RESPONSE TO CALVIN A. KENT AND KENT SOWARDS MEMORANDUM OF SEPTEMBER 13, 2010 ON "THE IMPACT OF COAL ON THE WEST VIRGINIA STATE BUDGET"

To: The Honorable Members of the West Virginia Joint Finance Committee,

Subcommittee B

From: Ted Boettner, West Virginia Center on Budget and Policy

Rory McIlmoil, Downstream Strategies

Date: November 15, 2010





To: The Honorable Chairs and Members of Finance Subcommittee B

We would like to thank you for the opportunity to present the findings of our study, "The Impact of Coal on the West Virginia State Budget," on September 13, 2010. The aim of our presentation was to expand the public dialogue and promote discussion of not just the benefits of the coal industry on our state's budget, but also the costs. We hope that the committee considers both the benefits and the full range of costs—now and in the future—in their consideration of state fiscal policy as it relates to the coal industry.

We present this memorandum to respond to the criticisms presented by Marshall University Professor Calvin A. Kent on September 13, 2010. Professor Kent, along with Kent Sowards of Marshall University, submitted to the committee a detailed memorandum outlining their response to our report (hereinafter referred to as the Kent Memo). Unfortunately, there was little time left in the committee meeting to respond to Professor Kent's presentation or the information contained in his submitted memorandum. We would now like to take the opportunity to do so.

First, we are very appreciative of Professor Kent's and Mr. Sowards' time and diligence in reviewing our report. We agree with a number of their suggestions and incorporate these into our updated findings and results, which are contained within this document. However, several of their critiques are simply incorrect and fail to acknowledge many of the costs associated with coal mining. To better illustrate these points, we offer a comprehensive response for your consideration.

We are encouraged that our report stimulated a dialogue, and we hope that the conversation continues and that the committee funds a more comprehensive study as suggested by Delegate Nancy Guthrie. Understanding the true impact of the coal industry for the state budget and for the economy is vital when making policy decisions pertaining to energy and economic development that will impact our state for years and decades to come.

We appreciate your time in reviewing the response, and please do not hesitate to contact us if you have any questions or comments.

With warm regards,

Ted Boettner, Executive Director

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West Virginia Center on Budget and Policy

Rory McIlmoil, Project Manager Downstream Strategies

EXECUTIVE SUMMARY

This response is structured in the same manner as the Kent Memo, and proceeds by first repeating each criticism and then responding. The first section addresses direct coal industry revenues, for which there is significant disagreement between our report and the Kent Memo on the methods used and the items that should be included in the analysis. The following sections address off-budget tax expenditures supporting the coal industry, as well as employment-related revenues and expenditures attributable to coal. At the end of this response, we provide a table detailing the revenues and expenditures associated with the coal industry for FY2009. This table is the same as the net impact table provided in our original report, but reflects our revisions based on the criticisms put forth in the Kent Memo that we feel are valid.

Direct coal industry revenues

Lack of consideration of coal's impacts on funds other than the General Revenue Fund and State Road Fund The Kent Memo argues that our report should have analyzed all Funds that make up the state budget, rather than just the General Revenue Fund (GRF) and State Road Fund (SRF). However, only the GRF and SRF exist as funds through which general state tax sources, including coal-related taxes and fees, are collected and distributed for the benefit of the public. This fact precludes inclusion of federal funds, Lottery Funds, and Special Revenue Funds. This allows us to estimate the net impact of coal more directly by excluding flows of money that (1) do not originate from the collection of general taxes applicable to all industries or citizens operating or living in West Virginia, and (2) are not expended on pre-determined priorities, as is the case with Special Revenues.

Exclusion of workers' compensation coal tax and special reclamation tax

If the coal industry did not exist in West Virginia, then the workers' compensation and special reclamation tax would not be necessary. We were correct to exclude the workers' compensation coal tax and special reclamation tax from our analysis, as these are Special Revenues collected specifically for the purpose of covering costs associated with past coal industry activity.

Exclusion of personal income tax revenues

We chose to exclude employment-related personal income tax (PIT) revenues from the direct coal industry revenues of our report, and instead calculated these revenues in the employment sections. Therefore, in our accounting of the total net impact of the coal industry on the state budget, we actually include PIT revenues paid by coal industry employees as a benefit to the state budget attributable to coal industry activity.

Exclusion of local property tax revenues

We agree with the Kent Memo that we should have included local property tax revenues in our analysis, rather than just the \$360,000 in state property tax revenues from coal. However, only \$31.5 million of local property taxes actually impact the state budget—rather than the \$90.8 million claimed by the Kent Memo. This is because the only cost to the GRF of an elimination of coal property tax revenues would be the additional State Aid to Schools funds to county school boards. The \$90.8 figure proposed by the Kent Memo is the total revenue for not just county school boards, but also county government and municipalities, and it is therefore inappropriate to attribute the full value as a benefit to the state (or, in other words, as an avoided cost to the state). We add \$31.5 million to our revised estimate of direct coal-industry revenues.

Partial exclusion of coal severance tax revenues

Transfers from the coal severance tax revenue stream to the Workers' Compensation Debt Reduction Fund and the Infrastructure Fund do not benefit the State budget, and indeed represent a cost to the state since they are effectively removed from the coal severance tax revenue pool, and thus the GRF. Therefore, our report does not account for them in the calculation of direct revenues attributable to the coal industry.

¹ For example, the health care provider tax that is included in the Special Revenue Fund is used to fund the state's Medicaid program.

Underestimation of corporate net income and business franchise tax revenues

Our estimate for coal-related corporate net income and business franchise tax (CNIT/BFT) revenues is accurate. While our estimate was \$6.6 million less than the estimate of \$25.6 million reported in "The West Virginia Coal Economy 2008," produced by West Virginia University's Bureau of Business and Economic Research and Marshall University's Center for Business and Economic Research (BBER/CBER), the discrepancy is explained by the difference in the period of analysis: our calculation covers FY2009, while BBER/CBER's covers calendar year 2008. Adjusting for this difference results in a new BBER/CBER value approximately equal to our own. Therefore, we consider our reported CNIT/BFT revenue value to be accurate.

In summary, we present a revised estimate for FY2009 direct coal industry revenues of \$338.8 million. This reflects an increase over our original estimate of \$307.3 million, and stands in contrast, for the reasons provided, to the estimate of \$676.3 million reported in the Kent Memo.

On-budget expenditures supporting coal: repairs to coal haul roads and bridges

The only criticism in the Kent Memo of our estimated on-budget expenditures for supporting or regulating the coal industry pertains to the estimated state expenditure for repairing damages to roads and bridges on coal haul roads that are not a part of the Coal Resource Transportation System (CRTS). The Kent Memo argues that we overestimated non-CRTS expenditures from the SRF because we (1) inappropriately extrapolated from per-mile costs for repairing CRTS roads in order to estimate non-CRTS expenditures, and (2) assumed that all damages were the result of the operation of coal trucks.

We respond by asserting that official state data for such expenditures, additional data and information pertaining to trucks operating on non-CRTS roads, and a more precise method for estimating non-CRTS expenditures are not available. Therefore, our original estimated expenditure of \$25.7 million for non-CRTS roads is the best available estimate generated using the best available data and information, and we maintain that total expenditures from the SRF for repairing roads and bridges damaged by coal haul trucks amounted to approximately \$93.0 million in FY2009.

Furthermore, we note that the estimated non-CRTS expenditure represents only 28% of our total estimated on-budget expenditure for repairing roads and bridges damaged by coal haul trucks, with the remaining 72% being spent for repairs to the CRTS. The Kent Memo's neglect of the expenditures pertaining to damages from overweight coal trucks operating on CRTS roads distracts from the primary purpose of, and conclusions drawn from our analysis of coal truck-related costs to the state budget, most notably that state taxpayers, rather than the coal industry, are paying a heavy cost for the operation of coal trucks on state roads, particularly on the CRTS roads in the southern counties.

Off-budget tax expenditures supporting coal

Presenting tax expenditures as a cost to the state budget is inappropriate

The Kent Memo generally questions the inclusion of tax expenditures in our accounting of the coal industry's net impact on the state budget. More specifically, while recognizing their impact as a source of foregone revenue, the Kent Memo argues against the consideration of tax expenditures by questioning the underlying assumption that they behave in the same manner as direct on-budget expenditures. However, Harvard economist Martin Feldstein, a former economic advisor to President Reagan and regular contributor to the *Wall Street Journal*, finds that:

"...because they [tax expenditures] result in the loss of revenue that would otherwise be collected by the government—they are equivalent to direct government expenditures. That's why tax and budget experts refer to them as "tax expenditures."

Purchase for resale tax exemption (for coal)

We agree with the Kent Memo that the "purchase for resale" tax exemption should not have been included in the report, as most other states do not tax these intermediate inputs and the exemption is uniform across all industries. Therefore, we deduct this expenditure, estimated at a value of \$85.5 million in our report, from the total estimated value for tax expenditures supporting the coal industry.

Direct use tax exemption for natural resource production and reclamation

We disagree with the Kent Memo that the natural resource production tax exemption, which applies to certain purchases made by coal companies in the process of producing coal, should have been excluded from our analysis. This is because the exemption is not uniformly applied to other businesses. Many West Virginia businesses pay a 6% sales tax on major inputs to their business, such as software. Unless the state moves to provide an across-the-board sales and use tax exemption for all direct use business purchases, we hold that these purchases qualify as a tax expenditure specifically aimed at supporting the coal industry. Therefore, we maintain that the direct use natural resource production exemption reflects a source of foregone revenue, and therefore a cost specifically associated with supporting coal industry activity.

Thin-seam coal tax credit

Finally, an off-budget expenditure not calculated in our report, but that represents a cost to the GRF that should have been accounted for, is the thin-seam coal tax credit, valued at \$68.7 million in 2008 and \$54.6 million in 2009. Therefore, the average value of the thin-seam tax credit for 2008 and 2009 was \$61.7 million, and we use this value in our revised estimate of off-budget expenditures supporting the coal industry in FY2009.

After adjusting for these revisions, our new estimate for total off-budget expenditures supporting the coal industry in FY2009 amounts to \$150.0 million. This represents a reduction of approximately \$23.8 million from our original estimate.

Expenditures supporting direct and indirect coal-related employment

The Kent Memo's primary argument relating to our calculation of employment-related expenditures is that our method errs in using a per-employee factor instead of a per-capita factor, and thereby overestimates state expenditures for supporting direct and indirect coal-related employment by assuming that the only people receiving benefits from state expenditures are those who are employed, when in fact all citizens receive benefits from state expenditures. While we recognize that there is more than one possible method for calculating state expenditures for coal employees, we maintain that there is a strong argument, and even a precedent, for estimating expenditures based on a per-employee factor.

Our method approximates the method used for a 1980 study titled "The Fiscal Impact of the Kentucky Coal Industry" that was commissioned by the Kentucky Legislative Research Commission and conducted by respected economist Richard G. Sims. The underlying assumption is that a coal miner's income supports more than just the miner, as it is likely that the miner is the primary income earner in the family. Therefore, state expenditures to support the coal miner automatically represent expenditures to support the miner's family members. Calculating an employment-related expenditure based on a per-capita factor, as recommended by the Kent Memo, ignores this fact. The Sims methodology, upon which our calculation was ultimately based, produces an estimate that nearly equals our own, and serves as a precedent that we choose to follow in conducting our analysis.

Revised estimate of coal's net impact on the state budget

The Kent Memo claims that the actual net impact of the coal industry on the state budget amounts to a benefit of \$490.2 million. As we explain in this response memo, this value is far from accurate. **Taking into** account and adjusting for the Kent Memo's valid criticisms, we present a revised estimate that the net impact of the coal industry on the West Virginia state budget amounted to a cost of \$42.2 million in **FY2009.**

The following table provides a breakdown of the revenues and expenditures attributable to the coal industry.

Table ES-1: Revised summary of revenues, expenditures, and net impact of the coal industry

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Item	General Revenue Fund	State Road Fund	Total
Direct coal industry			
Revenues	\$336,010,000	\$2,770,000	\$338,780,000
On-budget expenditures	(\$20,710,000)	(\$93,000,000)	(\$113,710,000)
Estimated net impact	\$315,300,000	(\$90,230,000)	\$225,070,000
Off-budget expenditures	(\$150,000,000)	not calculated	(\$150,000,000)
New estimated net impact	\$165,300,000	(\$90,230,000)	\$75,070,000
Direct coal employment			
Revenues	\$108,300,000	\$17,240,000	\$125,540,000
Expenditures	(\$106,410,000)	(\$19,480,000)	(125,890,000)
Estimated net impact	\$1,890,000	(\$2,240,000)	(\$350,000)
Indirect employment			
Revenues	\$128,900,000	\$39,000,000	\$167,900,000
Expenditures	(\$240,700,000)	(\$44,070,000)	(\$284,770,000)
Estimated net impact	(\$111,800,000)	(\$5,070,000)	(\$116,870,000)
<u>Total</u>			
Revenues	\$573,210,000	\$59,010,000	\$632,220,000
Expenditures	(\$517,820,000)	(\$156,550,000)	(\$674,370,000)
Estimated net impact	\$55,390,000	(\$97,540,000)	(\$42,150,000)

Legacy costs

While our analysis provides a snapshot of the coal industry's impact on the state budget for a single year (FY2009), it is perhaps of greater importance to recognize that this value fails to capture the significant legacy costs resulting from past coal industry activity that have yet to be funded. **These costs, which include** damages to roads and bridges and funding needs for reclaiming all abandoned mine land and bond forfeiture coal mine sites in the state, amount to nearly \$5 billion.

Therefore, we recommend that the committee act upon Delegate Nancy Guthrie's request for an independent, comprehensive report examining the full range of cost and benefits to the state and the public resulting from coal industry activity. Further, the Legislature should consider the information contained in our original report, as well as that provided in this document, and re-examine state policy as it relates to energy and economic development, to the extent that it supports the coal industry. The Legislature should consider enacting new policies that reflect a recognition of these realities, and that ensure that the coal industry, rather than the state taxpayers, pay for the costs associated with coal-related activity.

1. DIRECT COAL INDUSTRY: REVENUES

The Kent Memo asserts that our estimate of \$307.3 million in total direct coal industry revenue is less than half of the estimated \$676.2 million reported by West Virginia University's Bureau of Business and Economic Research and Marshall University's Center for Business and Economic Research (BBER/CBER), and therefore underestimates coal-related revenue by \$360 million. This section addresses each direct coal industry-related revenue; however, it first addresses the exclusions for which the Kent Memo claims our report was in error.

1.1 Excluded tax revenues

The Kent Memo claims that our report should have included revenues from the workers' compensation coal tax, special reclamation tax, and personal income taxes (PIT). The workers' compensation tax and special reclamation tax are collected specifically for paying off previous debts resulting from costs associated with coal industry activity. The PIT is a separate case, as discussed in this section.

Workers' compensation taxes and special reclamation fees are Special Revenues, and are collected solely for the purpose of ensuring that the coal industry, rather than the public, is required to pay for historical costs resulting from coal industry activity. Therefore, they are not a shared public responsibility or benefit, and neither contributes to the state budget since they do not impact the General Revenue Fund (GRF) or State Road Fund (SRF). Assuming the taxes and fees collected are at least equal to the estimated cost of coal-related workers' compensation claims and reclamation needs—as they should be—then the net impact of these revenues is zero, at best. In total, the value of these two revenues as reported in the BBER/CBER report is an estimated \$93.6 million for 2008.

In relation to PIT, contrary to the assertion in the Kent Memo, we included PIT revenues. However, we represent it as a revenue attributable to direct coal employment—as PIT is a tax paid by the employee—rather than as a revenue attributable to the coal companies. In our accounting of net impact, both industry-related and employment-related revenues (and expenditures) are considered together, meaning that the PIT revenues are still attributed to the coal industry; they are merely presented in the chapter on employment rather than on direct industry impacts. We attribute a total PIT revenue of \$128.9 million to the coal industry, as paid by those directly and indirectly employed as a result of coal industry activity. This value is approximately \$86 million greater than the \$46 million in coal-related PIT revenues reported by BBER/CBER.

1.2 Property taxes

The Kent Memo asserts that our report errs by excluding local government collections of coal-related property taxes, and responds by stating the following:

- 1. The omission of local property taxes is a major error as the GRF would by law have to pick up some of the expenses which now are covered by property taxes.
- 2. As the Public School Support Program (PSSP) is tied to both property taxes and the GRF, the inclusions of the local share portion would be appropriate.
- 3. In 2008, the expenditures that would have to be made up via general revenue funds given the elimination of coal related real and personal property were approximately \$90.8 million.

Property taxes are primarily levied by local governments and school districts, and do not play a major role in the state budget. The state does levy a property tax, but it is only 0.4% of levied property taxes. For the coal industry, this amounted to approximately \$360,000 in FY2009.

² BBER/CBER (2010) The West Virginia Coal Economy 2008. http://www.be.wvu.edu/bber/pdfs/BBER-2010-04.pdf Feb.

We agree that our report should have considered the increase in local education aid (via the PSSP) from the state GRF due to the elimination of coal property (real and personal) from county school board valuations. However, it would be an arduous task to arrive at a precise estimate given that the West Virginia Property Tax Division does not compile coal property (real and personal) valuations for each county. That said, it is erroneous to count the entire \$90.8 million as revenue "that would have to be made up via general revenue funds," because the only cost to the state GRF would be the additional State Aid to Schools funds to county school boards that would result from a drop in coal property taxes. The \$90.8 million in the Kent Memo represents total revenue for not just county school boards, but also county government and municipalities. County government and municipalities could make up this lost revenue by increasing levy rates and/or business taxes and fees. It is therefore inappropriate to attribute the full value as a benefit to the state.

The school aid formula (Public School Support Program) is used to calculate a minimum school funding allowance for each school district. Each school district is responsible for its own share of the funding under the formula, which totaled 80% of regular school levy property tax collections in 2009. Subtracting the school district's share from the funding allowance gives the total aid provided by the state. In 2009, the total funding allowance for all school districts was about \$1.52 billion. Regular school district property tax collections were about \$463 million, making the total local share about \$373 million (80% of \$463 million = \$373 million). Subtracting \$373 million from the total allowance of \$1.52 billion gives a state's payout of about \$1.15 billion.

Because of the school aid formula, property taxes paid by the coal industry contribute to the local share, which lowers the state contribution to county school districts. The estimated \$90.8 million paid by the coal industry includes all property taxes, which are paid to the state, counties, municipalities, and school districts, as well as through regular and excess levies. The school aid formula only accounts for property taxes paid to county school districts, and then only those raised by the regular levy. In 2009, 66.5% of property taxes were collected by school districts, and of that about 49.7% were collected through the regular levy rate. This means that of the \$90.8 million paid by the coal industry, about \$29.7 million (66.5% of \$90.8 million is \$59.8 million. 49.7% of \$59.8 is \$29.7 million) is factored into the school aid formula.

Taking out the \$29.7 million from local collections (\$463 million) leaves \$433.3 million, making the local share \$346.6 million (80% of \$433.3 is \$346.6 million). This would increase the school aid from the GRF from \$1.149 billion to \$1.175 billion, a difference of about \$31.5 million, assuming the funding allowance stays the same. Therefore, local property taxes paid by the coal industry save the state about \$31.5 million, due to the school aid formula. This amounts to \$59.3 million less than the Kent Memo contends. We include this as a state benefit of \$31.5 million in our revised accounting of direct coal revenues at the end of this section.

1.3 Coal severance tax

The Kent Memo correctly states that we present a coal severance tax revenue that is 70% of the value reported in the BBER/CBER report. The BBER/CBER report presented a total coal severance tax revenue of \$412.7 million for *calendar year 2008* (CY2008). Table 2 of our report presents a gross revenue of \$371 million for *fiscal year 2009*—our year of analysis—for a difference of \$41.7 million. This fact alone, that our years of analyses are offset by six months, accounts for much of the difference in our estimates.

An additional difference, as the Kent Memo points out, is that our report deducts for distributions to local government (\$35.5 million), and for transfers of severance tax revenue to the Workers' Compensation Debt Reduction Fund (\$35.6 million) and the Infrastructure Fund, and calculates that the actual benefit to the State arising from the coal severance tax amounted to \$281.4 million for FY2009.

While our report recognizes that the coal severance tax benefits local governments and municipalities, we exclude distributions to local governments—amounting to \$35.5 million in FY2009—because these revenues are not deposited into either the GRF or the SRF, and as such do not impact the state budget. A loss in county severance tax revenues is not covered by increased state funds, and counties could raise levy rates or enact

fees to make up this lost revenue. Moreover, county distributions of coal severance tax revenues are at the whim of market forces (production and price) associated with coal, and the State does not guarantee a minimum distribution to counties should production or price levels fall.

Therefore, county distributions of the coal severance tax do not impact the State budget, and we did not consider them in our accounting of the net impact of the coal industry.

We exclude coal severance tax revenue transfers to the Workers' Compensation Debt Reduction Fund and Infrastructure Fund for the same reason that we exclude consideration of Special Revenues—that these are transfers made in order to cover costs associated with past coal industry activity, and do not impact the GRF or SRF. However, both the BBER/CBER report and the Kent Memo ignore this fact.

The Kent Memo states that without these transfers, "The state might have to pick up at least some of these costs from general revenue if the severance tax were eliminated. This is certainly the case for the Workers' Compensation Debt Reduction Fund. The worst case scenario would be for these programs to go unfunded." This statement misses, or neglects to address, a few important points:

- 1. The state already collects a separate workers' compensation coal tax for purposes of paying off the "Old Fund," a tax that generated nearly \$80 million in FY2009. This means that the reduction of the "Old Fund" debt resulting from coal-related tax payments would continue unabated (and would therefore not be "unfunded" as the Kent Memo claims) as long as the tax remains in place.
- 2. The transfer from the coal severance tax to the Workers' Compensation Debt Reduction Fund only began after the State assumed responsibility in 2005 for the "Old Fund" debt related to workers' compensation claims, and was only meant to be a short-term transfer through FY2009.
- 3. As such, the transfer represents a source of lost revenue from the coal severance tax, and therefore cannot be represented as a revenue benefiting the state budget. The transfer is more appropriately considered as a cost to the state associated with coal of \$35.6 million for FY2009.
- 4. Transfers to the Infrastructure Fund, authorized by the 1994 Infrastructure Improvement Amendment, are dedicated to servicing debt and paying off outstanding principle on nearly \$270 million from bonds issued for economic development and water treatment projects between 1996 and 2000. These transfers reduce the amount of coal severance tax revenues deposited into the GRF, thereby rendering them unavailable for public benefit.

These three distributions—to local governments, the Workers' Compensation Debt Reduction Fund, and the Infrastructure Fund—amounted to a total of \$89.5 million in FY2009. Adjusting the coal severance tax revenue reported by BBER/CBER accordingly reduces the value to \$323.2. Further adjusting the value to account for the discrepancy resulting from the difference in the period of analysis reduces the BBER/CBER value to \$281.5 million, approximately equal to our reported value of \$281.4 million.

1.4 Corporate Net Income and Business Franchise taxes

After repeated requests made to the West Virginia Department of Revenue (WVDOR) and the Governor's Office for data on the corporate net income and business franchise taxes (CNIT/BFT) paid by the coal industry in FY2009 were rejected or ignored, the West Virginia Center on Budget and Policy (WVCBP) submitted a Freedom of Information Act request on April 16, 2010 to the WVDOR to obtain this information. WVDOR responded on April 21, 2010, informing WVCBP that the department "does not have the requested records in its possession." Keeping in mind that such data were provided to the authors of the BBER/CBER report, WVDOR responded to our own request by stating that:

Valid statistical allocation to the coal industry is not possible without significant additional research. The Freedom of Information Act does not require an agency to do research, to analyze data or to create records in order to respond to a Freedom of Information Act request.

Because WVDOR was unwilling to provide this information, our only course of action was to employ the method of multiplying total CNIT/BFT collections in FY 2009 (\$270.2 million) by the percent of Gross State Product generated by the coal industry, which we estimated to be approximately 7%. This resulted in an estimated CNIT/BFT revenue attributable to coal of \$19.0 million.

This methodology produced a revenue estimate of approximately \$6.6 million less than the estimate of \$25.6 million contained in the Kent Memo. However, this discrepancy may be lessened by an adjustment for the period of analysis. For instance, total CNIT and BFT revenues fell by \$118 million between FY2008 and FY2009, representing a decline of 30%. Applying that rate of decline to the \$25.6 million in CNIT/BFT reported by BBER/CBER results in an adjusted CNIT/BFT revenue attributable to coal of \$17.9 million—or, approximately \$1 million less than our own reported CNIT/BFT revenue.³

After adjusting for observed declines in total CNIT/BFT revenues on the state level, our reported revenue approximates the true value, meaning that our methodology produced a highly precise result. In short, adjusting BBER/CBER's value for the decline in total state CNIT/BFT collections between FY2008 and FY2009 produces a result approximately equal to our estimate. Therefore, we will assume that our CNIT/BFT value for FY2009 is accurate.

1.5 Conclusion: Direct coal-related revenues

Table 1 provides a new comparison of direct coal industry revenues. In order to make a more direct comparison, the table excludes personal income taxes from both sides, and the final row adjusts the BBER/CBER totals to reflect the decline in coal severance tax revenues and the CNIT/BFT revenues between 2008 and 2009.

Table 1: Comparison of direct coal industry revenues (in milli	on \$)

		Downstream	
Tax type	BBER/CBER 2008	FY2009 (revised)	Difference
Local property tax	\$90.8	\$31.5	\$59.3
State property tax	\$0.0	\$0.4	(\$0.4)
Coal severance tax	\$412.7	\$281.4	\$131.3
Workers' compensation	\$80.0	\$0.0	\$80.0
CNIT/BFT	\$25.6	\$19.0	\$6.6
Special reclamation	\$13.6	\$0.0	\$13.6
Sales and use	\$3.6	\$3.7	(\$0.1)
Coal Resource Transportation Road Fund	\$3.9	\$1.7	\$2.2
Overweight truck fees	\$0.0	\$0.8	(\$0.8)
Coal company donations	\$0.0	\$0.3	(\$0.3)
Personal income	n/a	n/a	n/a
Total direct coal industry revenue	\$630.2	\$338.8	\$291.4
Adjusted	\$579.8	\$338.8	\$241.0

As the table shows, before adjusting the BBER/CBER revenues for the difference in the time period of analysis, their reported total for direct coal industry revenues amounts to \$630.2 million, as compared to the original CY2008 total of \$676.2 million. The difference is that PIT values are removed since they are an employment-related revenue. Adding \$31.5 million for local coal-related property taxes brings our own total for direct coal industry revenues to \$338.8 million, up from our previously reported total of \$307.3 million.

³ This calculation requires further adjustment for the difference in CNIT/BFT revenues between CY2008 and FY2009, rather than between FY2008 and FY2009, as was done here. However, it is unlikely that such a refinement would produce a significantly different result.

This revision reflects our agreement with the Kent Memo that we failed to account for local property tax revenues that—in the absence of coal-related property taxation—would have been replaced by state funds from the GRF. Given our responses to various criticisms in the Kent Memo, we would argue that the BBER/CBER report overestimated coal industry revenues by \$291.4 million. However, some of the BBER/CBER-reported revenues must be adjusted for the difference in the time period of analysis.

Making those adjustments, as shown in the bottom line of the table, results in a BBER/CBER total direct coal industry revenue of \$579.8 million. No similar adjustments are required for the our data because we adjusted the CY2008 BBER/CBER values to reflect declines in CNIT/BFT and coal severance tax revenues between 2008 and FY2009. The new data show that the BBER/CBER report over-reports the coal industry's direct, non-employment contribution to the State budget by \$241 million, and that the actual direct contribution of the coal industry to the state budget is \$338.8 million.

2. DIRECT COAL INDUSTRY: ON-BUDGET EXPENDITURES

The only criticism in the Kent Memo of our estimated on-budget expenditures for supporting or regulating the coal industry pertains to the estimated state expenditure for repairing damages to roads and bridges on coal haul roads that are not a part of the Coal Resource Transportation System (CRTS).

2.1 Expenditures for repairing roads and bridges damaged by coal trucks

The Kent Memo asserts that our report incorrectly attributes all damages to non-CRTS roads to the operation of coal trucks, stating that "it is not clear" whether our decision to extrapolate our estimated per-mile repair cost for CRTS roads to non-CRTS roads is "appropriate," given that the maximum weight allowed on non-CRTS roads is 80,000 pounds while the maximum weight allowed on CRTS roads is 120,000 pounds.

As background, our estimated state expenditure for repairing non-CRTS roads and bridges amounts to \$25.7 million, while CRTS expenditures amount to \$67.3 million, for a total FY2009 state expenditure of \$93.0 million for repairing roads and bridges damaged by coal trucks. Therefore, by focusing solely on our calculation of non-CRTS expenditures, the Kent Memo only criticizes 28% of our estimated expenditure, and does not raise any concerns or issues with the remaining 72% of our estimated cost. This neglect of the expenditures pertaining to damages from overweight coal trucks operating on CRTS roads distracts from the primary purpose of, and conclusions drawn from our analysis of coal truck-related costs to the state budget.

For instance, the West Virginia Division of Highways (WVDOH) recognized as recently as 2009 that "The financial resources needed for highway and bridge repair on the CRTS exceeds the amount of funds available for those purposes..." and that "The major concern of the WVDOH continues to be the collection and dedication of sufficient revenues to enable the maintenance and repair of the growing number of CRTS roads and bridges."

The Kent Memo also fails to recognize that FY2009 coal industry contributions to the SRF—amounting to a mere \$2.8 million—fall far short of providing funds sufficient for covering damages to CRTS roads and bridges resulting from the operation of overweight coal trucks. Further, the Kent Memo does not speak to the primary conclusion of this section of our report: that state taxpayers, rather than the coal industry, are paying a heavy cost for the operation of coal trucks on state roads, particularly on the CRTS roads in the southern counties.

⁴ It should be noted that with the tolerance levels allowed—namely, a 5% tolerance for 120,000 pound trucks and a 10% tolerance for 80,000 pound trucks—the actual allowable weights for coal trucks on CRTS roads is 126,000 pounds, while that for non-CRTS roads is 88,000 pounds.

Further, the Kent Memo neglects to recognize that—as we describe in our report—WVDOH has estimated an unfunded cost of \$300 million for repairing CRTS bridges damaged by overweight coal trucks, in addition to a 2002 estimate of \$2.8 billion for repairing damages to coal haul roads merely "to meet minimum federal standards." Adjusting for inflation and the expansion of the haulroad system, our report estimates a total unfunded "legacy" cost for repairing previous damages to roads and bridges resulting from the operation of coal trucks to \$3.7 billion. In total, the unfunded legacy cost on state roads and bridges associated with coal truck damages amounts to an estimated \$4 billion. This is significant because state data show that damages to the CRTS are increasing as the system expands, and as the number and average weight of CRTS permits continue to grow.

Finally, to address the criticism of our non-CRTS expenditure estimate, we recognize the uncertainty in our method for estimating non-CRTS expenditures. The true non-CRTS expenditure may or may not amount to \$25.7 million; however, without an official state estimate, it is impossible to confirm the accuracy of our estimate. To be fair, it is not known whether the actual expenditure on non-CRTS roads is less than or greater than our estimate, as the true value depends on which improvements were actually funded in FY2009.

Therefore, lacking official state data for such expenditures, additional data and information pertaining to trucks operating on non-CRTS roads, and a more precise method for estimating non-CRTS expenditures, we continue to use our original estimated expenditure of \$25.7 million for non-CRTS roads. We invite a refinement of our analysis by WVDOH or an independent commission.

3. DIRECT COAL INDUSTRY: OFF-BUDGET EXPENDITURES

The Kent Memo has the following to say about our inclusion and calculation of off-budget tax expenditures:

The Downstream report indicates that two significant "tax expenditures" have the same fiscal impact of on-budget government expenditures. The two largest identified in the report ("Purchase for resale" and Natural Resource production" tax exemptions) account for approximately \$168 million (or roughly 96% of the \$173 million total off-budget tax expenditures supporting coal).

In general terms, while "tax expenditures" lessen the ability of state government to expend for service provision, the assumption that they behave in the manner as direct on-budget expenditures is misleading. If that logic were to hold, all exemptions or tax rates at anything lower than 100 percent could be considered "tax expenditures." It may be foregone revenue, but not necessarily a hard cost to the state.

For the "Purchase for resale" component, the authors apply the general 6% sales and use tax rate to an estimated \$1.4 billion gross coal production value for FY 2009. The resulting \$85.5 million dollar "tax expenditure" estimate has a more methodological problem. The coal produced and distributed to power plants, manufacturers and other consumers' is not a final product for the vast majority of tonnage purchased. In the case of electricity generation, coal is a intermediate input to the final product/service and would not necessarily be taxable at the sales and use rate of 6%.

Only states with a gross receipts tax or some version of value-added taxation taxes inputs to final products. In such cases the input is taxed when it is sold to the user and taxed again when it is included in the final product. To do so creates "pyramiding" or double taxation. This exclusion of applying the sales and use tax to inputs is extended to all business in the state, not just to mined coal and is justified by sound economic theory.

While the estimator employed in determining the direct use tax exemption for the coal industry (7% of GDP attributable to coal multiplied by the total direct use exemption for all applicable activities) may be reasonable, the question remains regarding the appropriateness of classifying this exemption as another hard cost.

To respond, we cite WV Code § 11-10-5s(c), which defines tax expenditures as "exclusions, deductions, tax preferences, credits and deferrals designed to encourage certain kinds of activities or to aid taxpayers in special circumstances." Additionally, as noted in our report, the Tax Department's reports on state tax expenditures recognizes that programs funded through tax expenditures are, in effect, receiving priority funding over other programs.

While economic benefit in terms of job creation or revenue generation may result, the Tax Department also notes that tax expenditures "tend to reduce economic efficiency through promotion of some economic activities over others," and, perhaps more importantly, that "the value of the expenditures should be minimized because their cost is distributed among other taxpayers."

Harvard economist Martin Feldstein, a former economic advisor to President Reagan and regular contributor to the *Wall Street Journal*, finds that:

"...because they [tax expenditures] result in the loss of revenue that would otherwise be collected by the government—they are equivalent to direct government expenditures. That's why tax and budget experts refer to them as "tax expenditures."

The conservative Tax Foundation maintains that:

"...economists all over the political spectrum agree...that tax expenditures are really just spending in disguise and that their use shrinks the tax base and forces up tax rates. States are effectively subsidizing all the activities associated with their tax expenditures, like higher education, home ownership, or renewable energy...When tax expenditures are correctly viewed as spending, it becomes clear that states need to be accountable for how much they are spending through their tax codes..."

Tax expenditures are often referred to as "foregone revenue" since they are one way for applying the general tax regime to pursue a policy objective. Tax expenditures tend to generate horizontal inequity, given that not all people or companies have the same consumption needs or preferences. They also generally require higher tax rates in order to collect a given amount if part of the potential revenue is lost through tax expenditures.

From a strictly budgetary point of view, the difference between tax expenditures and direct spending is that the latter is carried out over two stages. Direct spending includes the revenue and the payment or transfer of the subsidy, whereas tax expenditures only cover the payment. Excluding tax expenditures from budget accounting violates the budget principle of non-compensation of revenues and costs.

The most common approach in estimating the value of tax expenditures is the "revenue foregone approach" that is included in the official West Virginia Tax Expenditure studies. This approach measures how much tax revenue is reduced, relative to a benchmark, for each tax expenditure, based on no behavioral changes. The "revenue gain approach" measures how much revenue could increase if a particular tax expenditure were removed after adjusting for behavioral effects associated with the change. While the latter would be preferable in determining the revenue cost of tax expenditures, there are considerable practical difficulties in producing these estimates. These difficulties include assuming a range of policy outcomes, the price elasticity of coal and responsiveness of coal companies, and other information about the behavior of coal companies and the behavior of taxpayers affected by the policy change. Given the enormity of such an undertaking, and the impracticality of employing such a technique, our report used the standard method of estimating the cost based on the value provided in the 2010 West Virginia Tax Expenditure Report.

However, we agree with the Kent Memo that the "purchase for resale" tax exemption should not have been included in the report, as most other states do not tax these intermediate inputs and the exemption is uniform across all industries. That said, the application of the "direct use exemption" for natural resource production should be included because the exemption is not uniformly applied.

The direct use "natural resource production" tax exemption applies to certain purchases made by coal companies in the process of producing coal and reclaiming mined lands. Businesses in West Virginia and across the nation pay sales taxes on many of their inputs (business purchases). Alan D. Vaird, a resident fellow at the conservative American Enterprise Institute for Public Policy Research, noted in *Tax Analysts* that sales taxes paid by business purchases amounted to "roughly 40% of nationwide sales tax revenue."

In 2009, the Tax Foundation examined 20 types of taxes on business purchases in each state that levied a sales tax and found that almost every state taxes some form of business-to-business transaction. For example, Hawaii taxes 18 of the 20 types of purchases surveyed, including for "raw materials." West Virginia applied a sales tax to 12 business-to-business transactions. Many states even apply a sales tax to manufacturing equipment purchased by businesses.

Unlike the coal industry, which does not pay a sales tax on certain purchases, many businesses in West Virginia must pay a 6% sales tax on major inputs into their businesses that they then sell to customers. For example, according to the Tax Foundation, West Virginia does not provide an exemption for business purchases on software, even though this is a major input for many of our state's businesses. In sum, unless West Virginia moves to provide an across-the-board sales and use tax exemption for all direct use business purchases, then we hold that these purchases qualify as a tax expenditure specifically aimed at supporting the coal industry.

Finally, an off-budget expenditure not calculated in our report that should have represented a cost to the GRF was the thin-seam coal tax credit, valued at \$68.7 million in 2008 and \$54.6 million in 2009. Therefore, the average value of the thin-seam tax credit for 2008 and 2009 was \$61.7 million, and we will use this value in our new calculation of off-budget expenditures supporting the coal industry in FY2009.

This credit, similar to the direct use exemption, is included in the West Virginia Tax Expenditure Report as a tax expenditure and should be reflected as a cost to the state unless proven otherwise. Another off-budget expenditure that should have been included in the report is the Economic Opportunity Credit. However, we could not include this as a cost because WVDOR failed to provide the amount of the expenditure.

Overall, given our agreement with the Kent Memo that the Purchase for Resale tax expenditure (\$85.5 million) should not have been included, our assertion that the direct use tax exemption for natural resource production (\$82.5 million) should be included, and our decision to include the thin seam tax credit (\$61.7 million), we present a new total for estimated off-budget expenditures supporting the coal industry.

Total off-budget tax expenditures supporting the coal industry in FY2009 amount to an estimated \$150.0 million. The new estimate reflects a reduction of \$23.8 million from the previous estimate of \$173.8 million.

Table 2: Off-budget expenditures supporting coal

Tax expenditure	Applicable taxes	Amount	Percent of total
Direct use exemption (natural resource production)	Sales and use taxes	\$82,480,000	55%
Thin-seam tax credit	Coal severance tax	\$61,650,000	41%
Residual tax credits	Coal severance tax, CNIT, BFT	\$3,350,000	2%
Waste coal tax credit	Coal severance tax	\$1,870,000	1%
Coal loading facilities credit	Coal severance tax, BFT	\$600,000	0%
Annual credit	Coal severance tax	\$50,000	0%
Total		\$150,000,000	100%

4. STATE EXPENDITURES SUPPORTING COAL-RELATED EMPLOYMENT

The Kent Memo's primary argument related to our calculation of employment-related expenditures is that our method errs in using a per-employee factor instead of a per-capita factor. In other words, our method uses "percent of total employment," and multiplies that percentage by the remaining state expenditures from the GRF and SRF after subtracting for on-budget expenditures. The Kent Memo argues that this method overestimates state expenditures for supporting direct and indirect coal-related employment by assuming that the only people receiving benefits from state expenditures are those who are employed, while in fact all citizens of the state, whether employed or not, receive benefits from state expenditures.

Arguing for the alternative method of using a per-capita factor for estimating employment-related expenditures, the authors of the Kent Memo state that:

"A more accurate estimate uses the methodology of the U.S. Census Bureau and the Bureau of Economic Analysis, [which] is to allocate expenditures over the entire population of a state, since...all its citizens receive benefits from state expenditures."

First, neither the US Census Bureau nor the Bureau of Economic Analysis has an official method for allocating state expenditures for employees or residents. However, we recognize that there is more than one possible method for calculating state expenditures for coal employees. Still, we maintain that there is a strong argument, and even a precedent, for estimating expenditures based on a per-employee factor.

We chose our method in order to ensure methodological consistency with a similar 2009 report for Kentucky published by the Mountain Association for Community Economic Development (MACED), which, in turn, drew upon a 1980 study titled "The Fiscal Impact of the Kentucky Coal Industry," commissioned by the Kentucky Legislative Research Commission and conducted by respected economist Richard G. Sims. The Sims report estimated state coal-related employment expenditures by calculating the ratio of state population to total non-agricultural workers, and applying that ratio to total coal-related employment in order to estimate the number of citizens whose family incomes "may be termed coal related." Sims multiplied that number by the average per-capita expenditure to come up with the state coal-related employment expenditure.

While this method takes a longer route than our own, the underlying assumption is the same: that a coal miner's income supports more than just the miner. In other words, it is likely that the miner is the primary income earner in the family. Therefore, state expenditures to support the coal miner automatically represent expenditures to support the miner's family members. Calculating employment expenditures based on a percapita factor, as recommended by the Kent Memo, ignores this fact. The Sims methodology produces an estimate nearly equal to our own, and serves as a precedent for conducting our own analysis.

Despite this historical justification, we recognize that our method involves an inherent problem in that it does fail to account for state expenditures for the unemployed. However, in the same manner, the methodology proposed by the authors of the Kent Memo is also problematic, in that it ignores the fact that coal miners and other coal-related employees are often the primary income earners in their families.

Finally, as the Kent Memo neglected to address our estimates for employment-related *revenues*, these will not be considered here. However, it is notable that our estimate for PIT revenues associated with coal employees exceeded the value for PIT revenues reported by BBER/CBER by approximately \$86 million, and, further, that we consider not only PIT revenues, but all revenues attributable to coal industry employees, both direct and indirect.

⁵ http://www.lrc.ky.gov/lrcpubs/rr172.pdf

5. CONCLUSION: COAL'S NET IMPACT ON THE STATE BUDGET

The Kent Memo concludes by claiming that the actual net impact of the coal industry on the state budget amounts to a positive \$490.2 million. As we have shown in this response memo, this value is inaccurate. Taking into account and adjusting for the Kent Memo's valid criticisms, we estimate that the impact of the coal industry on the West Virginia state budget amounts to a net cost of \$42.2 million.

Table 3 provides a revised breakdown of the revenues and expenditures attributable to coal industry activity.

Table 3: Revised summary of revenues, expenditures, and net impact of the coal industry

Item	General Revenue Fund	State Road Fund	Total
Direct coal industry			
Revenues	\$336,010,000	\$2,770,000	\$338,780,000
On-budget expenditures	(\$20,710,000)	(\$93,000,000)	(\$113,710,000)
Estimated net impact	\$315,300,000	(\$90,230,000)	\$225,070,000
Off-budget expenditures	(\$150,000,000)	not calculated	(\$150,000,000)
New estimated net impact	\$165,300,000	(\$90,230,000)	\$75,070,000
Direct coal employment			
Revenues	\$108,300,000	\$17,240,000	\$125,540,000
Expenditures	(\$106,410,000)	(\$19,480,000)	(125,890,000)
Estimated net impact	\$1,890,000	(\$2,240,000)	(\$350,000)
Indirect employment			
Revenues	\$128,900,000	\$39,000,000	\$167,900,000
Expenditures	(\$240,700,000)	(\$44,070,000)	(\$284,770,000)
Estimated net impact	(\$111,800,000)	(\$5,070,000)	(\$116,870,000)
<u>Total</u>			
Revenues	\$573,210,000	\$59,010,000	\$632,220,000
Expenditures	(\$517,820,000)	(\$156,550,000)	(\$674,370,000)
Estimated net impact	\$55,390,000	(\$97,540,000)	(\$42,150,000)

While our analysis provides a snapshot of the coal industry's impact on the state budget for a single year (FY2009), it is perhaps of greater importance to recognize that this value fails to capture the significant legacy costs resulting from past coal industry activity that have yet to be funded. **These costs, which include** damages to roads and bridges and funding needs for reclaiming all abandoned mine land and bond forfeiture coal mine sites in the state, amount to nearly \$5 billion.

Therefore, we recommend that the committee act upon Delegate Nancy Guthrie's request for an independent, comprehensive report examining the full range of cost and benefits to the state and the public resulting from coal industry activity. Further, the Legislature should consider the information contained in our original report, as well as that provided in this document, and re-examine state policy as it relates to energy and economic development, to the extent that it supports the coal industry. The Legislature should consider enacting new policies that reflect a recognition of these realities, and that ensure that the coal industry, rather than the state taxpayers, pay for the costs associated with coal-related activity.