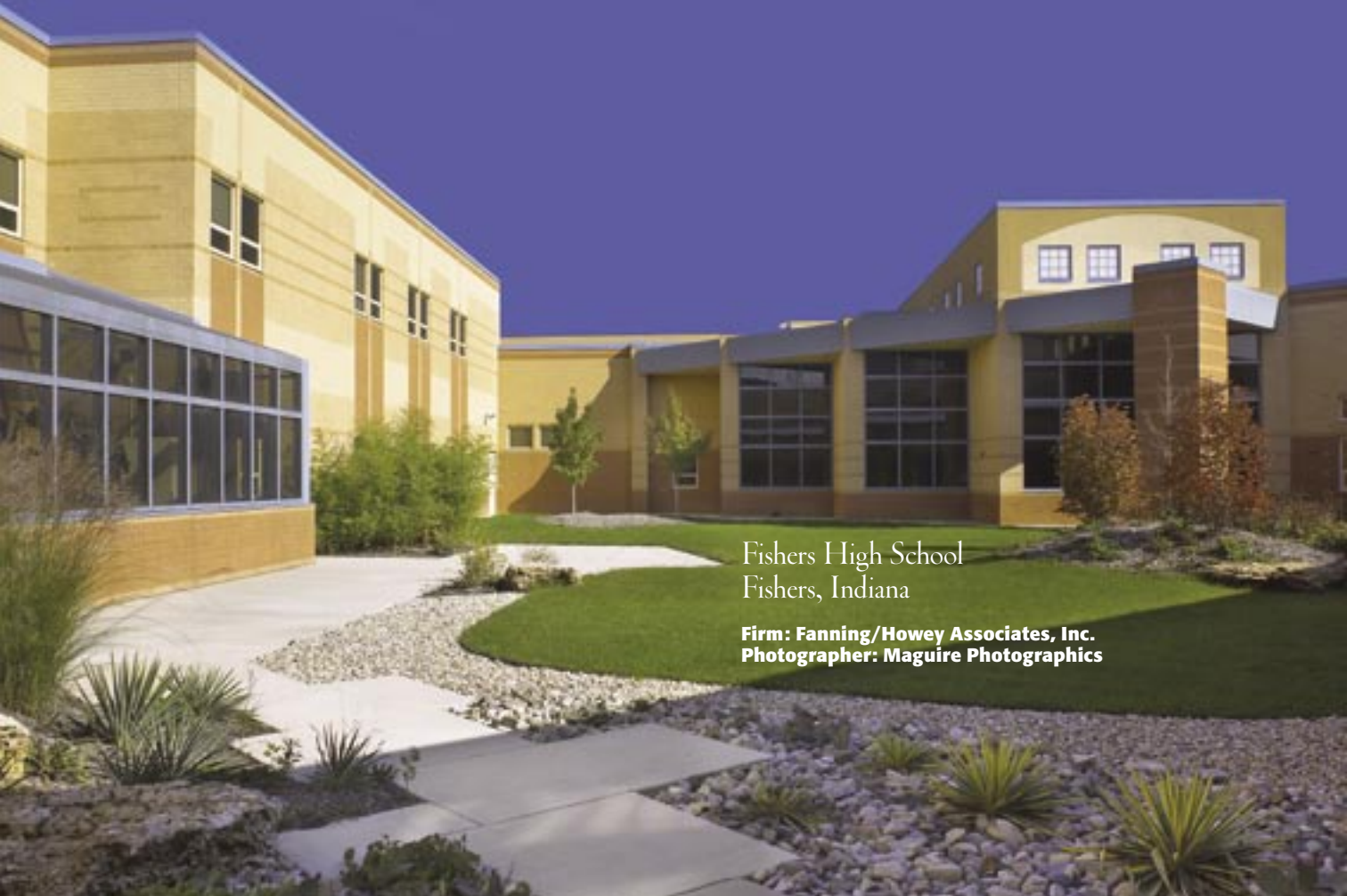


36TH ANNUAL MAINTENANCE & OPERATIONS COST STUDY

SCHOOLS



Fishers High School
Fishers, Indiana

Firm: Fanning/Howey Associates, Inc.
Photographer: Maguire Photographics

By Joe Agron

Spending by school districts on maintenance and operations increased in 2006-07, reversing years of historic low expenditures. According to *American School & University's* 36th annual Maintenance and Operations Cost Study, the median school district spends 9.19 percent of total district expenditures (TDE) on M&O, up from 7.58 percent the year before.

While percentage spending has not been this high since the late 1990s, the amount still is significantly less than what was spent 20 years ago. Of particular note is that utility spending represented the largest category increase (28 percent)—reflecting among other things rapidly rising energy costs.

What follows is a compilation of findings from the latest M&O Cost Study that can help you in benchmarking expenditures at your institution. As you peruse the data, keep in mind that all costs are affected greatly by numerous factors that schools have limited control over, including age and overall condition of buildings, climate, the labor market in your area, as well as other aspects. In addition, data provided are not intended to be "ideal" amounts for M&O allocations—they are only reflections of actual spending by school districts.

CONTINUED...

Maintenance & Operations Costs

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

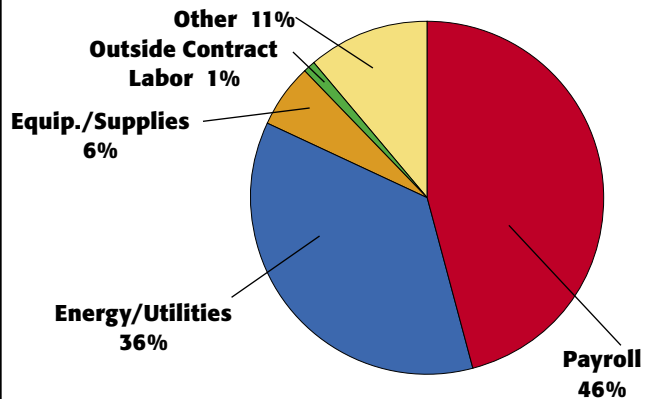
Total Payroll	\$379.34
Custodial**	\$277.50
Maintenance**	\$123.64
Grounds**	\$31.95
Outside Contract Labor	\$3.30
Total Utilities	\$297.67
Gas**	\$64.67
Electricity**	\$137.49
<i>Gas & Electricity (subtotal)</i>	<i>\$206.82</i>
Other Fuels	\$25.73
Other Utilities	\$36.36
Trash Collection/Disposal	\$9.29
Total Equipment & Supplies	\$52.57
Custodial/Maint. Equip. & Supplies**	\$45.99
Grounds Equip. & Supplies**	\$6.72
Other	\$90.96
Total M&O*	\$823.84
Total District Expenditures (TDE)	\$8,967
M&O as % TDE	9.19%

*Calculated from subtotals (in bold).

**Based on fewer responses than the total due to schools that combine some of these categories.

How the M&O budget is split

(based on median dollars per FTE student)



Tracking square footage

Median amount of square feet (SF) and acreage maintained at school districts:

SF maintained per full-time custodial worker	23,408
SF maintained per full-time maintenance worker	86,194
Acres maintained per full-time grounds worker	44
SF maintained per building	63,893
SF of building maintained per student	174.15

Privatization

19.6

Percentage of school districts contracting out maintenance and operations services.

Survey methodology

To arrive at data for the M&O Cost Study, a detailed questionnaire was mailed in October 2006 to chief business officials at the nation's public school districts asking them to document their institutions' M&O expenditures per student and per square foot for the 2006-07 school year. Categories include:

- Per student:** Based on total district enrollment (average daily attendance as of October 2006).
- 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 2006-07 school year.
- Total maintenance and operations (M&O) expenditures:** Including salaries, benefits, outside contracts, utilities, gas, electricity, 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 electrical, HVAC 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.
- Other utilities:** Including water, telephone, etc.
- Other:** Most often identified as clerical costs, equipment repair and rental, insurance and travel.

Maintenance & Operations Costs

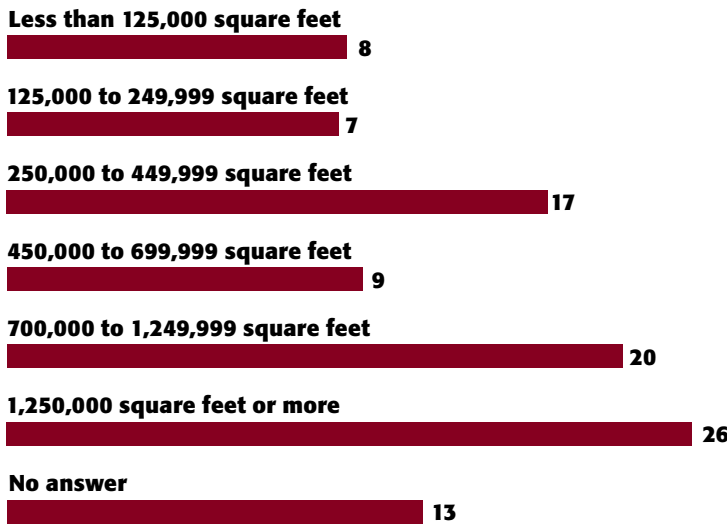
(Expressed in **median** dollars **per square foot**)

Total Payroll	\$2.56
Custodial**	\$1.56
Maintenance**	\$0.78
Grounds**	\$0.17
Outside Contract Labor	\$0.01
Total Utilities	\$1.71
Gas**	\$0.39
Electricity**	\$0.80
<i>Gas & Electricity (subtotal)</i>	<i>\$1.32</i>
Other Fuels	\$0.09
Other Utilities	\$0.25
Trash Collection/Disposal	\$0.05
Total Equipment & Supplies	\$0.32
Custodial/Maint. Equip. & Supplies**	\$0.26
Grounds Equip. & Supplies**	\$0.04
Other	\$0.49
Total M&O*	\$5.09
Total District Expenditures (TDE)	\$53.95

*Calculated from subtotals (in bold).

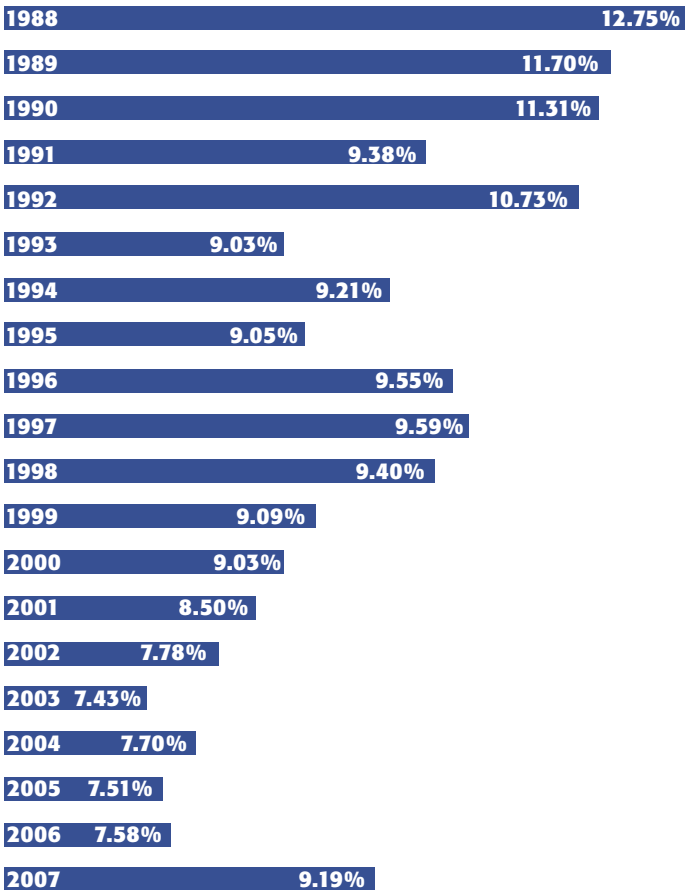
**Based on fewer responses than the total due to schools that combine some of these categories.

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



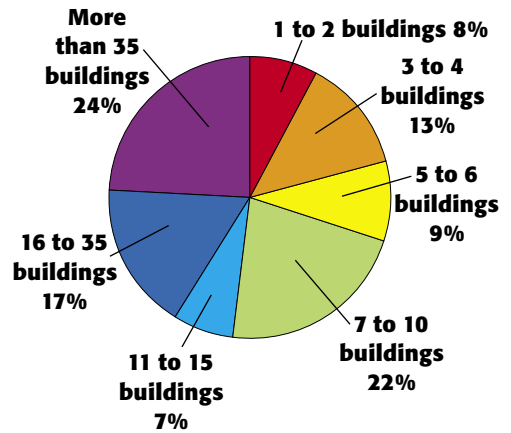
20 years of M&O expenditures

Spending by school districts on maintenance and operations as a percentage of total district expenditures over the past two decades:



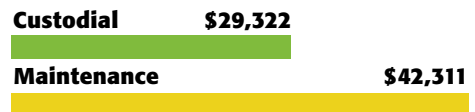
Total number of buildings in district

(of survey respondents)



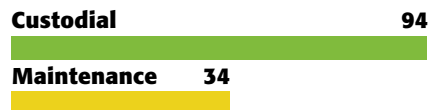
Salaries

Median salary for custodial and maintenance personnel at school districts:



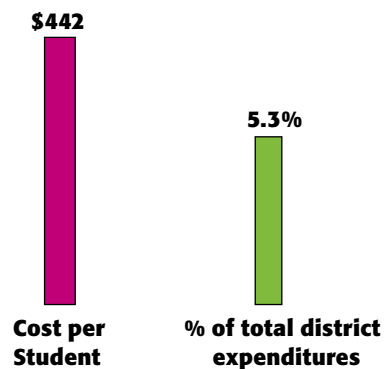
Personnel

Average number of full-time custodial and maintenance personnel at school districts:



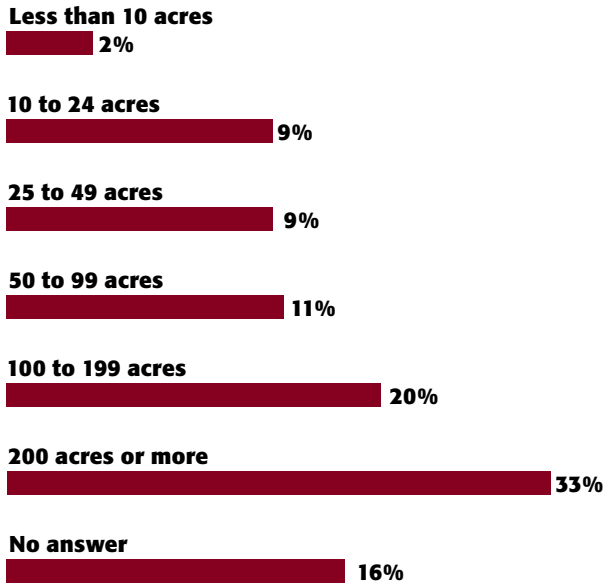
Spotlight on transportation costs

Median cost of transportation per student and as a percentage of total district expenditures:



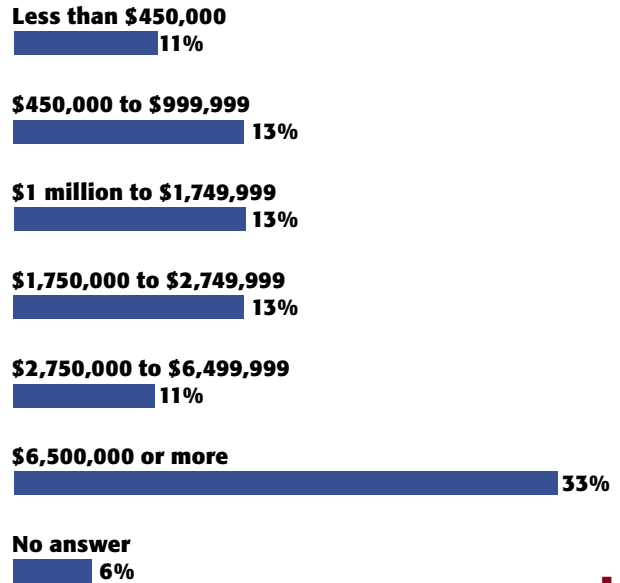
Total gross area of grounds maintained

(by survey respondents)



Total maintenance and operations expenditures

(per survey respondents)



Agron, editor-in-chief, can be reached at jagron@ASUmag.com.

Does your institution embrace Green Cleaning?

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For more information on how to enter, email JAgron@ASUmag.com or call 215-752-2787.

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36TH ANNUAL MAINTENANCE & OPERATIONS COST STUDY

COLLEGES

Embry Riddle Aeronautical University, Academic Complex
Prescott, Ariz.

Firm: DLR Group

Photo: ©Mark Boisclair, courtesy of DLR Group



By Joe Agron

Colleges are focusing increased effort—and money—to improve the physical condition of existing facilities and address a huge backlog of deferred maintenance. According to *American School & University's* 36th annual Maintenance and Operations Cost Study, the median college spends 16.4 percent of total college budget on M&O, up from 11 percent the year before.

The boost in percentage spending by colleges reflects a growing need by institutions to get their physical plants prepared for the approximately 2 million more students projected to enter their doors over the next decade. While spending on M&O by far surpassed annual percentage amounts reported over the past decade, much of the increase could be attributed to huge outlays this school year for the cost of utilities—especially gas, which skyrocketed 117 percent from what was spent per student the year before.

More information from the latest M&O Cost Study follows, providing you with valuable data that can help you in benchmarking expenditures at your institution. As you review the information, keep in mind that the survey only targets two-year and four-year colleges with no significant graduate programs in order to provide useful comparative data. Larger four-year universities with significant graduate programs are not surveyed because their costs and activities typically are so varied that results would be less useful.

CONTINUED...

Maintenance & Operations Costs

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

Salaries	\$409.76\$
Benefits (based on full-time only)	\$117.66
Total Utilities	\$434.66
Gas**	\$145.83
Electricity**	\$277.30
Gas & Electricity (subtotal)	\$368.66
Other Utilities**	\$72.64
Total Equipment & Supplies	\$92.26
Custodial/Maint. Equip. & Supplies**	\$64.96
Grounds Equip. & Supplies**	\$23.73
Vehicle Maintenance	\$15.90
Other	\$78.97
Total M&O*	\$1,149.21
% M&O of Total College Budget	16.4%

*Calculated from sub-totals (in bold).

**Based on fewer responses than the total due to schools that combine some of these categories.

Privatization

29

Percentage of colleges that outsource M&O services.

Survey methodology

Data for the annual M&O Cost Study were collected via an in-depth questionnaire mailed in October 2006 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 2006-07 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.

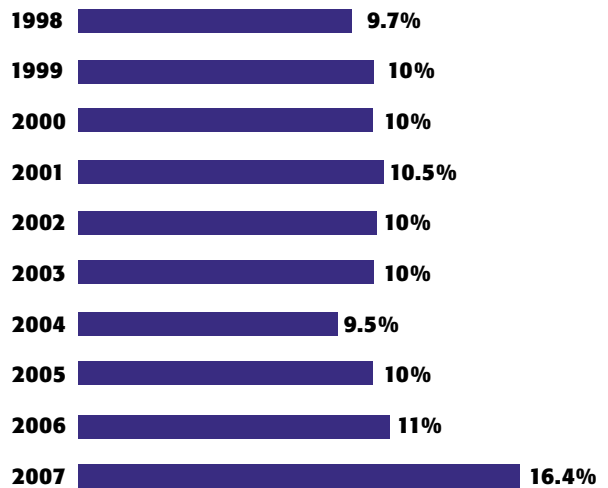
Median M&O salaries and number of employees at colleges

(Full-time employees)

Function	Salary	# of Employees
Administrative	\$50,000	2
Custodial/Housekeeping	\$22,500	8
Grounds	\$27,164	3
Maintenance	\$32,017	7

10 years of M&O expenditures

Spending by colleges on maintenance and operations as a percentage of total college expenditures over the past decade:



Maintenance & Operations Costs

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

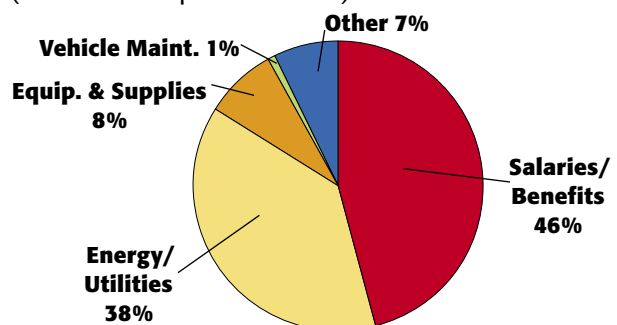
Salaries	\$1.87
Benefits (based on full-time only)	\$0.45
Total Utilities	\$1.90
Gas**	\$0.53
Electricity**	\$1.03
Gas & Electricity (subtotal)	\$1.61
Other Utilities**	\$0.24
Total Equipment & Supplies	\$0.42
Custodial/Maint. Equip. & Supplies**	\$0.26
Grounds Equip. & Supplies**	\$0.13
Vehicle Maintenance	\$0.06
Other	\$0.46
Total M&O*	\$5.16
Sq. ft. of bldg. maint. per FTE student	272

*Calculated from sub-totals (in bold).

**Based on fewer responses than the total due to schools that combine some of these categories.

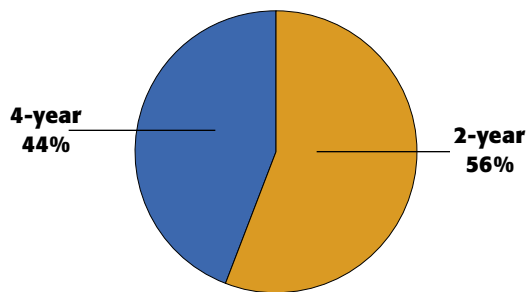
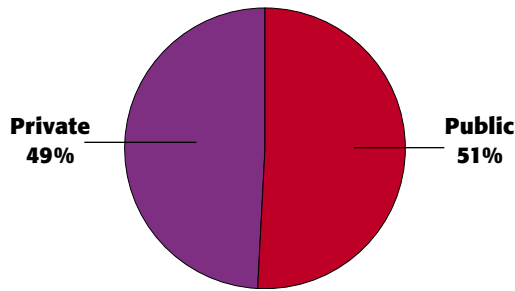
How the M&O budget is split

(median dollars per FTE student)



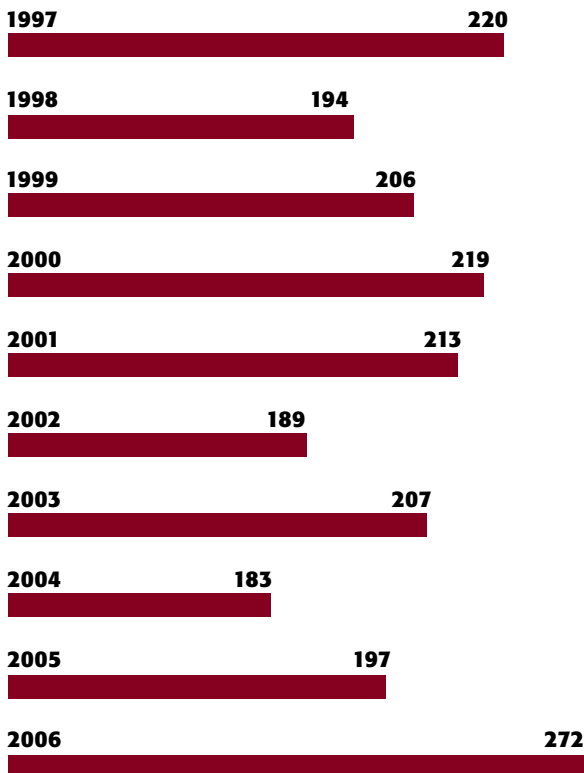
Type of institution

(of survey respondents)



Square footage maintained

The amount of square feet of building maintained per full-time-equivalent (FTE) student at colleges over the past decade (in median square feet):



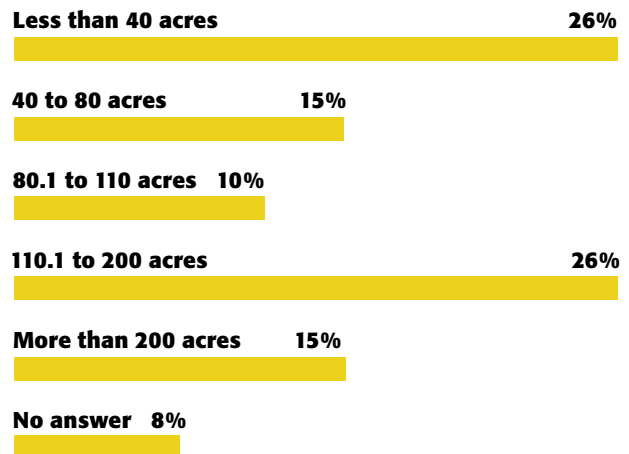
Total gross area maintained of all buildings

(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.	18%
300,000 to 449,999 sq. ft.	10%
450,000 to 599,999 sq. ft.	18%
600,000 to 749,999 sq. ft.	20%
750,000 to 999,999 sq. ft.	8%
1 million sq. ft. or more	8%
No answer	5%

Total grounds acreage maintained

(by survey respondents)



Number of buildings at institution

1 to 4 buildings	10%
5 to 10 buildings	15%
11 to 15 buildings	23%
16 to 25 buildings	18%
26 to 40 buildings	18%
More than 40 buildings	13%
No answer	3%

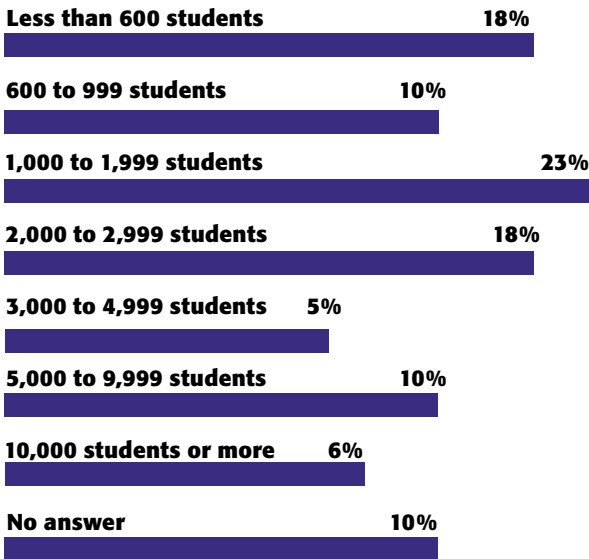
Detailed data

Following are medians for the 2006-07 school year:

Sq. ft. of bldg. maintained per student	272
Sq. ft. maintained per custodial employee	39,391
Sq. ft. maintained per maintenance employee	71,479
Acres maintained per grounds employee	30
Total reported M&O Budget	\$2 million

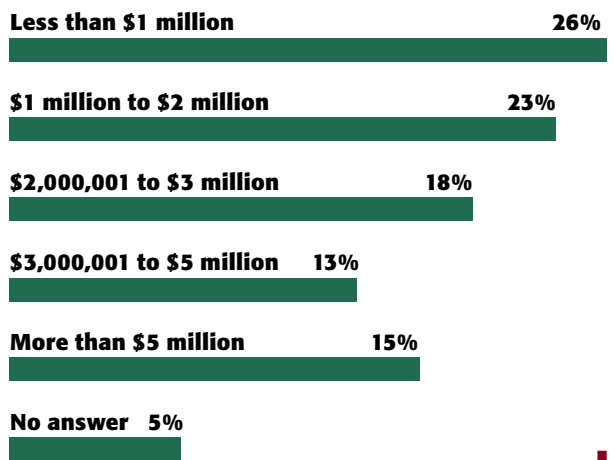
FTE enrollment

(of responding institutions)



M&O budget

(of survey respondents)



Agron, editor-in-chief, can be reached at jAgron@ASUmag.com.

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