

A Study of Central Office Capacity in Regional Districts

by the Massachusetts Association of Regional Schools (MARS)

November, 2009

Introduction

The Massachusetts Association of Regional Schools (MARS) has undertaken a study of central office staffing for the Massachusetts Department of Elementary and Secondary Education (ESE). The study examines central office staff and their roles or functions in terms of district size.

ESE requested the study to provide factual information for the ongoing discussion about regionalization, consolidation, and collaboration among smaller districts, in which the question of central office capacity has been raised repeatedly. MARS' member superintendents oversee not only regional districts but also elementary districts in superintendency unions, some of which are very small. The opportunity to work closely with superintendents on this central office study, and the size range of districts represented by MARS superintendents, made MARS an ideal consultant for the study.

Some findings from the data are that superintendents and clerical staff in smaller districts have primary responsibility for more functions than in larger districts. This indicates that these superintendents are likely to have less time available for instructional leadership, and that clerical staff often have primary responsibility for functions that in larger districts are done by business officials or technology directors. Another indicator of the strain on small district leadership is the number of secondary responsibilities in diverse areas carried by SPED administrators in small districts—double the number than in larger districts. The median number of clerical staff increases by 250% from the study's smallest to largest districts while the median of district administrators increases by only 65%, indicating that professional staff may spend more time doing clerical tasks in smaller districts.

The MARS team hopes this study will prove a useful addition to the discussion about administrative capacity and efficiency of districts of different sizes. The team thanks the superintendents who took time from their busy schedules to complete the survey.

Methodology

A team of six sitting or recently retired regional superintendents developed a survey to administer to fellow superintendents of MARS' member regional districts. Regional vocational-technical high schools were not included in the study because their regional structure, educational program, and typical central office staffing cannot be compared directly with academic districts. The team identified 43 central office functions in six areas—school committee and community, instructional leadership, financial management, human resources, operations, and technology systems. Superintendents were asked to identify central office staff with primary (1) and secondary responsibility (2) for each function. A "1" was also defined as "the go-to person," and a "2" as the next person in line.

Surveys were customized for each district with a list of every individual reported in the district's 2009 Educational Personnel Information Management System (EPIMS) data. The individuals'

EPIMS job codes were used to compare positions and responsibilities across districts. A sample survey form is attached as Appendix A.

The team sent surveys to 51 superintendents, and obtained 41 complete and useable responses. Team members worked with superintendents by phone or in person to complete the survey in order to improve the consistency of data from a somewhat subjective exercise. Among the 41 respondents, there were 28 superintendents of regional K–12 districts, three of regional secondary schools, and 10 of K–12 superintendency unions which include both regional secondary schools and elementary districts. Thirty-nine elementary districts were included in the study because of the superintendency unions, for a total of 80 districts under 41 superintendents.

To facilitate analysis of the impact of size, districts were divided by enrollment size into quartiles of about ten districts each. Superintendents of unions have one central office managing several districts, so the enrollment of those districts was aggregated as one district to accurately reflect the number of students for which that central office is responsible. Using quartiles resulted in the following ranges of district size:

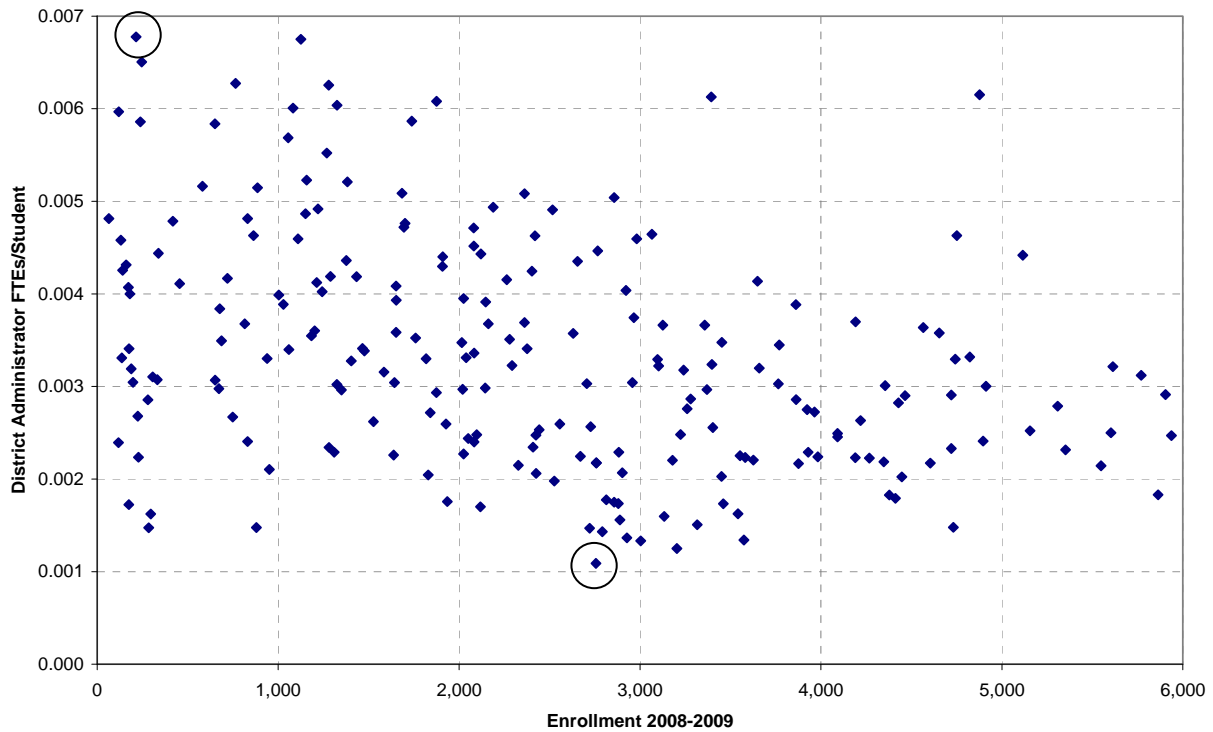
| Quartile | 1 | 2 | 3 | 4 |
|---------------------|-------------|---------------|---------------|---------------|
| Number of districts | 10 | 10 | 11 | 10 |
| Enrollment* | 651 – 1,643 | 1,695 – 2,145 | 2,426 – 3,461 | 3,627 – 7,339 |

** October 1, 2009 Student Information Management System(SIMS)*

Central Office Staffing - State Context

Analysis of state-wide 2009 EPIMS data demonstrates that districts make different decisions about central office staffing regardless of size, but the ratio of administrators to students varies especially widely among smaller districts. The following chart plots the ratio of full-time equivalent (FTE) administrators to students against district size for all districts with up to 6,000 students. (See Appendix B for a version of this chart showing different types of districts.)

District Administrator FTEs / Students, by District Enrollment



*Note: see circled points. The lowest point—the district with the fewest administrators per student—represents 3.0 administrators for 2,751 students. The highest point—the most administrators per student—represents 1.3 administrators for 214 students (some higher outliers are not shown.) The lowest point is a municipal K-12 district and the highest is an elementary district in a K-12 superintendency union.
Source: 2008-09 Educational Personnel Information Management System (EPIMS) and SIMS*

While the range is wider at the low end, the ratio of administrators to students generally gets smaller as districts get larger. By looking at medians of district administrator FTEs in groups of K-12 districts averaging 2,000, 3,000 and 4,000 students, we see how the typical staffing profile changes as districts get larger. Comparing districts with averages of 2,000 and 4,000 students, the table shows that at the median districts with 50% fewer students have only 30% fewer administrators. The chart above includes many districts that are not K-12, such as elementary districts that are members of a superintendency union. The range of staffing for small districts may in part reflect the assignment of a percentage of one central office to each member district. While the range of the ratios indicates various strategies for covering the necessary administrative tasks, at the median for a full K-12 district it appears to be difficult to reduce district administrative staff in parallel with enrollment. Smaller districts with more administrators may economize by eliminating higher-cost executive positions such as assistant superintendents. (See Appendix C for more detail on these profiles.)

Median District Administration by District Size

| District average enrollment | 2,000 (48 districts) | 3,000 (44 districts) | 4,000 (29 districts) |
|------------------------------------|-------------------------|-------------------------|-------------------------|
| Total Administrators | 6.8 | 7.6 | 10.0 |
| Superintendent | 1.0 | 1.0 | 1.0 |
| Assistant superintendent | | | 1.0 |
| Other district administrator | 1.0 | 1.0 | 2.0 |
| School business official | 1.0 | 1.0 | 1.0 |
| SPED administrator | 1.0 | 1.0 | 1.0 |
| Technology director | 1.0 | .4 | 1.0 |
| Other positions (curriculum areas) | 1.8 | 3.2 | 3.0 |

2009 EPIMS data - K-12 districts only

Several positions as coded in EPIMS have undefined responsibilities (e.g. other district administrator) so the median profiles do not define exactly how a central office team would be set up. There is no right way to set up such a team - a superintendent may apportion responsibilities based on the strengths of individuals and use varying titles (as well as EPIMS codes) but the medians provide some general information about number and roles of district administrators. The MARS study sought to provide more detailed data about how central office functions are organized regardless of FTEs and titles.

MARS Survey Data Analysis

The discussion of survey results includes analysis by size using quartiles, as well as analysis focused on functions or positions across the whole group. The study reviews the specific positions of superintendent, SPED administrator, business manager, and technology director. The study looks in more detail at functions in the areas of instructional leadership and technology, as well as clerical staff responsibility for finance and technology tasks.

Central Office Administrator Team

The administrators of any district oversee the same complement of tasks whether there are two or twenty of them. Median and average administrator FTEs of the sample districts are shown below. The team provided an extra line for “school-based staff” such as a principal having a central office responsibility, but did not consistently collect total FTEs for this line. This may mean that FTEs are effectively under-reported in some districts. Those districts that did report FTEs for this line had as many as 6.0 additional FTEs, and were mostly the smallest quartile districts.

Central Office Administrator FTEs by Quartile

| Quartile | 1 | 2 | 3 | 4 |
|----------|-----|-----|-----|------|
| Median | 5.3 | 5.4 | 6.0 | 8.8 |
| Average | 5.2 | 5.6 | 6.6 | 10.4 |

The Superintendent

Not surprisingly, superintendents consistently assigned themselves primary responsibility (“1”) for working with key governance entities, managing principals, and heading union negotiations. The table of raw data below lists all functions for which any superintendent assigned him/herself primary responsibility, from most to least commonly assigned. The list includes 33 of the 43 functions identified in the survey. They are grouped in four ranges based on the number of 1s assigned to the functions.

Superintendents’ Primary Responsibilities (1s)

| | Function | Total | Quartile | | | |
|--------------------------------|------------------------------------|-------|----------|----|----|----|
| | | | 1 | 2 | 3 | 4 |
| Group 1 | school committee meetings | 41 | 10 | 10 | 11 | 10 |
| | supervise principals | 41 | 10 | 10 | 11 | 10 |
| | hire principals | 41 | 10 | 10 | 11 | 10 |
| | town government meetings | 40 | 9 | 10 | 11 | 10 |
| | evaluate principals | 40 | 10 | 10 | 11 | 9 |
| | union negotiations | 39 | 9 | 10 | 11 | 9 |
| | parent issues | 34 | 8 | 9 | 9 | 8 |
| Group 2 | public relations | 28 | 6 | 7 | 8 | 7 |
| | recruit staff | 24 | 6 | 7 | 6 | 5 |
| Group 3 | hire teachers | 20 | 5 | 6 | 5 | 4 |
| | prepare budget | 18 | 5 | 5 | 2 | 6 |
| | capital building projects | 17 | 4 | 5 | 3 | 5 |
| | supervise curriculum & instruction | 11 | 4 | 3 | 3 | 1 |
| | manage budget | 11 | 3 | 5 | 1 | 2 |
| Group 4 | MCAS and accountability data | 8 | 4 | 2 | 1 | 1 |
| | supervise PD | 7 | 3 | 3 | 1 | - |
| | supervise district assessments | 7 | 3 | 3 | - | 1 |
| | Athletics | 6 | - | 4 | 1 | 1 |
| | benefits management | 5 | 1 | 4 | - | - |
| | other ESE/state data requirements | 5 | 1 | - | 3 | 1 |
| | Purchasing | 4 | - | 1 | 2 | 1 |
| | write grants | 3 | - | 1 | - | 2 |
| | Health | 2 | - | 1 | - | 1 |
| | district assessment data/reporting | 2 | 1 | 1 | - | - |
| | supervise ELL program | 1 | - | 1 | - | - |
| | supervise SPED program | 1 | - | 1 | - | - |
| | Treasurer | 1 | - | - | - | 1 |
| | building maintenance | 1 | 1 | - | - | - |
| | Transportation | 1 | 1 | - | - | - |
| administrative data systems | 1 | 1 | - | - | - | |
| staff data and EPIMS reporting | 1 | 1 | - | - | - | |
| instructional technology | 1 | 1 | - | - | - | |

The less frequently assigned responsibilities clustered in smaller districts, a pattern that is more easily seen by aggregating the ones in each groups and comparing quartiles 1 plus 2 with quartiles 3 plus 4. The following table uses the groups of functions above and aggregates primary responsibilities relative to the number of districts in the upper and lower half of size.

The percentage of responsibility within each group is “actual 1s divided by possible 1s.” For functions in Groups 1 and 2, with more superintendents assigning themselves primary responsibility, smaller and larger districts have the same profile. The lower half, however, shows respectively smaller district superintendents retaining 50% more of the possible responsibilities (45% compared to 30%) and 100% more (10% compared to 5%).

Superintendents’ Primary Responsibilities (1s) Related to Size of District

| Number with primary responsibility for a function | N of functions | Actual 1s/ Possible 1s | Actual 1s/ Possible 1s |
|---|----------------|--|--|
| | | Quartiles 1 and 2 20 districts 651–2,145 | Quartiles 3 and 4 21 districts 2,426–7,339 |
| Group 1 (32-41) | 7 | 96% | 96% |
| Group 2 (21-31) | 2 | 65% | 62% |
| Group 3 (11-20) | 5 | 45% | 30% |
| Group 4 (1-10) | 19 | 11% | 5% |

With regard to secondary responsibility (“2”), there is no clear pattern among superintendents, although the tasks generally fall under the areas of instructional leadership and fiscal management. A small number of superintendents considered themselves to have secondary responsibility for almost every task, but no task belonged to more than half the group. It may be that “secondary responsibility” was less clearly defined for respondents than “primary responsibility.” The scattering may also reflect the diverse backgrounds and interests of individuals in the superintendency and the tasks in which they choose to stay involved. The table of raw data below lists all functions for which any superintendent assigned him/herself secondary responsibility, from most to least commonly assigned. The list includes 38 of the 43 functions identified in the survey. They are grouped in ranges based on the number of superintendents in each quartile and the number of 1s assigned to functions.

Superintendents' Secondary Responsibilities (2s)

| | Function | Total | Quartile | | | |
|--------------------------|------------------------------------|-------|----------|---|---|---|
| | | | 1 | 2 | 3 | 4 |
| Group 1 | supervise curriculum & instruction | 21 | 3 | 6 | 4 | 8 |
| | prepare budget | 20 | 5 | 5 | 6 | 4 |
| | manage budget | 19 | 6 | 3 | 4 | 6 |
| | hire teachers | 19 | 5 | 4 | 4 | 6 |
| | supervise ELL program | 15 | 3 | 5 | 3 | 4 |
| | supervise SPED program | 15 | 5 | 6 | 1 | 3 |
| | supervise PD | 14 | 2 | 5 | 3 | 4 |
| | financial reporting (local/state) | 14 | 5 | 3 | 2 | 4 |
| | supervise district assessments | 13 | 1 | 4 | 3 | 5 |
| | transportation | 12 | 3 | 2 | 2 | 5 |
| | write grants | 11 | 3 | 4 | 1 | 3 |
| | grants management | 11 | 4 | 2 | 2 | 3 |
| | capital building projects | 11 | 3 | 3 | 2 | 3 |
| | district assessment data/reporting | 11 | 1 | 5 | 2 | 3 |
| Group 2 | purchasing | 10 | 4 | 3 | 2 | 1 |
| | building maintenance | 10 | 3 | 3 | 1 | 3 |
| | grounds | 10 | 2 | 3 | 1 | 4 |
| | health | 10 | 3 | 2 | 1 | 4 |
| | recruit staff | 8 | 4 | - | 2 | 2 |
| | food services | 8 | 3 | 2 | 1 | 2 |
| | athletics | 8 | 3 | 1 | 1 | 3 |
| | MCAS and accountability data | 8 | - | 5 | 1 | 2 |
| | other ESE/state data requirements | 8 | 2 | 4 | - | 2 |
| | parent issues | 7 | 2 | 1 | 2 | 2 |
| | payroll | 7 | 2 | 1 | 1 | 3 |
| | computer system | 7 | 2 | 3 | - | 2 |
| | administrative data systems | 7 | 3 | 3 | - | 1 |
| | student data and SIMS reporting | 7 | 2 | 3 | - | 2 |
| | student indicators data/reporting | 7 | 2 | 3 | - | 2 |
| | staff data and EPIMS reporting | 7 | 2 | 3 | - | 2 |
| | instructional technology | 6 | 1 | 4 | - | 1 |
| | treasurer | 5 | 2 | 1 | - | 2 |
| | accounts payable | 5 | 2 | - | 1 | 2 |
| | public relations | 4 | 2 | - | | 2 |
| | benefits management | 4 | 2 | - | 1 | 1 |
| town government meetings | 1 | 1 | - | - | - | |
| union negotiations | 1 | 1 | - | - | - | |
| evaluate principals | 1 | - | - | - | 1 | |

The results are similar to the pattern for primary responsibilities when the results are aggregated as above. For 24 of the 38 functions, where 10 or fewer superintendents assigned themselves

secondary responsibility, the percentage (actual 2s/possible 2s) was twice as high for superintendents of smaller districts.

Superintendents' Secondary Responsibilities (2s) Related to Size of District

| Number with secondary responsibility for a function | N of functions | Actual 2s/ Possible 2s | Actual 2s/ Possible 2s |
|---|----------------|--|--|
| | | Quartiles 1 and 2 20 districts 651–2,145 | Quartiles 3 and 4 21 districts 2,426–7,339 |
| Group 1 (11-21) | 14 | 38% | 34% |
| Group 2 (1-10) | 24 | 19% | 12% |

Instructional Leadership Responsibilities

The ongoing discussion of central office capacity generally assumes that smaller districts' administrators have less time and fewer personnel to provide instructional supervision directed at continuous improvement of classroom teaching. The survey asked who had primary responsibility for five functions of instructional leadership and found a wide range of positions, as shown in the following table. The least common positions may represent reporting mistakes. Totals greater than 41 mean that more than one person were assigned primary responsibility. These overlaps may occur in K–12 superintendency unions with several separate districts, as well as when two individuals were reported in a single district in fact or in error.

Primary Responsibilities for Instructional Leadership, by Position

| EPIMS Job Description | supervise principals | supervise curriculum & instruction | supervise PD | supervise district assessments | supervise SPED program | supervise ELL program |
|------------------------------|----------------------|------------------------------------|--------------|--------------------------------|------------------------|-----------------------|
| Superintendent | 41 | 11 | 7 | 7 | 1 | 1 |
| Asst/Deputy Superintendent | 1 | 12 | 15 | 15 | 1 | 10 |
| Business Official | | | | 2 | | |
| Other District Administrator | | 7 | 6 | 5 | 4 | 3 |
| Director Pupil Personnel | | | | | 1 | 2 |
| SPED Administrator | | 1 | 1 | 4 | 38 | 10 |
| Director Curriculum | | 14 | 13 | 8 | 1 | 5 |
| Director ELL | | | | | | 3 |
| Director Technology | | 1 | 1 | 2 | | 1 |
| Director of PD | | | 3 | 1 | | |
| Other Administrative Support | | | 1 | | | |
| School-based Staff | | 1 | | 1 | 1 | |
| Total | 42 | 47 | 47 | 45 | 47 | 35 |

More detailed data on the specific function “supervise curriculum and instruction” showed that in smaller districts, primary responsibility moved either toward the superintendent, or toward less executive positions. In larger districts, this responsibility was concentrated at the level of assistant superintendent. While most of the staff with this primary responsibility was full-time, the part-time individuals were concentrated in the smaller districts (quartiles 1 and 2).

Supervise Curriculum and Instruction

| EPIMS Job Description | Quartile | | | |
|------------------------------|-----------|-----------|-----------|-----------|
| | 1 | 2 | 3 | 4 |
| Superintendent | 4 | 3 | 3 | 1 |
| Asst/Deputy Superintendent | | 2 | 4 | 6 |
| Other District Administrator | 3 | 1 | 1 | 2 |
| SPED Administrator | 1 | | | |
| Director Curriculum | 3 | 4 | 3 | 4 |
| Director Technology | | 1 | | |
| Additional District Staff | 1 | | | |
| Total | 12 | 11 | 11 | 13 |

SPED Administrator

The position of SPED administrator exists in nearly every district, and its primary and secondary responsibilities were analyzed by quartile. SPED administrators had primary responsibility for more functions among smaller districts, but their secondary responsibilities were more telling. These were doubled in the smallest districts (quartile 1), indicating that these individuals must shoulder more of the administrative load.

SPED Administrators' Primary Responsibilities (1s)

| Function | Total | Quartile | | | |
|------------------------------------|-------|----------|---|----|----|
| | | 1 | 2 | 3 | 4 |
| supervise SPED program | 38 | 8 | 9 | 11 | 10 |
| supervise ELL program | 10 | 5 | 1 | 3 | 1 |
| write grants | 10 | 2 | 3 | 2 | 3 |
| grants management | 7 | 2 | 1 | 3 | 1 |
| health | 7 | 1 | 1 | 4 | 1 |
| parent issues | 6 | 3 | 1 | | 2 |
| supervise district assessments | 4 | 3 | | | 1 |
| public relations | 3 | 2 | | | 1 |
| prepare budget | 2 | 1 | | 1 | |
| manage budget | 2 | 1 | | 1 | |
| supervise curriculum & instruction | 1 | 1 | | | |
| supervise PD | 1 | | 1 | | |
| financial reporting (local/state) | 1 | | | 1 | |
| recruit staff | 1 | 1 | | | |
| hiring teachers | 1 | 1 | | | |
| transportation | 1 | | | 1 | |
| MCAS and accountability data | 1 | | 1 | | |

The secondary responsibilities of SPED administrators are shown below in the six categories of administrative functions used in the survey, sorted from most to least common in total. The most common financial task was grants management, while technology responsibilities were distributed across several data/reporting categories and instructional technology.

SPED Administrators' Secondary Responsibilities (2s)

| | Quartile | | | |
|--------------------------------|----------|----|----|----|
| | 1 | 2 | 3 | 4 |
| All functions | 61 | 34 | 21 | 30 |
| Instructional Leadership | 14 | 10 | 7 | 12 |
| Financial Management | 18 | 5 | 1 | 11 |
| School Committee and Community | 6 | 9 | 9 | 2 |
| Technology Systems | 13 | 5 | 2 | 3 |
| Human Resources | 6 | 3 | 0 | 2 |
| Operations | 4 | 2 | 2 | 0 |

School business official

Of the 41 districts in the sample, only 34 assigned the EPIMS position “school business official” to an individual. Other positions (assistant superintendent, “other district administrator”) may take the same role in some districts, possibly in combination with other roles. A few districts assigned 2-4 individuals to the EPIMS position, possibly in error. Those reported as school business officials had primary responsibilities, as one would expect, in finance and operations. Business managers in the largest quartile were more likely to have responsibility for five functions with the most ones than those in other quartiles. For least commonly held responsibilities, there seems to be a pattern of smallest and largest districts more often assigning these responsibilities to the school business official, while middle-sized districts assign them elsewhere.

School Business Officials' Primary Responsibilities (1s)

| Function | Total | Quartile | | | |
|-----------------------------------|-------|----------|---|---|----|
| | | 1 | 2 | 3 | 4 |
| financial reporting (local/state) | 30 | 8 | 5 | 7 | 10 |
| manage budget | 27 | 7 | 4 | 7 | 9 |
| prepare budget | 26 | 6 | 4 | 7 | 9 |
| Transportation | 26 | 6 | 4 | 8 | 8 |
| Purchasing | 25 | 6 | 5 | 5 | 9 |
| building maintenance | 20 | 4 | 6 | 5 | 5 |
| Grounds | 19 | 4 | 6 | 5 | 4 |
| capital building projects | 16 | 4 | 5 | 3 | 4 |
| food services | 16 | 3 | 4 | 3 | 6 |
| Payroll | 10 | 3 | 1 | 2 | 4 |
| Treasurer | 9 | 1 | 1 | 1 | 6 |
| accounts payable | 9 | 3 | 1 | 1 | 4 |
| grants management | 8 | 4 | 1 | 2 | 1 |
| benefits management | 7 | 3 | - | 1 | 3 |

The study looked at the top three tasks — financial reporting, managing budgets, and preparing budgets — to see who was responsible if not a school business official. Most commonly it was the superintendent, and occasionally “assistant superintendent” and “other district administrator.”

The study looked at two operations tasks, transportation and capital building projects, to see if district size affected who handles those functions. In smaller districts, transportation was sometimes handled by clerical staff, which was not the case in any of the larger districts.

Primary Responsibility for Transportation (1s)

| EPIMS Job Description | Total | Quartile | | | |
|------------------------------|-------|----------|----|----|----|
| | | 1 | 2 | 3 | 4 |
| Business Official | 27 | 6 | 4 | 9 | 8 |
| Asst/Deputy Superintendent | 4 | 1 | 2 | 1 | |
| Other District Administrator | 4 | | 2 | 1 | 1 |
| Additional District Staff | 2 | 1 | | | 1 |
| Superintendent | 1 | 1 | | | |
| SPED Administrator | 1 | | | 1 | |
| <i>Clerical Positions</i> | | | | | |
| Admin Clerk/Secretary | 2 | 1 | 1 | | |
| Other Administrative Support | 2 | 1 | 1 | | |
| Administrative Aides | 1 | | 1 | | |
| Total | 44 | 11 | 11 | 12 | 10 |

Capital building projects were handled more similarly in districts of all sizes, largely by the superintendent or business official.

Primary Responsibility for Capital Projects (1s)

| EPIMS Job Description | Total | Quartile | | | |
|------------------------------|-------|----------|----|----|----|
| | | 1 | 2 | 3 | 4 |
| Superintendent | 17 | 4 | 5 | 3 | 5 |
| Business Official | 17 | 4 | 5 | 4 | 4 |
| Additional District Staff | 7 | 3 | | 2 | 2 |
| Asst/Deputy Superintendent | 2 | 1 | 1 | | |
| Other District Administrator | 3 | | 2 | 1 | |
| Total | 46 | 12 | 13 | 10 | 11 |

Technology Director

Expert technology managers have become essential as data collection and analysis has become more essential to district instructional and administrative systems. In the study sample of forty-one districts, twenty-four assigned the EPIMS position “Technology Director” to an individual and almost all those individuals were full-time. The number of districts with technology directors did not vary much by size of district.

Technology Directors

| | Quartile | | | |
|-------------|----------|-----|-----|-----|
| | 1 | 2 | 3 | 4 |
| Individuals | 6 | 6 | 4 | 8 |
| FTEs | 6.0 | 5.0 | 3.9 | 7.1 |

However, reviewing technology responsibilities by position presented a more complicated picture. The table below shows how primary responsibility for technology tasks was assigned to positions. Positions are sorted from most to least primary responsibilities of executive positions and then of clerical staff, and tasks are sorted across from most to least commonly managed by the 24 technology directors. The column totals, which are greater than 41, indicate that there was consistently some overlap of primary responsibility, ranging from 3 to 10 instances. Data about student performance (district assessment and MCAS) and about staff was least commonly managed by the technology directors. Assistant superintendents were most frequently responsible for district assessment data and MCAS/accountability data (10 and 12 of 41 districts.) Administrative clerks were most frequently responsible for staff/EPIMS data (10 of 41 districts.)

Primary Responsibility for Technology Functions, by Position

| EPIMS Job Description | computer system | admin data systems | instruction technology | other ESE/state data reports | student data and SIMS reporting | student indicators data reporting | district assessment data reporting | staff data and EPIMS reporting | MCAS and accountability data |
|---------------------------|-----------------|--------------------|------------------------|------------------------------|---------------------------------|-----------------------------------|------------------------------------|--------------------------------|------------------------------|
| Director Technology | 19 | 15 | 15 | 14 | 14 | 12 | 8 | 8 | 4 |
| Other District Admin | 7 | 9 | 8 | 6 | 7 | 4 | 8 | 7 | 8 |
| School-based Staff | 2 | 3 | 6 | 4 | 7 | 11 | 5 | 4 | 5 |
| Asst/Deputy Supt | 1 | | 4 | 5 | 4 | 5 | 10 | 4 | 12 |
| Superintendent | | 1 | 1 | 5 | | | 2 | 1 | 8 |
| Director Curriculum | | 1 | | 3 | | | 6 | | 4 |
| Business Official | 2 | 4 | 1 | 1 | 2 | 1 | | 1 | |
| Director ELL | | | | 1 | | 1 | 1 | | 1 |
| SPED Administrator | | | | | | | | | 1 |
| <i>Clerical Positions</i> | | | | | | | | | |
| Info Tech Support | 13 | 9 | 7 | 3 | 7 | 6 | 3 | 6 | 2 |
| Admin Clerk/Secretary | 1 | | | 5 | 3 | 2 | 1 | 10 | |
| Other Admin Support | 1 | 2 | 1 | 3 | 1 | 1 | 1 | 2 | 1 |
| Administrative Aides | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 |
| Total | 47 | 45 | 44 | 51 | 46 | 44 | 46 | 45 | 47 |

The study also looked at the relationship of district size to the technology responsibilities of two positions, school-based and clerical staff. The table below indicates that only districts in quartile four (3,600 to 7,300 students) did not assign a significant number of primary responsibilities for technology functions to school-based staff such as principals or technology-skilled teachers.

School-Based Staff with Primary Responsibility (1s) for Technology Functions

| Function | Quartile | | | |
|------------------------------------|-----------|-----------|-----------|----------|
| | 1 | 2 | 3 | 4 |
| computer system | 1 | 1 | | |
| administrative data systems | 1 | 1 | 1 | |
| student data and SIMS reporting | 2 | 2 | 2 | 1 |
| student indicators data/reporting | 3 | 3 | 3 | 2 |
| staff data and EPIMS reporting | 1 | 1 | 2 | |
| MCAS and accountability data | 2 | 1 | 2 | |
| district assessment data/reporting | 1 | 1 | 2 | 1 |
| other ESE/state data requirements | 2 | 1 | 1 | |
| instructional technology | 2 | 2 | 2 | |
| Total | 15 | 13 | 15 | 4 |

The following table indicates again that only districts in quartile 4 (3,600 to 7,300 students) did not assign a significant number of primary responsibilities for technology functions to clerical staff.

Clerical Staff with Primary Responsibility (1s) for Technology Functions

| Function | Quartile | | | |
|------------------------------------|-----------|-----------|-----------|-----------|
| | 1 | 2 | 3 | 4 |
| computer system | 6 | 3 | 5 | 2 |
| administrative data systems | 3 | 2 | 4 | 3 |
| student data and SIMS reporting | 4 | 3 | 4 | 1 |
| student indicators data/reporting | 4 | 2 | 3 | 1 |
| staff data and EPIMS reporting | 6 | 4 | 7 | 3 |
| MCAS and accountability data | 1 | 1 | 2 | |
| district assessment data/reporting | 4 | 1 | 1 | |
| other ESE/state data requirements | 9 | 2 | 1 | |
| instructional technology | 4 | 1 | 3 | 1 |
| Total | 41 | 19 | 30 | 11 |

Central Office Clerical Staff

The proportion of clerical FTEs to administrators increased dramatically with district size in the study sample; while the median number of administrators increased by 50%, clerical staff increased by 250%.

Median Central Office FTEs by Quartile

| Quartile | 1 | 2 | 3 | 4 |
|----------------|-----|-----|------|------|
| Administrators | 5.3 | 5.4 | 6.0 | 8.8 |
| Clerical staff | 5.9 | 7.5 | 10.6 | 15.4 |

The study found that the primary responsibilities covered by clerical staff were most frequently financial tasks, followed by data and technology tasks. Larger districts used far fewer clerical

staff for primary responsibilities, one of the clearest indications in our data that smaller districts have clerical staff handling responsibilities given to business managers and technology directors in larger districts.

Primary Responsibilities (1s) of Clerical Staff

| Function | Total | Quartile | | | |
|------------------------------------|-------|----------|----|----|----|
| | | 1 | 2 | 3 | 4 |
| Payroll | 41 | 7 | 14 | 9 | 11 |
| accounts payable | 38 | 7 | 12 | 10 | 9 |
| benefits management | 23 | 6 | 7 | 6 | 4 |
| staff data and EPIMS reporting | 20 | 6 | 4 | 7 | 3 |
| Treasurer | 18 | 7 | 5 | 6 | |
| computer system | 16 | 6 | 3 | 5 | 2 |
| financial reporting (local/state) | 14 | 7 | 5 | 1 | 1 |
| administrative data systems | 12 | 3 | 2 | 4 | 3 |
| student data and SIMS reporting | 12 | 4 | 3 | 4 | 1 |
| other ESE/state data requirements | 12 | 9 | 2 | 1 | |
| Recruit staff | 10 | 5 | 1 | 2 | 2 |
| student indicators data/reporting | 10 | 4 | 2 | 3 | 1 |
| grants management | 9 | 2 | 2 | 3 | 2 |
| instructional technology | 9 | 4 | 1 | 3 | 1 |
| Purchasing | 8 | 3 | 3 | 2 | |
| district assessment data/reporting | 6 | 4 | 1 | 1 | |
| Transportation | 5 | 2 | 3 | | |

This table aggregates ones by individuals, not by district; in some cases more than one clerk had primary responsibility.

Superintendency Unions Compared with Regional Districts

The study sample included 10 of the 12 Commonwealth K–12 unions and 28 of 31 K–12 regional districts. Superintendency unions are organizations enabled by state law in the same way that regional districts are, and allow districts to share a central office while maintaining separate elementary districts. These central offices have a unique administrative burden, as the following table demonstrates by comparing the twelve K–12 superintendency unions in the Commonwealth to 12 comparable regional districts.

| K–12 System | Sup'ts | Towns | Districts | School Committees* | Teacher Contracts |
|-----------------------------|--------|-------|-----------|--------------------|-------------------|
| K–12 Superintendency Unions | 12 | 40 | 49 | 61 | 34 |
| K–12 Regional Districts | 12 | 40 | 12 | 12 | 12 |

** includes union school committee in addition to elementary and regional committees*

The extra time devoted to evening meetings, administrative reporting, and union negotiations by the superintendents and other central office administrators of unions is largely invisible in our analysis, but it represents a significant loss of time for other tasks, e.g. instructional leadership. As the table below indicates, the unions and regional K–12 districts are almost evenly represented in each size quartile. The ten unions, however, include 49 separate districts of significantly smaller size, which are aggregated into single units for this table.

Districts by Type and Size in the Study Sample

| K–12 System | Quartile | | | | Total |
|------------------------------|----------|---|---|---|-------|
| | 1 | 2 | 3 | 4 | |
| Regional secondary districts | 1 | 1 | | 1 | 3 |
| Regional K–12 districts | 8 | 6 | 8 | 6 | 28 |
| K–12 superintendency unions* | 1 | 3 | 3 | 3 | 10 |

** Union size is based on the total of all students under the supervision of a central office*

Summary

The MARS study of district administration provides some concrete evidence of how small size constrains the capacity and efficiency of smaller districts. Small districts have a wide range of staff FTEs, but overall smaller districts have less executive staff and/or clerical staff to cover the same functions as larger ones. Superintendents and clerks both have primary responsibility for more functions in small districts. This limits the superintendent’s time and attention for instructional leadership, and puts fewer executives in charge of key functions, particularly in the financial and technology areas. The study finds that small districts’ technology functions are more often handled by school-based or clerical staff compared to the larger districts in the sample. While a technology-savvy principal or teacher may have skills equivalent to a technology director, these functions take time away from instructional functions.

Closer examination of a few positions validated these conclusions. SPED administrators take on more administrative functions in small districts, particularly in the number of functions for which they have secondary responsibility. The “school business official” position is not always represented in districts of various sizes, and assistant superintendents can have financial and/or operations in their portfolio. When there is no business manager, the superintendent most frequently handles key finance functions including preparing and managing the budget and financial reporting. Looking at two specific operations functions, the study finds that transportation responsibilities may move to clerical staff in smaller districts, while superintendents and business officials consistently retain responsibility for capital projects across all districts in the study.

Instructional leadership was a particular focus of the study analysis. Superintendents’ reported responsibility for these functions could mask a significant difference in available time and energy in two different ways. In small districts, a greater number of other responsibilities compete for the superintendent’s time, and in K–12 superintendency unions that manage several districts through one central office, there are greater demands of governance entities, and management and reporting. These unions include 49 districts in total, and 50% of those individual districts have less than 500 students.

Conclusions

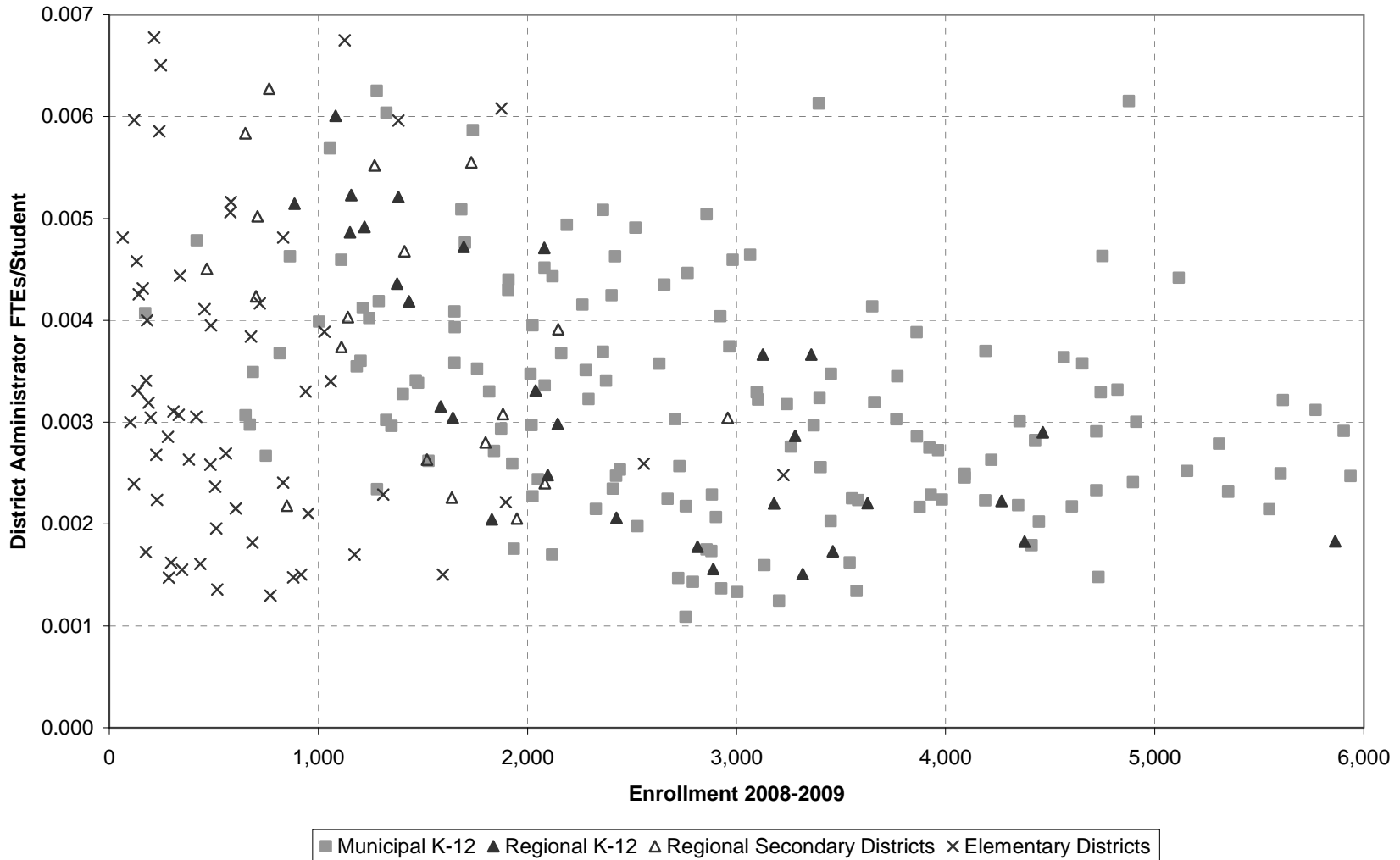
- Analysis of state-wide EPIMS data on district administration staffing indicates that districts make widely different decisions about central office staffing regardless of district size, but the ratio of administrators to students varies most among smaller districts.
- Districts with an average of 2,000 students compared to those with an average of 4,000 have 30% fewer administrators for 50% fewer students.
- The study team did not consistently collect the total FTEs of school-based staff with direct responsibility for central administration tasks (e. g. a principal). Districts that did report FTEs for this line recorded as many as 6.0 additional FTEs, and were largely the smallest districts in the sample.
- Superintendents most consistently assign themselves primary responsibility (“1”) for working with key governance entities, managing principals, and heading up union negotiations. Primary responsibility for more tasks occurs in smaller districts.
- Superintendents’ secondary responsibilities (2) are not concentrated in the same way that primary responsibilities are, although the tasks generally fall under the areas of instructional leadership and fiscal management. Secondary responsibility for more tasks occurs in smaller districts.
- The study found a wide range of positions with primary responsibility for functions in the category of instructional leadership.
- For the specific function “supervise curriculum and instruction”, in smaller districts primary responsibility moves either toward the superintendent, or toward less-executive positions. In larger districts, this responsibility is concentrated at the level of assistant superintendent.
- SPED administrators have primary responsibility for somewhat more functions among smaller districts, but their secondary responsibilities are doubled in the smallest districts.
- School business officials’ primary responsibilities are in finance and operations, as one would expect. Where there is no business official position, the top three tasks of business officials—financial reporting, managing budgets, and preparing budgets—are most commonly handled by the superintendent, followed by the assistant superintendent and “other district administrator.”
- In larger districts, transportation is typically a direct responsibility of the school business official, and in the small districts is more frequently done by clerical staff.
- Only districts in quartile four (3,600 to 7,300 students) did not assign a significant number of primary responsibilities for technology functions to school-based and clerical staff.
- The proportion of clerical FTEs to administrators increases dramatically with district size in the study sample; while the median number of administrators increases by 50%, clerical staff increases by 250%. The larger districts use fewer clerical staff for primary responsibilities, one of the clearest indications in the data that smaller districts have clerical staff handling responsibilities that larger districts give to executive staff.
- The extra time devoted to evening meetings and administrative reporting by superintendents and central office teams of superintendency unions is largely invisible in the study’s data, but it represents a significant loss of time for other tasks, e.g. instructional leadership.

Appendix A – Survey Instrument

| District/Union | EPIMS | | Initial | Last Name | FTE | School Committee and Community school committee meetings town government meetings union negotiations parent issues public relations work | | | | Instructional Leadership supervise principals evaluate principals supervise curriculum & instruction supervise ELL program supervise SPED program supervise PD supervise district assessments write grants | | | | Financial Management prepare budget manage budget financial reporting (local/state) Treasurer purchasing payroll accounts payable grants management | | | | Human Resources recruiting hiring teachers hiring principals benefits management | | | | Operations capital building projects building maintenance grounds transportation food services athletics health | | | | Technology Systems computer system - hardware, networks administrative data systems student data and SIMS reporting student indicators data/reporting staff data and EPIMS reporting MCAS and accountability reporting district assessment data/reporting other ESE/state data requirements instructional technology | | | |
|---|-------|---------------------------|---------|-----------|------|---|--|--|--|--|--|--|--|---|--|--|--|--|--|--|--|--|--|--|--|---|--|--|--|
| | Code | EPIMS Job Description | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| District Name | 1200 | Superintendent | A | Smith | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| District Name | 1201 | Asst/Deputy Supt | A | Smith | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| District Name | 1205 | Other District Admin | A | Smith | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| District Name | 1212 | SPED Administrator | A | Smith | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| District Name | 1224 | Director Technology | A | Smith | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| District Name | 6110 | Admin Clerk/Sec'y | A | Smith | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| District Name | 6110 | Admin Clerk/Sec'y | A | Smith | 0.75 | | | | | | | | | | | | | | | | | | | | | | | | |
| District Name | 6110 | Admin Clerk/Sec'y | A | Smith | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| District Name | 6140 | Info Tech Support | A | Smith | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| District Name | 6140 | Info Tech Support | A | Smith | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| District Name | 6150 | Other Admin Support | A | Smith | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| <p><i>Is there a person with primary responsibility for a function who is not reported in the EPIMS data above? If so, use the lines below.</i></p> <p><i>Please put a 1 in all the appropriate function columns, estimate the total FTEs for these persons, and use the comments column if needed.</i></p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| District Name | 9988 | Additional District Staff | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| District Name | 9999 | Municipal Staff | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Appendix B

Ratio of District Administrator FTEs Per Student, by Enrollment and District Affiliations



Source: Oct. 2008 SIMS and 2008-09 EPIMS, MA Department of Elementary and Secondary Education

Appendix C – Administration Median Profiles by Average District Size

| Enrollment | Number of Districts | Calculation | All Districts | Supt | Asst Supt | Other District Admin | School Business Official | Technology | Pupil Personnel | SPED | ELL | Curriculum | Professional Development | Assess | English | Reading | Mathematics | Science | History/Social Studies | Foreign Language | Arts | Library/Media | Guidance | School Nurse Leader | |
|-------------|---------------------|-------------|---------------|------|-----------|----------------------|--------------------------|------------|-----------------|------|-----|------------|--------------------------|--------|---------|---------|-------------|---------|------------------------|------------------|------|---------------|----------|---------------------|-----|
| 3,500-4,500 | 29 | median | 10.0 | 1.0 | 1.0 | 2.0 | 1.0 | 1.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.4 | 0.4 | 0.4 | 0.3 | 0.1 | 0.0 | 0.4 | 0.0 | |
| | | average | 10.3 | 1.0 | 0.8 | 2.2 | 0.9 | 0.8 | 0.3 | 0.9 | 0.2 | 0.4 | 0.0 | 0.0 | 0.4 | 0.0 | 0.4 | 0.3 | 0.3 | 0.3 | 0.2 | 0.1 | 0.5 | 0.2 | |
| | | mode | 8.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| | | max | 15.5 | 1.0 | 2.0 | 5.5 | 1.0 | 2.0 | 1.0 | 1.0 | 1.0 | 1.0 | 2.0 | 0.5 | 0.4 | 1.4 | 0.5 | 1.4 | 1.1 | 1.0 | 1.0 | 1.0 | 2.6 | 1.0 | 1.0 |
| | | min | 4.8 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2,500-3,500 | 44 | median | 7.6 | 1.0 | 0.0 | 1.0 | 1.0 | 0.4 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| | | average | 8.4 | 1.0 | 0.5 | 1.7 | 0.9 | 0.5 | 0.1 | 1.0 | 0.1 | 0.6 | 0.0 | 0.0 | 0.3 | 0.0 | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | 0.3 | 0.2 | |
| | | mode | 5.0 | 1.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| | | max | 20.8 | 1.0 | 2.0 | 6.6 | 2.0 | 1.0 | 1.0 | 1.0 | 1.0 | 5.4 | 0.5 | 1.0 | 1.8 | 1.0 | 2.0 | 1.3 | 1.3 | 1.0 | 1.2 | 1.0 | 1.0 | 1.0 | |
| | | min | 3.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| 1,500-2,500 | 48 | median | 6.8 | 1.0 | 0.0 | 1.0 | 1.0 | 1.0 | 0.0 | 1.0 | 0.0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| | | average | 7.1 | 1.0 | 0.3 | 1.0 | 0.8 | 0.7 | 0.2 | 0.9 | 0.0 | 0.5 | 0.0 | 0.0 | 0.1 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.2 |
| | | mode | 5.0 | 1.0 | 0.0 | 0.0 | 1.0 | 1.0 | 0.0 | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |
| | | max | 12.5 | 1.0 | 1.0 | 4.2 | 4.0 | 2.0 | 3.0 | 1.0 | 1.0 | 2.0 | 1.0 | 1.0 | 0.8 | 1.0 | 1.8 | 0.9 | 0.8 | 0.6 | 0.8 | 3.0 | 1.0 | 1.0 | |
| | | min | 3.4 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | |

Note: Table includes only K-12 districts in each size range.

Source: 2008-09 EPIMS, MA Department of Elementary and Secondary Education