

CAMBRIDGE PUBLIC SCHOOL DISTRICT

COMPARATIVE REVIEW OF SCHOOL DISTRICT SUPPORT AND ADMINISTRATIVE STAFFING

FEBRUARY 2005

The logo for MMA Consulting Group, Inc. is a stylized geometric design consisting of six light purple shapes arranged in a circular pattern. Three squares are positioned at the top and bottom, and three diamonds are positioned between them, all pointing towards the center.

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February 8, 2005

James Maloney
Chief Operating Officer
Cambridge Public School District
159 Thorndike Street
Cambridge, Massachusetts

Re: Comparative Review of School District Support and Administrative Staffing

Dear Mr. Maloney:

MMA Consulting Group, Inc. is pleased to submit the *Comparative Review of School District Support and Administrative Staffing*. This document reflects the information collected and our analysis regarding the level of staffing within the Cambridge Public School District. The approach and methodology we used to develop the information is described in this report. The report is designed to allow the reader to review exhibits in sequence and draw conclusions.

We look forward to discussing the report with you.

Very truly yours,

Mark E. Morse

Mark E. Morse
President

I. INTRODUCTION AND APPROACH

MMA Consulting Group, Inc. was employed by the Cambridge Public School District (CPS) to review the level of support staffing within the CPS. MMACG's responsibility was to examine staffing levels by functional area and compare those staffing levels to a set of comparison school districts. After a discussion with CPS officials, three comparative jurisdictions were selected, Brookline, Newton and Somerville.

To conduct this study, the consultants reviewed CSP budgets and district position control documents to identify the assignment of support staff, organized the data in manageable categories, and reviewed the information with CPS personnel to ensure that positions were identified. Consultants contacted each of the comparative school districts, discussed the data sought, and provided them with a printout of position assignments, by category, in Cambridge. The consultants conducted on-site interviews with officials from two of the school districts. Because of staffing commitments in the third district, it was difficult to schedule an on-site visit, but personnel provided detailed information and responded to telephone inquiries. Personnel from the comparative school districts willingly contributed a great deal of time in providing information and answering questions.

After gathering and organizing data, the consultants met with CPS personnel to review the data collected to ensure comparisons were accurate and to ask questions regarding staff assignments in the CPS. In addition, a number of questions were raised regarding local district practices which required follow-up data gathering and verification to ensure that the comparisons are valid.

Comparative or normative data has limitations. In a broad sense, comparative information provides a normative framework for evaluating general staffing levels. This type of data only provides a general benchmark. It is apparent from this analysis that each of the organizations to which the CPS is compared in this report has its own staffing patterns that appear to reflect local history and practice. It will also become apparent to the reader of this report that a number of local policy decisions affect the number of employees in different categories.

II. MEASURE OF STAFFING AND CPS EMPLOYMENT HISTORY

The primary measure used in this report is the comparison of the number of support positions, by category, to the total size of a school system's enrollment. To arrive at this measure, the consultants divided total school enrollment by the number of positions in a particular category, which results in the number of students for each category of employee. For comparison purposes, we used enrollment figures provided by the Department of Education for 2003 to 2004. For example, in the CPS, there are currently 6,437 students enrolled and there are 606.8 FTE support positions. The total enrollment is divided by 606.8 which results in 10.6, which means there is one support position for each 10.6 students enrolled in the CPS. When determining the number of positions for comparison purposes, we used a full-time equivalent employee (FTE) measure. The definition of FTE may vary slightly from district to district, which required consultants to use reasonable judgment when comparing data.

It is interesting to note that the school enrollment in the CPS has declined during the last five years by 910 students, or 12.4 percent. The total number of employees (FTEs) has declined from 1,460.9 in FY '00-'01 to 1,295.7 in FY '04-'05, or 11.3 percent. The total number of FTE support positions in FY '00-01 was 700.2. In FY '00-'01, there was one employee for each 10.5 students (FY '00-'01 enrollment of 7,367 divided by 700.2 = 10.5 rounded). Thus, the number of FTE support positions per enrollment has changed little in the last five years, which indicates that the number of support positions has decreased at generally the same rate as the student enrollment. Exhibit 1, *General Fund Staffing Summary - FY '01-'02 through FY '04-'05*, present five years of total CPS staffing.

EXHIBIT 1
GENERAL FUND STAFFING SUMMARY
FY' 00-'01 THROUGH FY '04-'05

JOB CATEGORY	FY '00-'01	FY '01-'02	FY '02-'03	FY '03-'04	FY '04-'05	5-YEAR CHANGE	% CHANGE
Administrator	84	81	82	74	71.9	-12.1	-14.4%
Teacher	760.7	761.3	757.9	708.1	682.5	-78.2	-10.3%
Custodial	85.5	83.5	82.0	75.0	73.8	-11.7	-13.7%
Food Service *	0.0	0.0	0.0	0.0	0.0		
Clerical	86.8	83.3	80.4	74.1	71.8	-15	-17.3%
Paraprofessional	198.7	212.5	195.5	190.0	189.8	-8.9	-4.5%
Full-time Other	83.9	84.8	91.3	86.0	87.4	3.5	4.2%
Part-time Aide	161.3	154	139.7	139.7	118.5	-42.8	-26.5%
Total Employment (FTE)	1,460.9	1,460.4	1,428.8	1,346.9	1,295.7	-165.2	-11.3%
Support Staff FTE	700.2	699.1	670.9	638.8	613.2	-87	-12.4%

* Food Service Staff funded by Food Service Revolving Fund
Source: Annual CPS Budget document

It should be noted that, in Exhibit 1, the CPS has identified 613.2 FTE support positions. In the detailed analysis shown below, the consultants have identified 606.8 FTEs. This variation is likely the result of some personnel leaving District employment.

Exhibit 2, *Enrollment Change*, presents data from the CPS for FY '00-'01 and FY '04-'05. The data indicates an enrollment decline of 12.4 percent.

EXHIBIT 2
ENROLLMENT CHANGE - FY '00-'01 THROUGH FY '04-'05

	FY'00-'01	FY '04-'05	5-YEAR CHANGE	% CHANGE
Enrollment	7,367	6,457	-910	12.4%

We conclude from the general data presented above that the support and administrative staff of the CPS has decreased to reflect the decreasing student enrollment. The percent decrease of support and administrative staff has been equal to the percent decline in enrollment over the last five years.

III. COMPARISON OF SUPPORT STAFFING

COMPARISON SCHOOL DISTRICTS

The Brookline, Newton and Somerville school districts were selected for comparison purposes. Exhibit 3, *Comparison School District Characteristics*, presents basic data about each school district. For the purposes of this exhibit, we have used Department of Education compiled data for the school year 2003-2004.

EXHIBIT 3

COMPARISON SCHOOL DISTRICT CHARACTERISTICS

	CAMBRIDGE	BROOKLINE	NEWTON	SOMERVILLE
Population	101,807	57,032	83,880	76,922
Enrollment	6,437	6,022	11,415	5,616
African-American	38.2%	9.9%	5.3%	16.6%
Asian	10.3%	17.7%	11.6%	7.8%
Hispanic	14.5%	6.1%	3.2%	29.5%
Native American	0.7%	0.2%	0.1%	0.4%
White	36.4%	66.0%	79.7%	45.8%
First Language not English	32.8%	27.3%	17.3%	49.1%
Limited English Proficiency	10.1%	6.6%	4.8%	15.2%
Low-Income	40.6%	9.6%	7.1%	60.8%
Special Education	21.5%	17.5%	18.3%	21.2%
Teachers	651	512	967	446
Day-Program Expenditures	\$102,868,783	\$64,018,505	\$125,707,088	\$60,797,256
	\$15,980.86	\$10,630.77	\$11,012.45	\$10,825.72
Schools	13	9	22	11
Square Footage	1,803,063	1,010,000 (estimate)	2,700,000 (estimate)	1,112,000

Exhibit 3 shows that while each school district has a relatively diverse student enrollment, Cambridge and Somerville student diversity is greater than Brookline and Newton. Newton has a substantially larger student enrollment than CPS, while Brookline and Somerville's enrollment total is closer to that of CPS. The information from the Department of Education indicates that a greater percent of student population has been classified as low income in CPS (40.6 percent) than in

Brookline (9.6 percent) and Newton (7.1 percent). However, in Somerville, 60.8 percent of the enrollment is classified as low income. In the CPS, 21.5 percent of the student enrollment has special needs, which is similar to Somerville at 21.2 percent. Brookline and Newton have somewhat lower percentages of special need students.

COMPARATIVE DATA

Exhibit 4, *Base Data Collected*, presents information gathered from each jurisdiction. In this exhibit, and in other exhibits, we have organized the staffing information in the following categories:

- Paraprofessional
- Paraprofessional (Special Education)
- Custodial
- Maintenance
- Food Service
- Central Support Staff
- Safety and Security
- School Support Staff
- Grant Supported Positions

Under each of these categories, there is a detailed list of positions included. There are several columns of information. The first column of data presents the staffing level in Cambridge, followed by the staffing in Brookline, Newton and Somerville. For each category the number of positions employed is shown. In addition, to allow comparison, the school enrollment for each district (shown in Exhibit 3) is divided by the total number of positions each district has in each category. For example, under the first category of *Paraprofessional*:

Cambridge has one paraprofessional employee per	24.6 students
Brookline has one paraprofessional employee per	119.9 students
Newton has one paraprofessional employee per	93.5 students
Somerville has one paraprofessional employee per	57.3 students

This suggests that Cambridge has a far greater number of paraprofessional employees than the other districts. However, a review of the detail suggests that in part, the reason for the CPS staffing level is the policy decision to employ more paraprofessionals for elementary instruction and to employ Home Based Program Aides.

For purposes of comparing custodial positions, we have shown these positions in relation to the number of square feet of facility. Cambridge has one custodian for each 27,739 square feet of school building space.

A careful review of the data also indicates several features which distinguish the CPS from other districts. Under the *Maintenance* category, the CPS employs 12 maintenance employees, while in the other districts, maintenance is generally provided by the city or town. Note also that the CPS has made a policy decision have the positions of Family Resource Liaison (10.1 FTEs) and Technology Assistant (18.95 FTEs, rounded to 19.0); no other district appears to have these positions.

Exhibit 5, *Position Comparisons*, repeats the same information as shown in Exhibit 4, but averages the number of employees in Brookline, Newton and Somerville to show comparisons between Cambridge and the average of the other three districts.

Exhibit 6, *Summary of Position Comparisons*, summarizes data from Exhibit 5 and displays the total number of employees a district has by each category, the number of students per support position category, and the average of the three comparative districts. This exhibit indicates that Cambridge employs one support employee (FTE) for each 10.6 students; on average, the other three districts employ one staff support position (FTE) for each 16.3 employees.

Exhibit 7, *Comparison of Administrative Relationships among School Districts and Municipalities*, shows a list of support services, and indicates if the service is provided by district personnel (in-house) or provided by the city or town. This listing indicates that each district has a different administrative relationship with its municipality.

**EXHIBIT 4
BASE DATA COLLECTED**

	CAMBRIDGE	BROOKLINE	NEWTON	SOMERVILLE
PARAPROFESSIONAL (FTE)				
Kindergarten	36	11.62	0	25
Elementary Instruction	108.45	2.875	43.42	0
Secondary Instruction	6.2	4	19.69	1
Library	0	5.7	6.3	
Bilingual/ELL	11	3	15.89	3
Home Based Program Aide	20	0	0	0
Technology	2	0	0	0
Lunchroom	42	16.125	0	40
Reading	5	0	0	0
Other	13.45	6.9	36.84	29
				Title 1, etc.
No. of Employees (Subtotal)	244.1	50.22	122.14	98
Enrollment/No. of Paraprofessionals	26.4	119.9	93.5	57.3
PARAPROFESSIONAL (Special Education)				
Special Education	81.5	153.75	316.59	58
Enrollment/No. of Paraprofessionals	79.0	39.2	36.1	96.8
CUSTODIAL				
School Custodian	60	47.2	87	48
Other	1	0.5	0	0
Central Administration	4	1.5	4	3
No. of Employees (Subtotal)	65	49.2	91	51
Sq. Ft. per Custodian	27,739	20,528	29,670	21,804
MAINTENANCE	12	0	5	0
			Town Provided	City Managed
FOOD SERVICES				
School Based Services	34.35	26	172.58	30
Central Administration	3.43	1	1	3
Other	3.0			
No. of Employees (Subtotal)	40.78	27	173.58	33
Enrollment/Food Service Personnel	157.85	223.04	65.76	170.18

**EXHIBIT 4 (CONTINUED)
BASE DATA COLLECTED**

	CAMBRIDGE	BROOKLINE	NEWTON	SOMERVILLE
CENTRAL SUPPORT STAFF				
Purchasing	3.5	0	3	0
Payroll	5	2	3	2
Accounts Payable	3	1	2	0
Finance/Budget	5	2	3	5
Human Resources	8	2.5	6.7	1
MIS	8	6.2	12	5
Curriculum Development	12.75	5.5	6	1
Grants	1	2	2	1
Student Achievement	1.5	1	3	0
Legal	1	0	0	0
Deputy Supt.	0.75	0	1	1
COO	1	0	0	0
CFO	2	0	0	1
Superintendent	2	1	2	2
Registration/Admissions	4.58	0	1	4
Bilingual Education	5.42	0.5	1	1
Special Education	6.25	3.6	6.8	6
Transportation	1.5	1.5	2	
Other	0	0	7.23	0
			Adult Ed.	
No. of Employees (Subtotal)	72.25	28.8	61.73	30
Enrollment/Central Office Support Staff	89.1	209.1	184.9	187.2
SAFETY & SECURITY	13	3	10.5	9
Enrollment/Safety & Security	495.2	2007.3	1087.1	624.0
SCHOOL SUPPORT STAFF				
High School Clerical/Adm. Support	21.5	18.7	29.36	9
Elementary Clerical	14.6	10.8	32.31	9
Family Resource Liaison	10.1	0	0	0
Technology Assistant	18.95	0	0	0
No. of Employees (Subtotal)	65.15	29.5	61.67	18
Enrollment/School Support Staff	98.8	204.1	185.1	312.0
GRANT SUPPORTED POSITIONS	13	14.45	1	9
			ECC	Preschool-Daycare
TOTAL SUPPORT STAFF	606.8	355.92	843.21	306
Enrollment/Total Support Staff	10.6	16.9	13.5	18.4

EXHIBIT 5
POSITION COMPARISONS

	CAMBRIDGE	BROOKLINE	NEWTON	SCOVERMILLE	AVERAGE THREE SYSTEMS
PARAPROFESSIONAL (FTE)					
Kindergarten	36.0	11.6	0.0	25.0	12.2
Elementary Instruction	108.5	2.9	43.4	0.0	15.4
Secondary Instruction	6.2	4.0	19.7	1.0	8.2
Library	0.0	5.7	6.3		6.0
Bilingual/ELL	11.0	3.0	15.9	3.0	7.3
Home Based Program Aide	20.0	0.0	0.0	0.0	0.0
Technology	2.0	0.0	0.0	0.0	0.0
Lunchroom	42.0	16.1	0.0	40.0	18.7
Reading	5.0	0.0	0.0	0.0	
Other	13.5	6.9	36.8	29.0	24.2
No. of Employees (Subtotal)	244.1	50.2	122.1	98.0	90.1
Enrollment/Nb. of Paraprofessionals	26.4	119.9	93.5	57.3	90.2
PARAPROFESSIONAL (Special Education)					
Special Education	81.5	153.8	316.6	58.0	176.1
Enrollment/Nb. of Paraprofessionals	79.0	39.2	36.1	96.8	57.4
CUSTODIAL					
School Custodian	60.0	47.2	87.0	48.0	60.7
Other	1.0	0.5	0.0	0.0	0.2
Central Administration	4.0	1.5	4.0	3.0	2.8
No. of Employees (Subtotal)	65.0	49.2	91.0	51.0	63.7
Sq. Ft. per Custodian	27,739	20,528	29,670	21,804	24,001
MAINTENANCE	12.0	0.0	5.0	0.0	1.7
FOOD SERVICES					
School Based Services	34.4	26.0	172.6	30.0	76.2
Central Administration	3.4	1.0	1.0	3.0	1.7
Other	3.0				
No. of Employees (Subtotal)	40.8	27.0	173.6	33.0	77.9
Enrollment/Food Service Personnel	157.8	223.0	65.8	170.2	153.0

EXHIBIT 5 (CONTINUED)
POSITION COMPARISONS

CENTRAL SUPPORT STAFF					
Purchasing	3.5	0.0	3.0	0.0	1.0
Payroll	5.0	2.0	3.0	2.0	2.3
Accounts Payable	3.0	1.0	2.0	0.0	1.0
Finance/Budget	5.0	2.0	3.0	5.0	3.3
Human Resources	8.0	2.5	6.7	1.0	3.4
MS	8.0	6.2	12.0	5.0	7.7
Curriculum Development	12.8	5.5	6.0	1.0	4.2
Grants	1.0	2.0	2.0	1.0	1.7
Student Achievement	1.5	1.0	3.0	0.0	1.3
Legal	1.0	0.0	0.0	0.0	0.0
Deputy Supt.	0.8	0.0	1.0	1.0	0.7
COO	1.0	0.0	0.0	0.0	0.0
CFO	2.0	0.0	0.0	1.0	0.3
Superintendent	2.0	1.0	2.0	2.0	1.7
Registration/Admissions	4.6	0.0	1.0	4.0	1.7
Bilingual Education	5.4	0.5	1.0	1.0	0.8
Special Education	6.3	3.6	6.8	6.0	5.5
Transportation	1.5	1.5	2.0	0.0	1.2
Other	0.0	0.0	7.2	0.0	2.4
No. of Employees (Subtotal)	72.3	28.8	61.7	30.0	40.2
Enrollment/Central Office Support Staff	89.1	209.1	184.9	187.2	193.7
SAFETY & SECURITY	13.0	3.0	10.5	9.0	7.5
SCHOOL SUPPORT STAFF					
High School Clerical/Adm Support	21.5	18.7	29.4	9.0	19.0
Elementary Clerical	14.6	10.8	32.3	9.0	17.4
Family Resource Liaison	10.1	0.0	0.0	0.0	0.0
Technology Assistant	19.0	0.0	0.0	0.0	0.0
No. of Employees (Subtotal)	65.2	29.5	61.7	18.0	36.4
Enrollment/School Support Staff	98.8	204.1	185.1	312.0	233.7
GRANT SUPPORTED POSITIONS	13.0	14.5	1.0	9.0	8.2
TOTAL SUPPORT STAFF	606.8	355.9	843.2	306.0	501.7
Enrollment/Total Support Staff	10.6	16.9	13.5	18.4	16.3

**EXHIBIT 6
SUMMARY OF POSITION COMPARISONS**

	CAMBRIDGE	BROOKLINE	NEWTON	SOMERVILLE	AVERAGE THREE SYSTEMS
PARAPROFESSIONAL (FTE)					
No. of Employees (Subtotal)	244.1	50.2	122.1	98.0	90.1
Enrollment/No. of Paraprofessionals	26.4	119.9	93.5	57.3	90.2
PARAPROFESSIONAL (Special Education)					
Special Education	81.5	153.8	316.6	58.0	176.1
Enrollment/No. of Paraprofessionals	79.0	39.2	36.1	96.8	57.4
CUSTODIAL					
No. of Employees (Subtotal)	65.0	49.2	91.0	51.0	63.7
Sq. Ft. per Custodian	27,739	20,528	29,670	21,804	24,000.9
MAINTENANCE	12.0	0.0	5.0	0.0	1.7
FOOD SERVICES					
No. of Employees (Subtotal)	40.8	27.0	173.6	33.0	77.9
Enrollment/Food Service Personnel	157.8	223.0	65.8	170.2	153.0
CENTRAL SUPPORT STAFF					
No. of Employees (Subtotal)	72.3	28.8	61.7	30.0	40.2
Enrollment/Central Office Support Staff	89.1	209.1	184.9	187.2	193.7
SAFETY & SECURITY	13.0	3.0	10.5	9.0	7.5
SCHOOL SUPPORT STAFF					
No. of Employees (Subtotal)	65.2	29.5	61.7	18.0	36.4
Enrollment/School Support Staff	98.8	204.1	185.1	312.0	233.7
GRANT SUPPORTED POSITIONS	13.00	14.45	1.00	9.00	8.2
TOTAL SUPPORT STAFF	606.8	355.9	843.2	306.0	501.7
Enrollment/Total Support Staff	10.6	16.9	13.5	18.4	16.3

**EXHIBIT 7
COMPARISON OF ADMINISTRATIVE RELATIONSHIPS
AMONG SCHOOL DISTRICTS AND MUNICIPALITIES**

	CAMBRIDGE	BROOKLINE	NEWTON	SOMERVILLE
Food Service Program	In-House	In-House	In-House	In-House
Custodial	In-House	In-House	In-House	City Provided
Maintenance	In-House	Town Provided	City Provided	City Provided
Payroll	In-House	In-House	In-House	In-House
Payroll Check/Warrant Processing	City Provided	Town Provided	City Provided	City Provided
Benefit Administration	In-House	Town Provided	City Provided	City Provided
Purchasing & POs	In-House	Town Provided	In-House	In-House
Accounts Payable	In-House	In-House	In-House	In-House
Vendor Check/Warrant Processing	City Provided	Town Provided	City Provided	City Provided
Auditing	City Provided	Town Provided	City Provided	City Provided
Transportation-Routing	In-House	In-House	In-House	Contractor
MIS	In-House	Town Managed	In-House	In-House