

Taking Inventory: The Impact of Exempting the Business Personal Property Tax

Sean O'Leary and Ted Boettner • October 2010



Executive Summary

During the 2010 Legislative Session, the West Virginia House of Delegates passed House Joint Resolution 101, a version of Governor Manchin's proposed constitutional amendment that would allow counties to exempt "newly entered" business personal property from property tax rolls.

Proponents of the measure argue that exempting the business personal property tax would boost investment and job growth. However, analysis shows that this exemption would have a profound impact on state and local government finances. The revenue loss would strain the ability of municipalities, county governments, and school districts to provide needed services and would likely lead to cuts in services or increased taxes on other taxpayers, such as higher property taxes on homeowners or higher taxes on real property owned by small businesses.

Key Findings

- The tax on business personal property accounts for an estimated 18 percent of all property taxes. Although West Virginia taxes business personal property at a higher rate than other states, it taxes real property at rates well below the national average.
- Numerous studies provide significant support for the conclusion that business taxes, in general, do not play a significant role in business investment decisions, nor do business tax cuts provide sufficient revenue or job creation to be a cost effective economic development strategy.
- If business personal property were fully exempted from taxation, local governments would lose an estimated \$187 million in tax revenue in FY 2010. Of this figure, counties would lose an estimated \$67 million.

- Exempting business personal property from taxation would cause local school districts to lose an estimated \$166 million in revenue. In response, the state's contributions to the School Aid Formula would increase by an estimated \$65 million, but school districts would still face a funding gap of nearly \$100 million. Without legislative action, local school districts would be unable to fill this deficit, and the state would need to provide this additional revenue to maintain the current educational system.

- With a projected revenue deficit of more than \$500 million by FY 2015, any additional decrease in revenue could be detrimental for West Virginia.

Exempting the business personal property tax would have a negative impact on school districts and on state, county, and municipal governments. The impact would be disproportionately felt in coal-producing counties. Before any action is taken by the Legislature, other alternatives should be explored thoroughly. To further erode state and local revenues or impose higher taxes on struggling families and small businesses can only have deleterious effects.

Introduction

In his 2010 State of the State Address, Governor Manchin proposed a constitutional amendment to lower taxes on commercial and industrial property. This announcement came on the heels of recommendations by the state's Tax Modernization Project Workgroup to propose a constitutional amendment "to allow the Legislature flexibility and discretion in the imposition of property taxes on commercial and industrial personal property."¹ The governor's proposed amendment would exempt manufacturing inventory, machinery, and equipment from property taxes.

During the 2010 Legislative Session, the West Virginia House of Delegates passed a scaled-down version of the governor's proposal, House Joint Resolution 101. HJR 101 proposed a constitutional amendment allowing counties to exempt "newly entered" business personal property from property tax rolls.

If the amendment were enacted, counties could opt to pass an ordinance allowing for the exemption of business personal property from property taxation. As a result, counties would likely experience an overall decline in business personal property tax collections. Business personal property assessed valuations would be sharply reduced and eventually eliminated, as almost all business personal property would be considered "new" over time and therefore be exempt.

While the state receives an insignificant amount of revenue from the business personal property tax, local governments rely heavily on it for operating revenue. Property taxes in West Virginia are the primary source of revenue for local governments, making up 45 percent of total revenue collected.² Property taxes also provide an important source of revenue for public education. In FY 2010, more than 66 percent of local property tax revenue went to fund elementary and secondary schools in West Virginia.³ These revenues provide one-third of total school district funding, helping to educate 280,000 students throughout the state.

Consequently, the impact of a business personal property tax exemption could be profound for counties, school districts, and municipalities. The loss in revenue at the local level will lead to either reductions in services or in increased taxes on other taxpayers, such as higher property taxes on homeowners or higher taxes on real property owned by small businesses.

This report will begin with a brief overview of the business personal property tax in West Virginia and will compare the state to others in terms of business property taxation. Second, it will outline some key findings from the literature on business taxes and economic development. Lastly, it will itemize the estimated fiscal impacts of exempting business personal property from taxation on all levels of government, including counties, municipalities, school districts, and the state.

Overview of the Business Personal Property Tax

Both real and personal business property are subject to the property tax in West Virginia. Real property includes land, structures, and certain equipment attached to structures. Personal property includes furnishings, inventory, machinery, equipment, fixtures, supplies, and tools. West Virginia is one of 44 states that taxes business machinery and equipment, and one of 11 states that taxes business inventory.⁴

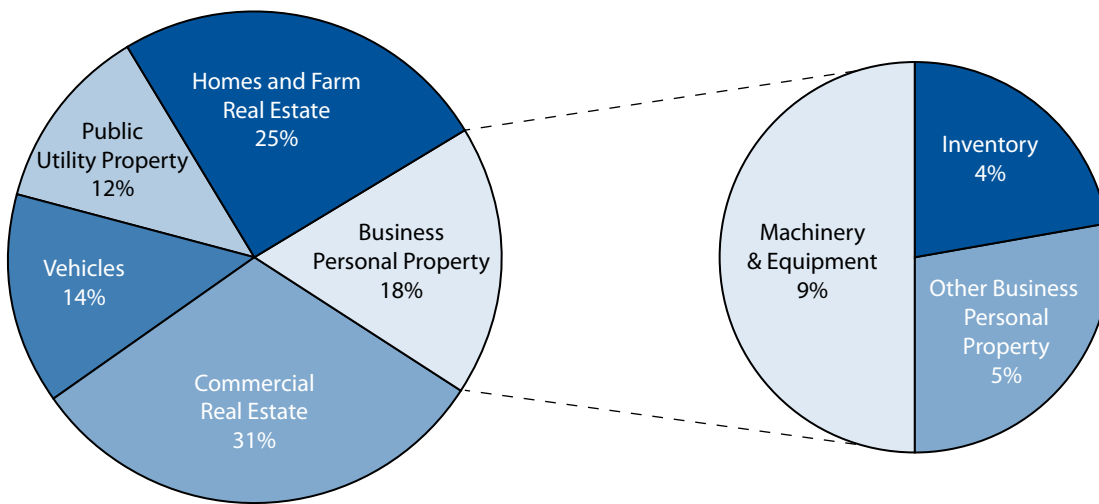
Property tax rates for businesses vary by location. In FY 2010, the average property tax rate for a business located inside a municipality (Class IV) was 2.86 percent of assessed value. For businesses located outside a municipality (Class III), the average property tax rate was 2.18 percent of assessed value.⁵

Business personal property accounts for approximately 18 percent of all property taxes paid, mostly coming from taxes paid on machinery and equipment (**Figure 1**).⁶ Of the \$1.4 billion in property tax revenue collected in FY 2010, an estimated \$252 million came from business personal property tax collections.⁷

Although West Virginia taxes business personal property at a higher rate than other states, it taxes real property at rates well below the national average.⁸ Overall, West Virginia's effective tax rate on business (real and personal) property is two percent, which is only 0.2 percent higher than the national average (**Appendix A**).

According to the Council On State Taxation (COST), property taxes accounted for 29 percent of all taxes paid by businesses in West Virginia in FY 2009, compared to the national average of 36 percent.⁹ **Table 1** shows how West Virginia compares to other states.

FIGURE 1
Sources of West Virginia Property Tax Revenue



Source: West Virginia State Tax Department

TABLE 1

Business Property Taxes as a Share of Total Business Taxes, 2009

Share of Total Business Taxes	States
51 – 60 %	NH, ME, VT, MI, RI
41 – 50 %	IA, SC, IN, WI, DC, KS, MA, SD, CT, NE, TX, FL, MT, NJ, CO, IL, MS, OR, VA
31 – 40 %	AZ, GA, OH, NY, ID, MN, PA, UT, MO, TN, WY, HI, NV, NC
21 – 30 %	WV, AR, MD, KY, CA, LA, AL, ND, WA
11 – 20 %	OK, DE, NM, AK

Source: Andrew Philips, Robert Cline, Thomas Neubig, and Julia Thayne, "Total state and local business taxes: State-by-state estimates for fiscal year 2009" (Ernst & Young LLP in conjunction with Council On State Taxation, March 2010).

Almost all states offer some form of tax abatement that reduces or eliminates the business personal property tax rate on certain items.¹⁰ In West Virginia, previous changes and exemptions to the business personal property tax include:

- A non-refundable tax credit allows manufacturers to offset their business franchise and corporate net income taxes with inventory taxes paid. The annual value of this credit is estimated at \$11 million.¹¹
- The "Freeport Exemption" allows tangible personal property that is in transit to be exempt from ad valorem property taxation and is annually valued at \$13.2 million.¹²

Business Taxes and Economic Development

Proponents of removing the business personal property tax argue that it “heavily taxes capital investment” and kills jobs,¹³ and claim its elimination will increase capital investment and employment. However, a review of existing studies and research sheds considerable doubt on this assertion.

First, an analysis of state and local business tax rates and recent state employment growth reveals no obvious connection between the two (**Appendix B**). In fact, the data show that higher state and local business taxes are associated with higher state job growth. While this does not prove that taxes are not a factor in job growth, it highlights a serious deficiency in arguing that high business tax rates cause job loss.

Second, claims that business taxes significantly affect economic development are often based on studies with tenuous results that can change dramatically when re-evaluated.¹⁴ Part of the reason that claims about taxes and economic activity can be misleading is that business tax rates can have an effect on economic activity within metropolitan areas, when all other factors are equal. However, they usually do not have that same effect among states.¹⁵ Those studies that examined inventory and other personal property taxes at the state level conclude that these taxes rarely impact business location decisions or have an effect on employment and job creation in manufacturing, wholesale, or retail sectors.¹⁶ Even when reducing these taxes may affect inventory location, the reduction could not stimulate enough economic activity to offset the revenue loss.

Third, an examination of wholesale trade jobs and effective property tax rates in all 55 West Virginia counties showed a positive relationship between the two (**Appendix C**). Holding all things constant, this means that the higher the effective rate, the more wholesale trade jobs are found in counties. Similar results were found when comparing manufacturing jobs and effective rates. Like the analysis of state employment growth and total business tax rates, these simple correlations do not account for all variables nor do they suggest that taxes do not matter in an industry’s decision to locate in an area. They simply show that

TABLE 2

The Relative Importance of Costs in Business Location Decisions

Cost Factor	Manufacturing Operations	Office Operations
Labor	36%	72%
Transportation	35%	0%
Utilities	17%	8%
Occupancy	8%	15%
Taxes	4%	5%

Source: Robert M. Ady, “Discussion,” *New England Economic Review* (March/April 1997): 77-82.

further study is needed to explain why employment in manufacturing and wholesale trade industries appears not to be strongly affected by higher tax rates.

Fourth, taxes are only one factor in a business’s decision to locate to an area. A study by Robert Ady found that businesses typically use five main cost factors in determining the geographic location of their facilities (**Table 2**). Of these cost factors, taxes were the least important factor in the decision to locate in a particular community. In addition, Ady concluded that, “the site selection data do not suggest any correlation between low taxes and positive economic growth, or between high taxes and slow growth.”¹⁷

One of the main reasons why taxes are not a significant factor in business location decisions is that variations in business taxes among states easily can be offset by modest changes in wages, benefits, or labor productivity levels as well as other costs of doing business such as utility prices, occupancy, and transportation. This is possible because state and local taxes comprise only two percent of the cost of doing business, on average.¹⁸

West Virginia's low average wages, along with its low utility costs, give the state one of the lowest costs of doing business in the nation (**Appendix D**).¹⁹ The low costs of labor and utilities more than offset differences in taxation, particularly when only looking at one tax in isolation. The availability of inputs (coal, natural gas, limestone, silica), access to markets, infrastructure, quality public services and schools, a highly trained workforce, and a high quality of life are all more important for business location decisions than taxes.²⁰

Finally, reducing business taxes is an expensive and inefficient way to spur economic development. Studies show that, on average, a 10 percent decrease in overall state and local business taxes, holding public services and other local factors constant, increases the long-run level of economic activity in a state by approximately two percent.²¹ Since the

business personal property tax accounts for approximately seven percent of overall state and local business taxes in West Virginia,²² exempting it could increase long-run business activity in the state by an estimated 1.4 percent. In other words, if business personal property taxes were exempted today, in 20 years there would be an additional 13,000 jobs in the economy than there would be if the tax were kept.

Despite this slight long-term economic boost, the net result would be a reduction in tax revenue that would cost the state even more jobs. Based on estimates that total state and local business tax revenue per private sector job in West Virginia is approximately \$4,500 (**Appendix D**), exempting business personal property from taxation would have a cost of \$600,000 per job over a 20-year period.²³

The Fiscal Impact of Exempting Business Personal Property

Exempting business personal property from taxation will cause local and state governments to lose an important source of revenue. Estimates of this fiscal impact were determined for the state, counties, school districts, and municipalities (**Appendix E**).

Impact on Local Government

If business personal property were fully exempted from taxation, local governments would lose more than \$186 million in tax revenue in FY 2010. This revenue loss would strain the ability of municipalities, county governments, and school districts to provide needed services, and would likely lead to cuts in services or increased taxes on other parties, like homeowners or small businesses.

Counties

Counties provide important public structures, services, and programs that enhance the quality of life for their residents. These investments make communities more prosperous, efficient, secure, and stable. Counties also provide part of the necessary infrastructure that businesses need to compete and thrive. From local libraries and parks to sewage and airport transportation, county governments play an essential role in the development of the state's communities. However, without a strong revenue system many of these services would diminish or disappear.

In FY 2010, West Virginia's 55 counties collected an estimated \$67 million in business personal property taxes.²⁴ **Appendix F** shows the amount of revenue that each county could lose. If all business personal property were exempted, a county government could expect to lose, on average, more than \$1 million in property tax revenue per year.

Currently, only Fayette and Wirt have excess levies at the maximum rate (Class I: 7.15¢ per \$100 of assessed value). Since these counties cannot increase their taxes, they will not be able to replace the property tax revenue lost by exempting business personal property from taxes. The result is likely to be service cuts. For the remaining 53 counties, a decline in assessed valuation due to exempting business personal property would force them to either increase levy rates paid by other taxpayers or cut services or program costs.

Municipalities

There are 241 municipalities that collect property taxes in West Virginia.²⁵ Each provides a number of important services, including libraries, police and fire protection, hospital care, road repair and maintenance, housing and community development, and recreation. In 2010 municipalities throughout the state levied \$96 million in property taxes, of which an estimated \$18 million was from business personal property.²⁶

Currently, 38 municipalities have excess levies at the maximum rate.²⁷ Property tax revenue lost because of a decline in assessed valuations due to exempting business personal property taxes for these municipalities could not be replaced, likely resulting in service cuts or increases in other taxes and fees. For the remaining 203 municipalities, a decline in assessed valuation due to exempting business personal property could result in either an increase in levy rates paid by other taxpayers, new taxes and fees, or cuts in services and programs.

School Districts

West Virginia's 55 school districts oversee 705 elementary and secondary schools, educating approximately 280,000 students.²⁸ Investments in schools are crucial because they provide the educational foundation that the state's future workforce needs to gain employment and be productive citizens. The property taxes levied by the school boards provide roughly one-third of total school district funding.

In FY 2010, taxes on business personal property brought in approximately \$166 million for county school districts, of which almost \$86 million was raised through excess levies and bonds.²⁹ If this tax were eliminated, school districts would face a revenue loss of nearly \$101 million, after the School Aid Formula is adjusted (see section on School Aid).

Currently, 43 counties have school excess levies, 21 of which are at the maximum rate (Class I: 22.95¢ per \$100 of assessed value). If one of the 21 counties³⁰ experiences a decline in assessed valuation of property due to exempting business personal property, then school services and programs likely would have to be cut, because the lost revenue could not be replaced through levies. If one of the 22 counties³¹ with school excess levies below the maximum statutory rate experiences a decline in assessed valuations due to exempting business property, then the county board of education would have to increase the levy rate paid by other taxpayers or choose to cut services or program costs.

Impact on State Government

The fiscal impact of eliminating the tax on business personal property would not be as acute for the state government as for counties, municipalities, and school districts (**Appendix E**). Nonetheless, with a projected revenue deficit of more than \$500 million by FY 2015,³² any additional decrease in revenue could prove detrimental at the state level.

State Collections

In FY 2010, the state government collected approximately \$6 million in property taxes, of which more than \$1 million was from business personal property. Exempting business personal property from taxation would result in a \$1 million loss for the state's General Revenue Fund.³³

School Aid

As previously mentioned, school districts would lose approximately \$166 million in revenue if the business personal property tax were eliminated. \$65 million of this lost revenue would be replaced by the state as a result of the School Aid Formula, which calculates a minimum school funding allowance for each county's school district.

The school district share is 85 percent of the county's regular property tax collections (90 percent of its regular school levy property tax collections minus a five percent deduction for delinquencies and other costs). Subtracting the school district share from the funding allowance gives the total aid provided by the state. For example, if a county's projected regular levy tax collections are \$1 million and the total program allowance under the formula is \$10 million, then the state aid to the school district would be \$9.15 million (\$10 million – 85 percent of \$1 million). If the county's property tax collections decline to \$900,000, then the state's aid to the school district would increase to \$9.235 million (\$10 million – 85 percent of \$900,000).

In FY 2010, the school district share of the School Aid Formula was \$373 million. Exempting business personal property from taxation statewide would lower the local share of the School Aid Formula by \$65 million (**Appendix G**). Although the Legislature could raise the current school levy rate of 19.40 cents per \$100 to its constitutional maximum rate of 22.95 cents per \$100 of assessed value, this would not provide enough revenue for school districts to maintain current services (**Appendix H**). To avoid decreases in school funding, the School Aid Formula would have to be adjusted, and the state would have to send more aid to local school districts. Either action would cause a shift in the tax burden among taxpayers.

If West Virginia increased aid to school districts by \$65 million, it could create larger budget gaps for the state over the next several years. To avoid cutting programs and services, the state would have to find a dedicated source of additional revenue.

Conclusion

Reducing or eliminating the business personal property tax would likely lead to a revenue loss large enough to weaken the ability of local governments to make the investments in roads, public safety, education, and recreation. In order to replace lost revenue to prevent such cuts in public services, local governments would have to raise property taxes on homeowners and real property owned or occupied by in-state businesses. This could deter small business growth if occupational costs increase due to higher tax rates.

If the Legislature proceeds with a constitutional amendment to exempt or reduce business personal property taxes, school districts would lose a substantial source of revenue. The impact would be disproportionately felt in coal-producing counties. To ensure that school districts have adequate revenue to fund education, the Legislature would have to increase aid to schools by adjusting the School Aid Formula. Counties and municipalities would also experience revenue losses, and would need the Legislature to grant them more flexibility in generating revenue. This could include giving

counties and municipalities the power to levy an income tax,³⁴ sales and use tax, or a severance tax at the county level.³⁵ Each of these options would result in a tax shift that would increase taxes on small businesses and homeowners.

The state's ability to sustain revenue collections has been compromised by the recession and will remain so for the foreseeable future. To further erode state and local revenues or impose higher taxes on struggling families and small businesses can only have detrimental effects.

Business Property Tax Rates, 2009

Each state's estimated business property tax rate is found by using business property taxes paid as a share of private sector Gross State Product (GSP). It is important to consider that this simple calculation does not reflect the structure of each state's economy. One reason why West Virginia's rate is above average is that the state has a very capital-intensive economy, with over one-fifth of business personal property tax collections coming from the coal industry. For example, the taxes levied on coal personal property (mostly machines and equipment) account for 60 percent of the total share of the industry's property taxes, while the taxes levied on the coal industry's real property (land, buildings, minerals) account for 40 percent.

TABLE A-1

State and Local Business Property Taxes as a Percent of Private Sector Gross State Product, 2009

State	Business Property Taxes (billions of dollars)	Private Sector Gross State Product (billions of dollars)	Business Property Tax as % of private sector GSP
Alabama	1.5	141.3	1.1%
Alaska	0.6	39.1	1.5%
Arizona	4.1	214.6	1.9%
Arkansas	1.0	84.8	1.2%
California	18.8	1,642.6	1.1%
Colorado	3.5	220.5	1.6%
Connecticut	3.1	194.6	1.6%
Delaware	0.3	57.1	0.5%
Florida	14.4	650.9	2.2%
Georgia	5.6	339.0	1.7%
Hawaii	0.8	49.1	1.6%
Idaho	0.7	45.2	1.5%
Illinois	10.7	573.9	1.9%
Indiana	4.4	226.8	1.9%
Iowa	2.8	121.7	2.3%
Kansas	2.5	103.7	2.4%
Kentucky	1.6	131.3	1.2%
Louisiana	2.4	198.0	1.2%
Maine	1.6	43.1	3.7%
Maryland	2.4	221.4	1.1%
Massachusetts	5.9	332.5	1.8%
Michigan	8.8	338.0	2.6%
Minnesota	3.6	234.9	1.5%

TABLE A-1 (CONTINUED)

State and Local Business Property Taxes as a Percent of Private Sector Gross State Product, 2009

State	Business Property Taxes (billions of dollars)	Private Sector Gross State Product (billions of dollars)	Business Property Tax as % of private sector GSP
Mississippi	1.8	75.9	2.4%
Missouri	2.8	210.0	1.3%
Montana	0.8	30.2	2.7%
Nebraska	1.6	72.5	2.2%
Nevada	1.8	118.4	1.5%
New Hampshire	1.6	57.4	2.8%
New Jersey	8.3	339.0	2.4%
New Mexico	0.6	70.9	0.8%
New York	21.9	1,625.7	1.3%
North Carolina	3.7	146.3	2.5%
North Dakota	0.5	44.0	1.1%
Ohio	8.4	415.7	2.0%
Oklahoma	1.2	124.0	1.0%
Oregon	2.0	140.0	1.4%
Pennsylvania	8.0	495.7	1.6%
Rhode Island	1.2	40.4	3.0%
South Carolina	3.0	127.7	2.4%
South Dakota	0.7	32.7	2.1%
Tennessee	3.1	226.2	1.4%
Texas	23.1	1,095.9	2.1%
Utah	1.2	94.6	1.3%
Vermont	0.8	22.2	3.6%
Virginia	4.8	325.0	1.5%
Washington	3.2	277.4	1.2%
West Virginia	1.0	50.7	2.0%
Wisconsin	4.5	210.9	2.1%
Wyoming	1.0	30.9	3.2%
United States	215.3	12,704.4	1.8%

Source: Andrew Philips, Robert Cline, Thomas Neubig, and Julia Thayne,
 "Total state and local business taxes: State-by-state estimates for fiscal year 2009"
 (Ernst & Young LLP in conjunction with Council On State Taxation, March 2010).

Comparing State and Local Business Tax Rates with Recent Employment Growth

Table A-2 ranks all states by employment growth since the 2001 business cycle peak and includes each state's total business tax rate. This rate was found by calculating state and local business taxes in fiscal year 2007 as a percentage of private sector gross state product (GSP). West Virginia's overall business tax rate of 7.2 percent ranked well above the national average of 5.4 percent, and is higher than the tax rate in all neighboring states. Nonetheless, of the 22 states that ranked below West Virginia in employment growth over this period, 21 had lower overall state and local business taxes than West Virginia.

West Virginia's above average business tax rate is largely due to the structure and size of its economy. West Virginia is an energy producing state, which is very capital intensive. Furthermore, the state levies a severance tax that most states do not impose. West Virginia is also one of the most economically undiversified states in the country and is heavily reliant on its energy sectors for its tax base.¹ Other energy states that lack economic diversity (Alaska, Wyoming, North Dakota, Maine, and New Mexico) also have above average business tax rates.

Comparing West Virginia's business tax rate with that of other states is also problematic, because it is a low-income state with an aging population and a small GSP. Simply dividing state and local business taxes (numerator) by GSP (denominator) reveals a higher rate for West Virginia, largely because of the size of the denominator. States that have broader tax bases and a larger GSP can have lower business tax rates and still generate more revenue.

The employment data were retrieved from the U.S. Bureau of Labor Statistics. March 2001 and December 2007 were selected because these dates marked the beginning and end of the last business cycle before the recession.

¹ According to Moody's Economy Inc, West Virginia ranks 4th lowest in economic diversity among the 50 states (Alaska ranks 1st, North Dakota 6th, and Wyoming is 3rd).

TABLE A-2

State Rankings for Employment Growth, including State and Local Business Tax Rates, 2001-2007

Rank	State	Employment Growth (%)	State & Local Business Taxes as % of private sector gross state product
1	NV	22.35	4.9
2	WY	20.49	9.3
3	AZ	17.29	5.1
4	UT	16.38	4.3
5	ID	15.26	4.6
6	MT	14.03	6.5
7	HI	12.19	5.4
8	NM	12.15	6.3
9	AK	11.54	11.6
10	FL	10.92	4.9
11	TX	10.27	5.0
12	ND	9.70	7.4
13	WA	9.05	5.8
14	SD	7.65	5.5
15	OR	7.22	3.8
16	VA	6.65	4.0
17	SC	6.16	5.0
18	NC	6.13	3.9
19	MD	5.62	4.2
20	OK	5.21	5.8
21	NE	5.13	5.4
22	AL	4.90	4.6

TABLE A-2 (CONTINUED)

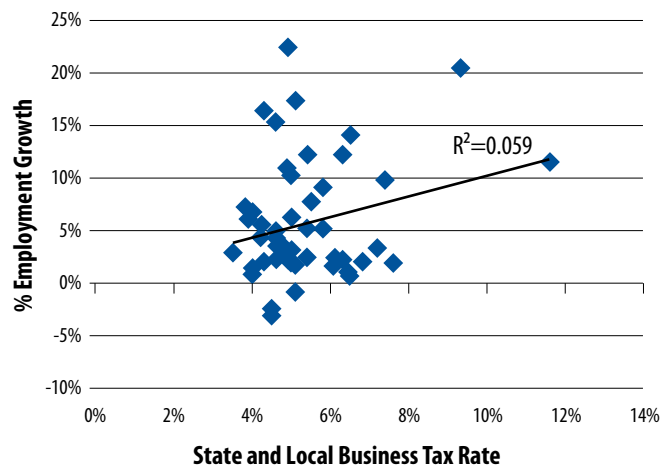
State Rankings for Employment Growth, including State and Local Business Tax Rates, 2001-2007

Rank	State	Employment Growth (%)	State & Local Business Taxes as % of private sector gross state product
23	CO	4.45	4.2
24	GA	4.29	4.2
25	AR	4.23	4.6
26	IA	3.46	4.8
27	TN	3.39	4.6
28	WV	3.26	7.2
29	CA	3.13	4.7
30	KY	3.09	5.0
31	DE	2.83	3.5
32	NH	2.37	5.4
33	KS	2.36	6.1
34	MN	2.33	4.6
35	NJ	2.25	4.9
36	MS	2.12	6.3
37	MO	2.00	4.3
38	VT	1.99	6.8
39	WI	1.90	5.0
40	ME	1.81	7.6
41	PA	1.68	5.1
42	RI	1.67	6.1
43	CT	1.31	4.0
44	NY	1.11	6.4
45	IN	0.91	4.0
46	LA	0.68	6.5
47	IL	-0.93	5.1
48	MA	-2.52	4.5
49	OH	-3.11	4.5
50	MI	-7.98	5.1

Source: Average business tax rates and GSP came from: Andrew Philips, Robert Cline, Thomas Neubig, and Julia Thayne, "Total state and local business taxes: State-by-state estimates for fiscal year 2009" (Ernst & Young LLP in conjunction with Council On State Taxation, March 2010). Non-farm seasonally adjusted employment data from March 2001 to December 2007 were retrieved from the U.S. Bureau of Labor Statistics.

Figure A-1 shows the scatter plot correlating the data in Table A-2. A statistical analysis of these data reveals that there is no obvious correlation between state and local business taxes and recent state employment growth trends.² The calculated correlation between these variables is actually positive, meaning that higher average business tax rates appear to be associated with higher state job growth. This simple correlation does not suggest that a causal relationship exists between higher business taxes and positive employment growth – there are too many other variables at play – but does suggest that more research is needed to explore what factors are driving economic development.

FIGURE A-1
Employment Growth from Mar. 2001 to Dec. 2007, and Overall State and Local Business Tax Rate in Each State in FY 2007



Source: Ernst & Young and Bureau of Labor Statistics

² The regression model of state employment growth as a function of state and local business taxes yielded a correlation of 0.24 (p=0.09), and an unstandardized coefficient of 1.01, with a standard error of 0.58 (t=1.74, p=0.09).

Comparing Effective Property Tax Rates with Employment in Manufacturing and Wholesale Trade Industries

Table A-3 shows effective tax rates for Class III/Class IV property in each of West Virginia's 55 counties, as well as employment in the manufacturing and wholesale trade industries. Employment in both wholesale trade and manufacturing industries is concentrated in the counties with the highest Class III-IV property tax rates.

TABLE A-3

Effective Tax Rates for Class III/IV Property and Annual Employment in Manufacturing and Wholesale Trade, by County, FY 2009

County	Effective Tax Rate (%)	Manufacturing Employment	Wholesale Trade Employment
Barbour	1.4	73	68
Berkeley	2.4	1,446	899
Boone	2.6	35	118
Braxton	1.8	359	53
Brooke	3.1	2,118	151
Cabell	3.2	4,685	1,883
Calhoun	1.7	32	0
Clay	1.6	42	0
Doddridge	2.6	60	0
Fayette	2.7	543	324
Gilmer	1.9	231	0
Grant	1.4	310	0
Greenbrier	2.5	742	219
Hampshire	1.4	184	90
Hancock	2.6	2,830	163
Hardy	1.5	2,834	72
Harrison	2.6	1,860	1,118
Jackson	2.6	1,488	248
Jefferson	2.2	830	257
Kanawha	2.7	3,508	3,922
Lewis	1.9	164	76
Lincoln	2.5	27	0
Logan	2.6	619	448
Marion	2.5	1,253	549
Marshall	2.5	1,326	166
Mason	2.4	619	122
McDowell	2.1	47	28
Mercer	2.5	1,277	628
Mineral	2.7	1,944	108

County	Effective Tax Rate (%)	Manufacturing Employment	Wholesale Trade Employment
Mingo	2.3	352	133
Monongalia	2.3	3,272	1,031
Monroe	2.1	416	13
Morgan	2.1	188	22
Nicholas	2.0	786	196
Ohio	3.0	1,415	1,735
Pendleton	1.3	55	61
Pleasants	2.2	397	0
Pocahontas	1.3	292	0
Preston	1.6	531	111
Putnam	2.3	2,055	1,630
Raleigh	2.5	1,010	1,547
Randolph	1.5	1,235	306
Ritchie	2.3	781	168
Roane	1.7	172	91
Summers	1.5	39	78
Taylor	2.3	0	25
Tucker	1.3	241	0
Tyler	2.4	606	70
Upshur	1.8	802	234
Wayne	2.4	565	324
Webster	1.4	122	0
Wetzel	2.4	93	26
Wirt	2.6	35	0
Wood	2.5	3,466	740
Wyoming	2.4	121	77

Source: Author's calculations using West Virginia State Tax Department, "Classified Assessed Valuations Taxes Levied, 2009 Tax Year," downloaded from <http://www.state.wv.us/taxrev/ptdweb/units/ASSESSSTND/TY%2009%20CLASSIFIED%20ASSESSED%20ELECTRONIC.pdf>; data from Workforce WV.

An examination of wholesale trade jobs and effective rates in the 55 West Virginia counties showed a statistically significant positive relationship between the two variables. Holding all things constant, this means that the higher the effective rate, the more wholesale trade jobs are found in counties. The regression model of wholesale trade jobs as a function of counties' effective rates yielded a correlation of 0.39 ($p \leq 0.05$), and an unstandardized coefficient of 475.78, with a standard error of 162.56 ($t=2.93$, $p \leq 0.05$).

An examination of manufacturing jobs and effective rates in the 55 West Virginia counties showed a statistically significant positive relationship between the two variables. Holding all things constant, this means that the higher the effective rate, the more manufacturing jobs are found in counties. The regression model of manufacturing jobs as a function of counties' effective rates yielded a correlation of 0.48 ($p \leq 0.05$), and an unstandardized coefficient of 952.64, with a standard error of 261.08 ($t=3.65$, $p \leq 0.05$).

The Cost of Doing Business in West Virginia

One reason why business tax effects on state economic development are modest is that variations in state and local taxes are not that large compared to other local costs of production. For example, overall state and local business taxes in West Virginia are estimated to be \$4,352 annually per employee (**Table A-4**). Utah has the lowest business taxes per employee at \$2,872, for a difference of \$1,480. When divided by 2,000 hours of work annually for a full-time employee, this is only about 74 cents per hour.

The 2007 average hourly wage in West Virginia was \$15.53 per hour, which was the third lowest in the country. This wage was \$1.27 less than Kentucky's average, the border state with average hourly wages closest to West Virginia's rates. As a point of comparison, average hourly wages in the

U.S. in 2007 were \$19.56 per hour. This wage difference alone is enough to offset variations in business taxes across states, not to mention other factors such as labor productivity and other costs such as utilities, occupancy, and transportation.

TABLE A-4

Business Tax Revenue Figures, Non-Farm Employment and Average Wages, by State, 2007

State	Total Business Tax Revenue (in thousands)	Non-Farm Employment	Business Tax Revenue Per Job	Average Hourly Wages
Alabama	\$6,200,000	2,005,700	\$3,091	\$16.80
Alaska	\$3,900,000	317,900	\$12,268	\$22.00
Arizona	\$10,400,000	2,673,700	\$3,890	\$18.06
Arkansas	\$3,700,000	1,204,500	\$3,072	\$15.60
California	\$72,900,000	15,173,500	\$4,804	\$22.11
Colorado	\$8,600,000	2,331,300	\$3,689	\$20.72
Connecticut	\$7,400,000	1,698,200	\$4,358	\$22.92
Delaware	\$1,900,000	436,300	\$4,355	\$20.69
Florida	\$30,800,000	8,018,400	\$3,841	\$17.91
Georgia	\$13,900,000	4,145,500	\$3,353	\$18.42
Hawaii	\$2,400,000	624,900	\$3,841	\$19.33
Idaho	\$2,000,000	654,900	\$3,054	\$16.98
Illinois	\$27,300,000	5,980,300	\$4,565	\$20.70
Indiana	\$8,900,000	2,985,800	\$2,981	\$17.51
Iowa	\$5,300,000	1,519,100	\$3,489	\$16.66
Kansas	\$5,800,000	1,380,000	\$4,203	\$17.45
Kentucky	\$6,200,000	1,866,700	\$3,321	\$16.80
Louisiana	\$11,200,000	1,915,500	\$5,847	\$16.38

TABLE A-4 (CONTINUED)

Business Tax Revenue Figures, Non-Farm Employment and Average Wages, by State, 2007

State	Total Business Tax Revenue (in thousands)	Non-Farm Employment	Business Tax Revenue Per Job	Average Hourly Wages
Maine	\$3,100,000	617,700	\$5,019	\$17.53
Maryland	\$9,000,000	2,608,300	\$3,451	\$22.01
Massachusetts	\$13,800,000	3,280,500	\$4,207	\$23.59
Michigan	\$17,300,000	4,268,400	\$4,053	\$20.30
Minnesota	\$10,000,000	2,771,300	\$3,608	\$20.59
Mississippi	\$4,400,000	1,152,800	\$3,817	\$15.25
Missouri	\$8,600,000	2,794,600	\$3,077	\$17.90
Montana	\$1,800,000	444,900	\$4,046	\$15.69
Nebraska	\$3,500,000	957,400	\$3,656	\$16.96
Nevada	\$5,200,000	1,292,500	\$4,023	\$18.00
New Hampshire	\$2,800,000	646,000	\$4,334	\$19.60
New Jersey	\$20,200,000	4,078,900	\$4,952	\$22.64
New Mexico	\$4,000,000	843,700	\$4,741	\$17.21
New York	\$58,600,000	8,734,000	\$6,709	\$22.89
North Carolina	\$12,600,000	4,145,100	\$3,040	\$17.74
North Dakota	\$1,700,000	358,400	\$4,743	\$16.18
Ohio	\$18,700,000	5,428,000	\$3,445	\$18.58
Oklahoma	\$6,600,000	1,568,400	\$4,208	\$16.21
Oregon	\$5,000,000	1,731,300	\$2,888	\$19.25
Pennsylvania	\$23,400,000	5,797,900	\$4,036	\$18.73
Rhode Island	\$2,400,000	492,600	\$4,872	\$20.30
South Carolina	\$6,200,000	1,944,400	\$3,189	\$16.66
South Dakota	\$1,600,000	406,500	\$3,936	\$15.16
Tennessee	\$9,800,000	2,797,400	\$3,503	\$17.01
Texas	\$48,000,000	10,395,100	\$4,618	\$18.21
Utah	\$3,600,000	1,253,300	\$2,872	\$17.83
Vermont	\$1,400,000	308,400	\$4,540	\$18.30
Virginia	\$12,300,000	3,761,400	\$3,270	\$20.61
Washington	\$14,900,000	2,933,600	\$5,079	\$21.50
West Virginia	\$3,300,000	758,300	\$4,352	\$15.53
Wisconsin	\$10,100,000	2,884,400	\$3,502	\$18.30
Wyoming	\$2,400,000	288,900	\$8,307	\$17.36

Source: U.S. Bureau of Labor Statistics; Andrew Phillips, Robert Cline, Thomas Neubig, and Julia Thayne, "Total state and local business taxes: State-by-state estimates for fiscal year 2009" (Ernst & Young LLP in conjunction with Council On State Taxation, March 2010).

Note. This formulation was adopted from one used by Timothy J. Bartik at the W.E. Upjohn Institute for Employment Research. See: Timothy J. Bartik, "Michigan's Business Taxes and Economic Development: Possible Reforms" (Kalamazoo, MI: Upjohn Institute for Employment Research, February 14, 2006), 4-5.

APPENDIX E

Estimated Impact of Exempting the Business Personal Property Tax, State and Local Governments

TABLE A-5
Potential State and Local Government Annual Property Tax Revenue Losses

	Municipal	County	School (Regular)*	School (Excess/Bond)*	Total Local Government	State Collections	Increase in State Aid to Schools	Total State Government
Barbour	\$40,000	\$234,000	\$54,000	\$0	\$328,000	\$4,000	\$265,000	\$269,000
Berkeley	\$178,000	\$884,000	\$305,000	\$1,975,000	\$3,342,000	\$20,000	\$1,225,000	\$1,245,000
Boone	\$403,000	\$4,661,000	\$745,000	\$5,218,000	\$11,027,000	\$57,000	\$3,665,000	\$3,722,000
Braxton	\$29,000	\$273,000	\$63,000	\$160,000	\$525,000	\$5,000	\$308,000	\$313,000
Brooke	\$803,000	\$1,807,000	\$316,000	\$2,678,000	\$5,604,000	\$24,000	\$1,518,000	\$1,542,000
Cabell	\$1,898,000	\$4,505,000	\$497,000	\$6,531,000	\$13,431,000	\$53,000	\$3,337,000	\$3,390,000
Calhoun	\$4,000	\$61,000	\$11,000	\$18,000	\$94,000	\$1,000	\$55,000	\$56,000
Clay	\$12,000	\$263,000	\$60,000	\$120,000	\$455,000	\$5,000	\$297,000	\$302,000
Doddridge	\$1,000	\$49,000	\$10,000	\$86,000	\$146,000	\$1,000	\$47,000	\$48,000
Fayette	\$386,000	\$2,032,000	\$311,000	\$2,175,000	\$4,904,000	\$24,000	\$1,527,000	\$1,551,000
Gilmer	\$15,000	\$155,000	\$28,000	\$72,000	\$270,000	\$2,000	\$135,000	\$137,000
Grant	\$62,000	\$551,000	\$129,000	\$0	\$742,000	\$10,000	\$632,000	\$642,000
Greenbrier	\$261,000	\$876,000	\$550,000	\$1,421,000	\$3,108,000	\$16,000	\$869,000	\$885,000
Hampshire	\$11,000	\$205,000	\$47,000	\$0	\$263,000	\$4,000	\$229,000	\$233,000
Hancock	\$579,000	\$1,587,000	\$321,000	\$2,246,000	\$4,733,000	\$24,000	\$1,577,000	\$1,601,000
Hardy	\$96,000	\$399,000	\$91,000	\$0	\$586,000	\$7,000	\$450,000	\$457,000
Harrison	\$1,279,000	\$2,909,000	\$662,000	\$3,500,000	\$8,350,000	\$43,000	\$2,731,000	\$2,774,000
Jackson	\$192,000	\$1,685,000	\$282,000	\$1,976,000	\$4,135,000	\$22,000	\$1,388,000	\$1,410,000
Jefferson	\$107,000	\$539,000	\$202,000	\$1,434,000	\$2,282,000	\$15,000	\$926,000	\$941,000
Kanawha	\$4,300,000	\$11,072,000	\$1,784,000	\$10,264,000	\$27,420,000	\$136,000	\$8,771,000	\$8,907,000
Lewis	\$30,000	\$376,000	\$87,000	\$334,000	\$827,000	\$7,000	\$427,000	\$434,000
Lincoln	\$9,000	\$284,000	\$47,000	\$329,000	\$669,000	\$4,000	\$232,000	\$236,000
Logan	\$238,000	\$3,991,000	\$801,000	\$4,485,000	\$9,515,000	\$49,000	\$2,991,000	\$3,040,000
Marion	\$484,000	\$1,999,000	\$411,000	\$2,876,000	\$5,770,000	\$32,000	\$2,020,000	\$2,052,000
Marshall	\$376,000	\$1,945,000	\$482,000	\$4,061,000	\$6,864,000	\$37,000	\$2,365,000	\$2,402,000
Mason	\$148,000	\$1,282,000	\$294,000	\$2,195,000	\$3,919,000	\$22,000	\$1,445,000	\$1,467,000
McDowell	\$117,000	\$721,000	\$165,000	\$1,777,000	\$2,780,000	\$19,000	\$1,338,000	\$1,357,000
Mercer	\$200,000	\$692,000	\$156,000	\$1,110,000	\$2,158,000	\$12,000	\$783,000	\$795,000

*This column assumes that the school district is receiving additional funding through the School Aid Formula, as shown in column marked "Increase in state aid to schools."

TABLE A-5 (CONTINUED)

Potential State and Local Government Annual Property Tax Revenue Losses

	Municipal	County	School (Regular)*	School (Excess/Bond)*	Total Local Government	State Collections	Increase in State Aid to Schools	Total State Government
Mineral	\$136,000	\$813,000	\$315,000	\$998,000	\$2,262,000	\$11,000	\$623,000	\$634,000
Mingo	\$198,000	\$1,636,000	\$203,000	\$2,797,000	\$4,834,000	\$29,000	\$1,844,000	\$1,873,000
Monongalia	\$869,000	\$2,706,000	\$1,078,000	\$4,386,000	\$9,039,000	\$54,000	\$3,225,000	\$3,279,000
Monroe	\$6,000	\$79,000	\$11,000	\$130,000	\$226,000	\$2,000	\$102,000	\$104,000
Morgan	\$5,000	\$97,000	\$26,000	\$153,000	\$281,000	\$2,000	\$128,000	\$130,000
Nicholas	\$206,000	\$1,119,000	\$259,000	\$1,052,000	\$2,636,000	\$20,000	\$1,275,000	\$1,295,000
Ohio	\$1,016,000	\$1,391,000	\$823,000	\$2,301,000	\$5,531,000	\$24,000	\$1,290,000	\$1,314,000
Pendleton	\$7,000	\$74,000	\$19,000	\$0	\$100,000	\$1,000	\$95,000	\$96,000
Pleasants	\$53,000	\$462,000	\$102,000	\$615,000	\$1,232,000	\$8,000	\$524,000	\$532,000
Pocahontas	\$7,000	\$120,000	\$30,000	\$0	\$157,000	\$2,000	\$147,000	\$149,000
Preston	\$83,000	\$429,000	\$103,000	\$146,000	\$761,000	\$8,000	\$509,000	\$517,000
Putnam	\$215,000	\$1,279,000	\$494,000	\$2,079,000	\$4,067,000	\$23,000	\$1,324,000	\$1,347,000
Raleigh	\$701,000	\$3,228,000	\$1,216,000	\$4,971,000	\$10,116,000	\$54,000	\$3,163,000	\$3,217,000
Randolph	\$116,000	\$550,000	\$127,000	\$0	\$793,000	\$10,000	\$623,000	\$633,000
Ritchie	\$26,000	\$188,000	\$30,000	\$135,000	\$379,000	\$2,000	\$145,000	\$147,000
Roane	\$22,000	\$229,000	\$40,000	\$29,000	\$320,000	\$3,000	\$197,000	\$200,000
Summers	\$18,000	\$78,000	\$18,000	\$0	\$114,000	\$1,000	\$88,000	\$89,000
Taylor	\$34,000	\$204,000	\$38,000	\$203,000	\$479,000	\$3,000	\$187,000	\$190,000
Tucker	\$51,000	\$392,000	\$106,000	\$0	\$549,000	\$8,000	\$521,000	\$529,000
Tyler	\$52,000	\$355,000	\$73,000	\$512,000	\$992,000	\$6,000	\$360,000	\$366,000
Upshur	\$196,000	\$991,000	\$241,000	\$723,000	\$2,151,000	\$18,000	\$1,186,000	\$1,204,000
Wayne	\$248,000	\$1,261,000	\$303,000	\$1,864,000	\$3,676,000	\$20,000	\$1,272,000	\$1,292,000
Webster	\$34,000	\$442,000	\$101,000	\$0	\$577,000	\$8,000	\$498,000	\$506,000
Wetzel	\$69,000	\$221,000	\$51,000	\$355,000	\$696,000	\$4,000	\$250,000	\$254,000
Wirt	\$2,000	\$25,000	\$4,000	\$24,000	\$55,000	\$0	\$19,000	\$19,000
Wood	\$1,349,000	\$2,166,000	\$541,000	\$3,642,000	\$7,698,000	\$41,000	\$2,657,000	\$2,698,000
Wyoming	\$61,000	\$852,000	\$106,000	\$1,586,000	\$2,605,000	\$15,000	\$961,000	\$976,000
Totals:	\$18,038,000	\$67,424,000	\$15,369,000	\$85,742,000	\$186,573,000	\$1,032,000	\$64,766,000	\$65,798,000

Grand Total: \$252,371,000

*This column assumes that the school district is receiving additional funding through the School Aid Formula, as shown in column marked "Increase in state aid to schools."

APPENDIX F

Estimated Fiscal Impact of Exempting Business Personal Property from Taxation (County Level)

TABLE A-6
Potential Annual Property Tax Revenue Losses, by County

County	Revenue Lost	% of Property Tax Revenue
Boone	\$4,661,000	39%
Logan	\$3,991,000	39%
Brooke	\$1,807,000	36%
Hancock	\$1,587,000	32%
Webster	\$442,000	31%
Mingo	\$1,636,000	29%
Nicholas	\$1,119,000	28%
Marshall	\$1,945,000	26%
Upshur	\$991,000	26%
Mason	\$1,282,000	25%
Raleigh	\$3,228,000	25%
Fayette	\$2,032,000	24%
Jackson	\$1,685,000	23%
Wayne	\$1,261,000	23%
Cabell	\$4,505,000	22%
McDowell	\$721,000	22%
Kanawha	\$11,072,000	20%
Marion	\$1,999,000	19%
Ohio	\$1,391,000	19%
Tucker	\$392,000	19%
Harrison	\$2,909,000	18%
Monongalia	\$2,706,000	18%
Tyler	\$355,000	18%
Wood	\$2,166,000	18%
Clay	\$263,000	17%
Mineral	\$813,000	16%
Wyoming	\$852,000	16%
Pleasants	\$462,000	15%

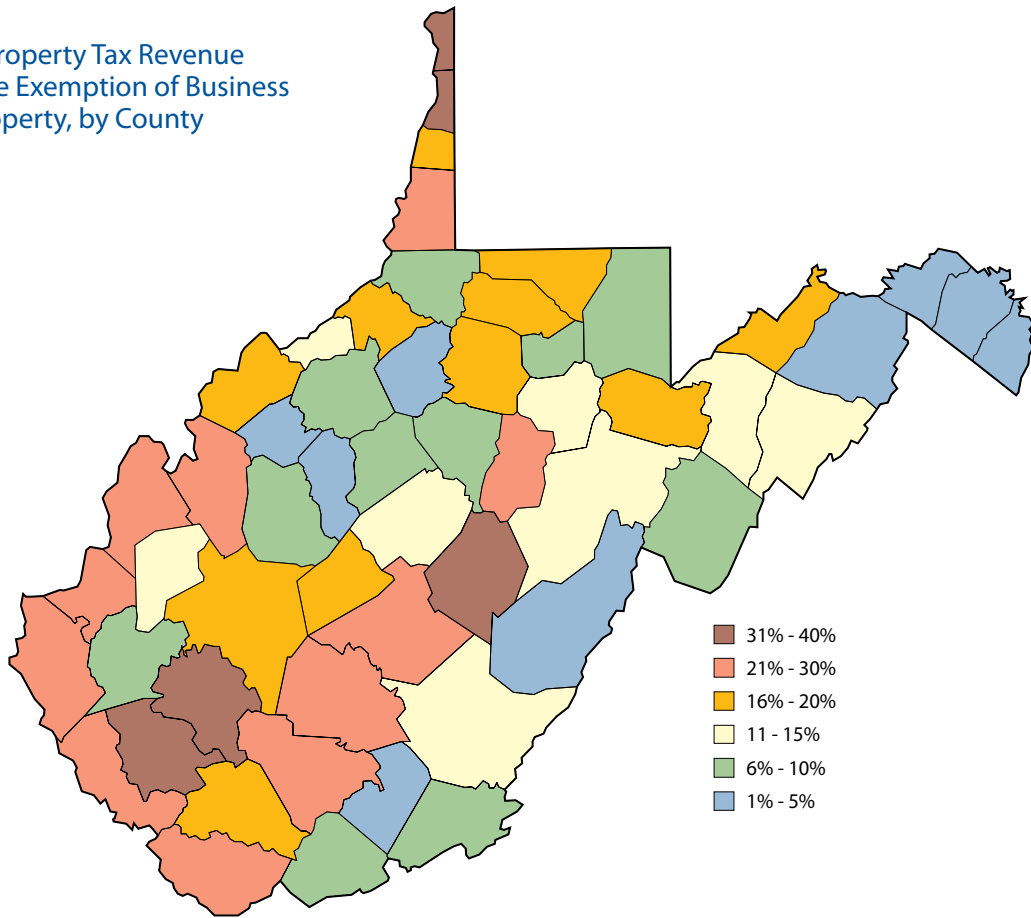
County	Revenue Lost	% of Property Tax Revenue
Grant	\$551,000	14%
Barbour	\$234,000	13%
Greenbrier	\$876,000	13%
Randolph	\$550,000	13%
Braxton	\$273,000	12%
Hardy	\$399,000	11%
Putnam	\$1,279,000	11%
Mercer	\$692,000	10%
Roane	\$229,000	10%
Preston	\$429,000	9%
Lewis	\$376,000	8%
Lincoln	\$284,000	8%
Gilmer	\$155,000	7%
Taylor	\$204,000	7%
Wetzel	\$221,000	7%
Monroe	\$79,000	6%
Pendleton	\$74,000	6%
Ritchie	\$188,000	6%
Berkeley	\$884,000	5%
Calhoun	\$61,000	5%
Jefferson	\$539,000	5%
Summers	\$78,000	5%
Hampshire	\$205,000	4%
Pocahontas	\$120,000	4%
Morgan	\$97,000	3%
Wirt	\$25,000	3%
Doddridge	\$49,000	2%

Total	\$67,424,000	18%
--------------	---------------------	------------

Source: West Virginia State Tax Department, "Classified Assessed Valuations Taxes Levied, 2009 Tax Year"; West Virginia Department of Revenue estimates; West Virginia State Auditor's Office; and author's analysis.

MAP A-1

Percent of Property Tax Revenue
Lost with the Exemption of Business
Personal Property, by County



APPENDIX G

Estimated Fiscal Impact of Exempting Business Personal Property from Taxation (School Districts)

TABLE A-7

Change in School Aid Formula, if Business Personal Property Exempted

County	Exemption Value	State Aid Increase
Barbour	\$319,000	\$265,000
Berkeley	\$1,530,000	\$1,225,000
Boone	\$4,410,000	\$3,665,000
Braxton	\$371,000	\$308,000
Brooke	\$1,834,000	\$1,518,000
Cabell	\$3,834,000	\$3,337,000
Calhoun	\$66,000	\$55,000
Clay	\$357,000	\$297,000
Doddridge	\$57,000	\$47,000
Fayette	\$1,838,000	\$1,527,000
Gilmer	\$163,000	\$135,000
Grant	\$761,000	\$632,000
Greenbrier	\$1,419,000	\$869,000
Hampshire	\$276,000	\$229,000
Hancock	\$1,898,000	\$1,577,000
Hardy	\$541,000	\$450,000
Harrison	\$3,393,000	\$2,731,000
Jackson	\$1,670,000	\$1,388,000
Jefferson	\$1,128,000	\$926,000
Kanawha	\$10,555,000	\$8,771,000
Lewis	\$514,000	\$427,000
Lincoln	\$279,000	\$232,000
Logan	\$3,792,000	\$2,991,000
Marion	\$2,431,000	\$2,020,000
Marshall	\$2,847,000	\$2,365,000
Mason	\$1,739,000	\$1,445,000
McDowell	\$1,503,000	\$1,338,000
Mercer	\$939,000	\$783,000

County	Exemption Value	State Aid Increase
Mineral	\$938,000	\$623,000
Mingo	\$2,047,000	\$1,844,000
Monongalia	\$4,303,000	\$3,225,000
Monroe	\$113,000	\$102,000
Morgan	\$154,000	\$128,000
Nicholas	\$1,534,000	\$1,275,000
Ohio	\$2,113,000	\$1,290,000
Pendleton	\$114,000	\$95,000
Pleasants	\$626,000	\$524,000
Pocahontas	\$177,000	\$147,000
Preston	\$612,000	\$509,000
Putnam	\$1,818,000	\$1,324,000
Raleigh	\$4,379,000	\$3,163,000
Randolph	\$750,000	\$623,000
Ritchie	\$175,000	\$145,000
Roane	\$237,000	\$197,000
Summers	\$106,000	\$88,000
Taylor	\$225,000	\$187,000
Tucker	\$627,000	\$521,000
Tyler	\$433,000	\$360,000
Upshur	\$1,427,000	\$1,186,000
Wayne	\$1,575,000	\$1,272,000
Webster	\$599,000	\$498,000
Wetzel	\$301,000	\$250,000
Wirt	\$23,000	\$19,000
Wood	\$3,198,000	\$2,657,000
Wyoming	\$1,067,000	\$961,000

Total	\$80,135,000	\$64,766,000
--------------	---------------------	---------------------

Source: West Virginia State Tax Department, "Classified Assessed Valuations Taxes Levied, 2009 Tax Year"; West Virginia Department of Revenue estimates; West Virginia State Auditor's Office; and author's analysis.

TABLE A-8

Estimated Annual Property Tax Revenue Losses, by School District

County	Regular Levy Revenue Not Replaced with State Aid	Excess Levy and Bond Revenue	Total Property Tax Revenue Loss	Percent of Property Tax Revenue Lost
Barbour	\$54,000	\$0	\$54,000	2%
Berkeley	\$305,000	\$1,975,000	\$2,280,000	3%
Boone	\$745,000	\$5,218,000	\$5,963,000	24%
Braxton	\$63,000	\$160,000	\$223,000	5%
Brooke	\$316,000	\$2,678,000	\$2,994,000	24%
Cabell	\$497,000	\$6,531,000	\$7,028,000	15%
Calhoun	\$11,000	\$18,000	\$29,000	2%
Clay	\$60,000	\$120,000	\$180,000	6%
Doddridge	\$10,000	\$86,000	\$96,000	1%
Fayette	\$311,000	\$2,175,000	\$2,486,000	15%
Gilmer	\$28,000	\$72,000	\$100,000	3%
Grant	\$129,000	\$0	\$129,000	2%
Greenbrier	\$550,000	\$1,421,000	\$1,971,000	9%
Hampshire	\$47,000	\$0	\$47,000	1%
Hancock	\$321,000	\$2,246,000	\$2,567,000	20%
Hardy	\$91,000	\$0	\$91,000	2%
Harrison	\$662,000	\$3,500,000	\$4,162,000	11%
Jackson	\$282,000	\$1,976,000	\$2,258,000	14%
Jefferson	\$202,000	\$1,434,000	\$1,636,000	3%
Kanawha	\$1,784,000	\$10,264,000	\$12,048,000	12%
Lewis	\$87,000	\$334,000	\$421,000	4%
Lincoln	\$47,000	\$329,000	\$376,000	5%
Logan	\$801,000	\$4,485,000	\$5,286,000	25%
Marion	\$411,000	\$2,876,000	\$3,287,000	12%
Marshall	\$482,000	\$4,061,000	\$4,543,000	17%
Mason	\$294,000	\$2,195,000	\$2,489,000	16%
McDowell	\$165,000	\$1,777,000	\$1,942,000	13%
Mercer	\$156,000	\$1,110,000	\$1,266,000	6%
Mineral	\$315,000	\$998,000	\$1,313,000	11%
Mingo	\$203,000	\$2,797,000	\$3,000,000	18%
Monongalia	\$1,078,000	\$4,386,000	\$5,464,000	11%
Monroe	\$11,000	\$130,000	\$141,000	4%
Morgan	\$26,000	\$153,000	\$179,000	2%
Nicholas	\$259,000	\$1,052,000	\$1,311,000	14%
Ohio	\$823,000	\$2,301,000	\$3,124,000	13%
Pendleton	\$19,000	\$0	\$19,000	1%
Pleasants	\$102,000	\$615,000	\$717,000	9%
Pocahontas	\$30,000	\$0	\$30,000	1%
Preston	\$103,000	\$146,000	\$249,000	3%

TABLE A-8 (CONTINUED)

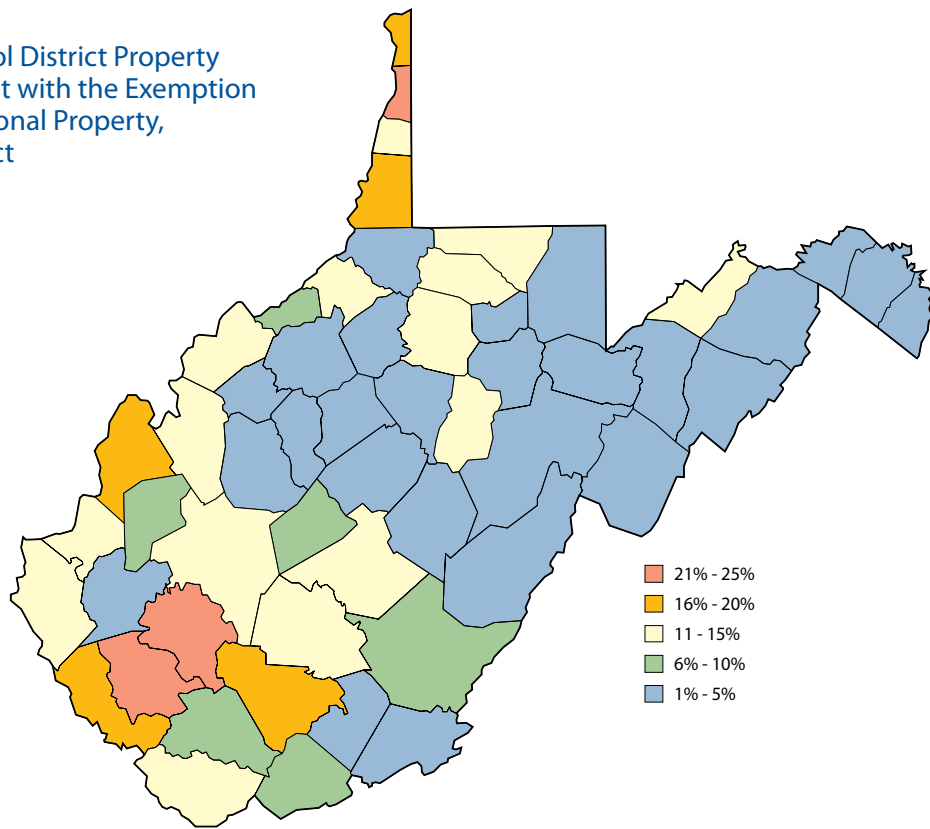
Estimated Annual Property Tax Revenue Losses, by School District

County	Regular Levy Revenue Not Replaced with State Aid	Excess Levy and Bond Revenue	Total Property Tax Revenue Loss	Percent of Property Tax Revenue Lost
Putnam	\$494,000	\$2,079,000	\$2,573,000	7%
Raleigh	\$1,216,000	\$4,971,000	\$6,187,000	16%
Randolph	\$127,000	\$0	\$127,000	2%
Ritchie	\$30,000	\$135,000	\$165,000	3%
Roane	\$40,000	\$29,000	\$69,000	3%
Summers	\$18,000	\$0	\$18,000	1%
Taylor	\$38,000	\$203,000	\$241,000	4%
Tucker	\$106,000	\$0	\$106,000	3%
Tyler	\$73,000	\$512,000	\$585,000	11%
Upshur	\$241,000	\$723,000	\$964,000	12%
Wayne	\$303,000	\$1,864,000	\$2,167,000	14%
Webster	\$101,000	\$0	\$101,000	5%
Wetzel	\$51,000	\$355,000	\$406,000	5%
Wirt	\$4,000	\$24,000	\$28,000	2%
Wood	\$541,000	\$3,642,000	\$4,183,000	11%
Wyoming	\$106,000	\$1,586,000	\$1,692,000	10%
Total	\$15,369,000	\$85,742,000	\$101,111,000	11%

Source: West Virginia State Tax Department, "Classified Assessed Valuations Taxes Levied, 2009 Tax Year"; West Virginia Department of Revenue estimates; West Virginia State Auditor's Office; and author's analysis.

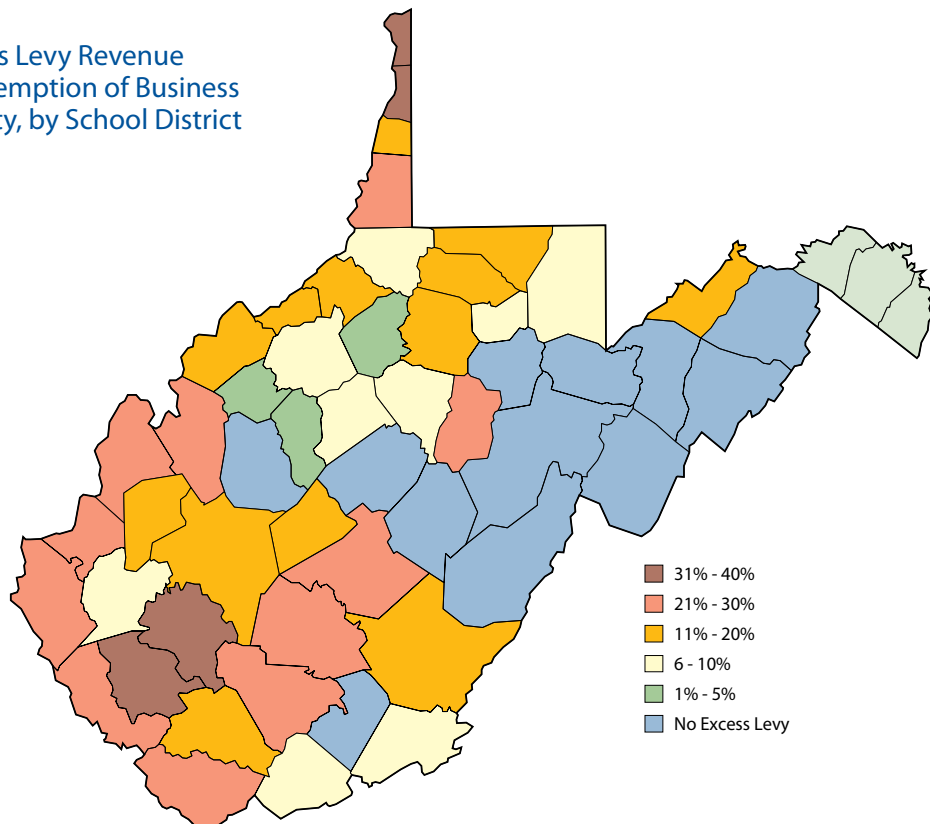
MAP A-2

Percent of School District Property Tax Revenue Lost with the Exemption of Business Personal Property, by School District



MAP A-3

Percent of Excess Levy Revenue Lost with the Exemption of Business Personal Property, by School District



School District Regular Levy Revenue with the Exemption of Business Personal Property and Maximized Levy Rates

TABLE A-9

Changes in Revenue, by School District

County	Current Regular School Levy Revenue	Maximum Regular School Levy Revenue with Business Personal Property Exemption	Change in Revenue
Barbour	\$2,451,795	\$2,522,984	\$71,189
Berkeley	\$28,661,385	\$32,096,099	\$3,434,714
Boone	\$11,246,674	\$8,087,116	-\$3,159,559
Braxton	\$3,085,504	\$3,211,466	\$125,962
Brooke	\$5,051,105	\$3,806,252	-\$1,244,853
Cabell	\$18,905,694	\$17,829,026	-\$1,076,667
Calhoun	\$1,476,812	\$1,668,109	\$191,297
Clay	\$2,114,531	\$2,079,111	-\$35,420
Doddridge	\$2,769,643	\$3,208,678	\$439,035
Fayette	\$7,614,128	\$6,832,923	-\$781,205
Gilmer	\$2,220,347	\$2,434,614	\$214,267
Grant	\$5,254,967	\$5,316,927	\$61,960
Greenbrier	\$9,366,633	\$9,401,618	\$34,986
Hampshire	\$7,619,754	\$8,687,397	\$1,067,643
Hancock	\$6,010,013	\$4,863,695	-\$1,146,318
Hardy	\$4,952,797	\$5,219,056	\$266,259
Harrison	\$18,792,865	\$18,217,792	-\$575,073
Jackson	\$7,290,740	\$6,648,937	-\$641,803
Jefferson	\$20,658,924	\$23,105,038	\$2,446,115
Kanawha	\$52,420,634	\$49,526,488	-\$2,894,146
Lewis	\$6,058,269	\$6,558,961	\$500,691
Lincoln	\$3,285,875	\$3,557,952	\$272,077
Logan	\$9,790,104	\$7,095,841	-\$2,694,264
Marion	\$12,774,775	\$12,236,200	-\$538,575
Marshall	\$11,054,707	\$9,709,005	-\$1,345,702
Mason	\$6,884,975	\$6,087,902	-\$797,073
McDowell	\$6,679,018	\$6,123,615	-\$555,402
Mercer	\$9,295,208	\$9,885,895	\$590,687
Mineral	\$5,285,657	\$5,143,508	-\$142,149
Mingo	\$7,595,786	\$6,563,695	-\$1,032,091
Monongalia	\$23,855,867	\$23,130,108	-\$725,759

TABLE A-9 (CONTINUED)

Changes in Revenue, by School District

County	Current Regular School Levy Revenue	Maximum Regular School Levy Revenue with Business Personal Property Exemption	Change in Revenue
Monroe	\$1,919,475	\$2,137,814	\$218,339
Morgan	\$5,516,970	\$6,344,128	\$827,157
Nicholas	\$5,562,846	\$4,766,243	-\$796,603
Ohio	\$9,734,177	\$9,015,654	-\$718,523
Pendleton	\$2,009,943	\$2,243,140	\$233,197
Pleasants	\$4,114,307	\$4,126,269	\$11,962
Pocahontas	\$4,598,687	\$5,230,477	\$631,789
Preston	\$6,747,853	\$7,258,420	\$510,567
Putnam	\$15,670,751	\$16,387,102	\$716,351
Raleigh	\$17,051,861	\$14,991,991	-\$2,059,871
Randolph	\$5,975,220	\$6,181,566	\$206,345
Ritchie	\$3,008,844	\$3,352,172	\$343,328
Roane	\$2,417,433	\$2,579,474	\$162,040
Summers	\$2,168,883	\$2,440,253	\$271,370
Taylor	\$3,162,648	\$3,475,176	\$312,528
Tucker	\$3,307,179	\$3,170,463	-\$136,715
Tyler	\$2,370,647	\$2,292,383	-\$78,264
Upshur	\$5,462,380	\$4,774,254	-\$688,127
Wayne	\$6,872,784	\$6,266,946	-\$605,839
Webster	\$1,929,287	\$1,573,526	-\$355,761
Wetzel	\$4,066,260	\$4,455,062	\$388,802
Wirt	\$712,974	\$816,629	\$103,655
Wood	\$18,052,419	\$17,572,207	-\$480,212
Wyoming	\$7,070,942	\$7,102,687	\$31,744
Total	\$460,029,957	\$449,410,041	-\$10,619,917

Source: West Virginia State Tax Department, "Classified Assessed Valuations Taxes Levied, 2009 Tax Year"; West Virginia Department of Revenue estimates; West Virginia State Auditor's Office; and author's analysis.

Note. Highlighted school districts would be unable to replace revenue lost by exempting business personal property even with an increase in the levy rate to its maximum level.

End Notes

- 1 West Virginia Department of Revenue, State Tax Department, "West Virginia Tax Modernization Project Workgroup's Recommendations to Governor" (December 30, 2009), downloaded from <http://www.state.wv.us/taxrev/publications/taxModernizationRecommendations.pdf>.
- 2 U.S. Census Bureau, Historical Data: 2007, State and Local Government, Table 1. State and Local Government Finances by Level of Government and by State: 2006-07, accessed from http://www.census.gov/govs/estimate/historical_data_2007.html.
- 3 West Virginia State Tax Department, "Classified Assessed Valuations Taxes Levied, 2009 Tax Year," downloaded from <http://www.state.wv.us/taxrev/ptdweb/units/ASSESSSTND/TY%2009%20CLASSIFIED%20ASSESSSED%20ELECTRONIC.pdf>.
- 4 Kail M. Padgitt, "2010 State Business Tax Climate Index: Seventh Edition," (Tax Foundation, September 2009): 58, downloaded from <http://www.taxfoundation.org/files/bp59.pdf>.
- 5 Assessed value equals 60 percent of appraised value.
- 6 According to the West Virginia State Tax Department, machinery and equipment includes all machinery and equipment except items in salvage and other categories. Other business personal property includes some machinery, equipment and inventory not otherwise classified and other items such as computer equipment, furniture, and fixtures but not the working interest of oil and natural gas well properties.
- 7 These estimates derive from FY 2010 county estimates calculated by the West Virginia Department of Revenue. Letter from Christopher G. Morris, West Virginia State Tax Commissioner, to Patti Hamilton, Executive Director of the West Virginia Association of Counties (dated February 26, 2010). Personal files of Ted Boettner.
- 8 Joomi Kim, Andrew Phillips, and Robert Cline, "Property Taxes on Business Capital: A Large and Growing Share of State and Local Business Taxes," *State Tax Notes* (March 27, 2006): 956. Note: The main reason for this disparity is the structure of West Virginia's economy. West Virginia has an undiversified economy that is very capital-intensive, with over one-fifth of business personal property tax collections coming from the coal industry. For example, the taxes levied on coal personal property (mostly machines and equipment) account for 60 percent of the total share of their property taxes while the taxes levied on the real property (land, buildings, minerals) of coal account for 40 percent.
- 9 Andrew Philips, Robert Cline, Thomas Neubig, and Julia Thayne, "Total state and local business taxes: State-by-state estimates for fiscal year 2009" (Ernst & Young LLP in conjunction with Council On State Taxation, March 2010): 7. Downloaded from [www.ey.com/Publication/vwLUAssets/Total-state-and-local-business-taxes-March-2010/\\$FILE/Total-state-and-local-business-taxes-March-2010.pdf](http://www.ey.com/Publication/vwLUAssets/Total-state-and-local-business-taxes-March-2010/$FILE/Total-state-and-local-business-taxes-March-2010.pdf).
- 10 Lincoln Institute of Land Policy, "Significant Features of the Property Tax, State Summaries," accessed from http://www.lincolnst.edu/subcenters/significant-features-property-tax/Report_State.aspx on August 24, 2010.
- 11 The value of this credit will diminish over time as the Corporate Net Income Tax rate drops to 6.5 percent in 2014 and as the Business Franchise Tax is eventually eliminated in 2015.
- 12 West Virginia State Tax Department, "West Virginia Tax Expenditure Study" (January 2009): 143, downloaded from www.state.wv.us/taxrev/expenditureStudy/expenditureStudy.2009.pdf.
- 13 Robin C. Capehart and Pavel A. Yakovlev, "Three Specific Tax Reforms for Increasing Growth," in *Unleashing Capitalism: Why Prosperity Stops at the West Virginia Border and How to Fix It*, ed. Russell S. Sobel (The Public Policy Foundation of West Virginia, 2007): 86.
- 14 Robert Tannenwald, "Research Counters Claims that Taxes Drive Business Location," *Choices* Vol. XII, Number 2 (January 2006): 3, downloaded from <http://www.mecep.org/av.asp?na=116>.
- 15 Michael Wasylenko, "Taxation and Economic Development: The State of the Economic Literature," *New England Economic Review* (March/April 1997): 47, downloaded from www.bos.frb.org/economic/neer/neer1997/neer297c.pdf.
- 16 See the following: Larry DeBoer, "Taxing Inventory: An Analysis of its Effects in Indiana," *Indiana Business Review* Fall (1999): 1-6, downloaded from <http://www.ibrc.indiana.edu/ibr/1999/fall99/01.pdf>; Stephen T. Mark, Therese J. McGuire, and Leslie E. Papke, "The Influence of Taxes on Employment and Population Growth: Evidence from the Washington D.C. Metropolitan Area," *National Tax Journal* 53 (2000): 105-23; Judith Phillips, "The Inventory Tax and Mississippi's Business Tax Climate: An Overview for Decision Makers" (The John C. Stennis Institute of Government, Mississippi State University, December 2007), downloaded from http://www.sig.msstate.edu/files/200_0108_Inventory_Tax.pdf; and John Matthews, "Inventory Taxes," Policy Brief Number 136 (Fiscal Research Center, Georgia State University, December 2006), downloaded from <http://www.iwla.com/CustomFiles/downloads/04D3C9B2-17D9-4C91-B28C-8CB6D01DBD0E.pdf>.
- 17 Robert M. Ady, "Discussion" (response to: "The Effects of State and Local Public Services on Economic Development"), *New England Economic Review* (March/April 1997): 80, downloaded from <http://belkcollegeofbusiness.uncc.edu/brusso/PPOL8641/Fisher%20on%20Development.pdf>.
- 18 Robert G. Lynch, *Rethinking Growth Strategies* (Washington, D.C.: Economic Policy Institute, 2004): 4, downloaded from [http://www.epi.org/books/rethinking_growth_\(full\).pdf](http://www.epi.org/books/rethinking_growth_(full).pdf); Michael Mazerov, "The 'Single Sales Factor' Formula for State Corporate Taxes: A Boon to Economic Development or a Costly Giveaway?" (Washington, D.C.: Center on Budget and Policy Priorities, September 2005): 39, downloaded from <http://www.cbpp.org/archiveSite/3-27-01sfp.pdf>; Center for Business Research, "Public Finance in Arizona" (Arizona State University: January 2003): 50, downloaded from <http://wpcarey.asu.edu/seidman/cbr/PDFs/publicfinance.pdf>.
- 19 Milken Institute, "Cost of Doing Business Index 2007" (2007), downloaded from <http://www.milkeninstitute.org/pdf/2007CostofDoingBusiness.pdf>. West Virginia's overall cost of doing business is 13 percent less than the national average.
- 20 Ady (1997): 77-78.
- 21 In a review of 91 studies, Michael Wasylenko finds that average tax elasticity is -0.2, with a range of -15.7 to a positive 0.54. See: Wasylenko (1997); Timothy J. Bartik, "Michigan's Business Taxes and Economic Development: Possible Reforms" (Kalamazoo, MI: Upjohn Institute for Employment Research, February 14, 2006), downloaded from http://www.upjohninst.org/tjb_testimony_2-17-06.pdf. For a critical appraisal of tax elasticity, see Lynch (2004). He found using a frequency distribution that a 10 percent tax burden reduced economic performance by 1-2 percent.
- 22 Based on data from Philips et al (2010).
- 23 For a change in business taxes, the tax revenue effect per job created is equal to:
 $(\Delta R/\Delta J) = (T/E) + T$, where R equals total business tax revenue, J equals total private employment, T equals tax revenue per job, and E equals the long run elasticity of tax cuts to job growth.

For exempting business personal property taxes the formula is $(-\$240\text{ million}/\Delta J) = (\$4,500/-0.2) + 4,500$, or an increase of 13,000 jobs over 20 years at an ongoing cost of \$18,000 per job. Present value of \$18,000 with a discount rate of 3% = $18,000/.03 = \$600,000$.

Calculations used by Timothy J. Bartik in: "The Effects of State and Local Taxes on Economic Development: A Review of Recent Research," *Economic Development Quarterly* 6:1 (1992): 102-110; "Economic Development," in *Management Policies in Local Government Finance*, 5th edition, ed. J. Richard Aronson and Eli Schwartz (Washington, DC: International City/County Management Association, 2004), 355-390; "Solving the Problems of Economic Development Incentives," *Growth and Change* 36:2 (2005): 139-166.
- 24 According to the WV Tax Department Classified Assessed Valuations for the Tax Year 2009, county governments collected \$67,424,077 in business personal property tax revenue. 86.1 percent of county property tax revenue was raised through the current regular levy rate. 13.8 percent was raised through excess levies.

- 25 West Virginia State Auditor, "Rates of Levy: State, County, School, and Municipal – 2009 Tax Year," downloaded from http://www.wvsao.gov/LocalGovernment/files/levy/assessment_levy_09-10/RateBook2010VALUESProtected.xls.
- 26 According to the WV State Tax Department, municipalities collected \$18,036,201 in Tax Year 2009. 77.4 percent of municipal tax revenue was raised through the current regular levy. 21 percent was raised through excess levies.
- 27 These municipalities are: Danville, Madison, Barboursville, Grantsville, Fayetteville, Montgomery, Mount Hope, Smithers, Glenville, Alderson, Lewisburg, Ronceverte, New Cumberland, Moorefield, Bridgeport, Clarksburg, Nutter Fort, Shinnston, Stonewood, Dunbar, South Charleston, St. Albans, Welch, Keyser, Alderson, Richwood, Kingwood, Cairo, Harrisville, Pennsboro, Hinton, Sistersville, Ceredo, Fort Gay, Mullens, and Oceana.
- 28 West Virginia Department of Education, Information System, West Virginia Achieves 2008-2009 NCLB Report Card, downloaded from <http://www.wveis.k12.wv.us/nclb/pub/rpt0809/cache/pdf999.pdf>.
- 29 According to the WV Tax Department Classified Assessed Valuations for Tax Year 2009, school districts collected \$165,876,105 in business personal property tax revenue, of which \$85,739,603 came from excess levies.
- 30 Counties with maximum school excess levy rates include: Boone, Brooke, Cabell, Doddridge, Fayette, Hancock, Jackson, Jefferson, Lincoln, Logan, Marion, McDowell, Mercer, Mineral, Mingo, Putnam, Raleigh, Tyler, Wayne, Wetzel, and Wyoming.
- 31 Counties with school excess levy rates below the maximum include: Berkeley, Calhoun, Clay, Gilmer, Greenbrier, Harrison, Kanawha, Lewis, Marshall, Mason, Monongalia, Monroe, Morgan, Nicholas, Ohio, Pleasants, Preston, Ritchie, Taylor, Upshur, Wirt, and Wood.
- 32 West Virginia Governor's Office, "Six Year Financial Plan FY 2009 through FY 2015: General and Lottery Revenues," downloaded from http://www.wvgov.org/SoS2010/COMPLETE_Budget_Presentation.pdf.
- 33 According to the WV Tax Department Classified Assessed Valuations for Tax Year 2009, the state government collected 0.4 percent of property taxes. 0.4 percent of the estimated \$252 million of business personal property tax collections is \$1,027,592.
- 34 For example, Maryland's 23 counties and Baltimore City levy a local income tax collected on the state income tax return as a convenience for local governments.
- 35 For example, Jackson and Marshall counties in Alabama levy a severance tax of 20 cents per ton.

Acknowledgments

We would like to acknowledge Elizabeth Paulhus, who edited the paper and provided us with invaluable feedback. In addition, we thank the members of the West Virginia Tax Modernization Committee for allowing us to present a draft of this report to their committee.

This report was made possible by generous grants from the W.K. Kellogg Foundation, the Claude Worthington Benedum Foundation, and the Mary Reynolds Babcock Foundation.



723 Kanawha Blvd., Suite 300
 Charleston, WV 25301
 Tel 304-720-8682
 Fax 304-720-9696
www.wvpolicy.org

The **West Virginia Center on Budget and Policy** is a policy research organization that is nonpartisan, nonprofit, and statewide. It focuses on how policy decisions affect all West Virginians, including low- and moderate-income families, other vulnerable populations, and the important community programs that serve them.