6.0 FACILITIES USE AND MANAGEMENT

6.0 FACILITIES USE AND MANAGEMENT

This chapter presents findings and recommendations relating to facilities use and management in Bath County Public Schools (BCPS). The major sections of this chapter are as follows:

CHAPTER SUMMARY

The facilities use and management functions in Bath County Public Schools are appropriately structured and sized for a three-school division. The division has accomplished some planning tasks and is doing a good job at keeping its schools clean and well maintained.

Commendations in the area of facilities use and management include:

- BCPS is commended for establishing a documented facilities planning process.
- BCPS is commended for maintaining clean schools with staffing levels below best practice levels.

The division can do more to make its operations cost effective. BCPS should explore more coordination with the county maintenance department and should tighten budgets for custodial supplies. While the division has begun an energy management program, it can do more to redirect resources back to the classrooms.

Recommendations in the area of facilities use and management include:

- Task the Director of Maintenance with custodial supervisory responsibilities in the areas of cleaning standards and techniques.
- Conduct facility assessments of the elementary schools.
- Coordinate maintenance contracts with the county maintenance department.
- Establish a cleaning supply budget for each school.
- Implement an aggressive energy management program.

6.1 Organizational Structure

FINDING

The Director of Maintenance has no direct supervisory responsibilities for the custodial staff. The custodians report to their respective principals, which is not unusual in school divisions. While it is constructive for school administrators to have control over the staff in their buildings, most building principals have no training in custodial services or building maintenance and therefore are not really qualified to supervise the technical aspects of the work of custodians.

The lack of professional-level supervision over custodians results in the use of ineffective cleaning methods. Custodians have many chemicals and methods at their disposal and should receive professional guidance to ensure the safest and most cost-effective application of these resources. New custodial equipment is being introduced every day. An experienced individual should evaluate the usefulness of these items to avoid the purchase of cheap and ineffective equipment.

A best practice for the supervision of custodians is to have a shared responsibility between the building administrator and a maintenance or custodial supervisor. The building administrator ensures that the employee is reporting to work, practicing good work habits, and working as part of the school team. The custodial supervisor is responsible for establishing standards for cleanliness and supporting the custodians with professional training so that they can perform their cleaning and maintenance duties in the most effective manner possible.

RECOMMENDATION

Recommendation 6-1:

Task the Director of Maintenance with custodial supervisory responsibilities in the areas of cleaning standards and techniques.

The Director of Maintenance should be charged with developing a training program for the custodians that will address the following areas:

- cleaning standards
- proper use of cleaning supplies
- proper use of cleaning equipment
- maintenance of cleaning equipment
- minor building maintenance tasks

He should be responsible for visiting each school at least four times a year and rating its cleanliness based on the cleaning standards, offering support and training to the custodial staff, and working with the principal to ensure the staff are working as a team.

FISCAL IMPACT

This recommendation can be implemented with existing resources.

6.2 Facilities Planning and Construction

FINDING

BCPS has conducted an assessment of the facility needs at the high school and has requested funding to meet those needs in its Capital Improvement Plan (CIP) for FY 2006-2007 through FY 2010-2011. In 2005, the division contracted with Construction Control Corporation to assess the facility needs at the high school and prepare a prioritized cost estimate of those needs. The identified needs were broken down into the categories shown in Exhibit 6-1.

EXHIBIT 6-1
BATH COUNTY HIGH SCHOOL FACILITY NEEDS
2005

NEEDS BY PRIORITY	ESTIMATED COST
Priority	$7,352,710
Non-priority	$4,512,561
Optional	$7,430,458
TOTAL	**$26,726,187**

Source: BCPS Maintenance Department, 2006.

BCPS has budgeted for approximately $5.3 million of work in FY 2006-07 and approximately $3.4 million in 2007-08 in its CIP. While the division has not been able to fund the remediation of all facility shortcomings, it has identified and prioritized its needs, and begun a program to address them. This documented planning process will serve the division well in the future.

The division should continue this planning effort by annually documenting and publishing what has been accomplished in the CIP. At the same time, it should update the facility needs list by including any new needs, eliminating any remediated needs, and reprioritizing all the needs, and then republish the list as a public education service. The division should then update its CIP and request additional funding if needed. This planning process will demonstrate the division's stewardship of a valuable public resource, the school facilities.

COMMENDATION

Bath County Public Schools is commended for establishing a documented facilities planning process.

FINDING

BCPS has not assessed and documented the facility needs at its two elementary schools. The division completed a study of its high school in 2005, but did not assess the needs at the elementary schools.

Facility planning should be done divisionwide to ensure equity for all students and consistency in facility standards. While it may appear obvious that the high school had the higher priority needs, the elementary schools may have needs that should be

addressed sooner rather than later to avoid unnecessary costs. For example, if a small roof leak is solved instead of just patched, the division may avoid future costly repairs to ceilings and walls from water and mold damage.

A divisionwide plan that assesses and prioritizes the needs of all the facilities and estimates the total funding required, will be seen as being equitable to all students and receive wider public support.

RECOMMENDATION

Recommendation 6-2

Conduct facility assessments of the elementary schools.

BCPS should conduct facility assessments of its two elementary schools as it did for the high school. The assessments should identify building condition needs, site condition needs, educational suitability needs, and technology infrastructure needs. The assessment should prioritize the needs and present cost estimates.

The Director of Maintenance should oversee the process of selecting a facility assessment firm to conduct the project.

FISCAL IMPACT

Facility assessments generally cost about $0.10 per square foot. Given that the two elementary schools contain approximately 118,000 square feet, the study should cost about $12,000.00 (118,000 SF x $0.10 = $11,821.30).

Recommendation	2006-07	2007-08	2008-09	2009-10	2010-11
Conduct Facility Assessments of the Elementary Schools	$0	($12,000)	$0	$0	$0

6.3 Maintenance

FINDING

BCPS is somewhat remote from many building maintenance services and therefore has to pay additional costs due to the time it takes contractors to travel to job sites in the division. Because the division is small, it wisely contracts out much of its maintenance work, rather than maintaining a staff which would not be kept fully occupied. As Bath County is a remote rural county, it does not support many of the building maintenance contractors that the division needs to contract with. Consequently, contractors often have to travel as long as 45 minutes to reach a job site in BCPS.

Because contractors must travel long distances to work in BCPS, the division pays a premium for these services. It was reported that the average travel time for a contractor is 45 minutes each way, which equates to 1.5 hours in an eight-hour day, or approximately 20 percent in a travel time premium.

A best practice in maintenance contracting is to bundle similar projects to realize savings through the economies of scale. Since the division requires maintenance for only a small inventory of facilities, its ability to bundle projects is limited. However, the potential for bundling could be increased if the division coordinated contracts with the county maintenance department, which would double the potential.

RECOMMENDATION

Recommendation 6-3

Coordinate maintenance contracts with the county maintenance department.

By coordinating contracts with the county maintenance department, BCPS could minimize the travel time premium. For instance, if both BCPS and the county had an annual maintenance service contract with the same contractor, the travel time premium would be eliminated due to the economies of scale, providing savings for both the division and the county. This coordination may be cumbersome at first, but given the small scale of both operations, logistics should be fairly easy to work out.

FISCAL IMPACT

The fiscal impact of this recommendation will be a savings resulting from the minimization of the travel time premium. This can be realized in two ways. BCPS and Bath County can combine their annual maintenance service contracts so only one contractor is used by both entities, and they can coordinate work order needs so one contractor can make a coordinated service call to work on both division and county facilities on the same trip.

Both the county and the division reported a typical travel time of 45 minutes or a 20 percent premium. Coordination of work between the two entities should reduce this premium by at least half, resulting in a savings of 10 percent of the division's contracted services. This would equal approximately $9,000 annually (maintenance contracts of $56,900 + buildings and grounds contracts of $41,000 = $97,900 x 10% = $9,790).

Recommendation	2006-07	2007-08	2008-09	2009-10	2010-11
Coordinate Maintenance Contracts with the County	$9,000	$9,000	$9,000	$9,000	$9,000

6.4 Operations and Custodial Services

FINDING

BCPS is staffing its custodial services at below a best practice level and still maintaining clean schools. In previous performance audits, MGT has seen school systems assign an average of between 12,600 square feet and 23,000 square feet per custodian. Based on these averages, MGT has determined that the best practice for custodial cleaning staff is approximately 19,000 gross square feet per custodian plus .5 FTE for elementary schools, .75 FTE for middle schools, and 1.0 FTE for high schools.

Exhibit 6-2 presents a comparison of BCPS's staffing level with this best practice.

EXHIBIT 6-2
COMPARISON OF CUSTODIAL STAFFING FORMULAS
APRIL 2006

SCHOOL	PERMANENT GSF	ASSIGNED FTE CUSTODIANS	GSF PER CUSTODIAN	NO. OF CUSTODIANS PER BEST PRACTICE	OVER / (UNDER) BEST PRACTICE
Millboro Elementary School	47,633	2	23,817	3	(1.0)
Valley Elementary School	70,550	3	23,517	4.5	(1.5)
Average			23,667		**(2.5)**
Bath County High School	135,844	5	27,169	8	(3.0)
TOTAL		**10**			**(5.5)**

Sources: BCPS, 2006.

The exhibit shows that BCPS is staffing its custodial services at 5.5 positions below the best practice for the entire division. Site visits revealed the schools to be clean and the custodial services to be generally good. Surveys of division administrators, principals, and teachers also produced positive results regarding the custodial services. Exhibit 6-3 presents the results of those surveys.

EXHIBIT 6-3
COMPARISON SURVEY RESPONSES FOR CLEANLINESS AND MAINTENANCE OF FACILITIES
2006

PART C	(%G + E) / (%F + P)[1]	
	ADMINISTRATORS PRINCIPALS	TEACHERS
1. The cleanliness and maintenance of facilities in Bath County Public Schools.	75/26	61/39

Source: MGT of America, Inc., 2006.
[1]Percent responding *Good* or *Excellent* / Percent responding *Fair* or *Poor.* The *Don't Know* responses are omitted.

COMMENDATION

BCPS is commended for maintaining clean schools with staffing levels below best practice levels.

FINDING

The cost of custodial cleaning supplies varies from school to school within BCPS. Exhibit 6-4 shows the dollar amount of cleaning supplies spent by each school in FY 2006. These costs vary per square foot of facility, from $.05 to $.13 per gross square foot (GSF).

EXHIBIT 6-4
COMPARISON OF CLEANING SUPPLY COSTS
2006

SCHOOL	PERMANENT GSF	CUSTODIAL SUPPLIES $ PER YEAR	$ PER GSF	$ IN EXCESS OF $0.05 PER SF
Millboro Elementary School	47,633	$6,191	0.13	$ 3,809
Valley Elemenatry School	70,550	$6,170	0.09	$ 2,643
Bath County High School	135,844	$6,245	0.05	$ -
TOTAL		**$18,606**		**$ 6,452**

Sources: BCPS and MGT of America, Inc., 2006.

It is logical for cleaning supply costs to vary somewhat from school-to-school. Some schools are older and may take more effort to clean. Some schools have a greater number of students per square foot or have more community use and thus require more cleaning supplies. However, it is also true that supplies can be misused, wasted, or even pilfered if there are no controls on their use.

RECOMMENDATION

Recommendation 6-4:

Establish a cleaning supply budget for each school.

By setting a budget for cleaning supplies for each school and by providing sufficient training in the proper use of cleaning supplies, the maintenance director can ensure a cost-effective use of division resources. The average cost of cleaning supplies at the high school is $.05 per GSF. The maintenance director should establish this as a base budget for each school, and increase or decrease the budget as experience dictates the appropriate level.

FISCAL IMPACT

Exhibit 6-4 shows that a base budget of $.05 per GSF would create a savings of approximately $6,000 per year.

Recommendation	2006-07	2007-08	2008-09	2009-10	2010-11
Establish a Cleaning Supplies Budget	$6,000	$6,000	$6,000	$6,000	$6,000

6.5 Energy Management

FINDING

BCPS does not have a comprehensive energy management program. The district has installed some HVAC control systems which schedule setbacks and black out periods. Staff have been instructed to turn off lights and appliances that are not in use for extended periods of time. Filters are changed at regular intervals and hot water

temperatures have been lowered to conserve energy. The division is currently waiting for a proposal from a performance contractor to propose additional measures.

Energy prices will continue to increase, and energy-inefficient facilities use valuable resources that could be directed toward the classrooms. Every division should have an aggressive energy management program that contains the following elements at a minimum:

- an energy education program for all building users;
- performance contracting;
- utility invoice monitoring;
- involvement with the federal Energy Star program (Environmental Protection Agency);
- centrally controlled HVAC systems; and
- building performance standards for renovation projects.

RECOMMENDATION

Recommendation 6-5:

Implement an aggressive energy management program.

The maintenance director should be responsible for designing and implementing an aggressive energy management program. He should continue to pursue the engagement of a performance contractor and the other elements of a comprehensive energy management program as outlined in the finding above.

FISCAL IMPACT

The fiscal impact of this recommendation would be a savings in utility costs. The amount of the savings would depend on the elements of the plan that were implemented. BCPS should aim for a five percent reduction in utility costs within two years. Given the current utility costs of approximately $384,700, this savings would amount to approximately $19,000 annually after the second year ($384,700 x .05 = $19,235).

Recommendation	2006-07	2007-08	2008-09	2009-10	2010-11
Implement an Energy Management Program	$9,500	$19,000	$19,000	$19,000	$19,000