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Analysis of Essential Programs and Services Components: System Administration

Report to

Maine Department of Education

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Background and Purpose

The purpose of this report is to provide data analysis and recommendations for the System Administration component within Maine's Essential Programs and Services (EPS) education cost model. The EPS model was implemented in FY 2006 as a way of estimating the cost of providing an adequate basic education, with consideration of the varying characteristics of each school and district that impact costs. The goal of EPS is to ensure that all students are provided with equitable resources for learning regardless of where they live. The model accounts for numerous factors such as student demographics, enrollment, geographic size, and regional differences in labor markets. The System Administration component is one of the "systemwide" funding model components with a fixed dollar amount of funding allocated per attending pupil in all districts.

In the initial cost model, the per-pupil funding amounts for each of these components was set in general alignment with historical district expenditures. In other words, past spending was used as a guideline for establishing the appropriate budget allocation. In subsequent years, the initial per-pupil amount was annually inflated by a consumer price index. However, in FY 2009 the per-pupil funding amount for System Administration was reduced to \$204 per pupil, about half of the initial model amount, as part of a broader policy initiative to promote school district reorganization. At the same time, other funding model components were reduced by 5% (Facilities Operation and Maintenance, transportation, and special education). Since that year, the practice of

annually inflating the amounts (from the revised and lower baseline amount) was resumed. The most recent annual inflation factor (from FY14 to FY15) was 1.6%.

The System Administration component is intended to ensure sufficient funding for the overall oversight of school districts. It includes costs for district-wide staff such as Superintendents, human resources personnel, business managers, and associated support staff. System Administration also incorporates Board of Education costs. It does not include costs for direct administration of schools or programs; funding for school administration (i.e. principals) is allocated within a separate component of the EPS model. The System Administration EPS component provided \$225 per pupil in FY 2015.

Methods

The study was conducted using expenditure and revenue data from FY2015 to analyze the amounts and patterns of system administration spending in Maine public schools. One substantial change from the prior FY2010 analysis was the introduction of districts with an Alternative Organizational Structure (AOS) as a result of state reorganization policies. In these entities, member districts share system administration and other services that vary based on the agreements in place for each unit. Each AOS has one central organizational body that administers the shared services, but does not operate schools and has no resident students of its own. The other AOS members contribute money to the central AOS. This creates duplication in the expenditure data, as funds that flow first from the member units to the central district are then spent again when the services are provided. To correct for this duplication, the expenditures of the central AOS units are excluded from all calculations.

Another change from FY2010 is the arrival of publicly funded charter schools in

Maine. Charter schools are not directly comparable to public school districts in the way they are funded; they are not included in the EPS formula calculations. To maintain comparability, they are not included in the total system administration cost data. As with prior studies, Maine Indian Education units are also excluded as their overall funding is uniquely affected by federal policies.

Results

Total FY2015 expenses of \$70.2M have increased 5.8% from \$66.4M in FY2010 when the last review of this EPS component was conducted. Public school district revenues in FY2015 were \$4.2M, for a net expenditure of \$66.0M. In comparison, the net expenditure in 2010 after accounting for \$4.0M in revenue was \$62.4M. Thus net system administration spending since FY2010 has also increased only 5.8%. Total education spending increased at a higher rate of 9.0% over the same period, from \$2,074.7M in FY2010 to \$2,260.5M in FY2015. For comparison, the Consumer Price Index increased about 9.5% from FY2010 to FY2015. Thus total and net system administration spending has grown at a slower pace than inflation.

Table 1 summarizes the reported FY2015 expenditures for system administration for all Maine public school districts, categorized by type of cost. It includes the percentage of overall spending to provide the proportionate size of the expenditure relative to the other categories. Similarly to FY2010, the system administration expenditures were mostly for personnel costs, with 72.8% of spending for salaries, stipends, contracted administrator services, and benefits. Appendix A provides additional descriptions of system administration costs by function and program.

Table 1: FY2015 System Administration Expenditures by Category

Description	Amount	Percent of Total
Salaries, Wages, and Benefits	\$51,141,648	72.8%
Administrators	\$16,918,687	24.1%
Salaries	\$16,384,696	
Contracted administrator services	\$533,991	
Other Professionals	\$22,253,171	31.7%
Salaries	\$18,220,103	
Contracted professional services	\$4,033,068	
Personal Services Stipends	\$794,814	1.1%
Employee Benefits	\$11,174,976	15.9%
Purchased Services	\$13,926,457	19.8%
Assessments for Administration &		
Interagency Services	\$4,895,684	7.0%
Legal Services	\$2,615,465	3.7%
Property Services	\$1,892,630	2.7%
Other Purchased Services	\$2,004,848	2.9%
Annual Audit Fees	\$1,229,547	1.8%
Insurance (non-benefit-related)	\$1,288,283	1.8%
Other	\$5,159,128	7.4%
General Supplies	\$1,295,231	1.8%
Property	\$221,961	0.3%
Debt Service and Interest	\$413,868	0.6%
Dues and Fees	\$964,306	1.4%
Special items	\$1,179,830	1.7%
Other	\$1,083,932	0.4%
Total Expenditures	\$70,227,233	100%

Table 2 below summarizes all reported revenues for each individual SAU, grouped by type of revenue. Certain one-time large revenues, including two lump sum payments for district withdrawal agreements and two large refunds for accrued overpayments into the Maine state retirement system, were excluded.

Revenues have also increased since FY2010, from \$3.9M to \$4.2M in FY2015 (7.7%). Table 2 details revenues by type and also provides the net system administration expenditures after subtracting all revenue.

Table 2: System Administration Revenue

Revenue	
Revenue from Other SAUs*	\$815,720
Sales or Refunds**	\$3,288,569
Refunds for Prior Year Expenses	\$51,042
Total Revenue	\$4,155,331

Net Total System Administration Expenditures \$66,071,902

In the next analysis, the net expenditures of each Maine school administrative unit (all system administration expenditures minus system administration revenues) were calculated on a per-resident pupil basis so that a comparison could be made to the EPS allocation of \$225 per resident student for FY2015. In Table 3, districts were grouped based on the amount they spent above or below the EPS per-pupil allocation. A strong majority of districts (72.9%) spent at least an additional 50% of the EPS per student rate of \$225 on net system administration expenses, about the same proportion as in FY2010. These districts account for 47% of Maine students.

^{*} Excludes \$1,461,890 in one-time revenues due to RSU withdrawal settlements

^{**} Excludes \$1,007,123 in one-time revenues due to MainePERS refunds

Table 3: Net System Administration Expenses by Percentage Above or Below FY15 EPS Per Pupil Allocation of \$225 Per Resident Pupil

					Amt. per
		Total pK-12		Average #	Pupil, All
	# of	Resident	% of Total	Resident	SAUs in
	SAUs	Students	Students	Students	Category
At or Below EPS Rate	10	13,599	7.6%	1,359.9	\$198
1% to 25% above EPS	24	42,579	23.7%	1,774.1	\$253
25% to 50% above EPS	28	38,658	21.5%	1,380.6	\$309
50% to 100% above EPS	51	48,288	26.9%	946.8	\$387
100% to 200% above EPS	57	30,050	16.7%	527.2	\$518
Over 200% above EPS	59	6,395	3.6%	108.4	\$996
Overall*	229	179,568	100.0%	784.1	\$368

^{*} Excludes \$23,484 from three districts with no resident students in FY2015

In all, 96% of Maine school administrative units spent above their EPS allocated rate of \$225 per resident pupil in FY2015.

The next analysis for system administration costs looks at net expenditures by district size. In this depiction, we have assigned students based on the district they attend (rather than their district of residence), and the 66 districts that share students in an AOS administrative structure are combined and treated as their eleven respective AOS units. This provides a view of spending that is closer to what the EPS cost model is intended to support, as it is based on districts that have attending students and therefore operate schools. The total number of administrative units included in Table 4 is lower, as individual districts that are members of an AOS are counted as one administrative unit (and counted in the size group for their combined total students); as explained in the methods section, expenses from the central administrative AOS unit are not included to avoid duplication. In addition to the 147 districts shown in Table 4, there were 30 districts each with zero attending pupils that spent a net total of \$369,167 on system administration, or an average of \$12,306 per district.

Table 4: Net System Administration Expenses by Administrative Unit Enrollment

	Size Category (by Number of Attending Students)				
	1 to	300 to	1000 to	3000	
	299	999	2999	and up	Total
# Units in Size	43	37	54	13	147
Category					
Total Attending	5,277	23,751	98,019	49,076	176,123
Students	5,2		70,017	17,07.0	1.0,120
Average # Attending	123	642	1,815	3,775	995
Students per Unit	123	042	1,013	3,773	773
Per Pupil Spending	\$882	\$508	\$347	\$304	\$375
in Size Category	\$00Z	\$300	\$347	\$304	φ3/3
Range of District Per	\$345 to	\$116 to	\$235 to	\$215 to	\$116 to
Pupil Spending	\$3895	\$1511	\$609	\$496	\$3895

As with the prior analysis in Table 3 based on resident pupils, this table shows that the majority of units that operate schools are spending well above the allocated \$225 per pupil on net system administration costs. As with many other types of expenses, the system administration costs per pupil are substantially higher in small units than in larger districts; the differences between the first three size groups are statistically significant (p<.05); the differences between two larger groups are not. However, the range of perpupil costs within each size category is quite large, with districts of similar size spending quite different amounts per pupil. As another way of depicting this range, the costs of the school unit at the 25th percentile in spending were \$270 per pupil, and those of the 75th percentile unit were \$579, or more than twice as much per student.

In our final analysis, spending was compared across school districts of various governance types. As with Table 4, this analysis is based on where students attend school, not where they reside.

Table 5: Per Pupil Net System Administration Expenses by Administrative Unit Governance Type

		ı			ı	
					Median	
				Expend.	SAU Per	
		Net	Attending	Per	Pupil	Range of
		Expenditure	SAU	Attending	Spending in	Per Pupil
SAU Type	N	Amount	Students	pupil	Group*	Amounts*
RSUs (including	71	\$33,733,285	96,996	\$348	\$370	\$116 to
MSADs)						\$2,434
AOS Member	66	\$4,828,236	13,011	\$371	\$485	\$164 to
Entities						\$3,532
Municipality	68	\$23,631,211	59,878	\$395	\$496	\$215 to
						\$3,895
Community	4	\$1,357,779	2,347	\$579	\$521	\$430 to
School District						\$1,029
Union	23	\$2,521,390	3,891	\$648	\$693	\$346 to
						\$3,305
Total	232	\$66,071,902	176,123	\$375	\$453	\$116 to
						\$3,895

^{*} in Units with attending Students; per pupil amounts cannot be calculated for units with zero students

As with comparisons by size groups, per pupil expenditures within each governance type vary widely. However, some of the differences between groups are significant. The per pupil spending in Regional School Units (RSUs), including Maine School Administrative districts (MSADs) doing business as RSUs, are statistically similar to those in Alternative Organizational Structure (AOS) entities. Spending in Municipal and Union districts are also statistically similar. However, RSUs and AOSes are significantly lower than both Municipal and Union member districts. Community School Districts (CSDs) are not statistically distinguishable from any of the other SAU types, likely because of the small number CSD units.

Summary

In summary, this analysis of system administration spending shows that Maine districts are spending more on system administration costs than they are allocated in the

EPS formula. Net expenditures have only increased 6% in the past five years, lower than the index for consumer inflation in the same time interval. Costs per pupil vary significantly from one district to the next, even when comparing districts of similar size or type. However, districts that operate with more enrolled students spend less per pupil on system administration than smaller units. Also, units that have joined into the RSU or AOS structures that were encouraged by prior district reorganization policies now spend less per pupil than municipal districts or those operating as school unions.

Appendix A: FY 2015 System Administration Expenditures by Function and Cost Center

Description	Amount	Percent of Total
Expenditures by Function		
General Administration		
Board of Education	\$8,104,803	11.5%
Executive Administration Overall	\$29,794,171	42.4%
Office of Superintendent	\$3,181,791	4.5%
Other General Administration	\$40,482	0.1%
General Central Services		
Fiscal Services	\$6,298,336	9.0%
Personnel Services	\$1,584,430	2.3%
Other Central Services	\$21,223,220	30.2%
Expenditures by Cost Center		
Systemwide	\$68,570,595	97.6%
Elementary	\$1,268,954	1.8%
Secondary	\$387,684	0.6%
Total Expenditures	\$70,227,233	100%