



State of Oklahoma

Incentive Evaluation Commission

Ethanol Fuel Retailer Tax Credit Evaluation

WORKING DRAFT

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PFM Group Consulting LLC
BNY Mellon Center
1735 Market Street
43rd Floor
Philadelphia, PA 19103



Contents

Key Findings and Recommendations 3

Introduction 6

Background and History 9

Incentive Usage and Administration 15

Economic and Fiscal Impact 19

Incentive Benchmarking 22

Appendices 25



Key Findings and Recommendations



Incentive Overview

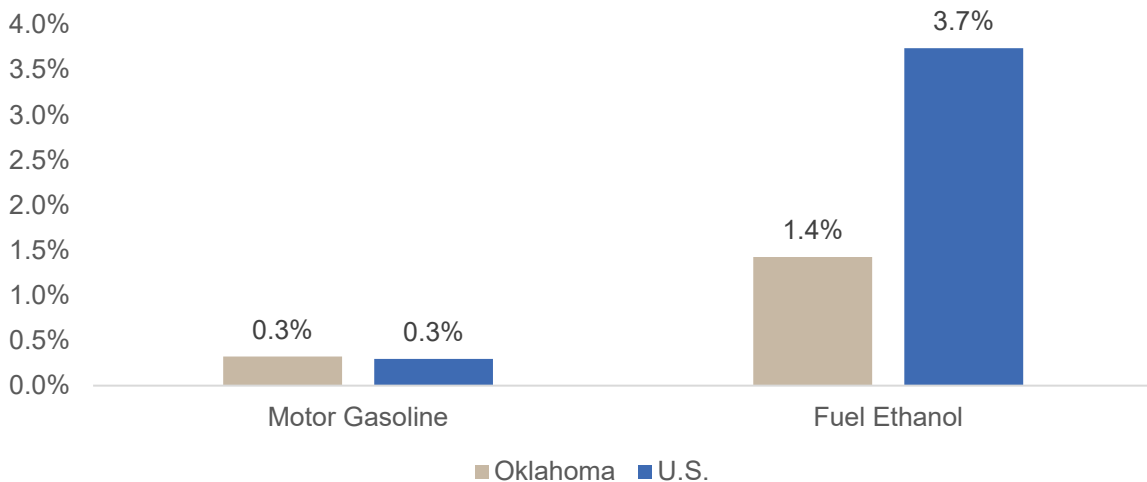
Oklahoma retailers that sell gasoline containing up to 15 percent ethanol by volume (E15) are eligible for a motor fuel tax credit of \$0.016 per gallon of ethanol blended into gasoline and sold in Oklahoma. To receive the credit, the retailer must provide a price reduction to the purchaser of the ethanol fuel in the same amount.

Recommendation: Repeal the Ethanol Fuel Retailer Tax Credit incentive and re-allocate the program's financial resources to the Tax Credit for Investments in Qualified Clean-Burning Motor Vehicle Fuel Property incentive.

Key Findings

- **Growth in Oklahoma's consumption of fuel ethanol exceeds that of its consumption of motor gasoline, but it lags growth in fuel ethanol consumption for the U.S. as a whole.** Since 2008, Oklahoma's consumption of fuel ethanol has increased by a CAGR of 1.4 percent, greater than its increased consumption of motor gasoline (0.3 percent). However, the State's increase in fuel ethanol consumption is surpassed by the U.S. as a whole (3.7 percent).

Figure 1: Annual Growth in Consumption, 2008-2019



Source: U.S. EIA

- **Fuel ethanol's share of finished motor gasoline has remained relatively constant in recent years.** In 2020, the nearly 123.5 billion gallons of finished motor gasoline consumed in the U.S. contained approximately 12.6 billion gallons of fuel ethanol. This is equal to about 10 percent of the total volume of finished motor gasoline consumption. This share has ranged from 9.2 to 10.2 percent since 2010.
- **While ethanol blended fuels are widely available in Oklahoma and nationwide, the most common blend does not qualify for the incentive.** According to statute, only retailers selling fuel blends of up to 15 percent ethanol are eligible. According to the Alternative Fuels Data Center, E10 is available at nearly every fueling station, and E15 is sold at more than 2,000 stations in 30 states. By contrast, there are more than 3,500 public stations in 42 states offering E85, which does not qualify. Some stations offer multiple ethanol blends in one location, often through blender pumps.



- **Use of the incentive by Oklahoma fuel retailers has remained relatively consistent over time.** The tax expenditures associated with the incentive have ranged between \$0.9 and \$1.6 million annually since 2008, averaging approximately \$1.2 million per year over the timeframe and increasing by a compound annual growth rate (CAGR) of 2.6 percent. The total number of companies claiming the credit in a given year has fluctuated but generally remained flat in the aggregate over the same period – a CAGR of -0.2 percent.
- **The program does not provide adequate protections – but the State is unlikely at risk of significant increases.** 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.
- **The State’s return on investment for the credit is negative.** Over the past 5 years, the additional income passed along to consumers from the ethanol fuel retailer tax credit has generated approximately \$218,124 in new state tax revenue. Over this same period, the state has provided \$6.6 million in tax credits. The state’s return on investment (ROI) is an average loss of approximately \$1.36 million per year – equal to a net loss of \$6.6 million from 2016-2020. **Oklahoma’s incentive structure is unique among state ethanol incentives.** Oklahoma’s program is structured as a pass-through from a fuel retailer, effectively providing the benefit indirectly to consumers. Only one other state – Oregon – was found to have a program that either directly or indirectly benefits the consumer, and that incentive expired nearly a decade ago. It is more typical for states to offer incentives that benefit retailers, as opposed to consumers. Most commonly, states provide incentives for retailers aimed not at promoting ethanol blended fuels themselves, but instead at reducing the cost of necessary infrastructure investments.
- **While generally straightforward, the administrative processes associated with the incentive are not particularly efficient, which impacts the Oklahoma Tax Commission (OTC) and retailers making claims.** Claim forms are not required to be submitted on any specific schedule, so the receipt of claims can be unpredictable for the OTC staff charged with reviewing and processing them. Further (and perhaps more significantly), a separate claim form must be completed for each retail location, which may be particularly cumbersome for larger retailers with multiple locations but also comes at a cost to the State. Many studies have been done related to the cost of processing a single invoice (when taking into consideration the staff time and resources necessary to accomplish this). For example, the Institute of Finance and Management has determined that the invoice processing cost varies between \$1 and \$21 per invoice, while other common industry benchmarks place the cost at around \$10 per invoice.

Recommendations

- **Repeal the Ethanol Fuel Retailer Tax Credit incentive and re-allocate the program’s financial resources to the State’s Tax Credit for Investments in Qualified Clean-Burning Motor Vehicle Fuel Property incentive.** Given the economic impact of Oklahoma’s the oil and gas industry, combined with the State’s lack of ethanol production facilities (despite prior efforts to spur their development), the State should sunset this incentive program and direct its funds (approximately \$1.2 million a year in tax expenditure) to the State’s Tax Credit for Investments in Qualified Clean-Burning Motor Vehicle Fuel Property. This incentive, also subject to evaluation by the Incentive Evaluation Commission in 2021, is targeted to the same industry (perhaps more directly, given the Ethanol incentive’s pass-through structure).



Introduction



Oklahoma Incentive Evaluation Commission Overview

The Oklahoma Incentive Evaluation Commission (Commission) was created by HB 2182 of 2015 to produce objective evaluations of the State of Oklahoma’s wide array of economic incentives. The Commission is made up of five members appointed by the Governor, President Pro Tempore of the Senate and Speaker of the House of Representatives, along with representatives of the Department of Commerce, Office of Management and Enterprise Services and Tax Commission.

Under the enabling legislation, each of the State’s economic incentives must be evaluated once every four years according to a formal set of general criteria, including (but not limited to) economic output, fiscal impact, return on incentive and effectiveness of administration, as well as criteria specific to each incentive.

Since the Commission’s inception, it has contracted with PFM Group Consulting LLC (PFM) to serve as the independent evaluator of each incentive scheduled for review in that year. PFM issues a final report on each incentive with recommendations as to how Oklahoma can most effectively achieve the incentive’s goals, including recommendations on whether the incentive should be retained, reconfigured or repealed; as well as recommendations for any changes to State policy, rules or statutes that would allow the incentive to be more easily or conclusively evaluated in the future.

The Commission is charged with considering the independent evaluator’s facts and findings – as well as all public comments – before voting to retain, repeal or modify each incentive under review. It then submits a final report to the Governor and Legislature.

Summary of 2017 Evaluation Findings and Recommendations

Based on the preceding framework, significant findings and recommendations from the 2017 evaluation of the Ethanol Fuel Retailer Tax Credit program are summarized in Table 1:

Table 1: Summary of 2017 Evaluation Findings and Recommendations

Evaluation Category	Significant Finding(s)
Overall Findings	<ul style="list-style-type: none"> - Consumption of ethanol in Oklahoma has increased significantly, while consumption of gasoline has flattened. - 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. - Oklahoma’s incentive is not as robust as in other states.
Fiscal and Economic Impact	<ul style="list-style-type: none"> - Based on economic and fiscal impact analysis, annual incentives exceed the tax revenue generated by additional household spending by Oklahoma residents. - The return on investment (ROI) for the incentive is negative. The net impact to the State is estimated to be -\$6.2 million between 2011 and 2015.
Future Fiscal Impact Protections	<ul style="list-style-type: none"> - The incentive does not provide specific financial protections, but the State is unlikely to be at risk of significant increases.
Administrative Effectiveness	<ul style="list-style-type: none"> - Reporting and administrative issues exist. - There is no specific reporting requirement associated with the credit.
Achievement of Goals	<ul style="list-style-type: none"> - 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.
Retain, Reconfigure or Repeal	<ul style="list-style-type: none"> - Based on its analysis of available data, the project team recommended in 2017 that the tax credit be repealed.



Evaluation Category	Significant Finding(s)
Other Recommendations	- If the program is retained, reconfigure the tax credit application process.

Source: Incentive Evaluation Commission, 2017 Final Report: Ethanol Fuel Retailer Tax Credit

Based on PFM's analysis and consideration of other factors, the Commission voted 4-0 to approve PFM's recommendation to repeal the incentive. During the most recent session of the 58th Oklahoma Legislature, SB 412¹ was introduced to repeal the program, but the measure failed to meet necessary procedural deadlines to continue progression in the legislative process. No statutory or programmatic changes have occurred since the 2017 Commission review.

2021 Criteria and Evaluation Approach

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 and, as noted previously, the provisions of HB 2182 require that criteria specific to each incentive be used for the evaluation.

In the case of the Ethanol Fuel Retailer Tax Credit, the program's stated purpose at the time of adoption was to "increase the sale of ethanol-blended gasoline in Oklahoma." In addition to this goal and the general evaluation factors discussed in the preceding section, the Commission has adopted the following criteria to assist in a determination of program effectiveness:

- Incentive usage over time (number and value of claims);
- Change in ethanol-blended fuel consumption versus non-blended fuel over time in Oklahoma and relative to other states;
- Change in ethanol-blended fuel as a share of total fuel consumed over time in Oklahoma and relative to other states;
- Change in number/share of fueling stations selling ethanol-blended fuel over time in Oklahoma and relative to other states; and
- State return on investment.

To conduct its 2021 review of the Ethanol Fuel Retailer Tax Credit (based on the criteria described in the preceding), the PFM project team conducted the following activities:

- Submitted a data request to the OTC;
- Reviewed and analyzed OTC-provided data;
- Completed subject matter expert/internal stakeholder interviews with representatives from OTC;
- Conducted external stakeholder interviews with industry representatives; and
- Benchmarked Oklahoma to other states.

¹ 58th Oklahoma Legislature, "Senate Bill 412." Accessed electronically at <https://legiscan.com/OK/text/SB412/id/2242983>



Background and History



Ethanol Fuel Background and History²

Ethanol, a renewable biofuel, is a clear, colorless alcohol made from a variety of biomass materials called feedstocks (the raw materials used to make a product). U.S. fuel ethanol producers mostly use food grains and crops with high starch and sugar content (such as corn, sorghum, barley, sugar cane and sugar beets) as feedstocks for making ethanol, though it can also be made from grasses, trees and agricultural and forestry residues (such as corn cobs and stocks, rice straw, sawdust and wood chips).

The origins of ethanol-blended fuel in the U.S. date back to the early 20th century, when Henry Ford designed the Model T to run on a mixture of gasoline and alcohol that he referred to as “the fuel of the future.” While ethanol was one of the first automotive fuels in the U.S., with the exception of the two world wars, only small amounts of fuel ethanol were used until the 1970s, when the oil embargo against the United States by major oil producers in the Middle East spurred interest in fuel ethanol as a way to reduce U.S. oil imports for making gasoline.

Use of fuel ethanol increased significantly in 2002 as states began to ban the use of the gasoline oxygenate known as methyl tertiary butyl ether (MTBE) because of concerns that it contaminated groundwater. Ethanol quickly replaced MTBE as a gasoline oxygenate across the country. Ethanol fuel use in the U.S. also increased in the 2000s as a result of various federal regulations and policies aimed at increasing biofuel consumption and reducing crude oil consumption for energy independence and reducing carbon emissions:³

- The Energy Policy Act of 2005 established a renewable fuels standard (RFS) as an amendment to the Clean Air Act. The RFS mandates that U.S. transportation fuels contain a minimum volume of biofuel. The mandated minimum volume increases annually and must be met using conventional biofuel (e.g., corn starch ethanol) and advanced biofuel (e.g., cellulosic ethanol).
- The Energy Independence and Security Act of 2007 increased and extended the RFS minimum annual goal for renewable fuel use from 5.4 billion gallons to 9.0 billion gallons in 2008 and to 36 billion gallons by 2022. Starting in 2016, all of the fuel increases in the RFS target must be met by advanced biofuels, defined as fuels derived from a feedstock other than corn starch.

Today, ethanol is available in several different blends for use in conventional and flexible fuel vehicles:

- E10: A low-level blend of 10 percent ethanol and 90 percent gasoline. It is approved by the U.S. Environmental Protection Agency (EPA) for use in any conventional, gasoline-powered vehicle. E10 is sold in every state, and more than 98 percent of U.S. gasoline contains up to 10 percent ethanol to boost octane, meet air quality standards or satisfy the RFS.
- E15: A low-level blend of 10.5-15 percent ethanol. It is approved for use in model year 2001 and newer light-duty conventional vehicles. While E15 does not qualify as an alternative fuel under Energy Policy Act definitions, it does help meet the federal RFS.
- E85: A blend of 51-83 percent ethanol, depending on geography and season. It qualifies as an alternative fuel under Energy Policy Act definitions and can be used in flexible fuel vehicles (FFVs), which have an internal combustion engine and are designed to run on E85, gasoline or any blend of gasoline and ethanol up to E85.

² Unless otherwise noted, ethanol history and background information comes from the U.S. Energy Information Administration, “Biofuels Explained: Ethanol,” (last updated June 2021). Accessed electronically at <https://www.eia.gov/energyexplained/biofuels/ethanol.php>

³ Eight states (Hawaii, Louisiana, Minnesota, Missouri, New Mexico, Oregon, Pennsylvania and Washington) have existing mandates for biofuel sales independent of the federal requirements.



While ethanol blended fuels are widely available in Oklahoma and nationwide, the most common blend does not qualify for the incentive. According to statute, only retailers selling fuel blends of up to 15 percent ethanol are eligible. According to the Alternative Fuels Data Center, E10 is available at nearly every fueling station, and E15 is sold at more than 2,000 stations in 30 states. There are more than 3,500 public stations in 42 states offering E85, which does not qualify. Some stations offer multiple ethanol blends in one location, often through blender pumps.⁴

Ethanol Production in the U.S. and Oklahoma

According to the U.S. Energy Information Administration’s (EIA) 2020 U.S. Fuel Ethanol Plant Production Capacity Report, as of January 2020, fuel ethanol production in the U.S. totaled 17.3 billion gallons per year, equal to 1.1 million barrels per day.⁵ Production fell significantly in late March and April 2020, driven by significant reductions in motor gasoline demand as a result of responses to COVID-19. Because almost all finished motor gasoline sold in the U.S. is blended with 10 percent ethanol, the drop in gasoline demand has driven similar decreases in fuel ethanol demand and, correspondingly, fuel ethanol production.⁶

Most U.S. fuel ethanol production capacity is located in the Midwest region (of the top fuel ethanol-producing states, 12 are located in the Midwest). The three states with the most ethanol production capacity – Iowa, Nebraska and Illinois – comprise half the nation’s total.

In order to spur biofuel and ethanol production in the state, Oklahoma previously offered – but has since sunset – a handful of incentives and programs, summarized in the following table:

Table 2: Oklahoma Ethanol Production Incentives (Now Expired)

Incentive	Date of Repeal	Incentive Description
Biodiesel Production Tax Credit ⁷	1/1/2014	A biodiesel facility may receive a credit of \$0.075 per gallon of biodiesel for up to 36 consecutive months for new fuel production. To be eligible for this credit, the facility must not have received credits before January 1, 2013, must have expanded its capacity by at least two million gallons after January 1, 2013, or must have achieved annual production of more than twelve times the monthly average of the three highest production months in the previous year. The credit will be capped at ten million gallons of biodiesel per year per biodiesel facility. If the credit allowed exceeds the amount of income taxes due, the excess amount may be carried forward as a credit against subsequent income tax liability for up to five years.
Ethanol Production Tax Credit ⁸	1/1/2014	An ethanol facility is eligible for a credit of \$0.075 per gallon of ethanol, before denaturing, for new production for up to 36 consecutive months. To be eligible for this credit, the facility must not have received credits before January 1, 2013, must have expanded its capacity by at least two million gallons after January 1, 2013, or must have achieved annual production of more than twelve times the monthly average of the three highest production months in the previous year. The credit will be capped at ten million gallons of ethanol per year per ethanol

⁴ Alternative Fuels Data Center, “Ethanol Fueling Infrastructure Development.” Accessed electronically at https://afdc.energy.gov/fuels/ethanol_infrastructure.html

⁵ 2020 marked the fifth consecutive year that production of fuel ethanol was more than 1 million barrels per day.

⁶ U.S. Energy Information Administration, “U.S. Fuel Ethanol Production Capacity Increased by 3% in 2019,” (September 29, 2020). Accessed electronically at <https://www.eia.gov/todayinenergy/detail.php?id=45316>

⁷ Reference HB 2308 of 2013 and 68 O.S. § 2357.67

⁸ Reference HB 2308 of 2013 and 68 O.S. § 2357.66



Incentive	Date of Repeal	Incentive Description
		facility and 30 million gallons of ethanol per year at all ethanol facilities in the state. Additional restrictions may apply.
Biofuels Development and Promotion ⁹	6/1/2010	Biofuels Development Act was created to encourage the processing, market development, promotion, distribution, and research of fuels derived from grain, ethanol or ethanol components, biodiesel, bio-based lubricants, co-products or by-products. The Biofuels Development Advisory Committee was to conduct a systematic review and study of the ethanol and biodiesel industry in Oklahoma and other states; study the feasibility of developing and enhancing the ethanol and biodiesel industry in Oklahoma; and otherwise encourage market development, promotion, distribution and research on products derived from grain, ethanol or ethanol components, biobased products, co-products, or by-products.
Ethanol Development ¹⁰	7/1/2006	Between May 2001 and June 2006, the Ethanol Development Study Act and Ethanol Development Advisory Committee were in place to encourage the processing, market development, promotion, distribution and research of products derived from grain, ethanol, or ethanol components, co-products or by-products, in part to provide efficient and less-polluting energy sources to make Oklahoma less energy dependent and reduce atmospheric carbon monoxide levels.

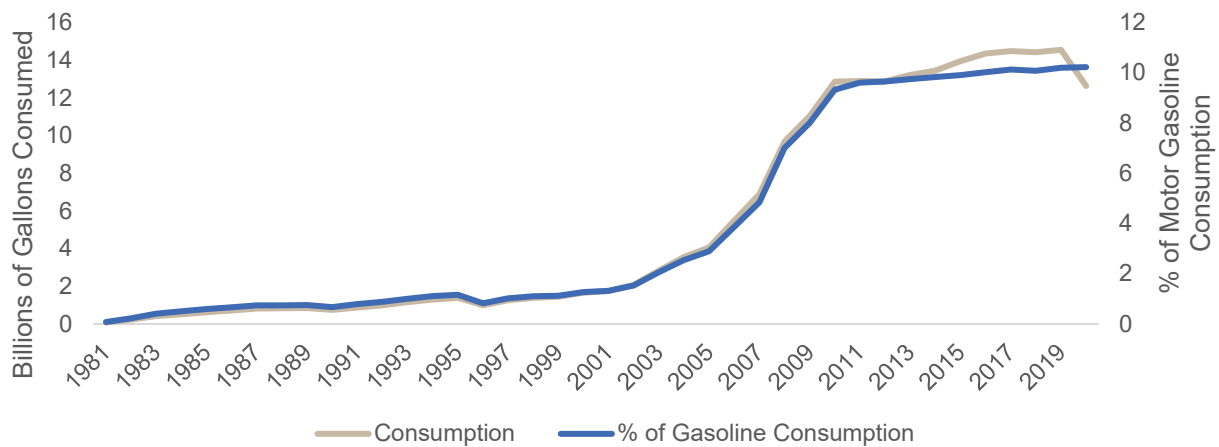
Source: Alternative Fuels Data Center

Despite these efforts, Oklahoma is currently not a major corn-producing state (which is used to produce ethanol) and has no ethanol production facilities.

Ethanol Consumption in the U.S. and Oklahoma

The historical trend of the U.S.' consumption of fuel ethanol aligns closely with that of fuel ethanol's share of total gasoline consumption nationwide.

Figure 2: U.S. Fuel Ethanol Consumption and % of Total Motor Gasoline Consumption, 1981-2020



Source: U.S. EIA

Note: Supplemental data provided in Appendix A.

⁹ Reference 2 O.S. § 1950.10 and 2 O.S. § 1950.11

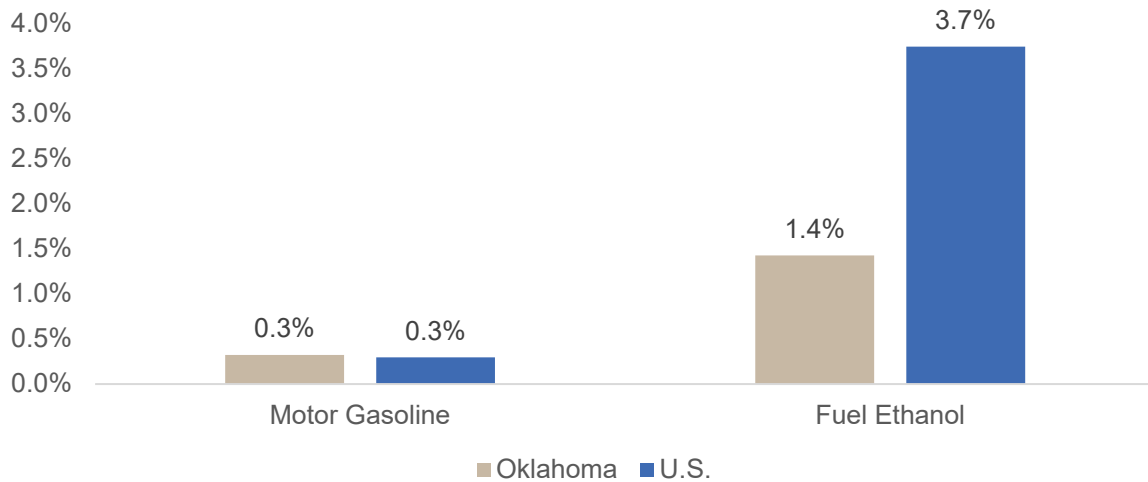
¹⁰ Reference 2 O.S. § 1950.1 and 2 O.S. § 1950.2



In 2020, the nearly 123.5 billion gallons of finished motor gasoline consumed in the U.S. contained approximately 12.6 billion gallons of fuel ethanol – equal to about 10 percent of the total volume of finished motor gasoline consumption. Notably, the 2020 total was a decrease from more than 14.5 billion gallons in 2019, likely due to the effects of the COVID-19 pandemic.

Growth in Oklahoma's consumption of fuel ethanol exceeds that of its consumption of motor gasoline, but lags growth in fuel ethanol consumption across the U.S. as a whole. Since 2008, Oklahoma's consumption of fuel ethanol has increased by a CAGR of 1.4 percent, greater than its increased consumption of motor gasoline (0.3 percent). However, the State's increase in fuel ethanol consumption is surpassed by the U.S. as a whole (3.7 percent).

Figure 3: Annual Growth in Consumption, 2008-2019



Source: U.S. EIA

Of course, many factors may have contributed to the increase in fuel 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 number of miles drivers were logging. Additionally, increases in fuel efficiency require fewer gallons of fuel to drive the same distance.

Fuel Ethanol Outlook and Major Determinants of Use

Several factors impact the current use – and, potentially future outlook – of ethanol-blended fuels, including:

- Environmental considerations: Environmental impacts are often cited as a key benefit of ethanol-blended fuel – though debatable evidence exists to support this. Ethanol is nontoxic and biodegradable – unlike gasoline – and it quickly breaks down into harmless substances if spilled.¹¹ Producing and burning ethanol results in emissions of carbon dioxide (CO₂), a greenhouse gas. However, the combustion of ethanol made from biomass (such as corn and sugarcane) is considered atmospheric carbon neutral because as the biomass grows, it absorbs CO₂, which may offset the CO₂ produced when the ethanol is burned.¹²

¹¹ Chemical denaturants are added to ethanol to make fuel ethanol, and many of the denaturants are toxic. Similar to gasoline, ethanol is a highly flammable liquid and must be transported carefully.

¹² Some ethanol producers burn coal and natural gas for heat sources in the fermentation process to make fuel ethanol, while some burn corn stocks or sugar cane stocks. The effect that increased ethanol use has on net CO₂ emissions depends on how ethanol is made and



- Electric vehicle sales trends: The increasing popularity of electric vehicles is likely to reduce the usage of vehicles operated by conventional gasoline, as well as biofuels.
- Fuel efficiency considerations: Because ethanol contains approximately two-thirds of the energy content of gasoline per gallon, use of ethanol blends results in decreased vehicle fuel economy (miles traveled per gallon), which may deter some drivers from fueling with ethanol blends. Vehicle fuel economy may decrease by approximately 3 percent when using E10.
- Fuel prices: The prices of ethanol and biodiesel (as compared to the prices of gasoline and diesel) play a role in biofuel sales, because consumers are sensitive to prices.
- Pipeline changes: Gasoline pipeline activity can also increase or decrease ethanol usage. As one example, in 2013, Iowa's largest pipeline operator stopped shipping regular 87-octane to Iowa terminals, and instead began shipping 84-octane, which cannot be legally sold in Iowa due to a requirement that a minimum of 87-octane fuel be sold at gas pumps. Boosting the fuel to the minimum octane levels required either blending with ethanol or with more expensive 91-octane premium gasoline, and as a result, this one-time pipeline change increased ethanol sales in Iowa around 2014.¹³
- Retail infrastructure costs: For retailers of ethanol-blended fuel, infrastructure costs can impact the ability to sell higher ethanol blends. Many existing retail facilities need significant infrastructure upgrades to sell E15 or E85. Upgrading infrastructure incurs direct costs (primarily including equipment and materials, as well as labor costs of removing existing equipment and installing replacement equipment) and potential hidden costs (such as revenue lost while shutting down the stations).

whether or not indirect impacts on land use are included in the calculations. Growing plants for fuel is a controversial topic because some people believe the land, fertilizers and energy used to grow biofuel crops should be used to grow food crops instead.

¹³ Iowa Department of Revenue, "Iowa's Biofuel Retailers' Tax Credits: Tax Credits Program Evaluation Study" (December 2019).

Accessed electronically at <https://tax.iowa.gov/sites/default/files/2020-06/Iowa%20Biofuel%20Retailer%20Tax%20Credits%20Evaluation%20Study%202019.pdf>



Incentive Usage and Administration



Incentive Characteristics

Since January 1, 2006, Oklahoma has provided a tax credit to fuel retailers who sell ethanol-blended fuel.¹⁴ The credit is equal to \$0.016 for each gallon of ethanol contained in gasoline sold by the retailer. In order to receive the credit, the retailer must reduce the price of ethanol sold by the amount of the credit, thereby passing along the savings to consumers. By making ethanol more financially attractive to consumers, the incentive aims to increase the sale of ethanol-blended gasoline in Oklahoma.

While, as discussed previously, there are three general categories of ethanol-gasoline blends (E10, E15 and E85), Oklahoma statute defines ethanol for purposes of this credit as “a blend of gasoline and ethyl alcohol consisting of not more than 15 percent ethyl alcohol by volume.” In other words, sales of E10 and E15 are eligible, while sales of E85 are not.

Oklahoma statute also provides that, if the federal government mandates the use of reformulated fuel in nonattainment areas for criteria pollutants with the National Ambient Air Quality Standards, the credit does not apply.¹⁵ However, Oklahoma currently does not have (and has never had) any nonattainment areas within its boundaries.

There is an open question as to whether the current tax credit is effectively incenting consumer behavior. While the goal of the incentive is to make ethanol fuel a more financially attractive option for consumers, the benefit passed on to the consumer is minimal. For example, a 20-gallon gas tank filled with E15 would contain three gallons of ethanol, resulting in a total price reduction of less than five cents per tank.

In addition to the Ethanol Fuel Retailer Tax Credit, Oklahoma currently provides a sales tax exemption for the portion of ethanol sold and blended with motor fuel.¹⁶

Historic Use of the Incentive

Between 2008 (when the first credits were claimed) and 2020, the number of companies claiming the Ethanol Fuel Retailer Tax Credit fluctuated from year to year, but generally remained flat in the aggregate, with a CAGR of -0.2 percent. During the same time period, total credits claimed by all companies increased by a CAGR of 2.6 percent, implying that the average credit claimed per company is increasing. This is supported by the data, which shows that the average claim per company increased by 2.8 percent during the time frame, averaging just over \$28,000 in 2020.

Table 3: Ethanol Fuel Retailer Tax Credit Claims, FY2008-2020

Fiscal 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

¹⁴ Per 68 O.S. § 500.10-1. A copy of this statute is provided in **Appendix B**.

¹⁵ The Clean Air Act, last amended in 1990, requires the EPA to set national ambient air quality standards (NAAQS) for six principal pollutants which can be harmful to public health and the environment: carbon monoxide, lead, nitrogen dioxide, ozone, particle pollution and sulfur dioxide. The Act also requires states to identify all areas that do not meet the standards and directs the U.S. EPA to designate these areas as “nonattainment areas.” The Act mandates the sales of reformulated gasoline (i.e., gasoline blended to burn more cleanly than conventional gasoline and to reduce smog-forming and toxic air pollutants) in the nine worst nonattainment areas.

¹⁶ Reference 68 O.S. § 500.10-1; 68 O.S. § 1359



Fiscal Year	Number of Companies	Amount of Credits Used/ Claimed	Average Claim/ Company
2013	41	\$1,424,302	\$34,739
2014	52	\$1,352,461	\$26,009
2015	41	\$1,163,215	\$28,371
2016	28	\$1,116,126	\$39,862
2017	43	\$1,366,722	\$31,784
2018	76	\$1,577,844	\$20,761
2019	70	\$1,502,000	\$21,457
2020	45	\$1,260,582	\$28,013

Source: Oklahoma Tax Commission

The tax expenditure associated with this incentive is relatively small, averaging approximately \$1.2 million annually since 2008. Total claims initially peaked in 2013 at \$1.4 million before declining and peaking again in 2018 at nearly \$1.6 million. The effects of the COVID-19 pandemic can be seen in the 2020 total, which, at under \$1.3 million, was the lowest level since 2016.

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.

Incentive Administration

The Ethanol Fuel Retailer Tax Credit is administered by the OTC as a claim for a refund; all claims are submitted to and reviewed by the Credits and Refunds section of the Account Maintenance Division.

To obtain a refund, the retailer dealer must substantiate that the retail price for each gallon was reduced by the required \$0.016 and provided to the purchaser of ethanol fuel. To submit claims, ethanol fuel retailers complete the OTC's "Application for Refund of Ethanol Credit for Retail Dealers" (Form 130-35, provided in **Appendix C**), which requires specific information regarding the retailer's purchase of ethanol purchase. Information to be supplied includes the date of purchase, name and location of the retailer, manifest number and total gallons purchased. Applicants must maintain documentation to support their respective claims for a period of three years.

To determine the amount of the refund claimed, total gallons of ethanol purchased are multiplied by the blend percentage (E10 is 10 percent, E15 is 15 percent, etc.) to calculate total gallons to be refunded. That amount is multiplied by the tax rate (0.016) to generate the total refund claimed.

In 2020, the average application for a refund was for 16,951 gallons of ethanol per location. The following example demonstrates the refund calculation process for a purchase of 17,000 gallons of ethanol at one location:

a) Total gallons of ethanol purchased:	20,000
b) Ethanol purchased by blend percentage:	15%
c) Gallons to be refunded (a x b):	2,550
d) <u>Incentive rate per gallon:</u>	<u>\$0.016</u>
e) Total refund claimed (c x d):	\$40.80



While generally straightforward, administrative processes are not particularly efficient for the OTC or retailers making claims. For example, a separate claim form must be completed for each retail location claiming the ethanol credit. For larger retailers with multiple locations, the claims process may be cumbersome. In 2020, for instance, one large company submitted a total of 936 unique claims for 78 separate fueling locations for an aggregate value of \$70,184 in refunds – an average of just under \$75 per claim form submitted. Forms are not required to be submitted on any specific schedule, so the receipt of claims can be unpredictable for the OTC staff charged with reviewing and processing them.

This is a cost to both the credit claimant and the State. Many studies have been done related to the cost of processing a single invoice (when taking into consideration the staff time and resources necessary to accomplish this). For example, the Institute of Finance and Management has determined that the invoice processing cost varies between \$1 and \$21 per invoice. This benchmark is based on the total cost of accounts payable staff split by the total number of invoices processed.¹⁷ Other common industry benchmarks place the cost at around \$10 per invoice.

¹⁷ Institute of Finance and Management, “2021 Maximizing Your Automation ROI Report.” Accessed electronically at <https://www.iofm.com/ap/benchmarking/2021-maximizing-your-automation-roi-report>



Economic and Fiscal Impact



Economic and Fiscal Impact

A detailed summary of the IMPLAN economic impact methodology is provided in **Appendix D**.

The State of Oklahoma ethanol fuel retailer tax credit is directly passed along to the consumer in the form of reduced pump prices. As a result, consumers who pay less at the pump have more disposable income available for spending elsewhere in Oklahoma or investing in savings. The portions of this additional household income spent in Oklahoma generate economic activity, resulting in a positive economic impact in the state. These total expenditures (also referred to as “economic activity” or “output”) are not the same as foregone tax revenues, which would normally be used for state budget spending. It is common, but not sufficient, in economic impact studies to compare economic activity against the incentives offered. This comparison does not provide insight into whether the public sector is making a net profit or loss on the incentive program, whether judged by revenue generated to the state or other quantitative or qualitative benefits.

To evaluate the economic impact of the ethanol fuel retailer tax credit, the IMPLAN household income module for analysis was used. This approach measures the effect of income changes to households according to demographic spending profiles. The IMPLAN spending profile used for analysis assumes a household income of \$50,000 to \$75,000 to model the economic impact. This household spending profile was used because average household incomes in Oklahoma ranged from \$66,547 in 2016 to \$75,537 in 2019, which generally aligns with the spending profile.

The model takes into account “leakages” in the economy as well as retail margins, some taxes, and savings. Therefore, the amount available for spending 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. Because this household income change is independent of production and payroll (employment-based activity), there are no direct or indirect economic impacts. Household income spending therefore generates only induced economic impacts, adjusted for personal tax, savings, other leakages, and no deduction for payroll tax on these portions of income.

Table 4: Impact of Ethanol Fuel Retailer Incentives

Year		Employment	Labor Income	Value Added	Output
2016	Induced Effect	8	\$345,210	\$631,486	\$1,189,198
2017	Induced Effect	10	\$422,718	\$773,269	\$1,456,200
2018	Induced Effect	11	\$488,017	\$892,719	\$1,681,144
2019	Induced Effect	10	\$464,559	\$849,808	\$1,600,335
2020	Induced Effect	9	\$389,890	\$713,217	\$1,343,111
Average	Induced Effect	10	\$422,079	\$772,100	\$1,453,998

Table 5: Annual Tax Revenue Generated, 2016-2020

Year	Credit Claimed/Used	Estimated State Tax Revenue	Net Impact
2016	\$1,116,126	\$35,680	(\$1,080,446)
2017	\$1,366,722	\$43,691	(\$1,323,031)
2018	\$1,577,844	\$50,440	(\$1,527,404)
2019	\$1,502,000	\$48,015	(\$1,453,985)
2020	\$1,260,582	\$40,298	(\$1,220,284)
Total	\$6,823,374	\$218,124	(\$6,605,150)



As shown in the preceding tables, household spending based on the ethanol fuel retailer tax credit supports on average 10 jobs a year. State tax revenues are calculated by IMPLAN and shown in the table. Over the past five years, the additional income passed along to consumers from the ethanol fuel retailer tax credit has generated approximately \$0.2 million in new state tax revenue. Over this same period, the state has provided \$6.6 million in tax credits. The state's return on investment (ROI) is an average loss of approximately \$1.4 million per year – equal to a net loss of \$6.6 million from 2016-2020.

The environmental implications of energy policies or programs can be monetized. This evaluation requires a net calculation of pollutants and greenhouse gases avoided. The net calculation includes the average emissions from gasoline avoided offset by the average emissions from ethanol, as a result of the ethanol substitution. These data are not currently available for this analysis. As global efforts increase to reduce carbon emissions such calculations should be included in the impact analysis to reflect these additional benefits.



Incentive Benchmarking



Benchmarking Introduction

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

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.

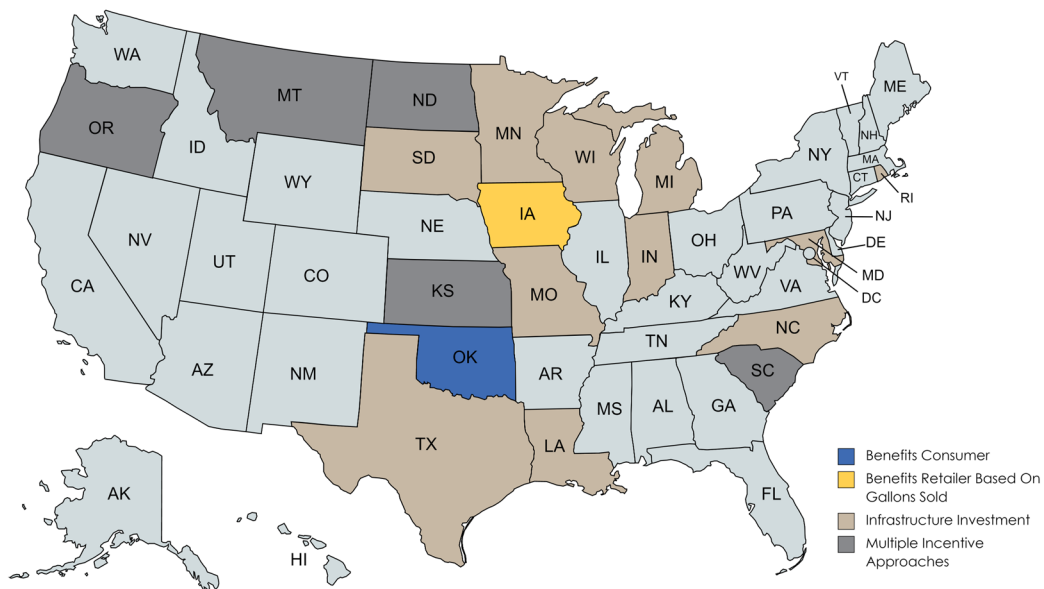
Peer State Incentives: Key Findings

The process of creating a comparison group for incentive benchmarking typically begins with bordering states 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 the Ethanol Fuel Retailer Tax Credit, the comparison group is not limited solely to neighboring states. While fueling locations near Oklahoma’s borders may compete with stations across state lines, there are many states that offer incentives promoting the sale of ethanol-blended fuels, and this evaluation focuses on three approaches employed by states:

- Incentive provided directly or indirectly to consumers of blended fuel;
- Incentive provided to retailers of blended fuel; and
- Incentive provided to retailers of blended fuel to assist with infrastructure investments.

Figure 4: State Ethanol Fuel Incentives by Type



¹⁸ The primary instances of exactly alike state incentive programs occur when states choose to ‘piggyback’ onto federal programs.



A significant takeaway of the benchmarking comparison is that Oklahoma's incentive is unique. Its tax credit is structured as a pass-through from a fuel retailer, effectively providing the benefit indirectly to consumers. Just one additional state – Oregon – was found to have a program that either directly or indirectly benefits the consumer (though, notably, it expired in December 2012). Oregon's Biofuels Use Tax Credit provided an income tax credit of \$0.50 per gallon of E85 purchased for use in an alternative fuel vehicle. Up to \$200 could be claimed each tax year for each AFV registered in Oregon and owned or leased by the resident.

It is more common for states to offer incentives that benefit the retailers of ethanol-blended fuel. Five states were found to offer tax credits for retailers based on the amount of biofuels sold at retail stations, including Iowa, Kansas, Montana, North Dakota and South Carolina.

Most commonly, though, states provide incentives for retailers aimed not at promoting ethanol-blended fuel sales themselves, but instead at reducing the cost of necessary infrastructure investments. In fact, fourteen states were identified that offer tax credits, grants and/or non-tax incentives for retailers based on investments made in the infrastructure necessary to sell biofuels.

Benchmarking Program Evaluations

As part of the benchmarking process, it can be useful to review studies and evaluations conducted by other states with comparable programs. In the case of the Ethanol Fuel Retailer Tax Credit, only one state among those described previously – Iowa – was found to have conducted an evaluation of its biofuel retailer tax credits. In December 2019, the Iowa Department of Revenue published a study of its four refundable tax credits for biofuel retailers aimed at helping promote biofuel sales to meet the State's goal that 25 percent of all petroleum used in gasoline in Iowa be replaced by biofuels by 2020. The credits under review included the following:¹⁹

- Ethanol Promotion Tax Credit (EPTC)
- E85 Gasoline Promotion Tax Credit
- E15 Plus Gasoline Promotion Tax Credit
- Biofuel Blended Fuel Tax Credit

Among the key findings of the report were that claims of the EPTC had been declining over time due to the increase of required biofuel distribution thresholds. Fewer fuel retailers have been able to meet the required thresholds necessary to claim the credit. Claims for the other three tax credits demonstrate the increase of E85, E15 and biodiesel sales over time. The changes in biodiesel sales across years reflect the revisions of the BBFC (eligibility, credit rates, etc.), suggesting biodiesel retailers have acted to respond to the tax credit revision. The evaluation forecasted that the statewide biofuel distribution percentage will be nearly 15 percent in 2024, significantly below the State's goal that 25 percent of all petroleum used in gasoline in Iowa be replaced by biofuels by 2020.

¹⁹ Iowa Department of Revenue, "Iowa's Biofuel Retailers' Tax Credits: Tax Credits Program Evaluation Study," (December 2019). Accessed electronically at <https://tax.iowa.gov/sites/default/files/2020-06/Iowa%20Biofuel%20Retailer%20Tax%20Credits%20Evaluation%20Study%202019.pdf>



Appendices



Appendix A: U.S. Fuel Ethanol Consumption and Percent of Total Motor Gasoline Consumption, 1981-2020

Year	Consumption (billions of gallons)	% of Gasoline Consumption
1981	0.083	0.08
1982	0.226	0.22
1983	0.415	0.41
1984	0.51	0.5
1985	0.617	0.59
1986	0.712	0.66
1987	0.819	0.74
1988	0.831	0.74
1989	0.843	0.75
1990	0.748	0.67
1991	0.866	0.79
1992	0.985	0.88
1993	1.151	1
1994	1.289	1.11
1995	1.383	1.16
1996	0.992	0.82
1997	1.256	1.02
1998	1.388	1.1
1999	1.443	1.12
2000	1.653	1.27
2001	1.741	1.32
2002	2.073	1.53
2003	2.826	2.06
2004	3.552	2.54
2005	4.059	2.89
2006	5.481	3.86
2007	6.886	4.84
2008	9.683	7.01
2009	11.037	8
2010	12.859	9.33
2011	12.893	9.61
2012	12.882	9.65
2013	13.216	9.75
2014	13.444	9.83
2015	13.947	9.91
2016	14.356	10.02
2017	14.485	10.13
2018	14.42	10.08
2019	14.552	10.2
2020	12.629	10.23

Source: U.S. Energy Information Administration



Appendix B: Retail Dealer Credit for Ethyl Alcohol Contained in Ethanol Sold (68 O.S. § 500.10-1)

A. As used in this section:

1. "Ethanol" means a blend of gasoline and ethyl alcohol consisting of not more than fifteen percent (15%) ethyl alcohol by volume; and
2. "Retail dealer" means the type of dealer described by paragraph 53 of Section 500.3 of Title 68 of the Oklahoma Statutes.

B. Unless the federal government mandates the use of reformulated fuel in an area within the State of Oklahoma in nonattainment with the National Ambient Air Quality Standards, there shall be allowed as a credit against the tax levy imposed pursuant to paragraph 1 of subsection A of Section 500.4 of Title 68 of the Oklahoma Statutes in the amount of one and six-tenths cents (\$0.016) for each gallon of ethyl alcohol which is contained in ethanol sold by a retail dealer.

C. Notwithstanding any other provision of the Oklahoma Motor Fuel Tax Code to the contrary, the retail dealer described by subsection A of this section may make the claim for refund from the Oklahoma Tax Commission. The refund claim process for the credit authorized by this section shall be substantially the same as the refund claims process authorized by the Motor Fuel Tax Code for other refunds provided by law.

D. Each claim for refund filed pursuant to this section shall be accompanied by such documentation as may be required by the Tax Commission that the retail dealer reduced the retail price for each gallon of ethyl alcohol which is contained in ethanol sold, and for which the credit authorized by this section is claimed, by one and six-tenths cents (\$0.016) and that such cost savings was economically provided to the purchaser of the ethanol fuel.



Refund Code 12

OKLAHOMA TAX COMMISSION

APPLICATION FOR REFUND OF ETHANOL CREDIT FOR RETAIL DEALERS

Please complete a separate claim form for each retail location claiming the ethanol credit.

NOTE: State law requires the State of Oklahoma to issue refunds via direct deposit. You will need to download and complete the Refund Direct Deposit Form (ARDD-100) found at www.tax.ok.gov. Mail the Form ARDD-100 to the address listed on the form.

Name of Retail Dealer:		FEIN <input type="checkbox"/> SSN <input type="checkbox"/> (Check one, enter number below)
Address:		Telephone Number: (Daytime)
City, State, ZIP Code:	Email Address:	

Pursuant to Title 68, O.S. 500.10-1, effective 01/01/2006, an Ethanol Credit is available to Retail Dealers who sell fuel grade ethanol to the consumer who uses the motor fuel on the public highways of this state and that the cost savings is economically provided to such consumer of the ethanol fuel. **Ethanol means a blend of gasoline and ethyl alcohol consisting of not more than fifteen percent (15%) ethyl alcohol by volume.**

PURCHASES				
Date Purchased	Name of Supplier	Location of Supplier	Manifest Number	Gallons of Ethanol
1. Total Gallons of Ethanol Purchased				
2. Multiply Total Gallons of Ethanol Purchased by the Blend Percentage (E10 is 10%, E15 is 15%, etc).....				X
3. Gallons to be Refunded.....				
4. Total Gallons Multiplied by Tax Rate				X 0.016
5. Total Refund Claimed				\$

Under penalty of perjury, I declare the information contained in this report to be true, correct, and complete to the best of my knowledge and belief. All sales of fuel grade ethanol have been paid.

Claimant's Signature	Date
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Applicant must maintain documentation to support the claim for a period of three (3) years.
Only completed claim forms will be considered.

Mail Completed Claim Form To:
 Oklahoma Tax Commission
 Account Maintenance Division/Credit and Refunds Section
 2501 North Lincoln Boulevard
 Oklahoma City, OK 73194



Appendix D: IMPLAN Economic Impact Methodology

The economic impact methodology utilized to determine the multiplier effects is IMPLAN (IMpact Analysis for PLANning), a proprietary model; PFM has obtained a license for use of the IMPLAN model for these evaluations.

IMPLAN's Social Accounting Matrices (SAMs) capture the actual dollar amounts of all business transactions taking place in a regional economy as reported each year by businesses and governmental agencies. SAM accounts are a better measure of economic flow than traditional input-output accounts because they include "non-market" transactions. Examples of these transactions would be taxes and unemployment benefits.

Multipliers

SAMs can be constructed to show the effects of a given change on the economy of interest. These are called Multiplier Models. Multiplier Models study the impacts of a user-specified change in the chosen economy for 440 different industries. Because the Multiplier Models are built directly from the region-specific SAMs, they will reflect the region's unique structure and trade situation.

Multiplier Models are the framework for building impact analysis questions. Derived mathematically, these models estimate the magnitude and distribution of economic impacts, and measure three types of effects which are displayed in the final report. These are the direct, indirect, and induced changes within the economy. Direct effects are determined by the Event as defined by the user (i.e. a \$10 million order is a \$10 million direct effect). The indirect effects are determined by the amount of the direct effect spent within the study region on supplies, services, labor, and taxes. Finally, the induced effect measures the money that is re-spent in the study area as a result of spending from the indirect effect. Each of these steps recognizes an important leakage from the economic study region spent on purchases outside of the defined area. Eventually, these leakages will stop the cycle.



Appendix E: Summary of Comparable State Programs

State	Name	Description
Incentives Provided Directly or Indirectly to Consumers of Blended Fuel		
Oklahoma	Ethanol Fuel Retailer Tax Credit	Oklahoma retailers that sell fuel blends of gasoline containing up to 15 % ethanol by volume (E15) are eligible for a motor fuel tax credit of \$0.016 per gallon of ethanol blended into gasoline and sold in Oklahoma, as long as the retailer provides a price reduction to the purchaser of the ethanol fuel in the same amount.
Oregon	Biofuels Use Tax Credit	Residents were eligible for an income tax credit of \$0.50 per gallon of gasoline blended with at least 85 % ethanol or diesel blended with at least 99 % biodiesel purchased for use in an alternative fuel vehicle. Up to \$200 could be claimed each tax year for each AFV that is registered in Oregon and owned or leased by the resident.
Incentives Provided to Retailers of Blended Fuel		
Iowa	Ethanol Promotion Tax Credit	Rate earned by a retailer varies from \$0.08 to \$0.04. Tax credit rate is a function of the size of the retailer.
	E85 Gasoline Promotion Tax Credit	Provides a credit for each gallon of E85 sold by a retailer. For 2012-2024, the rate is \$0.16 per gallon.
	E15 Plus Gasoline Promotion Tax Credit	Available to retailers who sell blended gasoline with 15 to 69 % ethanol. For 2014-2024, the tax credit rate is \$0.03 per eligible gallon sold, except June 1-September 15, when the rate is \$0.10 per gallon.
Kansas	Renewable Fuel Retailer Tax Incentive	Incentive for licensed motor fuel dealers for selling and dispensing renewable fuels, including biodiesel. A qualified motor fuel retailer is eligible for up to \$0.065 for every gallon of renewable fuel sold and up to \$0.03 for every gallon of biodiesel sold, if a required threshold %age is met. The threshold is determined by calculating the % of total gasoline sales that is renewable fuel or biodiesel. For renewable fuel, the threshold increases incrementally on an annual basis from 10 % in 2009 to 25 % beginning on January 1, 2024.
Montana	Quarterly Biodiesel Tax Refund	A licensed distributor in Montana who pays the special fuel tax on biodiesel may claim a refund equal to \$0.02 per gallon of biodiesel sold during the previous quarter if the biodiesel is made entirely from components produced in Montana. Additionally, the owner or operator of a retail motor fuel outlet may claim a refund equal to \$0.01 per gallon of biodiesel purchased from a licensed distributor if the biodiesel is made entirely from components produced in the state.
North Dakota	Biofuel Blender Tax Credit	A licensed fuel supplier to who blends biodiesel or renewable diesel fuel may claim an income tax credit of \$0.05 per gallon for fuel containing at least 5 % biodiesel or renewable diesel. Credits are not refundable but may be carried forward for up to five years.



State	Name	Description
South Carolina	Biofuel Blender Incentive	Ethanol retailers selling fuel blends of at least 70 % ethanol are eligible for a \$0.05 incentive per gallon of ethanol blended fuel sold, provided that the fuel is subject to the state motor fuel user fee. Additionally, biodiesel retailers are eligible for a \$0.25 incentive per gallon of biodiesel (B100) sold as pure biodiesel or as part of a biodiesel blend, provided that the blend contains at least 2 % biodiesel (B2). These incentives applied only to fuel sold before July 1, 2012.
Incentives Provided to Retailers of Blended Fuel to Assist with Infrastructure Investments		
Indiana	The Hoosier Homegrown Fuels Blender Pump Program	Provides grants to increase public fueling infrastructure availability for higher blends of ethanol. Funds are available to eligible applicants for 70 % to 79 % of the purchase price of E15 to E85 blender pumps and related hardware. Qualifying dispensers must be available for public use and must dispense higher ethanol blends for a minimum period of five years. The program is not currently accepting applications.
Kansas	Alternative Fuel Infrastructure Tax Credit	Kansas offers a tax credit from corporation income tax for installing alternative fueling infrastructure after January 1, 2009. The credit is only available to entities with corporate income tax liability (C corporations). Qualified property must be directly related to the delivery of alternative fuel into the fuel tank of a motor vehicle propelled by such fuel.
Louisiana	Alternative Fuel Vehicle and Fueling Infrastructure Tax Credit	Act 325, effective June 22, 2017, modified the Alternative Fuel Vehicle and Fueling Infrastructure Tax Credit, including clarifying that the costs associated with fueling station infrastructure that are not directly related to the delivery of an alternative fuel into the fuel tank of motor vehicles are not eligible for the credit.
Maryland	Alternative Fuel Infrastructure Program	Provides grants to plan, install, and operate public access alternative fueling and charging infrastructure. Private access natural gas and propane fueling stations are eligible for funding. Only Maryland-based private businesses are eligible, and projects must take place in the state. Grant award amounts are based on the alternative fuel technology and are capped at 50 % of project costs. Applicant cost share must be at least 50 %.
Michigan	Biodiesel Infrastructure Matching Grants	Qualified service station owners and operators may receive matching grants to convert existing, and install new, fuel delivery systems designed to provide E85 and biodiesel blends. Grants may not exceed 75 % of the costs to convert existing fuel infrastructure, up to \$3,000 per facility. Grants may not exceed 50 % of the construction costs to install new fueling infrastructure, up to \$12,000 per facility for E85 and \$4,000 per facility for biodiesel blends.
Minnesota	Blender Grants	Funding assistance to fuel retailers for the installation of equipment to dispense ethanol fuel blends ranging from E15 to E85. Grant amounts are based on the extent to which the installation meets project priorities.
Missouri	Alternative Fueling Station Tax Credit	For tax years beginning on or after January 1, 2015, an income tax credit is available for the cost of constructing a qualified alternative fueling station. The credit is 20 % of the costs directly associated with the purchase and installation of any alternative fuel storage and dispensing equipment or electric vehicle supply equipment, up to \$1,500 for individuals or \$20,000 for businesses.



State	Name	Description
Montana	Biofuel Blender Tax Credit	Tax credit for up to 15 % of the equipment costs incurred the year blending begins for investment made in storage and blending equipment used to blend biodiesel made from Montana-based feedstocks where by the end of the third year, biodiesel sales will at least total 2 % of diesel sales.
North Carolina	Infrastructure Tax Credit	A taxpayer who constructs a qualified fueling facility that dispenses biodiesel, ethanol or gasoline blends of at least 70 % ethanol is eligible for a tax credit equal to 15 % of the cost of constructing and installing the dispensing infrastructure that is directly and exclusively used for dispensing or storing the fuel.
North Dakota	Biodiesel Infrastructure Tax Credit	10 % income tax credit for the direct costs to adapt or add equipment that enables a facility to sell at least 2 % biodiesel blends (B2).
	Biofuels Blender Pump Program	Cost-share grants of up to \$5,000 per fueling pump, up to \$20,000 per retail location, to motor fuel retailers who install qualified biofuel blender pumps and associated equipment. Qualified retailers are eligible for grants of up to \$14,000 at each retail location for tanks and piping installed at the same time the blender pump is installed.
	Biofuels Infrastructure Partnership (BIP) Grant Program	Works with retailers and state and local government fleets to install infrastructure for higher blends of ethanol.
Oregon	Retail and Fleet Biofuels Infrastructure Grant	Provides incentives of up to \$10,000 to install or convert fueling equipment at retail gasoline stations and fleet fueling sites to B20 or higher biodiesel blends and E85 ethanol blends.
Rhode Island	Alternative Fueled Vehicle and Filling Station Tax Credit	Entitles taxpayers to a tax credit equal to 50 % of the capital, labor, and equipment costs associated with the construction of, or improvement to, any alternative fuel fueling or recharging station providing domestically produced alternative fuel or facilities for recharging electric vehicles.
South Carolina	Infrastructure Tax Credit	Taxpayer tax credits for placing in service property that is used for distributing or dispensing renewable fuels or constructing a commercial facility that produces renewable fuels repealed effective for facilities. The credit is equal to up to 25 % of the purchase, construction and installation costs.
South Dakota	Infrastructure Tax Credit	Tax credit up to 25 % of the purchase, construction, and installation costs for the fueling facility including pumps, storage tanks, and related equipment taken in three equal annual installments. Qualifying fuels include blends containing at least 70 % ethanol (E70) dispensed at the retail level for use in motor vehicles, and pure ethanol or biodiesel fuel dispensed. Additionally, the Department of Tourism and State Development may provide grants to retail motor fuel dealers for the purchase or installation of ethanol blender pumps, storage systems, and related equipment. Blender pumps must dispense a blend of either 10 % ethanol (E10) or the



State	Name	Description
		minimum blend percentage approved for all vehicles by the EPA, a blend of at least 15 % ethanol (E15), and E85.
Texas	Clean Transportation Zone Grant	Provides grants for 50 % of eligible costs, up to \$600,000, to construct, reconstruct, or acquire a facility to store, compress, or dispense alternative fuels in the Clean Transportation Zone. Qualified alternative fuels include biodiesel, electricity, natural gas, hydrogen, propane, and fuel mixtures containing at least 85 % methanol (M85).
Wisconsin	Infrastructure Tax Credit	A tax credit is available for 25 % of the cost to install or retrofit fueling pumps that dispense gasoline fuel blends of at least 85 % ethanol or diesel fuel blends of at least 20 % biodiesel fuel or that mix fuel from separate storage tanks and allow the user to select the percentage of renewable fuel. The maximum credit amount is \$5,000 per taxable year for each fueling station that has installed or retrofitted a pump. The credit must be claimed within four years of the tax return and expires December 31, 2017.