

RAMACO Brook Mine Preliminary Economic Summary

RAMACO has prepared a preliminary economic summary for their proposed Brook Mine to illustrate the potential economic impact from the mine. The preliminary economic summary demonstrates that the Brook Mine could provide as many as 584 direct and indirect jobs at peak mining production. The project would also significantly bolster tax receipts in Sheridan County and the State of Wyoming. In less than 10 years ad valorem/property taxes directly on Brook Mine property and production could be as high as 25% of Sheridan County’s ad valorem/property tax revenue, which would represent 35% of 2013 tax receipts. As currently planned Brook Mine would commence production in 2016 and continue for roughly 20 years.

Job Impacts

Assuming mining and reclamation permits are secured and economic conditions are favorable, RAMACO could begin construction of the loadout facilities, rail spur, and offices as early as 2015. Construction of these facilities would provide approximately 60 jobs in 2015 and 2016. RAMACO would then begin to hire full time mine employees in 2016, with employee levels ramping up from about 67 to 254 employees by 2025 as shown on **Figure 1**. In addition to direct mine employment, up to 330 additional indirect job opportunities would be created for suppliers, vendors, and mine service firms. Creation of indirect jobs is referred to as the multiplier effect.



Figure 1 Estimated Number of Jobs Created Over the Life of RAMACO's Brook Mine.

The U.S. Bureau of Economic Analysis estimates that nationwide the multiplier effect from coal mining can be as high as 3.4 indirect jobs created for each mining job. A 2013 study by Dr. Timothy Considine, a professor of energy economics at the University of Wyoming, assumed that for every mine construction job 0.4 indirect jobs would be created and for every production related mining job, up to 1.7 additional indirect jobs would be created in the state of Wyoming. For this analysis Dr. Considine's numbers were used to estimate indirect jobs created from Brook Mine construction and production mining. Since some mine support may come from outside of Sheridan County during production, the multiplier used by Dr. Considine was conservatively reduced to 1.3 during mining production. Similar assumptions were made for economic analyses prepared for Youngs Creek Mine. With the multiplier effect, the total number of jobs created by the Brook Mine could be as high as 584 during peak production.

Salaries and Wages

RAMACO projects average annual wages (including overtime) for hourly employees of \$77,000 per year. Up to 20 salaried jobs for technical and administrative personnel could have annual salaries ranging from \$65,000 to \$195,000. Average annual wages for construction jobs created by this project are estimated at \$55,000. Based on Dr. Considine's estimates, the average annual wage for indirect jobs created by the Brook Mine is estimated at \$40,000 during mine construction and \$43,000 during production. **Figure 2** shows the projected wages paid over the life of this project by year and **Figure 3** graphically depicts the total wages paid out over the life of this project. The direct jobs will have added economic benefits including health insurance, vacation, sick leave, 401 K, etc. which are not included in **Figure 2 or 3**. RAMACO projects that these benefits and other direct employee costs would equal 40% of the actual cash wage.

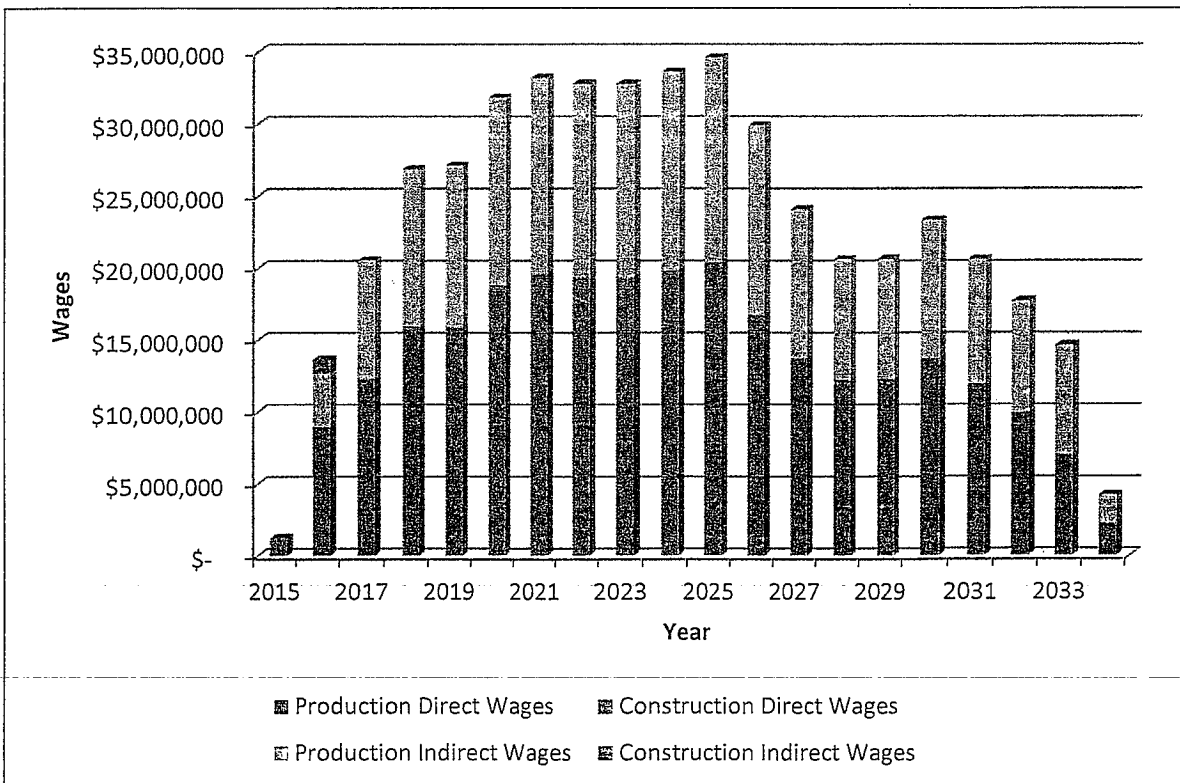


Figure 2 Projected Wages Over the Life of the Brook Mine.

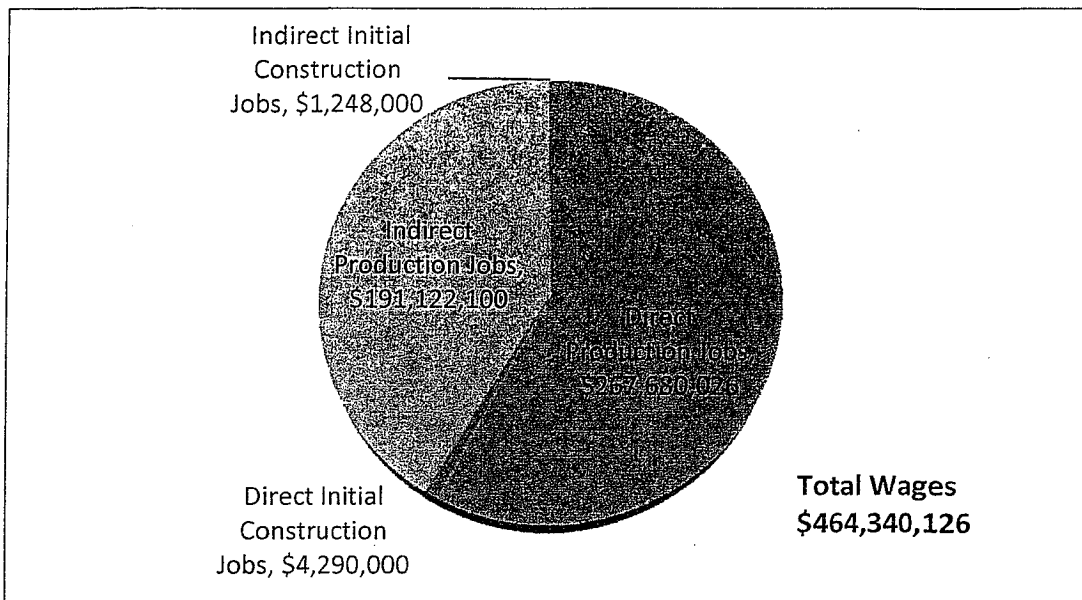


Figure 3 Projected Cash Wages from Direct and Indirect Jobs Created by the Brook Mine.

Tax Revenues

The Brook Mine will be subject to a number of federal, state and local taxes. Federal taxes will include black lung, reclamation, and payroll taxes as well as income taxes which are not considered here. State taxes will include severance and sales and use taxes. Local tax revenues will also include sales and use taxes however, ad valorem/property taxes will comprise the bulk of local tax revenues. Figure 4 presents the breakdown of major tax receipts expected over the life of the Brook Mine.

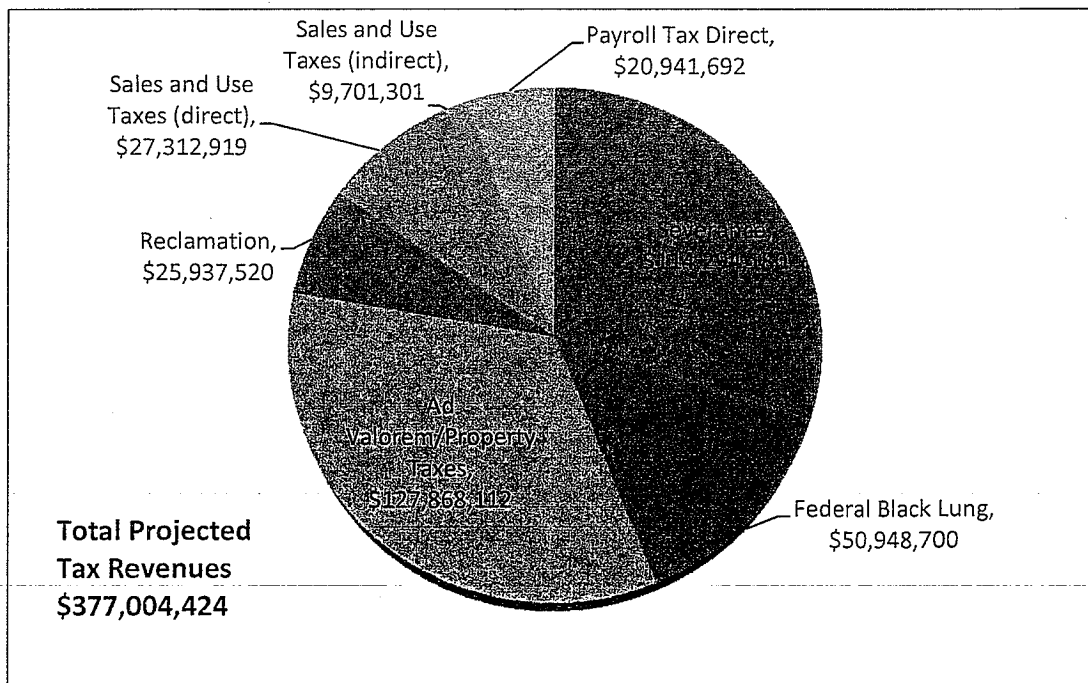


Figure 4 Major Tax Receipts Over Life of Brook Mine.

Local Tax Revenues

While a portion of federal and state tax revenues are returned to the county, the sales and use taxes and ad valorem/property tax receipts will have the biggest local impacts. Property taxes for Industrial properties are taxed on a percentage (11.5%) of the appraised value of the property; however, the ad valorem tax on mineral production is assessed at 100 percent of the value of production, so it is by far the biggest tax revenue for local sources.

The ad valorem taxes presented in **Figure 4** are based solely on production and property taxes directly associated with the mine with an assumed levy of 69.4 mills (6.94%). Of the 69.4 mills 12 mills goes to the general county fund, 12 mills goes to the state for the statewide school construction account, 5.5 mills goes to Sheridan College, 2 mills goes to county wide weed and pest, 3 mills goes to Tongue River fire district, and the balance goes to Sheridan county schools.

Sales and use taxes can also be significant. Two percent of the sales and use taxes would come to local governments and four percent would go to the state. The direct sales and use taxes for this analysis were based on direct equipment purchases by the mine. The indirect sales and use taxes were based on payroll numbers, assuming that 35% of the payroll generated during production would be spent locally and 20% of the payroll generated during construction would be spent locally. The lower percentage of payroll spent locally during construction accounts for the fact that many of the construction workers may be temporary residents that will send money home. Additional tax generation not estimated for this study may occur through gas taxes, cigarette taxes, lodging taxes, and other tax sources. **Figure 5** presents projected major tax revenues to Sheridan County over the life of mine.

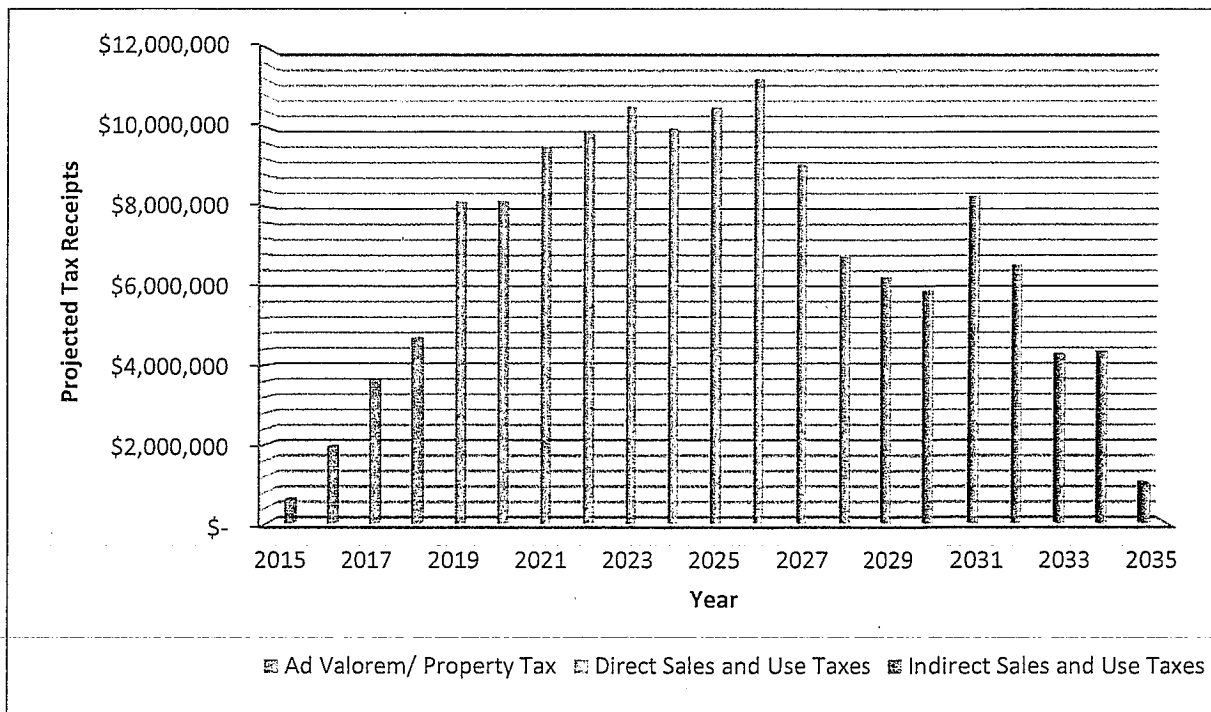


Figure 5 RAMACO Brook Mine Projected Tax Revenue

As shown in **Figure 5**, direct sales and use taxes will initially be the largest source of tax revenue for local government. The estimated local portion of direct and indirect sales tax revenue from capital expenditures over the first three years is estimated at \$2.9 million. RAMACO estimates the initial capital expenditure to construct the rail load out facility will be approximately \$65.6 million over the first two years of the project. Of this amount an estimated \$52.6 million will be for equipment and materials subject to sales taxes and the remaining amount will be for labor. An additional \$402.6 million subject to sales tax would be spent on mining equipment and ongoing operations over the life of the project. The county's portion of direct and indirect sales taxes has been conservatively estimated at \$12.3 million over the life of the project. Mine production is expected to begin in 2016; however, the ad valorem taxes on production are expected to lag by one year, so initial ad valorem tax receipts on production would not be received until 2017.

Total Estimated Impact to Local Governmental Bodies in Sheridan County

Figure 6 demonstrates how the Brook Mine would affect Sheridan County's ad valorem/property tax receipts based on the 2013 Tax Receipts. In 2013 Sheridan County's ad valorem/property tax receipts totaled \$30,106,051. In 2026 the Ad Valorem/property taxes on the Brook Mine are projected to contribute an additional \$10.6 Million to the county's tax receipts, which represents an increase of over 35% of Sheridan County's 2013 receipts. The Brook Mine would also represent 26% of all ad valorem/property taxes for the county by 2026. Please note that this analysis is conservative and ignores additional contributions from sales and use taxes, indirect property taxes from economic development as a result of the Brooks Mine, and other county revenue sources, which could be substantial.

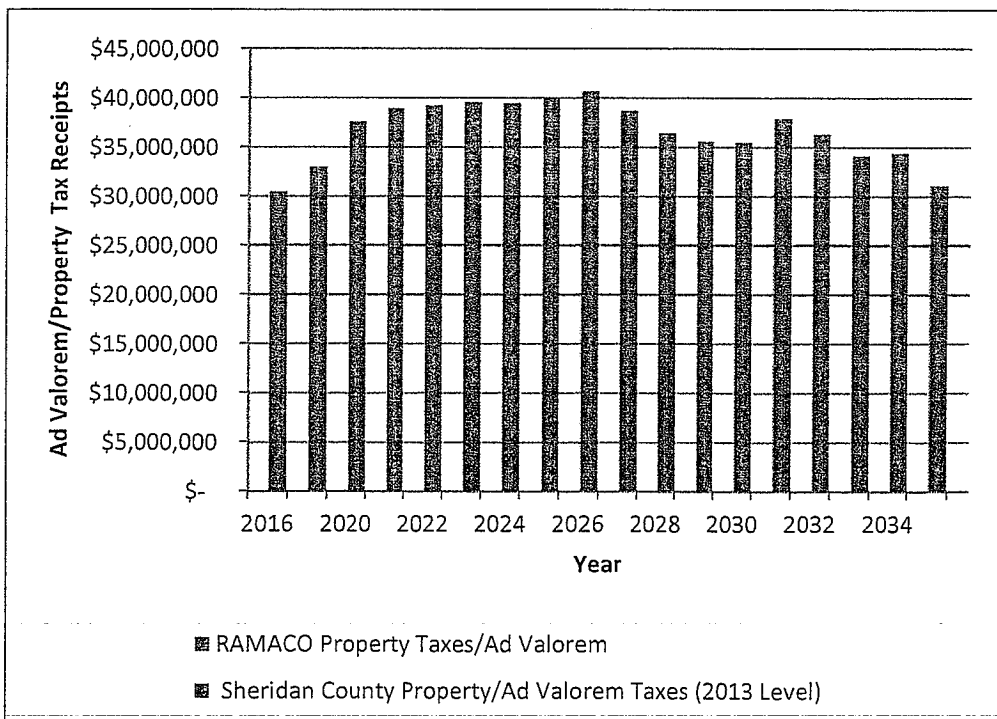


Figure 6 Projected Brook Mine Ad Valorem/Property Tax Contributions by Year

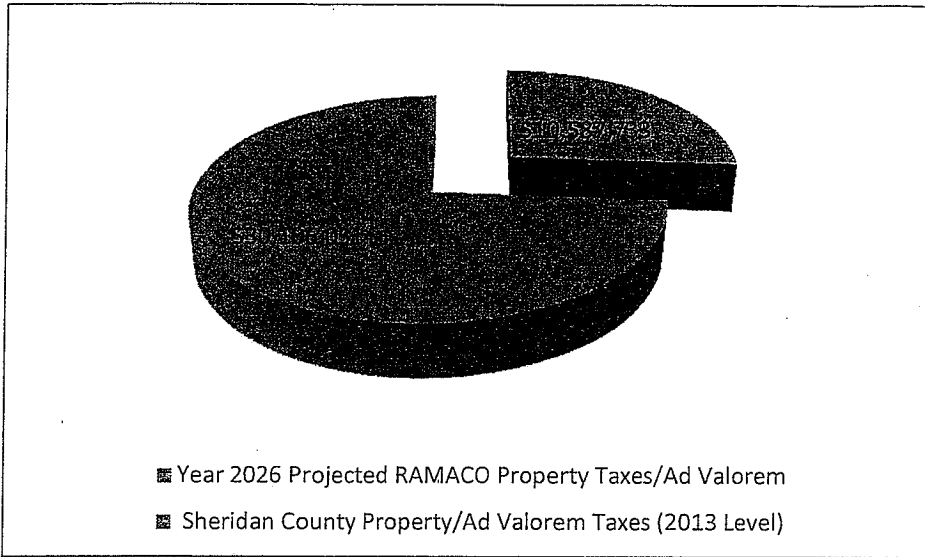


Figure 7 Brook Mine 2026 Property Tax/Ad Valorem total contribution.

This preliminary economic summary was developed based on the best available information from RAMACO at this time. RAMACO currently projects that all required permit documents and appropriate agreements will be in place to commence construction in 2015. However, factors outside of RAMACO's control may impact this schedule. Additional factors beyond RAMACO's control, including changes in the coal sales price will impact the ad valorem tax receipts.

For example, a one dollar per ton change in the price of coal is expected to result in roughly a \$0.07 change in tax receipts for that ton of coal. Therefore, a significant rise in coal prices may increase tax revenues. Conversely, a decrease in coal prices would negatively impact tax revenues. Adjustments in coal production rates may also impact tax revenues as well. A higher production rate will result in larger annual tax revenues but over a shorter time period. A lower production rate would result in lower annual tax revenues but they would be stretched out over a longer time period.

References:

2013, Considine, T.J. The Economic Value of Energy Resources on Federal Lands in the Rocky Mountain Region.

<http://www.westernenergyalliance.org/sites/default/files/2013%20Energy%20Dev%20Impact.pdf>

Report accessed on July 1, 2014.