

The Impact of Declining Enrollment, Inflationary Increases, and Relative Per Pupil Wealth on State Education Aid



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Background

The formation of the Combined Education Committee (CEC) by the Board of County Commissioners and the Board of Education has again brought to the forefront the annual decline in state education aid for the Carroll County Public Schools (CCPS) and the underlying factors for that decline. Although, internally, we have been familiar with these causes and trends for many years, the Superintendent directed staff to prepare a report to provide information and data to the public.

Impact of Declining Enrollment on State Aid

The steady decline in enrollment that CCPS has experienced beginning in 2005 through the present has had a negative financial impact in multiple ways. The State education aid formula is premised on a base, or foundation, of per pupil funding. Each year, the Governor and General Assembly set the State per pupil foundation funding amount and that figure is applied to each school system's prior year official, state certified enrollment. There is a direct relationship between the number of fewer students in the annual enrollment count and State aid received.

The original intention of the Thornton Commission, whose work underlies the current State formula, was that there would be an initial ramp-up of State education aid to get to a level of adequacy. Then there would be an annual inflationary increase on the foundation per pupil amount in order to sustain the level of funding the education systems achieved during the ramp up. When the recession occurred, the inflationary multiplier was the first thing to be removed. Even in recent years, when a meager annual multiplier has been implemented, that increase has not been sufficient to offset the overall loss in annual State aid.

The chart below shows the annual change of State aid for each Maryland school system for fiscal year (FY) 2010 to through FY 2016. While the overall change includes other factors to be addressed below, such as relative wealth, a large portion of CCPS' annual loss in State aid is attributable to our declining enrollment. Using whole dollar amount, CCPS is first in State aid lost.

	FY11 vs FY10	FY12 vs FY11	FY13 vs FY12	FY14 vs FY13	FY15 vs FY14	FY16 vs FY15
Allegany	(2,350,066)	(5,299,813)	(3,126,220)	68,136	719,351	750,291
AA	17,995,887	9,513,271	9,866,052	11,415,135	6,774,002	8,166,800
Balt City	31,327,141	6,660,185	4,963,908	30,066,550	5,932,173	(22,984,682)
Balt County	15,092,587	13,622,860	16,178,248	22,715,614	17,084,747	25,752,970
Calvert	518,819	(3,850,037)	(1,047,146)	(714,644)	575,498	(2,181,159)
Caroline	115,873	(282,415)	2,295,793	1,448,140	2,078,254	1,647,194
Carroll	(764,651)	246,821	(643,072)	(2,134,630)	(3,104,346)	(2,656,812)
Cecil	2,862,539	(2,780,888)	378,193	(731,092)	3,915,937	(477,464)
Charles	874,018	5,162,335	662,318	2,399,037	2,425,507	640,505
Dorchester	1,590,550	(125,233)	1,408,810	1,498,142	2,404,330	2,339,107
Frederick	4,357,376	9,492,594	5,345,668	3,808,422	2,574,437	(444,960)
Garrett	(988,801)	(1,530,156)	(1,100,535)	(893,979)	(762,096)	139,448
Harford	1,935,660	(757,683)	(4,159,288)	(2,801,263)	(63,087)	353,818
Howard	12,376,475	5,828,127	4,624,776	677,018	1,151,090	6,193,768
Kent	(150,410)	(246,428)	98,762	(291,138)	(225,998)	(86,321)
Montgomery	52,528,249	39,815,621	28,093,631	14,896,492	11,780,229	10,272,300
PG	(25,296,622)	(10,523,269)	39,083,101	36,986,987	57,370,375	39,315,570
Queen Anne's	388,144	816,954	116,399	938,061	616,533	199,380
St. Marys	1,603,935	(2,074,055)	2,380,060	3,153	2,793,474	2,162,923
Somerset	47,154	(33,497)	(270,072)	3,556,061	592,323	532,992
Talbot	259,964	314,476	492,066	261,315	475,100	663,821
Washington	3,597,598	8,886,229	4,138,719	3,118,827	4,961,475	149,347
Wicomico	405,541	(565,229)	4,943,634	4,632,161	3,985,105	5,263,982
Worcester	564,650	486,314	354,993	429,755	91,590	307,916
Total	118,891,610	72,777,084	115,078,798	131,352,260	124,146,003	76,020,734

Source: MSDE Summary of Major State Aid Programs

Impact of Inflationary Increases on the Operating Budget

As noted above, even the Thornton Commission report recognized the concern with maintaining education systems built upon elevated funding levels. In essence, the Commission sought to include an inflationary offset for the formula. Furthermore, the Commission noted a future concern if enrollments dropped precipitously in certain school systems. At the State level, the loss of enrollment has outpaced any inflationary increases resulting in the net loss for Carroll County Public Schools.

Unfortunately, this is compounded by actual annual inflationary increases to the operation of CCPS. Main drivers include employee insurances, utilities, and pupil transportation costs. Even though by comparison CCPS has enjoyed very favorable increases in these areas over the past several fiscal years, the annual increases on an operating budget of over \$300 million are significant.

Additionally, after many years of very limited permanent salary increases, employee compensation is programmed for three years as a Board and negotiated priority. If there is not additional local revenue to offset the loss in state aid and inflationary cost increases, the Board must make expenditure reductions to balance the budget as has been the case for many years. The chart below illustrates the interplay of these factors from FY 2012 through FY 2017.

Fiscal Year (\$ in millions)	FY12	FY13	FY14	FY15	FY16*	FY17
Inflation & Other Cost Increases	(3.0)	(3.9)	(2.6)	(1.8)	(2.3)	(3.6)
Negotiated Base Salary Increases (on-going)	-	(4.9)	-	-	(5.0)	(9.6)
Change in State Funding (includes one-time)	0.3	(0.6)	(2.1)	(3.1)	(1.4)	1.8
Change in County Funding	(1.4)	5.4	(0.3)	2.5	5.2	5.7
Expenditure Reductions Required to Balance	4.1	4.0	5.0	2.4	3.5	5.7

*State funding includes 100% of GCEI

The chart below shows the overall increase in local revenue from the County during the fiscal years displayed above.

Fiscal Year	County Operating (A)	CCPS Allocation (B)	County Operating (less CCPS Allocation) (C = A – B)	CCPS Operating (All Sources) (D)
2012	350,250,000	176,960,000	173,290,000	331,004,853
2017	388,407,000	193,889,000	194,518,000	335,191,443
% Change	10.89%	9.57%	12.25%	1.26%

Impact of Relative Per Pupil Wealth on State Aid

The second major component of the State aid formula is the equity measure, or relative wealth aspect. The formula is adjusted for each school system's relative per pupil wealth. The State calculates the assessable tax base for each county and divides the base by the number of students. The school systems are all ranked accordingly. A total of 85% of state aid is distributed based on the relative per pupil wealth rankings.

The relative wealth component of the State formula represents a second major reduction for CCPS. The chart below illustrates the FY 2009 to FY 2017 change in enrollment, total wealth, and per pupil wealth for each Maryland school system. It further demonstrates the change in total state aid, percentage change in state aid, and annualized percentage change in state aid. The counties highlighted are those that have lost state aid.

	% Change - FY 2009-FY2017			Total Direct State Aid				
	Enrollment	Wealth (Sept. NTI)	Per Pupil Wealth	FY 2009	FY2017	\$ Change	% Change	% Annualized
Garrett	-16.22%	16.76%	39.37%	24,566,877	19,458,679	(5,108,198)	-20.79%	-2.87%
Kent	-11.20%	12.91%	27.15%	9,444,016	8,404,523	(1,039,493)	-11.01%	-1.45%
Allegany	-7.88%	19.19%	29.38%	84,518,375	76,397,409	(8,120,966)	-9.61%	-1.25%
Carroll	-10.10%	10.52%	22.93%	139,030,915	127,667,969	(11,362,946)	-8.17%	-1.06%
Calvert	-8.15%	9.97%	19.73%	84,362,303	79,957,185	(4,405,118)	-5.22%	-0.67%
Harford	-3.98%	19.40%	24.35%	204,149,648	198,420,445	(5,729,203)	-2.81%	-0.36%
AA	9.00%	15.06%	5.56%	267,123,983	341,066,254	73,942,271	27.68%	3.10%
Balt City	0.43%	26.33%	25.79%	807,847,225	839,241,041	31,393,816	3.89%	0.48%
Balt Co.	7.08%	12.21%	4.79%	494,304,866	614,193,141	119,888,275	24.25%	2.75%
Caroline	-0.86%	6.37%	7.29%	42,037,874	50,864,322	8,826,448	21.00%	2.41%
Cecil	-4.28%	9.48%	14.37%	95,894,605	104,332,703	8,438,098	8.80%	1.06%
Charles	-1.44%	10.60%	12.22%	149,235,160	164,834,721	15,599,561	10.45%	1.25%
Dorchester	1.53%	2.53%	0.98%	29,899,704	39,392,736	9,493,032	31.75%	3.51%
Frederick	-0.01%	9.09%	9.10%	201,870,258	227,469,304	25,599,046	12.68%	1.50%
Howard	10.31%	19.64%	8.46%	191,398,843	233,736,298	42,337,455	22.12%	2.53%
Montg.	12.93%	1.96%	-9.72%	387,493,959	639,353,148	251,859,189	65.00%	6.46%
PG	0.32%	12.34%	11.99%	883,799,374	1,063,252,662	179,453,288	20.30%	2.34%
Queen Anne's	0.15%	7.59%	7.43%	29,625,076	33,444,402	3,819,326	12.89%	1.53%
Somerset	-0.50%	1.10%	1.61%	23,244,631	28,461,948	5,217,317	22.45%	2.56%
St. Marys	5.69%	28.96%	22.01%	92,907,591	99,844,453	6,936,862	7.47%	0.90%
Talbot	3.99%	5.21%	1.17%	9,884,021	13,112,682	3,228,661	32.67%	3.60%
Washington	2.44%	5.88%	3.35%	137,317,453	165,314,485	27,997,032	20.39%	2.35%
Wicomico	2.91%	-1.50%	-4.29%	108,817,017	139,171,672	30,354,655	27.90%	3.12%
Worcester	-1.84%	-11.97%	-10.32%	16,474,213	18,967,262	2,493,049	15.13%	1.78%
State	3.69%	10.28%	6.36%	4,515,247,987	5,326,359,444	811,111,457	17.96%	2.09%

LEAs That Lost Direct State Aid FY09 - FY17

Sources: Major State Aid Final Calculations FY09 & FY17

The total wealth for Carroll grew by 10.52%, just above the state average of 10.28%. However, CCPS has the third highest enrollment loss at -10.10% behind only Garrett and Kent. The state formula ranks relative wealth based on a per pupil basis. Once the lower denominator associated with decreased enrollment is factored in, CCPS' wealth per pupil has increased by 22.93%, which is fifth highest in the state. The net result is that CCPS's total loss in aid is the highest in the state as a total dollar figure and fourth highest by percentage loss after Garrett, Kent, and Allegany.

An examination of some specific examples will further illustrate the impact that relative per pupil wealth has on the funding formula, especially when combined with declining enrollment. Charles County is similar to Carroll in both total student population and total increase in actual wealth, where both are very near the State average. However, unlike Carroll, Charles experienced only a slight

overall decline in enrollment during these years (-1.44%). As a result of a more stable enrollment, Charles' relative per pupil wealth was not exaggerated like Carroll's, staying much closer to the actual wealth increase at 12.22%. The net effect is that Charles saw a 10.45% increase in State aid totaling \$15.6 million while Carroll received an -8.17% decrease totaling \$11.3 million less in State aid.

Washington County provides another important illustration. Similar in student population size to Carroll, Washington's enrollment grew by 2.44% and its actual wealth increased by 5.88%. These two factors together resulted in a relative per pupil wealth change of only 3.35%. The result of these factors, as opposed to Carroll's, is that Washington's State aid increased by \$28 million or 20.39%. Through a different lens, in this time period Carroll's State aid decreased from \$139 million to \$127.7 million while Washington's increased from \$137.3 million to \$165.3 million.

General Conclusions

1. Carroll is doubly penalized under the State formula due to declining enrollment. On the foundation of the formula, CCPS experiences an immediate loss in aid due to an annual lower headcount. Then, through the relative per pupil wealth component, Carroll's relative ranking is artificially inflated resulting in further losses in aid;
2. Under current conditions, Carroll's relative per pupil wealth only will continue to have a negative impact on State aid. As long as enrollments decline and there is no change to State law that positively impacts Carroll, the pronounced annual losses in State aid will continue into the future;
3. Under current conditions, Carroll will continue to make significant annual expenditure reductions to balance the budget. Unless local revenue increases to a level to offset both annual State aid losses and inflationary increases, the Board will need to make reductions to balance the budget and fund any prioritized improvements such as employee compensation. The pattern of the \$35 million in reductions beginning in FY 2009 through FY 2017 will continue without some drastic change;
4. The current State law for the education aid formula did not anticipate the negative impact for systems experiencing perpetually declining enrollment. The formula encouraged the development of programs and services for children during the initial phase-in of funding, but those programs cannot be sustained through periods of prolonged enrollment decline. At a certain point infrastructure cannot be trimmed at a level to offset reductions. Programs, services, and staffing must be eliminated to the detriment of students. In the starkest of terms, CCPS is a school system of approximately the same number of students as both Washington and Charles counties. Generally, the students of all three counties require similar services. However, under the State aid formula, the students in Washington and Charles are benefitting from school systems whose services are being delivered with a combined \$54,959,539 positive variance over CCPS' loss in aid during the same period of time; and
5. In order to overcome this situation at the local level, the only viable solution is for Carroll's overall population to begin to grow at a level to at least maintain the existing student enrollment thereby stabilizing State aid for CCPS.