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Memorandum

Date: Revised September 14, 2012 (Originally Issued August 17, 2012)

To: Keystone Analytics

From: Jason Horwitz, Consultant

Re: *Fiscal Analysis of House Bill 1776, Proposed Reform of School Funding*

Cc: Alex Rosaen, Manager of Public Policy and Economic Analysis

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I. Purpose of Memo

The property taxation system in Pennsylvania has become increasingly problematic for the Commonwealth's taxpayers. Assessments are inconsistent and outdated, and millage rates are subject to common but unpredictable increases. This is particularly a problem for the state's increasing population of elderly homeowners, who are often on a fixed income and more sensitive to changes in property tax bills. In response to these issues, members of the legislature have proposed House Bill 1776 (HB 1776), which would eliminate local property taxes for schools and replace them with increased state sales and personal income taxes. Eliminating property taxes for schools goes a long way toward mitigating taxpayer headaches because a large portion of property taxes goes to operating costs for schools, and they represent the share of the property tax burden that has increased most rapidly. After being tabled by the Finance Committee, HB 1776 is now being considered by the Appropriations Committee, but action on the bill is unlikely before the end of this year's legislative session.[1]

There continues to be uncertainty as to the legislation's fiscal impact on the state government and on school districts. Keystone Analytics, on behalf of the Pennsylvania Association of Realtors, has asked Anderson Economic Group to provide an independent assessment of the fiscal impact of these reforms. This memorandum presents the results of a fiscal analysis of the bill, which its sponsors intend to be revenue-neutral for the state budget. Our fiscal analysis estimates the bill's effect on the state budget overall, as well as the effect on revenues dedicated to schools.

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1. Tom Murse, "State panel advances property tax relief." *Lancaster Online*, July 11, 2012. http://lancasteronline.com/article/local/686644_State-panel-advances-property-tax-relief.html

II. Findings

Our research and analysis resulted in the following findings.

1. *HB 1776 would have a net negative fiscal impact on the state budget of approximately $1.8 billion in the year following implementation.*

   In the fiscal year after HB 1776 goes into effect, we expect that the state would be required to pay out approximately $10.7 billion to school districts in order to compensate them for decreased operating revenues.[2] This would be partially offset by savings and revenue increases from other sources which total $8.9 billion. Savings include $510 million in property tax reduction allocations, and additional revenues include $3.3 billion in personal income tax revenue and $5.0 billion in sales and use tax revenue. The net result of the changes contained in HB 1776 would be an estimated negative fiscal impact of $1.8 billion for the state government.[3]

2. *HB 1776 would decrease total revenues for school districts statewide by approximately $760 million in the first year following implementation.*

   The $10.7 billion that schools would get from the state under HB 1776 falls below the estimated $10.9 billion that schools would collect in property tax revenues without HB 1776. In addition, the state previously allocated $510 million a year to school districts to reimburse them for property tax reductions, which will no longer be applicable. The result is that school districts could experience a net drop of $760 million in revenues (not counting any additional revenues collected under the stipulation that school districts would be able to implement a district-wide personal or earned income tax). See "Fiscal Impact of HB 1776" on page 3 for further details.

3. *If the state were to make the HB 1776 reforms revenue-neutral by further increasing the personal income tax, the personal income tax would need to be further increased by at least 0.52%, to a total rate of 4.53%.*

   It is the intention of many supporters of HB 1776 that the bill should be revenue-neutral for state government. If the state were to make up for the shortfall outlined in the first finding by increasing the personal income tax statewide, it would need to increase the personal income tax by an estimated 0.52%, to a total rate of 4.53% (compared to 4.01% under the current bill). This amount may actually underestimate the rate required to achieve revenue-neutrality, as taxpayers may respond to the higher income tax rate in ways that reduce the size of the income tax base.

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2. The fiscal year for which we have performed analysis is FY 2013, because that is when the latest draft version of the bill calls for implementation. Note, however, that given the current timeline, this bill is not likely to go into effect until at least FY 2014. Analysis on a different year would result in a marginally different fiscal impact estimate than that shown here.
3. "Net fiscal impact" is calculated by subtracting net additional expenses from net additional revenues. In this case, a large increase in revenues will be more than offset by a large increase in expenses at the state level.

III. Description of House Bill 1776

House Bill 1776 contains the following major provisions:

- Starting at the beginning of the 2013 calendar year, school districts will no longer have the ability to implement local property taxes to support their operating costs. In addition, local property taxes to pay off current outstanding debts for school districts will remain in place, but no further school debts can be paid for with local property tax revenues.
- The state personal income tax will be increased by 0.94%, from 3.07% to 4.01%. All revenues from this increase will be deposited into the state Education Stabilization Fund.
- The state sales and use tax will increase from 6% to 7%. With the exception of some revenues that will go toward transportation expenses, all sales and use tax receipts will be deposited into the state Education Stabilization Fund.
- The tax base for the sales and use tax will be expanded to include additional goods and services. A list of those goods and services can be found in Exhibit 1. "Goods and Services Newly Subject to Sales Tax Under HB 1776" on page 10. Some of the more notable additions include newspapers and magazines, non-prescription drugs, clothing and footwear that cost $50 or more, personal hygiene products, personal legal and financial services, dry cleaning and laundry services, and tickets to sporting events and concerts.
- Property tax rebates for the elderly and permanently disabled will be discontinued starting in the year 2013. Rent rebates will continue and will now be available, at a lower rate, to households with incomes up to $25,000 (previously only up to $15,000).
- In fiscal year 2013, the state will allocate funds from the Education Stabilization Fund to school districts. The amount allocated to each school district will be equal to the operating revenues that the district received from property tax in fiscal year 2012 times the change in consumer price index (inflation) for the state of Pennsylvania. Allocation of funds for subsequent years is not defined in the current version of the bill.
- School districts will have the ability to implement a personal income tax or an earned income tax within their districts, with no limit on rate, subject to a no-exception public referendum.

IV. Fiscal Impact of HB 1776

We project that real estate taxes collected by schools for operating purposes will total $10.9 billion for fiscal year 2012-13 in the absence of any reforms to education funding.[4] The intention of many supporters of HB 1776 is for the bill to be revenue-neutral to the state, and the state would be required to replace nearly the entire reduction in school district funds upon elimination of local operating taxes. To achieve revenue-neutrality, the bill increases taxes or cuts spending in four separate ways:

- an increase in the personal income tax rate
- an increase in the sales and use tax rate
- an expansion of the sales and use tax base
- elimination of property tax rebates and partially offsetting an increase in rent rebates

4. The estimates in this memo are annualized for FY 2013. We estimated these impacts as if the legislation were in effect for the entire 2013 fiscal year. Clearly, legislation similar to this bill would not be implemented until a future year. We project that the annual impact in the near future would only slightly differ from that shown here, depending on the change in various tax bases (sales, personal income, and property) over time.

As shown in Table 1 on page 4, of the $10.9 billion in property tax revenues that schools will forgo in fiscal year 2014, the Commonwealth will compensate them for nearly $10.7 billion. This spending by the state is offset by a net increase in state revenues totaling $8.9 billion. This increase in state revenues is due to a $3.3 billion increase in personal income tax revenue, a $5.0 billion increase in sales and use tax revenue, and a $110 million reduction in spending due to changes to property tax rebate and rent rebate programs for the elderly and permanently disabled. In addition, gaming revenues totaling about $510 million, which were formerly allocated toward reductions in school district property taxes, will now be available for other uses, assuming that these transfers do not continue under some basis no longer related to school property taxes.[5]

TABLE 1. Estimated Fiscal Impact of HB 1776 on School Districts and Pennsylvania State Government, FY 2013 (millions of $)

Categories of Revenue Impact	Amount	Net Impact
Fiscal Impact on School Districts		
Real Estate Taxes that Would be Collected by Schools for Operating Costs Only, w/o HB 1776	- $10,944	
State Payment to Schools Under HB 1776	+ $10,693	
State Property Tax Reduction Allocations Lost	-$509	
Total Net Impact on School Districts		***($760)***
Fiscal Impact on Pennsylvania State Government		
State Payment to Schools Under HB 1776	- $10,693	
Personal Income Tax Increase (3.07%-4.01%)	+ $3,252	
Sales Tax Increase on Current Base (6%-7%)	+ $1,502	
Expanded Sales Tax Base	+ $3,524	
State Property Tax Reduction Allocations	+ $509	
Property Tax Rebates Eliminated	+ $179	
Rent Rebates Expanded	- $71	
Total Net Impact on Pennsylvania State Government		***($1,798)***
Addenda: Total Sales and Use Tax Increase: $5.03 billion		
State Fiscal Impact as a Share of State Personal Income: 0.52%		

Source: Pennsylvania Dept. of Revenue, Pennsylvania Dept. of Education, 2010 Bureau of Labor Statistics Consumer Expenditure Survey Microdata for Public Use, U.S. Census Bureau, AEG Estimates
Analysis: Anderson Economic Group, LLC
Note: These figures are all annualized estimates based on AEG projections for the fiscal year 2013. They are particularly sensitive to unpredicted changes in statewide personal income, consumption, and home prices. These estimates are static, meaning that they are based on estimated tax bases without making adjustments for secondary effects, such as reductions in sales or income that might occur in response to increased rates.

5. Much of these property tax reduction allocations were used for replacement of homestead and farmstead exemptions, but they were also used to replace rent and property tax rebates. Since rent rebates will continue, it is plausible that a small portion of these allocations will remain for that purpose. Another alternative is that the state continues this transfer under some other rules of allocation. In the version of the bill analyzed for this memorandum, there is no reference to the continuation of these transfers. Ongoing state transfers to school districts are solely based on property taxes collected by those school districts in the 2012 fiscal year.

In all, we expect that in the fiscal year following the implementation of HB 1776, school district revenues would decrease by a combined $760 million statewide, while net state government revenues would decrease by $1.80 billion due to HB 1776. (This analysis does not account for the fact that HB 1776 will give school districts the ability to enforce an earned income or personal income tax, upon voter approval.) If the state were to make up for the state revenue shortfall by increasing the rate of the personal income tax further, the rate would need to be increased by an additional 0.52%, to 4.53%.

V. Methodology

In order to estimate the fiscal impact of House Bill 1776, we analyzed each separate piece of the legislation that would significantly affect state and school revenues or expenditures. In this section, we summarize our methods for estimating the impact of each line item, as presented in Table 1 on page 4.

School Real Estate Taxes

In order to determine the impact of the reforms on school districts across the state, we needed to know the amount of property tax revenue that schools would forgo if they lost the ability to tax property for operating purposes. To estimate the real estate taxes that would be collected by schools in the absence of HB 1776, we estimated the amount of property taxes dedicated to school operating costs that would occur in FY 2013.

Real estate taxes collected for school operating purposes are approximately equal to the difference between total real estate taxes collected by schools and the cost of debt service for schools. We subtracted school debt service in each year from total real estate taxes collected by schools for that corresponding year from FY 2002 to FY 2010. Data was provided by the Pennsylvania Department of Education.

Growth in tax collections for school operating purposes increased by 4.83%, on average, from 2002 to 2010. From 2009 to 2010, however, the growth in collections had slowed to 3.16%. Since we believe that future growth will likely be between these numbers (because 2002 to 2008 reflected a boom in home prices, while 2009 to 2010 marked a particularly sluggish year), we used the average of these two values, 3.99%, as the approximate growth in property tax collections for school operating purposes from FY 2010 to FY 2013.

Using this growth rate, we estimate that school operating tax collections will be $10.94 billion in fiscal year 2013. This is the gross decrease in revenue for school districts, statewide, that would occur upon passage of HB 1776.

State Payments to School Districts

House Bill 1776 stipulates that, in the first year after the bill's implementation, the state would pay each school district a set amount. This amount would be determined by increasing the previous year's property tax revenues for each school district by either the rate of inflation for the region (change in the Consumer Price Index for All Urban Consumers for Pennsylvania, New Jersey, and Maryland) or the increase in sales tax revenues for the state from the previous year, whichever is lower. The way that funds would be distributed in subsequent years is not established in the bill.

We estimated the total amount of funds that the state government would transfer to school districts in the first year after the bill's implementation by taking the estimated amount of property tax revenue for school operating taxes in FY 2012 (as derived in the previous section), and inflating it by the projected rate of inflation for the year 2013, according to the Congressional Budget Office (1.6%). We assumed that inflation will be lower than the change in sales tax revenue. The resulting amount of revenue that school districts will receive from the state is $10.69 billion.

Personal Income Tax Revenues

To estimate the additional revenues that the state would receive due to an increase in personal income tax from 3.07% to 4.01%, we first projected what personal income tax collections would be

in fiscal year 2013 without the reforms. We assumed that personal income tax collections would grow at a rate of 4.26% per year, the average growth rate from 2002 to 2011. (Note that this growth rate may be somewhat conservative, since it takes into account the dip in collections due to the recession in 2009 and 2010.) Data on personal income tax collections are from the state's Comprehensive Annual Financial Reports (CAFR).

An annual 4.26% growth rate implies that state personal income tax collections, without reforms, would increase from $9.77 billion in FY 2011 to $10.62 billion in FY 2013. To determine the additional amount that the state would receive if they increased the rate, we multiplied this projected 2013 amount by 0.94/3.07, or the extent to which rates would increase. The resulting total increase in personal income tax revenues is $3.25 billion. Note that this is a *static* impact, which does not take into account the possibility that personal income could decrease in response to a rate increase due to people working marginally less or leaving the state.

Sales Tax Revenues from Existing Base

The method used to determine additional revenues from the existing sales tax base was similar to that used for the personal income tax. First, we estimated what the tax collections might be in 2013 without reforms, and then multiplied the collections by the change in rate to get the increase in revenues. Projecting the amount of sales and use tax collections in FY 2013 proved difficult due to the volatility of sales and use tax collections over the last ten years. For the five years prior to the recession, sales and use tax collections increased by 3.1% per year. However, they dipped significantly during the recession such that the ten-year average growth in collections is only 1.7% per year. Data on sales and use tax collections are from the state's Comprehensive Annual Financial Reports (CAFR).

We project a modest annual growth rate of 2.3% to reflect the fact that dips in the near future are unlikely, but the fast growth rate that occurred earlier in the previous decade may be unattainable in the near future. Using this growth rate, we project sales and use tax collections of $9.01 billion in FY 2013 under current tax law. If the rate on this base were to increase from 6% to 7%, we project an increase in revenues totaling $1.50 billion. Like with the personal income tax, this is a *static* impact that does not take into account a potential marginal decrease in statewide sales due to the increase in tax rate.

Sales Tax Revenue from Newly Taxed Goods and Services

To estimate the amount of sales tax revenue that would be collected from sales of the goods and services that would be newly taxed under HB 1776, we relied on the Bureau of Labor Statistics' 2010 Consumer Expenditure Survey Microdata. This survey tracks the purchases of residents all over the country. We analyzed the purchases of a highly-detailed set of products in Pennsylvania in the year 2010. According to our analysis, products that will be subject to tax that were not previously subject to tax make up 17.5% of total personal consumption in the state. We assume that revenues raised from business consumption, as opposed to personal consumption, will be negligible because virtually all business consumption that was previously exempt continues to be exempt under HB 1776. See Exhibit 1. "Goods and Services Newly Subject to Sales Tax Under HB 1776" on page 10 for a list of newly taxed goods and services.

We then estimated the total personal consumption expenditures that would be subject to tax in the fiscal year 2013, using the same average annual growth rate as in the section on sales tax above and applying it to the total consumption expenditures in Pennsylvania in the year 2010. We estimate

that total personal consumption expenditures will be approximately $290 billion in the year 2013, and approximately $50.3 billion of these expenditures will be taxable for the first time under HB 1776. By applying the new 7% sales and use tax rate to this new tax base, we estimate that these expenditures would yield an additional $3.52 billion in state government revenue.

Gaming Revenues Formerly Allocated to School Property Tax Reduction

The state provides funds to school districts in order to allow for a homestead and farmstead exclusion from school property taxes, as outlined in Special Session Act 1 of 2006. These reductions are funded by gaming revenues at the state level and allocated each year by the state legislature. If HB 1776 were to pass, the state would no longer need to provide this relief to local school districts.

For each of the past 5 years, the state has allocated a total of between $508 million and $509 million for property tax relief to school districts statewide. This excludes approximately $86 million that goes annually to the Philadelphia school district and Philadelphia suburban school districts, which use these funds to reduce wage taxes instead of property taxes. These annual allocations for relief have remained very steady over the past 5 fiscal years, so we have estimated the savings in the upcoming fiscal year will be equal to the average annual amount of state funds provided for property tax reduction over the past five years, $508.6 million. Data on property tax reductions are available from the Pennsylvania Department of Education.

Property Tax Rebate Elimination

The state currently operates a program where low-income homeowners or renters who are elderly or permanently disabled can receive rebates on their rent or property taxes from the state. HB 1776 would completely eliminate rebates for property taxes, but would continue to provide rebates at a more generous level for renters. We address changes to the property tax rebate program in this section and changes to the rent rebate program in the next section.

Largely due to passage of the Taxpayer Relief Act in 2006, the amount of property tax rebates jumped considerably from 2006 to 2008, but the total spent on this program has remained relatively steady since then. We assumed that the amount spent on rebates would continue to remain approximately constant from 2011 to 2013, so that state savings from eliminating property tax rebates would be approximately the amount of property tax rebates provided under this program in FY 2011, or $178.8 million.

Rent Rebate Expansion

Under current law, the state provides rent rebates worth $650 per household to elderly and permanently disabled renters who qualify and have incomes up to $8,000 per year. For those with incomes from $8,001 to $15,000 per year, the rebate is $500 per household. HB 1776 would change this program such that eligible households with annual incomes up to $7,500 per year would receive $750, eligible households with annual income from $7,501 to $15,000 would receive $500, eligible households with annual income from $15,001 to $20,000 would receive $300, and eligible households with annual income from $20,001 to $25,000 would receive $250.

Table 2 on page 9 shows two sets of data: the actual amount of claimants and rebates provided in 2011, and our estimates for the amount of claimants and rebates that would have been provided in 2011 under the program as described in HB 1776.

TABLE 2. Estimated Cost of Rent Rebates Under HB 1776 Reforms Compared to Current Scale of Program

Actual Rent Rebates, FY 2011

Income	# of Claimants	Rebates
$0-$8,000	143,476	$79,618,937
$8,001-$15,000	52,399	$25,608,493
TOTAL	195,875	$105,227,430

Estimated Rebates Under HB 1776 Reforms, FY 2011

Income	# of Claimants	Rebates
$0-$7,500	133,476	$85,464,982
$7,501-$15,000	62,399	$30,495,703
$15,001-$20,000	117,429	$34,433,881
$20,001-$25,000	88,935	$21,732,312
TOTAL	402,239	$172,126,877

Source: 2011 Report to the Pennsylvania General Assembly on the Property Tax Rent Rebate (PTRR) Program, U.S. Census Bureau, AEG Estimates
Analysis: Anderson Economic Group, LLC
Note: HB 1776 would not go into effect until fiscal year 2013, at the earliest. This table reflects a hypothetical situation where the reforms had been in effect in 2011.

These estimates were derived in two steps. First, we assumed that some claimants (10,000) would shift from the lowest income category to the second-lowest income category due to the cap being shifted from $8,000 to $7,500. Second, we used U.S. Census Bureau data on the incomes of households with residents over the age of 65 to determine the relative size of populations in the two new income categories. We assumed that the ratio of claimants in each new income category to the number of total claimants in the old categories is the same as the ratio of people over 65 who are at each of the new income levels to those over 65 who have incomes below $15,000. We also assumed that the size of the rebate collected per claimant would be equal to the amount stipulated by law, adjusted downward by the same amount that actual rebates per claimant were slightly below the amount stipulated by law in FY 2011.

Once these estimates for 2011 were determined, we applied the average growth rate in total rebates from 2006 to 2011, which is 3.30%, to both scenarios to get an estimate for what the rebate levels would be in FY 2013. This results in total rent rebates of $184 million under HB 1776, compared to total rent rebates of $113 million without HB 1776, for an increased cost of $71 million.

Exhibit 1. Goods and Services Newly Subject to Sales Tax Under HB 1776

GOODS

Candy and gum
Caskets and burial vaults
Catalogs and direct mail advertising
Clothing and footwear ($50 or greater)
Coin-operated food and beverage machines
Flags
Food items not on WIC list
Hotel stays for permanent residents
Investment metal bullion and coins
Liquor or malt beverages from retailers
Magazines
Newspapers
Non-prescription drugs
Personal hygiene products
Rental of films for commercial showing
Returnable container charges
Storage
Textbooks

ALL SERVICES EXCEPT

Altering or cleaning non-clothing items*
Business-to-business professional services
Delivery or installation services*
Farming, dairy, and agriculture services
Imprinting or printing services*
Installing repair or replacement parts (non-clothing)*
Legal contingency fees
Legal services for criminal or domestic relations
Medical and dental services
Office-cleaning services (labor portion only)
Real property transfer services, real estate services
Services for gov't entities
Services to educational or religious nonprofits
Ship-cleaning services
Telecommunication services completely contained in PA
Washing and inspecting motor vehicles*
Wrapping or packaging services*

* already subject to sales and use tax

Source: Pennsylvania House Bill 1776 of 2012;
PA Code Title 61, Part I, Subpart B, Article II. Sales and Use Tax
Analysis: Anderson Economic Group, LLC

Jason Horwitz Bio

Jason Horwitz is a Consultant at Anderson Economic Group, working in the Public Policy and Economic Analysis practice area. Mr. Horwitz's recent work includes an assessment of the effects of personal property tax reform in Michigan, an assessment of the effects of proposed reforms to state pension and retiree health care systems, analyses of the fiscal condition and tax policies of Michigan's state and local governments, and a review of tax incentive programs administered by the states of Michigan and Kentucky. Mr. Horwitz holds a Master of Public Policy from the Harris School of Public Policy at the University of Chicago and a Bachelor of Arts in Physics and Philosophy from Swarthmore College.