PEND OREILLE COUNTY ECONOMIC IMPACT STUDY



May 2018

Robinson Research and Jeffrey Bell Consulting were commissioned to study the contributions of Ponderay Newsprint and Pend Oreille Zinc and Lead Mine to the economy of Pend Oreille County.





Overview: Pend Oreille County Economy

Pend Oreille County does not have a strong, diverse economy. It is also very small in terms of employment and sales.

Only 35 percent of land in the County is privately owned and generating property taxes. Federal, state and local governments hold about 63 percent. Tribal and trust lands are about 2 percent of the county.

The county is rural with only 9.3 people per square mile.

It has a rural economy, with limited transportation routes and dependence on resource extraction industries, primarily timber and mining. There are only three major industries in those categories - Teck, Vaagen Brothers Lumber and PNC. Many other businesses such as logging and trucking are dependent on the big three. Retail and service industries are dependent on all resource extraction businesses.

Government employment accounts for more than 50 percent of all jobs and continues to face budget reductions in 2018. Manufacturing employment remains weak due to improved technology and efficiencies, allowing manufacturing companies to increase production without an increase in employment.

Employment in Pend Oreille County was affected by the most recent recession. The recovery has been slow. Growth over the last several years has dropped off, with small pockets of gains, but nowhere near the amount needed to replace the total employment at the peak of the business cycle.

The civilian labor force increased slightly in the first six months of 2017 to 4,743, from the same period in 2016 of 4,726. The number of employed residents showed an increase in 2017 to 4,351.

In 2016, there were 3,027 jobs covered by unemployment insurance in Pend Oreille County, with a total payroll of \$140.4 million.

The 2016 average annual income was \$46,411, well below the state's average annual income of \$59,073.

From 2011 through 2015, 19.6 percent of the county population was living below the poverty level, much higher than the state average at 11.3 percent.

Pend Oreille County's population was 13,123 in 2016. From 2010 to 2016, the population increased at a rate of 0.9 percent compared to the state's growth rate of 8.4 percent. The PUD has recorded a one percent annual increase in customers for several years.

Economic Importance of Ponderay Newsprint and Teck Zinc/Lead Mine

The Pend Oreille Country Economic Development Council (EDC), commissioned Jeffrey Bell Consulting and Robinson Research to examine all available data regarding Ponderay Newsprint Company (PNC) and Teck Zinc/Lead Mine (Teck) and perform an Economic Impact Analysis on the contribution one or both entities make to the economy of Pend Oreille County.

PNC and Teck are the backbone of the economy in Pend Oreille County. The fortunes of Vaagen Brothers Lumber, the third biggest employer in the County, are closely tied to those of PNC. Human nature dictates that when we hear rumblings about the possibility of a major employer closing or leaving the area, we automatically think of what other employers we can attract to fill the void. Perpetuating the health of a local or regional economy should always include overt measures to support the existing major employers in order to enhance the likelihood that they will be able to continue operations and possibly expand. New business development is an expensive endeavor with no guarantees of success. Ensuring a favorable environment for existing employers is a safer path to return on investment in economic development strategies.

The EDC, PNC, Teck Mine and other entities provided financial and taxing data which Robinson Research "boiled down" to create a synopsis.

While the local data is very worthy of consideration, unfortunately, the best available economic impact methodologies operate mostly on fluctuations in the labor force and do not have mechanisms for accommodating most of the other data.

While the State of Washington and the Federal Government gather and dispense all manner of economic data, very little of this is partitioned down to the county level.

Robinson Research purchased a Pend Oreille County-specific database from a supplier that specializes in maintaining relational database information for use in economic impact analysis. Robinson Research owns this and all updates outright into the foreseeable future. Our examination of the statistics and assumptions that we could verify in this database were generally 2016 and newer and were reasonable. In some categories (such as current mill/mine employment) we were able to substitute more current data derived from local sources.

Input Output Modeling

For decades, the Federal Government has collected financial information on numerous types of businesses and other employer entities (mostly from IRS filings) and examined the relationships between fluctuations in the revenues and employment in each type of entity and all the other entities that are affected by these fluctuations.

Types of businesses and employers that are numerous and well distributed across the country have allowed for the development of generally accepted "multipliers" and algorithms.

The following example is purely hypothetical, and the dollar amounts are imaginary. This is just to convey the concept of an input/output model.

For every million dollars' worth of fir/larch/hemlock, planed, kiln-dried dimensional lumber produced, (or similar labor expenditure), \$10 worth of diesel fuel, 25 cents worth of haircuts, \$1 in local property taxes, etc. get spent in the local, state and federal economies.

For the purposes of this task, newsprint mills and similar paper industry operations are a well-defined industry with a recent history of closures over the US.

Where there is zinc, there is usually lead as well, so zinc/lead mining operations are also a well-defined industry with a history of openings and closures.

While the laws of large numbers in these industries work in our favor to enhance accuracy of the projections, regional variations work against us. For example, Pend Oreille County enjoys an abundance of hydroelectric power, which creates an anomaly that compromises the modeling somewhat. Wind-down agreements for exiting power contracts vary widely and cannot be included in the industry-wide algorithms. Different counties states have differing tax structures. Most counties in the United States have little or no presence of federally recognized Native American tribes. In Pend Oreille County the Kalispel tribe is very prominent and its interests are thoroughly intertwined with the interests of the County. This relationship would not be accounted for in the standard input/output model.

If we are to reduce all of the estimates and calculations of the value of PNC and Teck to the simplest terms, the 2018 contribution to the local economy will be approximately \$264,442,751 available for use by the citizens, businesses, nonprofits, and local governments. At this point, this amount still includes state as well as local taxes. The input/output data purchased by Robinson Research does not allow for splitting of state and local taxes. However, in various places in this document, other entities have provided information regarding impacts to local taxes specifically.

This input/output model begins with the (purely hypothetical) assumption that both the mill and the mine will close entirely by the end of 2018. For perspective, we ran the model with both closures occurring in 2023 and the difference in overall impact for that year was roughly twice as great as if both closed in 2018. The same calculation in 2053 was approximately \$548 million fewer dollars. The impact is just measured on a year to year basis; it would not be appropriate to add all five years of impacts together to display one colossal impact.

The tables on the following pages show the mill and mine closures independently and combined. There are tables for impacts to the local economy not including state/local government and tables showing impacts on the tax revenues available to state/local government entities alone.

On the tables:

- The first column (Employment) is simply the number of jobs lost.
- The second column (Labor Income) is the actual direct labor income lost
- The third column (Total Value Added) adds the revenue lost through idling the products and services that supply that company directly.
- The fourth column (Output) is the third column with multiplier effects that allow for other lost jobs and production in the county as manifestations of the loss of these employers.

Combined Impact Summary Ponderay Newsprint and Teck Pend Oreille Mine (includes state and local taxes)

			Total Value	
Impact Type	Employment	Labor Income	Added	Output
Direct Effect - The set of expenditures applied to the predictive model (i.e.,				
I/O multipliers) for impact analysis. It is a series (or single) of production				
changes or expenditures made by producers/consumers as a result of an				
activity or policy. These initial changes are determined by an analyst to be a				
result of this activity or policy.	-418.0	-39,847,390.9	-54,705,221.9	-216,634,399.5
Indirect Effect - The impact of local industries buying goods and services from other				
local industries. The cycle of spending works its way backward through the supply				
chain until all money leaks from the local economy, either through imports or by				
payments to value added.	-182.9	-9,772,194.3	-13,529,187.7	-33,816,350.3
Induced Effect - The response by an economy to an initial change (direct effect)				
that occurs through re-spending of income received by a component of value added.				
IMPLAN's default multiplier recognizes that labor income (employee compensation				
and proprietor income components of value added) is not a leakage to the regional				
economy. This money is recirculated through the household spending				
patterns causing further local economic activity.	-101.8	-2,532,230.7	-7,314,325.8	-13,992,001.2
Total Effect	-702.7	-52,151,815.9	-75,548,735.5	-264,442,751.0

Combined Impact Summary – Top Industries Output Ponderay Newsprint and Teck Pend Oreille Mine

	Total	Total Labor	Total Value	
Description	Employment	Income	Added	Total Output
Paper mills	-148.3	-16,241,710.4	-28,288,812.7	-118,382,471.9
Lead and zinc ore mining	-294.6	-25,791,449.8	-28,885,257.8	-107,464,153.9
Local government electric utilities	-12.8	-1,714,493.7	-3,267,061.6	-8,075,575.7
Owner-occupied dwellings	0.0	0.0	-2,819,673.1	-4,346,838.6
Maintenance and repair construction of nonresidential structures	-22.2	-1,049,419.4	-1,314,349.3	-3,026,032.5
Commercial logging	-35.4	-1,506,572.5	-1,120,901.8	-2,524,721.6
Wholesale trade	-8.8	-581,889.6	-1,138,627.6	-1,845,412.1

State and Local Tax Impact by Total Combined – Ponderay Newsprint and Teck Pend Oreille Zine and Lead Mine

	Employee	Tax on Production		
Description	Compensation	and Imports	Households	Corporations
Dividends				-\$20,123.00
Social Ins Tax- Employee Contribution	-\$107,706.00			
Social Ins Tax- Employer Contribution	-\$225,613.00			
TOPI: Sales Tax		-\$4,851,837.00		
TOPI: Property Tax		-\$5,159,144.00		
TOPI: Motor Vehicle Lic		-\$165,825.00		
TOPI: Severance Tax		-\$74,488.00		
TOPI: Other Taxes		-\$1,121,326.00		
TOPI: S/L NonTaxes		-\$903,565.00		
Corporate Profits Tax				
Personal Tax: Income Tax				
Personal Tax: NonTaxes (Fines- Fees			-\$151,062.00	
Personal Tax: Motor Vehicle License			-\$53,052.00	
Personal Tax: Property Taxes			-\$16,677.00	
Personal Tax: Other Tax (Fish/Hunt)			-\$22,904.00	
Total State and Local Tax	-\$333,318.00	-\$12,276,185.00	-\$243,695.00	-\$20,123.00

The following charts show the separate breakout for the Ponderay Newsprint closing and the Teck Zinc and Lead Mine closing.

Ponderay Newsprint

Impact Summary
Ponderay Newsprint
(Includes state and local taxes)

			Total Value	
Impact Type	Employment	Labor Income	Added	Output
Direct Effect	-148.0	-16,208,120.3	-28,230,307.5	-118,137,640.7
Indirect Effect	-108.3	-5,511,759.2	-7,867,968.1	-17,747,307.3
Induced Effect	-44.1	-1,097,211.1	-3,157,695.5	-6,054,887.7
Total Effect	-300.3	-22,817,090.6	-39,255,971.1	-141,939,835.7

State and Local Tax Impact by Total Ponderay Newsprint				
Description	Employee Compensation	Tax on Production and Imports	Households	Corporations
Dividends				-\$29,392.00
Social Ins Tax- Employee Contribution	-\$61,289.00			
Social Ins Tax- Employer Contribution	-\$128,382.00			
TOPI: Sales Tax		-\$826,585.00		
TOPI: Property Tax		-\$878,940.00		
TOPI: Motor Vehicle Lic		-\$28,251.00		
TOPI: Severance Tax		-\$12,690.00		
TOPI: Other Taxes		-\$191,035.00		
TOPI: S/L NonTaxes		-\$153,936.00		
Corporate Profits Tax				
Personal Tax: Income Tax				
Personal Tax: NonTaxes (Fines- Fees			-\$64,079.00	
Personal Tax: Motor Vehicle License			-\$22,504.00	
Personal Tax: Property Taxes			-\$7,074.00	
Personal Tax: Other Tax (Fish/Hunt)			-\$9,716.00	
Total State and Local Tax	-\$189,671.00	-\$2,091,438.00	-\$103,373.00	-\$29,392.00

Top Ten Industries – Output Impac	t
Ponderay Newsprint	

	Total	Total Labor	Total Value	
Description	Employment	Income	Added	Total Output
Paper mills	-148.3	-16,240,152.4	-28,286,099.1	-118,371,116.0
Local government electric utilities	-10.3	-1,376,968.6	-2,623,888.9	-6,485,771.1
Commercial logging	-35.3	-1,504,592.8	-1,119,428.9	-2,521,404.0
Owner-occupied dwellings	0.0	0.0	-1,205,755.1	-1,858,805.1
Wholesale trade	-5.8	-388,690.9	-760,581.0	-1,232,699.3
Rail transportation	-2.9	-359,671.1	-641,241.3	-1,163,622.8
Truck transportation	-7.3	-288,610.8	-379,244.7	-1,044,398.7
Maintenance and repair construction of nonresidential structures	-5.8	-274,394.7	-343,666.7	-791,225.3
Architectural, engineering, and related services	-4.6	-334,343.2	-339,000.2	-698,365.9
Sawmills	-2.2	-107,582.9	-167,393.9	-618,049.3

Teck Pend Oreille Zinc and Lead Mine

Impact Summary
Teck Pend Oreille Zinc and Lead Mine
(Includes state and local taxes)

Impact Type	Employment	Labor Income	Total Value Added	Output
Direct Effect	-270.0	-23,639,270.5	-26,474,914.4	-98,496,758.9
Indirect Effect	-74.7	-4,260,435.1	-5,661,219.6	-16,069,043.0
Induced Effect	-57.7	-1,435,019.6	-4,156,630.3	-7,937,113.5
Total Effect	-402.4	-29,334,725.2	-36,292,764.4	-122,502,915.3

Top Ten Industries – Output Impact Teck Pend Oreille Zinc and Lead Mine

	Total	Total Labor	Total Value	
Description	Employment	Income	Added	Total Output
Lead and zinc ore mining	-294.6	-25,791,018.7	-28,884,775.0	-107,462,357.8
Owner-occupied dwellings	0.0	0.0	-1,613,918.0	-2,488,033.5
Maintenance and repair construction of nonresidential structures	-16.4	-775,024.8	-970,682.7	-2,234,807.2
Local government electric utilities	-2.5	-337,525.2	-643,172.6	-1,589,804.5
Accounting, tax preparation, bookkeeping, and payroll services	-8.9	-379,709.8	-504,066.3	-687,930.6
Wireless telecommunications carriers (except satellite)	-0.4	-18,683.9	-97,706.6	-660,282.9
Real estate	-5.3	-69,624.3	-301,850.0	-615,523.0
Wholesale trade	-2.9	-193,198.7	-378,046.5	-612,712.8
Truck transportation	-3.6	-144,027.7	-189,257.5	-521,194.5
Legal services	-3.2	-77,806.1	-243,662.5	-387,381.0

State and Local Tax Impact by Total Teck Pend Oreille Zinc and Lead Mine

	Employee	Tax on Production		
Description	Compensation	and Imports	Households	Corporations
Dividends				\$9,269.00
Social Ins Tax- Employee Contribution	-\$46,417.00			
Social Ins Tax- Employer Contribution	-\$97,230.00			
TOPI: Sales Tax		-\$4,025,251.00		
TOPI: Property Tax		-\$4,280,204.00		
TOPI: Motor Vehicle Lic		-\$137,574.00		
TOPI: Severance Tax		-\$61,798.00		
TOPI: Other Taxes		-\$930,291.00		
TOPI: S/L NonTaxes		-\$749,628.00		
Corporate Profits Tax				
Personal Tax: Income Tax				
Personal Tax: NonTaxes (Fines- Fees)			-\$86,983.00	
Personal Tax: Motor Vehicle License			-\$30,548.00	
Personal Tax: Property Taxes			-\$9,603.00	
Personal Tax: Other Tax (Fish/Hunt)			-\$13,188.00	
Total State and Local Tax	-\$143,647.00	-\$10,184,747.00	-\$140,322.00	\$9,269.00

Property Taxes and Levy Rates

If Ponderay Newsprint closed, the following year the county assessor-- when computing levy rates, the assessor would have deleted the value of all removed PNC assets from the assessed value total of that taxing district.

Teck has considerable assets in Pend Oreille County. There are nearly 300 acres of surface property identified as reusable in the 2013 EDC report including mine buildings and infrastructure. There are also considerable subsurface mining areas.

If Teck were removed from the tax rolls, the following year the county assessor when computing levy rates would have deleted the value of all removed assets from the assessed value total of that taxing district. At this time, it does not appear that would happen in any junior taxing districts in the north County. This assumes that the Pend Oreille Mine closure would not cause a general decline in all property values there.

Current County assessed value for Pend Oreille Teck Mine is \$34,352,518. If the buildings remained after closing the estimated assessed value would be \$2,222,448; with everything removed, \$505,355.

The levy rate which affects all taxpayers in that taxing district would then be computed with that lower total value which would have the effect of raising the levy rate and tax bill for all other property owners in that district. How much the increase would be is hard to determine since there are several variables.

"Currently, Pend Oreille County real estate is on an upswing, values are increasing rapidly for existing homes and have been for the past 3-4 years. However, if Pend Oreille County were to lose an employer such as Ponderay Newsprint this upswing could very easily come to a halt and quite possibly retract," Jim McCroskey, Pend Oreille County Assessor.

"If this were the case, levy rates would increase. Taxing districts budgets would still probably increase by the statutory I% and continue until their statutory maximums were met for each district. At this time, all taxing districts have considerable amounts before they meet their maximums."

"All in all, if property values go down, budgets increase, levy rates increase, individual property taxes will still increase within the statutory limitations set by Washington State Legislation."

Sales tax on Ponderay Newsprint purchases in the county are about \$30,000 annually.

ESTIMATED TAXES

Statutorily the levy rate cannot exceed 5.9. If this were to happen, the lowest Taxing Districts affected would be prorated. In this county, the Cemetery Districts are the first to be affected. They would be adjusted to meet the 5.9 limitation.

Losing a major, high valued tax paying industry would influence levy rates. As their values are reduced and their tax liabilities are lessened, all other tax payers would make up the difference to meet the taxing district's tax collections within the statutory limitations.

Limitations other than the 5.9 limit on regular levies are:

County Current Expense 1.80

(up to 2.475 with a road shift as long as the combine road/current expense total does not exceed 4.05 and does not adversely affect any other taxing district)

Cities and Towns 3.375

(3.60 if annexed into a library and/or fire dist. and will be reduced by those levy amounts)

Hospital .50 + .25 (.75)

Library .50

Fire Districts .50 + .50 + .50 (1.50)

Cemetery .1125

These rates cannot be exceeded. As reflected in the scenarios, the fire district and cemetery district will have their limitations met with the example of the Ponderay Newsprint closure.

Pend Oreille Public Utility District

Introduction

Public Utility District No. 1 of Pend Oreille County (District) is a municipal corporation organized pursuant to Title 54 RCW. By law, the District's primary purpose is to furnish electricity, on a non-profit basis, to its customers within the District. Any prudent economic analysis of Pend Oreille County must include a careful look at how changes affect the district. Even minor changes in contracts with major PUD customers will have sweeping effects on the overall economy of the County.

The District's geographical boundary encompasses all of Pend Oreille County, a largely rural county with a population of approximately 13,000. The District is governed by a three-member elected Board of Commissioners and employs roughly 95 people.

Customers

In general, the District's customers are segregated into two classifications: (1) the General Service Load, which is comprised of approximately 8,500 residential customers, commercial customers and a few small industrial load customers; and (2) large industrial load customers, which is any industrial customer of the District who regularly uses over two (2) megawatts (MW) of average energy per month. The District's largest industrial customer is Ponderay Newsprint Company.

Pursuant to two Contracts, PNC consumes on average approximately 70% of the total energy furnished by the District, and correspondingly pays a proportional share of the District's operating costs.

By their terms, the wholesale cost-based Contracts expire in 2027. The District owns and operates a run-of-the-river dam (one that can operate only when there is sufficient water flow in the Pend Oreille River) known as Box Canyon Dam. The dam was built in the 1950s. The electricity produced by Box is an asset of the District.

The District has a long-term assignment agreement to purchase power from Seattle City Light's Boundary Dam essentially at the production cost, a price that is currently well below market rates. The District also has a contract to purchase power from the Bonneville Power Administration which is delivered on a contract rate established every two years. The BPA contract expires in 2028.

The BPA contract is complex and is predicated on the District reporting its intended call for power and adhering to such or facing substantial financial penalties. In addition, when necessary, due to exhaustion of Box, Boundary, and BPA power, the District purchases power from the open market to balance its customers' hourly needs. The production, purchase, and delivery of power are highly complex and involve numerous third party contractual relationships.

Ponderay Newsprint

Most of PNC's power comes from Box, and PNC annually requires over 90% of Box's output. Under the Contracts, PNC is entitled to the amount of Boundary Power the District receives as a result of PNC's impact on the District's load factor.

Because PNC operates efficiently, it raises the District's load factor and therefore it receives a portion of the Boundary power for very little cost. PNC is also the primary driver and recipient of the District's BPA purchases and is directly responsible for any financial penalties associated with an inability to take the power.

This mix of resources ultimately results in the payment of a competitive "blended" rate for power. PNC paid the District \$23,769,699, \$29,327,800, and \$28,858,279 in 2015, 2016, and 2017 respectively.

Box Canyon Relicensing

In the late 1990s and early 2000s, the District started the process of obtaining a new license from the Federal Energy Regulatory Commission ("FERC") for Box. The original 50-year license was set to expire in 2002.

The renewal process was complicated, protracted, and contentious. FERC issued the new 50-year license in 2005. However, as a condition of the new license, FERC imposed several obligations on the District that required the District to upgrade Box and make other changes to the hydroelectric project. Specifically, the FERC license (and the Settlement Agreement) provided that the District would replace the four existing turbines with fish-friendly turbines and make other upgrades to Box (including four fish passage facilities and other mitigation work).

The debt-financed cost of these upgrades has been passed on to PNC through the terms of the Contracts, thereby making the power from Box more expensive than the current market. For perspective, PNC's blended MW costs have averaged roughly \$35 whereas the market price has stayed at roughly \$25.

2016 Litigation

On January 4, 2016 the District announced that it had terminated its power sales contracts with PNC due to the submission of power schedules showing a sharp reduction in operations in direct violation of the contracts. PNC subsequently engaged the District in litigation regarding the termination of the contracts. Despite the litigation, PNC continued to operate and pay its bills in a timely manner.

The District and PNC successfully settled all litigation in February 2018. Under the settlement agreement, the power sales contracts are reinstated. In addition, certain elements in the contracts have been clarified. PNC's potential liquidated damages (payments upon closure) are now set at a specified representative dollar amount. Because damages are reduced on a sliding scale as each year passes PNC has a greater incentive to stay in business.

For example, if PNC chose to terminate in 2019 instead of 2018, the damage payment could drop by as much as \$8 million, offsetting any losses from newsprint sales. PNC has also requested that the District continue to actively market Box power and has provided \$150,000 to assist with those efforts.

The District has marketed Box power over the last few years with no immediate success due to the combination of elevated costs of production and low market conditions. The request for marketing is not being represented as an indication of an imminent closure, but as a reciprocal opportunity for the District to decouple/diversify some of its risk and for PNC to take advantage of potential market savings.

Impact of PNC Closure

At approximately 70% of the District's load, future curtailment of PNC's operations could create significant surplus energy, which the District could likely be forced to resell to a new counterparty (e.g., industrial load, utility, or market) at a significant loss. Those potential losses or revenue deficiencies would need to be mitigated through cost controls and rates.

While the rate impact from a loss of PNC sales could be significant to the District, it cannot be precisely forecasted. It will depend upon the interaction of many factors, including but not limited to then-existing cost of production of Box power, cost of acquisition of BPA power, and market or resale value of the power.

With that in mind, the potential aggregate impact of a 2018 PNC shutdown without payment of any liquidated damages could be in excess of \$60 million dollars. This represents the delta between Box costs (approx. \$42 MWh) and an average forward market price plus delivery (\$25-\$30 MWh) multiplied by the average output of Box over the remaining term of the contract or 9 years if it occurred in 2018.

The loss could be less if the closure occurred in subsequent years. The annual losses could range between \$3 and \$9 million or higher. The figures, again, depend on PNC's payment of damages, market conditions, efficient marketing, cost cutting and adjusting existing purchase and sale contracts. But, to recover such estimated annual losses could result in 10-40% rate increases for general service customers.

Residential customers currently pay a basic charge of \$30.50 per month plus 5.11 cents per kilowatt-hour. This results in a blended rate of roughly 6.89 cents per kilowatt-hour, which is among the lowest in the state and nation. As a result, a residential customer in Pend Oreille County consuming 1,000 kWh per month would pay roughly \$70 per month.

A 20% increase would result in a blended rate of 8.268 cents per kilowatt-hour or roughly \$83 per month at 1,000 kWh of monthly consumption.

A 40% increase would result in a blended rate of 9.646 cents per kilowatt-hour or roughly \$97 per month at 1,000 kWh of monthly consumption.

The District necessarily sits squarely in the center of any economic development discussion by virtue of its status as Pend Oreille County's exclusive energy provider. Because the residential and small business customers are primarily served with low cost Boundary power, Box power has historically been utilized as an economic driver within our community.

The uncertainty of PNC's long-term operating horizon coupled with rising operating costs and limited market recovery options, has resulted in extensive strategic planning around community expectations and risk management.

A recently commissioned third-party risk assessment concluded that serving load industry remains the District's best option for securing future revenue and mitigating risk. However, all new load is not the same with varying levels of community benefit (jobs) and credit risk (non-payment). The District is interested in understanding the cumulative impacts of losing a major community partner, the associated tolerance for risk, and what role that might play in future decision making. The District currently remains committed to the philosophy of serving the general service customers with the lowest cost resource available and then supporting prudent economic development.

Selkirk and Cusick School Districts

Pend Oreille Mine is located in the Selkirk School District. All other property tax payers would increase their payments to meet the tax obligations to the school district should Teck properties be reduced in value.

Since Washington pays school districts at this time according to the number of students enrolled (\$8,752/student), any loss of students would cause a significant reduction in school district revenue.

Selkirk School District Superintendent Nancy Lotze said the exact number of students from families employed by Teck have not been calculated recently. But she said when they reopened in 2014, the district identified 9 new students. She said this was less than they expected but believe it is due to the fact that some families with students in school didn't relocate. She believes that one of the parents went to work in a different location during the shutdown but maintained permanent residence here.

Cusick School district did not submit estimated number of students but the impact of funds per student generated by the state would still impact the school district.

Metaline Falls/ Metaline/Ione

Pend Oreille Mine provides for its own water and sewer needs. But nearby towns provide the temporary housing for many of the mine workers. A reduction in those workers living there could increase sewer rates.

Metaline Falls Mayor Tara Leininger said for example one of the larger apartment building's sewer rates is based on occupancy. If that goes down, the rest of the city property owners would have to pay more to balance the city's sewer budget.

She said Teck's estimates of the impact on the community before they opened weren't accurate. They had said that there could be an additional 230 students in the school district but it never happened.

But she said the impact of 270 workers and all the other indirect jobs is obviously significant. The grocery stores, restaurants, bars and all the other businesses would be impacted. All the housing options are rented now but that would change without the mine workers, she said.

As a minister and community volunteer, Tara Leininger sees another significant loss without the mine workers. She said the limited number of volunteers for community improvement projects would be even smaller. She said the community depends on these volunteers and Teck's contributions.

Small Businesses

Even though many people in north Pend Oreille County live outside towns, most of the retail and service businesses are located in towns.

Business leaders said significant percentage of their current business comes from Teck employees and those indirectly working for them. They pointed out the fact that the only other larger employers are Seattle City Light, U.S. Border Patrol and PUD. The number employed varies and they do not expect to increase.

Conclusions

- As with all research methodologies, this one has some inherent strengths and weaknesses. Both the zinc/lead mining and newsprint industries in the United States provide a wealth of data and histories by which the input/output models could be optimized is a great contributor to accuracy. Pend Oreille County has some significant anomalies (abundant hydropower, wind-down agreements, the presence of a prominent Native American tribe and considerable distance from many sources of transportation, etc.). These anomalies cause the model to not be a perfect fit with the one-size fits all portions of the input/output model. Another challenge is the fact that we do not know if and when the mine and/or the newsprint mill will close. This type of analysis is inherently a snapshot in time and we do not have the specific time to which we can tie this snapshot. Even with the challenges faced by this methodology it is to the best of our knowledge the most appropriate available tool for estimating how these major economic events may play out over the next several years.
- We will use an analogy of a ship with a whole rammed in its side near the waterline; the ship does not sink outright, but its ability to carry on has been severely hampered. With each passing year, the ship does not develop an additional hole, but the original continues to hinder its progress. The hole may become bigger through corrosion, etc., or smaller due to some effort at repair. The key point is that, although the data used to create this model is annual (jobs lost), we do not compound the numbers of jobs lost with each passing year.

- Input/output models include all of the ways in which these possible losses of jobs would play out through all the vendors that directly serve these industries, and all of the vendors that would benefit from all the stimulation to the economy generated by these payrolls. The fortunes of local public entities (library, cemeteries, fire district, etc.) are also accounted for in these models.
- In simplest terms (for modeling purposes only, if we assume that both major employers will close abruptly at the end of 2018), during the next year the economy of Pend Oreille County would be forced to operate with a gap of nearly \$264 million compared to before the closures.
- Having no specific points in time to plug into these models, we also ran the calculations as if both major employers ran status quo with
 normal adjustments for inflation, etc, then abruptly closed at the end of 2023. The model assumes that our metaphorical ship proceeded
 unscathed until the end of 2018 at which the hole developed at that time was more than twice the size of the hole created in 2018. The
 negative impact from the projected loss in the 2018 scenario would be a very significant hit to the economy.
- Neither of the models created have much probability of playing out exactly as stated. On the other hand, they show arguably opposite ends of a spectrum of possibilities. Robinson Research owns the rights to annual updates in the economic data and the software to perform additional analysis as economic events play out in Pend Oreille County. Much of the "heavy lifting" on this exercise has already been performed and running additional versions of the model based on new developments will be terribly difficult.
- Any responsible analysis of the economic future of Pend Oreille County must address the role of Pend Oreille County PUD. The PUD
 produces the single most valuable resource that could be used to offset the losses of these major employers by attracting new
 employers. Seemingly mundane and un-newsworthy changes in PUD contracts could have a huge effect on the local economy.
- The PUD rates and other rates for a variety of local government services offer the citizens an "enhanced value" based upon economies of scale driven by major employers. For instance, Ponderay Newsprint currently consumes 70% of the PUD's available power and if its contribution to the operations of the PUD were curtailed, the rates for consumers would inevitably increase. There are chapters and charts following the input/output portion of the report that detail how the costs of public services could be increased.
- The estimated magnitude of the negative impact that would be caused by the loss of one or both of these major employers is very significant. The models strongly suggest that waiting for actual closures without doing everything possible to fill those voids as early as possible would have a crippling effect of the economic future and quality of life of Pend Oreille County.

- While continuous, vigorous effort to attract an appropriate mix of new employers will be necessary, it should not be conducted, or thought of, as being in lieu of efforts to maintain and enhance a favorable environment for the existing major employers to continue operating in the County.
- Determining the ideal mix of new employers is beyond the scope of this research.
- Determining the economic impact of adding any specific employers that are currently being proposed in Pend Oreille County is also beyond the scope of this research.

A telephone survey of voters in Pend Oreille County is being developed and will be implemented in May/June 2018. Determining preferences of the best way forward for the economy of Pend Oreille County will be the primary purpose of that survey.