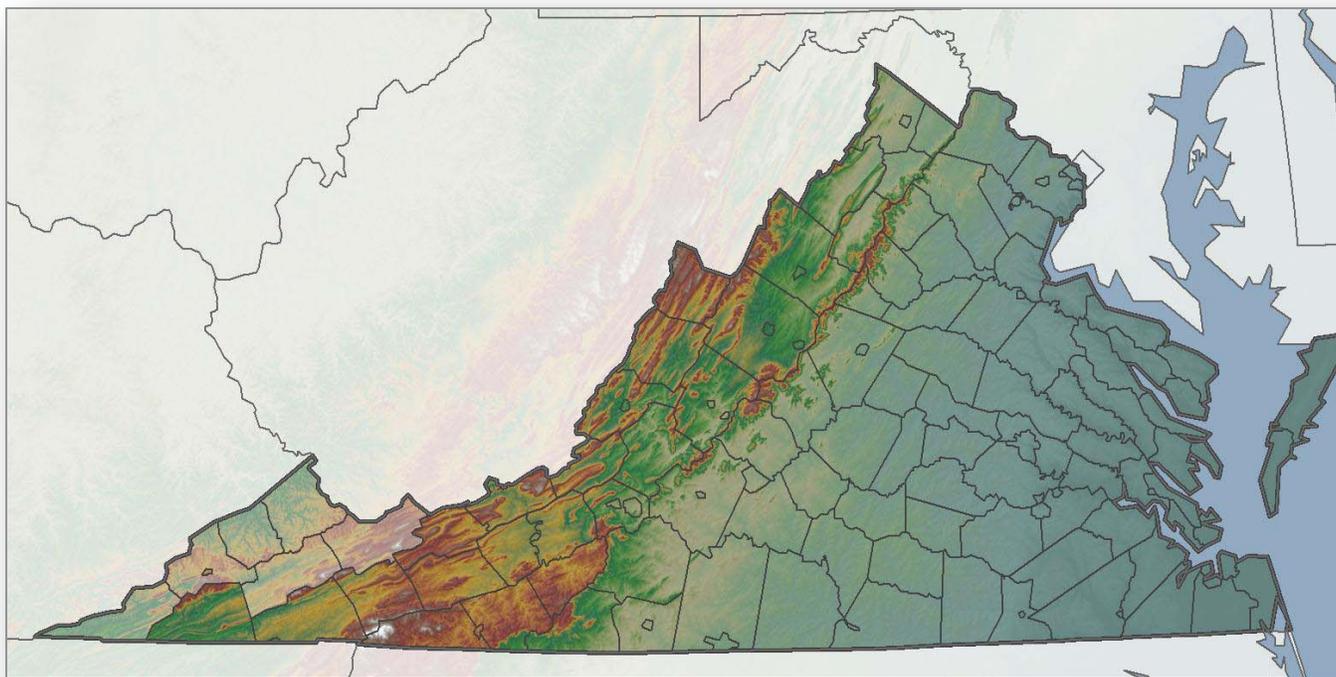


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ABOUT THE AUTHORS

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ABOUT THE PROJECT

In 2009, the Mountain Association for Community Economic Development produced a report titled *The Impact of Coal on the Kentucky State Budget* (Konty and Bailey, 2009). The report analyzed the Kentucky coal industry's net fiscal impact on the state budget by estimating the amount of tax revenues contributed by the industry, as well as the state expenditures associated with supporting the industry and its employees. The report found that the coal industry had a net negative impact on the state budget for Fiscal Year 2006, and concluded that while the coal industry provided significant benefits to the state and local economies in Kentucky, a true accounting of coal's economic impact must also consider the associated costs. For Kentucky, those costs were significant. The report's conclusions raise questions about Kentucky's policies related to energy and economic development, particularly given the realities of a decline in coal production, pending legislation that could reduce the competitiveness of Kentucky coal, and the growing impact of coal on economic, social, and environmental health.

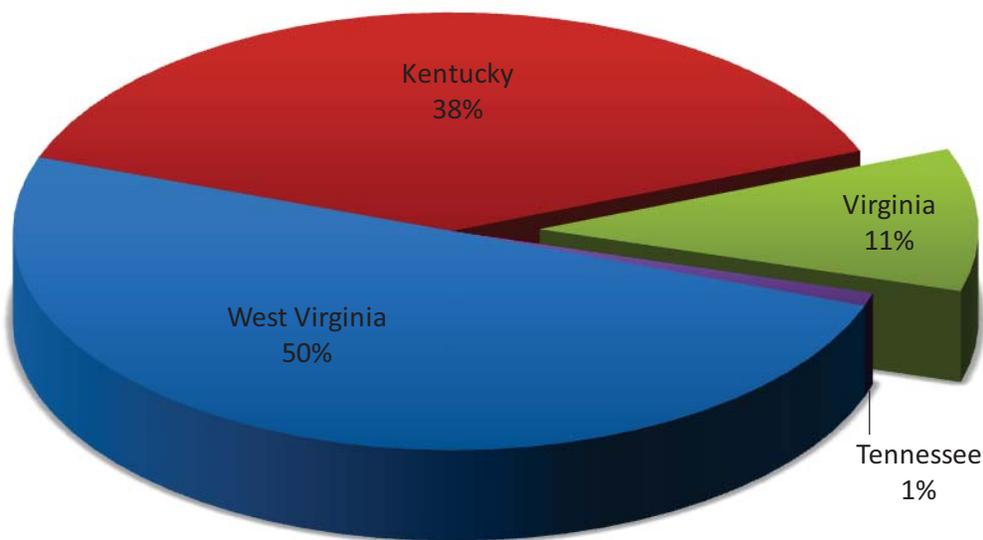
This Virginia report is one of three similar reports for other Central Appalachian states; the other two focus on Tennessee and West Virginia. The goal of these projects is to add to the public dialog so that policymakers at the county, state, and federal level can fairly assess the current benefits and costs of the coal industry and the potential for economic diversification.

EXECUTIVE SUMMARY

Coal plays a relatively insignificant role in the Commonwealth of Virginia’s overall economy; however, the industry does contribute millions of dollars in state revenue and provides well-paying jobs to thousands of Virginia residents, while providing a substantial portion of county revenues for a few southwestern counties. Despite these benefits, previous accounts of the economic impact of the coal industry for Central Appalachian states have only presented coal’s benefits; our estimates provide an initial accounting of both benefits and costs. Such an accounting is important, for projected declines in production, should they prove accurate, will further diminish coal’s contribution to state revenues, while the negative impacts resulting from coal industry activity will result in ongoing costs to the Commonwealth and its citizens.

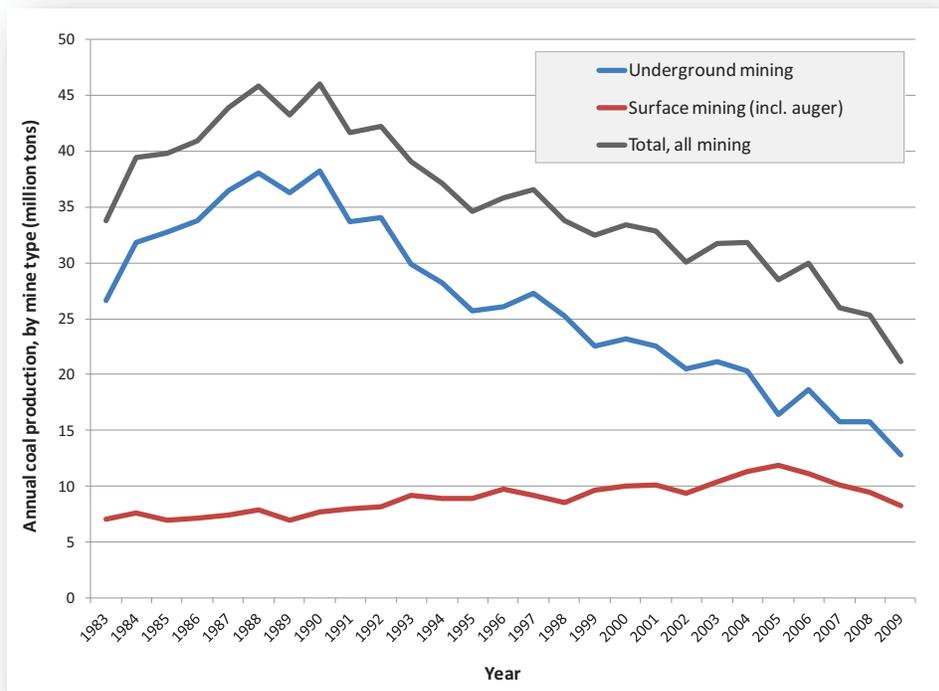
Virginia’s coal reserves are situated in the Central Appalachian coal basin, which produced approximately one-fifth of United States coal in 2008. Six of Virginia’s counties produced approximately 25.3 million tons of coal in 2008 and directly employed a reported 4,716 miners, managers, and upper-level staff. Of the coal-producing counties, production in only two of the counties—Buchanan and Wise—accounted for nearly 80% of total state production. Overall, Virginia coal accounted for 11% of all coal mined in Central Appalachia.

Figure ES-1: Central Appalachian coal production by state, 2008



Virginia’s peak coal production occurred in 1990 at nearly 46 million tons, representing 4.5% of total United States production. Since then, Virginia’s share has fallen to 2.2%, and annual production has declined by 45%, largely due to a 60% decline in underground coal production. Production from surface mining—generally the least expensive method of coal mining in Virginia, thereby helping Virginia coal maintain its price competitiveness—has increased by 23% since 1990, but has declined in recent years.

Figure ES-2: Annual coal production in Virginia by mine type, 1983-2009



Coal's importance for Virginia is not likely to grow in the future based on the declining competitiveness of Virginia coal resulting from the depletion of the lowest-cost coal reserves. Additionally, new regulations and technology requirements related to air emissions and tighter restrictions on surface mining are also likely to impact Virginia coal production, although to what extent is unknown. Should this occur, coal's contribution to the Commonwealth's budget and state and local economies will likely diminish. This reality raises questions about Virginia's priorities as they relate to economic policy and energy development, particularly for the coal-producing counties of the southwestern region.

In this report, we examine the net impact of the coal industry on the Virginia state budget by compiling data on and estimating both the tax revenues and the expenditures attributable to the industry for Fiscal Year 2009: July 1, 2008 through June 30, 2009. In calculating these estimates, there is an inherent degree of uncertainty associated with the results. We do not claim that our accounting of revenues and expenditures is precise; in fact, we round our estimates so as not to provide a false impression of precision.

Overall, when taking all revenues and expenditures into account, we estimate that the total net impact of the coal industry on the Virginia state budget in Fiscal Year 2009 amounted to a net cost to the Commonwealth of \$21.9 million. Examining the impact of the industry and its direct employees alone, and not accounting for tax expenditures, refunded tax credits or the impacts of indirect employment, we estimate a net benefit to the Commonwealth of \$7.0 million. However, including refunded tax credits and indirect employment is necessary for examining the true impact.

It is important to note that the impacts of coal extend beyond traditional accountings of revenues and expenditures. While this report focuses on the industry's net impact on the state budget for a single year, legacy costs resulting from past and future coal industry activity must be considered. These are important both for their potential impact on the availability of funds for various beneficial priorities, and for their future impact on the local and state economies, on the environment, and on the health of Virginia residents.

The following is a summary of findings for each of the revenues and expenditures examined in this report:

Direct coal industry: Revenues. The coal industry benefits the state budget through the payment of taxes and fees that contribute to the General Fund, either directly or indirectly. In Fiscal Year 2009, the coal industry provided an estimated \$8.5 million in revenues from the sales and use and corporate income taxes. In addition, local mineral property taxes paid by coal companies reduced demand on state funds for educational programming to the amount of \$6.6 million, bringing the total benefit of the coal industry to the state General Fund to approximately \$15.1 million. In total, coal industry contributions to the General Fund amounted to approximately 0.1% of total state-generated revenues. Based on a lack of coal-specific transportation-related taxes, we do not estimate the industry's contributions to the Transportation Fund.

Direct coal industry: On-budget expenditures. The Virginia state budget includes a variety of expenditures that exist only because of the Commonwealth's coal industry. We focus on coal-related expenditures that are paid for with general revenue and transportation funds. These include, for example, units of government within the Department of Mines, Minerals, and Energy, as well as expenditures for the repair of the Commonwealth's coal haul roads. We estimate that on-budget coal-related expenditures amounted to approximately \$11.2 million for Fiscal Year 2009. Comparing only the on-budget expenditures to the direct revenues generated by the industry, we estimate that the coal industry directly resulted in a net benefit to the state budget of approximately \$3.9 million in Fiscal Year 2009.

Direct coal industry: Off-budget expenditures. In addition to on-budget expenditures, we estimate off-budget expenditures in the form of tax expenditures. Typically, tax expenditures are foregone revenues resulting from the provision of tax exemptions, credits, and reduced or preferential tax rates. As such, these expenditures result in a loss of tax revenue to state government, thereby reducing the funds available for other government programs and services. We estimate that total tax expenditures provided to the coal industry amounted to \$37.4 million in Fiscal Year 2009. Only two expenditures—the Coalfield Employment Enhancement and Coal Employment and Production Incentive tax credits—accounted for 86% of the total tax expenditure for supporting the coal industry. Importantly, the impact of tax expenditures on the state budget are already largely accounted for as foregone revenues. Therefore, in our calculation of the net impact of the coal industry we include only the portion of the expenditures that was refunded to coal companies as a result of the credit value exceeding company tax liabilities. This cost amounted to \$14.2 million in Fiscal Year 2009.

Tax credits and exemptions represent an unnecessary cost to Virginia's taxpayers given that tax rates have little or no impact on coal production. This is primarily due to the fact that taxes represent only a small portion of the overall cost of doing business, and further, that market forces have a greater effect on coal production and employment than do tax credits and tax rates. For the most part, tax expenditures supporting the Virginia coal industry result in tens of millions of dollars in foregone revenue. However, due to a provision allowing coal companies to be refunded a portion of the value of certain tax credits if the value of the credits exceeds a company's tax liability, some tax credits also result in a direct cost to the state and its taxpayers.

Direct coal employment: Revenues and expenditures. While the coal industry generates business-related tax revenues for the Commonwealth associated with the mining of coal, the state budget also benefits through the collection of taxes paid by those directly and indirectly employed as a result of the Virginia coal industry. Therefore, a complete accounting of the impact of the coal industry on the state budget requires a calculation of the revenues and expenditures associated with coal-related employment. Approximately 4,649 Virginia residents were directly employed in the coal industry in Fiscal Year 2009 (slightly lower than the 4,716 reported coal mining employees in 2008). We estimate that total tax revenues related to direct employment in the coal industry amounted to \$23.1 million. However, state expenditures to support those employees amounted to approximately \$20.0 million. Therefore, we estimate that tax benefits for the state budget contributed by direct employees of the coal industry exceeded state expenditures for supporting those employees by approximately \$3.1 million.

Indirect employment supported by coal: Revenues and expenditures. When discussing the total economic impact of any industry, it is necessary to include not only the direct impacts in terms of employment, tax revenues, and expenditures, but also the indirect and induced impacts of the industry. The coal industry, like other industries, relies on other companies and generates economic activity and employment. To calculate the indirect impacts, we used the Regional Input-Output Modeling System economic impact multipliers for the coal industry in Virginia. For Fiscal Year 2009, we estimate that indirect employment attributable to coal industry activity generated approximately \$38.3 million in state revenues. However, state expenditures to support those employees amounted to approximately \$53.5 million. We therefore estimate that employment indirectly supported by the Virginia coal industry resulted in a net cost of approximately \$14.7 million for Fiscal Year 2009.

Legacy costs related to coal. While this report focuses on the impacts of the coal industry and its employees on the state budget, there are certain legacy costs that will continue to require funding long into the future. For example, in Virginia, as in other Appalachian states, there are numerous abandoned mine lands that have yet to be reclaimed despite decades of federal funding dedicated to that purpose. For Virginia, there have been 2,894 abandoned mine land sites identified, totaling 76,787 acres, of which only 22% have been reclaimed. While \$159.2 million had been spent to complete projects through September 2009, an additional \$436.8 million of work is required to reclaim the remaining sites. These legacy sites present a liability for the coal industry. Because the main funding mechanism in place to reclaim these sites is insufficient and scheduled to end in 2022, action is needed to ensure that reclamation is completed and that the costs are not shifted to taxpayers. If no action is taken, then the Virginia state budget could face additional expenditures in the future to finish the job of reclaiming these legacy sites.

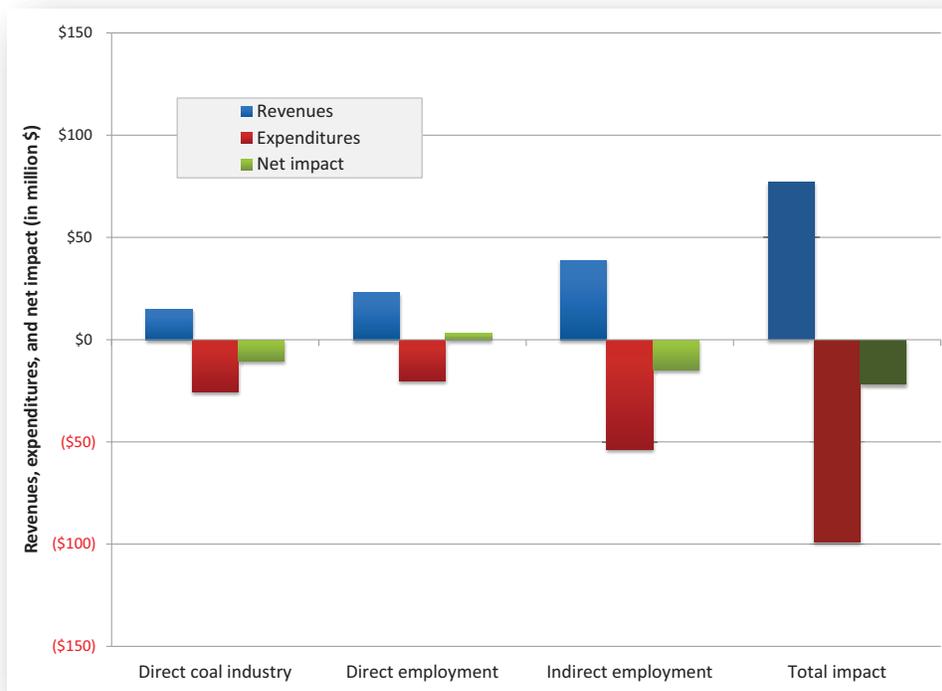
Conclusions and recommendations. Every job and every dollar of revenue generated by the coal industry provides an economic benefit for the Commonwealth of Virginia and the counties where the coal is produced; however, the net impact of the Virginia coal industry, when taking all revenues and expenditures into account, amounted to a net cost to the Commonwealth of \$21.9 million in Fiscal Year 2009.

While this number is a reasonable and plausible first approximation, it cannot be represented as a precise calculation. However, the estimates provided in this report are based on the data that are available, and provide a useful first step toward considering not just the industry's revenues, but its costs as well.

Table ES-1: The estimated impact of the coal industry on the Virginia state budget (detail)

Item	General Fund	Transportation Fund	Total
Direct coal industry			
Revenues	\$15,050,000	\$0	\$15,050,000
On-budget expenditures	(\$9,650,000)	(\$1,500,000)	(\$11,150,000)
Estimated net impact	\$5,400,000	(\$1,500,000)	\$3,900,000
Coal tax credit refunds	(\$14,200,000)	not calculated	(\$14,200,000)
Total net impact, direct coal industry	(\$8,800,000)	(\$1,500,000)	(\$10,300,000)
Direct coal employment			
Revenues	\$20,190,000	\$2,940,000	\$23,130,000
Expenditures	(\$17,080,000)	(\$2,940,000)	(\$20,020,000)
Estimated net impact	\$3,110,000	\$0	\$3,110,000
Indirect employment supported by coal			
Revenues	\$30,980,000	\$7,850,000	\$38,830,000
Expenditures	(\$45,660,000)	(\$7,850,000)	(\$53,510,000)
Estimated net impact	(\$14,680,000)	\$0	(\$14,680,000)
Total			
Revenues	\$66,220,000	\$10,790,000	\$77,010,000
Expenditures	(\$86,590,000)	(\$12,290,000)	(\$98,880,000)
Estimated net impact	(\$20,370,000)	(\$1,500,000)	(\$21,870,000)

Figure ES-3: Net impact of the coal industry on the Virginia state budget (summary, by category)



The process of thinking through the revenues and expenditures as they pertain to the coal industry, and the provision of these initial estimates, is of benefit for state policymakers in that it offers a better understanding of the role of the coal industry at the state level. We encourage the generation of additional data and the calculation of refined estimates to help move this dialog forward.

The following policy recommendations address the direct and indirect costs attributable to coal industry activity in Virginia, with the overall goal being to ensure that the costs are covered through revenues collected from the industry rather than being paid for by the public.

- Eliminate the Coalfield Employment Enhancement and Coal Employment and Production Incentive tax credits.
- Increase funding for the Virginia Coalfield Economic Development Authority and expand the organization's scope of work related to economic diversification.
- Create a Permanent Mineral Trust Fund, similar to such funds that are in place in many western states such as Wyoming and New Mexico, and invest the revenues in economic development.
- Ensure that funds for reclamation and water treatment of abandoned mines are sufficient for meeting all present and future needs.
- Require responsible fiscal accounting to better inform governmental budgetary decision-making.

Overall, state policy related to energy and economic development—to the extent that it supports the coal industry—should be reconsidered, and new policies should be enacted that reflect a recognition of these realities. In Section 9, we detail, analyze, and project the financial benefits of a combined policy recommendation consisting of: (1) eliminating the Employment Enhancement and Coal Employment and Production Incentive tax credit, (2) distributing the majority of the new corporate income tax revenues to VACEDA, and (3) using the remaining revenues to establish a permanent mineral trust fund. We recommend this approach because as coal production in Virginia declines in the future, the potential loss of state revenues will make it even more difficult to cover the annual and legacy costs of coal while also supporting economic diversification strategies for southwest Virginia's coal-producing counties.