

RESEARCH NOTE

The Cost of Administering School Districts in New York State, 1993-94 to 2001-02

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Fiscal Analysis and Research Unit

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INTRODUCTION

This report is a descriptive analysis of the costs of administering school districts in New York State from the 1993-94 school year through 2001-02. The operational definition of central administration expenditures includes expenditures for district superintendents, assistant superintendents, business officers, and other staff associated with central administration. Board of education expenditures, which fund both administrative and policymaking activities, include expenditures for the district clerk's office, district meetings, auditing services, legal services, the tax collector's office, and school census activities. Expenditures for central administration and boards of education have been combined in this analysis as a measure of administrative cost. These two items are reported by school districts in the annual financial report (ST-3).¹ This research note will show that administrative expenditures consistently comprise a very small part of school district budgets, a pattern that persists in every year of the period examined.

FINDINGS: STATEWIDE TRENDS

In New York State total expenditures for all school districts were \$35.371 billion in 2001-02, while total administrative expenditures in that year were \$862 million, or 2.4 percent of total expenditures. As Figure 1 and Table 1 illustrate, the administrative cost percentage for the State outside of New York City never exceeded 2.4 percent throughout the entire period from the 1993-94 school year through 2001-02.

¹ The ST-3 form is an accounting document that each school district files with the State Education Department at the end of each school year.

Figure 1.

Central Administration and Board of Education Expenditures
as a Percentage of All Expenditures, 1993-94 through 2001-02

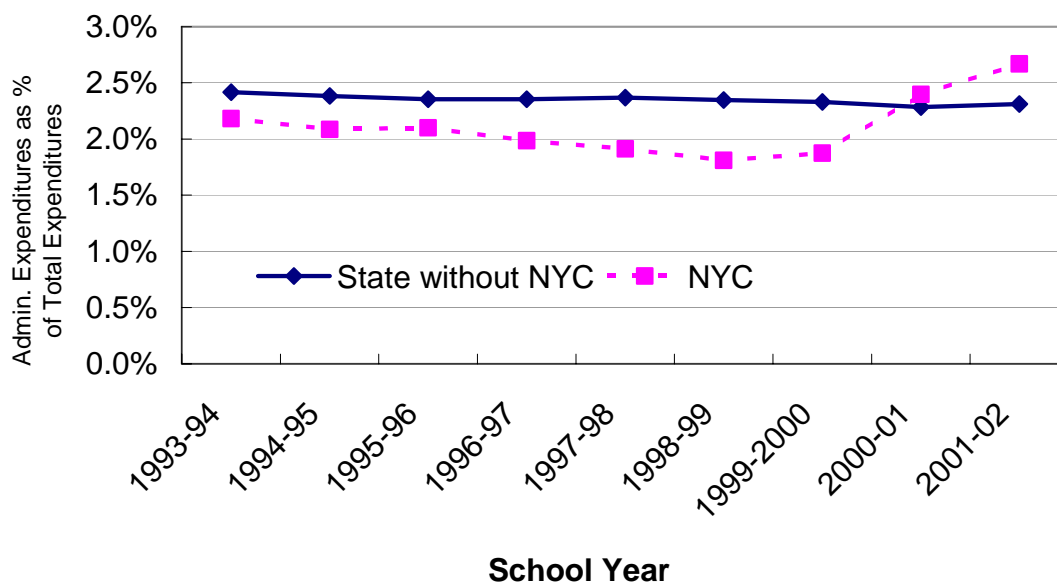


Table 1.

Central Administration and Board of Education Expenditures
as a Percentage of Total Expenditures, 1993-94 through 2001-02

Administrative and Board of Education Expenditures	Year								
	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-2000	2000-01	2001-02
Statewide	2.3%	2.3%	2.3%	2.2%	2.2%	2.2%	2.2%	2.3%	2.4%
Statewide, Excluding New York City	2.4%	2.4%	2.4%	2.4%	2.4%	2.3%	2.3%	2.3%	2.3%
New York City	2.2%	2.1%	2.1%	2.0%	1.9%	1.8%	1.9%	2.4%	2.7%

Table 1 shows that:

- New York City's administrative expenditures ranged from 1.8 to 2.2 percent of total expenditures throughout the first seven years of this period.
- In fact, New York City's administrative expenditures as a percentage of total expenditures fell modestly below the statewide average throughout the first seven years of the period (until the 1999-2000 fiscal year), ranging from 0.2 to 0.5 percentage points lower than comparison figures for the rest of the State.
- During the last two years of the period trended, however, New York City's administrative expenditures increased sharply as a percentage of total expenditures; they exceeded the average for the rest of the State by 0.1 percentage points in 2000-01 and by 0.4 percentage points in 2001-02.

DISTRICT ADMINISTRATIVE EXPENDITURES EXAMINED BY WEALTH DECILES

Although administrative shares of total district expenditures are modest, it is useful nonetheless to know whether such allocations vary according to district wealth. For this analysis, two wealth measures used by the New York State Education Department in order to classify districts (income wealth per pupil and real property wealth per pupil) were employed: each of these two fiscal capacity measures were indexed for each district by dividing each measure by the corresponding weighted statewide wealth measure per pupil. The two resulting indices were then combined to create a single overall index, the combined wealth ratio (CWR) based upon a 50-50 weighting of the two wealth indices.²

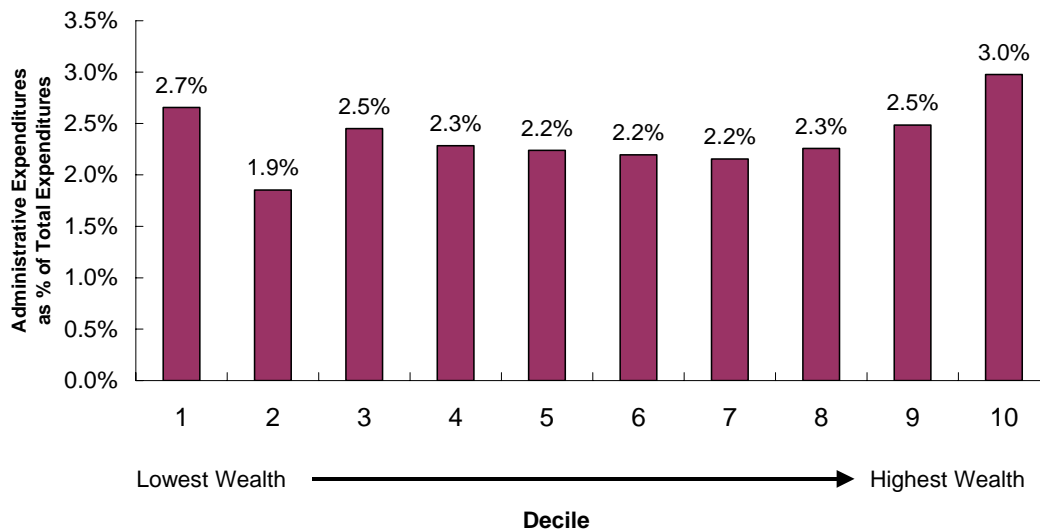
The 680 major school districts were then grouped in deciles based upon the 2001-02 CWR.³ It should be noted that although nearly every district's CWR changes on a yearly basis, the position of most districts relative to others in the State tends to remain stable over time.

² For a more detailed discussion of how the CWR is calculated for each school district see the appendix to SED's *School District Fiscal Profiles*, 15th edition. The *Fiscal Profiles* are available on-line at: http://www.oms.nysed.gov/faru/Profiles/profiles_cover.htm. See also, SED's *State Aid to Schools: A Primer*, available on-line at: <http://www.oms.nysed.gov/faru/Primer/primer03-04.htm>.

³ Deciles are arranged from least wealthy (first decile) to wealthiest (tenth decile) as measured by the CWR. The number of major school districts analyzed is 679. New York City was not included in the deciles; had it been included, it would fall into the seventh decile. Consequently, the seventh decile contains 67 districts rather than 68, as do the other deciles.

Figure 2.

Central Administration and Board of Education Expenditures
as a Percentage of Total Expenditures, 2001-02



As Figure 2 illustrates, there is a marked uniformity in the allocation of district expense to central administration and board of education functions regardless of district wealth. It should be noted that the administrative expenditure percentages in the above bar chart were virtually unchanged during the entire nine-year period. (As we saw in Figure 1, however, New York City is somewhat exceptional in this regard.) As a result, the most recent year's data (from the 2001-02 school year) was chosen as representative. The chart above illustrates that:

- Only two deciles had administrative expenditures amounting to more than 2.5 percent.
- These two deciles were the tenth (the wealthiest), at 3.0 percent, and the first (the least wealthy), at 2.7 percent.

Furthermore, Table 2 shows that the school districts with “higher” administrative cost (defined in this study as districts whose administrative expenditures exceeded eight percent of total expenditures), are almost exclusively concentrated in the ninth and tenth deciles of district wealth. This is true in every fiscal year studied. The Pearson correlation between district wealth (as measured by its CWR) and the percentage of expenditures devoted to administration was +0.42, indicating that as wealth increases, there is a greater propensity to allocate a higher share of district expenditures to administrative functions.

Table 2.

The Number of Districts with High Administrative Costs

(Administrative Expenditures Exceed Eight Percent of Total Expenditures)

Wealth Decile	Year							
	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	2000-2001	2001-02
1 (Low Wealth)								
2								
3			1		1	1		
4								
5								
6								
7		1						
8		1		1			1	1
9	2	1		1		2	1	
10 (High Wealth)	6	7	7	7	9	10	7	7

If economies of scale are at work here, we should expect that administrative costs as a share of total district spending would decline with increasing district enrollment, and conversely, that administrative costs would rise as district enrollment declines. Accordingly, many of the higher cost districts highlighted in Table 2 also happened to have relatively few pupils. Indeed, none of the eight districts whose ratios of administrative expenditures to total expenditures exceeded eight percent during the 2001-02 school year had an enrollment greater than 500 students. Tuckahoe Commons had the largest enrollment at 417, with Maplewood (194) and Andes (163) the next largest; the remaining districts had fewer than 100 students.

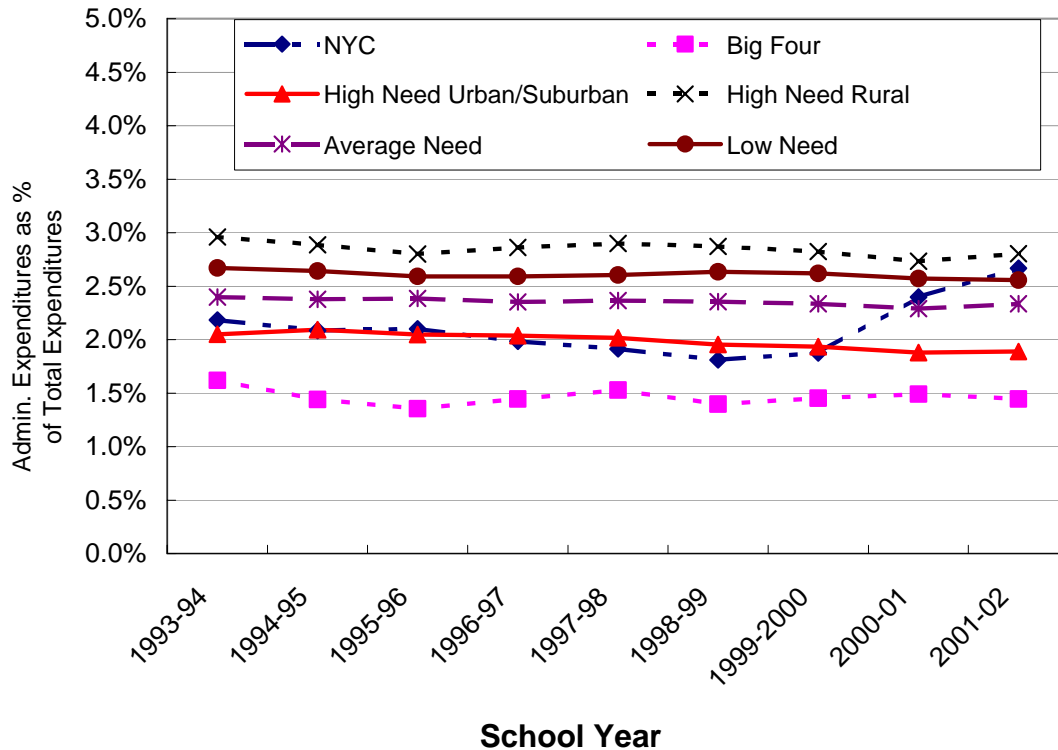
DISTRICT ADMINISTRATIVE EXPENDITURES BY NEED/RESOURCE CATEGORY

SED classifies school districts not only according to their wealth or fiscal capacity, but also by a measure that takes into account *both* their degree of pupil need and their fiscal capacity. This measure is the need/resource capacity index. While the need/resource capacity index is a continuous measure, it is used in SED as a categorical variable as well. SED has defined six need/resource categories: New York City, the Big Four City School Districts (Buffalo, Rochester, Syracuse, and Yonkers), high need urban/suburban districts, high need rural districts, average need districts and low need districts.⁴ This taxonomy has proven to be quite useful in displaying complex

⁴ For further information on the need/resource categories, including details on how the index used to classify districts is calculated, see the New York State Education Department's *Similar Schools: A Descriptive Overview*, available on-line at: <http://www.emsc.nysed.gov/repcrd2003/information/similar-schools/guide.html>.

data simply. Figure 3 displays the central administrative percentage figures by need/resource category from 1993-94 through 2001-02.

Figure 3.
The Percentage of Total Expenditures Used for Administration
by Need/Resource Category, 1993-94 through 2001-02



- As shown in Figure 3, high need rural districts and low need districts had the highest and second highest administrative cost percentages of all of the need/resource categories from 1993-94 through 2000-01.
- From 1993-94 through 1999-2000, the Big Four, the high need urban/suburban districts, and New York City had the lowest administrative cost percentages. In the last two years studied, however, the percentages in the Big Four and high need urban/suburban districts remained low, while New York City's rose sharply to reach 2.7 percent in 2001-02.

WHY DISTRICT ADMINISTRATIVE COSTS VARY BY NEED/RESOURCE CATEGORY AND DISTRICT WEALTH

To explain why school districts in different wealth deciles and need/resource categories have such different levels of administrative costs, differences in district enrollments need to be examined. To accomplish this, each district's share of administrative expenditures was compared to the number of pupils in the district. The "duplicated combined adjusted average daily membership," or DCAADM, was used as an enrollment figure.⁵

Analysis shows that the share of overall district expense attributable to administrative costs diminishes as district size increases. As Table 3 shows, this efficiency effect is especially strong in districts of under 500 pupils ($r = -0.71$).⁶ However, the effect dampens as district size increases, as evidenced by the progressively weaker negative correlations between size and administrative shares of expenditures. In other words, the gains in efficiency found by increasing district size diminish after a certain size is reached.

Table 3.

Correlation between District Size and per Pupil Administrative Expenditures, 2001-02

	District Pupil Count (DCAADM)*						
	All Districts	1-500	501-1,000	1,001-1,500	1,501-3,000	3,001-4,500	4,500-1,000,000
Pearson Correlation	-0.05	-0.71	-0.35	-0.10	-0.12	-0.15	-0.07
Number of Districts	680	68	103	141	181	77	110

* Duplicated Combined Adjusted Average Daily Membership. For an explanation of how this measure is calculated, see the appendix to SED's *Fiscal Profile of New York State School Districts*. This yearly report is available on-line at: http://www.oms.nysed.gov/faru/Profiles/profiles_cover.htm.

⁵ For a description of the DCAADM, see the appendix to SED's *School District Fiscal Profiles*, 15th edition. The *Fiscal Profiles* are available at: http://www.oms.nysed.gov/faru/Profiles/profiles_cover.htm.

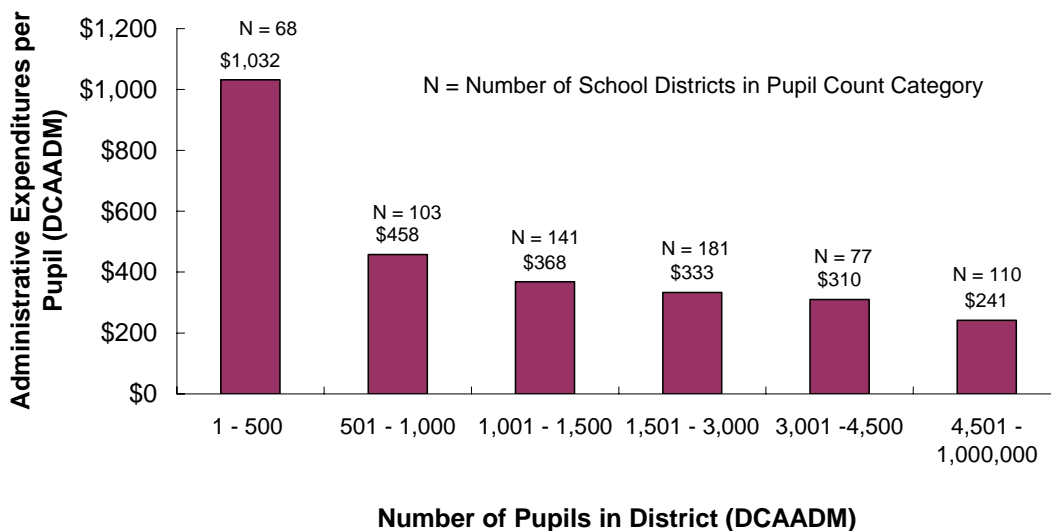
⁶ Other research dealing with the relationship between district size and district costs include: William Duncombe and John Yinger, *Does School District Consolidation Cut Costs?* (Syracuse: Syracuse University, The Maxwell School, Center for Policy Research, December 2000); Matthew Andrews, William Duncombe, and John Yinger, *Revisiting Economies of Size in American Education: Are We any Closer to a Consensus?* (Syracuse: Syracuse University, The Maxwell School, Center for Policy Research, October 2000); Susan E. Heinbuch and F. Wagner, *Small Schools Operating Costs: Reversing Assumptions about Economies of Scale* (New York: Public Education Association, 1992); David H. Monk, *Educational Cost Differentials and Rural Schools: A Broadened View* (Ithaca, NY: Cornell University, 1983); and David H. Monk, *The Conception of Scale and the Internal Allocation of School District Resources* (Ithaca, NY: Cornell University, 1982).

Figure 4 illustrates this curvilinear relationship. The drop in the administrative cost per pupil is precipitous between the first and second enrollment categories depicted: among those districts with fewer than 500 pupils (n = 68 statewide), the administrative expenditures per pupil were \$1,032, while they amounted to less than half that in districts with 501 to 1000 pupils (\$458). In the remaining categories of districts these efficiencies continue but with a smaller effect.

Figure 4.

Average Administrative Expenditures per Pupil by District Size (Pupil Count),

2001-02



CONCLUSIONS

Administrative expenditures in New York State school districts were a small part of overall expenditures throughout the 1993-94 to 2001-02 period. These expenditures remained stable as a percentage of total expenditures, averaging around 2.5 percent statewide. These two facts show that administrative expenditures have not been a significant contributor to recent increases in many school district budgets.

In addition, districts that tended to have higher administrative costs per pupil and high administrative cost ratios tended to have smaller enrollments (under 500 pupils). These smaller enrollment districts were concentrated in the high need rural and low need district categories. Hence districts in these need/resource categories were more expensive to administer (on a per-pupil basis). When school districts were examined by wealth deciles, the poorest deciles and the wealthiest deciles had the greatest concentrations of small school districts. As a consequence, districts in these deciles were more expensive to administer than those in deciles with fewer very small districts.