol sales thresholds along with tiered refund percentages, further incenting retailers to promote the sale of ethanol.



Appendices



Appendix A: Comparable State Programs

State	Program Name	Effective Date	Sunset Date	% of Total Sales Threshold?	Credit Based on Pure Ethanol or Blend	Credit per Gallon	Eligible Blends	Annual Cap	Refundable?
Oklahoma	Ethanol Fuel Retailer Tax Credit	January 1, 2006	None	No	Pure Ethanol	\$0.016 per gallon of pure ethanol sold; retailer must provide price reduction to the purchaser of the ethanol fuel in the same amount	15%	None	Yes
Iowa	Ethanol Blended Gasoline Tax Credit (<i>Expired</i>)	January 1, 2002	December 31, 2008	Yes	Blend	\$0.025 per blended gallon sold in excess of 60% of total sales	N/A	None	Yes
	Ethanol Promotion Tax Credit	January 1, 2009	December 31, 2020	Yes	Pure Ethanol	Credit based on meeting threshold of renewable fuel as a percentage of total sales; 2017 threshold is 21% for retailers selling > 200,000 gallons and 17% for those selling < 200,000 gallons - \$0.080 if threshold percentage is met - \$0.060 if threshold is missed by 2% or less - \$0.040 if threshold is missed by 2-4%	N/A	None	Yes
	E85 Gasoline Promotion Tax Credit	January 1, 2006	December 31, 2017	No	Blend	\$0.16 per gallon for fuel sold in calendar years 2012-2017	70-85%	None	Yes



State	Program Name	Effective Date	Sunset Date	% of Total Sales Threshold?	Credit Based on Pure Ethanol or Blend	Credit per Gallon	Eligible Blends	Annual Cap	Refundable?
	E15 Plus Gasoline Promotion Tax Credit	July 1, 2011	December 31, 2017	No	Blend	For every gallon of ethanol blended gasoline sold: - \$0.03 between September 15 and May 30 - \$.010 between June 1 and September 14	15-69%	None	Yes
Kansas	Renewable Fuel Retailer Tax Incentive	January 1, 2009	December 31, 2025	Yes	Blend	Credit based on meeting threshold of renewable fuel as a percentage of total sales; threshold ranges from 10% in 2009 to 25% in 2024 - \$0.065 if threshold percentage is met - \$0.045 if threshold is missed by 2% or less	N/A	No funding available through June 30, 2018	No
Missouri	Ethanol-Blended Fuel Tax Credit (<i>Not Enacted</i>)	January 1, 2017	December 31, 2025	No	Blend	For every gallon of 15-50% ethanol blended gasoline sold: - \$0.03 between September 16 and May 31 - \$0.10 between June 1 and September 15	15-50%	\$1,000,000	Yes

State of Oklahoma

Incentive Evaluation Commission

Economically At-Risk Lease Tax Rebate Evaluation

November 13, 2017

PFM Group Consulting LLC
BNY Mellon Center
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Executive Summary



Overview

Many states have provided tax incentives to stimulate oil and gas production, revenue and job creation. Over the years, the State of Oklahoma has enacted a series of rebates that effectively lower the tax rate for various forms of production, including production from economically at-risk leases. The intent of Oklahoma's Economically At-Risk Lease Incentive, effective July 1, 2005, is to lessen the impact of low prices on well operators and extend production from wells that otherwise might be shut down, either temporarily or permanently. Under the incentive, economically at-risk oil or gas leases are eligible for reduced gross production tax (GPT) rates.

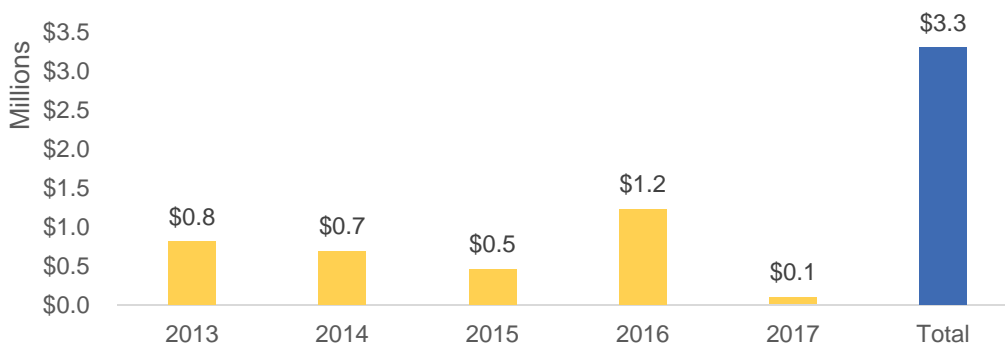
During the 2017 legislative session, HB2377 was enacted, which provided a sunset of eight gross production tax (GPT) incentives on July 1, 2017 (instead of July 1, 2020 as previously existed in State statute). This incentive now sunsets retroactively to December 31, 2016. The bill also requires claims for rebates to be made by July 1, 2017, and delays rebate payments until July 1, 2018. While it could be argued that the evaluation of the incentive is no longer necessary, examining the impact of incentives for such an important state industry is useful from a public policy perspective. It is also possible that the State may wish to revisit these incentives in the future.

Recommendation: Based on the lack of essential data and the analysis of available information, the project team concurs with the repeal of the program.

Key Findings

- **Data to evaluate the program based on approved criteria was not available.** Data that would enable the project team to analyze this incentive based on the following Incentive Evaluation Commission (IEC)-adopted criteria is not captured in a format that allows for timely analysis:
 - Cost benefit analysis at different price points;
 - Change in production for qualified wells;
 - Change in value of leases.
- **The return on investment (ROI) for this program was positive.** Based on the economic and fiscal impact analysis, it appears the tax revenue generated exceeds the annual incentives offered under this program. The net benefit to the State is estimated to be \$3.3 million between 2013 and 2017.

Figure 1: Net Fiscal Impact¹



¹ Net fiscal impact is defined as the total tax revenue generated minus the annual rebates paid.



- **The State is not currently at risk of significant increases in tax expenditures associated with the program.** One of the statutory requirements 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 sunset of the program for all production effective December 31, 2016, the State is not at risk of significant increases in expenditures related to this incentive.
- **Relative to other states, Oklahoma’s program was competitive, yet less comprehensive.** While the State’s rebate tiers the reduced tax rate based on the gross production tax rate, Oklahoma is the only state to impose a cap on total available incentive funding.

Changes to Improve Future Evaluations (if the Program were Resumed)

- **Recommendation 1: Explore the Oklahoma Tax Commission’s new electronic filing system as a method for improving reporting and data collection.** The Oklahoma Tax Commission (OTC) recently rolled out an electronic filing system for the filing of Forms 320-A (Request for Assignment of OTC Production Unit Number) and 320-C (Gross Production Request for Change), the latter of which is required to apply to the Re-Established Production Rebate. The system allows users to register new wells, request assignment of the lease production unit number (PUN), make changes to existing lease record information, and make all other changes currently found on the forms. While this system is currently not planned for use in administering the Economically At-Risk Lease program, the State should assess whether it has an opportunity to automate the data collection process. The system may be able to act as a database/repository for the information currently collected, as well as data necessary for effective administration (see Recommendation 2).
- **Recommendation 2: Improve the data collection process.** Should the State seek to reinstate this (or a similar) rebate in the future, it should require additional data from those who qualify for the rebate in order to ensure a full cost-benefit analysis can be completed. Data required includes:
 - Claims by catastrophic events versus non-catastrophic events;
 - Well-level production data;
 - Production year associated with each claim (as opposed to claim year);
 - Lease values.



Key Findings and Recommendations



Overall Recommendation: Based on the lack of essential data and its analysis of available information, the project team agrees with the legislature's recent decision to repeal the program.

Key Findings

According to the Oklahoma Tax Commission (OTC), information that would enable the project team to analyze the incentive based on the Incentive Evaluation Commission (IEC)-adopted criteria is not captured in a format that allows for timely analysis.

Other Findings

- **The return on investment (ROI) for this program was positive.** Based on the economic and fiscal impact analysis, it appears the tax revenue generated exceeded the annual incentives offered under this program. The net benefit to the State is estimated to be \$3.3 million between 2013 and 2017.
- **The State is not currently at risk of significant increases in tax expenditures associated with the program.** 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 sunset of the program for all production effective July 1, 2017, the State is not at risk of significant increases in expenditures related to this incentive.
- **A lack of data creates challenges in assessing the impact of the program.** Very high level information related to this incentive (estimated total rebates of gross production tax paid) is reported in the State's Tax Expenditures Report; the source of this information is gross production tax reports. However, there is generally a lack of detailed data associated with this incentive. According to the OTC, data detailing claims by production year (instead of claim year) is not captured in a format that allows for timely analysis. Instead, staff were able to provide total incentive rebates claimed per year, along with the number of companies paid. Additionally, the State was not able to provide claims by catastrophic events versus those not related to such events; well-level production data; and lease values.
- **Relative to other states, Oklahoma's program was competitive, yet less comprehensive.** While the State's rebate tiers the reduced tax rate based on the gross production tax rate, Oklahoma is the only state to impose a cap on total available incentive funding.

Recommendations

The Economically At-Risk Lease program was sunset effective July 1, 2017. Given the lack of needed data for evaluation, the project team concurs with the decision to end the program. Key in this determination is a lack of essential data that could illustrate the impact of the program in accordance with the Commission's evaluation criteria.

The project team provides the following recommendations for consideration in the event that the program is revisited/reinstated in the future.

- **Recommendation 1: Explore the new system as a method for improving reporting and data collection.** The OTC recently rolled out an electronic filing system for the filing of Forms 320-A



(Request for Assignment of OTC Production Unit Number) and 320-C (Gross Production Request for Change), the latter of which is required to apply to the Re-Established Production Rebate. The system allows users to register new wells, request assignment of the lease production unit number (PUN), make changes to existing lease record information, and make all other changes currently found on the forms. While this system is currently not planned for use in administering the Economically At-Risk Lease program, the State should assess whether it has an opportunity to automate the data collection process. The system may be able to act as a database/repository for the information currently collected, as well as data necessary for effective administration (see Recommendation 2).

- **Recommendation 2: Improve the data collection process.** Should the State Legislature seek to reinstate this (or a similar) rebate in the future, it should require additional data from those who qualify for the rebate in order to ensure a full cost-benefit analysis can be completed. Data required includes:
 - Claims by catastrophic events versus non-catastrophic events;
 - Well-level production data;
 - Production year associated with each claim (as opposed to claim year);
 - Lease values.



Introduction



Overview

In 2015, HB2182 established the Oklahoma Incentive Evaluation Commission (the Commission). 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 first set of 11 evaluations was conducted in 2016.

The Economically At-Risk Lease Incentive is one of 12 incentives scheduled for review by the Commission in 2017. Based on this evaluation and their collective judgement, the Commission will make recommendations to the Governor and the State Legislature related to this incentive.

During the 2017 legislative session, HB2377 was enacted, which provided a sunset of eight gross production tax (GPT) incentives on July 1, 2017 (instead of July 1, 2020 as previously existed in State statute). This incentive now sunsets retroactively to December 31, 2016. The bill also requires claims for rebates to be made by July 1, 2017, and delays rebate payments until July 1, 2018. While it could be argued that the evaluation of the incentive is no longer necessary, examining the impact of incentives for such an important state industry is useful from a public policy perspective. It is also possible that the State may wish to revisit these incentives in the future.

Incentive Background

Many states have provided tax incentives to stimulate oil and gas production, revenue and job creation. Over the years, the State of Oklahoma has enacted a series of rebates that effectively lower the tax rate for various forms of production, including production from economically at-risk leases.

The intent of Oklahoma's Economically At-Risk Lease Incentive, effective July 1, 2005, is to lessen the impact of low prices on well operators and extend production from wells that otherwise might be shut down, either temporarily or permanently. Under the incentive, economically at-risk oil or gas leases are eligible for reduced gross production tax (GPT) rates.

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 specific goals were not included in the legislation that established them. However, it is reasonable to assume that the goals of the program would include increased Oklahoma oil and gas production and, through it, increased employment within the State.

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:

- Cost benefit analysis at different price points;
- Change in production for qualified wells;
- Change in value of leases.

The criteria focus on what are generally considered goals of incentive programs (such as creating jobs and capital investment in the state). 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 criterion for evaluation (State return on investment). These will be discussed throughout the balance of the evaluation.



Industry Background

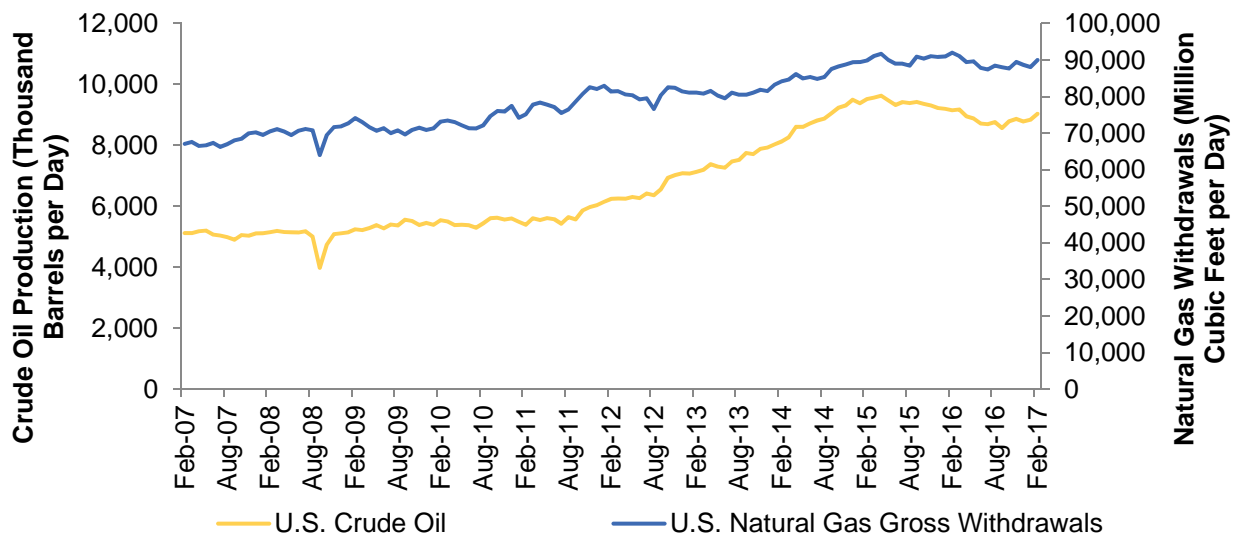


U.S. Oil and Gas Industry Background

Nationally, oil and gas production have both increased over the last 10 years. Crude oil production grew by 76 percent between February 2007 and February 2017, and natural gas withdrawals increased by 34 percent during the same time period. Nationally, U.S. crude oil production peaked in April 2015 at an average of 9.6 million barrels per day, and natural gas withdrawals peaked in February 2016 at an average of 92 billion cubic feet per day.

The following chart tracks oil and gas production during this timeframe.

Figure 2: U.S. Crude Oil and Natural Gas Production, 2007-2017



Source: U.S. Energy Information Administration Monthly Crude Oil and Natural Gas Production

Industry Outlook

Nationally, the outlook for the oil and gas industry is positive. According to the April 2017 Oklahoma Economic Indicators Report produced by the Oklahoma Employment Security Commission, U.S. crude oil production is forecast to average 9.2 million barrels per day in 2017 and 9.9 million barrels per day in 2018, an increase from 8.9 million barrels per day in 2016. Additionally, the report estimates that U.S. natural gas production in 2017 will increase by 0.8 billion cubic feet per day (Bcf/d) over 2016 levels, and 2018 production is forecast to be 4.0 Bcf/d over the 2017 projection.



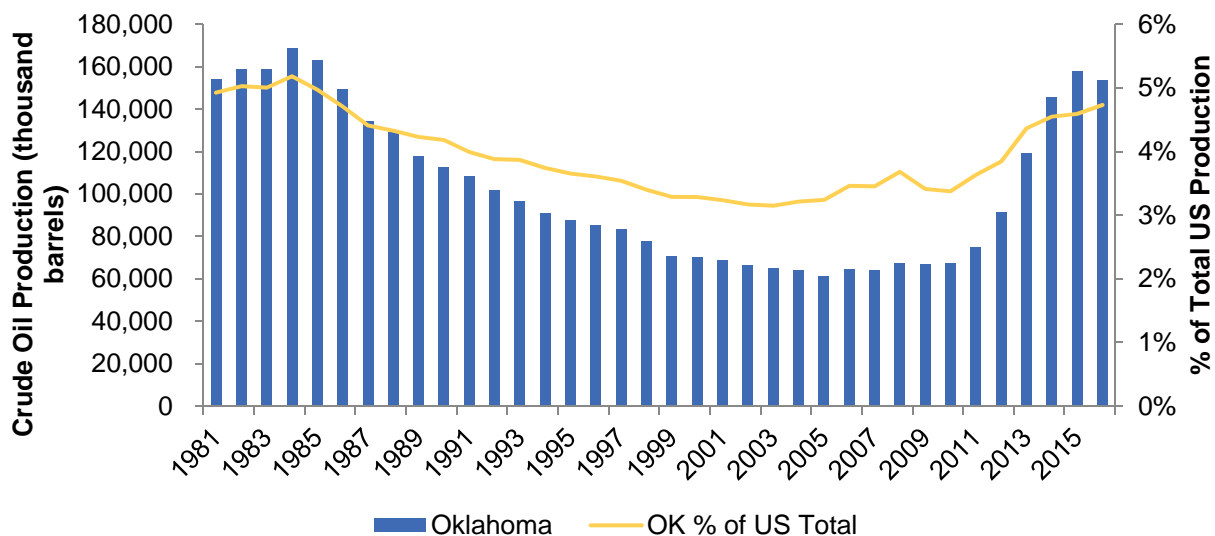
Oklahoma Oil and Gas Industry Background

Oil and Gas Production

The oil and gas industry plays a major role in Oklahoma's economy. The State produces a substantial amount of oil and natural gas, ranking fifth in crude oil production and third in dry natural gas production among all states in 2015.²

Including Oklahoma, the Midwestern states³ accounted for 614 million barrels of crude oil, or 19 percent of all U.S. field production, in 2016. Total Oklahoma production declined steadily between 1984 and 2005 before increasing to levels seen prior to the start of the decline, with most of the significant increases occurring in the years since 2012. Simultaneously, Oklahoma's share of total Midwestern crude oil production has decreased from 43 percent in 1981 to 25 percent in 2016, primarily as a result of increased production in North Dakota. North Dakota's production has grown exponentially, from 45 million barrels in 1981 (13 percent of the Midwestern total) to 378 million barrels in 2016 (62 percent of the Midwestern total). Nationally, Oklahoma's production of crude oil has consistently accounted for approximately three to five percent of total production. The figure below illustrates Oklahoma's performance among all states.

Figure 3: Oklahoma Field Production of Crude Oil, 1981-2016



Source: U.S. Energy Information Administration Annual Crude Oil Production

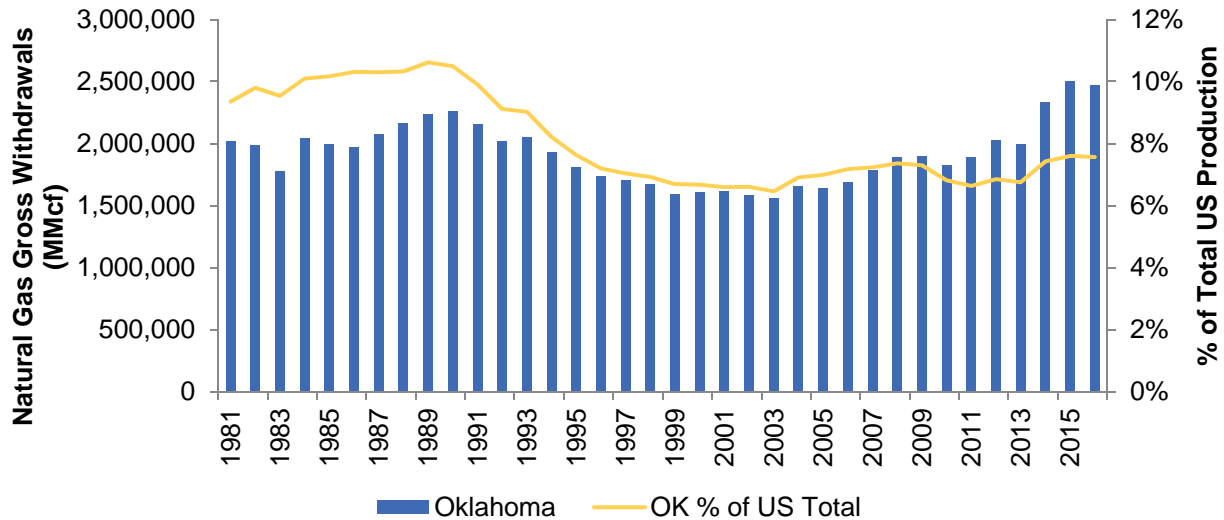
Oklahoma natural gas withdrawals declined between 1990 and the early 2000s but have increased modestly since, peaking at 2.5 million cubic feet (Mcf) in 2015. Despite this increase in total production, Oklahoma's share as a percentage of total U.S. production, which peaked at more than 10 percent in the late 1980s, has declined since and now hovers around seven percent. The following figure illustrates Oklahoma's natural gas withdrawal performance.

² US Energy Information Administration Monthly Crude Oil and Natural Gas Production.

³ According to the US EIA, the Midwestern Petroleum Administration for Defense District (PADD) includes Illinois, Indiana, Kansas, Kentucky, Michigan, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota and Tennessee.



Figure 4: Oklahoma Natural Gas Withdrawals, 1981-2016



Source: U.S. Energy Information Administration Annual Natural Gas Withdrawals

Oil and Gas Economic Impact

The oil and gas industry plays a significant role in Oklahoma's regional economy. A 2016 study by the State Chamber of Oklahoma Research Foundation identified the following as a few of the industry's economic contributions:⁴

- Household earnings (\$15.6 billion) from the oil and gas sector total 13.2 percent of total state earnings;
- Oil and gas activity accounts for more than half the fixed investment (\$20.3 billion) in Oklahoma;
- The state exported crude oil and natural gas valued at \$7.1 billion in 2015;
- An estimated \$1.7 billion in oil and gas royalties were paid to Oklahomans in 2015;
- Activity in the industry supports an estimated \$28.6 billion in additional output of goods and services in other industry sectors statewide.

The oil and gas industry also directly generates many high paying jobs throughout the State. **While the oil and gas industry accounts for fewer than two percent of all private industry jobs within Oklahoma, oil and gas wages account for nearly six percent of total private industry wages.** Additionally, the average annual pay (nearly \$140,000 in 2015) is significantly higher than the statewide average annual pay for all private industries (\$44,504).

⁴ State Chamber of Oklahoma Research Foundation. Economic Impact of the Oil and Gas Industry on Oklahoma (September 2016).



Table 1: Oklahoma Oil and Gas Employment, 2006-2015⁵

Year	Oil and Gas Employment		Oil and Gas Wages		Avg. Annual Pay	
	Total Employees	% of All Private Industry Total	Total Wages (in thousands)	% of All Private Industry Total Wages	Oil and Gas	All Private Industries
2006	16,192	1.4%	\$2,148,554	5.3%	\$132,694	\$34,136
2007	17,985	1.5%	\$1,856,701	4.3%	\$103,234	\$35,469
2008	19,808	1.6%	\$2,258,918	4.9%	\$114,041	\$37,137
2009	19,410	1.7%	\$1,939,932	4.5%	\$99,943	\$36,934
2010	18,677	1.6%	\$1,907,912	4.3%	\$102,152	\$38,011
2011	21,078	1.8%	\$2,486,725	5.2%	\$117,979	\$40,157
2012	23,986	2.0%	\$2,860,984	5.6%	\$119,279	\$41,863
2013	24,328	2.0%	\$3,057,485	5.8%	\$125,677	\$42,734
2014	24,140	1.9%	\$3,089,106	5.6%	\$127,965	\$44,089
2015	23,868	1.9%	\$3,324,490	5.9%	\$139,288	\$44,504

Source: U.S. Department of Labor BLS - Quarterly Census of Employment and Wages

Note: data represents only direct employment.

In addition, Oklahoma's oil and gas industry is a vital part of the regional and national economy. The benchmark price for a blend of U.S. crude oils known as West Texas Intermediate (WTI) is set at Cushing, Oklahoma.⁶ Additionally, the State ranks as the third most attractive oil and gas market among 126 markets worldwide due to its abundant natural energy reserves and strong prospects for growth.⁷ According to a 2015 report released by the U.S. Department of Labor's Bureau of Labor Statistics (BLS), in June 2014, Washington County, Oklahoma had the highest concentration of employment in the oil and gas extraction industry in the country (with a location quotient of 139.8). Woods County, Oklahoma had the third highest concentration (98.4).⁸

Oklahoma Oil and Gas Taxes

In addition to employment opportunities, the oil and gas industry provides significant revenue to states through the payment of various taxes. Nationally, taxes levied on the oil and gas industry can be grouped into three broad categories: production, property and income. For this evaluation, production taxes, which are imposed on the value or volume of the oil and gas as it is extracted from the ground or at the point of first sale, are the focus of this incentive.

Oklahoma's Gross Production Tax (GPT) is a severance tax on the dollar value of production of oil and gas taken from land or water in the State. Under current law, traditional vertical wells are taxed at 7.0 percent.⁹

⁵ BLS Data for all jobs categorized under NAICS 211, Oil and Gas Extraction.

⁶ EIA State Profile and Energy Estimates: Oklahoma. Available at <https://www.eia.gov/state/index.php?sid=OK>.

⁷ State Chamber of Oklahoma Research Foundation. Economic Impact of the Oil and Gas Industry on Oklahoma (September 2016).

⁸ U.S. Department of Labor Bureau of Labor Statistics. Counties with Highest Concentration of Employment in Oil and Gas Extraction, June 2014. Available at: <https://www.bls.gov/opub/ted/2015/counties-with-highest-concentration-of-employment-in-oil-and-gas-extraction-june-2014.htm>.

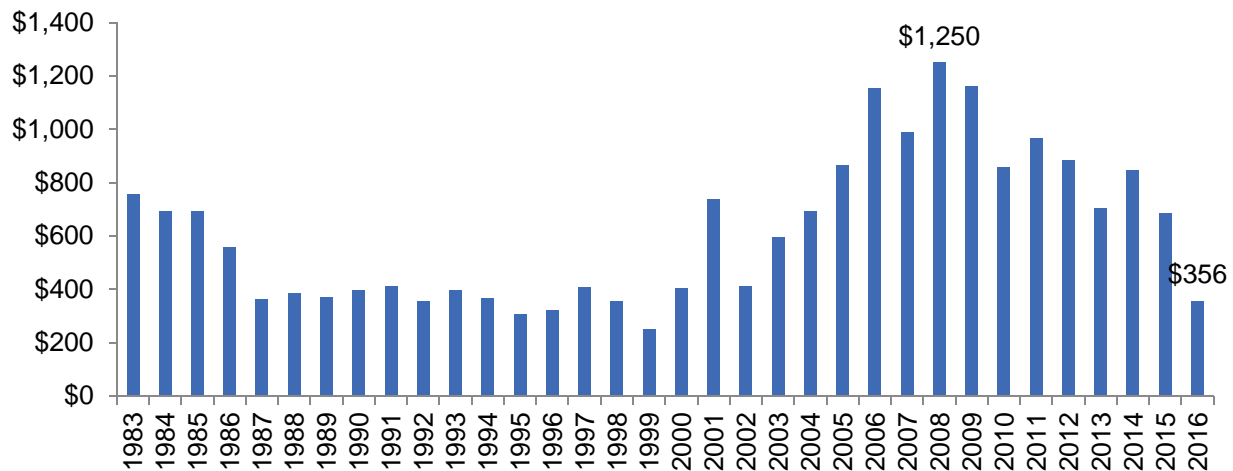
⁹ A vertical well, considered to be the conventional well type, is a well that is not turned horizontally at depth, allowing access to oil and gas reserves located directly beneath the surface access point. Historically, natural gas and exploration involved the use of vertical wells because directional drilling technology was expensive and complicated. While less expensive to develop they are typically less productive because of their limited range.



Horizontal wells drilled before July 1, 2015 are taxed at 1.0 percent for four years and 7.0 percent thereafter.¹⁰ Newly drilled wells are taxed at 2.0 percent for the first 36 months of production; they are then taxed at 7.0 percent for the rest of the life of the well.

These taxes are a significant source of overall Oklahoma revenues, totaling \$355.9 million in FY2016.¹¹ Because GPT revenue depends both on the amount of mineral extracted and its price, it can vary greatly from year to year. Since peaking in 2008 at \$1,250 million, total collections have decreased substantially, as shown in the figure below. This decrease is likely due to demand-related impacts of the Great Recession and changes in oil and gas prices, as well as reductions in tax rates put in place by the State to encourage additional production.

Figure 5: Oklahoma Gross Production Tax Collections, 1983-2016 (in millions)



Source: Oklahoma Tax Commission Annual Report, 2016

¹⁰ Horizontal wells, the less traditional well type, allows operators to extract oil and gas from unconventional sources that may run horizontally. A horizontal well typically originates from a vertical well, as this allows engineers to examine rock fragments at different layers in order to determine where reserves can be found.

¹¹ Oklahoma Tax Commission Annual Report (2016).



Incentive Usage and Administration



Incentive Characteristics

At the state level, many governments have granted tax exemptions to stimulate production, revenue and job creation. Over the years, the State has enacted a series of rebates that effectively lower the tax rate for various forms of production, including production from economically at-risk leases.

The intent of Oklahoma's Economically At-Risk Lease Incentive, effective July 1, 2005, is to lessen the impact of low prices on well operators and extend production from wells that otherwise might be shut down, either temporarily or permanently. Under the incentive, economically at-risk oil or gas leases are eligible for reduced gross production tax (GPT) rates which are dependent upon the GPT tax rate currently being imposed for a given lease:

GPT Rate	Exemption
7.0%	Six-sevenths (85.7 percent) of the GPT levied
4.0%	Three-fourths (75.0 percent) of the GPT levied
1.0-2.0%	No reduction shall apply

'Economically at-risk' oil or gas leases are defined as any oil or gas lease with one or more producing wells with an average production volume per well of 10 barrels of oil or 60 MCF of natural gas per day or less operated at a net loss or at a net profit which is less than the total gross production tax remitted for the lease during the previous calendar year.

For all eligible leases, a refund of gross production taxes paid for production in the previous calendar year is issued to the well operator. The total amount of refunds in calendar years 2015 and 2016 was capped at \$12.5 million dollars. All refunds provided under this incentive must be claimed before July 1, 2017.

Historic Use of the Incentive

According to data provided by the OTC, the amount of rebates paid and the number of companies claiming those rebates have fluctuated in recent years but are generally declining, with rebates peaking at \$14.2 million in 2013 but averaging \$10.5 million between 2013 and 2016.

Table 2: Economically At-Risk Lease Incentive Claims Data, 2013-2017

2013	\$14,179,938	19
2014	\$10,661,303	79
2015	\$7,355,988	70
2016	\$9,673,144	115
2017*	\$9,883,434	155

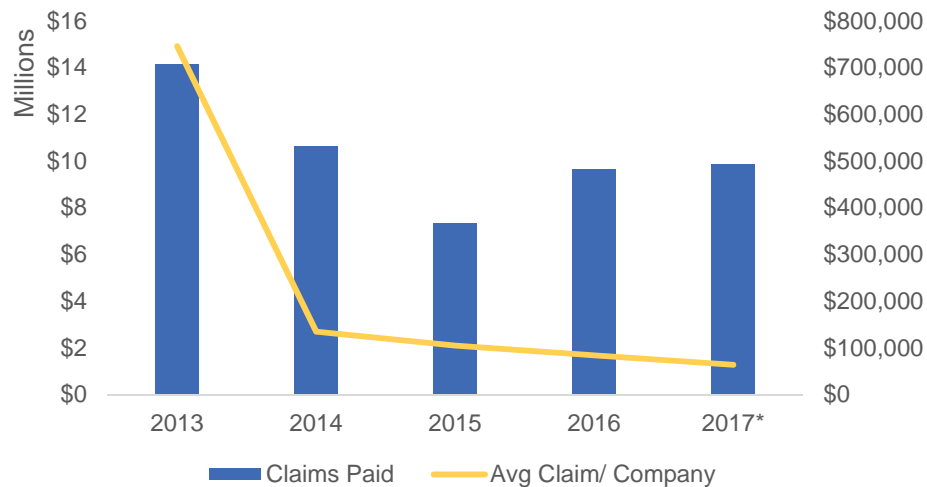
Source: OTC data

* Preliminary; program cap is \$12.5 million

The average claim per company has declined significantly, from \$746,000 in 2013 to \$84,000 in 2016. It should be noted that data demonstrating claims per lease was not available.



Figure 6: Economically At-Risk Lease Incentive - Average Claim/Company, 2013-2017



Source: OTC data
* Data as of 6/23/2017

As might be expected due to the nature of the Economically At-Risk Lease Incentive, there is a negative correlation between production (which is intrinsically tied to oil and gas prices) and incentive claims – when the industry is doing well, fewer leases are economically at risk.

Two years ago, Oklahoma crude oil was selling for approximately \$100 per barrel and natural gas between \$3 and \$5 per MCF. This year, oil prices have fallen below \$40 a barrel and gas typically sells for less than \$2 per MCF.¹² As the price of oil and gas declined, more wells became eligible for the incentive under the definition of ‘economically at risk’.

In an effort to control tax expenditures associated with this program, the total amount of refunds issued to operators was capped at \$12.5 million dollars, effective calendar year 2015. The OTC estimates that, had the program not been capped, **the total amount of claims eligible to be filed beginning July 1, 2016 would have been nearly \$133 million**, as shown in the following table.

Table 3: Impact of SB1577 on Eligible Claims as of July 1, 2016

	Total At-Risk Forecast	SB1577 Impact	Marginal Well Cap Apportionment
Estimated Rebate Values	\$132,900,000	\$120,400,000	\$12,500,000
Estimated Oil Rebate	\$75,753,000	\$68,628,000	\$7,125,000
Estimates Gas Rebate	\$57,147,000	\$51,772,000	\$5,375,000

Source: OTC data

¹² Oklahoma Watch, “Unprofitable Wells Now a Big Tax Break.” (March 30, 2016). Available at <http://oklahomawatch.org/2016/03/30/unprofitable-wells-now-a-big-tax-break/>.



Incentive Administration

There are three components to overall program administration, each of which is managed by the OTC:

1. **Eligibility.** In order to be eligible, a lease¹³ must be operated at a net loss or a net profit which is less than the total gross production tax remitted for the lease during the previous tax reporting year.
2. **Certification.** To apply to have a lease certified as being economically at risk, a signed and notarized OTC Form 329 (Application for Certification of Economically at Risk Lease) is completed by the operator and submitted to the OTC's Gross Production Department.

A standard formula is used to determine if a lease is economically at risk. This entails subtracting from the gross revenue from each lease for the previous calendar year any severance taxes, royalty payments, lease operating costs and overhead costs.

For audit purposes, the OTC can request additional information from the applicant, including copies of federal income tax returns, joint interest billings or any other documentation regarding lease production or expenses.

Within 60 days of the application date, the OTC makes its determination and issues either an approval letter or denial letter to the operator. If an exemption is denied, an explanation is provided. An applicant can appeal the determination.

3. **Refunding.** Each year is claimed separately. No claims for rebates are permitted after December 31, 2015 for production periods occurring between calendar years 2005 through 2013, and no claims for rebates for production periods in 2014 and after are permitted more than 18 months after the date that the refund is first available.

Recent legislation changed the process of issuing refunds in recent years. For production prior to December 31, 2015, the refund could not be claimed until July 1 of the following year. However, for production on January 1, 2016 and thereafter, the refund must be claimed prior to July 1 of the subsequent calendar year. As mentioned previously, HB2377 sunsets this incentive for production effective December 31, 2016 and requires claims for these rebates to be made by June 30, 2017. It also delays rebate payments until after July 1, 2018.

Industry Education

According to the OTC, lack of industry education is the primary reason for oil and gas incentive-related denials – most often, applicants are confused about the level at which the incentives are administered (i.e. lease or well level). In addition to educational opportunities provided by the OTC, State agency Sustaining Oklahoma's Energy Resources (SOER) provides a variety of workshops for industry professionals around the state on a variety of industry-related topics. One workshop, Navigating State Forms: A Panel Discussion with the OCC

¹³ A lease is defined as a spaced unit, a separately metered formation within the spaced unit, or each tract within an OCC-approved unitization, or a lease which, for tax reporting purposes, has been assigned a production unit number. A lease may contain one or more wells which have identical interest and payout.



and OTC, provides information about where to find, how to complete and when to submit some of the most common forms associated with operating an oil or gas well in the state.¹⁴

Reporting and Data Issues

Very high level information related to this incentive (estimated total rebates of gross production tax paid) is reported in the State's Tax Expenditures Report; the source of this information is gross production tax reports.

However, there is a general lack of detailed data associated with this incentive. According to the OTC, data detailing claims by production year (instead of claim year) is not captured in a format that allows for timely analysis. Instead, staff were able to provide total incentive rebates claimed per year, along with the number of companies paid. Other necessary information not available includes:

- Claims by catastrophic events versus non-catastrophic events;
- Well-level production data;
- Lease values.

¹⁴ Sustaining Oklahoma's Energy Resources (SOER) was created on July 1, 2013 when the Marginal Well Commission (MWC) with the Oklahoma Energy Resources Board (CERB) under Senate Bill 767.



Economic and Fiscal 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 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 7: 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).

Fiscal Impact 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).¹⁵ Two datasets were used to derive the ratio: 1) U.S. Department of Commerce Bureau of Economic

¹⁵ Gross State Product (GSP) is the state counterpart of Gross Domestic Product (GDP) for the nation. To assist the reader, the project team has decided to use GDP throughout this section of the report instead of mixing the two terms. This decision was made because more people are familiar with the term GDP.



Analysis GDP estimates by state;¹⁶ and 2) the OTC's *Annual Report of the Oklahoma Tax Commission*.¹⁷ Over the past 10 years, the state tax revenue as a percent of state GDP was 5.4 percent, as shown in the following table:

Table 4: State of Oklahoma Tax Revenue as a Percent of State GDP

Year	Oklahoma Tax Revenue ¹⁸	Oklahoma GDP	Ratio
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%
2015-16	\$8,963,894,053	\$182,937,000,000	4.9%
Average	\$8,908,720,068	\$166,905,300,000	5.4%

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

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.

To estimate State of Oklahoma tax revenue generated in a given year, the project team multiplied the total value added figure produced by the IMPLAN model by the corresponding annual ratio (about 5.4 percent). For example, if the total value added was \$1,000,000, then the estimated State of Oklahoma tax revenue was \$54,000 (\$1,000,000 x 5.4 percent).

¹⁶ U.S. Department of Commerce Bureau of Economic Analysis. Available at <http://www.bea.gov/regional/>.

¹⁷ https://www.ok.gov/tax/Forms_&_Publications/Publications/Annual_Reports/index.html.

¹⁸ Gross collections from state-levied taxes, licenses and fees, exclusive of city/county sales and use taxes and county lodging taxes.



Impact of Economically At-Risk Lease Incentives

The Economically At-Risk Lease incentive was designed to increase and expand oil and gas production in Oklahoma. A full or partial refund of gross production taxes paid for production in the previous calendar year was issued to the well operator. Because gross production tax rates vary based on the well classification, total annual production or output was derived using a blended production tax rate of 5.5 percent. Based on data availability, it was necessary to convert the incentive amount to annual economic activity prior to utilizing the economic impact model. IMPLAN Sector 20 Extraction of Natural Gas and Crude Petroleum was used to model the economic impact.

Table 5: Impact of Economically At-Risk Lease Incentives

Year		Output	Value Added	Labor Income	Employment	Estimated Oklahoma Tax Revenue
2013	Direct Effect	\$257,817,045	\$182,697,216	\$140,485,229	1,067	
	Indirect Effect	\$59,166,354	\$36,278,266	\$27,762,585	319	
	Induced Effect	\$126,889,798	\$69,439,817	\$39,207,118	974	
	Total Effect	\$443,873,197	\$288,415,299	\$207,454,932	2,360	\$14,997,596
2014	Direct Effect	\$193,841,870	\$143,862,743	\$110,623,418	825	
	Indirect Effect	\$45,966,569	\$28,566,888	\$21,861,317	247	
	Induced Effect	\$100,096,010	\$54,679,556	\$30,873,177	754	
	Total Effect	\$339,904,449	\$227,109,187	\$163,357,912	1,826	\$11,355,459
2015	Direct Effect	\$133,745,236	\$98,481,771	\$75,727,668	559	
	Indirect Effect	\$31,593,624	\$19,555,568	\$14,965,245	167	
	Induced Effect	\$68,184,281	\$37,431,091	\$21,134,347	510	
	Total Effect	\$233,523,141	\$155,468,430	\$111,827,260	1,237	\$7,818,572
2016	Direct Effect	\$175,875,351	\$127,916,211	\$98,361,314	721	
	Indirect Effect	\$41,387,614	\$25,400,378	\$19,438,089	216	
	Induced Effect	\$88,522,682	\$48,618,575	\$27,451,026	659	
	Total Effect	\$305,785,647	\$201,935,164	\$145,250,429	1,596	\$10,904,499
2017	Direct Effect	\$179,698,790	\$129,094,828	\$99,267,613	724	
	Indirect Effect	\$42,128,157	\$25,634,417	\$19,617,191	216	
	Induced Effect	\$89,298,723	\$49,066,546	\$27,703,959	661	
	Total Effect	\$311,125,670	\$203,795,791	\$146,588,763	1,601	\$9,985,994

Source: TXP, Inc. IMPLAN analysis output, September 2017



Table 6: Annual Tax Revenue Generated, 2011-2015

Year	Credit Established During Current Tax Year	Estimated State of OK Tax Revenue	Net Impact
2013	\$14,179,938	\$14,997,596	\$817,658
2014	\$10,661,303	\$11,355,459	\$694,156
2015	\$7,355,988	\$7,818,572	\$462,584
2016	\$9,673,144	\$10,904,499	\$1,231,355
2017	\$9,883,434	\$9,985,994	\$102,560
Total	\$51,753,807	\$55,062,119	\$3,308,312

Source: TXP, Inc. IMPLAN analysis output, September 2017

As depicted in the preceding table, the Economically At-Risk Lease Tax Rebate program results in increased statewide oil and gas production sector activity. The level of economic activity varies each year and is directly linked to the amount of oil and gas production. Multiplying the total value added figure produced by the IMPLAN model by the corresponding annual tax ratio, provides an estimate for total annual State tax revenue. Over the past 5 years, the Economically At-Risk Lease Tax Rebate program (through direct, indirect and induced economic effects) has generated approximately \$55.1 million in state tax revenue. Over this same period, the state has provided \$51.8 million amount in rebates, resulting in a return on investment of \$3.3 million.

It should be noted that it is difficult to evaluate the importance of the Economically At-Risk Lease Tax Rebate program on the long-term outlook for the overall oil and gas sector (but-for test). It is reasonable to assume that some of the oil and gas producers would have continued to operate these wells at some level or shift capital expenditures to another location within the state. If this occurred, there would have been positive economic activity without the incentive. A more important variable that drives activity in this sector is the market price for crude oil and natural gas. The importance of this incentive and the risk producers are willing to take is directly linked to the market price of oil and natural gas.



Incentive Benchmarking



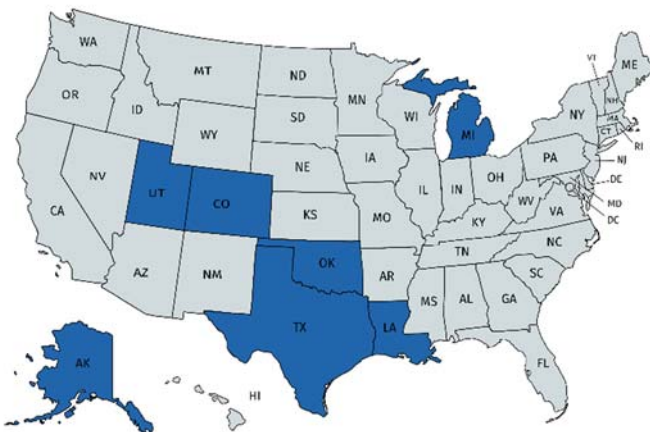
Benchmarking

A detailed description of comparable state programs can be found in **Appendix A**.

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.¹⁹ 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 begins with bordering states. This is generally the starting point, because proximity often leads states to compete for the same regional businesses

Figure 8: States Offering Economically At-Risk Lease Incentives



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.

In total, six states offer programs comparable to Oklahoma’s economically at-risk lease incentive; these states are displayed in Figure 8.

Oklahoma, along with these other states, accounted for 50 percent of total U.S. dry natural gas production and 53 percent of total U.S. crude oil production in 2015. Several top-producing states were not found to have similar incentives (Pennsylvania, number two for natural gas; Wyoming, number four for natural gas and number eight for crude oil; and West Virginia, number seven for natural gas).

¹⁹ The primary instances of exactly alike state incentive programs occur when states choose to ‘piggyback’ onto federal programs.



Table 7: Production of States Offering Economically At-Risk Lease Incentives, 2015

State	Dry Natural Gas			Crude Oil		
	Production (Mcf)	% of U.S. Total	Rank	Production (thousand barrels)	% of U.S. Total	Rank
Texas	7,071,203	26.10%	1	1,263,585	36.80%	1
Oklahoma	2,336,234	8.60%	3	157,770	4.60%	5
Louisiana	1,735,120	6.41%	5	62,881	1.83%	9
Colorado	1,600,203	5.91%	6	126,232	3.67%	7
Utah	408,002	1.50%	11	36,987	1.10%	11
Alaska	326,066	1.20%	13	176,241	5.13%	4
Michigan	105,841	0.39%	18	6,424	0.19%	19
U.S.	27,059,503	50.2%		3,436,515	53.3%	

Source: U.S. Energy Information Administration

A review of the six comparable incentive programs reveals that only Oklahoma and Louisiana tier the reduced tax rate based on the gross production tax rate. In Louisiana, the severance tax is reduced to a quarter of the normal rate for stripper wells producing less than 10 barrels a day, and its reduced to half of the normal rate for stripper wells²⁰ producing less than 25 barrels a day. Michigan's stripper wells and marginal property are eligible for a reduction in severance tax from 6.6 percent to 4.0 percent. In Texas, exemptions for marginal wells are based on average gas price (if the price of gas is more than \$3.50 per gallon, there is no exemption, credits of between 25 percent and 100 percent are available if the price of gas is less than \$3.50 per gallon). In Utah, all marginal stripper wells are tax exempt – and similarly, in Colorado, eligible wells are exempt from taxes. Alaska offers a carried-forward annual loss provision, where lease expenditures that are not deductible in calculating production tax values generate a loss carry forward and are eligible for a tax credit (35 percent in 2016).

Recently, the State of Oklahoma imposed a sunset date on the program, and all refunds provided under this incentive must be claimed before July 1, 2017; as a result, all state programs have a sunset date.

Finally, Oklahoma's program is the only state that imposed a cap on total available incentive funding (total refunds were not to exceed \$12.5 million combined in 2015 and 2016). Overall, Oklahoma's Economically At-Risk Lease program was competitive, yet it was less beneficial to eligible producers than other states because of its funding caps.

The differing oil and gas tax rates in Oklahoma can make a comparison of tax rates among the states more difficult. One report, by the State of Idaho's Department of Lands, sought to make a comparison possible among states, even with varying rates. The Department determined that in order to make an "apples to apples" comparison among states, it was appropriate to calculate the "effective rate" which factors in each state's production and various taxes.²¹ To arrive at each state's effective rate, the Department divided taxes collected by the valuation of the production.

Based on this calculation, Oklahoma's FY2016 effective tax rate (3.2 percent) based on severance, production and property taxes paid in ratio to taxable value of production, was the lowest among oil and gas producing

²⁰ Stripper wells, also known as marginal wells, are wells individually producing small volumes of natural gas or oil.

²¹ An effective tax rate is the average percentage that companies pay in taxes on taxable income.



states²² used in the study. Idaho's effective rate was similar at 4.0 percent, while all other states imposed taxes at an effective rate between 6.1 percent (Utah) and 13.4 percent (Wyoming).²³

Benchmarking Program Evaluations

Among the states with active incentive programs, one useful study was found. A 2015 evaluation by the Alaska Department of Revenue²⁴ sought to analyze the effect of Alaska's four North Slope oil and gas tax credits (qualified capital expenditures, carry-forward annual loss, small producer and transitional investment expenditures credits). To do so, the study used an opportunity cost comparison between the estimated value of oil and gas tax credits or investing in the Constitutional Budget Reserve Fund (CBRF).

The Department found that the oil and gas tax credits have a substantial negative effect on the State's finances, and that the opportunity cost of the four credits over a five-year period ranged from \$0.9 billion to \$4.9 billion, and in the subsequent 10 years were estimated to cost between \$0.6 billion and \$7.3 billion.

²² Producing states used in analysis: Alaska, Idaho, Louisiana, Montana, North Dakota, Oklahoma, Texas, Utah and Wyoming.

²³ Idaho Department of Lands Oil and Gas Taxation Comparison: Analysis of Severance, Production and Ad Valorem Taxes (2016).

²⁴ Alaska Department of Revenue. The Effect of Alaska North Slope Oil and Gas Tax Credits on Petroleum Tax Revenue (2015).



Appendices



Appendix A: Comparable State Programs

State	Program Name	Effective Date	Sunset Date	Eligible Leases	Incentive	Program Cap
Oklahoma	Economically At-Risk Oil or Gas Lease Tax Exemptions	July 1, 2005	None	Any oil or gas lease with one or more producing wells with an average production volume per well of 10 barrels of oil or 60 MCF of natural gas per day or less, operated at a net loss or at a net profit which is less than the total gross production tax remitted in the previous calendar year	If gross production tax rate was: - 7%, exemption is 6/7 of the gross production tax levied - 4%, exemption is 3/4 of the gross production tax levied - 1% or 2%, no exemption shall apply	\$12.5 million
Alaska	Carried-Forward Annual Loss	January 1, 2006	None	Lease expenditures that are not deductible in calculating production tax values generate a "loss carry-forward" and are eligible for a tax credit	Credit rate is 35% for 2016 forward; credits are transferable	None
Colorado	Oil and Gas Severance Tax Exemption	January 1, 2000	None	- Oil produced from any individual well that produces 15 barrels per day or less of oil for the average of all producing days during a taxable year - Gas produced from any well that produces 90,000 cubic feet or less of gas per day for the average of all producing days during a taxable year	Tax exemption on oil and gas production from eligible wells	None
Louisiana	Severance Reduction for Stripper Wells	Unknown	Unknown	- Oil wells incapable of producing an average of either 10 or 25 barrels of oil per producing day; well must be certified as a stripper well by Commissioner of Conservation	- For wells producing less than 10 barrels, severance tax for stripper wells is reduced to 1/4 of the normal rate, or 3.125% - For wells producing less than 25 barrels, severance tax for stripper wells is reduced to 1/2 of the normal rate, or 6.25% Eligible wells are also exempt from severance tax in any month where the average value is less than \$20/barrel	



State	Program Name	Effective Date	Sunset Date	Eligible Leases	Incentive	Program Cap
Michigan	Severance Tax Reduction for Stripper Wells and Marginal Properties	March 31, 1992	None	<ul style="list-style-type: none"> - Stripper Well: Oil produced and sold from a property whose maximum daily average production of crude oil per well during any consecutive 12-month period does not exceed 10 barrels - Marginal Property: A property whose daily average production (excluding condensate recovered in non-associated production) per well during any preceding consecutive 12-month period that did not exceed the number of barrels shown below for the average completion depth: <ul style="list-style-type: none"> - Between 2,000 and 4,000 feet: 20 barrels or less - Between 4,000 and 6,000 feet: 25 barrels or less - Between 6,000 and 8,000 feet: 30 barrels or less - More than 8,000 feet: 35 barrels or less 	Reduction in severance tax from 6.6% to 4%	None
Texas	Severance Tax Relief for Marginal Wells	September 1, 2005	None	Leases that average, over a 90-day period, less than 15 barrels per day per well or 5 percent recoverable oil per barrel of produced water per well	Exemptions based on average gas price: <ul style="list-style-type: none"> - More than \$3.50: No exemption - Between \$3.00 and \$3.50: 25% credit - Between \$2.50 and \$3.00: 50% credit - \$2.50 or less: 100% credit 	None
Utah	Marginal/Stripper Well Tax Exemption	January 1, 1984	None	Wells which produce an average of less than 20 barrels per day for one year, or 60 MCF or less of natural gas per day for 90 consecutive days	Stripper wells are tax exempt unless the exemption prevents the severance tax from being treated as a deduction for federal tax purposes	None

State of Oklahoma

Incentive Evaluation Commission

Production Enhancement Rebate Evaluation

November 13, 2017

PFM Group Consulting LLC
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Executive Summary



Overview

Many states have provided tax incentives to stimulate oil and gas production, revenue and job creation. Over the years, the State of Oklahoma has enacted a series of rebates that effectively lower the tax rate for various forms of production, including increased production resulting from approved production enhancement projects. Oklahoma's Production Enhancement Rebate, effective July 1, 1994, exempts from gross production tax (GPT) for 28 months the production resulting from the re-establishment of an inactive well. The goal of the program is to encourage the undertaking of enhancement projects to increase well production.

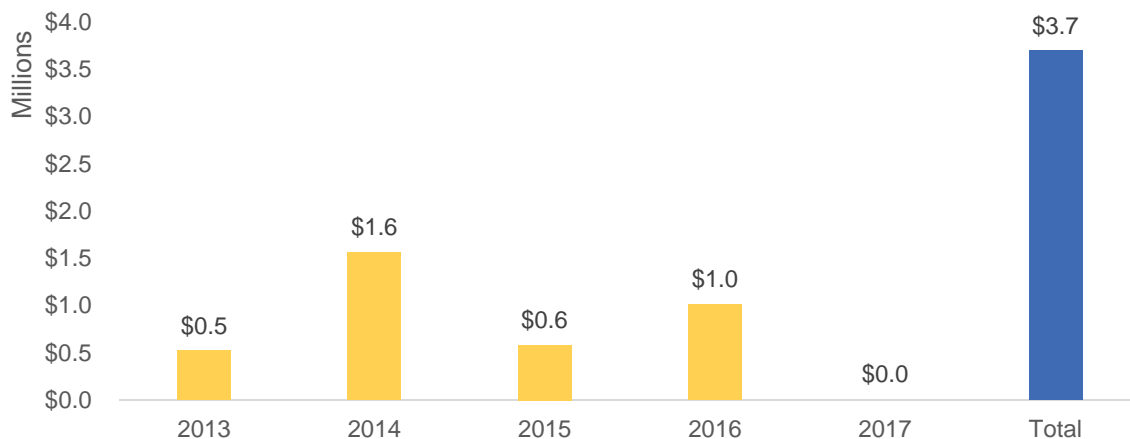
During the 2017 legislative session, HB2377 was enacted, which provided a sunset of eight GPT incentives on July 1, 2017 (instead of July 1, 2020 as previously existed in State statute). This incentive is among those included for the July 1, 2017 sunset. While it could be argued that the evaluation of the incentive is no longer necessary, examining the impact of incentives for the critically important oil and gas industry is useful from a public policy perspective. It is also possible that the State might revisit these incentives in the future.

Recommendation: Based on the lack of essential data and the analysis of available information, the project team concurs with the repeal of the program.

Key Findings

- **The return on investment (ROI) for this program was positive.** Based on the economic and fiscal impact analysis, it appears the tax revenue generated exceeds the annual incentives offered under this program. The net benefit to the State is estimated to be \$3.7 million between 2013 and 2017.

Figure 1: Net Fiscal Impact¹



- **The State is not currently at risk of significant increases in tax expenditures associated with the program.** One of the statutory requirements 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 decision to sunset the program for all production effective July 1, 2017, the State is not at risk of significant increases in expenditures related to this incentive.

¹ Net fiscal impact is defined as the total tax revenue generated minus the annual rebates paid.



- **Data to evaluate the program based on approved criteria was not available.** Data that would enable the project team to analyze this incentive based on the following Incentive Evaluation Commission (IEC)-adopted criteria is not captured in a format that allows for timely analysis:
 - Change in capital investment versus non-qualified within the industry;
 - Change in oil/gas production versus non-qualified within the industry;
 - Change in jobs versus non-qualified within the industry;
 - Change in revenue associated with leases.
- **Relative to other states, Oklahoma's program was competitive, yet less comprehensive.** While Oklahoma's program is considered competitive among its peers, it falls short of much of the competition in terms of program duration, length of rebate/exemption, and basis of taxation (full production versus incremental production). However, while many states limit incentives based on commodity prices, Oklahoma has no such restriction.

Changes to Improve Future Evaluations (if the Program were Resumed)

- **Recommendation 1: Explore the Oklahoma Tax Commission's new electronic filing system as a method for improving reporting and data collection.** The Oklahoma Tax Commission (OTC) recently rolled out an electronic filing system for the filing of Forms 320-A (Request for Assignment of OTC Production Unit Number) and 320-C (Gross Production Request for Change), the latter of which is required to apply to the Re-Established Production Rebate. The system allows users to register new wells, request assignment of the lease production unit number (PUN), make changes to existing lease record information, and make all other changes currently found on the forms. While this system is currently not planned for use in administering the Production Enhancement Rebate, the State should assess whether it has an opportunity to automate the data collection process. The system may be able to act as a database/repository for the information currently collected, as well as data necessary for effective administration (see Recommendation 2).
- **Recommendation 2: Improve the data collection process.** Should the State seek to reinstate this (or a similar) rebate in the future, it should require additional data from those who qualify for the rebate in order to ensure a full cost-benefit analysis can be completed. Data required includes gross volume and base production totals, as well as the production year associated with each claim. If jobs and/or payroll associated with the production enhancement rebate are goals of the program, that information should also be collected.



Key Findings and Recommendations



Overall Recommendation: Based on the lack of essential data and its analysis of available information, the project team concurs with the State's decision to repeal the program.

Key Findings

According to the OTC, information that would enable the project team to analyze the incentive based on the Incentive Evaluation Commission (IEC)-adopted criteria is not captured in a format that allows for timely analysis.

Below is a summary of the project team's additional findings, based on the established criteria for evaluation.

Other Findings

- **The return on investment (ROI) for this program was positive.** Based on the economic and fiscal impact analysis, it appears the tax revenue generated exceeds the annual incentives offered under this program. The net benefit to the State is estimated to be \$3.7 million between 2013 and 2017.
- **The State is not currently at risk of significant increases in tax expenditures associated with the program.** 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 program sunset for all production effective July 1, 2017, the State is not at risk of significant increases in expenditures related to this incentive.
- **A lack of data creates challenges in assessing the impact of the program.** Very high level information related to this incentive (estimated total rebates of gross production tax paid) is reported in the State's Tax Expenditures Report; the source of this information is gross production tax reports. However, there is a general lack of detailed data associated with this incentive. According to the OTC, data detailing claims by production year (instead of claim year), gross volume and volume of base production are not captured in a format that allows for timely analysis. Instead, staff were able to provide total incentive rebates claimed per year, along with the number of companies paid. Finally, there is no data required associated with jobs or payroll for the enhanced production.
- **Relative to other states, Oklahoma's program was competitive, yet less comprehensive.** While Oklahoma's program is considered competitive among its peers, it falls short of much of the competition in terms of program duration, length of rebate/exemption, and basis of taxation (full production versus incremental production). However, while many states limit incentives based on commodity prices, Oklahoma has no such restriction.

Recommendations

The project team concurs with the State's decision to end the program. Key in this determination was a lack of essential data that could illustrate the impact of the program in accordance with the Commission's evaluation criteria.

The project team provides the following recommendations for consideration in the event that the program is revisited/reinstated in the future.



- **Recommendation 1: Explore the new electronic filing system as a method for improving reporting and data collection.** The OTC recently rolled out an electronic filing system for the filing of Forms 320-A (Request for Assignment of OTC Production Unit Number) and 320-C (Gross Production Request for Change), the latter of which is required to apply to the Re-Established Production Rebate. The system allows users to register new wells, request assignment of the lease production unit number (PUN), make changes to existing lease record information, and make all other changes currently found on the forms. While this system is currently not planned for use in administering the Production Enhancement Rebate, the State should assess whether it has an opportunity to automate the data collection process. The system may be able to act as a database/repository for the information currently collected, as well as data necessary for effective administration (see Recommendation 2).
- **Recommendation 2: Improve the data collection process.** Should the State seek to reinstate this (or a similar) rebate in the future, it should require additional data from those who qualify for the rebate in order to ensure a full cost-benefit analysis can be completed. Data required includes gross volume and base production totals, as well as the production year associate with each claim. If jobs and payroll associated with enhanced production are program goals, then that information should also be collected from those seeking the rebate.



Introduction



Overview

In 2015, HB2182 established the Oklahoma Incentive Evaluation Commission (the Commission). 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 first set of 11 evaluations was conducted in 2016.

The Production Enhancement Rebate is one of 12 incentives scheduled for review by the Commission in 2017. Based on this evaluation and their collective judgement, the Commission will make recommendations to the Governor and the State Legislature related to this incentive.

During the 2017 legislative session, HB2377 was enacted, which provided a sunset of eight gross production tax (GPT) incentives on July 1, 2017 (instead of July 1, 2020 as previously existed in State statute). This incentive is among those with a July 1, 2017 sunset. While it could be argued that the evaluation of the incentive is no longer necessary, examining the impact of incentives for such an important state industry is useful from a public policy perspective. It is also possible that the State may wish to revisit these incentives in the future.

Incentive Background

Many states have provided tax incentives to stimulate oil and gas production, revenue and job creation. Over the years, the State of Oklahoma has enacted a series of rebates that effectively lower the tax rate for various forms of production, including production resulting from enhancement projects.

Oklahoma's Production Enhancement Rebate, effective July 1, 1994, reduced the gross production tax for 28 months on the incremental production² resulting from production enhancement projects.

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 specific goals were not included in the legislation that established them. However, it is reasonable to assume that the goals of the program would include increased Oklahoma oil and gas production and, through it, increased employment within the State.

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:

- Change in capital investment versus non-qualified within the industry;
- Change in oil/gas production versus non-qualified within the industry;
- Change in jobs versus non-qualified within the industry;
- Change in revenue associated with leases.

The criteria focus on what are generally considered goals of incentive programs, such as creating jobs and capital investment in the state. 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 criterion for evaluation (State return on investment). These will be discussed throughout the balance of the evaluation.

² Incremental production means the amount of crude oil, natural gas or other hydrocarbons which are produced as a result of the production enhancement project in excess of the base production.



Industry Background

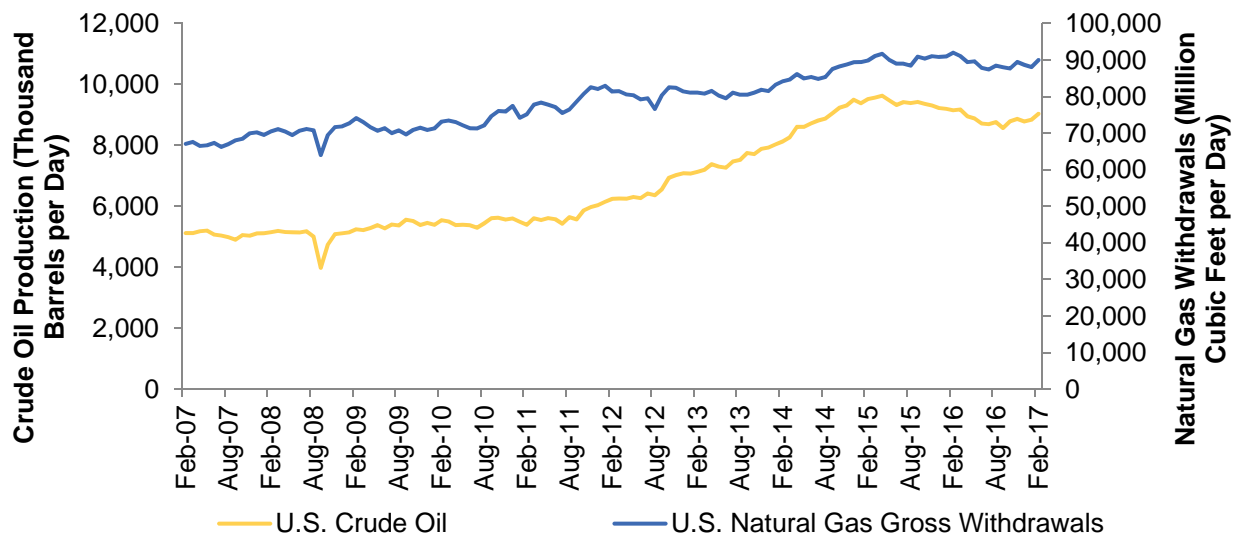


U.S. Oil and Gas Industry Background

Nationally, oil and gas production have both increased over the last 10 years. Crude oil production grew by 76 percent between February 2007 and February 2017, and natural gas withdrawals increased by 34 percent during the same time period. Nationally, U.S. crude oil production peaked in April 2015 at an average of 9.6 million barrels per day, and natural gas withdrawals peaked in February 2016 at an average of 92 billion cubic feet per day.

The following chart tracks oil and gas production during this timeframe.

Figure 2: U.S. Crude Oil and Natural Gas Production, 2007-2017



Source: U.S. Energy Information Administration Monthly Crude Oil and Natural Gas Production

Industry Outlook

Nationally, the outlook for the oil and gas industry is positive. According to the April 2017 Oklahoma Economic Indicators Report produced by the Oklahoma Employment Security Commission, U.S. crude oil production is forecast to average 9.2 million barrels per day in 2017 and 9.9 million barrels per day in 2018, an increase from 8.9 million barrels per day in 2016. Additionally, the report estimates that U.S. natural gas production in 2017 will increase by 0.8 billion cubic feet per day (Bcf/d) over 2016 levels, and 2018 production is forecast to be 4.0 Bcf/d over the 2017 projection.



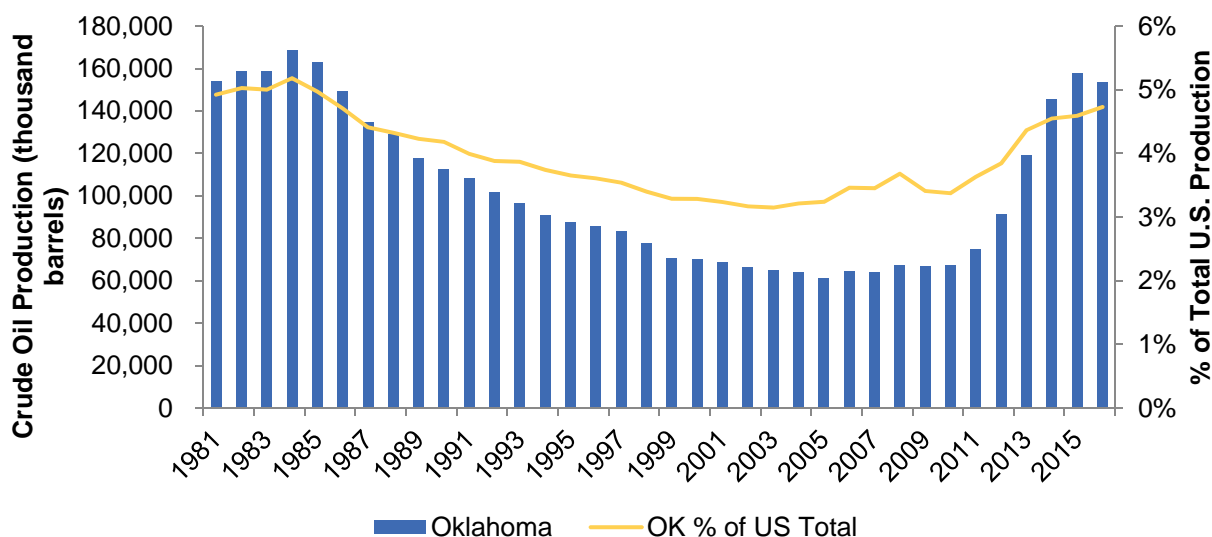
Oklahoma Oil and Gas Industry Background

Oil and Gas Production

The oil and gas industry plays a major role in Oklahoma's economy. The State produces a substantial amount of oil and natural gas, ranking fifth in crude oil production and third in dry natural gas production among all states in 2015.³

Including Oklahoma, the Midwestern states⁴ accounted for 614 million barrels of crude oil, or 19 percent of all U.S. field production, in 2016. Total Oklahoma production declined steadily between 1984 and 2005 before increasing to levels seen prior to the start of the decline, with most of the significant increases occurring in the years since 2012. Simultaneously, Oklahoma's share of total Midwestern crude oil production has decreased from 43 percent in 1981 to 25 percent in 2016, primarily as a result of increased production in North Dakota. North Dakota's production has grown exponentially, from 45 million barrels in 1981 (13 percent of the Midwestern total) to 378 million barrels in 2016 (62 percent of the Midwestern total). Nationally, Oklahoma's production of crude oil has consistently accounted for approximately three to five percent of total production. The figure below illustrates Oklahoma's performance among all states.

Figure 3: Oklahoma Field Production of Crude Oil, 1981-2016



Source: U.S. Energy Information Administration Annual Crude Oil Production

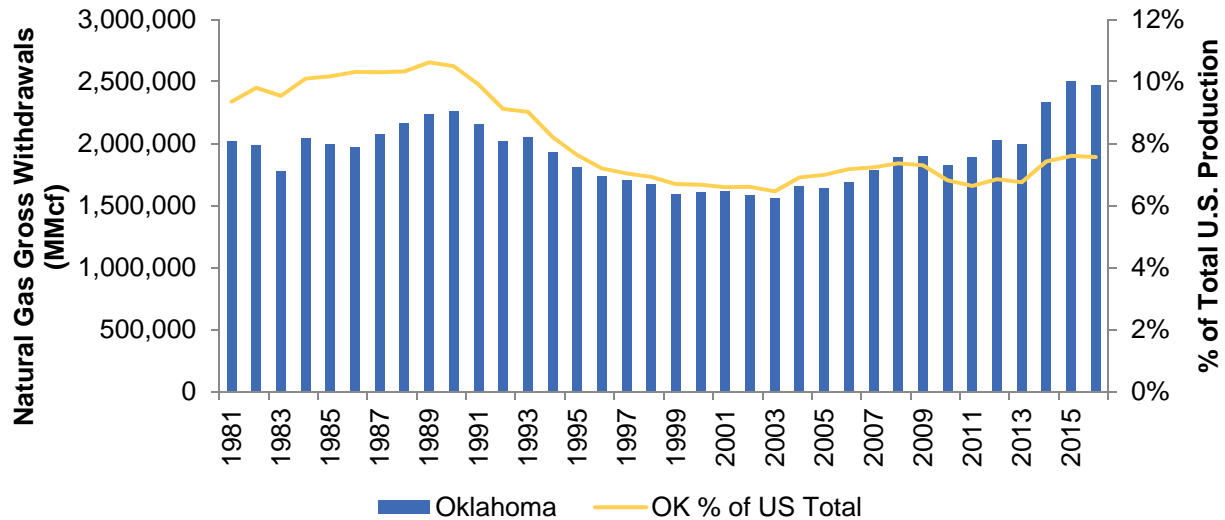
Oklahoma natural gas withdrawals declined between 1990 and the early 2000s but have increased modestly since, peaking at 2.5 million cubic feet (Mcf) in 2015. Despite this increase in total production, Oklahoma's share as a percentage of total U.S. production, which peaked at more than 10 percent in the late 1980s, has declined since and now hovers around seven percent. The following figure illustrates Oklahoma's natural gas withdrawal performance.

³ U.S. Energy Information Administration Monthly Crude Oil and Natural Gas Production.

⁴ According to the U.S. EIA, the Midwestern Petroleum Administration for Defense District (PADD) includes Illinois, Indiana, Kansas, Kentucky, Michigan, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota and Tennessee.



Figure 4: Oklahoma Natural Gas Withdrawals, 1981-2016



Source: U.S. Energy Information Administration Annual Natural Gas Withdrawals

Oil and Gas Economic Impact

The oil and gas industry plays a significant role in Oklahoma's regional economy. A 2016 study by the State Chamber of Oklahoma Research Foundation identified the following as a few of the industry's economic contributions:⁵

- Household earnings (\$15.6 billion) from the oil and gas sector total 13.2 percent of total state earnings;
- Oil and gas activity accounts for more than half the fixed investment (\$20.3 billion) in Oklahoma;
- The State exported crude oil and natural gas valued at \$7.1 billion in 2015;
- An estimated \$1.7 billion in oil and gas royalties were paid to Oklahomans in 2015;
- Activity in the industry supports an estimated \$28.6 billion in additional output of goods and services in other industry sectors statewide.

The oil and gas industry also directly generates many high paying jobs throughout the State. **While the oil and gas industry accounts for fewer than two percent of all private industry jobs within Oklahoma, oil and gas wages account for nearly six percent of total private industry wages.** Additionally, the average annual pay (nearly \$140,000 in 2015) is significantly higher than the statewide average annual pay for all private industries (\$44,504).

⁵ State Chamber of Oklahoma Research Foundation. Economic Impact of the Oil and Gas Industry on Oklahoma (September 2016).



Table 1: Oklahoma Oil and Gas Employment, 2006-2015⁶

Year	Oil and Gas Employment		Oil and Gas Wages		Avg Annual Pay	
	Total Employees	% of All Private Industry Total	Total Wages (in thousands)	% of All Private Industry Total Wages	Oil and Gas	All Private Industries
2006	16,192	1.4%	\$2,148,554	5.3%	\$132,694	\$34,136
2007	17,985	1.5%	\$1,856,701	4.3%	\$103,234	\$35,469
2008	19,808	1.6%	\$2,258,918	4.9%	\$114,041	\$37,137
2009	19,410	1.7%	\$1,939,932	4.5%	\$99,943	\$36,934
2010	18,677	1.6%	\$1,907,912	4.3%	\$102,152	\$38,011
2011	21,078	1.8%	\$2,486,725	5.2%	\$117,979	\$40,157
2012	23,986	2.0%	\$2,860,984	5.6%	\$119,279	\$41,863
2013	24,328	2.0%	\$3,057,485	5.8%	\$125,677	\$42,734
2014	24,140	1.9%	\$3,089,106	5.6%	\$127,965	\$44,089
2015	23,868	1.9%	\$3,324,490	5.9%	\$139,288	\$44,504

Source: U.S. Department of Labor BLS - Quarterly Census of Employment and Wages

Note: data represents only direct employment.

In addition, Oklahoma's oil and gas industry is a vital part of the regional and national economy. The benchmark price for a blend of U.S. crude oils known as West Texas Intermediate (WTI) is set at Cushing, Oklahoma.⁷ Additionally, the State ranks as the third most attractive oil and gas market among 126 markets worldwide due to its abundant natural energy reserves and strong prospects for growth.⁸ According to a 2015 report released by the U.S. Department of Labor's Bureau of Labor Statistics (BLS), in June 2014, Washington County, Oklahoma had the highest concentration of employment in the oil and gas extraction industry in the country (with a location quotient of 139.8). Woods County, Oklahoma had the third highest concentration (98.4).⁹

Oklahoma Oil and Gas Taxes

In addition to employment opportunities, the oil and gas industry provides significant revenue to states through the payment of various taxes. Nationally, taxes levied on the oil and gas industry can be grouped into three broad categories: production, property and income. For this evaluation, production taxes, which are imposed on the value or volume of the oil and gas as it is extracted from the ground or at the point of first sale, are the focus of this incentive.

Oklahoma's GPT is a severance tax on the dollar value of production of oil and gas taken from land or water in the State. Under current law, traditional vertical wells are taxed at 7.0 percent.¹⁰ Horizontal wells drilled before

⁶ BLS Data for all jobs categorized under NAICS 211, Oil and Gas Extraction.

⁷ EIA State Profile and Energy Estimates: Oklahoma. Available at <https://www.eia.gov/state/index.php?sid=OK>

⁸ State Chamber of Oklahoma Research Foundation. Economic Impact of the Oil and Gas Industry on Oklahoma (September 2016).

⁹ U.S. Department of Labor Bureau of Labor Statistics. Counties with Highest Concentration of Employment in Oil and Gas Extraction, June 2014. Available at: <https://www.bls.gov/opub/ted/2015/counties-with-highest-concentration-of-employment-in-oil-and-gas-extraction-june-2014.htm>.

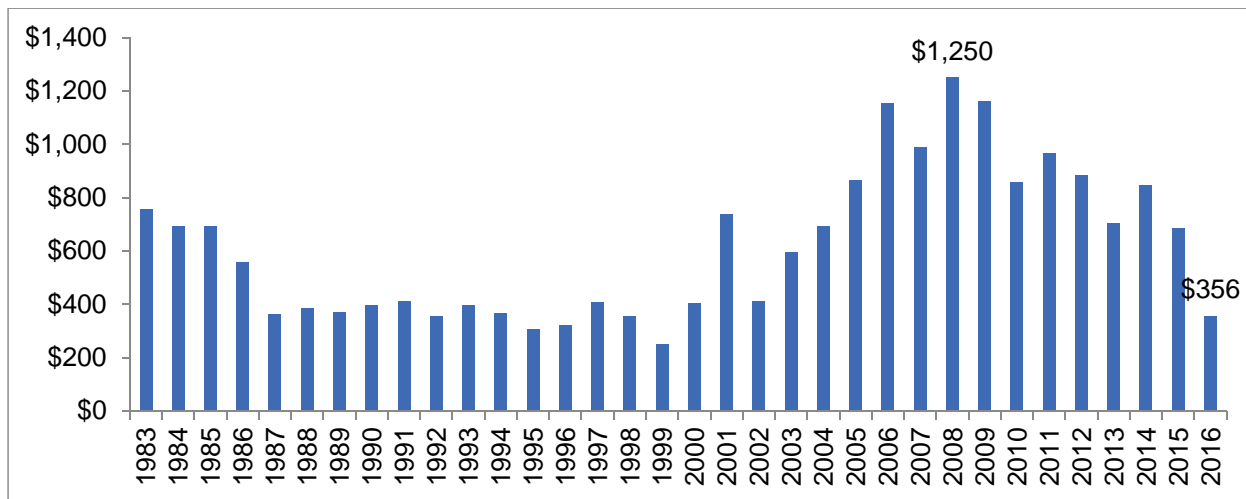
¹⁰ A vertical well, considered to be the conventional well type, is a well that is not turned horizontally at depth, allowing access to oil and gas reserves located directly beneath the surface access point. Historically, natural gas and exploration involved the use of vertical wells because directional drilling technology was expensive and complicated. While less expensive to develop they are typically less productive because of their limited range.



July 1, 2015 are taxed at 1.0 percent for four years and 7.0 percent thereafter.¹¹ Newly drilled wells are taxed at 2.0 percent for the first 36 months of production; they are then taxed at 7.0 percent for the rest of the life of the well.

These taxes are a significant source of overall Oklahoma revenues, totaling \$355.9 million in FY2016.¹² Because GPT revenue depends both on the amount of mineral extracted and its price, it can vary greatly from year to year. Since peaking in 2008 at \$1,250 million, total collections have decreased substantially, as shown in the figure below. This decrease is likely due to demand-related impacts of the Great Recession and changes in oil and gas prices, as well as reductions in tax rates put in place by the State to encourage additional production.

Figure 5: Oklahoma Gross Production Tax Collections, 1983-2016 (in millions)



Source: Oklahoma Tax Commission Annual Report, 2016

¹¹ Horizontal wells, the less traditional well type, allows operators to extract oil and gas from unconventional sources that may run horizontally. A horizontal well typically originates from a vertical well, as this allows engineers to examine rock fragments at different layers in order to determine where reserves can be found.

¹² Oklahoma Tax Commission Annual Report (2016).



Incentive Usage and Administration



Incentive Characteristics

At the state level, many governments have granted tax exemptions to stimulate production, revenue and job creation. Over the years, the State of Oklahoma has enacted a series of rebates that effectively lower the tax rate for various forms of production, including production resulting from enhanced recovery projects.

Oklahoma's Production Enhancement Rebate, effective July 1, 1994, reduces the gross production tax for 28 months on the incremental production¹³ resulting from production enhancement projects.

For purposes of calculating incremental production resulting from each project, "base production" is defined as:

- The average monthly production of the well in the 12 months prior to the enhancement project commencement; or
- The average monthly production of the well in the 12 months prior to the enhancement project commencement, less the monthly rate of decline in production for each month beginning 180 days prior to the enhancement project commencement; or
- If the well has been producing for less than 12 months, the average monthly production during the months it was in production prior to the commencement of the enhancement project.

A "production enhancement project" is defined as any workover (definition to follow), recompletion (definition to follow), reentry of plugged and abandoned wellbores, or addition of a well or field compression.¹⁴

A "workover" is any downhole operation in an existing oil or gas well that is designed to sustain, restore or increase the production rate or ultimate recovery in a geologic interval currently completed or producing in the existing oil or gas well.¹⁵

"Recompletion" means any downhole operation in an existing oil or gas well that is conducted to establish production of oil or gas from any geologic interval not currently completed or producing in such existing oil or gas well within the same or a different geologic formation.

For all eligible production under these definitions, the State issues a refund against gross production taxes. The Production Enhancement Rebate is applicable toward projects with a beginning date on or after July 1, 1994 and prior to July 1, 2017.

Historic Use of the Incentive

According to data provided by the OTC, the amount of rebates paid and the number of companies claiming rebates have fluctuated in recent years, peaking at \$24.1 million in 2014 but averaging \$12.6 million between 2013 and 2016. It is likely that the spike in 2014 was due to an administrative change effective July 1, 2014 that prohibited the refund of gross production taxes for production occurring prior to July 1, 2003 and limited the

¹³ Incremental production means the amount of crude oil, natural gas or other hydrocarbons which are produced as a result of the production enhancement project in excess of the base production.

¹⁴ Compressors are deployed to boost the gas pressure high enough to push it through pipelines.

¹⁵ For production enhancement projects having a project beginning date on or after July 1, 1997, and prior to July 1, 2017, "workover" includes, but is not limited to: acidizing; reperforating; fracture treating; sand/paraffin/scale removal or other wellbore cleanouts; casing repair; squeeze cementing; installation of compression on a well or group of wells or initial installation of artificial lifts on gas wells, including plunger lifts, rod pumps, submersible pumps and coiled tubing velocity strings; downsizing existing tubing to reduce well loading; downhole commingling; bacteria treatments; upgrading the size of pumping unit equipment; setting bridge plugs to isolate water production zones; or any combination thereof. Routine maintenance, routine repair, or like for like replacement of downhole equipment such as rods, pumps, tubing, packers, or other mechanical devices does not qualify as a workover.



claim window to 18 months after the first day of the fiscal year in which the refund is initially available. This change had the effect of increasing claims in 2014 resulting from production occurring prior to July 1, 2003 that otherwise would have become ineligible for the rebate.

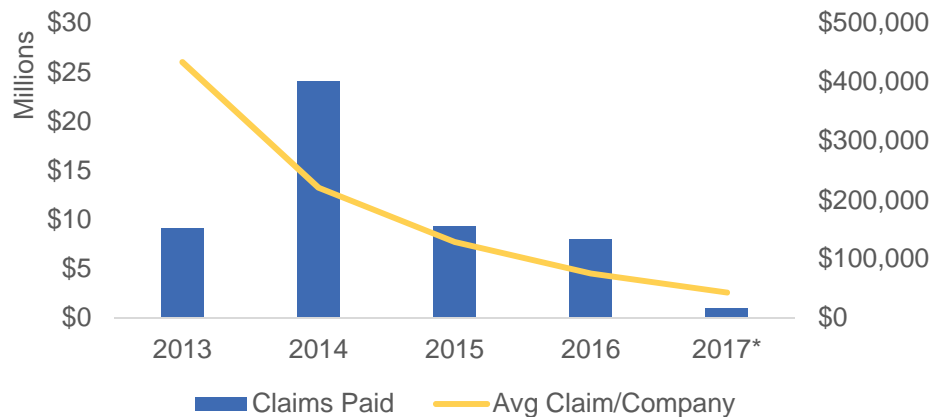
Table 2: Production Enhancement Rebate Claims Data, 2013-2017

Claim Year	Total Claims Paid	Total Companies
2013	\$9,103,474	21
2014	\$24,050,859	109
2015	\$9,268,950	72
2016	\$7,978,526	106
2017	\$949,295	22

Source: OTC data
* Preliminary

There does not appear to be a strong correlation between production increases and rebates associated with this incentive. While production has generally increased from year to year, rebate claims have fluctuated significantly, and the average claim per company has decreased from \$433,000 in 2013 to \$75,000 in 2016. It is possible that this is due to the relatively stronger market enabling operators to prioritize top-producing wells instead of turning to smaller projects focused on incremental increases.

Figure 6: Production Enhancement Rebate - Average Claim/Company, 2013-2017



Source: OTC data
* Preliminary

Incentive Administration

There are three components to overall program administration, which are jointly managed by the OTC and the Oklahoma Corporation Commission (OCC):

1. **Eligibility.** In order to be eligible for the Production Enhancement Rebate, well operators must undertake projects that qualify under the definition of “production enhancement projects” which means



any workover, recompletion, reentry of plugged and abandoned wellbores, or addition of a well or field compression.

2. **Application.** To apply for qualification of a production enhancement project and incremental production, OCC Form 1534 (Application for Tax Rebate) is completed by the well operator and submitted, along with supporting documents, to the Technical Services Department of the Conservation Division of the OCC for review. If the application is approved, a copy is forwarded to the well operator. If the application is denied or refused, or if approval is delayed beyond 60 days, the operator can seek review by application, notice and hearing.
3. **Refunding.** If the OCC approves the application, the operator requests a refund by letter to the Audit Division of the OTC. The letter states the reason for the refund and the amount claimed and is submitted along with a copy of the application approved by the OCC certifying the well as a production enhancement project. The applicant also provides a completed OTC Form 328 (Gross Production 841/495 Refund Report); and if the request is filed by anyone other than the person named in the OCC application, a notarized affidavit. The OTC reviews the application and supporting documentation and if no problems exist, processes the refund.

The amount refunded is based on the incremental production resulting from the production enhancement project. To calculate this, the OCC uses a decline forecast model it developed internally. The tool uses historical production data to calculate a decline rate and baseline production level from which increased production is measured. These measures are passed along to the operator at the time of approval so that they can be used to calculate each refund request based on actual production post-enhancement project.

Industry Education

According to the OTC, lack of industry education is the primary reason for oil and gas incentive-related denials – most often, applicants are confused about the level at which the incentives are administered (i.e. lease or well level). In addition to educational opportunities provided by the OTC, State agency Sustaining Oklahoma's Energy Resources (SOER) provides a variety of workshops for industry professionals around the state on a variety of industry-related topics. One workshop, Navigating State Forms: A Panel Discussion with the OCC and OTC, provides information about where to find, how to complete and when to submit some of the most common forms associated with operating an oil or gas well in the state.¹⁶

Reporting and Data Issues

Very high level information related to this incentive (estimated total rebates of gross production tax paid) is reported in the State's Tax Expenditures Report; the source of this information is gross production tax reports.

However, there is a general lack of detailed data associated with this incentive. According to the OTC, data detailing claims by production year (instead of claim year) and gross volume and volume of base production are not captured in a format that allows for timely analysis. Instead, staff were able to provide total incentive rebates claimed per year, along with the number of companies paid.

¹⁶ Sustaining Oklahoma's Energy Resources (SOER) was created on July 1, 2013 when the Marginal Well Commission (MWC) with the Oklahoma Energy Resources Board (CERB) under Senate Bill 767.



Economic and Fiscal 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 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 7: 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).

Fiscal Impact 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).¹⁷ Two datasets were used to derive the ratio: 1) U.S. Department of Commerce Bureau of Economic

¹⁷ Gross State Product (GSP) is the state counterpart of Gross Domestic Product (GDP) for the nation. To assist the reader, the project team has decided to use GDP throughout this section of the report instead of mixing the two terms. This decision was made because more people are familiar with the term GDP.



Analysis GDP estimates by state;¹⁸ and 2) the OTC's *Annual Report of the Oklahoma Tax Commission*.¹⁹ Over the past 10 years, the state tax revenue as a percent of state GDP was 5.4 percent, as shown in the following table:

Table 3: State of Oklahoma Tax Revenue as a Percent of State GDP

Year	Oklahoma Tax Revenue ²⁰	Oklahoma GDP	Ratio
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%
2015-16	\$8,963,894,053	\$182,937,000,000	4.9%
Average	\$8,908,720,068	\$166,905,300,000	5.4%

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

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.

To estimate State of Oklahoma tax revenue generated in a given year, the project team multiplied the total value added figure produced by the IMPLAN model by the corresponding annual ratio (about 5.4 percent). For example, if the total value added was \$1,000,000, then the estimated State of Oklahoma tax revenue was \$54,000 (\$1,000,000 x 5.4 percent).

Impact of Production Enhancement Rebate Incentives

The Production Enhancement Rebate was designed to increase and expand oil and gas production in Oklahoma. A full or partial refund of gross production taxes paid for production in the previous calendar year

¹⁸ U.S. Department of Commerce Bureau of Economic Analysis. Available at <http://www.bea.gov/regional/>.

¹⁹ Oklahoma Tax Commission. Available at https://www.ok.gov/tax/Forms_&_Publications/Publications/Annual_Reports/index.html.

²⁰ Gross collections from state-levied taxes, licenses and fees, exclusive of city/county sales and use taxes and county lodging taxes.



was issued to the well operator. Because GPT rates vary based on the well classification, total annual production or output was derived using a blended production tax rate of 5.5 percent. Based on data availability, it was necessary to convert the incentive amount to annual economic activity prior to utilizing the economic impact model. IMPLAN Sector 20 Extraction of Natural Gas and Crude Petroleum was used to model the economic impact.

Table 4: Impact of Production Enhancement Rebate Incentives

Year		Output	Value Added	Labor Income	Employment	Estimated Oklahoma Tax Revenue
2013	Direct Effect	\$165,517,703	\$117,291,017	\$90,191,059	685	
	Indirect Effect	\$37,984,606	\$23,290,529	\$17,823,489	205	
	Induced Effect	\$81,462,837	\$44,580,136	\$25,170,842	626	
	Total Effect	\$284,965,146	\$185,161,682	\$133,185,390	1,515	\$9,628,407
2014	Direct Effect	\$437,288,338	\$324,540,308	\$249,555,634	1,862	
	Indirect Effect	\$103,696,093	\$64,444,111	\$49,316,996	557	
	Induced Effect	\$225,806,829	\$123,351,741	\$69,646,875	1,700	
	Total Effect	\$766,791,260	\$512,336,160	\$368,519,505	4,119	\$25,616,808
2015	Direct Effect	\$168,526,364	\$124,092,455	\$95,421,033	704	
	Indirect Effect	\$39,809,706	\$24,641,093	\$18,857,033	211	
	Induced Effect	\$85,915,950	\$47,165,237	\$26,630,442	643	
	Total Effect	\$294,252,020	\$195,898,785	\$140,908,508	1,558	\$9,851,831
2016	Direct Effect	\$145,064,114	\$105,506,836	\$81,129,600	595	
	Indirect Effect	\$34,137,004	\$20,950,539	\$16,032,770	178	
	Induced Effect	\$73,014,578	\$40,101,188	\$22,641,938	544	
	Total Effect	\$252,215,696	\$166,558,563	\$119,804,308	1,317	\$8,994,162
2017	Direct Effect	\$17,259,908	\$12,399,443	\$9,534,565	70	
	Indirect Effect	\$4,046,372	\$2,462,163	\$1,884,214	21	
	Induced Effect	\$8,577,062	\$4,712,798	\$2,660,940	63	
	Total Effect	\$29,883,342	\$19,574,404	\$14,079,719	154	\$959,146

Source: TXP, Inc. IMPLAN analysis output, September 2017

Table 5: Annual Tax Revenue Generated, 2011-2015

Year	Rebates Paid During Current Tax Year	Estimated Oklahoma Tax Revenue	Net Impact
2013	\$9,103,474	\$9,628,407	\$524,933
2014	\$24,050,859	\$25,616,808	\$1,565,949
2015	\$9,268,950	\$9,851,831	\$582,881
2016	\$7,978,526	\$8,994,162	\$1,015,636
2017	\$949,295	\$959,146	\$9,851
Total	\$51,351,104	\$55,050,354	\$3,699,250

Source: TXP, Inc. IMPLAN analysis output, September 2017



As depicted in the preceding table, the Production Enhancement Rebate program results in increased statewide oil and gas production sector activity. The level of economic activity varies each year and is directly linked to the amount of oil and gas production. It is likely that the spike in 2014 was due to an administrative change effective July 1, 2014 that prohibited the refund of gross production taxes for production occurring prior to July 1, 2003. Multiplying the total value added figure produced by the IMPLAN model by the corresponding annual tax ratio provides an estimate for total annual State tax revenue. Over the past 5 years, the Production Enhancement Rebate program (through direct, indirect and induced economic effects) has generated approximately \$55.1 million in state tax revenue. Over this same period, the State has provided \$51.4 million amount in rebates, resulting in a return on investment of \$3.7 million between 2013 and 2017.

It should be noted that it is difficult to evaluate the importance of the Production Enhancement Rebate program on the long-term outlook for the overall oil and gas sector (but-for test). It is reasonable to assume that some of the oil and gas producers would have continued to invest in these wells at some level or shifted capital expenditures to another location within the state. If this occurred, there would have been positive economic activity without the incentive. A more important variable that drives activity in this sector is the market price for crude oil and natural gas. The importance of this incentive and the risk producers are willing to take is directly linked to the market price of oil and natural gas.



Incentive Benchmarking

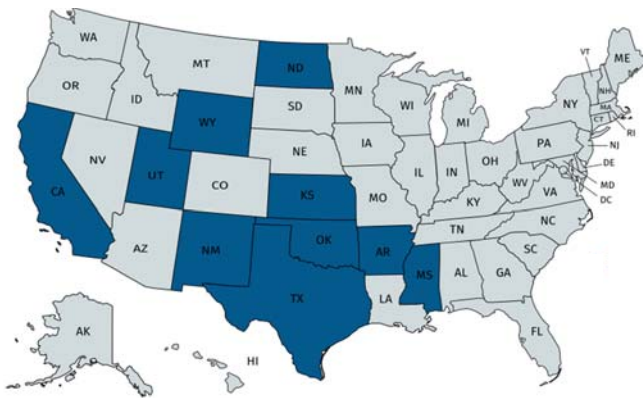
Benchmarking

A detailed description of comparable state programs can be found in **Appendix A**.

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.²¹ 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 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.

Figure 8: States Offering Production Enhancement Incentives



However, the comparison group for certain incentives will be broader than just the neighboring states. In this case (as with most energy-related incentives), the industry the rebate 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.

In total, nine states were found to currently have (or previously have had) tax incentives comparable to those offered by the State of Oklahoma. Those states are displayed in Figure 8.

Oklahoma, along with other states offering similar production enhancement incentives, accounted for 54 percent of total U.S. dry natural gas production and 70 percent of total U.S. crude oil production in 2015. Several top-producing states were not found to have similar incentives (Pennsylvania, number two for natural gas; Louisiana, number five for natural gas and number nine for crude oil; Colorado, number six for natural gas and number seven for crude oil; West Virginia, number seven for natural gas; Ohio, number ten for natural gas; and Alaska, number four for crude oil).

Table 6: Production of States Offering Production Enhancement Incentives, 2015

	Dry Natural Gas			Crude Oil		
State	Production (Mcf)	% of U.S. Total	Rank	Production (thousand barrels)	% of U.S. Total	Rank
Texas	7,071,203	26.1%	1	1,263,585	36.8%	1
Oklahoma	2,336,234	8.6%	3	157,770	4.6%	5

²¹ The primary instances of exactly alike state incentive programs occur when states choose to ‘piggyback’ onto federal programs.



State	Dry Natural Gas			Crude Oil		
	Production (Mcf)	% of U.S. Total	Rank	Production (thousand barrels)	% of U.S. Total	Rank
Wyoming	1,745,165	6.4%	4	86,499	2.5%	8
New Mexico	1,151,159	4.3%	8	146,746	4.3%	6
Arkansas	1,009,723	3.7%	9	6,165	0.2%	23
Utah	408,002	1.5%	11	36,987	1.1%	11
North Dakota	381,653	1.4%	12	429,447	12.5%	2
Kansas	270,180	1.0%	14	45,481	1.3%	10
California	218,590	0.8%	15	201,284	5.9%	3
Mississippi	57,859	0.2%	20	24,918	0.7%	14
U.S.	27,059,503	54.1%		3,436,515	69.8%	

Source: U.S. Energy Information Administration

A review of the nine comparable incentive programs reveals that Oklahoma is one of three with sunset dates. While Oklahoma's Production Enhancement Rebate is currently applicable toward projects with a beginning date on or after July 1, 1994 and prior to July 1, 2017, Texas' program sunset in September 2013, and Wyoming's program expired in March 2008.

Like Oklahoma, Kansas and North Dakota offer full production tax exemptions on incremental production, with no restrictions related to the price of oil or gas. While all three programs are time limited, Kansas and North Dakota offer more generous terms related to the length of the incentive (7 years and 5-10 years, respectively).

Four states (Arkansas, New Mexico, Utah and Wyoming) offer a reduction in tax rate on incremental production, as opposed to a full tax exemption. While New Mexico and Wyoming time-limit their incentives and limit them based on commodity prices, Arkansas and Utah impose no such restrictions.

Finally, three states (California, Mississippi and Texas) reduce the tax rate on total well production, as opposed to the incremental increase in production resulting from the enhancement project. Only Texas imposes a duration limitation, and only California restricts the incentive based on oil and gas prices.

While Oklahoma's program is considered competitive among its peers, it provides less benefit than many of the benchmark states in terms of program duration, length of rebate/exemption, and basis of taxation (full production versus incremental production). However, many states limit incentives based on commodity prices, and Oklahoma does not.

The differing oil and gas tax rates in Oklahoma can make a comparison of tax rates among the states more difficult. One report, by the State of Idaho's Department of Lands, sought to make a comparison possible among states, even with varying rates. The Department determined that in order to make an "apples to apples" comparison among states, it was necessary to calculate the "effective rate," which factors in each state's production and various taxes.²² To arrive at each state's effective rate, the Department divided taxes collected by the valuation of the production.

Based on this calculation, Oklahoma's FY2016 effective tax rate (3.2 percent) based on severance, production and property taxes paid in ratio to taxable value of production, was the lowest among oil and gas producing

²² An effective tax rate is the average percentage that companies pay in taxes on taxable income.



states used in the study.²³ . Idaho's effective rate was similar at 4.0 percent, while all other states imposed taxes at an effective rate between 6.1 percent (Utah) and 13.4 percent (Wyoming).²⁴

Benchmarking Program Evaluations

Among the states with active incentive programs, one useful study was found. In December 2000, the University of Wyoming (UW) produced a study on Mineral Tax Incentives, Mineral Production and the Wyoming Economy.

The study sought to answer two questions:

- To what extent do mineral taxes, tax incentives and environmental regulations increase or decrease tax collections to Wyoming entities as compared with amounts that would be collected in their absence?
- To what extent do taxes, tax incentives and environmental regulations alter employment and other economic activity in Wyoming as compared with what would occur in the absence?

Using Pindyck's 1979 model of exhaustible resource supply²⁵ as a basis, the UW team developed an empirical framework that was used to show how changes in taxes, tax incentives and environmental regulations alter the timing of exploration and production by firms in the oil industry. The model was used to assess the impact on drilling and production of a change in any tax or tax incentive.

Study Limitations²⁶

- Data used to implement the model are imperfect.
- The model does not envision interactions between states that arise from changes in tax or regulatory policy.
- The model used does not take into consideration investment decision factors beyond profit maximization.

Key Findings

The study projected that a permanent severance tax reduction of four percent on incremental production resulting from qualified workovers and recompletions would result in an increase in real disposable taxable personal income of more than \$1.0 million, with the annual total decreasing to \$0.7 million by 2035. The report also projected an increase in total employment of approximately 40 jobs, with this number decreasing to fewer than 20 by 2035.

²³ Producing states used in analysis: Alaska, Idaho, Louisiana, Montana, North Dakota, Oklahoma, Texas, Utah and Wyoming.

²⁴ Idaho Department of Lands Oil and Gas Taxation Comparison: Analysis of Severance, Production and Ad Valorem Taxes (2016).

²⁵ Pindyck's exhaustible resource supply model says that demand uncertainty has no effect on the expected dynamics of market price, while reserve uncertainty shifts the expected rate of change of price only if extraction costs are nonlinear in reserves. If the demand function is nonlinear, both demand and reserve uncertainty affect the dynamics of production, whatever the character of extraction costs. More information is available at <https://dspace.mit.edu/bitstream/handle/1721.1/35223/MIT-EL-79-021WP-05768933.pdf?sequence=1>.

²⁶ Limitations identified by UW researchers.



Appendices



Appendix A: Comparable State Programs

State	Program Name	Effective Date	Sunset Date	Incentive	Eligible Projects	Incentive Duration
Oklahoma	Production Enhancement Rebate	July 1, 1994	June 30, 2017	Exemption from gross production tax for any incremental production resulting from enhancement projects	Any eligible workover, eligible recompletion, reentry of plugged and abandoned wellbores, or addition of a well or field compression	28 months from date of first sale after project completion
Arkansas	Enhanced Recovery Operations Severance Tax Credit	July 1, 1995	None	50% reduction in severance tax on incremental increases in production resulting from approved enhanced recovery projects	Approved workover and completion projects	Duration of operation
California	Enhanced Oil Recovery Credit	January 1, 1996	None	5% tax credit on qualified oil recovery costs. Credit is reduced when reference price exceeds \$28 per barrel	Projects involving tertiary recovery methods, including miscible fluid displacement, steam drive injection, microemulsion flooding, in situ combustion, polymer-augmented water flooding, cyclic-steam injection, alkaline flooding, carbonated water flooding, immiscible nonhydrocarbon gas displacement	Duration of operation
Kansas	Incremental Production Exemption	July 1, 1998	None	Exemption from severance tax for any incremental production resulting from production enhancement projects	Workovers; recompletions to a different producing zone in the same well bore; secondary recovery projects; addition of mechanical devices to dewater a gas or oil well; replacement or enhancement of surface equipment; installation or enhancement of compression equipment, line looping or other technique	7 years after start-up date of project



State	Program Name	Effective Date	Sunset Date	Incentive	Eligible Projects	Incentive Duration
Mississippi	Enhanced Oil Recovery	April 1, 1994	None	Annual privilege tax is assessed against enhanced oil recovery wells at a discounted rate of 3% of the value of the oil or gas at the point of production; normal rate is 6%	Projects using any non-primary enhanced oil recovery method approved and permitted	Duration of operation
New Mexico	Enhanced Oil Recovery Incentive - Secondary Recovery	July 1, 1992	None	Special reduced recovered oil tax rate for incremental production achieved from enhanced oil recovery project. No reduction is available when WTI is more than \$28 per barrel	Projects involving processes other than primary recovery, including the use of a pressure maintenance process, a water flooding process, an immiscible, miscible, chemical, thermal or biological process	5 years from the date of recovery project approval
	Enhanced Oil Recovery Incentive - Tertiary Recovery	July 1, 1992	None	Special reduced recovered oil tax rate for incremental production achieved from enhanced oil recovery project. No reduction is available when WTI is more than \$28 per barrel		7 years from the date of recovery project approval
North Dakota	Secondary Recovery Project Exemption	July 1, 1991	None	Exemption from oil extraction tax for any incremental production resulting from secondary recovery projects	Secondary recovery (water flooding) projects	5 years from date of the incremental production
	Tertiary Recovery Project Exemption	July 1, 1991	None	Exemption from oil extraction tax for any incremental production resulting from tertiary recovery projects	Tertiary enhanced recovery projects, including CO2 injection	10 years from date of the incremental production



State	Program Name	Effective Date	Sunset Date	Incentive	Eligible Projects	Incentive Duration
Texas	Enhanced Oil Recovery Incentive	September 1, 1989	None	<ul style="list-style-type: none"> - Oil produced from approved enhanced oil recovery projects or expansion of existing projects is eligible for special enhanced oil recovery tax rate of 2.3% of production's market value (one half the standard rate) - An additional 50% rate reduction (to 1.15%) applies for 30 years if the Commission certifies that anthropogenic carbon dioxide is used in the project 	Any process other than primary recovery, including use of an immiscible, chemical, thermal or biological process and any co-production project. Also includes the addition of injection and producing wells and change of injection pattern	10 years after Commission certification of production response
	Enhanced Efficiency Equipment Incentive	September 1, 2005	September 1, 2013	Tax credit of 10% of the cost of enhanced efficiency equipment used to produce oil from a marginal well, not to exceed \$1,000 per well	Enhanced efficiency equipment must be approved by an accredited petroleum engineering program at a higher educational institution in the state to reduce the energy used to produce oil by more than 10% per barrel	Duration of operation
Utah	Enhanced Recovery Incentive	January 1, 1996	None	50% reduction in severance tax rate on the incremental production achieved from enhanced oil recovery project	Projects involving the injection of liquids or hydrocarbon/non-hydrocarbon gases directly into a reservoir for the purpose of augmenting reservoir energy; modifying the properties of the fluids or gases in a reservoir; or changing the reservoir conditions to increase the recoverable oil, gas, or oil and gas through the joint use of two or more well bores	Duration of operation



State	Program Name	Effective Date	Sunset Date	Incentive	Eligible Projects	Incentive Duration
Wyoming	Tertiary Recovery Well Incentive (Expired)	July 1, 1985	March 31, 2008	Incremental oil production resulting from an enhanced recovery project is eligible for a 2% severance tax rate (instead of 6%). For projects approved after March 31, 2003, no reduction is available in months where the price received by the producer equals or exceeds \$27.50 per barrel	Tertiary enhanced recovery projects	5 years from first date of tertiary production

State of Oklahoma

Incentive Evaluation Commission

Re-Established Production Rebate Evaluation

November 13, 2017

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Executive Summary



Overview

Many states have provided tax incentives to stimulate oil and gas production, revenue and job creation. Over the years, the State of Oklahoma has enacted a series of rebates that effectively lower the tax rate for various forms of production, including production resulting from re-established production projects. Oklahoma's Re-Established Production Rebate, effective July 1, 1994, exempts from gross production tax (GPT) for 28 months the production resulting from the re-establishment of an inactive well. The goal of the program is to encourage re-establishment of production at currently inactive oil and/or gas wells.

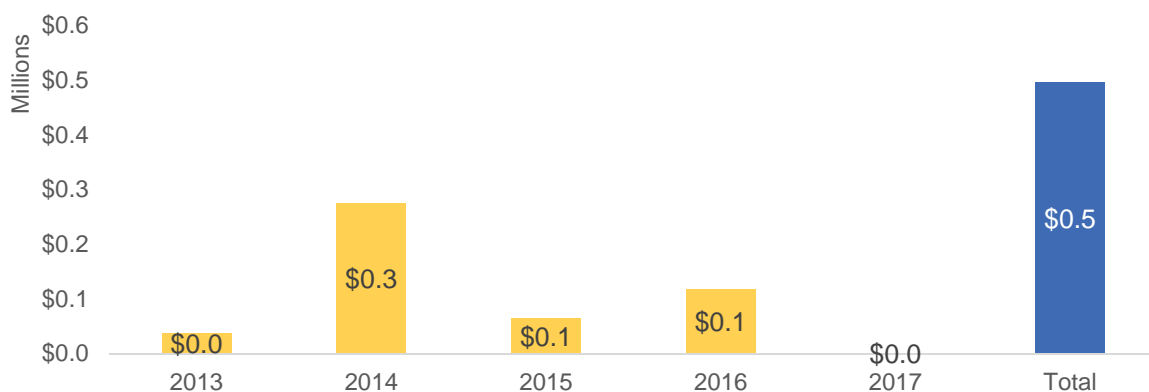
During the 2017 legislative session, HB2377 was enacted, which provided a sunset of eight GPT incentives on July 1, 2017 (instead of July 1, 2020 as previously existed in State statute). This incentive is among those with a July 1, 2017 sunset. While it could be argued that the evaluation of the incentive is no longer necessary, examining the impact of incentives for the vitally important oil and gas industry is useful from a public policy perspective. It is also possible that the State might revisit these incentives in the future.

Recommendation: Based on the lack of essential data and the analysis of available information, the project team concurs with the repeal of the program.

Key Findings

- **Data to evaluate program based on approved criteria was not available.** Data that would enable the project team to analyze this incentive based on the following Incentive Evaluation Commission (IEC)-adopted criteria is not captured in a format that allows for timely analysis:
 - Cost benefit analysis at different price points;
 - Change in production for qualified wells;
 - Change in value of leases;
- **The return on investment (ROI) for this program was positive.** Based on the economic and fiscal impact analysis, it appears the tax revenue generated exceeds the annual incentives offered under this program. The net benefit to the State is estimated to be \$0.5 million between 2013 and 2017.

Figure 1: Net Fiscal Impact¹



¹ Net fiscal impact is defined as the total tax revenue generated minus the annual rebates paid.



- **The State is not currently at risk of significant increases in tax expenditures associated with the program.** One of the statutory requirements 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 recent decision to sunset the program for all production effective July 1, 2017, the State is not at risk of significant increases in expenditures related to this incentive.
- **The State is taking steps toward improving oil and gas data collection.** The Oklahoma Tax Commission (OTC) recently rolled out an electronic filing system for the filing of Forms 320-A (Request for Assignment of OTC Production Unit Number) and 320-C (Gross Production Request for Change), the latter of which is required to apply for the Re-Established Production Rebate. The system allows users to register new wells, request assignment of the lease production unit number (PUN), make changes to existing lease record information, and make all other changes currently found on the forms.
- **Relative to other states, Oklahoma’s program was competitive, yet less comprehensive.** While the State’s rebate is generous in its definition of inactivity at 12 months, most other states are more competitive regarding length of exemption – many at 10 years.

Changes to Improve Future Evaluations (if the program were resumed)

- **Recommendation 1: Explore the new OTC electronic filing system as a method for improving reporting and data collection.** With the recent rollout of a new electronic filing system that will allow users to register new wells, request assignment of the lease production unit number (PUN), make changes to existing lease record information, and make all other changes currently found on the program’s required forms, the State may have an opportunity to automate the data collection process. The system may be able to act as a database/repository for the information currently collected, as well as data necessary for effective administration (see Recommendation 2).
- **Recommendation 2: Improve the data collection process.** Should the State seek to reinstate this (or a similar) rebate in the future, it should require additional data from those who qualify for the rebate in order to ensure a full cost-benefit analysis can be completed. Data required includes gross volume and base production totals, as well as the production year associated with each claim. Further, if jobs and payroll are determined to be criteria for evaluation of the rebate, that information should also be collected from program participants.



Key Findings and Recommendations



Overall Recommendation: Based on the lack of essential data and its analysis of available information, the project team concurs with the decision to repeal the program.

Key Findings

According to the Oklahoma Tax Commission (OTC), information that would enable the project team to analyze the incentive based on the Incentive Evaluation Commission (IEC)-adopted criteria is not captured in a format that allows for timely analysis.

Other Findings

- **The return on investment (ROI) for this program was positive.** Based on the economic and fiscal impact analysis, it appears the tax revenue generated exceeds the annual incentives offered under this program. The net benefit to the State is estimated to be \$0.5 million between 2013 and 2017.
- **The State is not currently at risk of significant increases in tax expenditures associated with the program.** 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 decision to sunset the program for all production effective July 1, 2017, the State is not at risk of significant increases in expenditures related to this incentive.
- **A lack of data creates challenges in assessing the impact of the program.** Very high level information related to this incentive (estimated total rebates of gross production tax paid) is reported in the State’s Tax Expenditures Report; the source of this information is gross production tax reports. However, there is a generally lack of detailed data associated with this incentive. According to the OTC, data detailing claims by production year (instead of claim year) is not captured in a format that allows for timely analysis. Instead, staff were able to provide total incentive rebates claimed per year, along with the number of companies paid.
- **However, the State is taking steps toward improving data collection.** The OTC recently rolled out an electronic filing system for the filing of Forms 320-A (Request for Assignment of OTC Production Unit Number) and 320-C (Gross Production Request for Change), the latter of which is required to apply to the Re-Established Production Rebate. The system allows users to register new wells, request assignment of the lease production unit number (PUN), make changes to existing lease record information, and make all other changes currently found on the forms.
- **Relative to other states, Oklahoma’s program was competitive, yet less comprehensive.** While the State’s rebate is generous in its definition of inactivity at 12 months, most other states offer more lengthy exemptions – many at 10 years.

Recommendations

The Re-Established Production Rebate program was sunset effective July 1, 2017. Given the lack of needed data for evaluation, the project team concurs with the decision to end the program. Key in this determination is a lack of essential data that could illustrate the impact of the program in accordance with the Commission’s evaluation criteria.



Given the findings previously discussed, the project team provides the following recommendations for consideration in the event that the program is revisited/reinstated in the future.

- **Recommendation 1: Explore the new OTC electronic filing system as a method for improving reporting and data collection.** With the recent rollout of a new electronic filing system that will allow users to register new wells, request assignment of the lease production unit number (PUN), make changes to existing lease record information, and make all other changes currently found on the program's required forms, the State may have an opportunity to automate the data collection process. The system may be able to act as a database/repository for the information currently collected, as well as data necessary for effective administration (see Recommendation 2).
- **Recommendation 2: Improve the data collection process.** Should the State seek to reinstate this (or a similar) rebate in the future, it should require additional data from those who qualify for the rebate in order to ensure a full cost-benefit analysis can be completed. Data required includes gross volume and base production totals, as well as the production year associated with each claim. Further, if jobs and payroll are determined to be criteria for evaluation of the rebate, that information should also be collected from program participants.



Introduction



Overview

In 2015, HB2182 established the Oklahoma Incentive Evaluation Commission (the Commission). 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 first set of 11 evaluations was conducted in 2016.

The Re-Established Production Rebate is one of 12 incentives scheduled for review by the Commission in 2017. Based on this evaluation and their collective judgement, the Commission will make recommendations to the Governor and the State Legislature related to this incentive.

During the 2017 legislative session, HB2377 was enacted, which provided a sunset of eight gross production tax (GPT) incentives on July 1, 2017 (instead of July 1, 2020 as previously existed in State statute). This incentive is among those with a July 1, 2017 sunset. While it could be argued that the evaluation of the incentive is no longer necessary, examining the impact of incentives for such an important state industry is useful from a public policy perspective. It is also possible that the State may wish to revisit these incentives in the future.

Incentive Background

Many states have provided tax incentives to stimulate oil and gas production, revenue and job creation. Over the years, the State of Oklahoma has enacted a series of rebates that effectively lower the tax rate for various forms of production, including production resulting from re-established production projects.

Oklahoma's Re-Established Production Rebate, effective July 1, 1994, exempts from GPT for 28 months the production resulting from the re-establishment of an inactive well.

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 specific goals were not included in the legislation that established them. However, it is reasonable to assume that the goals of the program would include increased Oklahoma oil and gas production and, through it, increased employment within the State.

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:

- Price model for fiscal impact – cost benefit analysis at different price points;
- Change in production for qualified wells;
- Change in value of leases.

The criteria focus on what are generally considered goals of incentive programs, such as change in production and the value of leases. 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 criterion for evaluation (State return on investment). These will be discussed throughout the balance of the evaluation.



Industry Background

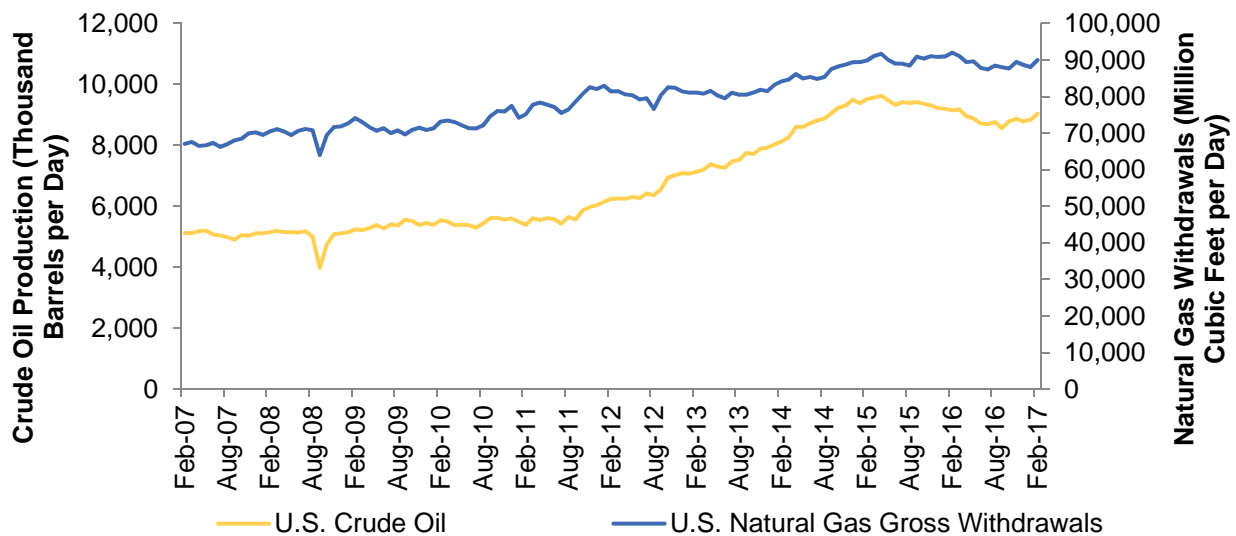


U.S. Oil and Gas Industry Background

Nationally, oil and gas production have both increased over the last 10 years. Crude oil production grew by 76 percent between February 2007 and February 2017, and natural gas withdrawals increased by 34 percent during the same time period. Nationally, U.S. crude oil production peaked in April 2015 at an average of 9.6 million barrels per day, and natural gas withdrawals peaked in February 2016 at an average of 92 billion cubic feet per day.

The following chart tracks oil and gas production during this timeframe.

Figure 2: U.S. Crude Oil and Natural Gas Production, 2007-2017



Source: U.S. Energy Information Administration Monthly Crude Oil and Natural Gas Production

Industry Outlook

Nationally, the outlook for the oil and gas industry is positive. According to the April 2017 Oklahoma Economic Indicators Report produced by the Oklahoma Employment Security Commission, U.S. crude oil production is forecast to average 9.2 million barrels per day in 2017 and 9.9 million barrels per day in 2018, an increase from 8.9 million barrels per day in 2016. Additionally, the report estimates that U.S. natural gas production in 2017 will increase by 0.8 billion cubic feet per day (Bcf/d) over 2016 levels, and 2018 production is forecast to be 4.0 Bcf/d over the 2017 projection.



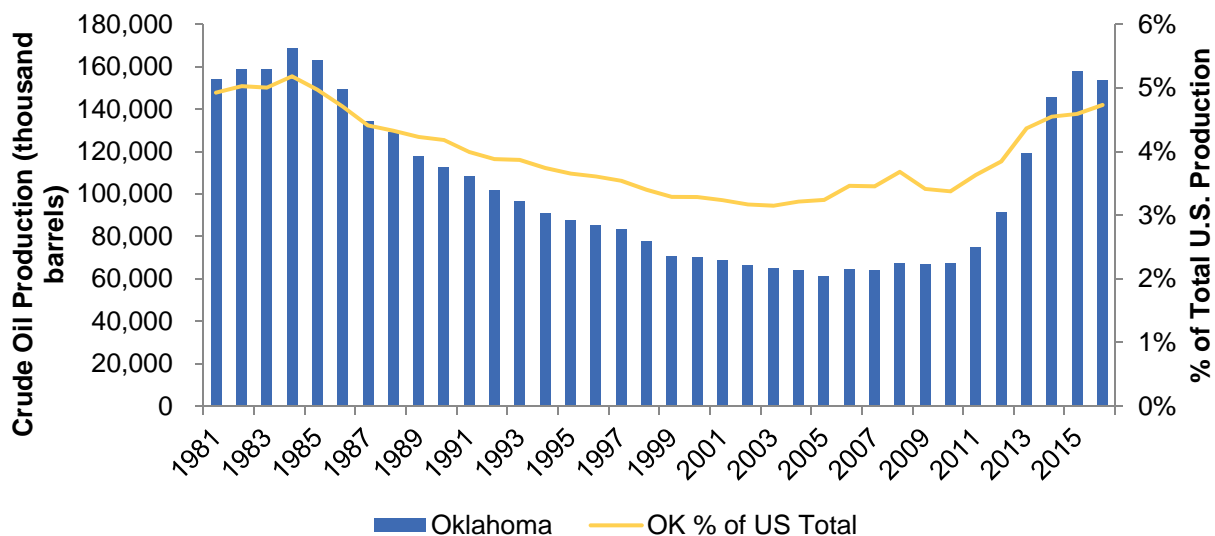
Oklahoma Oil and Gas Industry Background

Oil and Gas Production

The oil and gas industry plays a major role in Oklahoma's economy. The State produces a substantial amount of oil and natural gas, ranking fifth in crude oil production and third in dry natural gas production among all states in 2015.²

Including Oklahoma, the Midwestern states³ accounted for 614 million barrels of crude oil, or 19 percent of all U.S. field production, in 2016. Total Oklahoma production declined steadily between 1984 and 2005 before increasing to levels seen prior to the start of the decline, with most of the significant increases occurring in the years since 2012. Simultaneously, Oklahoma's share of total Midwestern crude oil production has decreased from 43 percent in 1981 to 25 percent in 2016, primarily as a result of increased production in North Dakota. North Dakota's production has grown exponentially, from 45 million barrels in 1981 (13 percent of the Midwestern total) to 378 million barrels in 2016 (62 percent of the Midwestern total). Nationally, Oklahoma's production of crude oil has consistently accounted for approximately three to five percent of total production. The figure below illustrates Oklahoma's performance among all states.

Figure 3: Oklahoma Field Production of Crude Oil, 1981-2016



Source: U.S. Energy Information Administration Annual Crude Oil Production

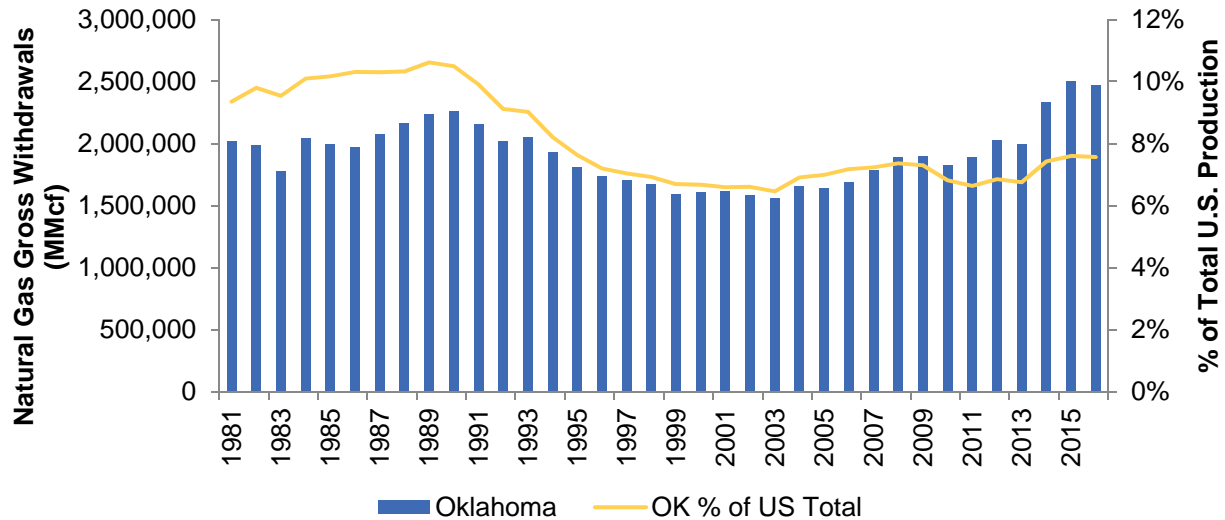
Oklahoma natural gas withdrawals declined between 1990 and the early 2000s but have increased modestly since, peaking at 2.5 million cubic feet (Mcf) in 2015. Despite this increase in total production, Oklahoma's share as a percentage of total U.S. production, which peaked at more than 10 percent in the late 1980s, has declined since and now hovers around seven percent. The following figure illustrates Oklahoma's natural gas withdrawal performance.

² U.S. Energy Information Administration Monthly Crude Oil and Natural Gas Production.

³ According to the U.S. EIA, the Midwestern Petroleum Administration for Defense District (PADD) includes Illinois, Indiana, Kansas, Kentucky, Michigan, Missouri, Nebraska, North Dakota, Ohio, Oklahoma, South Dakota and Tennessee.



Figure 4: Oklahoma Natural Gas Withdrawals, 1981-2016



Source: U.S. Energy Information Administration Annual Natural Gas Withdrawals

Oil and Gas Economic Impact

The oil and gas industry plays a significant role in Oklahoma's regional economy. A 2016 study by the State Chamber of Oklahoma Research Foundation identified the following as a few of the industry's economic contributions:⁴

- Household earnings (\$15.6 billion) from the oil and gas sector total 13.2 percent of total state earnings;
- Oil and gas activity accounts for more than half the fixed investment (\$20.3 billion) in Oklahoma;
- The state exported crude oil and natural gas valued at \$7.1 billion in 2015;
- An estimated \$1.7 billion in oil and gas royalties were paid to Oklahomans in 2015;
- Activity in the industry supports an estimated \$28.6 billion in additional output of goods and services in other industry sectors statewide.

The oil and gas industry also directly generates many high paying jobs throughout the State. **While the oil and gas industry accounts for fewer than two percent of all private industry jobs within Oklahoma, oil and gas wages account for nearly six percent of total private industry wages.** Additionally, the average annual pay (nearly \$140,000 in 2015) is significantly higher than the statewide average annual pay for all private industries (\$44,504).

⁴ State Chamber of Oklahoma Research Foundation. Economic Impact of the Oil and Gas Industry on Oklahoma (September 2016).



Table 1: Oklahoma Oil and Gas Employment, 2006-2015⁵

Year	Oil and Gas Employment		Oil and Gas Wages		Avg. Annual Pay	
	Total Employees	% of All Private Industry Total	Total Wages (in thousands)	% of All Private Industry Total Wages	Oil and Gas	All Private Industries
2006	16,192	1.4%	\$2,148,554	5.3%	\$132,694	\$34,136
2007	17,985	1.5%	\$1,856,701	4.3%	\$103,234	\$35,469
2008	19,808	1.6%	\$2,258,918	4.9%	\$114,041	\$37,137
2009	19,410	1.7%	\$1,939,932	4.5%	\$99,943	\$36,934
2010	18,677	1.6%	\$1,907,912	4.3%	\$102,152	\$38,011
2011	21,078	1.8%	\$2,486,725	5.2%	\$117,979	\$40,157
2012	23,986	2.0%	\$2,860,984	5.6%	\$119,279	\$41,863
2013	24,328	2.0%	\$3,057,485	5.8%	\$125,677	\$42,734
2014	24,140	1.9%	\$3,089,106	5.6%	\$127,965	\$44,089
2015	23,868	1.9%	\$3,324,490	5.9%	\$139,288	\$44,504

Source: U.S. Department of Labor BLS - Quarterly Census of Employment and Wages

Note: data represents only direct employment.

In addition, Oklahoma's oil and gas industry is a vital part of the regional and national economy. The benchmark price for a blend of U.S. crude oils known as West Texas Intermediate (WTI) is set at Cushing, Oklahoma.⁶ Additionally, the State ranks as the third most attractive oil and gas market among 126 markets worldwide due to its abundant natural energy reserves and strong prospects for growth.⁷ According to a 2015 report released by the U.S. Department of Labor's Bureau of Labor Statistics (BLS), in June 2014, Washington County, Oklahoma had the highest concentration of employment in the oil and gas extraction industry in the country (with a location quotient of 139.8). Woods County, Oklahoma had the third highest concentration (98.4).⁸

Oklahoma Oil and Gas Taxes

In addition to employment opportunities, the oil and gas industry provides significant revenue to states through the payment of various taxes. Nationally, taxes levied on the oil and gas industry can be grouped into three broad categories: production, property and income. For this evaluation, production taxes, which are imposed on the value or volume of the oil and gas as it is extracted from the ground or at the point of first sale, are the focus of this incentive.

Oklahoma's GPT is a severance tax on the dollar value of production of oil and gas taken from land or water in the State. Under current law, traditional vertical wells are taxed at 7.0 percent.⁹ Horizontal wells drilled before

⁵ BLS Data for all jobs categorized under NAICS 211, Oil and Gas Extraction.

⁶ EIA State Profile and Energy Estimates: Oklahoma. Available at <https://www.eia.gov/state/index.php?sid=OK>.

⁷ State Chamber of Oklahoma Research Foundation. Economic Impact of the Oil and Gas Industry on Oklahoma (September 2016).

⁸ U.S. Department of Labor Bureau of Labor Statistics. Counties with Highest Concentration of Employment in Oil and Gas Extraction, June 2014. Available at: <https://www.bls.gov/opub/ted/2015/counties-with-highest-concentration-of-employment-in-oil-and-gas-extraction-june-2014.htm>.

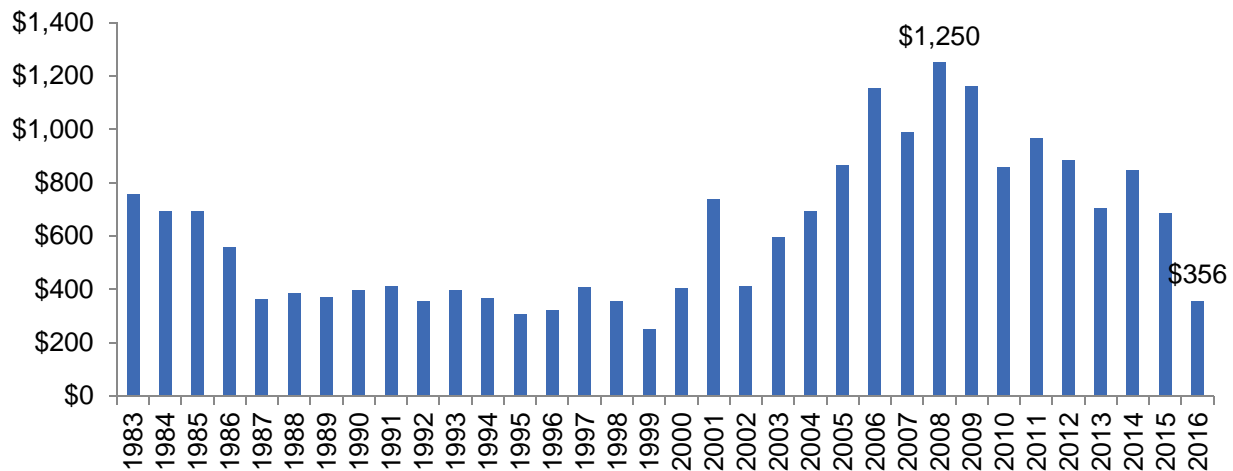
⁹ A vertical well, considered to be the conventional well type, is a well that is not turned horizontally at depth, allowing access to oil and gas reserves located directly beneath the surface access point. Historically, natural gas and exploration involved the use of vertical wells because directional drilling technology was expensive and complicated. While less expensive to develop they are typically less productive because of their limited range.



July 1, 2015 are taxed at 1.0 percent for four years and 7.0 percent thereafter.¹⁰ Newly drilled wells are taxed at 2.0 percent for the first 36 months of production; they are then taxed at 7.0 percent for the rest of the life of the well.

These taxes are a significant source of overall Oklahoma revenues, totaling \$355.9 million in FY2016.¹¹ Because GPT revenue depends both on the amount of mineral extracted and its price, it can vary greatly from year to year. Since peaking in 2008 at \$1,250 million, total collections have decreased substantially, as shown in the figure below. This decrease is likely due to demand-related impacts of the Great Recession and changes in oil and gas prices, as well as reductions in tax rates put in place by the State to encourage additional production.

Figure 5: Oklahoma Gross Production Tax Collections, 1983-2016 (in millions)



Source: Oklahoma Tax Commission Annual Report, 2016

¹⁰ Horizontal wells, the less traditional well type, allows operators to extract oil and gas from unconventional sources that may run horizontally. A horizontal well typically originates from a vertical well, as this allows engineers to examine rock fragments at different layers in order to determine where reserves can be found.

¹¹ Oklahoma Tax Commission Annual Report (2016).



Incentive Usage and Administration



Incentive Characteristics

At the state level, many governments have granted tax exemptions to stimulate production, revenue and job creation. Over the years, the State of Oklahoma has enacted a series of rebates that effectively lower the tax rate for various forms of production, including production resulting from re-established production projects.

Oklahoma's Re-Established Production Rebate, effective July 1, 1994, exempts from gross production tax for 28 months the production resulting from the re-establishment of an inactive well.

For a well where production is re-established on or after July 1, 1997 and prior to July 1, 2017, 'inactive well' is defined as any well that has not produced oil, gas, or oil and gas for a period of not less than one year. Wells that experience mechanical failure or loss of mechanical integrity are also considered inactive wells.

Historic Use of the Incentive

According to data provided by the OTC, the amount of rebates paid and the number of companies claiming those rebates have fluctuated in recent years, peaking at \$4.2 million in 2014 but averaging \$1.7 million between 2013 and 2016. It is likely that the spike in 2014 was due to an administrative change effective July 1, 2014 that prohibited the refund of gross production taxes for production occurring prior to July 1, 2003 and limited the claim window to 18 months after the first day of the fiscal year in which the refund is initially available. This change had the effect of increasing claims in 2014 resulting from production occurring prior to July 1, 2003 that otherwise would have become ineligible for the rebate.

Table 2: Re-Established Production Rebate Claims Data, 2013-2017

Fiscal Year	Total Claims Paid	Total Companies
2013	\$649,774	7
2014	\$4,241,503	47
2015	\$1,021,297	34
2016	\$927,945	40
2017*	\$56,997	7

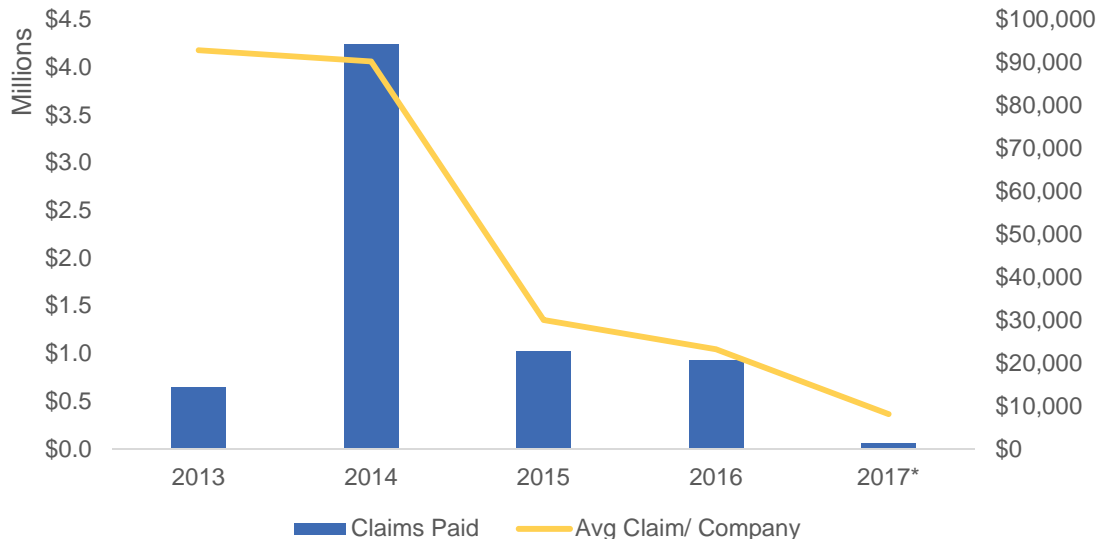
Source: OTC data

* Preliminary

There does not appear to be a strong correlation between production increases and rebates associated with this incentive. While production has generally increased from year to year, rebate claims have fluctuated significantly, and the average claim per company has decreased from \$93,000 in 2013 to \$23,000 in 2016. It is possible that this is due to the strong market enabling operators to prioritize top-producing wells instead of turning to smaller projects focused on incremental increases.



Figure 6: Re-Established Production Rebate - Average Claim/Company, 2013-2017



Source: OTC data
* Data as of 6/23/2017

Incentive Administration

There are essentially three components to overall program administration, which are jointly managed by the OTC and the Oklahoma Corporation Commission (OCC):

1. **Eligibility.** In order to be eligible for the Re-Established Production Rebate, a well must meet one of the following definitions of 'inactive':
 - a. A well experiencing mechanical failure or loss of mechanical integrity as defined by the OCC that results in the cessation of production and the workover of a well;
 - b. A well on which work to re-establish production commenced on or after July 1, 1997 and on or before July 1, 2020 that has not produced oil or gas for a period of not less than one year.¹²
2. **Application.** To apply for qualification of re-established production, OCC Form 1534 (Application for Tax Rebate) is completed by the well operator and submitted, along with supporting documents, to the Technical Services Department of the Conservation Division of the OCC for review. If the application is approved, a copy is forwarded to the well operator. If the application is denied or refused, or if approval is delayed beyond 60 days, the operator can seek review by application, notice and hearing.
3. **Refunding.** If the OCC grants the application, the operator requests a refund by letter to the Audit Division of the OTC. The letter states the reason for the refund and the amount claimed and is submitted along with a copy of the application approved by the OCC certifying the well as an inactive well for which production has been re-established. The applicant must also provide a completed OTC Form 320-C (Gross Production Request for Change) that shows the date of the re-establishment of production; OTC Form 328 (Gross Production 841/495 Refund Report); and if the request is filed by

¹² For wells that began re-established production work between July 1, 1994 and June 30, 1997, the threshold of inactivity was two years.



anyone other than the person named in the OCC application, a notarized affidavit. The OTC reviews the application and supporting documentation, and if no problems exist, it processes the refund.

Industry Education

Lack of industry education is the primary reason for oil and gas incentive-related denials – most often, applicants are confused about the level at which the incentives are administered (i.e. lease or well level). In addition to educational opportunities provided by the OTC, State agency Sustaining Oklahoma's Energy Resources (SOER) provides a variety of workshops for industry professionals around the state on a variety of industry-related topics. One workshop, Navigating State Forms: A Panel Discussion with the OCC and OTC, provides information about where to find, how to complete and when to submit some of the most common forms associated with operating an oil or gas well in the state.¹³

New Electronic Filing System

The OTC recently rolled out an electronic system for the filing of Forms 320-A (Request for Assignment of OTC Production Unit Number) and 320-C (Gross Production Request for Change), the latter of which is required to apply to the Re-Established Production Rebate. The system allows users to register new wells, request assignment of the lease production unit number (PUN), make changes to existing lease record information, and make all other changes currently found on the forms.

Reporting and Data Issues

Very high level information related to this incentive (estimated total rebates of gross production tax paid) is reported in the State's Tax Expenditures Report; the source of this information is gross production tax reports. However, there is a general lack of detailed data associated with this incentive. According to the OTC, data detailing claims by production year (instead of claim year) is not captured in a format that allows for timely analysis. Instead, staff were able to provide total incentive rebates claimed per year, along with the number of companies paid.

¹³ Sustaining Oklahoma's Energy Resources (SOER) was created on July 1, 2013 when the Marginal Well Commission (MWC) with the Oklahoma Energy Resources Board (CERB) under Senate Bill 767.



Economic and Fiscal 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 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 7: 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).

Fiscal Impact 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).¹⁴ Two datasets were used to derive the ratio: 1) U.S. Department of Commerce Bureau of Economic

¹⁴ Gross State Product (GSP) is the state counterpart of Gross Domestic Product (GDP) for the nation. To assist the reader, the project team has decided to use GDP throughout this section of the report instead of mixing the two terms. This decision was made because more people are familiar with the term GDP.



Analysis GDP estimates by state;¹⁵ and 2) the OTC's *Annual Report of the Oklahoma Tax Commission*.¹⁶ Over the past 10 years, the state tax revenue as a percent of state GDP was 5.4 percent, as shown in the following table:

Table 3: State of Oklahoma Tax Revenue as a Percent of State GDP

Year	Oklahoma Tax Revenue ¹⁷	Oklahoma GDP	Ratio
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%
2015-16	\$8,963,894,053	\$182,937,000,000	4.9%
Average	\$8,908,720,068	\$166,905,300,000	5.4%

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

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.

To estimate State of Oklahoma tax revenue generated in a given year, the project team multiplied the total value added figure produced by the IMPLAN model by the corresponding annual ratio (about 5.4 percent). For example, if the total value added was \$1,000,000, then the estimated State of Oklahoma tax revenue was \$54,000 (\$1,000,000 x 5.4 percent).

¹⁵ U.S. Department of Commerce Bureau of Economic Analysis. Available at <http://www.bea.gov/regional/>.

¹⁶ Oklahoma Tax Commission. Available at https://www.ok.gov/tax/Forms_&_Publications/Publications/Annual_Reports/index.html.

¹⁷ Gross collections from state-levied taxes, licenses and fees, exclusive of city/county sales and use taxes and county lodging taxes.



Impact of Re-Established Production Incentives

The Re-Established Production incentive was designed to increase and expand oil and gas production in Oklahoma. A full or partial refund of gross production taxes paid for production in the previous calendar year was issued to the well operator. Because gross production tax rates vary based on the well classification, total annual production or output was derived using a blended production tax rate of 5.5 percent. Based on data availability, it was necessary to convert the incentive amount to annual economic activity prior to utilizing the economic impact model. IMPLAN Sector 20 Extraction of Natural Gas and Crude Petroleum was used to model the economic impact.

Table 4: Impact of Re-Established Production Rebate

Year		Output	Value Added	Labor Income	Employment	Estimated Oklahoma Tax Revenue
2013	Direct Effect	\$11,814,072	\$8,371,821	\$6,437,521	49	
	Indirect Effect	\$2,711,208	\$1,662,396	\$1,272,178	15	
	Induced Effect	\$5,814,531	\$3,181,974	\$1,796,606	45	
	Total Effect	\$20,339,811	\$13,216,191	\$9,506,305	108	\$687,242
2014	Direct Effect	\$77,118,235	\$57,234,492	\$44,010,527	328	
	Indirect Effect	\$18,287,384	\$11,365,078	\$8,697,327	98	
	Induced Effect	\$39,822,292	\$21,753,767	\$12,282,614	300	
	Total Effect	\$135,227,911	\$90,353,337	\$64,990,468	726	\$4,517,667
2015	Direct Effect	\$18,569,036	\$13,673,097	\$10,513,943	78	
	Indirect Effect	\$4,386,423	\$2,715,073	\$2,077,758	23	
	Induced Effect	\$9,466,628	\$5,196,890	\$2,934,269	71	
	Total Effect	\$32,422,087	\$21,585,060	\$15,525,970	172	\$1,085,522
2016	Direct Effect	\$16,871,728	\$12,271,006	\$9,435,804	69	
	Indirect Effect	\$3,970,315	\$2,436,659	\$1,864,696	21	
	Induced Effect	\$8,491,984	\$4,663,981	\$2,633,378	63	
	Total Effect	\$29,334,027	\$19,371,646	\$13,933,878	153	\$1,046,069
2017	Direct Effect	\$1,036,309	\$744,480	\$572,469	4	
	Indirect Effect	\$242,950	\$147,832	\$113,131	1	
	Induced Effect	\$514,979	\$282,963	\$159,767	4	
	Total Effect	\$1,794,238	\$1,175,275	\$845,367	9	\$57,588

Source: TXP, Inc. IMPLAN analysis output, September 2017

Table 5: Annual Tax Revenue Generated, 2011-2015

Year	Rebates Paid During Current Tax Year	Estimated Oklahoma Tax Revenue	Net Impact
2013	\$649,774	\$687,242	\$37,468
2014	\$4,241,503	\$4,517,667	\$276,164
2015	\$1,021,297	\$1,085,522	\$64,225



Year	Rebates Paid During Current Tax Year	Estimated Oklahoma Tax Revenue	Net Impact
2016	\$927,945	\$1,046,069	\$118,124
2017	\$56,997	\$57,588	\$591
Total	\$6,897,516	\$7,394,088	\$496,572

Source: TXP, Inc. IMPLAN analysis output, September 2017

As depicted in the preceding table, the Re-Established Production Rebate program results in increased statewide oil and gas production sector activity. The level of economic activity varies each year and is directly linked to the amount of oil and gas production. It is likely that the spike in 2014 was due to an administrative change effective July 1, 2014 that prohibited the refund of gross production taxes for production occurring prior to July 1, 2003. Multiplying the total value added figure produced by the IMPLAN model by the corresponding annual tax ratio provides an estimate for total annual State tax revenue. Over the past 5 years, the Re-Established Production Rebate program (though direct, indirect and induced economic effects) has generated approximately \$7.4 million in state tax revenue. Over this same period, the State has provided \$6.9 million amount in rebates, resulting in a return on investment of \$0.5 million between 2013 and 2017.

It should be noted that it is difficult to evaluate the importance of the Production Enhancement Rebate program on the long-term outlook for the overall oil and gas sector (but-for test). It is reasonable to assume that some of the oil and gas producers would have re-established some of these wells. If this occurred, there would have been positive economic activity without the incentive. A more important variable that drives activity in this sector is the market price for crude oil and natural gas. The importance of this incentive and the risk producers are willing to take is directly linked to the market price of oil and natural gas.



Incentive Benchmarking



Benchmarking

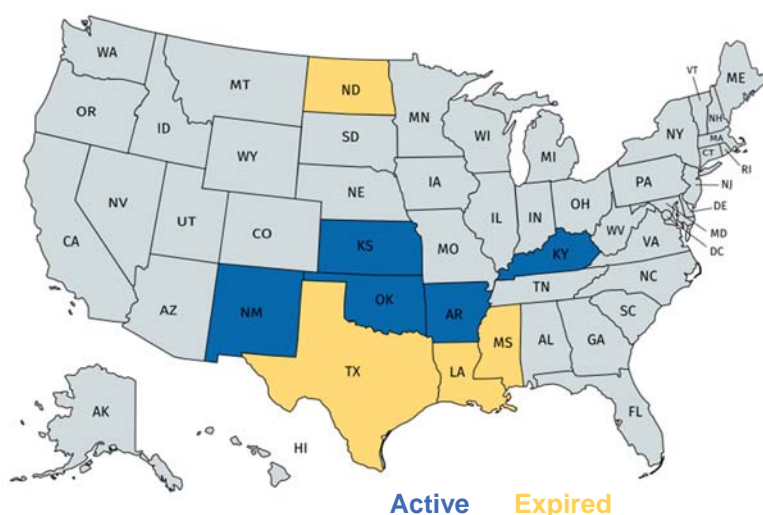
A detailed description of comparable state programs can be found in **Appendix A**.

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.¹⁸ 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 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.

Figure 8: States Offering Re-Established Production Incentives



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 incentive 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.

In total, eight states were found to offer comparable incentive programs. Those states are displayed in the map to the left.

Oklahoma, along with the states offering similar re-established production incentives, accounted for 52 percent of total U.S. dry natural gas production and 62 percent of total U.S. crude oil production in 2015. Several top-producing states were not found to have similar incentives (Pennsylvania, number two for natural gas; Wyoming, number four for natural gas and number eight for crude oil; Colorado, number six for natural gas and number seven for crude oil).

Table 6: Production of States Offering Re-Established Production Incentives, 2015

State	Dry Natural Gas			Crude Oil		
	Production (Mcf)	% of U.S. Total	Rank	Production (thousand barrels)	% of U.S. Total	Rank
Texas	7,071,203	26.10%	1	1,263,585	36.80%	1
Oklahoma	2,336,234	8.60%	3	157,770	4.60%	5

¹⁸ The primary instances of exactly alike state incentive programs occur when states choose to ‘piggyback’ onto federal programs.



State	Dry Natural Gas			Crude Oil		
	Production (Mcf)	% of U.S. Total	Rank	Production (thousand barrels)	% of U.S. Total	Rank
Louisiana	1,735,120	6.41%	5	62,881	1.83%	9
New Mexico	1,151,159	4.30%	8	146,746	4.30%	6
Arkansas	1,009,723	3.70%	9	6,165	0.20%	21
North Dakota	381,653	1.40%	12	429,447	12.50%	2
Kansas	270,180	1.00%	14	45,481	1.30%	10
Kentucky	79,699	0.29%	19	2,862	0.08%	22
Mississippi	57,859	0.20%	20	24,918	0.70%	14
U.S.	27,059,503	52.01%		3,436,515	62.27%	

Source: U.S. Energy Information Administration

A review of the comparable incentive programs reveals that the large majority are structured as tax exemptions. Additionally, Kentucky offers a tax credit, which is equal to 4.5 percent of the gross value of production from recovered inactive wells.

Most states (6 of 9) define inactivity as 24 months. Oklahoma and Arkansas use 12 months as the threshold, and Kansas requires wells to be out of use for 36 months before operators can claim the Inactive Well Exemption.

Including Oklahoma, 5 of 9 states have sunset provisions and have already sunset. Mississippi's exemption ended in July 2003, and Texas' incentive ended in February 2010. The North Dakota incentive expired in July 2016, and the Oklahoma incentive was sunset on July 1, 2017.

A key variable is the length of the incentive. In Oklahoma, the exemption is available for 28 months from the date of re-establishment. Louisiana offered a 2 year exemption for wells certified before 2005, though the credit was adjusted to 5 years between 2005 and 2010. Mississippi offered a 3-year exemption before the credit expired in 2003. All other states offer exemptions for 10 years.

Overall, the State of Oklahoma's Re-established Production Rebate was competitive with, yet less comprehensive than, other state programs. While it is generous in its definition of inactivity at 12 months, most other states offer more lengthy exemptions – many at 10 years.

The differing oil and gas tax rates in Oklahoma can make a comparison of tax rates among the states more difficult. One report, by the State of Idaho's Department of Lands, sought to make a comparison possible among states, even with varying rates. The Department determined that in order to make an "apples to apples" comparison among states, it was necessary to calculate the "effective rate" which factors in each state's production and various taxes.¹⁹ To arrive at each state's effective rate, the Department divided taxes collected by the valuation of the production.

Based on this calculation, Oklahoma's FY2016 effective tax rate (3.2 percent) based on severance, production and property taxes paid in ratio to taxable value of production, was the lowest among oil and gas producing states used in the study.²⁰ Idaho's effective rate was similar at 4.0 percent, while all other states imposed taxes at an effective rate between 6.1 percent (Utah) and 13.4 percent (Wyoming).²¹

¹⁹ An effective tax rate is the average percentage that companies pay in taxes on taxable income.

²⁰ Producing states used in analysis: Alaska, Idaho, Louisiana, Montana, North Dakota, Oklahoma, Texas, Utah and Wyoming.

²¹ Idaho Department of Lands Oil and Gas Taxation Comparison: Analysis of Severance, Production and Ad Valorem Taxes (2016).



Benchmarking Program Evaluations

Among the states with active incentive program, one useful study was found. According to the Louisiana Legislative Auditor, the Center for Energy Studies at Louisiana State University conducted an analysis in 2005 that measured the direct fiscal impact of the inactive well exemption on the state severance tax and royalty collections for 1994 through 2004. The report found that the taxable production from “re-entered” wells was nearly twice the base period (1990-1994) amount.²²

²² Louisiana Legislative Auditor Report Highlights: Oil and Natural Gas Severance Tax Exemptions Program (January 2007).



Appendices



Appendix A: Comparable State Programs

State	Program Name	Incentive Type	Incentive	Inactivity Threshold	Effective Date	Sunset Date
Oklahoma	Re-Established Production Rebate	Tax Exemption	Tax exemption on production for 28 months from date of re-establishment	12 months	July 1, 1994	June 30, 2017
Arkansas	Inactive Wells and Fields Re-Establishment Tax Incentive	Tax Exemption	Tax exemption on production for 10 years from date of re-establishment	12 months	July 1, 1995	None
Kansas	Inactive Well Exemption	Tax Exemption	Tax exemption on production for 10 years after date of receipt of such certification	36 months	July 1, 1996	None
Kentucky	Recovered Inactive Wells Tax Credits	Tax Credit	Tax credit equal to 4.5% of the gross value of production from recovered inactive well	24 months	July 15, 2010	None
Louisiana	Inactive Wells Re-Establishment Tax Incentive (<i>Expired 2010</i>)	Tax Exemption	- 2 year exemption for wells certified between July 31, 1994 and June 30, 2000 or between July 31, 2002 and December 31, 2004 - 5 year exemption for wells certified between January 1, 2005 and June 30, 2010	24 months	July 31, 1994	June 30, 2010
Mississippi	Inactive Wells Exemption (<i>Expired 2003</i>)	Tax Exemption	Tax exemption on production for 3 years beginning on the date of first sale of production	24 months	July 1, 1999	July 1, 2003
New Mexico	Production Restoration Tax Incentive	Tax Exemption	Tax exemption on production for 10 years from first day of month following production	24 months	January 1, 1993	None
North Dakota	Inactive Wells Re-Establishment Incentive (<i>Expired 2016</i>)	Tax Exemption	Tax exemption on production for 10 years after production	24 months	July 1, 1996	July 1, 2016
Texas	Previously Inactive Wells Production Tax Exemption	Tax Exemption	Tax exemption on production for 10 years from date of re-establishment	24 months	September 1, 1997	February 28, 2010

State of Oklahoma

Incentive Evaluation Commission

Coal Tax Credits Evaluation

November 13, 2017

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Executive Summary



Overview

Coal tax credits have existed in some capacity in Oklahoma for nearly 25 years in order to incent coal production and promote the use of Oklahoma coal within the State. Since that time, however, both coal production and employment have declined, suggesting that the industry, which was never a large employer in the State, may continue to shrink as alternative energy options continue to emerge. As currently constructed, the State's coal tax program is effectively subsidizing a few companies – with little resulting economic benefit.

Recommendation: Based on its analysis of available data, the project team recommends repealing the coal tax credit program.

Key Findings

- **Coal production in the state has decreased over time.** Total Oklahoma coal production has declined steadily since the 1970s, despite the introduction of coal production and purchase credits. Since 2008, the three largest coal producers in the State have each experienced decreasing production.
- **Coal industry jobs in the State have decreased over time.** Employment in the Oklahoma coal industry increased by a compound annual growth rate (CAGR) of 6.9 percent between 2001 and 2009 but has declined by a CAGR of -7.7 percent since. Overall, the CAGR between 2001 and 2015 is 0.4 percent – indicating that employment has been essentially flat during this time period.
- **Average annual pay in the mining industry is consistently higher than the average annual pay across all private industries in the State.¹** Despite the decreasing employment in the industry, the jobs that remain are relatively well-paying, both statewide and in the county responsible for the large majority of coal production.
- **There is no evidence of increased capital investment associated with the coal credits.** The number of coal mining sites has remained essentially unchanged in recent years. In 2006, four counties housed a total of seven establishments. By 2016, six counties were home to seven mine sites.
- **It is difficult to evaluate the importance of the coal tax credits on the long-term outlook for this sector.** It is reasonable to assume that Oklahoma's incentives are important for industries in decline. However, it is not clear whether reducing the incentives by some amount (e.g. 50 percent) would have a material impact on coal sector employment or activities.
- **It is not possible to evaluate the State's return on investment (economic activity versus financial net cost) due to data limitations.** Prior to 2014, the State did not separately track the coal credit established during the current tax year and unused credit carried over from a prior year. Additionally, prior to 2014, credits were eligible to be transferred (primarily to insurance companies for use in reducing premium tax liabilities). For these reasons, it is not possible to evaluate the State's full return on investment.

¹ Analysis based on NAICS 212 – Mining, except oil and gas. Industries in the subsector primarily engage in mining, mine site development, and beneficiating (i.e. preparing) metallic minerals and nonmetallic minerals, including coal. The term “mining” is used in the broad sense to include ore extraction, quarrying, and beneficiating (e.g. crushing, screening, washing, sizing, concentrating, and flotation), customarily done at the mine site. Please note that NAICS 2121, Coal Mining, did not provide sufficient data for analysis.



Other Findings

- **Relative to other states, Oklahoma's coal incentives are generous.** The State incentivizes both the production and purchase of coal. The State also offers the highest credits - \$5.00 per ton, as compared to \$1.00-\$3.00 in other states.
- **Adequate protections appear to be in place.** The State limits the program's potential impact by basing eligibility on the average monthly price of coal and has reduced both the face value and refundable value of the credits in recent years.
- **Reporting and data collection issues exist, but improvements are being made.** Prior to 2014, amounts refunded were not reported; additionally, amounts transferred were not collected or reported on by the Oklahoma Tax Commission (OTC). However, since 2014, the data collected and reported is more detailed.

Changes to Improve Future Evaluations (if the Program is Retained)

- **Recommendation 1: Reconfigure the program.** As currently constructed, there is no direct link between industry jobs and eligibility for the credit. The State may want to explore the provisions of Virginia's Coalfield Employment Enhancement Credit, which tied the amount of the credit to a so-called "employment factor," to determine if a similar structure would effectively help Oklahoma increase coal employment.
- **Recommendation 2: Continue to improve data collection associated with the credits.** Since 2014, the OTC has improved its reporting of coal credits by accounting for credits carried over separately from those generated in the current fiscal year. However, it is not currently possible to determine which credits were claimed by coal producers and which were claimed by coal consumers. Obtaining and reporting on this information should be possible, given the small number of total returns impacted, and providing this data would greatly increase the ability to analyze program impacts.



Key Findings and Recommendations



Key Findings

Coal tax credits have existed in some capacity in Oklahoma for nearly 25 years in order to incent coal production and promote the use of Oklahoma coal within Oklahoma borders. Since that time, however, both coal production and employment have declined, suggesting that the industry, which was never a major employer in the State, may continue to shrink as alternative energy options continue to emerge. As currently constructed, the State's coal tax program is effectively subsidizing a few companies – with little resulting economic benefit.

Based on its analysis of available data, the project team recommends repealing the coal tax credit program.

The following analyzes the program as it relates to the established criteria for evaluation.

- **Coal production in the state has decreased over time.** Total Oklahoma coal production has declined steadily since the 1970s, despite the introduction of coal production and purchase credits. Since 2008, the three largest coal producers in the State have each experienced decreasing production. Overall, Oklahoma companies are producing a Compound Annual Growth Rate (CAGR) of -8.4 percent from year to year.
- **Coal industry jobs in the State have decreased over time.** Employment in the Oklahoma coal industry increased by a CAGR of 6.9 percent between 2001 and 2009 but has declined by a CAGR of -7.7 percent since. Overall, the CAGR between 2001 and 2015 is 0.4 percent – indicating that employment has been essentially flat during this time period. Additionally, while the value of coal credits was increased from \$0.95 per ton to \$5.00 per ton in 2007, since that time, employment has decreased from 237 to 161 – a decrease of 76 positions and CAGR of -4.7 percent. This rate of decline exceeds that of the U.S. as a whole (-2.6 percent) during the same period.
- **Average annual pay in the mining industry is consistently higher than the average annual pay across all private industries in the State.²** Despite the decreasing employment in the industry, the jobs that remain are relatively well-paying, both statewide and in the county responsible for the large majority of coal production. Since 2006, the average annual mining industry pay has increased by a CAGR of 3.05 percent. During the same time frame, the average annual pay for all private industries in the State has increased by 2.53 percent. The average mining pay has consistently surpassed the average pay across all private industries by 15-30 percent. Additionally, the Oklahoma CAGR exceeds that of the U.S. coal industry as a whole (2.32 percent).
- **There is no evidence of increased capital investment associated with the coal credits.** The number of coal mining sites has remained essentially unchanged in recent years. In 2006, four counties housed a total of seven establishments. By 2016, six counties were home to seven mine sites. The lack of new mine sites suggests an absence of capital investment associated with the coal credits. However, this sluggishness outperforms the U.S. as a whole, which had 324 fewer mines in 2016 than in 2006 (a decline of 25 percent).
- **It is difficult to evaluate the importance of the coal tax credits on the long-term outlook for this sector.** It is reasonable to assume Oklahoma's incentives are important for industries in decline.

² Analysis based on NAICS 212 – Mining, except oil and gas. Industries in the subsector primarily engage in mining, mine site development, and beneficiating (i.e. preparing) metallic minerals and nonmetallic minerals, including coal. The term “mining” is used in the broad sense to include ore extraction, quarrying, and beneficiating (e.g. crushing, screening, washing, sizing, concentrating, and flotation), customarily done at the mine site. Please note that NAICS 2121, Coal Mining, did not provide sufficient data for analysis.



However, it is not clear whether reducing the incentives by some additional amount (as has been done in the recent past) would have a material impact on coal sector employment.

- **It is not possible to evaluate the State's return on investment (economic activity versus financial net cost) due to data limitations.** Prior to 2014, the State did not separately track credits established during the current tax year and unused credits carried over from a prior year. Additionally, prior to 2014, credits were eligible to be transferred (primarily to insurance companies for use in reducing premium tax liabilities). For these reasons, it is not possible to evaluate the State's full return on investment.

Other Findings

- **Relative to other states, Oklahoma's program is generous.** Among coal producing states, seven comparable incentive programs were identified – three related to purchasing coal and four related to producing coal. The State of Oklahoma's program is more comprehensive, as it incentivizes both the production and purchase of coal. The State also offers the highest credits - \$5.00 per ton, as compared to \$1.00-\$3.00 in other states. Like Oklahoma, half of the states allow credits to be carried forward, and two states (Kentucky and Virginia) allow them to be carried forward for twice as long (10 years). Just two states (Arkansas and Virginia) currently allow the credits to be transferred.
- **Adequate protections appear to be in place.** One of the statutory requirements 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 credits are not available to be claimed in any month in which the average price of coal is \$68 or more per ton (excluding freight charges). As a result, certain types of coal are not eligible for the credit, and in the event that the price of all types of coal increase significantly, there is a safeguard in place to prevent the incentive from becoming considerably more expensive for the State.³

Additionally, given the generally decreasing trends in Oklahoma coal production, it is unlikely that a surge in production alone would drastically increase associated tax expenditures for the State.

Finally, the State has taken steps in recent years to control the potential cost of the incentive – first by reducing the value of refunded credits to 85 percent of face value (January 1, 2014), and then by reducing the overall value of the credit to 75 percent (January 1, 2016).

- **Reporting and data collection issues exist, but improvements are being made.** The primary information available for determining potential financial impact is from the State's Other Credits form (Form 511 CR), which is filed with tax returns. Prior to 2014, amounts refunded were not reported; additionally, amounts transferred are not collected or reported on by the OTC. This issue is further complicated by the fact that the value and types of credits and the refundability and transferability provisions have changed on multiple occasions.

High-level coal credit information is made available in the State's Tax Expenditure Report, issued every two years. The report provides the estimated tax expenditure totals and the number of returns claiming a credit. However, it does not distinguish between coal producer returns and coal purchaser returns.

³ Average Oklahoma bituminous coal sales price data is withheld by the EIA to avoid disclosure.



Overall Recommendation

Based on its analysis of available data, the project team recommends repealing the coal tax credit program.

While the relatively high pay of jobs in the coal mining sector is notable, the coal industry in Oklahoma is a shrinking one that will likely continue to decline (in terms of both production and employment) as alternative energy options continue to emerge. As currently constructed, the State's coal tax program is essentially subsidizing a few companies and a relatively small number of jobs – with little resulting economic benefit.

In the event that the State chooses to continue the program, the project team provides the following additional recommendations.

- **Recommendation 1: Reconfigure the program.** One of the approved evaluation criteria for this incentive is the impact on employment. However, as currently constructed, there is no direct link between industry jobs and eligibility for the credit. The Commonwealth of Virginia's Coalfield Employment Enhancement Credit (now expired) did just that - the amount of the credit allowed was equal to the amount earned multiplied by the person's employment factor – which was derived by taking the annual number of coal mining jobs of the company filing the return (including contractors) by the total number of coal mining jobs in the previous year. The State may want to consider restructuring its program in a similar manner in order to link the credits it pays directly to increases in employment.
- **Recommendation 2: Continue to improve data collection associated with the credits.** Since 2014, the OTC has improved its reporting of coal credits by accounting for credits carried over separately from those generated in the current fiscal year. However, it is not currently possible to determine which credits were claimed by coal producers and which were claimed coal consumers. Obtaining and reporting on this information should be a relatively easy, given the small number of total returns impacted, and providing this data would greatly increase the ability to analyze program impacts.



Introduction



Overview

In 2015, HB2182 established the Oklahoma Incentive Evaluation Commission (the Commission). The bill 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 first set of 11 evaluations was conducted in 2016.

The State's coal incentive for the production and purchase of coal is one of 12 scheduled for review by the Commission in 2017. Based on this evaluation and their collective judgement, the Commission will make recommendations to the Governor and the State Legislature related to this incentive in December 2017.

Industry and Incentive Background

By 1986, out-of-state electric power-generating plants were the major consumer of Oklahoma coal and its major uses in Oklahoma were in cement and lime kilns, at a paper plant, and for process heat at an auto assembly plant. In 1987, the State passed the "Burn Oklahoma" law requiring all in-state coal-fired power plants to include at least 10 percent Oklahoma coal in their fuel mix. As a result, a significant change in the distribution of Oklahoma coal occurred. By 1991, more than 50 percent of Oklahoma coal production was used by Oklahoma electric power plants.⁴

This created a need to incent increased coal production (as well as the use of Oklahoma coal) within Oklahoma borders. As a result, the State created a series of tax credits for producers and consumers. In 1989, the State created a \$1.00 per ton tax credit to subsidize purchases of Oklahoma coal; that credit was later increased to \$2.00 per ton. Though the "Burn Oklahoma" law was declared unconstitutional by the U.S. Supreme Court in January 1992, additional tax credits were enacted to incent businesses to continue purchasing Oklahoma coal. While key characteristics of this program have changed over time, the credits have totaled more than \$4 million annually in each of the past two years.

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 these credits, the specific goals were not included in the legislation that established them. To assist in a determination of program effectiveness, the Incentive Evaluation Commission has adopted the following criteria:

- Change in production before/after the credit;
- Change in jobs associated with the credit;
- Change in payroll associated with the credit;
- Change in capital investment associated with the credit;
- Change in jobs/payroll/capital associated with the credit versus state growth rates as a whole;
- Return on investment – economic activity versus financial net cost.

The criteria focus on what are generally considered key goals of incentive programs (such as creating jobs and capital investment in the state). 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 criterion for evaluation (State return on investment). These will be discussed throughout the balance of the evaluation.

⁴ Oklahoma Department of Mines Annual Report, 2015.



Industry Background

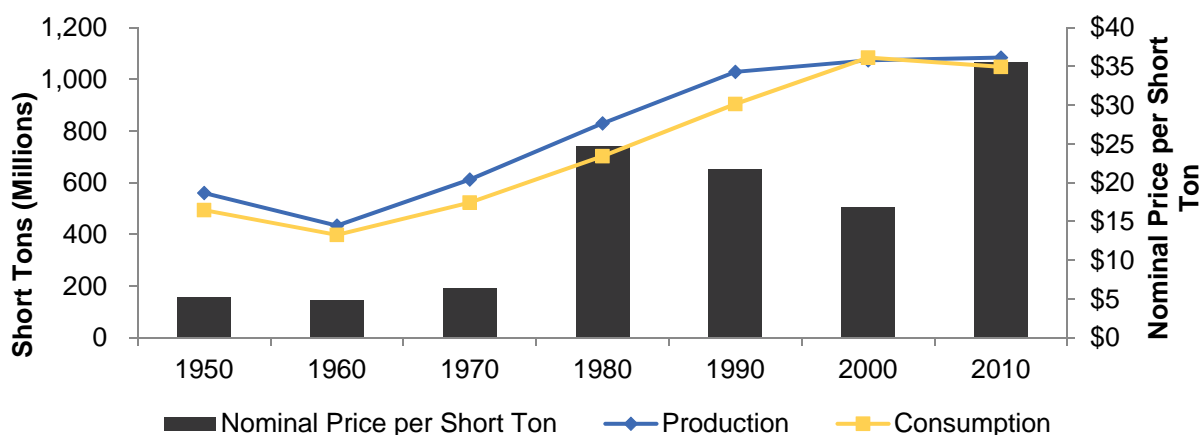


U.S. Coal Industry Background and History

The U.S. coal production industry has changed significantly since the mid-20th century. In the 1950s, more than 90 percent of all coal mined was bituminous,⁵ 75 percent was mined using underground methods, and 94 percent was mined east of the Mississippi River. By 2010, bituminous coal accounted for just 45 percent of all coal mined, while subbituminous coal⁶ accounted for an additional 48 percent. During that time, nearly 70 percent of mining was performed using surface methods, and mines east of the Mississippi River had declined as a share of total output and were responsible for just over 40 percent of all production.⁷

Overall coal production nearly doubled over the 60-year time period (increasing from 560.4 million short tons to 1.1 billion short tons), and U.S. consumption more than doubled (growing from 494 million short tons to 1.0 billion short tons).⁸ Additionally, while the nominal price per short ton was \$5.19 in 1950, by 2010, the price had risen to \$35.61.

Figure 1: U.S. Coal Prices, Production and Consumption, 1950 to 2010



Source: U.S. Energy Information Administration

Since U.S. production peaked in 2011, however, it has declined by an average of 3.7 percent annually, and consumption has declined by approximately 5.3 percent per year.⁹ In fact, between 2014 and 2015, national coal production, consumption and employment each fell by more than 10 percent. The declining trend has continued into 2017 and is expected to continue. U.S. year-to-date coal production for the first half of the year (through June 2017) totaled approximately 387 million short tons, higher than the same point in 2016 but 14 percent lower than the comparable year-to-date coal production in 2015.¹⁰

While coal mining accounted for more than 89,000 U.S. jobs in 2011, by February 2017, that number had declined to slightly over 50,000.¹¹ In addition to the electric generation segment, coal fuels support another

⁵ Containing the widest range of carbon content (45% to 86%), bituminous is mainly used as a fuel to generate electricity, though some is used as coking coal to produce steel. Bituminous coal makes up 45% of U.S. coal production by weight and 54% by energy intensity.

⁶ Generally used for electricity generation, subbituminous coal contains 35% to 45% carbon. A major component of U.S. coal production, subbituminous coal makes up 47% of U.S. coal production by weight and 41% by energy intensity.

⁷ U.S. Energy Information Administration Annual Energy Review, 1950-2010.

⁸ U.S. Energy Information Administration Monthly Energy Review, February 2017.

⁹ Ibid.

¹⁰ U.S. Energy Information Administration Monthly Energy Review, July 2017.

¹¹ Bureau of Labor Statistics Current Employment Statistics Survey coal mining employment data.



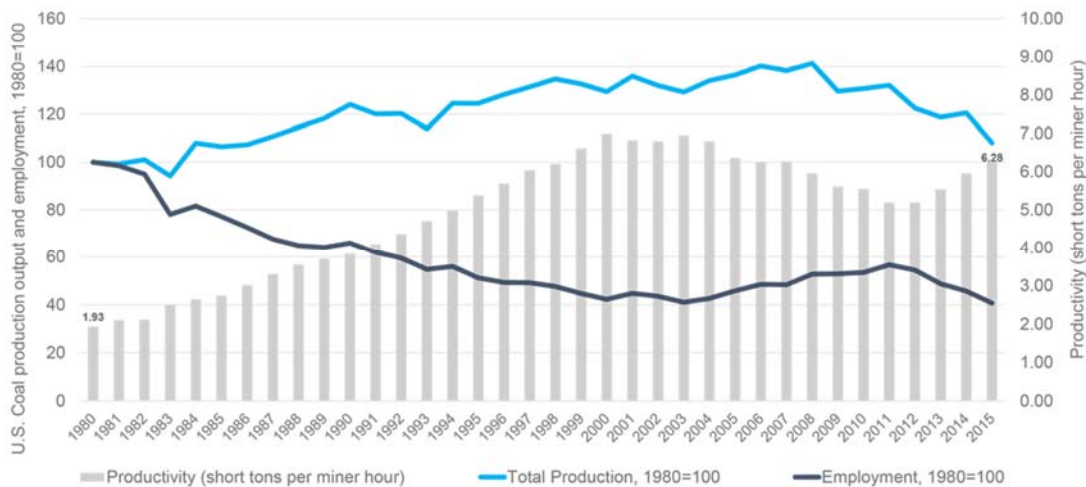
74,084 jobs, or about 7 percent of the nationwide fuels workforce.¹² While coal provided approximately half of the electricity in the U.S. in 2005, in 2016, the U.S. Energy Information Administration calculated that coal provided 30 percent of electricity generation nationwide, with natural gas (34 percent), nuclear (19 percent) and renewables (15 percent) accounting for the remainder.

U.S. Coal Industry Outlook

According to a 2017 report by the Institute for Energy Economics and Financial Analysis (IEEFA), the U.S. coal industry, after encountering one of its worst years in history in 2016, will continue to decline in 2017 (though at a slower pace). While the industry will likely gain limited market share in day-to-day competition in regional electricity markets due to a relative increase in the price of natural gas, any gains will be marginal.¹³

The IEEFA report notes that despite the promise of the new administration granting regulatory relief and a coal resurgence, the coal sector's challenge is that too many companies are mining too much coal for too few customers.¹⁴ Additionally, increases in automation will likely increase coal outputs but decrease employment in the sector. A recent Brookings analysis of EIA annual coal report data found that automation has already significantly contributed to declining employment in coal mining, as shown in the figure below.¹⁵

Figure 2: Automation has Significantly Contributed to Declining Employment in Coal Mining (U.S. coal production, employment and productivity trends, 1980-2015)



Source: Brookings analysis of EIA annual coal report data

Further, it is predicted that the coal mining industry will lose even more jobs to automation in the next decade. The mining industry has already adopted many automation technologies (autonomous haul trucks and loaders; semi-autonomous crushers, rock breakers and shovel swings; GIS and GPS; etc.), and their use is expected to increase over the next 10-15 years, because the mining industry is highly capital intensive and requires expensive equipment.¹⁶

¹² U.S. Department of Energy - U.S. Energy and Employment Report (January 2017).

¹³ IEEFA 2017 U.S. Coal Outlook.

¹⁴ Ibid.

¹⁵ The Brookings Institution – Increased Automation Guarantees a Bleak Outlook for Trump's Promises to Coal Miners (January 25, 2017).

¹⁶ International Institute for Sustainable Development – Mining a Mirage? (2016).



Oklahoma Coal Industry Background and History

Oklahoma Coal Production

Oklahoma is one of 25 states that produces coal; however, it is not a large producer. In 2015, the State ranked 22nd in production (0.1 percent of U.S. production) and 16th in total number of mines.

Coal production is also a small component of overall mining within the State. According to the Oklahoma Department of Mines' most recent annual report, the nearly 800,000 tons of coal mined in 2015 represented just 1 percent of total mining in the state, as shown in the following table:

Table 1: Oklahoma Mining Summary, 2015

Material	Tons Mined	% of Total
Limestone	47,420,355	59.9%
Sand and Gravel	16,174,880	20.4%
Granite	4,954,479	6.3%
Gypsum	4,722,359	6.0%
Clay	1,550,241	2.0%
Select Fill	1,470,280	1.9%
Coal	796,859	1.0%
Dimensional Stone	730,369	0.9%
Shale	565,436	0.7%
Chat	321,166	0.4%
Dolomite	184,318	0.2%
Salt	167,655	0.2%
Caliche	134,034	0.2%
Tripoli	32,781	0.0%
Volcanic Ash	0	0.0%
Total	79,225,212	100.0%

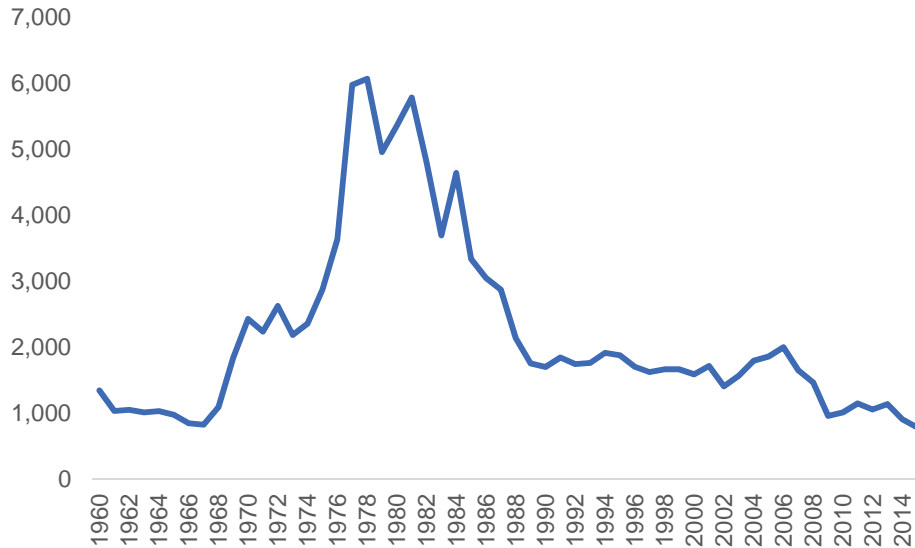
Source: Department of Mines Annual Report, 2015

The State's coal production has changed significantly over the past 50 years. As shown in Figure 3, coal production steadily increased in the 1960s and 1970s before peaking in 1978 at 6.1 million short tons. Total production has declined steadily since. In 2015, the State's total production was 780,000 short tons.¹⁷

¹⁷ Figure does not precisely align to total in table above due to differing data sources (EIA and OK Department of Mines).



Figure 3: Oklahoma Coal Production Estimates (thousand short tons) – 1960-2015



Source: U.S. EIA Table PT1 – Primary Energy Production Estimates, Oklahoma

Today, the State's industry has been reduced to four companies at six mine sites in four counties. The following table and figure display each active coal company's production between 2008 and 2015. The three largest producers (Phoenix, Farrell Cooper and GCI) have each experienced decreasing production since 2008. Overall, Oklahoma companies are producing a CAGR of -8.4 percent from year to year.

Table 2: Oklahoma Coal Company Production (tons), 2008-2015¹⁸

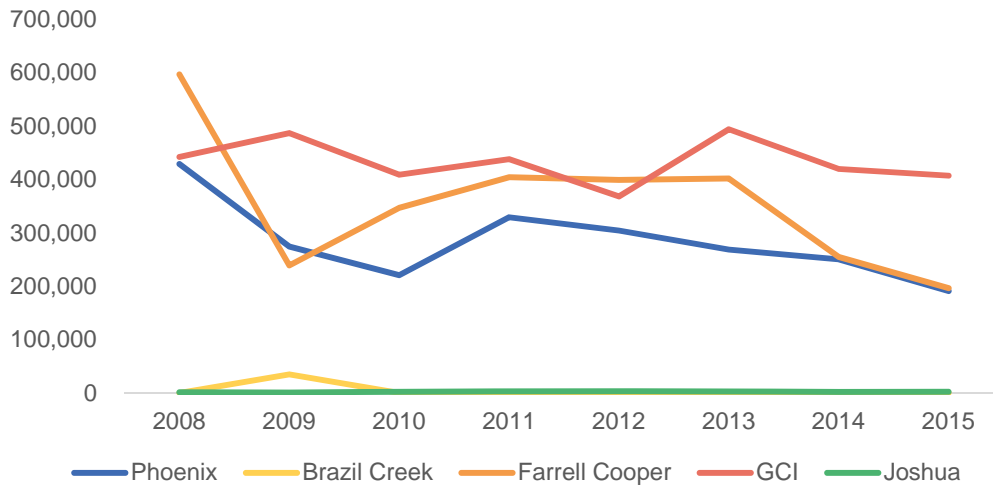
Year	Phoenix	Brazil Creek	Farrell Cooper	GCI	Joshua	Total Tonnage
2008	429,060	0	597,059	442,338	1,172	1,469,629
2009	274,346	34,937	239,033	487,064	644	1,036,024
2010	220,871	0	347,083	408,913	1,974	978,841
2011	329,162	0	404,157	438,266	2,988	1,174,572
2012	304,309	0	399,159	368,374	3,228	1,075,069
2013	268,580	0	401,729	494,341	2,558	1,167,208
2014	250,323	0	255,056	419,725	1,959	927,064
2015	190,909	0	196,343	407,365	2,242	796,859
CAGR	-10.9%	N/A	-14.7%	-1.2%	9.7%	-8.4%

Source: Oklahoma Department of Mines Annual Coal Production Statistics

¹⁸ Not all coal produced is eligible for the coal tax credits. Eligibility is based on the price of the coal; no production credits are offered when the average price of coal is \$68 or more per ton, excluding freight charges.



Figure 4: Oklahoma Coal Company Production (tons), 2008-2015



Source: Oklahoma Department of Mines Annual Coal Production Statistics

Oklahoma Coal Industry Employment¹⁹

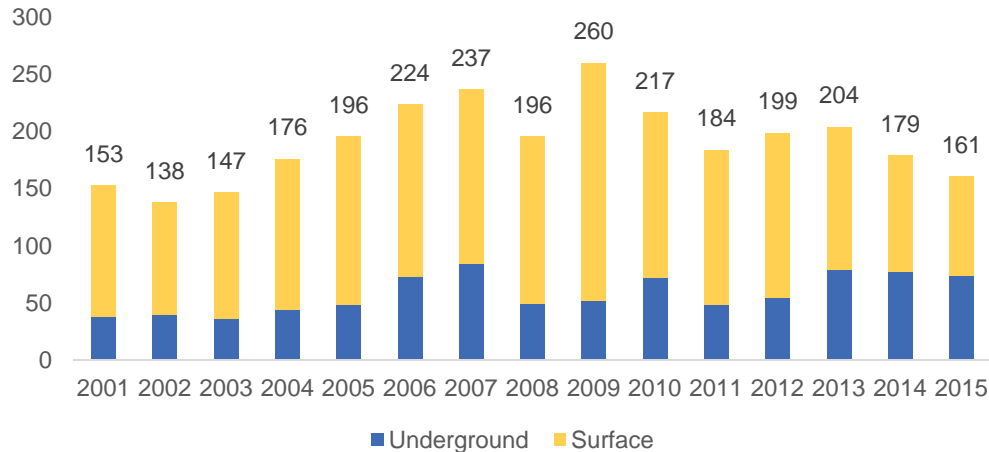
In Oklahoma, the coal industry has long been a relatively small part of the economy. The overall mining and logging industry accounted for 3.2 percent of all Oklahoma non-farm employment in 1990; by 2016 that share was 2.5 percent.

As shown in the following figure, State employment in the coal mining industry increased by a CAGR of 6.9 percent between 2001 and 2009, but it has declined by a CAGR of -7.7 percent since that time. Overall, the CAGR between 2001 and 2015 is 0.4 percent – indicating that employment has been essentially flat during this time period.

¹⁹ Indirect jobs associated with the coal industry are included in the economic and fiscal impact section of this report.



Figure 5: Oklahoma Average Number of Employees by Mine Type, 2001-2015



Source: U.S. Energy Information Association Annual Coal Reports

Even while employment was declining, in 2007, coal credits were increased from \$0.95 per ton to \$5.00 per ton. Since that time, employment has decreased from 237 to 161 – a decrease of 76 positions and CAGR of -4.7 percent.

This rate of decline exceeds that observed nationwide (-2.6 percent), as shown in the following table.

Table 3: Oklahoma and U.S. Total Number of Employees, 2007-2015

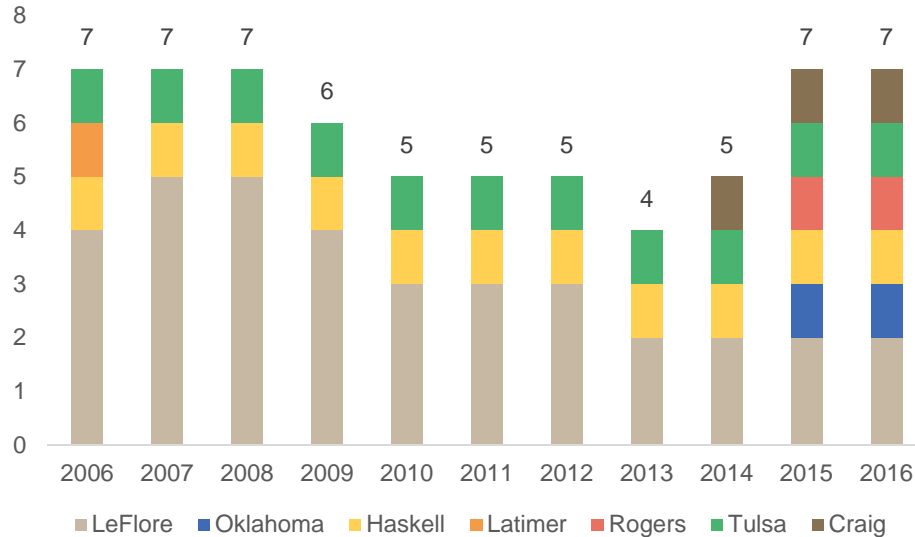
Year	OK	U.S.
2007	237	81,278
2008	196	86,859
2009	260	87,755
2010	217	86,195
2011	184	91,611
2012	199	89,838
2013	204	80,396
2014	179	74,931
2015	161	65,971
CAGR	-4.7%	-2.6%

Source: U.S. Energy Information Association Annual Coal Reports

Additionally, the number of coal production establishments has been stagnant in recent years. As shown in the following table, the number of coal sites in Oklahoma has fluctuated since 2006, but was the same in 2016 as it was 10 years prior.



Figure 6: Number of Establishments by County, 2006-2016



Source: BLS Quarterly Census of Employment and Wages

This stagnation in the development of new mines, however, is better than the U.S. as a whole, where the number of mines has decreased from 1,275 in 2006 to 951 in 2016, a decline of 324 (25 percent).

Mining Industry Payroll

The average mining industry pay in the State has consistently surpassed the average pay across all private industries by 15-30 percent. As shown in the following table, since 2006, the average annual mining industry pay has increased by a compound annual growth rate (CAGR) of 3.05 percent. During the same time, the average annual pay for all private industries in Oklahoma has increased by 2.53 percent.

Table 4: Oklahoma Average Annual Pay by Industry, 2006-2016

Year	Mining, Except Oil and Gas ²⁰	All Private Industry
2006	\$41,926	\$34,136
2007	\$45,128	\$35,469
2008	\$43,210	\$37,137
2009	\$42,375	\$36,934
2010	\$45,014	\$38,011
2011	\$47,812	\$40,157
2012	\$50,934	\$41,863

²⁰ NAICS 212 – Mining, except oil and gas. Industries in the subsector primarily engage in mining, mine site development, and beneficiating (i.e. preparing) metallic minerals and nonmetallic minerals, including coal. The term “mining” is used in the broad sense to include ore extraction, quarrying, and beneficiating (e.g. crushing, screening, washing, sizing, concentrating, and flotation), customarily done at the mine site. Please note that NAICS 2121, Coal Mining, did not provide sufficient data for analysis.



Year	Mining, Except Oil and Gas ²⁰	All Private Industry
2013	\$52,281	\$42,734
2014	\$54,875	\$44,089
2015	\$58,443	\$44,504
2016	\$56,608	\$43,809
CAGR	3.05%	2.53%

Source: BLS Quarterly Census of Employment and Wages

The average industry pay in Oklahoma consistently trails the national average by approximately 30 percent. This is not surprising, as the cost of living varies considerably from state to state. However, it should be noted that the growth in industry pay (calculated as the CAGR between 2006 and 2016) exceeds that observed across the U.S. as a whole (2.32 percent).

Because coal mining occurs in a specific area of the State, it is important to account for the different economic factors that influence pay in those areas. According to the 2015 Oklahoma Department of Mines Report, the majority of coal production (73 percent) occurred in LeFlore County.²¹ The following table, which compares the average annual mining pay to the average annual private industry pay in LeFlore County, shows that the industry's annual pay is high relative to the average across all private industries.

Table 5: LeFlore County Annual Pay by Industry, 2006-2016

Year	Mining, Except Oil and Gas	All Private Industry
2006	\$29,398	\$24,553
2007	\$30,495	\$25,692
2008	\$32,873	\$26,771
2009	ND	\$25,647
2010	ND	\$25,786
2011	ND	\$27,536
2012	ND	\$28,801
2013	ND	\$31,515
2014	ND	\$33,875
2015	ND	\$32,426
2016	\$40,519	\$31,051

Source: BLS Quarterly Census of Employment and Wages
ND: Not disclosable – data do not meet BLS or State agency disclosure standards

²¹ The remainder occurred in Craig County (24 percent), Haskell (2.8 percent) and Okmulgee (0.3 percent).

²² NAICS 212 – Mining, except oil and gas. Industries in the subsector primarily engage in mining, mine site development, and beneficiating (i.e. preparing) metallic minerals and nonmetallic minerals, including coal. The term “mining” is used in the broad sense to include ore extraction, quarrying, and beneficiating (e.g. crushing, screening, washing, sizing, concentrating, and flotation), customarily done at the mine site. Please note that NAICS 2121, Coal Mining, did not provide sufficient data for analysis.



Incentive Usage and Administration



Incentive Characteristics

There are two main types of coal credits available in the State: those for purchasers and those for producers.

Purchase Credits

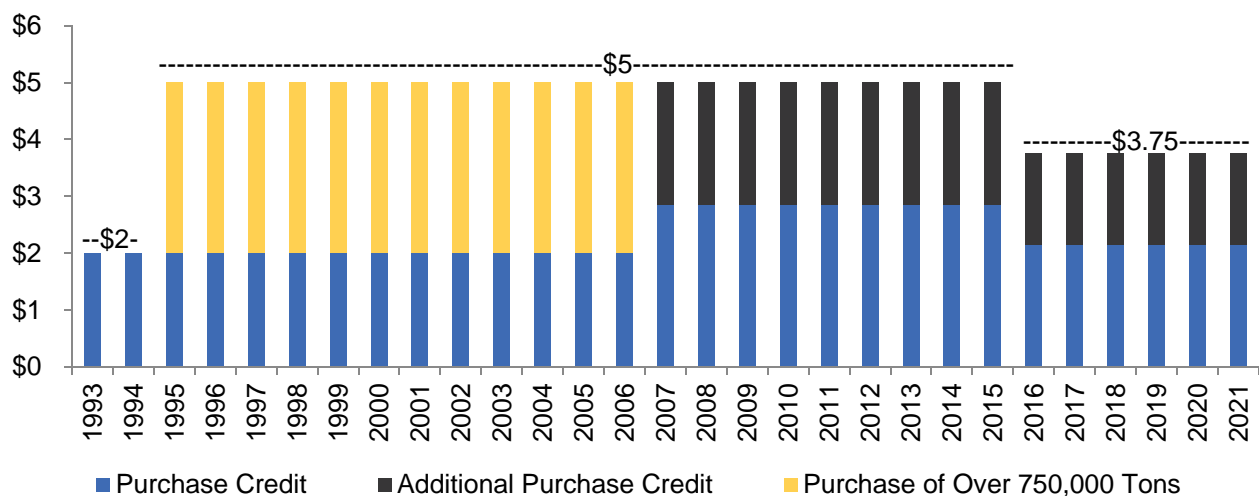
Through December 31, 2021, two credits totaling \$5.00 per ton²³ are available to businesses purchasing Oklahoma-mined coal to furnish water, heat, light or power to the State or its citizens, or to generate heat, light, or power for use in manufacturing operations within the state. However, the structure of the credits has changed significantly since introduction:

- **1993-1994:** \$2.00 per ton purchased by water, heat, light or power suppliers;
- **1995-2006:** \$2.00 per ton purchased by water, heat, light or power suppliers; an additional \$3.00 per ton for suppliers purchasing at least 750,000 tons of coal per year;
- **2007-2021:** \$2.85 per ton purchased by water, heat, light or power suppliers; an additional \$2.15 for each ton purchased;
- **2014-2015:** \$2.85 per ton purchased by water, heat, light or power suppliers; an additional \$2.15 for each ton purchased; credits refundable at 85 percent of face value;
- **2016-2021:** \$2.14 per ton purchased by water, heat, light or power suppliers; an additional \$1.61 for each ton purchased; credits refundable at 85 percent of face value.

The purchase credits made available since the inception of the incentive are summarized in

Figure 7:

Figure 7: Oklahoma Coal Purchase Credits per Ton, 1993-2021²⁴



²³ A \$2.85 per ton credit is available per §68-2357.11 subsection B paragraph 3; an additional \$2.15 per ton credit is available per §68-2357.11 subsection B paragraph 4.

²⁴ It should be noted that effective 2014-2021, credits are refundable at 85 percent of face value. This is not reflected in the figure, as the figure displays the full value of the credits themselves.



Production Credits

The State's credits for production have also changed in structure over the years. From January 1, 2001 to December 31, 2021, a credit is available to businesses primarily engaged in mining, producing or extracting coal. Between July 1, 2006 and December 31, 2021, the credit is \$5.00 for each ton of coal mined, produced or extracted in, on, under or through a valid permit issued by the Oklahoma Department of Mines.

As with the purchase credits, production credits earned prior to January 1, 2014 are transferable and may be claimed for up to five years. For those earned on or after January 1, 2014, any credit earned but not used is refunded at 85 percent of the amount of the credit. All credits calculated for activities occurring on or after January 1, 2016 are refundable at 75 percent of the amount of the original credit. No production credits are offered when the average price of coal is \$68 or more per ton, excluding freight charges.

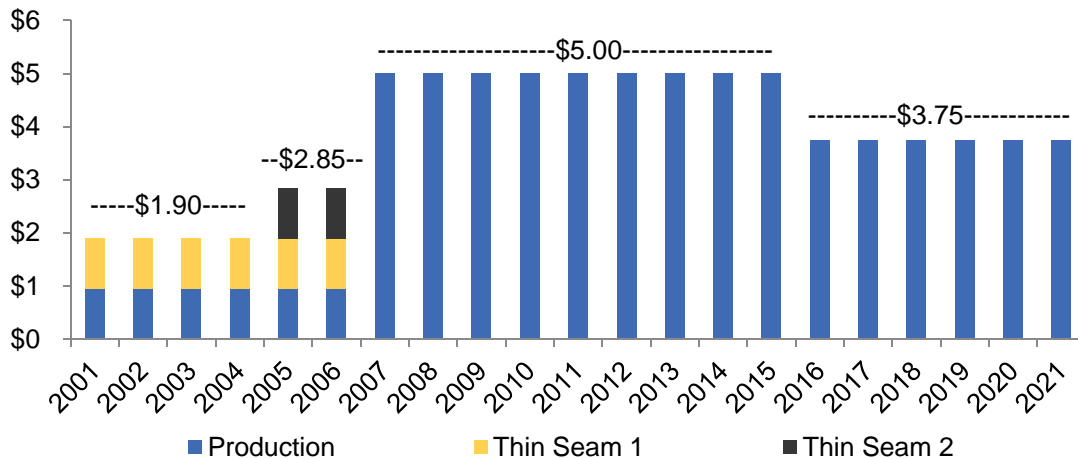
A summary of production credits and their changes is summarized below:

- **2001-2004:** \$0.95 per ton of coal mined, produced or extracted on, under or through a permit; an additional \$0.95 per ton of coal mined, produced or extracted from thin seams (unless the coal is sold to a consumer who purchases at least 750,000 tons of Oklahoma-mined coal per year);
- **2005-2006:** \$0.95 per ton of coal mined, produced or extracted on, under or through a permit; an additional \$0.95 per ton of coal mined, produced or extracted from thin seams (unless the coal is sold to a consumer who purchases at least 750,000 tons of Oklahoma-mined coal per year); and an additional \$0.95 per ton credit on the amount of tax paid into the General Fund for coal mined, produced or extracted from thin seams;
- **2007-2013:** \$5.00 per ton of coal mined, produced or extracted on, under or through a permit;
- **2014-2015:** \$5.00 per ton of coal mined, produced or extracted on, under or through a permit; credits refundable at 85 percent of face value;
- **2016-2021:** \$3.75 per ton of coal mined, produced or extracted on, under or through a permit; credits refundable at 85 percent of face value.

The production credits made available since the inception of the incentive are summarized in Figure 8:



Figure 8: Oklahoma Coal Production Credits per Ton, 2001-2021²⁵



Historic Use of Coal Credits

Since 2009, use of the coal tax credits has fluctuated widely, as shown in the following table. While claims were minimal between 2009 and 2013, they increased significantly in 2014 and 2015, totaling \$4.0 and \$4.4 million, respectively. Coal credits for new production were suspended in 2010 and 2011 as part of a two-year budget-balancing deal, but credit holders could still use credits they received from previous production during that time. New production was again eligible for the credits in 2012.

Table 6: Coal Tax Credits, 2009-2015

Year	Number of Returns	Total Credits Earned ²⁶	Total Claims Used ²⁷
2009	18	\$644,644	\$569,691
2010	18	\$325,102	\$292,690
2011	6	\$90,034	\$85,818
2012	10	\$535,982	\$78,563
2013	7	\$168,230	\$89,059
2014	14	\$6,431,548	\$3,997,756
2015	12	\$4,906,916	\$4,414,630

Source: OTC Form 511CR data

The sharp increase in 2014 is primarily due to the fact that prior to tax year 2014, unused credits (i.e. credits earned that are greater than the amount of taxes owed) were transferrable – and companies earning the credits largely took advantage of this option. Generally, these “leftover” credits were sold to insurance companies to

²⁵ It should be noted that effective 2014-2021, credits are refundable at 85 percent of face value. This is not reflected in the figure, as the figure displays the full value of the credits themselves.

²⁶ Prior to 2014, “Total Credits Earned” was the amount of the credit (including any carryover credit) claimed on a tax return eligible to be used to offset any tax liability.

²⁷ Based upon a taxpayer’s final liability as calculated, the “Total Claims Used” is the amount used to offset any tax liability.



reduce insurance premiums tax liabilities. The following table displays the number of insurance companies and total coal credits used to reduce insurance premiums tax liabilities between 2009 and 2014.

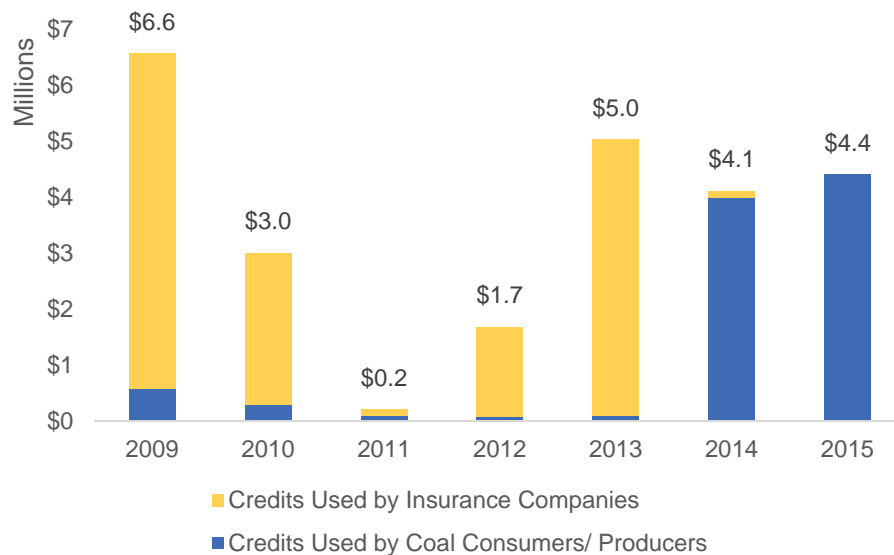
Table 7: Coal Credits Claimed by Insurance Companies, 2009-2014

Year	Total Insurance Companies	Total Credits Used	Average Credit/ Company
2009	10	\$6,007,014	\$600,701
2010	9	\$2,712,606	\$301,401
2011	1	\$122,816	\$122,816
2012	5	\$1,608,892	\$321,778
2013	8	\$4,950,957	\$618,870
2014	2	\$120,285	\$60,142

Source: Oklahoma Insurance Department data

When factoring these amounts in with the amounts claimed by coal companies, aggregate credits claimed have generally decreased since peaking at \$6.6 million in 2009 – totaling \$5.0 million in 2013 and \$4.4 million in 2015.

Figure 9: Coal Credits Claimed by Coal and Insurance Companies, 2009-2015



Source: Oklahoma Insurance Department and Tax Commission data, 2009-2015

Given this, and because differing data sources must be used in order to account for the entire impact of the program for tax years 2009-2013, data for tax years 2014 and 2015 is most useful for analyzing the current and potential future state of the coal tax incentive program.

In 2014, coal credits were claimed on 14 returns. While more than \$6.2 million in credits was established during the tax year, only \$4.0 million (approximately two-thirds) was used to reduce tax liability. In 2015, however, credits used to reduce tax liability was equal to approximately 90 percent of credits established during the tax year. Under the provisions of the program, the amounts not used to reduce tax liability may be carried forward



for five years, making it more difficult for the State to estimate tax expenditures associated with the program from year to year.

Table 8: Oklahoma Coal Tax Credit Detail, 2014-2015

Year	Number of Returns	Unused Credit Carried over from Prior Year(s)	Credit Established During Current Tax Year	Amount Used to Reduce Tax Liability
2014	14	\$183,001	\$6,248,547	\$3,997,756
2015	12	\$85,344	\$4,821,572	\$4,414,630

Source: OTC Form 511CR data

It can also be useful to analyze the credits earned and claimed per coal industry employee. As shown in the following table, the average credit claimed per employee in 2014 and 2015 was between \$20,000 and \$30,000 – and the average credit earned per employee was between \$30,000 and \$35,000. According to the Bureau of Labor Statistics, the average annual pay for a person employed in the mining industry in Oklahoma was \$55,000-\$60,000 during that time frame.²⁸ On a per-employee basis, the coal tax credit is significant – and amounts to a subsidy of approximately half the average annual pay per employee – **every year that the credits are in place.**

Table 9: Coal Credits Earned and Used per Employee, 2009-2015

2009	260	\$569,691		\$644,644	
2010	217	\$292,690		\$325,102	
2011	184	\$85,818		\$90,034	
2012	199	\$78,563		\$535,982	
2013	204	\$89,059		\$168,230	
2014	179	\$3,997,756		\$6,431,548	
2015	161	\$4,414,630		\$4,906,916	

Source: OTC Form 511 CR data, EIA Coal Annual Reports

Incentive Administration

There are three components to overall program administration:

1. **Eligibility.** There are two groups eligible for the incentives: coal purchasers and coal producers. Coal purchasers must either furnish water, heat, light, or power to the citizens or to the State of Oklahoma, or burn coal to generate heat, light, or power for use in manufacturing operations in Oklahoma. Coal producers must hold a valid permit issued by the Oklahoma Department of Mines. Additionally, the average price of coal mined, produced or extracted in any month for which credits are claimed must not be more than \$68 per ton.

²⁸ According to BLS Quarterly Census of Employment and Wages data, in 2013, a worker employed in the Support Activities for Coal Mining sub-industry (NAICS 212113) earned an average of \$55,806, and in 2016, a worker in the Bituminous Coal and Lignite Surface Mining sub-industry (NAICS 212111) earned \$52,239.



2. **Determining the Credit.** Eligible producers and purchasers claim credits on their Oklahoma corporate income tax returns. Additionally, these entities fill out line 2 of Form 511CR (Other Credits) by identifying unused credit carried over from prior years, credit established during current tax year, and total available credit. The OTC is responsible for determining the eligibility for the credit and, if necessary, administering any refund based on that credit.²⁹ To request a refund, entities must complete and file OTC Form 577 (Refundable Coal Credit).

Transferability

Prior to January 1, 2014, credits were transferrable at any time during the five years following the year of qualification. The producer or purchaser originally earning the credit and the transferee were required to jointly file a copy of the written transfer agreement with the OTC within 30 days of the transfer. The written agreement was required to contain the name, address and taxpayer identification number of both parties, the amount of the credit being transferred, the year the credit was originally allowed to the transferring entity, and the tax year or years for which the credit may be claimed. A copy of OTC Form 572 (Transfer Agreement for Income Tax, Rural Electric Cooperatives Tax, or Insurance Premium Tax Credit) had to be attached to any tax return on which a taxpayer claimed a transferred credit.

Refundability

Credits earned on or after January 1, 2014 but not used are refunded to the taxpayer at 85 percent of the face amount of the credits. If the taxpayer is a pass-through entity and does not file a claim for a direct refund, that entity allocates the credit to one or more of the shareholders, partners or members of the pass-through entity.

3. **Reporting.** Once the tax year is completed and timely returns have been filed and processed, the OTC is the source for data associated with the use of the tax credit. Estimated tax expenditures and number of returns related to coal incentives are found in the OTC's Tax Expenditures reports.

²⁹ As discussed previously, credits earned on or after January 1, 2014 but not used shall be refunded to the taxpayer at 85 percent of the face amount of the credits.



Economic and Fiscal 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 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 10: 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).

Fiscal Impact

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).³⁰ Two datasets were used to derive the ratio: 1) U.S. Department of Commerce Bureau of Economic

³⁰ Gross State Product (GSP) is the state counterpart of Gross Domestic Product (GDP) for the nation. To assist the reader, the project team has decided to use GDP throughout this section of the report instead of mixing the two terms. This decision was made because more people are familiar with the term GDP.



Analysis GDP estimates by state;³¹ and 2) the OTC's *Annual Report of the Oklahoma Tax Commission*.³² Over the past 10 years, the state tax revenue as a percent of state GDP was 5.4 percent, as shown in the following table:

Table 10: State of Oklahoma Tax Revenue as a Percent of State GDP

Year	Oklahoma Tax Revenue ³³	Oklahoma GDP	Ratio
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%
2015-16	\$8,963,894,053	\$182,937,000,000	4.9%

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

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 employee compensation, 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 a standard practice, and it 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, the project team multiplied the total value added figure produced by the IMPLAN model by the corresponding annual ratio (about 5.0 percent). For example, if the total value added was \$1,000,000, then the estimated State of Oklahoma tax revenue was \$50,000 (\$1,000,000 x 5.0 percent).

Impact of Coal Incentives

Given the relatively small size of the coal industry in Oklahoma and limited employment growth over the past decade, it is difficult to directly link the coal incentive to increased economic output. For example, total sector

³¹ U.S. Department of Commerce Bureau of Economic Analysis. Available at <http://www.bea.gov/regional/>.

³² Oklahoma Tax Commission. Available at https://www.ok.gov/tax/Forms_&_Publications/Publications/Annual_Reports/index.html.

³³ Gross collections from state-levied taxes, licenses and fees, exclusive of city/county sales and use taxes and county lodging taxes.



employment has declined from about 200 workers in 2013 to 161 workers in 2015. Unlike other Oklahoma incentive programs that are based on net new employment, this program is based on production. An alternative approach to evaluating the coal incentive program is to estimate the total economic impact of the coal sector (including tax revenues generated) each year against the incentive program expenditures. The simplifying assumption, based on available data, is that all eligible companies take advantage of the incentive. For the past five years, the annual economic impact of the coal sector was calculated using QCEW employment data. IMPLAN Sector 22 Coal Mining was used to model the economic impact. The following tables depict the statewide annual impact of the coal sector.

Table 11: Impact of Coal Incentives

Year		Output	Value Added	Labor Income	Employment	Estimated Oklahoma Tax Revenue
2011	Direct Effect	\$110,203,631	\$36,034,843	\$7,647,065	161	
	Indirect Effect	\$43,567,213	\$23,877,621	\$14,238,543	219	
	Induced Effect	\$16,824,651	\$9,213,061	\$5,212,848	134	
	Total Effect	\$170,595,495	\$69,125,525	\$27,098,456	514	\$3,594,527
2012	Direct Effect	\$127,183,872	\$42,574,055	\$9,034,771	199	
	Indirect Effect	\$51,455,266	\$28,210,672	\$16,822,399	254	
	Induced Effect	\$19,867,276	\$10,884,948	\$6,158,820	155	
	Total Effect	\$198,506,414	\$81,669,675	\$32,015,990	608	\$4,083,484
2013	Direct Effect	\$130,379,453	\$46,458,007	\$9,858,997	204	
	Indirect Effect	\$56,268,915	\$30,784,279	\$18,357,076	273	
	Induced Effect	\$21,742,088	\$11,877,961	\$6,720,677	167	
	Total Effect	\$208,390,456	\$89,120,247	\$34,936,750	644	\$4,481,894
2014	Direct Effect	\$114,401,579	\$42,617,795	\$9,044,053	179	
	Indirect Effect	\$51,195,996	\$28,239,656	\$16,839,683	246	
	Induced Effect	\$19,981,412	\$10,896,131	\$6,165,147	150	
	Total Effect	\$185,578,987	\$81,753,582	\$32,048,883	575	\$4,414,693
2015	Direct Effect	\$102,897,507	\$38,367,267	\$8,142,036	161	
	Indirect Effect	\$46,113,547	\$25,423,145	\$15,160,160	219	
	Induced Effect	\$17,899,947	\$9,809,394	\$5,550,260	134	
	Total Effect	\$166,911,001	\$73,599,806	\$28,852,456	514	\$3,606,390

Source: TXP, Inc. IMPLAN analysis output, September 2017

As depicted in the preceding table, direct employment in the coal industry supports 300 to 400 additional indirect and induced jobs each year. These jobs are linked to the purchases made by the coal industry to supplier firms as well as the ripple effects of employee payroll. Multiplying the total value added figure produced by the IMPLAN model by the corresponding annual tax ratio, provides an estimate for total annual State tax revenue.



Incentive Benchmarking

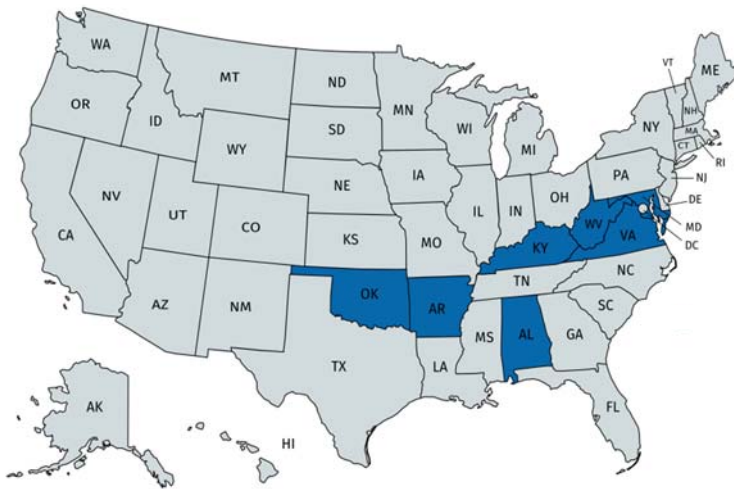


Benchmarking

A detailed description of comparable state programs can be found in **Appendix A**.

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

Figure 11: States Offering Coal Production Incentives



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.³⁴ 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 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.

According to the U.S. Department of Labor, 25 states were producing coal in 2015. Two states account for more than half of all coal production in the United States. Wyoming ranked first for coal production, with 376 million short tons, accounting for 42 percent of total production within the U.S. West Virginia ranked second, producing 96 million short tons, representing 11 percent of the total. By contrast, Oklahoma generated a total of 780 thousand short tons, or 0.1 percent of national coal production.

Among coal producing states, seven comparable incentive programs were identified – three related to purchasing coal and four related to producing coal. The State of Oklahoma’s program is more comprehensive, as it provides incentives for both the production and purchase of coal. The State also offers the highest credits - \$5.00 per ton, as compared to \$1.00-\$3.00 in other states. As in Oklahoma, Arkansas, Kentucky and Virginia allow credits to be carried forward, and two states (Kentucky and Virginia) allow them to be carried forward for twice as long (10 years). Just two states (Arkansas and Virginia) allow their current credits to be transferrable.

³⁴ The only real instances of exactly alike state incentive programs occur when states choose to ‘piggyback’ onto federal programs.



Purchase Incentives

In Virginia, electricity generators are provided a \$3.00 credit for each ton of Virginia coal purchased. Credits are not refundable but are transferrable and available to carry forward for 10 years.

Maryland offers a \$3.00 per ton credit for Maryland-mined coal used by qualified co-generators, public service companies, or electricity suppliers. The State imposes a \$3.0 million annual cap, \$2.25 million of which is reserved for use in a Maryland facility. The credit, which is set to expire at the end of 2020, is not transferrable or able to be carried forward.

Kentucky's coal incentive tax credit is equal to \$2.00 for each eligible ton of coal; incentive-eligible tons are calculated by subtracting tons purchased in the base year by the tons purchased during the prior calendar year. As structured, the program aims to increase total coal purchases by electric power companies. The credit is non-refundable and non-transferrable but can be carried forward.

Production Incentives

Alabama's coal incentive is a credit on corporate income taxes in the amount of \$1.00 per ton of increased production over the previous year's total. Credits are not transferrable or able to be carried forward.

Arkansas' program offers a \$2.00 credit for production plus an additional \$3.00 credit for each ton mined in excess of 50,000 tons if sold to electric generation plants for less than \$40.00 per ton, excluding freight charges. Credits are transferrable and may be carried forward for 5 years.

Now expired (effective January 1, 2017), the Commonwealth of Virginia offered a Coalfield Employment Enhancement Credit. The amount of the credit allowed was equal to the amount earned multiplied by the person's employment factor – which was derived by taking the annual number of coal mining jobs of the person filing the return (including contractors) by the total number of coal mining jobs in the previous year. The credit for coal mined by underground methods was not to exceed \$2.00 per ton for a seam thickness of 36" and under, and \$1.00 per ton for a seam thickness above 36." For coal mined by surface mining methods, a credit in the amount of \$0.40 per ton was available per ton of coal sold. Credits were refundable at 90 percent prior to January 1, 2002 and 85 percent thereafter.

Of states offering comparable incentives, West Virginia's program has the most unique structure due to its application to facility costs. The State provides a Coal Loading Facilities credit equal to 10 percent of the calculated qualified investment to build or construct a new or expanded coal loading facility. The credit is applied over 10 years, offsetting up to half of the annual tax liability for business and occupation (B and O) and severance taxes.

Benchmarking Program Evaluations

A March 2016 briefing by the Commonwealth Institute determined that coal tax credits in Virginia are failing to achieve their stated goals of promoting employment and prosperity. The study examined coal employment in Virginia, which declined from approximately 11,000 jobs in 1988 to fewer than 4,000 in 2014, despite an increase in the five-year rolling average of coal credits per employee from less than \$2,000 in 1992 to nearly \$9,000 by 2014.³⁵ In total, the State provided \$737 million to coal and electricity producers between 1988 and

³⁵ The Commonwealth Institute – Coal Tax Credits are Not Working (March 2016). Available at: http://www.thecommonwealthinstitute.org/wp-content/uploads/2016/03/coal_tax_credits_are_not_working.pdf.



214, during which time annual coal tonnage and employment both declined by 67 percent. The report notes that the Joint Legislative Audit and Review Commission (JLARC) determined in 2012 that “changes in coal mining activity appear unaffected by the credits.”

The 2012 JLARC report cited above,³⁶ determined that the tax credits were not meeting their intended purpose by comparing each incentive’s stated public policy purpose (listed in Table 12) with the outcomes generated by the industry.

Table 12: Virginia Coal Production, Employment and Consumption Credits

Incentive	Public Policy Purpose
Coalfield Employment Enhancement Tax Credit	Provide incentive for coal mine operators to produce Virginia coal and coal bed methane and employ miners and in turn slow the decline in Virginia coal production and employment
Coal Production and Employment Incentive Tax Credit	Provide incentive for electricity producers to purchase Virginia coal and in turn slow the decline in Virginia coal production and employment

Source: JLARC Review of the Effectiveness of VA Tax Preferences, Jan. 2012

JLARC’s determination that the incentives failed to meet these stated goals was based on the following findings:

- Coal production and employment in Virginia decreased substantially during the last 20 years;
- Decreases in coal employment from 1996 to 2005 were greater than predicted without the Coalfield Employment Enhancement tax credit – decreases in coal production were six percent lower than predicted without the credit;
- The average tax credit claimed exceeded the tax liability of the claimant, resulting in a refund.

Due in large part to these findings, the State’s Coalfield Employment Enhancement Tax Credit sunset on January 1, 2017. A bill to reinstate the expired coal tax credit was vetoed in February 2017, with the Governor citing the “ineffectiveness” of the credit offered to coal mine owners and coal-buying power companies. The Governor vetoed similar measures in 2015 and 2016.³⁷ The Coal Production and Employment Incentive Tax Credit continues to be offered and has no scheduled sunset date.

³⁶ Virginia Joint Legislative Audit and Review Commission Review of the Effectiveness of Virginia Tax Preferences, January 2012.

³⁷ Governor Vetoes Coal Tax Credit Bill for Third Year in a Row. February 22, 2017. Available at: http://www.newsadvance.com/work_it_lynchburg/news/governor-vetos-coal-tax-credit-bill-for-third-year-in/article_040d7e20-5b08-5e82-be67-9ee3e7b81ae2.html.



Appendices



Appendix A: Comparable State Programs

State	Program Name	Credit	Carry-Forward	Transferable?	Effective Date	Sunset
Oklahoma	Coal Tax Credits	Two credits totaling \$5 per ton (\$2.85 and \$2.15) are available to businesses purchasing Oklahoma-mined coal to furnish water, heat, light or power to the state or its citizens, or to generate heat, light, or power for use in manufacturing operations within the state. After 1/1/2014, credits are not transferrable, but refundable up to 85% of face value; after 1/1/2016, credits are refundable at 75%	5 years	Yes, but must have been transferred prior to December 31, 2013	January 1, 1993	December 31, 2021
		A credit of \$5 per ton is available to businesses primarily engaged in mining, producing or extracting coal, and holding a valid permit; not valid for any month in which the average price of coal is \$68 or more per ton, excluding freight charges. After 1/1/2014, credits are not transferrable, but refundable up to 85% of face value; after 1/1/2016, credits are refundable at 75%	5 years	Yes, but must have been transferred prior to December 31, 2013	January 1, 2001	December 31, 2021
Alabama	Coal Producers Corporate Income Tax Credit	\$1 per ton of increased production of coal over the previous year's production	None	No	January 1, 1995	None
Arkansas	Coal Mining Income Tax Credit	\$2 per ton of coal mined, produced, or extracted; additional credit of \$3 per ton mined in excess of 50,000 tons if sold to electric generation plant for less than \$40 per ton excluding freight charges	5 years	Yes	January 1, 2003	None
Kentucky	Coal Incentive Tax Credit	\$2 per incentive ton of coal used to generate electric power or used as feedstock for an alternative fuel facility; incentive tons are calculated as current year tons minus tons purchased and used in prior year	10 years	No	July 14, 2000	None*
	Clean Coal Incentive Tax Credit	\$2 per ton of eligible coal not already claimed as a credit under the Coal Incentive Tax Credit	Unknown	No	January 1, 2005	Unknown



State	Program Name	Credit	Carry-Forward	Transferable?	Effective Date	Sunset
Maryland	Maryland-Mined Coal Tax Credit	\$3 per ton of Maryland-mined coal purchased by qualified co-generator, public service company, or electricity supplier; \$2.25 million of credits (of \$3 million cap) reserved for use in a Maryland facility	None	No	January 1, 2007	December 31, 2020
Virginia	Coal Employment and Production Incentive Tax Credit	\$3 per ton of Virginia coal used for electricity generation	10 years	Yes	January 1, 2001	None
West Virginia	Coal Loading Facilities Credit	A credit equal to 10% of calculated qualified investment, applied over 10 years, to offset up to 50% of annual tax liability for B&O and severance tax for qualified coal loading facilities	None	No	July 1, 1993	None

INCENTIVE EVALUATION COMMISSION COMMENTS

COAL TAX CREDIT

CYNTHIA ROGERS

There are good reasons to support PFM's recommendation to eliminate Coal Tax Credits. Coal is not a growing industry and is not the energy of the future. (We do not brag to visitors that we subsidize coal production and use.) The credits are excessive in comparison with other states and do not seem to leverage state funds to great effect.

1. As industry representatives explained, the big driver of the lack of coal employment growth was the "war on coal" and the inability to get permits. Employment fell despite the continued use of the credits over the past five years.
2. It makes little sense to incentivize the production AND purchase of Oklahoma coal. Oklahoma is the only state with incentives for production and purchase of coal: among the 7 states with coal credits, 4 have production credits and 3 have purchasing credits.
3. Even though coal jobs are cited as being "good" jobs for the area, the jobs come at a steep cost. According to PFM's estimates the coal incentives received amounted to about \$26,420 per job in 2015. The average mine job in Leflore County was \$40,519. In fact, the per job subsidy is more than half the average salary. This is very poor leveraging.
4. The \$26,420 per job subsidy could be used to retrain mine workers, to incentivize employment in other industries, or even to increase teacher salaries. Subsidizing teacher salaries by \$26,000 per worker would make teaching jobs "high wage."
5. The purchasers of coal can purchase better quality coal more cheaply from Wyoming. The purchasers will not go out of business without the credit.

Recommendation:

Discontinue the coal tax credits. Consider programs that target industries with a future.