The Economic Impact of Tribal Nations in Oklahoma
Fiscal Year 2017

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Acknowledgements

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Kyle D. Dean, PhD
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Executive Summary

Direct Contribution of Tribes

Employment and Wages for Oklahomans

Oklahoma tribes employed 51,674 Oklahoma workers in 2017, paying out wages and benefits of $2.7 billion to Oklahomans. If Oklahoma tribes were an industry, they would rank as the 11th largest by employment.

Oklahoma Production

When combining business revenues, government expenditures, and capital expenditures, Oklahoma tribes accounted for $7.7 billion in direct Oklahoma production. If Oklahoma tribes were an industry, they would rank as the 9th largest by production.

Health Care, Education, Transportation

In cooperation with the federal government, Oklahoma tribes spent significant dollars on health care, education, and transportation which benefitted all Oklahomans.

- Health Care for tribal citizens resulted in a savings of $88 million through the reduction of Medicaid match payments that would otherwise be borne by the state.
- Oklahoma tribes invested heavily in tribal education and primary, secondary, and higher education benefitting all Oklahomans. In total, tribes invested $198 million for human capital development in the state.
- Oklahoma Tribes have provided more than $1.5 billion in exclusivity fees to the state since 2006, of which $1.3 billion have been transferred to the HB 1017 Education Fund to support statewide education programs.
- Oklahoma tribes brought $42.6 million into the state for construction and maintenance of Oklahoma roads, bridges, and other transportation infrastructure used by all Oklahomans.

Total Economic Impact

- When analyzed in the context of the Oklahoma economy and accounting for spillover (multiplier) impacts, we estimate that tribal activities supported:
  - 96,177 jobs in the state
  - $4.6 billion in wages and benefits to Oklahoma workers
  - $12.9 billion in state production of goods and services. This is the total economic impact.
Introduction

This report evaluates and quantifies the economic contribution of Oklahoma tribes within the state of Oklahoma. Working with Oklahoma tribes, we gathered data on tribal businesses, governments, and other sources of tribal contribution such as expenditures on capital projects, and federal dollars that come to the state to support projects within the Oklahoma tribal areas. We received data from 15 participating tribes (see Appendix A for list). We used this data along with data from other sources to create an economic profile of aggregated tribal activity within the state. The data from this profile were used as primary inputs into our economic model which was used to quantify the output, value added, employment, and wages and benefits (payroll) impacts of tribal activity generated in Oklahoma.

This methodology follows that of the most recent report outlining all Oklahoma tribal impacts which was completed in 2012 (Dean 2012), previous studies focused on tribal gaming activities (Dean and Robinson 2015) and (Dean and Robinson 2016), and many other reports created for individual tribes.

The impact estimates in this report do not represent the exact impact(s) of Oklahoma tribes (which is unknowable), rather, they should be interpreted as good faith estimates of the economic contribution of all Oklahoma tribal activity and the corresponding spillover effects generated by economic linkages with other Oklahoma institutions and citizens. This general disclaimer is useful for any impact report using similar methodology but is particularly prescient for this report given the number of participants (15 of 38 tribes) in the study. Comparison of results with previous studies is useful for understanding the nature of the change of activity and impact, but should not be viewed as precise, exact developments.
Background

To fully appreciate the contribution of Oklahoma tribes, one must have some understanding of the historical relationship between the tribes and the federal and state government. From the 2012 all-tribe impact study,

“The State of Oklahoma was formed from the twin Territories of Oklahoma Territory in the west having been populated by land runs on public lands pursuant to the allotment of Indian lands by the Dawes Act of 1887 and ‘Indian Territory’ in the east being sovereign Tribal Nations lands provided by the US as compensatory land in ‘Fee Simple’ for their original lands east of the Mississippi pursuant to the Removal Act of 1830. These ‘Indian’ lands constituted the vast majority of what is now the State of Oklahoma, which is a Choctaw word meaning ‘Red People.’”

The statement from the 2012 report implies that removal only affected tribes east of the Mississippi. In actuality, it impacted tribes from areas throughout the east, midwest, and plains states, and to some degree tribes west of the plains. According to the Oklahoma Historical Society, only 3 of the 38 tribes now in Oklahoma are native to the area (Caddo, Osage, Wichita), although other tribes had some contact with the state

“Osages, Pawnees, Kiowas, Comanches, Cheyennes, and Arapahos had also migrated into the region or visited to use resources. Some Delawares, Shawnees, Kickapoos, Chickasaws, and Choctaws regularly came to hunt Oklahoma’s abundant bison, beaver, deer, and bear.”

While not studied specifically here, one can imagine some of the long-run effects of removal for tribal economies. A few of the issues that would have negatively impacted

Many tribes have cultural centers that preserve their cultural traditions and history. Pictured here is the Citizen Potawatomi Nation Cultural Heritage Center in Shawnee, OK. The Potawatomi Indians were removed from the Great Lakes region of the U.S.

1 https://www.okhistory.org/research/airemoval
production include geographic effects due to an unfamiliar geography, labor supply decreases from the loss of citizens who chose not to move, died during the move, or died fighting the move, or loss of labor productivity due to the mental health effects resulting from the trauma of removal just to name a few.

Once removed, tribes faced continual productivity challenges imposed by federal policy. Probably the most significant federal policy was that of assimilation which was pursued in the latter part of the 19th and early part of the 20th centuries. Assimilation policies were designed to eliminate tribal culture and government and force Indian people to conform to “mainstream” society and culture. In order to accommodate settlers

This famous U.S. Department of the Interior poster soliciting buyers for Indian land in 1911 shows that 34,664 acres of Oklahoma reservation land were sold for settlement in 1910. U.S. Library of Congress
moving into Indian Territory, the assimilation regime forced tribes to give up common land for U.S. settlement in favor of individual allotments for tribal citizens. Assimilation policies also forced tribal children to attend government-run boarding schools which stripped them of their cultural identity and language and suppressed tribal governments. The policy forced tribes to abandon their traditional economic structure without giving them the ability to coordinate their structural change.

The division of land and restrictions of tribal government weakened tribes’ ability to exercise sovereignty and negotiate with the federal government. Here’s how Angie Debo described the situation with respect to the Five Eastern Tribes,

“When the tribal governments began to lose their power, the agent had to deal not with five political units but with thousands of bewildered individuals attempting to adjust themselves to new conditions,...” (Debo 1940).

Once divided, the federal government assigned “guardians” to tribes and their citizens to approve tribal and individual affairs. Many Native Americans required guardian approval for financial and other transactions, faced land sale restrictions, oil and gas development and lease issues, and a multitude of other problems including corruption stemming from the guardianship regime (Debo 1940, 1986), (Faiman-Silva 1997), (Kickingbird and Ducheneaux 1973), and (Kelley 1993),

Federal policy gradually moved toward self-determination with mixed results until the late ’60s/early ’70s with the passage of the Indian Civil Rights Act of 1968, the Indian Financing Act (1974), the Indian Self-Determination and Education Assistance Act (1975), and the Indian Child Welfare Act (1978). Tribal sovereignty was restored, allowing tribes to direct their own affairs 70-80 years after the federal government abolished their ability to exercise self-governance. This opened the door for true tribal self-determination governmentally, judicially, and economically.

Unfortunately, the historical federal policies of removal and assimilation left tribes without a solid economic base. This began to change in the early 1990s and accelerated in the 2000s for Oklahoma tribes with the advent of compacted gaming between the Oklahoma tribes and the state. So-called Vegas-style gaming was non-existent in Oklahoma prior to tribal compacts but the demand for gaming was significant as evidenced by the rapid growth of tribal gaming once the compacts were ratified. Gaming success provided/provides significant

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2 The Indian Gaming Regulatory Act of 1988 (IGRA) gave tribes the right to negotiate gaming agreements with individual states.
revenue for tribal governments who use these revenues to provide services for citizens and to develop new tribal industries, each to benefit the long-term welfare of tribal citizens. The current structure and value of tribal economies is detailed throughout this report.

Current Oklahoma Tribal Geography

Oklahoma has 38 federally recognized tribes in the state (see Appendix A for complete list). Today, these tribes are headquartered within Tribal Jurisdictional Areas, the boundaries of which remain from the pre-statehood area. From the Quapaw Tribe in the northeast corner to the Cheyenne–Arapaho Tribes bordering the Texas Panhandle in the West to the Choctaw Nation in the southeast corner, tribal activities touch nearly every part of the state.

Source: US Census Bureau Tigerline Shapefiles, OCU Center for Native American and Urban Studies
Oklahoma Native Population

According to the U.S. Census Bureau 2010 Decennial Census, Oklahoma ranked second only to California in the number of self-identified Native Americans residing in the state as 9.2% of census respondents identified as American Indian and Alaska Native alone or in combination with one or more other races. The Oklahoma Native American population grew to 482,760 in 2010 from 391,949 in 2000, representing nearly 13% of the state’s total population of 3.75 million.

Today, Oklahoma still ranks second to California in Native American population with 519,272 Oklahomans who identify as Native American Alone or In Combination with Another Race according to the U.S. Census Bureau American Community Survey 2018 population estimates.

Native American Population by State 2018

Alone or in Combination with Another Race

Source: US Census Bureau ACS 5-year Estimate of Population, OCU Center for Native American and Urban Studies

Note that the Census count includes individuals who “self-identify” as Native American. This is different from Tribal Citizenship for which the individual tribes set requirements.
The majority of the Native American population in Oklahoma resides in Tulsa and Oklahoma counties, mirroring the geography of the general population who choose to live in the two largest Metropolitan Statistical Area (MSA) counties in the state. Of the 519,000 Native Americans living in the state in 2018, 69,000 lived in Tulsa County, 54,000 lived in Oklahoma County, and the next highest concentration was in Cleveland County with 23,000 self-identified Native American residents. The gold counties in the map (right top) have the most Native Americans and the blue counties have the least.

A more in-depth evaluation reveals the significance of the population of Native Americans in rural counties. As the gold counties in the map (right bottom) demonstrate, the historical geography of Indian Territory is still apparent in the share of population that is Native American living in the counties of the current Tribal
Jurisdictional Areas. This is most noticeable in the Cherokee Nation Jurisdictional Area with Adair County Native Americans accounting for 53.6% of the county population followed by Cherokee County (44%) and other Cherokee Nation counties (Delaware, Mayes, Sequoyah). This is not surprising given the number of Cherokee Nation Citizens and non-citizens identifying as Cherokee.

subsequent downstream activity from tribal and non-tribal entities triggered by the direct tribal contribution 4. These impacts were estimated from data collected and imputed for tribal government activity, tribal business activity, and tribal capital projects expenditures 5.

Tribal Government Activity

Impact from tribal governments derives from the programs and services they provide for tribal citizens and their expenditures incurred for basic government operations. The structure of many tribal governments is similar to other local, state, and federal governments with executive, legislative, and judicial branches. The operation of these basic government functions generates economic activity similar to other state and local government operations.

The primary focus of tribes is the long-run welfare of tribal citizens. Tribal governments use dollars received from federal sources and tribal businesses to provide programs and services that benefit tribal citizens in the pursuit of this objective. These programs include workforce development, housing assistance for low-income citizens, health care, education, and many others. The delivery of these programs serves as another source of economic activity through expenditure, employment, and wages.

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4 Short-Run is used here to indicate the reported impacts (output, employment, payroll) do not include any dynamic growth effects from tribal investment in human and physical capital.

5 For a more detailed explanation of the methodology used to calculate estimates, see Appendix A: Impact Methodology.
Tribal Businesses

Tribes in Oklahoma operate a diverse portfolio of businesses which provide revenue vital for tribal self-determination and long-run stability. For this report, we classified tribal businesses into finance, gaming, manufacturing, professional services, real estate, retail, and other categories. Tribal business activities generate revenue, the majority of which is transferred to tribal governments to support the government activity mentioned above.

Capital Projects

Capital projects include expenditures on new construction and maintenance and upgrades for existing structures. We divided these expenditures into two broad categories: Roads and Other Capital Expenditures.

Long-Run Impacts

The total, long-run impact of Oklahoma tribes is difficult to quantify in a report such as this. Tribes undertake many programs that develop human capital and invest in physical capital that benefit their citizens and other Oklahomans throughout the state. These investments increase the long-run growth potential for Oklahoma's economy.

The full impact of these investments is difficult to quantify today, their benefits being realized in future years. Thus, the economic impacts we report provide a conservative estimate of the true value of Oklahoma tribal activity.

The Chickasaw Nation Medical Center (CNMC) is located in Ada, OK with outlying clinics in Ardmore, Purcell, and Tishomingo.
Support to Oklahoma Communities

Tribes provide dollars directly to local communities to support community projects/goals. Such payments include donations to local school districts and governments supporting local primary and secondary schools and universities, contributions to communities supporting local health and wellness and cultural programs, and many other community programs. The table below highlights a summary of these contributions by the tribes who participated in this study. As such, the true contribution of Oklahoma tribes is larger than the amount reported here.

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<tr>
<td>Health and Wellness</td>
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<td>Total</td>
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Source: Participating Tribes, OCU Center for Native American and Urban Studies
In Focus: Health Care, Education, and Transportation

Economic impact estimates fail to capture much of the societal benefit of tribal activities. Just like national Gross Domestic Product (GDP) quantifies tangible values but fails as a true measure of societal well-being, so it is with the quantification of tribal production. Here we mention some of the societal benefits of Health Care, Education, and Transportation programs.

Health Care

Tribal nations, in partnership with the federal Indian Health Service (IHS), provide health care services for tribal citizens. These services are funded through federal grants, tribal grants, revenue from third-party insurance collections, and Medicare and Medicaid dollars for tribal citizens who receive care from tribally operated health care facilities.

6 The term "Health Care" refers to the delivery of health care services. The term "Healthcare" refers to the industry that provides the services as defined by the U.S. Bureau of Economic Analysis.
Rural Economic Benefits from Access to Care

Tribal health care facilities provide increased access to care for tribal citizens in both urban and rural parts of the state. Rural tribal populations are relieved of the stress of relocating to more urban areas to be near health care and thus may be more likely to remain in these rural areas, pushing against the gravity of rural-to-urban migration that is decimating rural communities throughout the nation. This has a profound impact on rural communities who benefit from the expenditure on local goods and services and sales and property taxes raised from these tribal citizens and the healthcare workers employed by these tribal health care facilities.

Additionally, health care access provides productivity enhancements for workers who receive the care (or in the opposite, lack of access creates loss of productivity). The U.S. Chamber of Commerce researched productivity losses due to absenteeism, presenteeism, and early retirement attributable to poor health for a variety of countries around the world. They estimated that the U.S. lost 8.2% of GDP due to illness related productivity costs, the highest of any country in their sample (Rasmussen, Sweeney, and Sheehan 2016). The availability of health care for tribal citizens is important for increasing the productivity of tribal citizens who work for tribal and non-tribal entities.

Cheyenne and Arapaho Tribes’ George Hawkins Memorial Substance Abuse Treatment Center located in Clinton, OK.
Medicaid Savings for the State

Like the general population of the state, many tribal citizens participate in the Medicaid insurance program provided to low-income individuals (SoonerCare in Oklahoma). Medicaid costs are generally shared by federal and state governments. However, tribal care at tribal facilities requires no state match for Medicaid expenditures. The Federal Medical Assistance Percentage (FMAP) identifies the share of Medicaid claims to be paid by the federal government, the remaining share to be paid by the states. In the Social Security Act, section 1905(b), the U.S. Congress authorized the Centers for Medicare and Medicaid Services (CMS) to reimburse the Indian Health Service (IHS) at 100% FMAP for medical services provided at IHS and tribal facilities for Medicaid-enrolled Native Americans. The Secretary for Health and Human Services (HHS) determines the FMAP for each state for each fiscal year.

According to the Oklahoma Health Care Authority (OHCA), Medicaid expenditures at Oklahoma tribal health care facilities totaled $213 million in FY2018 (Miller 2019). The 2018 FMAP of 58.57% would have required Oklahoma taxpayers to pay 41.43% of the cost of care for these citizens if they were served at non-tribal/non-IHS facilities. This created a savings of over $88 million for Oklahoma taxpayers, freeing the legislature to fund other state priorities or to refrain from raising taxes that serve as a drag on statewide economic growth.

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7 There are some administrative costs incurred by the Oklahoma Health Care Authority, but the cost of care is zero for the state.
Education

Oklahoma tribes provide significant resources for education programs that benefit tribal citizens and non-tribal Oklahomans including donations to local school districts and universities, scholarships, and direct payments to the state in the form of gaming exclusivity fees which are used primarily for education.

Through gaming compacts between Oklahoma-based tribes and the state, tribal nations submit a percentage of their Class III gaming revenues for the exclusive right to operate casinos in the state. According to the state Office of Management and Enterprise Services (OMES), Oklahoma tribes have remitted over $1.5 billion in exclusivity fees to the state since 2006, the first year of collections. With the exception of 2014, remittances increased each year, topping $138.5 million in the most recent completed fiscal year, FY2018.

The collected exclusivity fees are primarily used by the state to fund statewide education. In 2017, tribes remitted $133,940,428 in exclusivity fees to the state. The state sends the first $250,000 of these fees to the Oklahoma Department of Mental

![Annual Exclusivity Fees Collected](chart.png)


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Health and Substance Abuse Services (ODMHSAS). Of the remaining funds, 88% goes to the state HB1017 education fund to support education for all Oklahoma citizens.

In addition to exclusivity fees, Oklahoma tribes spent $80.5 million for tribal education programs and scholarships and donations to Oklahoma education institutions in 2017 (see the “Support to Oklahoma Communities” section of the report). When combined with the exclusivity fees provided to education, Oklahoma tribes delivered $198 million for Oklahoma education programs in 2017.

In 2017, the state reported exclusivity fees provided to the HB1017 education fund totaled $117,647,577 (Oklahoma Office of Management and Enterprise Services 2017). Total support for Oklahoma education = $117.6 million (HB 1017 funds) + $80.5 million (other education support)
Transportation

Oklahoma tribes invest significant resources into transportation infrastructure around the state. These investments benefit all Oklahomans who use the infrastructure improvements. The Oklahoma Department of Transportation (ODOT) estimated the aggregate investment from FY1980 to FY2018 to be in the neighborhood of $200 million. This includes a combination of federal Tribal Transportation Program (TTP) dollars, tribal nation dollars, other federal transportation dollars, and limited state and county dollars.

This quote from Terri Angier (ODOT) highlights the significance of the infrastructure contribution from Oklahoma tribal nations.

"Since 1980, tribal nations in Oklahoma have contributed more than $200 million in funding and right-of-way donations towards highway improvement projects. Thanks to these partnerships, many critically-needed safety projects were able to get underway and completed ahead of schedule. The addition of tribal funding means less expense to the Oklahoma Department of Transportation and therefore the taxpayers of Oklahoma. The support from tribal governments is also invaluable to ODOT when applying for federal grants, which can help secure additional sources of funding for our infrastructure projects. Other aspects of transportation also benefit by tribal donations including rural road and bridge improvements, transit services, walking trails and pedestrian improvements, and also to car seat safety programs or other safety initiatives."

Nixon Road Improvement paid for by The Choctaw Nation, Coal County, OK

10 Quote provided by Terri Angier, Interagency Liaison – Office of Transportation Secretary Tim Gatz, Oklahoma Department of Transportation
Tribal Transportation Program

The Tribal Transportation Program (TTP) provides federal dollars to tribal communities for transportation infrastructure construction and maintenance. Formerly called the Indian Reservation Roads Program (IRR), it is administrated by the Office of Federal Lands Highway (FLH) within the US Department of Transportation. According to FLH, the purpose of the program is

“to provide safe and adequate transportation and public road access to and within Indian reservations, Indian lands, and Alaska Native Village communities. A prime objective of the TTP is to contribute to the economic development, self-determination, and employment of Indians and Native Americans.”

The FLH provides program funding directly to individual tribes within the 12 Bureau of Indian Affairs (BIA) regions in the US. Oklahoma is comprised of two of the BIA regions: Southern Plains Region, which includes Texas, Kansas, and Western Oklahoma, and the Eastern Oklahoma Region. Combined, the Southern Plains and Eastern Oklahoma regions had nearly 27,000 miles of TTP roads in 2015 which accounted for 18% of TTP miles nationally.

TTP funds are provided to tribes in partnership with the Oklahoma Department of Transportation (ODOT) to fund improvements in tribal jurisdictional areas which encompass nearly 3/4 of the land area in the state. These tribal areas overlap with county, city, and state jurisdictions, who benefit directly from the transportation improvements with no additional cost to local governments. According to the FHL TTP Annual Report released in March 2019, Oklahoma received and spent $42,552,352 on TTP projects in 2017.

Funding by Oklahoma Tribal Nations

Individual tribes expend significant resources from their treasuries to fund additional improvements in addition to those provided through the TTP. ODOT provided four

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11 Tribal Transportation Program (TTP) Annual Report, March 5, 2019, FY 2017 Data Report, Federal Highway Administration, US Department of Transportation.
examples of these expenditures for use in this report. These examples include $13.5 million provided by the Chickasaw Nation for improvements to I-35 access near the Texas state line (multiple projects, various years), nearly $12 million in funding and right-of-way donations from the Cherokee Nation to improve the I-44/193rd Street interchange in Tulsa (2009), $8 million in funding from the Citizen Potawatomi Nation for improvements at I-40 and SH-102 near Shawnee (2006), and $5 million in funding from the Choctaw Nation for improvements to the US-69B and US-69 junction in Durant (2010).

The Muscogee (Creek) Nation purchased a Volvo MT2000 milling machine to maintain roads in their Jurisdiction Area.

I-44/193rd Street Interchange in Tulsa paid for by The Cherokee Nation. The interchange serves the Hard Rock Casino along with many restaurants, hotels, a strip mall, and other Tulsa businesses.

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12 Source: Terri Angier, Interagency Liaison – Office of Transportation Secretary Tim Gatz, Oklahoma Department of Transportation
The Permanence of Tribal Impact

The U.S. population is continuing to shift from rural areas to cities. According to the 2010 Decennial Census, 81% of the population lived in urban areas, up from 79% in 2000. Oklahoma is not immune to this trend as evidenced in the map below highlighting the change in county population from 2010 – 2018.

Blue counties lost population since 2010 while gold counties gained population. The intensity of color indicates the magnitude of the gain/loss. With the exception of south-central counties along the I-35 corridor and counties in the northwest part of the state which are benefitting from Oil and Gas production, the population (and economic activity) trend is similar to that of the other U.S. states.

Tribes provide unique economic development opportunities for many of Oklahoma’s rural counties. Unlike corporations who frequently move their operations from rural to urban areas or from city to city, the permanence of tribal jurisdictional boundaries guarantees their contribution will remain in Oklahoma communities, mitigating population and economic loss in the rural counties in tribal jurisdictional areas.

Oklahoma Population Change 2010 - 2018
Percent Change by County

Source: US Census Bureau ACS 5-year Estimate of Population, OCU Center for Native American and Urban Studies

The Net Benefit of Tribal Impact

The economic impacts reported later in the report reveal the gross quantifiable benefit of tribal production throughout the state. The net benefit of tribal activity is more significant. The state and local communities compete with other states and communities to lure corporations, pursuing jobs and economic growth. This competition requires that communities provide tax subsidies or abatements, public investment in capital projects, or other government expenditures to separate themselves from other communities pursuing the same corporations. The nature of this location model increases the cost to communities, reducing the true impact of corporate production by the amount of the incentives. Additionally, the dollars used in the process could be spent on other community priorities or given back to taxpayers.

Tribes do not require such tax expenditures to create economic activity in Oklahoma communities, so their true impact is greater than that of subsidized corporations. In fact, tribes bring additional federal dollars to these communities in support of health care, transportation, education and other programs, generating a significant net benefit advantage to Oklahoma communities.

Lastly, states have limited resources to provide economic development assistance to communities (for example, Community Development Block Grants (CDBG)), especially in declining rural areas. The community support expenditures outlined previously augment, or in some cases substitute for state expenditures, freeing state resources for spending elsewhere, increasing the reach of state dollars.

Construction of the Citizen Potawatomi Nation Iron Horse Industrial Park and Foreign Trade Zone near Shawnee, OK. When complete, this 400-acre park will provide access to rail and road networks for industrial and manufacturing tenants.

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14 Tribes do have tax exemptions for some programs or businesses due to their sovereign relationship with the state. Tribes do not require tax incentives/subsidies to lure them to the communities within their jurisdictional areas.
Economic Impact Estimates

In this section we report the quantifiable economic impacts derived from Oklahoma tribal activity. Tribal impacts were estimated for each of three categories, Government, Business, and Capital Expenditures, which were combined to estimate the total quantifiable economic impact of Oklahoma tribes. These impacts are reported by category and in total within the following sections.

Tribal Direct Contribution

The direct contribution of any entity refers to its direct revenues (and/or expenditures for tribes), the wages and benefits it pays to workers, and the number of jobs maintained directly by the entity. For the purpose of impact estimation, the direct output (production) of tribal activity includes their business revenues, government expenditures, and expenditures for capital improvements including roads projects. Direct Employment refers to the number of jobs maintained by tribal businesses and tribal governments in Oklahoma communities. Total wages and benefits refers to the total compensation of workers filling these jobs who live within the borders of the state. Some jobs are filled by out-of-state workers but their income is spent within their communities outside the state so their wages and benefits are not included in this analysis. We can interpret the direct contribution of tribes as the direct production of economic output, the direct number of jobs maintained in Oklahoma communities, and the direct compensation paid to Oklahoma residents15.

Direct contribution refers to the direct employment, payroll, and output of Oklahoma tribes inside the Oklahoma economy. Employment includes all business and government jobs as estimated by the average number of employees for each entity during the year. Payroll includes all business and government wages and benefits provided to workers who reside within the state.

Output includes the total of tribal business revenues and expenditures by tribal governments. Tribes also directly contribute to the economy through their expenditures on new capital projects and road construction and maintenance. Capital expenditure varies by year depending upon tribal improvement schedules, so caution is advised when

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<td>$400,077,731</td>
<td>$400,077,731</td>
<td></td>
</tr>
<tr>
<td>Roads Expenditures</td>
<td></td>
<td>$42,552,352</td>
<td>$42,552,352</td>
<td></td>
</tr>
</tbody>
</table>

Source: Participating Tribes, OCU Center for Native American and Urban Studies

15 Note: While not directly included in this study, previous studies including 2016 OIGA report (Dean and Robinson 2016) found that approximately 60% of employees working for Oklahoma tribes were not citizens of Oklahoma tribes.
comparing capital expenditure (including roads) for specific years. The direct contribution data is summarized in the table below. These numbers serve as the direct inputs into the economic impact model.

**Tribal Direct Contributions in Context**

To better understand the economic significance of Oklahoma tribes, we can compare the direct output and employment of Oklahoma tribes to private industry production and employment aggregated by 2-digit NAICS code\(^\text{16}\). This level of aggregation likely understates the significance of tribal activities relative to Oklahoma industries. Many might prefer a comparison to specific industries such as "Oil and Gas", but such comparisons may introduce bias when defining the specific industries. Using data from the U.S. Bureau of Economic Analysis (BEA) and the U.S. Bureau of Labor Statistics (BLS) aggregated at the 2-digit industry level avoids the introduction of bias. The reader should view the reported rankings as extremely conservative.

In 2017, Mining (primarily Oil and Gas) was the largest industry in the state with output of $22.3 billion, followed by Real Estate ($18 billion), Manufacturing ($17.7 billion), and Healthcare ($13.7 billion). The output of Oklahoma tribes (excluding capital expenditures) would rank them as the 9th largest industry in the state.

Evaluating employment similarly, tribes would have ranked as the 11th largest industry in Oklahoma for jobs. Healthcare was number one (193,514) followed by Retail (179,208), Accommodation & Food Services (150,375), Manufacturing (128,122), Administration & Waste (96,964), Construction (77,247), Professional Services (69,846), Wholesale Trade (58,346), Finance & Insurance (56,163), Transportation & Warehousing (52,891), and Oklahoma Tribes (51,674). Mining, Other Services, Real Estate, Information, Management of Companies, Arts, Entertainment, & Recreation, Education, Agriculture & Forestry, and Utilities sectors all employed fewer individuals than Oklahoma tribes.

\(^{16}\) NAICS refers to the North American Industry Classification System used to categorize industries by type throughout the US, Canada, and Mexico. 2-digit classification is the highest level of aggregation, thus industries classified by 2-digit code are frequently referred to as supersectors. There are 20 2-digit NAICS categories, 19 of which include private industry production, the 20th referring to federal, state, and local government production. This government industry was excluded from the comparison.
Total Economic Impact

The impacts reported in the below include the direct tribal contribution discussed previously, and the economic activity generated by governments, households, and businesses in response to tribal production. These additional impacts are referenced as the “Multiplier Effect” in the table. These multiplier effects include the additional production, employment, and compensation generated by Oklahoma companies in response to the demand for their goods and services by tribal activities. It also includes the additional impacts by households and governments receiving income through wages and who produce products and services purchased by tribes. Tribes supported significant economic activity within the state of Oklahoma in 2017.

<table>
<thead>
<tr>
<th>Total Economic Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Output:</strong> $12.9 billion</td>
</tr>
<tr>
<td><strong>Employment:</strong> 96,177 jobs</td>
</tr>
<tr>
<td><strong>Income to Workers:</strong> $4.6 billion</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Economic Impacts from Oklahoma Tribes in 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment</td>
</tr>
<tr>
<td>Direct Effect</td>
</tr>
<tr>
<td>Multiplier Effect</td>
</tr>
<tr>
<td>Total Effect</td>
</tr>
</tbody>
</table>

*Source: Participating Tribes, OCU Center for Native American and Urban Studies*
Comparison of Impacts from the 2012 All-Tribe Economic Impact Report

Here we present a comparison of the current impacts with those reported in 2012. These changes should not be viewed as exact, rather they present evidence of the growth of tribal impact.

Employment supported by tribal activities increased by 10.3% over the 6-year period and output increased by 19.8%. By comparison, the state of Oklahoma experienced a 4.88% increase in total employment and a 13.5% increase in output as measured by GDP over the same period\textsuperscript{17}. The large increases in employment and output demonstrate the increasing importance of tribes as drivers of economic growth in Oklahoma. Again, this growth is especially important in rural areas where the national trend is decline.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{comparison_bar_chart.png}
\caption{Comparison of Impacts from the 2012 Report
Output and Payroll in Billions of US Dollars}
\end{figure}

\textit{Source: OCU Center for Native American and Urban Studies}

\textsuperscript{17} The U.S. Bureau of Labor Statistics reports that employment increased from 1,507,558 to 1,581,198 from 2011 to 2017. The U.S. Bureau of Economic Analysis reports that Oklahoma Nominal GDP increased from $165 billion to $187 billion from 2011 to 2017. The use of GDP is to illustrate the change in the value of all final goods and services produced in the state. It should not be used to directly compare the output impact of Oklahoma tribes which includes intermediate production and final production of goods and services. For this purpose, use the total of value-added impact.
Oklahoma Fiscal Impacts

Tribal activities generated significant revenues for Oklahoma state and local governments in 2017. Using IMPLAN\(^\text{18}\) software generates estimates of fiscal collections at every level of government from workers, households, and corporations resulting from the entirety of economic activity (direct and multiplier) generated from the initial direct contributions in the impact model. The estimated fiscal impacts of Oklahoma tribal nations are summarized in the table below. Combining fiscal impact estimates generated by the model with the exclusivity fees paid by tribes, we estimated payments to Oklahoma governments totaled nearly $1 billion. Note: The numbers reported here do not include federal government collections as they are not germane to this study.

<table>
<thead>
<tr>
<th>Fiscal Impacts</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household Income, Property, and other Taxes and Fees</td>
<td>$96,050,971</td>
</tr>
<tr>
<td>Worker Social Insurance Employer + Employee</td>
<td>$15,284,162</td>
</tr>
<tr>
<td>Corporate Income, Dividends, and Production Taxes (including Sales Tax)</td>
<td>$720,013,134</td>
</tr>
<tr>
<td>Tribal Exclusivity Fees</td>
<td>$133,940,428</td>
</tr>
<tr>
<td>Total Estimated Fiscal Impacts</td>
<td>$965,288,695</td>
</tr>
</tbody>
</table>

Source: OCU Center for Native American and Urban Studies

\(^\text{18}\) IMPLAN is a nationally recognized vendor of impact multipliers and software. IMPLAN Group LLC, 16905 NorthCross Drive, Suite 120, Huntersville, NC 28078
Other Impacts not Quantified in this Report

The mere presence of tribal citizens in Oklahoma generates direct economic activity not specifically affiliated with individual tribes and not counted in this report. This is important to mention so that readers understand that the estimates contained in this report are conservative relative to the entirety of economic activity generated by, or because of Oklahoma tribal nations.

Two examples of entities that exist indirectly because of Oklahoma tribes and their citizens are the Indian Health Care Resource Center (IHCRC) in Tulsa and Oklahoma Indian Legal Services (OILS) in Oklahoma City. The IHRCC is a non-profit organization that provides culturally sensitive health care to Native Americans in Tulsa and the surrounding areas. The IHCRC medical staff saw 14,071 patients in 35,262 patient visits in 2017, increasing the health and wellness of the population in NE Oklahoma and employing Oklahomans.

Oklahoma Indian Legal Services (OILS) is a non-profit organization providing free legal services to individual Oklahoma tribal citizens who are experiencing Federal Indian Law or Tribal Law issues related to their status as a member of a federally-recognized Tribe. Fifty five percent of their legal resources are spent representing individual landowners with issues involving Trust Indian Land or Five Tribes Restricted Indian Land. They also provide representation in guardianships, adoptions and juvenile matters involving the Indian Child Welfare Act. OILS attorneys represent clients in every Tribal Court in Oklahoma.

While OILS receives some funding from Oklahoma tribes (already included in impacts) and the state, 70% of their funding is provided from outside the state by the Legal Services Corporation (LSC). OILS operations employ attorneys and staff increasing the output of the legal services industry in the state.

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Appendix A: Impact Methodology

Impact Estimation

Economic impacts are estimates of the full production, employment, and income that are directly and indirectly linked to the production activity under study. The true impacts are unknowable, as the variety and quantity of expenditures flowing downstream are not specifically reported. However, "good" estimates can be obtained by using existing economic linkages developed from previous industry flows. These previous annual dollar flows are used to construct a model that calculates the downstream impacts that result from tribal government, business, and construction activities. The downstream expenditures include production by related industries, governments, and households. When totaled, these direct (tribal) and multiplier (downstream industries) activities provide a complete picture of the total impact.

A model was created for the state of Oklahoma for use in the estimation phase. Tribal data was collected from individual tribes and aggregated into tribal direct inputs. Because this report includes data from 15 of the 38 tribes, additional tribal government, business, and capital activities were estimated for the remaining tribes in Oklahoma to complete the data inputs for use in the Oklahoma model. All reported impacts occur at the state level.

Tribal government impacts were derived from direct government expenditures, employment, and payroll. These impacts were added to business impacts derived from business revenues, employment, and payroll, and capital expenditures for one-time roads and other construction projects to provide a complete estimate of the impacts of all tribal activities in the state. Construction impacts are transient, occurring only once, while government and business (operations) impacts occur annually. Because of the volatility of transient construction impacts across years, impacts for construction activities (roads and other capital projects) will be reported separately from impacts derived from annual government and business operations allowing a more appropriate comparison of tribal impacts across time. All impacts are then combined to provide a total estimate of the impact of tribal activity for the year.

The methodology employed in this report is designed to estimate the contribution of existing activities to the local economy. The approach begins with a static description of expenditure flows between households and industries, capturing the reliance of one industry's output on other, supporting industries. For example, by examining the expenditures from the construction industry to the wholesale lumber industry we can derive an estimate of the reliance of the construction sector on wholesale lumber output. The initial tribal revenue and expenditure contributions are detailed in the Direct Impacts sections of the report.

From these frozen-in-time expenditure flows, we can derive economic multipliers specific to each industry. These multipliers estimate the combined, or total economic impact originating from an initial expenditure. In the context of this report, for example, the gaming and recreation output multiplier

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20 In fact, while reports of this nature are commonly referred to as 'impact analyses', they are more correctly characterized as 'contribution analyses'
estimates the total impact to economic output stemming from an initial output change within the gaming sector. This methodology is also used for estimating the contribution of government activities. Similarly, multipliers for employment and income are derived and interpreted. This approach is valuable as it provides rich information at a relatively low computational cost. However, the methodology does invoke some restrictive assumptions, including constant prices and a fixed production process, and should not be confused with a computationally higher cost economic forecast.

Data were gathered, categorized, and Tribal activity was estimated for the Nation as outlined within the Direct Impacts sections. Tribal expenditures, employment, and payroll were used as primary inputs into IMPLAN industry and government multipliers for output, employment, and payroll to estimate the total impacts of all activities per annum.

Tribal Data Overview

The calculation of impacts relies on quality data inputs and a representative model of the regional economy. Every effort was made to obtain a complete, aggregated dataset of all Oklahoma tribal production for this study. We used a data collection survey which was completed by 15 of the 38 Oklahoma tribes. Being incomplete, this sample was used along with other data from government sources to create an estimated aggregate dataset that is unbiased, and we believe best represents the actual production of Oklahoma tribes. Actual production from Oklahoma tribes may have been more or less than the estimate represented in this section. Thus, this dataset should be viewed as a good representation of tribal activity in the state that may disagree slightly with other representations of Oklahoma tribal activity which incorporate estimates from several data sources.

Data Collection

The Nation provided the primary source data included in the analysis. We worked closely with Nation personnel to collect, evaluate, and categorize revenue, expenditure, payroll, employment, and all other primary data. Data was categorized by Nation function (government, business, capital expenditure) and then sub-categorized into meaningful groupings. The categories and groupings are:

Government:
- Education
- Government Operations
- Healthcare
- History and Culture
- Housing
- Social Services

Business:
- Gaming and Other
- Manufacturing
- Professional Services and Banking
- Retail

Roads Expenditures:
- New construction
- Maintenance

Capital Expenditures:
- New construction
- Maintenance
- Equipment
Appendix B: Federally Recognized Tribes in Oklahoma

* Indicates Participating Tribe

Absentee-Shawnee Tribe of Indians of Oklahoma *
Alabama-Quassarte Tribal Town
Apache Tribe of Oklahoma
Caddo Nation of Oklahoma
Cherokee Nation *
Chickasaw Nation *
Cheyenne and Arapaho Tribes *
Choctaw Nation of Oklahoma *
Citizen Potawatomi Nation *
Comanche Nation
Delaware Nation *
Delaware Tribe of Indians
Eastern Shawnee Tribe of Oklahoma *
Fort Sill Apache Tribe of Oklahoma
Iowa Tribe of Oklahoma
Kaw Nation *
Kialegee Tribal Town
Kickapoo Tribe of Oklahoma
Kiowa Indian Tribe of Oklahoma
Miami Tribe of Oklahoma
Modoc Tribe of Oklahoma *
Muscogee (Creek) Nation *
Osage Nation
Otoe-Missouria Tribe of Indians
Ottawa Tribe of Oklahoma
Pawnee Nation of Oklahoma *
Peoria Tribe of Indians of Oklahoma *
Ponca Tribe of Indians of Oklahoma
Quapaw Tribe of Indians
Sac & Fox Nation
Seminole Nation of Oklahoma *
Seneca-Cayuga Tribe of Oklahoma
Shawnee Tribe
Thlopthlocco Tribal Town *
Tonkawa Tribe of Indians of Oklahoma
United Keetoowah Band of Cherokee Indians in Oklahoma
Wichita and Affiliated Tribes
Wyandotte Nation

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Appendix C: Glossary of Terms

Direct Impact

Direct Impact refers to the direct contribution of tribal activity to the state of Oklahoma. For this study, direct impact includes Business Revenues, Employment, and Wages and Benefits and Government Expenditures, Employment, and Wages and Benefits.

Multiplier Impact

Economic impact includes the direct contribution of tribes (Direct Impact) and the additional economic activity that is generated in support of this direct contribution. Multiplier Impact refers to this additional activity and includes revenues and subsequent expenditures of businesses from whom tribes purchase goods and services. Also included are the additional employment and wages and benefits created by downstream businesses as well as business activity resulting from worker income spent within the state.

Employment

In the context of this report, employment refers to the number of jobs or positions necessary to support tribal activity and the production of downstream industries that supports tribal activity. It is not a count of total employees as multiple employees may fill a single job during a year if one employee leaves employment and is replaced by another individual.

Input-Output Models

Models that estimate economic linkages between industries, households, governments, and trade based upon known or estimated flows of dollars throughout an economy. IMPLAN models estimate the linkages using publicly available data on production, employment, wages, household income, government revenue and expenditure, and other dollar flows for a specific region. The region of interest in this report is the state of Oklahoma and all linkages and estimates are provided by statewide linkages and data collected from tribes.

Output

Output is an estimate of the value of production for a given activity in a given region. In this report, output refers to value of all goods and services produced directly by tribes or indirectly by downstream industries. It differs from GDP in that it includes the value of all goods and services produced, including intermediate goods used in the production of final goods which can result in double counting in some cases.

Wages and Benefits/Payroll

The term Payroll is synonymous with the phrase Wages and Benefits in this report. Both refer to the total expenditure of tribes on wages, salaries, and associated benefits for workers who live within the state of Oklahoma. Wages and Benefits paid to employees who live in adjoining states do not count toward this total.

Value Added

Value Added is similar to output in that it measures the value of production. Unlike output, it avoids double counting by summing only the added value of production at each phase of the production process. The total value added will sum to the value of the final good produced and thus is comparable to traditional measures of GDP. To understand the value of tribal production within the state, compare Value Added to Oklahoma GDP.
Appendix D: References


Miller, Dana. 2019. “Interview with Dana Miller, Oklahoma Health Care Authority Tribal Government Representative.”


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Director, Center for Native American and Urban Studies
Associate Professor of Economics

Kyle Dean is an Associate Professor of Economics and the Director for the Center for Native American and Urban Studies at Oklahoma City University. He specializes in economic modeling, impact analysis, and regional, urban, and public finance consulting. He has worked with many Oklahoma tribes, trade associations, industries, and corporations throughout his career helping them to quantify their economic activity and solve complex economic problems.

Dr. Dean holds a Ph.D. in Economics from Oklahoma State University and a Bachelor of Business Administration in Management Information Systems from the University of Oklahoma. He is a lifelong “Okie” and currently lives with his wife and two children in Oklahoma City.
Thank You Participating Tribes!