



Sheyenne Ninth Grade Center  
West Fargo, N.D.

Architect: YHR Partners, Ltd.  
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## 38TH ANNUAL MAINTENANCE & OPERATIONS COST STUDY

# SCHOOLS



**BY JOE AGRON**

Despite the worst economic environment in generations, spending by K-12 institutions on maintenance and operations (M&O) held its own—defying historical trends that have shown M&O spending among the most affected in times of budget tightening.

According to data collected for *American School & University's* 38th annual Maintenance & Operations Cost Study, the median school district allocated 9.57 percent of total district expenditures (TDE) to M&O in the 2008-09 school year. This is an increase over last year, and much better than the abnormally low percentages reported earlier in the decade.

Whether a reflection of when data was collected (data reported is for the 2008-09 school year and reflects budgets passed prior to the escalation of the economic crisis) or that M&O budgets have suffered so much over the years that most operations already are “bare bones” and further reductions would cause crippling results, only time will tell.

However, school district operations remain under pressure. For example, although energy expenditures saw some relief, custodial staff is being tasked with more responsibility. With a median of 32,100 square feet maintained per full-time custodian (an almost 20 percent increase over last year's amount), facility directors must look continually for ways to improve productivity so that staff can work smarter, safer and more efficiently.

The following pages include data from the latest M&O Cost Study that can help you in benchmarking expenditures at your institution. Data provided reflect actual spending by school districts on M&O and are not intended to be “ideal” amounts. Numerous factors—age and overall condition of buildings, the labor market in your area, climate, etc.—also will affect your costs when compared with the national medians.

For those looking for additional data, go online at [ASUmag.com](http://ASUmag.com). Look for the “Web Exclusive” icon throughout this survey that will direct you to a special online area—and exclusive data not found in the print version on M&O expenditures and operations at our nation's school districts.

## Maintenance & Operations Costs

(Expressed in **median** dollars **per student**)

<b>Total Payroll</b>	<b>\$426.88</b>
Custodial	\$277.60
Maintenance	\$118.31
Grounds	\$30.97
<b>Outside Contract Labor</b>	<b>\$48.08</b>
<b>Total Energy/Utilities</b>	<b>\$295.13</b>
Energy (gas, electricity, other fuels)	\$244.87
Utilities	\$37.82
Trash Collection/Disposal	\$12.44
<b>Total Equipment &amp; Supplies</b>	<b>\$67.03</b>
Custodial/Maint. Equip. & Supplies	\$49.41
Grounds Equip. & Supplies	\$17.62
<b>Other</b>	<b>\$73.08</b>
<b>Total M&amp;O*</b>	<b>\$910.20</b>
<b>Total District Expenditures (TDE)</b>	<b>\$9,509.62</b>
<b>M&amp;O as % TDE</b>	<b>9.57%</b>

\*Calculated from subtotals (in bold).

## Maintenance & Operations Costs

(Expressed in **median** dollars per **square foot**)

<b>Total Payroll</b>	<b>\$2.07</b>
Custodial	\$1.35
Maintenance	\$0.57
Grounds	\$0.15
<b>Outside Contract Labor</b>	<b>\$0.23</b>
<b>Total Energy/Utilities</b>	<b>\$1.43</b>
Energy (gas, electricity, other fuels)	\$1.19
Utilities	\$0.18
Trash Collection/Disposal	\$0.06
<b>Total Equipment &amp; Supplies</b>	<b>\$0.33</b>
Custodial/Maint. Equip. & Supplies	\$0.24
Grounds Equip. & Supplies	\$0.09
<b>Other</b>	<b>\$0.36</b>
<b>Total M&amp;O Budget*</b>	<b>\$4.42</b>
<b>Total District Expenditures (TDE)</b>	<b>\$46.21</b>

\*Calculated from subtotals (in bold).

## Total gross area of buildings maintained

(including corridors and other common and office areas of all district buildings) by survey respondents

Less than 125,000 square feet	13
125,000 to 249,999 square feet	17
250,000 to 449,999 square feet	16
450,000 to 699,999 square feet	11
700,000 to 1,249,999 square feet	11
1,250,000 square feet or more	13

\*\*"No answer" represents the remaining percentage to equal 100%.

## Methodology

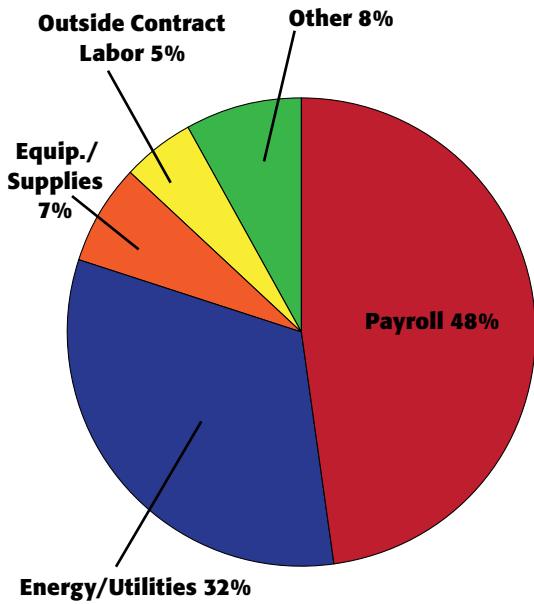
To arrive at data for the 38th annual AS&U Maintenance & Operations Cost Study, a detailed questionnaire was mailed in January 2009 to chief business officials and directors of facilities at the nation's public school districts asking them to document their institutions' M&O expenditures per student and per square foot for the 2008-09 school year. Categories include:

- Per student:** Based on total district enrollment (average daily attendance as of October 2008).
- Per square foot:** Based on total gross area of all district buildings maintained, including corridors, offices and common space.
- Total district expenditures (TDE):** Amounts for the 2008-09 school year.
- Total maintenance and operations (M&O) expenditures:** Including salaries, benefits, outside contracts, utilities, energy, trash collection/disposal, equipment and supplies, etc., for custodial, maintenance and grounds.
- Custodial:** Those individuals responsible for building upkeep and cleaning.
- Maintenance:** Those individuals who perform skilled jobs, such as HVAC, electrical or plumbing repair.
- Grounds:** Those individuals responsible for landscape upkeep and maintenance.
- Payroll:** Including benefits.
- Average salary:** Annualized, excluding benefits.
- Outside contract labor:** Those hired for specialized jobs to maintain or repair building systems or equipment, such as HVAC maintenance or repair.
- Energy:** Including gas, electricity and other fuels used to operate facilities.
- Utilities:** Including water, telephone, etc.
- Other:** Most often identified as clerical costs, equipment repair and rental, insurance and travel.

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### How the M&O budget is split

(based on median dollars per FTE student)



### CLICK 101

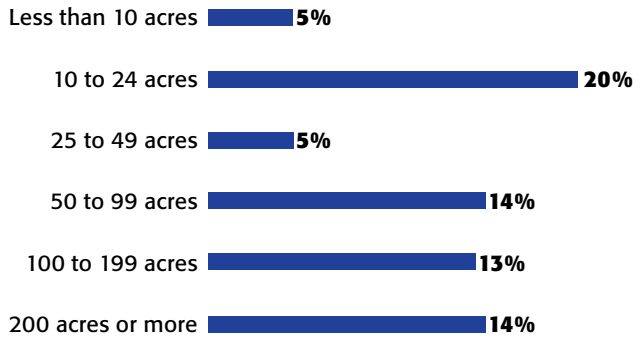
#### WEB EXCLUSIVE

- CHART: Median amount of square feet and acreage maintained at school districts
- TIMELINE: M&O expenditures over the past 20 years

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### Total gross area of grounds maintained

(by survey respondents)



*\*\*No answer" represents the remaining percentage to equal 100%.*

### CLICK 101

#### WEB EXCLUSIVE

- CHART: Amount spent annually on transportation
- CHART: Salary data for custodial and maintenance personnel

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### Green Cleaning in Schools

The percentage of school districts with a green cleaning program **23%**

**37%** The percentage of school districts (of those that don't have a program) that plan to add a green cleaning program in the near future

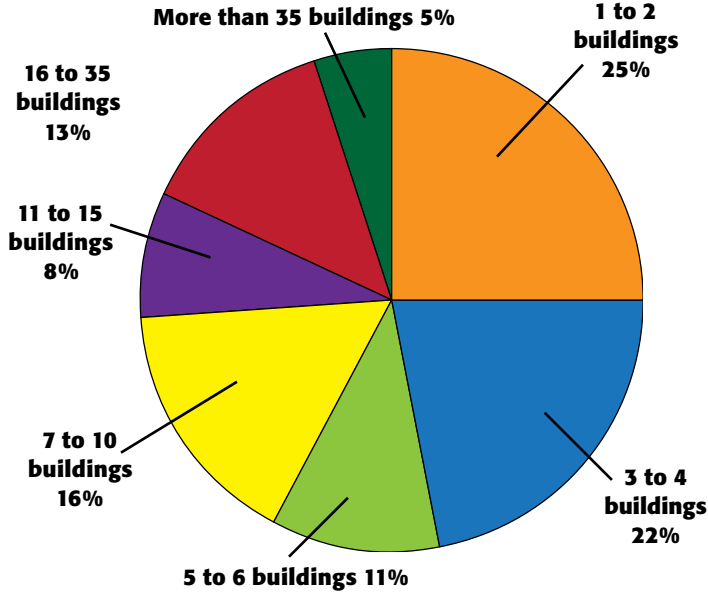
### Total maintenance and operations expenditures

(per survey respondents)



*\*\*No answer" represents the remaining percentage to equal 100%.*

### Total number of buildings in district (of survey respondents)



### Privatizing M&O

**11%** The percentage of school districts contracting out maintenance and operations services

### CLICK 101

#### WEB EXCLUSIVE

•CHART: Number of full-time maintenance, custodial and grounds staff

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## 38TH ANNUAL MAINTENANCE & OPERATIONS COST STUDY

# COLLEGES



**BY JOE AGRON**

The nation's colleges are feeling the pinch of the economic downturn, and maintenance and operations (M&O) budgets especially are under pressure.

According to *American School & University's* 38th annual Maintenance & Operations Cost Study, the median college allocates 10 percent of its total budget to M&O, down from 11 percent the year before. While lower energy costs helped colleges' bottom lines, rising payroll and benefits costs strained budgets.

Like school districts, custodial and maintenance staff are being required to do more. The amount of square feet maintained per full-time custodian increased by 16 percent; the amount of square feet maintained per full-time maintenance worker increased by 13 percent.

The following pages include data from the latest M&O Cost Study that can help you in benchmarking expenditures at your institution. Data provided only targets two-year and four-year colleges with no significant graduate programs. This is done to provide more useful comparative data. Larger four-year universities with significant graduate programs are not surveyed because their costs and activities are so varied that results would be less useful.

In addition, data provided reflect actual spending by colleges on M&O and are not intended to be "ideal" amounts. Numerous factors—such as age and overall condition of buildings, the labor market in your area, climate, etc.—will affect your costs when compared with the national medians.

For those looking for additional data, go online at [www.ASUMag.com](http://www.ASUMag.com). Look for the "Web Exclusive" icon throughout this survey that will direct you to a special online area—and exclusive data not found in the print version on M&O expenditures and operations at our nation's colleges.

## Maintenance & Operations Costs

(Expressed in **median** dollars per **FTE student**)

<b>Salaries</b>	<b>\$567.51</b>
<b>Benefits (based on full-time only)</b>	<b>\$170.25</b>
<b>Total Energy/Utilities</b>	<b>\$451.33</b>
Gas/Electricity/Other Fuels	\$400.00
Utilities	\$51.33
<b>Total Equipment &amp; Supplies</b>	<b>\$54.33</b>
Custodial/Maint. Equip. & Supplies	\$40.33
Grounds Equip. & Supplies	\$14.00
<b>Vehicle Maintenance</b>	<b>\$10.33</b>
<b>Other</b>	<b>\$50.00</b>
<b>Total M&amp;O Budget*</b>	<b>\$1,303.75</b>
<b>% M&amp;O of Total College Budget</b>	<b>10.0%</b>

\*Calculated from subtotals (in bold).

## Maintenance & Operations Costs

(Expressed in **median** dollars per **square foot**)

<b>Salaries</b>	<b>\$2.39</b>
<b>Benefits (based on full-time only)</b>	<b>\$0.72</b>
<b>Total Energy/Utilities</b>	<b>\$1.90</b>
Gas/Electricity/Other Fuels	\$1.68
Utilities	\$0.22
<b>Total Equipment &amp; Supplies</b>	<b>\$0.23</b>
Custodial/Maint. Equip. & Supplies	\$0.17
Grounds Equip. & Supplies	\$0.06
<b>Vehicle Maintenance</b>	<b>\$0.04</b>
<b>Other</b>	<b>\$0.21</b>
<b>Total M&amp;O Budget*</b>	<b>\$5.49</b>

\*Calculated from subtotals (in bold).

## Green Cleaning in Colleges

The percentage of colleges with a green cleaning program **56%**

**50%** The percentage of colleges (of those that don't have a program) that plan to add a green cleaning program in the near future

### CLICK 101

**WEB EXCLUSIVE**

- CHART: Median amount of square feet and acreage maintained at colleges
- CHART: M&O salaries and number of employees at colleges

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## Methodology

Data for the annual *American School & University M&O Cost Study* were collected via an in-depth questionnaire mailed in January 2009 to physical plant directors at two-year and four-year colleges with no significant graduate programs. Recipients were asked to document various M&O costs for the 2008-09 school year. The tables and charts detail median M&O expenditures per full-time-equivalent (FTE) student and per square foot, as well as the incidence of various maintenance practices.

Among the titles included:

•**Administrative:** Those individuals who have managerial or supervisory duties (does not include the overall director of physical plant).

•**Custodial:** Those individuals responsible for building upkeep and cleaning.

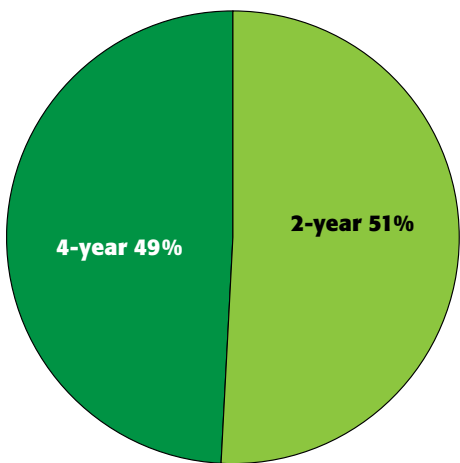
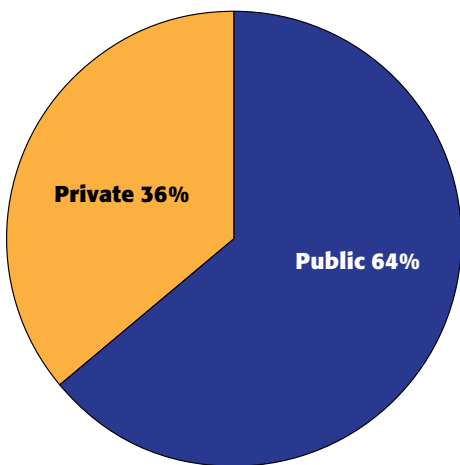
•**Maintenance:** Those individuals who perform skilled jobs, such as plumbing, electrical or HVAC repair.

•**Grounds:** Those individuals responsible for landscape maintenance and upkeep.

•**Secretarial.** Those individuals providing clerical support.

### Type of institution

(of survey respondents)



**28** Mean number of buildings on campus of survey respondents.

### Number of buildings at institution

1 to 4 buildings	8%
5 to 10 buildings	21%
11 to 15 buildings	13%
16 to 25 buildings	8%
26 to 40 buildings	15%
More than 40 buildings	26%
<i>*"No answer" represents the remaining percentage to equal 100%.</i>	

### Total grounds acreage maintained

(by survey respondents)

Less than 40 acres	28%
40 to 80 acres	3%
80.1 to 110 acres	5%
110.1 to 200 acres	18%
More than 200 acres	28%

*\*"No answer" represents the remaining percentage to equal 100%.*

### Total gross area maintained of all buildings

(including corridors and other common and office areas)

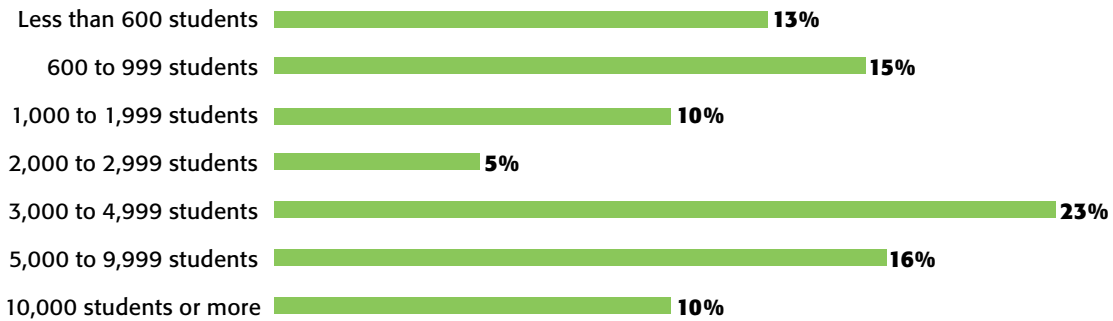
by responding institutions

Less than 150,000 sq. ft.	13%
150,000 to 299,999 sq. ft.	5%
300,000 to 449,999 sq. ft.	5%
450,000 to 599,999 sq. ft.	10%
600,000 to 749,999 sq. ft.	0%
750,000 to 999,999 sq. ft.	13%
1 million sq. ft. or more	23%

*\*"No answer" represents the remaining percentage to equal 100%.*

## FTE enrollment

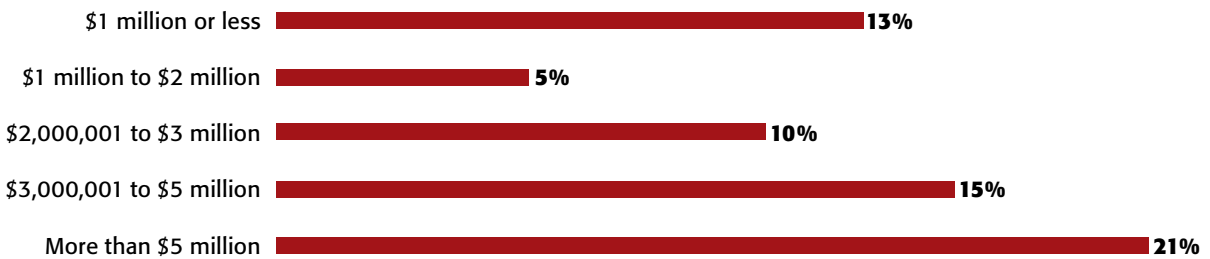
(of responding institutions)



\*"No answer" represents the remaining percentage to equal 100%.

## M&O budget

(of survey respondents)



\*"No answer" represents the remaining percentage to equal 100%.

### Privatizing M&O

**13%** The percentage of colleges contracting out maintenance and operations services

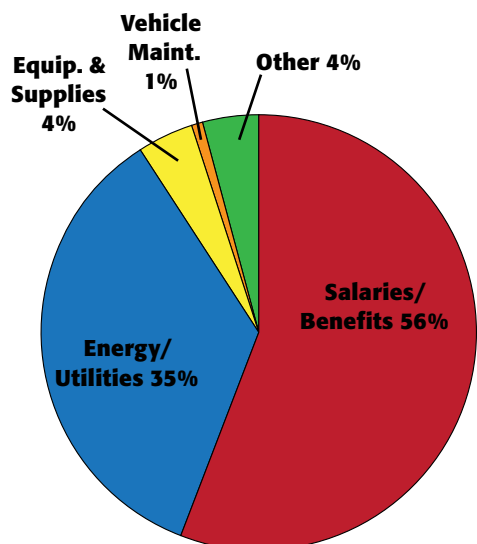
### CLICK 101

**WEB EXCLUSIVE**

- CHART: Median square footage of building maintained per FTE student
- TIMELINE: M&O expenditures over the past 10 years

### How the M&O budget is split

(median dollars per FTE student)



Agron, editor-in-chief, can be reached at JAgron@ASUmag.com. Research conducted by Elinor Rice, senior research manager, Penton Media. ■