

2015-2016

Facilities Budgeting and Staffing Survey Report



National Business Officers Association

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Contents

Introduction	1
Survey Methodology and Demographics	2
General	3
Budgets	3
Salaries and Staffing	5
Outsourcing	10
Service and Maintenance	11
Conclusions	12



Introduction

Dear Colleague,

The mission of the National Business Officers Association (NBOA) is to develop, deliver and promote best business practices to advance independent schools. With this mission in mind, this research report is a first-of-its-kind effort to establish a national benchmark for facilities and maintenance management within independent schools. NBOA, in partnership with SchoolDude and Building Solutions, conducted a survey of business officers and facilities staff to provide maintenance and operations benchmarks to help inform decisions regarding your school's physical plant and facilities staffing.

Our goal: to collect financial and demographic data from independent schools based on specific key performance indicators (KPIs). This information is intended to provide insights into your institution's budget and staffing levels while providing valuable data to support future choices for your facilities budget and staffing.

A host of challenges face the independent school community as we look to operate and maintain world-class facilities and infrastructure to support world-class educational goals. This report details how schools are managing those challenges. I hope you and your school's leadership find this information useful.

Regards,



Jeffrey Shields, FASAE, CAE
President and CEO
National Business Officers Association (NBOA)
July 2016

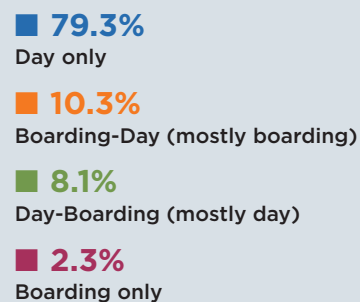
Survey Methodology and Demographics

From March 3, 2016, to April 7, 2016, SchoolDude and NBOA conducted an initial survey of facilities managers and other decision-makers in independent educational institutions. Institutions surveyed included day schools, boarding-day schools, day-boarding schools and boarding-only schools serving students ranging in age from early childhood (EC) to grade 12. A total of 174 schools participated in the survey

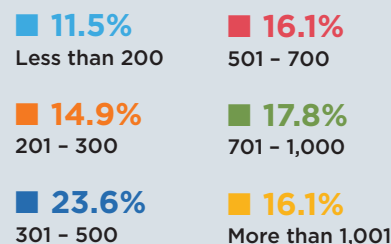
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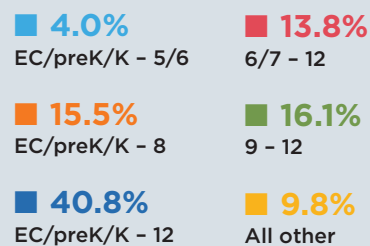
Type of School



Enrollment of Participating Schools



Grades Represented



General

Small and larger independent schools alike reported having aging infrastructures and the maintenance issues associated with that fact. The more facilities to maintain, the greater the challenges reported. For those schools with a single building (8.6 percent), the average age of that building was 31.9 years. For schools with two or more buildings (91.4 percent), the average age of the oldest building was 84.7 years. The oldest building reported was 300 years old, and the business officer for that school noted the maintenance issues were “just what one would expect” from a building of that tenure.

Nearly all respondents reported the gross square footage (GSF) of their facility or facilities. The median facility area was 171,000 GSF, and the average facility area was 208,000 SF.

The majority of schools had one or two athletic fields, either grass or synthetic. Nearly 80 (78.2) percent of respondents had grass fields and 26.4 percent had a single synthetic field. Less than 17 (16.7) percent of schools reported having seven or more grass fields. None of the respondents had more than four synthetic fields.

Budgets

Facilities budgets averaged 10.2 percent of overall budgets among schools surveyed. The median was 9 percent, and the range was 1 to 37 percent. Total facilities and maintenance spending showed a strong correlation with the number of students and the size of the physical plant

Median total spending (including payroll, supplies, energy, contract services, repairs, snow removal and miscellaneous/other) was significantly higher for day-boarding schools than for boarding-only, boarding-day and day-only schools. Day-only schools reported median total facility and maintenance spending 47.2 percent below that of the next-highest school types (boarding-only and boarding-day).

Nearly 40 (39.7) percent of schools reported having a separate security department. Of schools with a separate security department, security reports to the facilities department at 47.8 percent of schools, and to administration/business at 44.9 percent of schools. In 7.3% of cases, security reports to dean of students, director of operations, head of school, student life/administrative or vice president of academics.

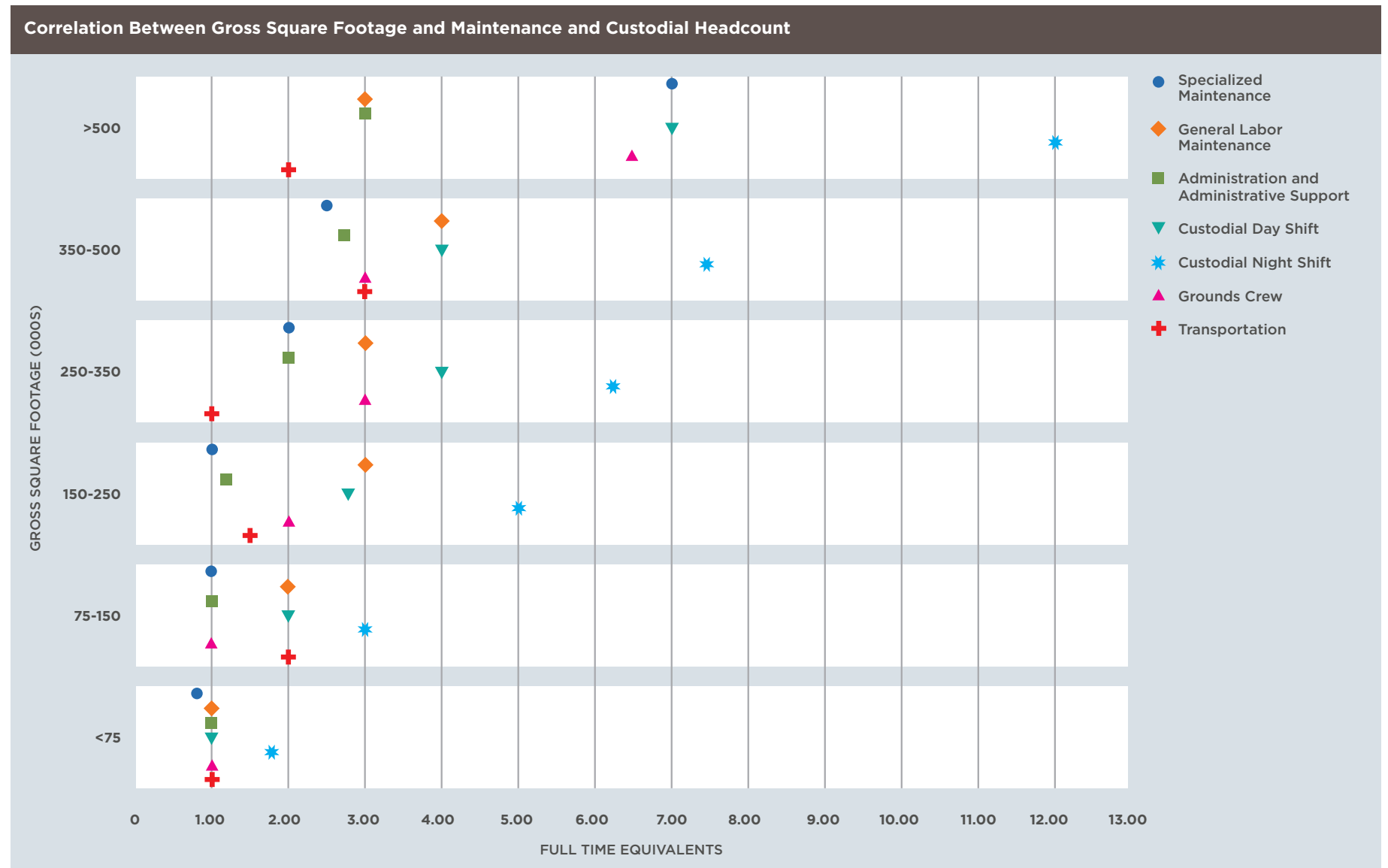
Budgets (continued)

FACILITY AND MAINTENANCE BUDGET SPENDING: MEDIAN

	Payroll	Supplies	Energy	Contract Services	Repairs	Snow Removal	Other/Misc	Total Spending
All	\$ 329,027	\$ 60,000	\$ 284,500	\$ 200,854	\$ 60,721	\$10,000	\$ 52,514	\$1,105,497
Enrollment								
<200	\$ 79,150	\$ 15,000	\$ 48,339	\$ 41,344	\$ 11,527	\$ 4,000	\$ 12,000	\$ 236,801
201-300	173,248	27,000	125,456	86,884	97,701	0	46,000	822,025
301-500	254,250	35,000	167,000	155,662	54,819	0	40,000	685,974
501-700	426,550	65,083	270,620	238,940	87,000	10,000	99,000	1,272,141
701-1,000	797,874	125,000	417,318	215,000	152,817	0	168,003	1,617,945
>1,001	964,500	132,500	555,000	4,455,000	135,410	0	145,658	2,629,196
Gross Square Footage (GSF)								
<75K GSF	\$ 80,000	\$ 15,000	\$ 57,438	\$ 75,000	\$ 28,000	\$ 0	\$ 19,346	\$ 381,745
75K - 150K GSF	240,000	37,500	183,295	142,468	60,362	0	42,125	804,000
150K-250K GSF	406,750	53,067	313,526	203,927	88,728	6,000	100,000	1,388,000
250K-350K GSF	820,000	100,150	510,000	245,000	104,227	3,000	114,716	2,205,000
350K-500K GSF	1,095,998	221,048	612,500	515,038	138,808	0	147,315	2,892,934
>500KGSF*	1,341,649	251,106	1,169,690	611,230	161,722	5,000	201,876	5,665,588
Type of School								
Boarding-only and Boarding-day	\$ 491,257	\$ 77,585	\$ 522,652	\$ 159,000	\$ 93,299	\$ 6,300	\$ 24,754	\$1,720,698
Day	299,550	48,159	229,310	169,000	70,500	0	54,852	1,168,846
Day-boarding	994,000	131,000	441,158	180,000	101,151	10,000	132,000	2,492,763
Region								
New England	\$ 530,000	\$ 65,000	\$ 412,000	\$ 119,616	\$ 97,701	\$ 15,000	\$ 87,317	\$1,918,793
East	613,347	83,500	380,136	200,854	54,007	5,100	102,000	1,718,698
Mid-Atlantic	488,251	100,000	289,000	299,921	68,500	10,000	88,780	1,176,525
Southeast	312,900	44,000	295,822	170,150	99,598	0	30,740	1,450,000
Midwest	233,458	34,236	215,828	98,800	58,402	13,841	37,442	854,000
Southwest	702,646	51,567	379,144	173,626	98,304	0	88,359	1,523,598
West	210,562	46,541	174,191	124,250	60,362	0	72,000	822,025
Non-US	442,513	63,820	327,000	191,927	67,000	5,050	48,774	1,283,119

Salaries and Staffing

Gross square footage correlated strongly with Full Time Equivalents (FTEs) among all positions surveyed. Physical plant size correlated most strongly with day and night custodial staff and grounds crews. There was little correlation between number of students and FTEs in most positions, with the exception of night custodial staff median levels.



Salaries and Staffing (continued)

Regionally, all schools have similar numbers of staff in all positions. At schools with boarding, median staffing levels for all positions (except night custodians) were higher than at day schools, where the median FTEs were similar. This general rule held true for FTE staffing averages.

FACILITY AND MAINTENANCE FULL TIME EQUIVALENTS (FTEs): MEDIANS

	Maintenance: Specialized Trade	Maintenance: General Labor	Administration & Administrative Support	Custodial: Day Shift	Custodial: Night Shift	Grounds Crew	Transportation
All	2.00	3.00	2.00	2.50	5.00	3.00	2.00
Enrollment							
<200	1.00	1.00	1.00	1.00	0.94	1.00	0.70
201-300	1.50	1.00	1.00	4.00	2.00	1.00	2.00
301-500	2.00	2.50	1.50	2.00	4.00	1.80	2.00
501-700	2.00	2.50	1.00	2.00	5.00	3.50	2.50
701-1,000	2.00	3.00	2.00	3.00	6.50	3.00	2.50
>1,001	3.00	3.00	2.00	3.00	10.00	4.50	1.00
Gross Square Footage (GSF)							
<75K GSF	0.75	1.00	1.00	1.00	1.75	1.00	1.00
75K - 150K GSF	1.00	2.00	1.00	2.00	3.00	1.00	2.00
150K-250K GSF	1.00	3.00	1.25	2.75	5.00	2.00	1.50
250K-350K GSF	2.00	3.00	2.00	4.00	6.25	3.00	1.00
350K-500K GSF	2.50	4.00	2.70	3.00	7.50	3.00	3.00
>500KGSF*	7.00	3.00	3.00	7.00	12.00	6.50	2.00

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Salaries and Staffing (continued)

FACILITY AND MAINTENANCE FULL TIME EQUIVALENTS (FTEs): MEDIAN (continued)

	Maintenance: Specialized Trade	Maintenance: General Labor	Administration & Administrative Support	Custodial: Day Shift	Custodial: Night Shift	Grounds Crew	Transportation
Type of School							
Boarding-only and Boarding-day	2.00	3.00	2.00	5.50	2.00	3.00	1.00
Day	1.00	2.00	1.10	2.00	5.00	2.00	1.00
Day-boarding	3.00	3.00	1.63	4.00	5.00	4.50	2.00
Region							
New England	2.00	3.00	1.00	3.50	1.00	0.25	0.35
East	2.00	2.00	1.61	3.00	5.00	1.00	0.00
Mid-Atlantic	1.00	2.00	1.30	2.25	5.75	2.00	1.00
Southeast	1.00	2.00	1.00	2.00	5.00	1.25	1.00
Midwest	1.00	1.85	1.00	1.00	2.00	1.00	0.00
Southwest	1.00	3.00	2.00	2.00	4.00	2.00	1.00
West	0.50	1.25	1.00	1.00	3.00	1.00	0.00
Non-US	0.50	2.00	1.00	4.00	4.00	1.50	1.00

Salaries and Staffing (continued)

As in other surveys conducted by NBOA, a school's location bore a strong influence on salary levels. Schools in the East and Mid-Atlantic reported the highest median salaries for the positions surveyed.

The median facility administration and administrative support salary was \$69,703; the average was \$69,522. Most schools reported similar median salaries for most positions, regardless of school type, number of students and physical plant size.

FACILITY AND MAINTENANCE BUDGET SALARY: MEDIAN

	Maintenance: Specialized Trade	Maintenance: General Labor	Administration & Administrative Support	Custodial: Day Shift	Custodial: Night Shift	Grounds Crew	Transportation
All	\$45,000	\$38,250	\$65,000	\$27,000	\$25,000	\$34,940	\$17,700
Enrollment							
<200	\$ 0	\$29,060	\$14,064	\$18,000	\$ 0	\$ 0	\$ 0
201-300	42,375	40,000	64,000	25,500	26,000	27,450	20,000
301-500	48,000	38,500	68,500	26,308	27,511	30,675	19,700
501-700	51,290	45,000	67,703	30,600	27,000	34,880	15,200
701-1,000	50,000	36,825	75,000	28,477	17,160	41,800	30,000
>1,001	52,000	37,194	61,210	30,000	25,000	40,000	35,500
Gross Square Footage (GSF)							
<75K GSF	\$ 0	\$29,560	\$40,000	\$12,400	\$ 0	\$14,000	\$ 0
75K - 150K GSF	19,150	40,475	65,547	29,120	27,000	26,000	15,600
150K-250K GSF	42,707	37,000	60,040	28,049	25,792	36,700	12,000
250K-350K GSF	55,000	40,000	75,000	31,000	28,000	40,000	37,500
350K-500K GSF	52,000	35,000	74,000	25,700	23,000	39,875	30,300
>500KGSF*	54,000	31,200	38,000	31,200	8,580	36,800	21,900

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Salaries and Staffing (continued)

FACILITY AND MAINTENANCE BUDGET SALARY: MEDIAN (continued)

	Maintenance: Specialized Trade	Maintenance: General Labor	Administration & Administrative Support	Custodial: Day Shift	Custodial: Night Shift	Grounds Crew	Transportation
Type of School							
Boarding-only and Boarding-day	\$43,000	\$39,000	\$60,500	\$25,730	\$ 0	\$31,070	\$ 7,200
Day	45,000	38,000	65,274	28,049	25,000	35,000	15,600
Day-boarding	50,580	39,000	70,000	26,000	25,000	34,880	22,500
Region							
New England	\$48,000	\$37,000	\$35,600	\$25,700	\$25,700	\$15,995	\$15,528
East	54,240	43,680	83,000	33,500	27,750	41,550	0
Mid-Atlantic	52,000	40,000	74,797	28,600	22,480	42,250	32,000
Southeast	39,000	34,750	50,000	27,525	17,580	39,000	25,000
Midwest	40,316	41,000	62,500	0	23,511	23,462	3,600
Southwest	50,000	34,899	60,000	27,739	25,000	31,232	26,900
West	42,707	40,000	67,104	25,640	26,000	37,664	26,519
Non-US	3,150	27,300	42,500	24,800	2,400	14,000	11,550

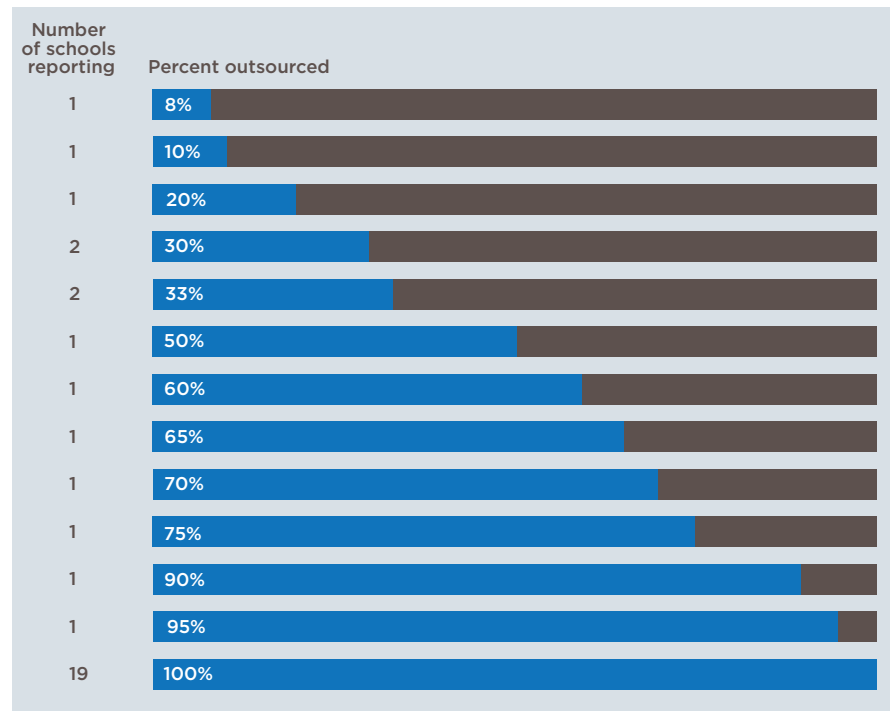
Outsourcing

Sixty-four percent of schools surveyed reporting outsourcing some or all of their custodial functions. Of the schools that outsource, 60 percent (111 schools) outsourced 100 percent of their custodial functions. Seventeen percent of institutions reported they included the cost of custodial supplies in custodial contract amounts. All schools surveyed outsourced at least some portion of their maintenance work, with 58 percent (19 schools) outsourcing 100 percent of their maintenance services.

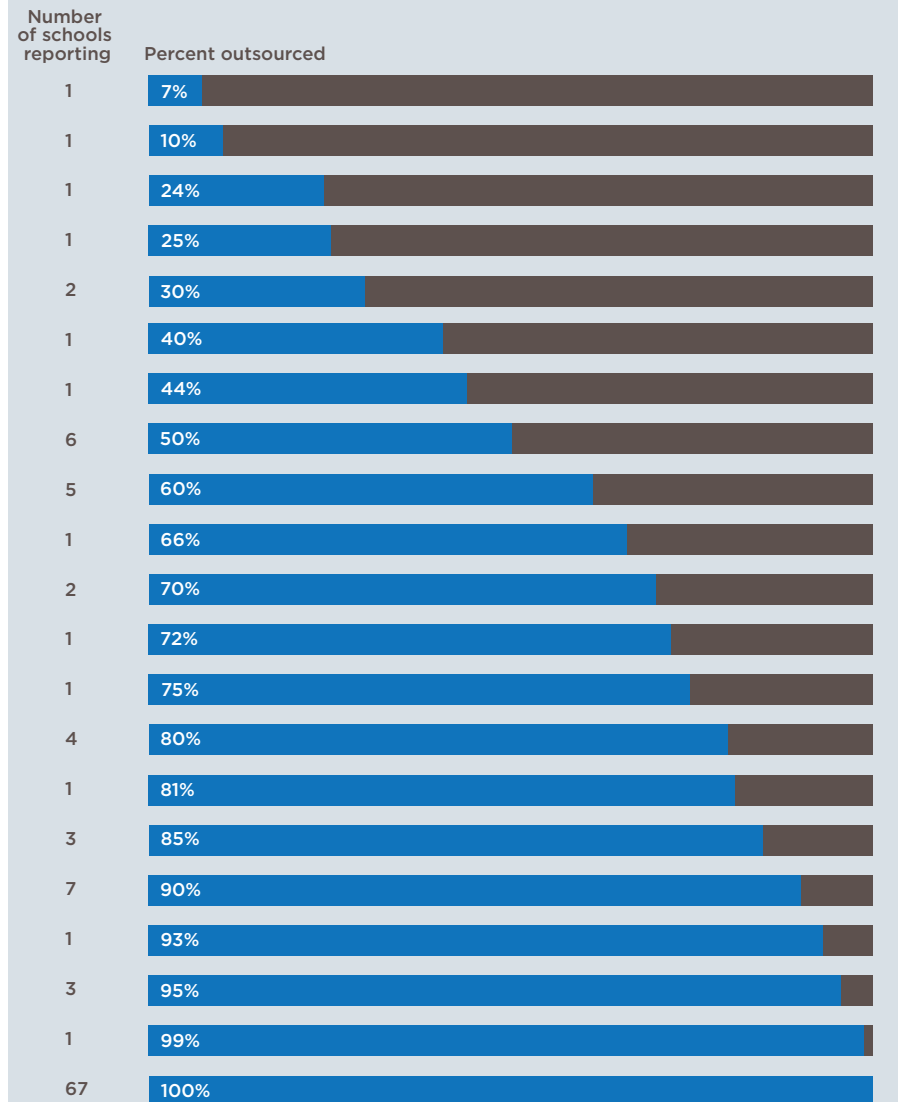
Schools reported that they outsource to:

- Keep costs down
- Keep staff count down
- Save time in operations

Percent of Maintenance Function Outsourced N=33



Percent of Custodial Function Outsourced N=111



Service and Maintenance

Using the APPA service levels (5: unkempt neglect, 4: moderate dinginess, 3: casual inattention, 2: ordinary tidiness and 1: orderly spotlessness), 70 percent of surveyed schools rated their service levels as 2.

Sixty-eight percent of schools reported having a maintenance backlog. Backlogs ranged from \$10,000 to \$24,000,000. The median backlog was \$850,000.

The median replacement value of facilities was \$37,750,000, and the average replacement value was \$51,155,086. The highest replacement value reported was \$508,911,100 with the lowest reported at \$134,236. Current replacement value invested annually in facilities renewal ranged from zero percent to 40 percent. The average was 2.88 percent, and the median was 1 percent.

The facilities condition index (FCI) is defined as the dollar total of building repair/upgrade/renewal needs divided by the current replacement value (in dollars) of the building components. Eighteen percent of schools reported having an FCI below 10 percent. Buildings that have an FCI of 10 percent or greater are considered to be in poor condition.

On average, schools reported that they dedicate 27 percent of facilities-related work to preventive maintenance. The highest reported was 90 percent. On average, schools reported dedicating 25 percent of time (in hours) to preventive maintenance. The highest reported was 90 percent.

Fifty-two percent of schools surveyed reported they use a work order tracking system. In 2015, these schools submitted a total of 248,157 work orders, with an average of 2,788 work orders per institution. They submitted 62,299 preventive maintenance work orders, with an average of 708 preventive maintenance work orders per institution. Typically schools closed out 80 percent of work orders within seven days; five days was the average “days aged” for work order requests.

Facilities condition index (FCI)		
Value	Count	Percent
< 10%	30	17.2%
Between 10% and 20%	17	9.8%
Between 20% and 30%	4	2.3%
Between 30% and 40%	1	0.6%
> 40%	4	2.3%
Unsure	118	67.8%

Conclusions

NBOA's 2016 Facilities Budgeting and Staffing Survey Report is intended to be both a benchmark and a useful tool for our member institutions. NBOA's inaugural piece of research into facilities budgets, staffing and operations clearly shows the major facilities and maintenance concerns are financial pressures, operational pressures, regulations and technical knowledge of in-house staff. Respondents attributed much of the financial pressure to aging of facilities and inadequate spending on maintenance over time. Consequently, the current spending levels are not adequate to maintain facilities and/or take care of deferred maintenance. Respondents also noted budget constraints prevented them from having adequate staffing to provide appropriate maintenance and keep up with daily operational demands. This lack of resources leads to stress within the facilities staff and concern that resources are not properly utilized. An independent school's facilities are a direct contributor to the value a school provides in how its students learn as well as in ensuring the health and safety of its students and staff. Schools must continually monitor of the utilization and maintenance of those assets so that their communities do not find them lacking.