



AUGENBLICK,  
PALAICH AND  
ASSOCIATES

# Memo



**To:** Kristy Michel, Donna Gunning, Stakeholder Advisory Group Members

**From:** Michael Griffith, The Augenblick, Palaich and Associates and Picus Odden and Associates Research Team

**Date:** December 10, 2015

**Subject:** County wealth and tax revenues

During our presentation to the Stakeholder Advisory Group's meeting in October we were asked to respond to three questions: 1) How does the State calculate a district's fiscal capacity (or wealth) for use in the school funding formula? 2) How do the proportions of property and income wealth vary across districts? and 3) How do the proportions of property and income tax revenues vary across districts? To do this we reviewed four fiscal years (2012 to 2015) of information on school funding wealth calculations and district<sup>1</sup> income and property tax revenues.

## How the State Calculates a District's Fiscal Capacity

In the 2014-15 fiscal year (FY), approximately 75 percent of state aid to public schools in Maryland was distributed to districts based on their fiscal capacity (or wealth).<sup>2</sup> The State uses four factors in determining a district's fiscal capacity:

1. Personal property, including railroad and utility operating personal property as well as business personal property;
2. Real property, including all current property as well as new construction;
3. Railroad operating real property; and
4. Income, defined in statute as net taxable income (NTI) based on tax returns filed on or before September 1<sup>st</sup> or November 1<sup>st</sup>.<sup>3</sup>

Maryland then employs the following formula to determine a district's relative fiscal capacity:  
(Total personal property values x 50 percent) + (Total real property values x 40 percent) + (100 percent of public utilities' assessable base) + (100 percent of net taxable income) = Total district fiscal capacity.

A district's total wealth is then divided by its "full-time equivalent enrollment" to arrive at its per pupil fiscal capacity or wealth for the purposes of the school finance formula.

---

<sup>1</sup> For this memo the terms district and county (and City of Baltimore) are used interchangeably.

<sup>2</sup> Maryland State Department of Education, *Aid to Education*, page 25. Accessed on August 1, 2015: <http://mgaleg.maryland.gov/pubs/budgetfiscal/2015fy-budget-docs-operating-R00A02-MSDE-Aid-to-Education.pdf>

<sup>3</sup> Counties were given the choice of using the November NTI following an increase in the length of time federal and state income tax payers have when requesting a filing extension.

**Table 1: Components of Local Wealth Calculation by District**

Local Unit	Personal Property		Real Property		Utility	Income (100% of Total)		Total Wealth	
	Total	50% of Total	Total	40% of Total	100% of Total	September NTI	November NTI	w/September NTI	w/November NTI
Allegany	325,436,000	162,718,000	3,579,504,000	1,431,801,600	5,818,000	846,733,114	876,505,845	2,447,070,714	2,476,843,445
Anne Arundel	2,502,898,000	1,251,449,000	73,995,692,000	29,598,276,800	37,185,000	13,829,132,947	15,740,435,663	44,716,043,747	46,627,346,463
Baltimore City	1,901,565,000	950,782,500	33,201,833,000	13,280,733,200	132,257,000	7,270,612,426	8,296,655,508	21,634,385,126	22,660,428,208
Baltimore	2,900,057,000	1,450,028,500	75,568,332,000	30,227,332,800	108,778,000	17,711,780,233	21,125,266,456	49,497,919,533	52,911,405,756
Calvert	864,837,000	432,418,500	11,332,961,000	4,533,184,400	78,840,000	2,126,350,911	2,288,416,921	7,170,793,811	7,332,859,821
Caroline	95,779,000	47,889,500	2,551,358,000	1,020,543,200	4,869,000	418,654,177	438,993,378	1,491,955,877	1,512,295,078
Carroll	576,414,000	288,207,000	17,999,418,000	7,199,767,200	12,873,000	4,011,304,564	4,237,465,943	11,512,151,764	11,738,313,143
Cecil	357,559,000	178,779,500	9,295,505,000	3,718,202,000	19,231,000	1,709,941,880	1,807,773,925	5,626,154,380	5,723,986,425
Charles	951,162,000	475,581,000	15,392,435,000	6,156,974,000	17,916,000	3,039,461,609	3,210,666,929	9,689,932,609	9,861,137,929
Dorchester	117,861,000	58,930,500	2,861,600,000	1,144,640,000	2,379,000	405,519,027	432,224,951	1,611,468,527	1,638,174,451
Frederick	276,886,000	138,443,000	25,439,382,000	10,175,752,800	24,038,000	5,548,170,010	5,974,849,768	15,886,403,810	16,313,083,568
Garrett	165,862,000	82,931,000	4,621,273,000	1,848,509,200	35,148,000	394,091,098	413,844,923	2,360,679,298	2,380,433,123
Harford	1,005,200,000	502,600,000	25,615,958,000	10,246,383,200	30,745,000	5,590,455,988	5,938,050,507	16,370,184,188	16,717,778,707
Howard	1,499,844,000	749,922,000	42,668,958,000	17,067,583,200	25,966,000	9,873,506,551	11,134,155,005	27,716,977,751	28,977,626,205
Kent	34,669,000	17,334,500	2,976,547,000	1,190,618,800	1,928,000	347,654,498	437,703,684	1,557,535,798	1,647,584,984
Montgomery	3,587,690,000	1,793,845,000	160,874,596,000	64,349,838,400	99,814,000	30,645,070,583	39,729,557,135	96,888,567,983	105,973,054,535
Prince George's	3,007,627,000	1,503,813,500	72,990,095,000	29,196,038,000	55,478,000	13,975,474,857	14,841,280,221	44,730,804,357	45,596,609,721
Queen Anne's	58,446,000	29,223,000	7,638,124,000	3,055,249,600	3,823,000	1,094,611,937	1,208,010,438	4,182,907,537	4,296,306,038
St. Mary's	249,811,000	124,905,500	11,814,658,000	4,725,863,200	4,508,000	2,347,492,304	2,458,269,122	7,202,769,004	7,313,545,822
Somerset	64,511,000	32,255,500	1,417,666,000	567,066,400	989,000	191,946,842	204,216,654	792,257,742	804,527,554
Talbot	54,288,000	27,144,000	8,789,477,000	3,515,790,800	3,138,000	877,937,284	1,128,275,661	4,424,010,084	4,674,348,461
Washington	496,633,000	248,316,500	11,928,567,000	4,771,426,800	17,587,000	2,293,911,460	2,425,819,499	7,331,241,760	7,463,149,799
Wicomico	466,601,000	233,300,500	5,832,822,000	2,333,128,800	11,371,000	1,290,316,451	1,371,238,083	3,868,116,751	3,949,038,383
Worcester	296,443,000	148,221,500	14,526,197,000	5,810,478,800	3,245,000	879,367,798	1,001,765,477	6,841,313,098	6,963,710,777
Total State	21,858,079,000	10,929,039,500	642,912,958,000	257,165,183,200	737,924,000	126,719,498,549	146,721,441,696	395,551,645,249	415,553,588,396

Table 1 above shows the four components of local wealth used in the State’s school finance formulas by district: 1) personal property, 2) real property, 3) utility assessable base, and 4) net taxable income. The two NTIs, September and November, are shown because beginning in FY 2014 the NTI amount which provides a district with its largest share of state aid is used in its wealth calculation. The September NTI is used in the majority of districts. The final two columns show total wealth using the September NTI and November NTI.

**Variation in the Property and Income Components of District Wealth**

Figure 1 below shows the change in the “mix” of property and income wealth statewide between FY 2012 and 2015. The share of property wealth decreased slightly, from 73.6 percent of total wealth in 2012 to 66.9 percent in 2015. Conversely, the share of income wealth increased from 27.7 percent to 33.1 percent over the same period.

**Figure 1: Property and Income Shares of Total District Wealth**



Table 2 below shows the breakout between property and income wealth by district for FY 2015. As the table shows, there is a significant amount of variation from district to district. The share of property wealth ranges from 61.6 percent in Howard County to 87.1 percent in Worcester County. The range in the share of income wealth is even greater, ranging from 12.9 percent in Worcester County to 38.4 percent in Howard County. The statewide average shares were 66.9 percent in property wealth and 33.1 percent in income wealth.

**Table 2: District Property and Income Wealth Shares  
FY 2015**

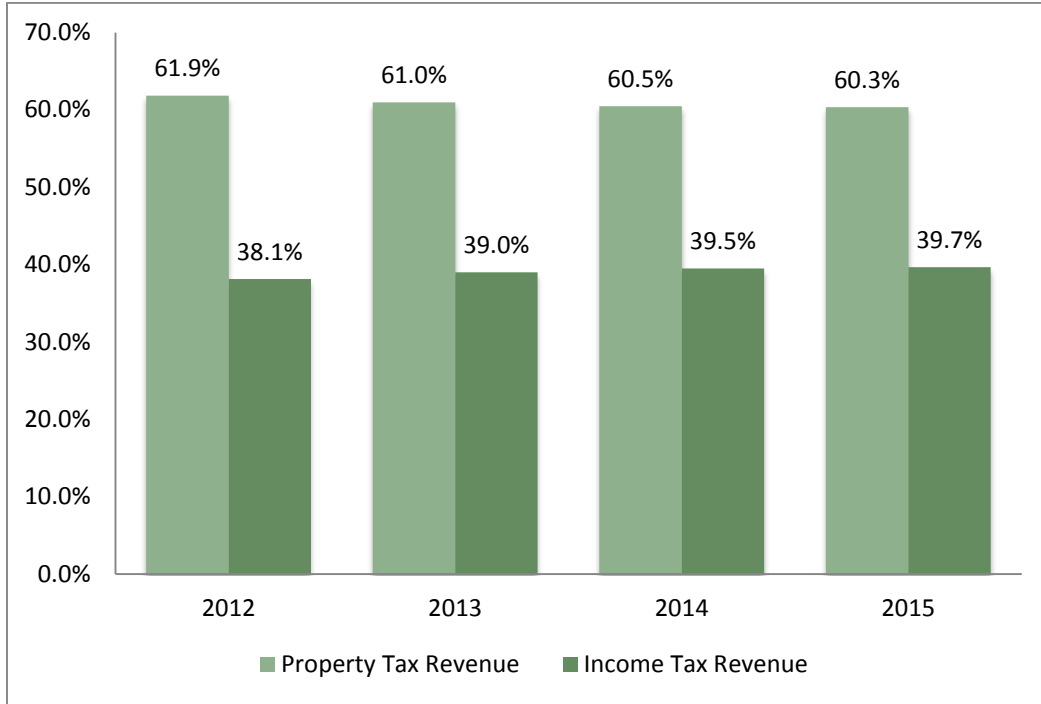
District	Property	Income
Allegany	64.6%	35.4%
Anne Arundel	66.2%	33.8%
Baltimore City	66.4%	33.6%
Baltimore	64.2%	35.8%
Calvert	68.8%	31.2%
Caroline	71.0%	29.0%
Carroll	63.9%	36.1%
Cecil	68.4%	31.6%
Charles	67.4%	32.6%
Dorchester	73.6%	26.4%
Frederick	63.4%	36.6%
Garrett	82.6%	17.4%
Harford	64.5%	35.5%
Howard	61.6%	38.4%
Kent	77.7%	22.3%
Montgomery	68.4%	31.6%
Prince George's	67.5%	32.5%
Queen Anne's	71.9%	28.1%
St. Mary's	66.4%	33.6%
Somerset	74.6%	25.4%
Talbot	80.2%	19.8%
Washington	67.5%	32.5%
Wicomico	65.3%	34.7%
Worcester	87.1%	12.9%
State	66.9%	33.1%

### Variation in Property and Income Tax Revenues

Maryland's counties raise local revenues from a number of different sources, including property taxes, income taxes, other local taxes, fees, and state and federal aids. However, the two largest sources of revenue, property and income taxes, account for more than 40 percent of their total revenues. The tax bases for these two revenue sources are also used for determining districts' fiscal capacity. Figure 2 shows the statewide average share of property to income taxes for all counties for fiscal years 2012 to 2015. Paralleling the change in the shares of local wealth shown in Figure 1, over time the property tax share has decreased slightly while the income tax share has increased. Across all four years the share of income tax revenues to the sum of property tax and income tax revenues is higher than the share of income wealth to total wealth. On average for the four years, the share of income to total wealth was 30.2 percent, while the share of

income tax revenues to the sum of property tax and income tax revenues was 39.1 percent. This shows that income tax revenues make up a larger share of total county revenues than their share of total county wealth.

**Figure 2: Statewide Average Shares of Property and Income Taxes**



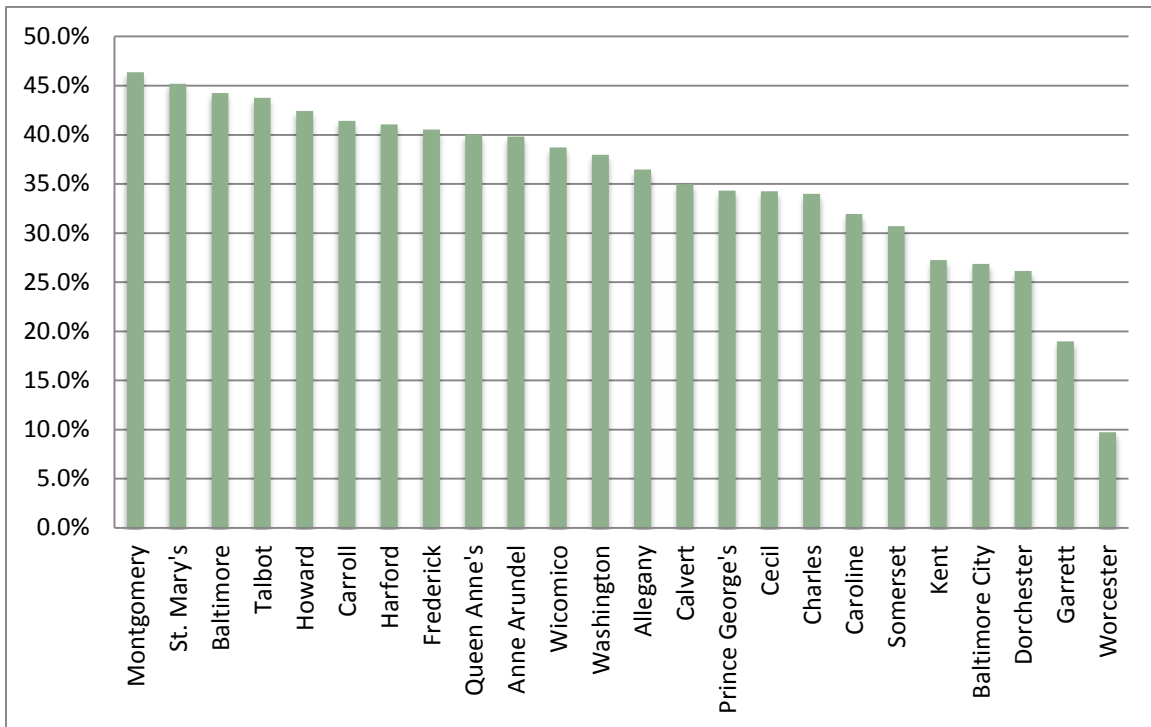
The proportion of property tax and income tax revenues vary greatly from county to county in the State. As Table 3 shows, local income taxes accounted for over 45 percent of Montgomery County’s local property plus income taxes in FY 2015. However, in that same year income tax revenues accounted for less than 10 percent in Worcester County. Figure 3 shows the same breakout for income tax revenues graphically. This figure highlights how Worcester County’s mix of property tax and income tax revenues is an outlier from that of the other counties.

**Table 3: Shares of Property Tax and Income Tax Revenues as Percent of Total Property Tax + Income Tax Revenues: By County for FY 2015**

District	Property	Income
Allegany	63.5%	36.5%
Anne Arundel	60.2%	39.8%
Baltimore City	73.1%	26.9%
Baltimore	55.8%	44.2%
Calvert	65.0%	35.0%
Caroline	68.1%	31.9%
Carroll	58.6%	41.4%
Cecil	65.7%	34.3%
Charles	66.0%	34.0%

District	Property	Income
Dorchester	73.9%	26.1%
Frederick	59.5%	40.5%
Garrett	81.0%	19.0%
Harford	58.9%	41.1%
Howard	57.6%	42.4%
Kent	72.8%	27.2%
Montgomery	53.6%	46.4%
Prince George's	65.7%	34.3%
Queen Anne's	59.9%	40.1%
St. Mary's	54.8%	45.2%
Somerset	69.3%	30.7%
Talbot	56.2%	43.8%
Washington	62.0%	38.0%
Wicomico	61.3%	38.7%
Worcester	90.3%	9.7%
State	60.3%	39.7%

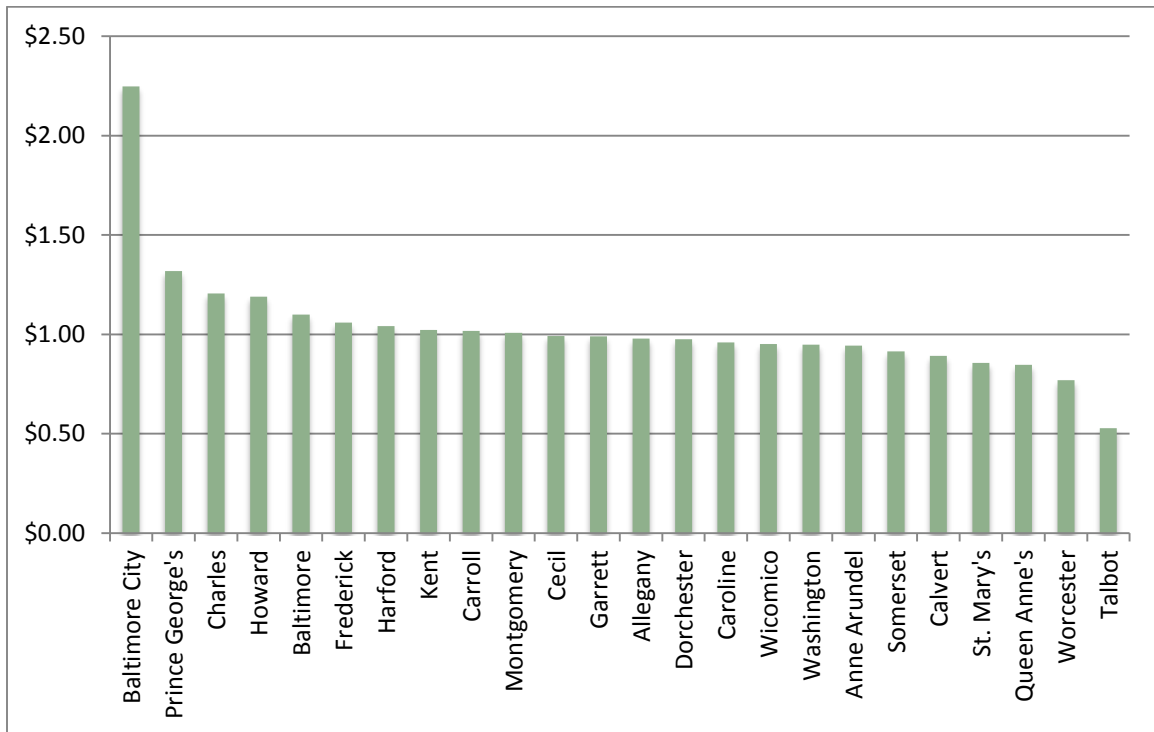
**Figure 3: Percentage of Total Property and Income Tax Revenues from Income Taxes – FY 2015**



### Tax Rates Vary From County to County

The primary reason that the relationship between property and income tax wealth and property and income tax revenues differ across counties has to do with the difference in tax rates from county to county. The State’s funding formula uses measures a district’s property values and net taxable income to determine local wealth. Local tax revenues are based on those two amounts multiplied by a county’s tax rates. As Figure 4 shows, property tax rates vary greatly from county to county. For example, the property tax rate in Baltimore City is over four times that of Talbot County. Local income tax rates in the state also vary – but not as greatly as property tax rates. Figure 5 shows that Worcester County’s income tax rate is just over 1.0 percent while multiple counties are at the State’s maximum rate of 3.2 percent.

**Figure 4: Property Tax Rates by County – FY 2015**



**Figure 5: Income Tax Rates by County – FY 2015**

