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## The Impact of Coal Companies Ceasing Operations in Wyoming

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The fourth- and sixth-largest producing coal mines in the country located in Wyoming closed down on July 1, 2019 leaving approximately 700 workers without a job due to the owner (Blackjewel LLC) declaring bankruptcy, bringing the total number of Wyoming coal companies that have filed for bankruptcy to six (Erickson, 2019a). Coal mining is extremely important to Campbell County and the state as a whole in terms of employment, labor income, and tax revenue. For example, at the time this report was published, Blackjewel owed

Campbell County \$37 million in tax liability (Erickson, 2019b).

This research presented in this article discusses the impacts of a scenario in which one or more of these mines shut down with 700 workers laid off, the reported

number of workers who lost jobs due to the mine closures (Erickson, 2019a). This analysis assumes that these workers will not find work in-state within the year. If they do find employment in Wyoming during the year, damages would be less than the results indicate.

**Table 1: Economic Impact Summary of the Loss of 700 Coal Jobs in Wyoming**

ImpactType	Employment	Labor Income	Total Value Added	Output
Direct Effect	-700	-\$78,473,839	-\$344,831,229	-\$639,550,300
Indirect Effect	-821	-\$57,457,552	-\$108,174,956	-\$199,391,561
Induced Effect	-527	-\$19,520,635	-\$39,656,268	-\$70,263,221
<b>Total Effect</b>	<b>-2,048</b>	<b>-\$155,452,025</b>	<b>-\$492,662,453</b>	<b>-\$909,205,082</b>

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**Table 2: Top 10 Industries Impacted by Coal Mining Job Losses in Wyoming**

Description	Total Employment	Total Labor Income	Total Value Added	Total Output
Coal Mining	-727	-\$81,472,349	-\$358,007,339	-\$663,987,720
Support Activities for Mining	-270	-\$20,855,115	-\$23,851,675	-\$37,902,450
Wholesale Trade	-74	-\$6,601,751	-\$11,574,540	-\$17,533,734
Maintenance & Repair Construction of Nonresidential Structures	-62	-\$3,427,694	-\$4,518,994	-\$9,348,056
Other Financial Investment Activities	-51	\$102,902	-\$565,558	-\$6,963,408
Real Estate	-49	-\$959,339	-\$5,287,244	-\$8,229,477
Rail Transportation	-40	-\$5,205,219	-\$21,491,114	-\$29,073,850
Full-Service Restaurants	-37	-\$769,291	-\$817,745	-\$1,697,881
Limited-Service Restaurants	-35	-\$644,646	-\$1,612,679	-\$2,917,783
Architectural, Engineering, & Related Services	-25	-\$1,671,033	-\$1,678,384	-\$3,645,906
<b>Total Effect</b>	<b>-2,048</b>	<b>-\$155,452,025</b>	<b>-\$492,662,453</b>	<b>-\$909,205,082</b>

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## Methodology

This analysis employs the IMPLAN (IMPact analysis for PLANning) economic impact modeling system. This software can be used to estimate the impacts of almost any change in economic activity, such as a military base closure, a new industry moving into an area, or the construction of a new school. IMPLAN provides analysts with three types of estimates:

1. Direct Impacts: economic impacts as a result of actual project spending, such as the hiring of a general contractor to perform a construction project that subsequently increases employment to complete the project.

2. Indirect Impacts: economic impacts as a result of business-to-business spending when projects or events occur, such as a ready-mix company that purchases aggregate from an outside supplier because of a new project.

3. Induced Impacts: economic impacts as a result of household spending changes because of project or event occurrence, such as an electrician who wires a new school building and then takes his family out to dinner because of the increase in wages.

## Results

The loss of these coal mining jobs would be very harmful to the Wyoming economy. Losing 700 jobs would cause the loss of 821 indirect jobs and 527 induced jobs, for a total loss of 2,048 jobs (see Table 1). The loss of labor income (including benefits) totaled \$155.5 million, while the value of total output decreased by \$909.2 million.

Table 2 shows the 10 industries with the greatest loss in employment in this scenario. Support activities for mining lost the second greatest number jobs (-270) followed by wholesale trade (-74), maintenance & repair construction of nonresidential structures (-62,) other financial investment activities (-51), and real estate (-49).

The effect on state and local taxes cannot be overstated. Taxes on production and imports greatly impact state and local budgets. The loss of all jobs in this scenario would result in a loss of \$72.5 million in taxes on production and imports alone (see Table 3).

## References

Erickson, C (2019b, July 30). A timeline of the three weeks since Blackjewel declared bankruptcy. *Casper Star-Tribune*. Retrieved July 23, 2019 from <https://tinyurl.com/y3ykecdq>.

Erickson, C (2019a, July 1). Wyoming coal mines close, send 700 workers home after bankruptcy filing. *Casper-Star Tribune*. Retrieved July 23, 2019, from <https://tinyurl.com/y5ye3gvj>

Table 3: State and Local Tax Impact from Coal Mining Job Losses in Wyoming

Description	Employee Compensation	Tax on Production & Imports	Households	Corporations
Dividends				-\$925,071
Social Ins Tax- Employee Contribution	-\$688,912			
Social Ins Tax- Employer Contribution	-\$1,443,074			
TOPI: Sales Tax		-\$23,936,475		
TOPI: Property Tax		-\$30,554,129		
TOPI: Motor Vehicle Lic		-\$832,255		
TOPI: Severance Tax		-\$14,837,171		
TOPI: Other Taxes		-\$1,988,098		
TOPI: S/L NonTaxes		-\$400,465		
Corporate Profits Tax				
Personal Tax: Income Tax				
Personal Tax: NonTaxes (Fines- Fees)			-\$117,269	
Personal Tax: Motor Vehicle License			-\$242,441	
Personal Tax: Property Taxes			-\$87,173	
Personal Tax: Other Tax (Fish/Hunt)			-\$665,717	
<b>Total State and Local Tax</b>	<b>-\$2,131,987</b>	<b>-\$72,548,593</b>	<b>-\$1,112,600</b>	<b>-\$925,071</b>

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