Statewide Economic Impact of The Pawnee Nation of Oklahoma

2017

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**Executive Summary**

**Direct Contribution of The Pawnee Nation of Oklahoma**

**Employment and Wages for Oklahomans**

The Pawnee Nation of Oklahoma employed 318 paying wages and benefits of $11,438,063 to Oklahoma workers.

**Oklahoma Production**

When combining business revenues, government expenditures, and capital expenditures, The Pawnee Nation of Oklahoma accounted for $28,267,911 in direct Oklahoma production.

- The Pawnee Nation of Oklahoma spent $5,283,776 for basic government operations as well as healthcare, education, social services, history and culture, housing, and education programs
- The Pawnee Nation of Oklahoma businesses generated $22,634,993 in revenues
- The Pawnee Nation of Oklahoma spent $349,142 on other capital projects

**Economic Impact of The Pawnee Nation of Oklahoma**

When analyzed in the context of the Oklahoma economy and accounting for spillover (multiplier) impacts, we estimate that The Pawnee Nation of Oklahoma supported:

- **461** jobs in the state
- **$17.7 million** in wages and benefits to Oklahoma workers
- **$41.2 million** in economic impact statewide
Introduction

In 2018, The Center for Native American and Urban Studies (CNAUS) at Oklahoma City University was commissioned to research and report the economic impact of all tribal activities within the state of Oklahoma. Sponsored by the Oklahoma Tribal Finance Consortium (OTFC), the study was completed on July 10, 2019. Tribes who provided data for the comprehensive study each received a brief memo outlining their statewide economic impacts.

This document is the report of the economic impacts of The Pawnee Nation of Oklahoma. This memo is not a comprehensive analysis of impact, rather, it is a highlight of total impacts based upon the data provided by The Pawnee Nation of Oklahoma.

The Pawnee Nation of Oklahoma is headquartered in Pawnee, Oklahoma. Their Jurisdictional area spans part of Pawnee County in North-Central Oklahoma. According to the tribe, there are 3,507 tribal citizens throughout the United States, with 61.8% living in Oklahoma.

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

Pawnee Nation Jurisdictional Area

Source: US Census Bureau Tigerline Shapefiles, OCU Center for Native American and Urban Studies
**Direct Contribution**

The Pawnee Nation of Oklahoma provided internal data which was used to estimate the impact of their activities statewide. The data were classified by four broad categories: Government, Business, Roads, and Other Capital Projects. As categorized, the provided data represent the direct Oklahoma economic contribution of The Pawnee Nation of Oklahoma.

The direct contribution data were used as the primary input into the economic impact model. The table below details the direct contribution of The Pawnee Nation of Oklahoma for the four categories with Roads and Other Capital Projects summed in the "Capital Projects" column.

<table>
<thead>
<tr>
<th>Pawnee Nation Direct Contribution Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Government</td>
</tr>
<tr>
<td>Employment</td>
</tr>
<tr>
<td>126</td>
</tr>
<tr>
<td>Payroll</td>
</tr>
<tr>
<td>$6,175,594</td>
</tr>
<tr>
<td>Output</td>
</tr>
<tr>
<td>$5,283,776</td>
</tr>
</tbody>
</table>

*Source: Pawnee Nation, OCU Center for Native American and Urban Studies*

**Tribal Government Activities**

To maintain consistency across all tribal reports, we classified all government activities into Healthcare, Social Services, History and Culture, Housing, Education, and basic Government Operations categories. According to The Pawnee Nation of Oklahoma, the tribal government spent $5,283,776 operating the government and providing services to tribal citizens. The Pawnee government maintained 126 jobs, paying $6,175,594 in wages and benefits to Oklahoma workers.

**Tribal Business Activities**

Tribal business activities were aggregated into 6 broad categories: Finance, Professional Services, Manufacturing, Retail, Gaming, and Other Business. In 2017, The Pawnee Nation of Oklahoma received $22,634,993 in combined revenues from its Oklahoma-operated business entities. Tribal businesses provided 192 jobs, paying $5,262,469 in wages and benefits to Oklahoma workers.

**Tribal Capital Projects**

Capital projects include expenditures on new construction, maintenance, and upgrades for existing structures. We divided these expenditures into two broad categories: Roads and Other Capital Expenditures. The Pawnee Nation of Oklahoma spent $349,142 on capital projects in 2017. The Nation did not report any Roads Projects Expenditures for 2017.
Economic Impacts

The impacts reported in the table below include the direct tribal contribution and the additional economic activity generated by other Oklahoma entities in response to the tribal contribution. This "response" is referred to as the "Multiplier Effect" in the table below. Note: the direct Output contribution may differ from the direct contribution reported previously due to the incorporation of retail margins in the table below.

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 who receive income from the cycle of activity resulting from the initial direct contribution. Households and governments spend this income on additional goods and services from Oklahoma entities, deepening the impacts throughout the state. The resulting impacts represent the economic significance of the tribe within The State of Oklahoma.

The total economic impact of The Pawnee Nation of Oklahoma was $41,153,991 in 2017. As a result of all tribal activity, The Pawnee Nation of Oklahoma supported 461 jobs paying wages and benefits of $17,678,735 to Oklahoma workers.

<table>
<thead>
<tr>
<th></th>
<th>Employment</th>
<th>Payroll</th>
<th>Value Added</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct Effect</strong></td>
<td>318</td>
<td>$11,438,062</td>
<td>$16,750,365</td>
<td>$21,895,870</td>
</tr>
<tr>
<td><strong>Multiplier Effect</strong></td>
<td>143</td>
<td>$6,240,673</td>
<td>$10,832,370</td>
<td>$19,258,122</td>
</tr>
<tr>
<td><strong>Total Effect</strong></td>
<td>461</td>
<td>$17,678,735</td>
<td>$27,582,736</td>
<td>$41,153,991</td>
</tr>
</tbody>
</table>

Source: Pawnee Nation, OCU Center for Native American and Urban Studies
Appendix A: 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 using IMPLAN software. The model was used to estimate the impacts from tribal government and business activities as well as roads and other capital expenditures. 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. As a result, some of the variance of impacts across years can be explained as variation in roads and other capital projects expenditures.

The methodology employed in this report is designed to estimate the contribution of (mostly) 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.

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 (or revenue) from The Pawnee Nation of Oklahoma. Multipliers for employment and wages and benefits are derived similarly.

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.

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1 IMPLAN is a nationally recognized vendor of impact multipliers and software. IMPLAN Group LLC, 16905 NorthCross Drive, Suite 120, Huntersville, NC 28078

2 In fact, while reports of this nature are commonly referred to as ‘impact analyses’, they are more correctly characterized as ‘contribution analyses’
Tribal Data Overview

The Pawnee Nation of Oklahoma provided all primary data used to estimate the impacts. Data were collected using a survey specifically targeted to the categories needed for impact estimation. The Pawnee Nation of Oklahoma used internal records to complete revenue, expenditure, employment, and wages and benefits totals for the various categories. The completed survey served as direct inputs into the economic impact model.

Production Categories

The four sources of impact (government, business, roads expenditures, and capital expenditures) and their subcategories are listed below.

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

Business:
- Finance
- Gaming
- Manufacturing
- Other Businesses
- Professional Services
- Retail

Roads Expenditures:
- New construction
- Maintenance

Capital Expenditures:
- New construction
- Maintenance
Appendix B: 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.
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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.