

MEMORANDUM

**TO: THE HONORABLE SENATOR WALT HELMICK AND DELEGATE HARRY KEITH WHITE,
MEMBERS OF SUB-COMMITTEE B, INTERIM COMMITTEE ON FINANCE**

FROM: CALVIN A. KENT AND KENT SOWARDS,

SUBJECT: RESPONSE TO "THE IMPACT OF COAL ON THE WEST VIRGINIA STATE BUDGET"

DATE: SEPTEMBER 13, 2010

First I would like to thank you, the chairs of the Finance Subcommittee B, for the opportunity to discuss our initial thoughts regarding *Coal and Renewables in Central Appalachia - The Impact of Coal on the West Virginia State Budget* produced by Downstream Strategies and the West Virginia Center on Budget and Policy. After having partnered with West Virginia University's Bureau of Business and Economic Research to publish *The West Virginia Coal Economy* earlier this year, the Center for Business and Economic Research is pleased to continue its work regarding the coal industry and examining its state-wide impacts. While I feel that the comments presented in this memorandum are representative of the piece as a whole, I caution you that they should not be viewed as comprehensive and that further analysis of the issues discussed is warranted.

In producing *Coal and Renewables in Central Appalachia* (herein referred to as the Downstream report), the authors set out to provide "an initial accounting of both benefits and costs" (p. x). They suggest that earlier analyses (those from the West Virginia Coal Association and *The West Virginia Coal Economy*, herein referred to as the BBER/CBER report) overestimate the size of the coal economy by failing to account for costs to the state. The design of the BBER/CBER report relied upon widely accepted research methodologies to estimate the direct, indirect and induced economic impacts of the coal industry using the IMPLAN input-output modeling system using calendar year 2008 data.

In contrast, the Downstream report uses FY 2009 data and incorporates estimated budgetary impacts upon the State's General Revenue Fund (GRF) and the State Road Fund (SRF). As a contributing member to the BBER/CBER report, I acknowledge that an analysis of industry costs to State government was never part of the research aim of the BBER/CBER report and we encourage additional research into what accounts for a sizeable portion of the State's economic mix. Disagreement, however, arises from several of the methodological assumptions and calculations used to derive some of the estimates presented within the Downstream report. The balance of this memorandum is dedicated to a discussion of major differences between the two documents and areas of particular concern.

State government has several other funds which both create costs and benefits for the state and need attention to obtain a truly accurate picture if one wants to know the impact of coal on the state budget as the title of the Downstream report suggests.



The title of the Downstream report is misleading. It implies that the impact it is measuring is on the total State budget yet only the GRF and the SRF are considered. While a more comprehensive examination of the coal industry appears to be the primary goal of the analysis produced by the Downstream report, falling to account for the revenues distributed to local governments (such as severance taxes) property taxes for local governments as well as indirect effects resulting from industry activity overlooks significant revenues and expenditure patterns. The Downstream report focuses on the State's General Revenue Fund (GRF) and the State Road Fund (SRF) only.

In reference to methodology, the Downstream report relies upon published figures where 'possible', but employs several estimating techniques that produced significantly different estimates from the BBER/CBER report. The major differences are summarized below.

- **Coal-related Revenues**

- The Downstream authors' estimate of total direct coal industry revenue (\$307.3m) is less than half of the figure in the BBER/CBER analysis (\$676.2m). Excluded from their analysis are workers' compensation taxes and special reclamation fees.
- The severance tax figures the Downstream authors report for FY 2009 is roughly 70% of the number employed by BBER/CBER from 2008. While part of the difference may be due to BBER/CBER using a calendar year and Downstream using a fiscal year basis, yet that would only explain a small part of the difference.
- The BBER/CBER figure are the actual amounts received by the state for that calendar year. Downstream underestimates coal related revenue by \$360 million

Table 1. Direct Coal-Related Revenues Comparison (in \$millions)

Tax Type	BBER / CBER 2008	Downstream FY 2009	Difference
Property			
Real Property			
Producing Coal	19.7	0.0	(19.7)
Non-Producing Coal	13.3	0.0	(13.3)
Buildings and Land	3.0	0.0	(3.0)
Personal Property	54.8	0.0	(54.8)
State Property Tax ¹		0.4	0.4
Severance	412.7	281.4	(131.3)
Workers' Compensation	80.0		(80.0)
CNIT/BFT	25.6	19.0	(6.6)
Special Reclamation	13.6		(13.6)
Sales and Use	3.6	3.7	0.1
CRTRF	3.9	1.7	(2.2)
Overweight Truck Fees ¹		0.8	0.8
Coal Company Donations ¹		0.3	0.3
Personal Income ²	46.0	0.0	(46.0)
	676.2	307.3	(368.9)

¹ Not disaggregated in the same manner in the 2010 BBER/CBER report.

² Downstream Strategies accounts for Personal Income Taxes in manner different from the BBER/CBER report describing PIT as "not a direct coal industry revenue" (Footnote 3, p. 9).

- **Property Taxes**
 - The Downstream authors suggest that because "in FY 2009, the State received only 0.4% of levied property taxes" (p. 14) with the rest supporting local governments, that it is inappropriate to count property taxes levied in their analysis.
 - The omission of local property taxes is a major error as the general fund would by law have to pick up some of the expenses which now are covered by property taxes.
 - As the Public School Support Program (PSSP) is tied to both property taxes and the general revenue fund, the inclusion of the local share portion would be appropriate.
 - 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.

- **Coal Severance Taxes**
 - The Downstream report indicates that it is only concerned with the revenues to the General Revenue Fund and State Road Fund; thus it does not include roughly \$89.5m of Coal Severance Taxes that are:
 - Distributed to local governments (\$35.6m in FY 2009)
 - Distributed to the Workers' Compensation Debt Reduction Fund (\$35.5m in FY 2009)
 - Distributed to the Infrastructure Fund (\$18.4m in FY 2009)
 - or Retained by the Department of Revenue for administration (\$35,000 in FY 2009)
 - 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.

- **Corporate Net Income and Business Franchise Taxes**
 - The Downstream report estimates CNIT and BFT via percentage of State GDP attributable to mining multiplied by the total CNIT and BFT collections in FY 2009.
 - The BBER/CBER report employs a figure provided by the WV State Tax Department.
 - A difference of roughly \$6.6m (or 34.7 percent) arises from the differing methods.

- **Coal Road Transportation System (CRTS)**
 - It is not clear that the extrapolated cost for non-CRTS roads is appropriate.
 - The Downstream authors assume that the same level of expenditure per mile on the CRTS is appropriate for the non-CRTS mileage in the total coal haul road system.
 - This CRTS figure is simply inflated by the mileage for total coal haul roads divided by the mileage of the CRTS.
 - This runs in direct opposition to the fact that non-CRTS coal trucks operate at a maximum of 80,000 lbs, far lower than CRTS permitted weights (up to 120,000 lbs).
 - The estimated strain increase of 24% (provided as partial justification of the increase) is over and above that of single-axle trucks.
 - This suggests that all the additional strain is from coal trucks alone and suggests that the other heavy trucks using the same non-CRTS roads do not contribute to the condition of those roads.

- **Personal Income**
 - The authors of the Downstream report produce an estimate of personal income taxes in excess of that produced by the BBER/CBER report.
 - However, the use of the "average effective personal income tax rate for all West Virginia taxpayers" of 4.26% employed by Downstream strategies versus the effective tax rate of 4.63% for earners in the \$50,000 to \$80,000 range incorrectly applies the information that "most direct coal industry employees actually make well below the average" (p. 42).
 - Tax rates are not applied in isolation for those employees with spousal income and household incomes could very easily reach the \$50,000 to \$80,000 figure indicated by the Downstream authors.
 - The effective tax rate, if applied to the Downstream direct coal employee AGI estimate of \$1.49b would result in an additional \$5.5m of personal income taxes.

- **Direct Coal Industry: Off-Budget 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 a 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 major 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 tax 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 more reasonable, the question remains regarding the appropriateness of classifying this exemption as another hard cost.



- **State Expenditures Supporting Direct Coal Employment**
 - It is unclear why the share of direct employment is the basis for allocating State expenditures.
 - The Downstream approach assumes that the only people receiving benefits from state expenditures are those who are employed.
 - All citizens of the State whether employed or not receive benefits from state expenditures
 - The Downstream approach does not consider any State expenditure for the unemployed, retired, school-age children and the disabled (all of which are categories that would require some form of State expenditures).

If the direct employment method for determining State expenditures continues to hold, the following industries would account for significant portions of state expenditures (based upon total State expenditures):

○ Government and Government Enterprises	\$759.0 million
○ Health Care and Social Assistance	\$568.2 million
○ Retail Trade	\$539.7 million

Mining (including oil and natural gas) ranks tenth using this methodology, with slightly less than \$125.9 million in expenditures.

A more accurate estimate uses the methodology of the U.S. Census Bureau and the Bureau of Economic Analysis is to allocate expenditures over the entire population of a state, since the entire population of the State is in the calculation as all its citizens receive benefits from state expenditures. If we divide the total State General Revenue and Special Reclamation fund expenditures in FY 2009 (\$4.53 billion) by the July 1, 2009 population estimate for the State produced by the U.S. Census Bureau (1,819,777) we arrive at roughly a \$2,492 per resident expenditure. Multiplying that figure by the roughly 21,000 direct coal employees (as suggested by Downstream strategies for FY 2009), State expenditures supporting direct coal employment would equal approximately \$52.3 million (approximately \$73.6 less than estimated in the Downstream report).

If the coal industry was to disappear these expenditures would still continue unless all of those unemployed in the coal industry moved out of state. In fact expenditures for unemployment compensation, medical care and public health would probably experience a significant increase and school aged children would still have to be educated and state services provided with no coal industry related revenues coming in to the State GRF.

Table 2 provides a summary of the major discrepancies between the two reports as well as a revised estimate of the impacts to the State budget (in terms of the GRF) altering only Property and



Severance Tax collections as well as "Tax Expenditures" and the Direct and Indirect Industry Employment Support expenditures. No changes to allocations in the in SRF were made.

Table 2. Summary of Major Discrepancies

Variable	BBER/CBER 2008	Downstream FY 2009
Revenues		
Property Taxes	\$90.8 m	\$0.4 m
Severance Tax	\$412.7 m	\$281.4 m
Workers' Compensation	\$80.0 m	-
CNIT and BFT	\$25.6 m	\$19.0 m
Special Reclamation	\$13.6 m	-
Expenditures		
"Tax Expenditures"	-	\$168.0 m
Direct Employment Support	\$52.3 m*	\$125.9m
Indirect Employment Support	\$118.4 m*	\$284.8 m
Downstream FY 2009		
Direct and Indirect Coal Industry		
Revenues	\$600.7 m	\$780.6 m
Expenditures	\$698.2 m	\$290.4 m
Estimated Net Impact	(\$97.5 m)	\$490.2 m

* CBER Estimate based upon State Per Capita Expenditures

** CBER estimate revising Downstream expenditures by altering only Property and Severance Tax collections as well as "Tax Expenditures" and the Direct and Indirect Industry Employment Support expenditures.

The Downstream report concludes that the estimated net impact to the State budget is a negative \$97,490,000 for FY 2009. The analysis in this memorandum shows a positive impact of \$490.2 million. Simply eliminating the "Off-budget" "tax" expenditures figures for the intermediate goods ("Purchase for resale" and "Natural resource production" tax exemptions) would alter this figure to a net benefit of roughly \$70 million. Given Downstream's methodological assumptions regarding estimation of the coal severance, property, CRTS, and state expenditures by employment share alone, sufficient questions regarding the accuracy of the Downstream report is warranted and as such additional examination is suggested.

