ECONOMIC IMPACTS: SOONER SUB PROPOSALS

This report fulfills the Oklahoma Department of Commerce’s statutory requirement (66 O.S. § 304) to evaluate the economic impact of the proposals submitted for the Sooner Sub line. Both proposals indicate an expansion of capacity and investment in rail infrastructure in Oklahoma. Economic impacts discussed in the following pages include the impacts on GDP, Employment, Real Disposable Income and fiscal impacts.

MODELING OVERVIEW

The Oklahoma Department of Commerce used a REMI model to simulate the economic impacts upon the state of Oklahoma from the BNSF and Stillwater Central proposals using the respective variables/timelines submitted in the proposals. Specific variables used in the modeling included:

- **BNSF**: Indicates that it plans to hire 20 new positions with payroll of $1.5 million. It would invest $15 million over 5 years to upgrade the line to Federal Railroad Administration (FRA) Class 3 standards and an additional $30 million in the Sooner Sub and Cherokee Yard over the first 10 years. The company plans to invest in Cherokee Yard, but does not provide any details about permanent jobs that may be associated with it.

- **Stillwater Central (WATCO)**: Indicates that it plans to hire 18 new positions with payroll of $1.1 million. It will invest $2.35 million to bring the Sooner Sub to FRA Class 3 standards, and invest $2.185 million in excess of the minimum in the Sale Agreement in Passenger Rail.

- **Stillwater Central (WATCO) Energy Infrastructure**: In Stillwater Central’s proposal, the company mentions that it plans to invest, or cause improvements to be funded, $101.8 million in a rail extension and an energy terminal that would employ 60 people.

In the case of BNSF, the investment in Cherokee Yard and Sooner Sub connections enters the model solely as a capital investment figure. There was not any information supplied about permanent jobs associated with Cherokee Yard.

It should be noted that for both BNSF and Stillwater Central, it would only be accurate to include additional investments/projects (Energy Customer Infrastructure and Cherokee Yard) in a comparative economic impact if the expansions/investment would not otherwise occur. To this point, Stillwater Central included three projects that do not appear contingent on the sale of Sooner Sub to Stillwater Central/WATCO; rather the projects appear that they are already planned and will occur regardless of which company, if any, obtain the Sooner Sub.

Additionally, regular maintenance expenses are expenditures that are expected to occur in order to properly maintain operations and productivity. In a REMI model, these expenditures are not needed to be accounted for separately, and in fact, doing so would be double counting impacts associated with the expenditures. To this point, the $25 million listed by Stillwater Central as related to the acquisitions and operations of the Sooner Sub are maintenance expenditures that have been excluded from the model to avoid the double counting of this activity.
**Variables not Included in the Economic Impact**

Variables not included in the economic impact modeling were the respective bid amounts and information associated with passenger rail.

The bid amount is a financial transaction and, in and of itself, does not have an economic impact until the money is spent.

Regarding the passenger rail information, given that most of the passengers on a Tulsa-OKC route would be Oklahoma residents, most money spent by passengers on a rail line from Tulsa to Oklahoma City would be money that is not new to the state economy but rather represents a shift in spending patterns. This has less of an economic impact than when money originates from out of the state. A true economic impact of the passenger rail alternative could not be reasonably estimated unless information regarding the mix of in-state vs. out-of-state passengers was presented to also include estimates shifting spending patterns for Oklahoma residents.

In addition to the two variables mentioned above, there are other variables that could be included in an economic impact scenario but were not included in this project. Those variables include:

- The stated cost differential for rail service on a short-line railroad vs. a Class 1 railroad, and
- The competitive differential offered to the economy by upgrading to a Class 3 rail line vs. a Class 2 rail line, which would include speed to market and efficiency.

These two variables were not included in order to focus on more of the concrete variables in each of the proposals. Each of these variables would need to have a range of assumptions associated with them, which in a competitive/comparative situation could be problematic.

**Other Notes**

In any economic impact, if the companies create jobs or investment that is different from what was initially modeled, or if a component the project does not materialize, then the realized economic impact would differ from the information presented. Further, the purpose of an economic impact is to inform, and it should only be one tool in a varied toolbox used to evaluate competing alternatives.

Lastly, the economic impacts represent economic activity occurring in the state that is over the baseline scenario. In this case, the baseline would represent the state not selling the Sooner Sub line and maintaining activity on it at the current level of service.
ECONOMIC IMPACTS: GDP

Gross Domestic Product (GDP) represents the value-added economic activity occurring within the state. Output is a broader measure of economic activity than GDP, but GDP captures more of the activity occurring within the state.

BNSF Impacts
- The combined economic impact of BNSF’s proposal on Oklahoma’s GDP is $8.3 million higher in the first year and peaks at $14.7 million higher during the construction phase.
- Focusing solely on operations, the economic impact of BNSF’s proposed activity is $4.2 million higher in 2015 growing to $12.1 million by 2025.

Stillwater Central/WATCO Impacts
- The combined economic impact of Stillwater Central’s proposal on Oklahoma’s GDP is $5.9 million higher in the first year and peaks at $23.6 million higher during the construction phase.
- Focusing solely on operations, the economic impact of Stillwater Central’s proposed activity is $5.8 million higher in 2015 growing to $10.7 million higher by 2025.

Difference in Impacts
The differences in the operational impacts are due to the fact that (1) BNSF plans to hire 20 people at $1.5 million payroll and Stillwater Central/WATCO listed 18 people with a $1.1 million payroll, and (2) BNSF will pay a higher wage.

Regarding the total impacts, while BNSF plans to invest $12.65 million more than Stillwater Central in the upgrade to FRA Class 3 standards, Stillwater Central plans more than $70 million more than BNSF in additional investment.
ECONOMIC IMPACTS: EMPLOYMENT

Employment impacts represent the increase in employment in the state that would result from the proposals. The employment figures are the total projected gains from the direct, indirect and induced impacts associated with a change in the economy.

BNSF Impacts
- BNSF’s combined proposal is projected to add nearly 100 jobs to the state’s economy in the first year and is projected to create 150 jobs for the state’s economy during the time it is operational and investing in the upgrade of the Sooner Sub line to FRA Class 3 standards.
- When the project is fully operational, BNSF’s proposal is projected to create 88 sustained jobs for the state’s economy. This does not include any capital investment activities.

Stillwater Central/WATCO
- Stillwater Central’s combined proposal is projected to add 111 jobs to the state’s economy during the first year and is projected to peak at more than 350 jobs during the time it is operational and investing in the construction of the Energy Customer Infrastructure.
- When the project is fully operational, Stillwater Central’s proposal is projected to create 76 sustained jobs for the state’s economy. This does not include any capital investment activities.

Differences in Impacts
The differences in the construction/investment impacts are due to timing and amount of the investments in the respective proposals. BNSF plans a five year time frame to invest $15 million to upgrade the Sooner Sub Rail Line to FRA Class 3 standards and an additional $30 million over the first 10 years related to the Cherokee Yard and connections to the Sooner Sub. Stillwater Central’s Energy Customer Infrastructure Investment is $101.8 million and it indicated that it would like to complete the capital investment relatively quickly.
Disposable Income represents household income that is available in the economy to be spent or saved after accounting for income taxes. The impacts represent the total projected gains from the direct, indirect and induced income gains associated with a change in the economy.

**BNSF Impacts**
- BNSF’s combined proposal is projected to create $4.5 million in disposable income in the state’s economy in the first year and is projected to create $8.8 million in disposable income for the state’s economy at the peak when it is making its capital investments.
- When the project is fully operational, BNSF’s Sooner Sub operations are projected to generate $5.8-6.5 million in sustained disposable income for state’s economy each year. This does not include any capital investment activities.

**Stillwater Central/WATCO**
- Stillwater Central’s combined proposal is projected to create $4.2 million in disposable income in the state’s economy during the first year and is projected to peak at $15.2 million in disposable income during the time when it is making its capital investments.
- When the project is fully operational, Stillwater Central’s Sooner Sub operations are projected to generate $4.9-5.5 million in sustained disposable income for state’s economy. This does not include any capital investment activities.

**Differences in Impacts**
During the Operations phase of the two proposals, over the 2015-2025 timeframe, BNSF is projected to generate $58.6 in (real/inflation-adjusted) disposable income and Stillwater Central is projected to generate $48.4 million in (real) disposable income. Including capital investment activities, BNSF is projected to generate $82.1 million and Stillwater Central is projected to generate $128.8 million in (real/inflation-adjusted) disposable income to the state.

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**Watco Disposable Income Impacts**
- Terminal Oper.
- Investment FRA Class 3
- Passenger Rail Investment
- Operations

**BNSF Disposable Income Impacts**
- Additional Investment
- Investment FRA Class 3
- Operations
**ECONOMIC IMPACTS: FISCAL**

The net fiscal impacts are similar with the information that each of the proposers submit. Stillwater Central submitted fiscal impacts derived from an economic impact over a period of years to include the construction related taxes. BNSF submitted the direct (not an impact) of state and local taxes that they expect to pay from the increased operations in their proposal, and did not include construction activities.

So that each of the projects are directly comparable, the net fiscal impact on state taxes from a REMI model were estimated at $10.5 million for BNSF and $8.6 million for Stillwater Central/WATCO over the 2015-2025 time period. This only includes **operations** and not any construction/investment activity.

Since (1) the average wages for BNSF are higher than those for Stillwater Central, and (2) BNSF plans to hire more jobs than Stillwater Central, BNSF is projected to have a larger net fiscal impact to the state.
### SUMMARY: OPERATING IMPACTS

#### BNSF Operating Impacts Summary

<table>
<thead>
<tr>
<th>Variable</th>
<th>BNSF Sooner Sub Operations</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP Initial (2015)</td>
<td>$4.2</td>
<td>$4.2</td>
</tr>
<tr>
<td>GDP Final (2025)</td>
<td>$12.1</td>
<td>$12.1</td>
</tr>
<tr>
<td>GDP Avg. Oper. 1</td>
<td>$13.5</td>
<td>$13.5</td>
</tr>
<tr>
<td>Employment Initial (2015)</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>Employment Final (2025)</td>
<td>88</td>
<td>88</td>
</tr>
<tr>
<td>Employment Avg. Oper. 1</td>
<td>86</td>
<td>86</td>
</tr>
<tr>
<td>Disposable Income Initial (2015)</td>
<td>$2.0</td>
<td>$2.0</td>
</tr>
<tr>
<td>Disposable Income Final (2025)</td>
<td>$6.5</td>
<td>$6.5</td>
</tr>
<tr>
<td>Disposable Income Avg. Oper. 1</td>
<td>$5.7</td>
<td>$5.7</td>
</tr>
<tr>
<td>Fiscal Total</td>
<td>$10.5</td>
<td></td>
</tr>
</tbody>
</table>

1. Avg. Oper. Represents the time period after full ramp up of employment. 1 year given for partial employment.

#### Stillwater Central/WATCO Operating Impacts Summary

<table>
<thead>
<tr>
<th>Variable</th>
<th>Stillwater Central Sooner Sub Operations</th>
<th>Energy Customer Infrastructure Terminal 2</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP Initial (2015)</td>
<td>$3.7</td>
<td>$3.4</td>
<td>$7.1</td>
</tr>
<tr>
<td>GDP Final (2025)</td>
<td>$10.7</td>
<td>$5.7</td>
<td>$16.4</td>
</tr>
<tr>
<td>GDP Avg. Oper. 1</td>
<td>$9.4</td>
<td>$5.5</td>
<td>$14.9</td>
</tr>
<tr>
<td>Employment Initial (2015)</td>
<td>31</td>
<td>19</td>
<td>50</td>
</tr>
<tr>
<td>Employment Final (2025)</td>
<td>78</td>
<td>89</td>
<td>167</td>
</tr>
<tr>
<td>Employment Avg. Oper. 1</td>
<td>75</td>
<td>89</td>
<td>164</td>
</tr>
<tr>
<td>Disposable Income Initial (2015)</td>
<td>$1.6</td>
<td>$3.2</td>
<td>$4.8</td>
</tr>
<tr>
<td>Disposable Income Final (2025)</td>
<td>$5.5</td>
<td>$6.1</td>
<td>$11.6</td>
</tr>
<tr>
<td>Disposable Income Avg. Oper. 1</td>
<td>$5.7</td>
<td>$5.4</td>
<td>$11.0</td>
</tr>
<tr>
<td>Fiscal Total</td>
<td>$8.6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. Avg. Oper. Represents the time period after full ramp up of employment. 1 year given for partial employment for Stillwater Central Operations.

2. The Energy Customer Infrastructure includes a capital investment in terminal operations that are expected to employ 60 people.

Note: Dollar figures are in millions of inflation-adjusted (real) dollars

Note: The projected economic impacts would change if the actual performance differs from the data given in the proposal.
# SUMMARY: CONSTRUCTION IMPACTS

## BNSF Construction Impacts Summary

<table>
<thead>
<tr>
<th>Variable</th>
<th>BNSF FRA Class 3&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Additional Inv.&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>Average</td>
<td>$2.2</td>
<td>$2.1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>$10.8</td>
<td>$21.4</td>
</tr>
<tr>
<td>Employment</td>
<td>Initial</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Peak</td>
<td>33</td>
<td>33</td>
</tr>
<tr>
<td>Disposable Income</td>
<td>Average</td>
<td>$1.5</td>
<td>$1.6</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>$7.5</td>
<td>$7.5</td>
</tr>
</tbody>
</table>

1. BNSF capital investment to upgrade the Sooner Sub line to FRA Class 3 is stated as $15 million over 5 years.
2. The Additional investment represents potential investment in the Sooner Sub rail line, the Cherokee Yard, and connections between the Sooner Sub and the Cherokee Yard. It is associated with an investment of $30 million over 10 years.

## Stillwater Central Construction Impacts Summary

<table>
<thead>
<tr>
<th>Variable</th>
<th>Stillwater Central FRA Class 3&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Energy Customer Infrastructure&lt;sup&gt;2&lt;/sup&gt;</th>
<th>Passenger Rail&lt;sup&gt;3&lt;/sup&gt;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>Average</td>
<td>$0.8</td>
<td>$8.3</td>
<td>$0.8</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>$1.7</td>
<td>$24.9</td>
<td>$1.6</td>
</tr>
<tr>
<td>Employment</td>
<td>Initial</td>
<td>12</td>
<td>91</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Peak</td>
<td>13</td>
<td>157</td>
<td>12</td>
</tr>
<tr>
<td>Disposable Income</td>
<td>Average</td>
<td>$0.5</td>
<td>$5.4</td>
<td>$0.5</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>$1.0</td>
<td>$16.2</td>
<td>$1.0</td>
</tr>
</tbody>
</table>

1. Information was given to upgrade the Sooner Sub to FRA Class 3 standards.
2. The Energy Customer Infrastructure investment includes rail and terminal construction in the Cushing area.
3. The Passenger Rail investment includes investment over and above the minimum in the Sale Agreement.

Note: Dollar figures are in millions of inflation-adjusted (real) dollars

Note: The projected economic impacts would change if the actual performance differs from the data given in the proposal.

GDP/Disposable Income Note: Average represents the average impacts during the construction phase and total represents the total amount over the construction phase.

Employment Note: Peak employment represents peak level of employment that may be seen during the construction phase.
SUMMARY: COMPARISON OF COMBINED IMPACTS

In a 10 year time frame after the sale of the Sooner Sub, the Stillwater Central’s total economic impacts of its submissions generally produced:

- Employment impacts that were 71% higher than BNSF,
- GDP impacts that were 31% higher than BNSF, and
- Disposable Income Impacts that were 55% higher than BNSF.

Alternatively stated, BNSF’s average impacts over the ten year time frame generally produced:

- Employment impacts that were 58% the level of those from Stillwater Central,
- GDP impacts that were 76% the level of those from Stillwater Central, and
- Disposable Income impacts 64% of those from Stillwater Central.

If these are equally weighted, BNSF’s Economic Activity would be two-thirds (66.4%) that of Stillwater Central’s Economic Activity. The combined operation and construction summary is presented in the table below, and the results are the same whether displayed as an average or a total.

<table>
<thead>
<tr>
<th>Values ($m)</th>
<th>BNSF</th>
<th>SLWC</th>
<th>% Difference BNSF to SLWC</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP Impact (avg. value 2015-2024) in millions</td>
<td>$13.1</td>
<td>$17.2</td>
<td>76.3%</td>
</tr>
<tr>
<td>Employment Impact (avg. value)</td>
<td>127.4</td>
<td>218.1</td>
<td>58.4%</td>
</tr>
<tr>
<td>Disposable Income Impact (avg. value 2015-2024) in millions</td>
<td>$7.6</td>
<td>$11.7</td>
<td>64.5%</td>
</tr>
<tr>
<td>Total Economic Activity Impact</td>
<td></td>
<td></td>
<td>66.4%</td>
</tr>
</tbody>
</table>
**RETURN ON INVESTMENT**

Return on Investment (ROI) is a financial ratio that evaluates the profitability associated with an initial investment and associated costs against any cash flows over time.

- **Acquisition Costs**: The state acquired the Sooner Sub in 1998 for $5.9 million. Adjusting for inflation to 2014, the cost of acquisition would be $8.58 million.
- **Maintenance Costs**: In addition to the initial acquisition, the state paid maintenance costs on the Sooner Sub totaling $5.77 million adjusted for inflation.
- **Lease Revenue Paid to the State**: Between 2003 and 2013 when the line was active, lease revenue paid to the state totaled $3.47 million (inflation adjusted).
- **Lease Revenue Paid to the State**: Projecting forward to 2017, when the current lease expires, an additional $3.65 million in lease revenue is projected to be paid to the state for total lease payments to the state of $7.13 million between 2003 and 2017.

**Return on Investment in a No-Sale Scenario (ROI = -84%)**

- Given $14.35 million in total costs (inflation adjusted) to the state, and $7.13 million in revenues, the state will have lost $7.23 million owning the Sooner Sub Line with an ROI of -84% over the 1998-2017 time period.
- Owning the Sooner Sub line served a public purpose at the time; however, if an offer is available to purchase the Sooner Sub line from the state, the private sector would likely be more productive with the asset. The private sector has a profit motive and is a generator of tax revenue whereas the public sector spends taxes that serve the public good where there is not a market for the private sector. As the owner of Sooner Sub, the private sector would have a vested interest to be a good steward of the asset, invest in its upkeep, expand its capabilities, and create jobs.

**Return on Investment in a Sale to Stillwater Central/WATCO (ROI=747% to 770%)**

- Given a purchase price of $75 million and the costs and revenues through 2014, the ROI would be 747% for Stillwater Central.
- Including projected net tax revenue accruing to the state from Stillwater Central’s increased operations on the Sooner Sub through 2017; the ROI would be 770%.

**Return on Investment in a Sale to BNSF (ROI=165% to 193%)**

- Given a purchase price of $25 million and the costs and revenues 2014, the ROI would be 165% for BNSF.
- Including projected net tax revenue accruing to the state from BNSF’s increased operations on the Sooner Sub through 2017, the ROI would be 193%.