

Operations and Maintenance Summary

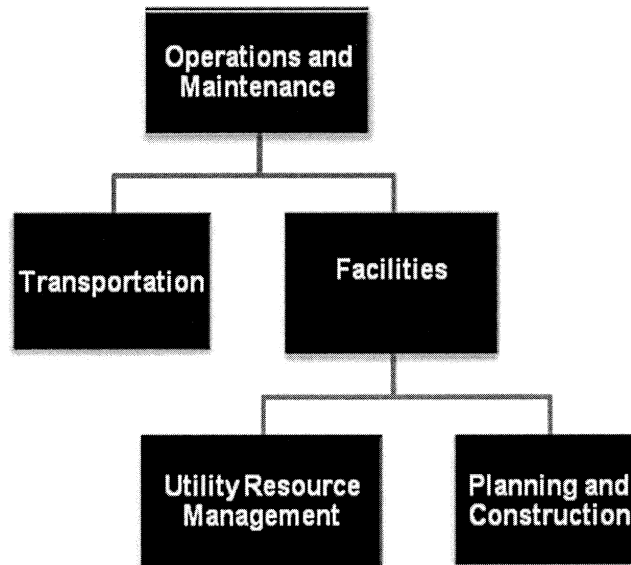
Program Overview

The Operations and Maintenance program is comprised of various non-instructional areas of the school system that enable teaching and learning. Operations and Maintenance includes departments that are responsible for efficiently and effectively delivering Facilities Management, Planning and Construction, Student Transportation, and Community Services. Departments deliver services to schools and HCPS stakeholders in support of the Harford County Board of Education Strategic Plan Goal #4 to provide safe, secure, and healthy learning environments that are conducive to effective teaching and learning.

The primary purposes of Operations and Maintenance are to:

- Provide the technical skills and expertise to establish and deliver a comprehensive maintenance program for all school facilities;
- Manage a capital improvement program to plan, design, construct, and modernize educational facilities for the students and staff;
- Provide energy management resources through the coordination of administration and policy between the central office management team and the individual facility managers;
- Provide transportation to eligible students enrolled in our schools; and
- Administer the program for the use of public school facilities by the community by providing funds for custodial overtime, materials and supplies, and fees associated with the community use of our facilities.

PROGRAM COMPONENT ORGANIZATION



	FY11 Actual	FY12 Actual	FY12 Budget	Change FY12- FY13	FY13 Budget
OPERATIONS AND MAINTENANCE	\$ 65,620,450	\$ 67,667,330	\$ 68,139,408	\$ 304,382	\$ 68,443,790
Transportation	\$ 29,561,078	\$ 31,031,249	\$ 31,247,877	\$ 348,489	\$ 31,596,366
Facilities	\$ 21,062,257	\$ 21,774,381	\$ 21,858,858	\$ 79,211	\$ 21,938,069
Utility Resource Management	\$ 14,110,014	\$ 14,048,591	\$ 14,165,388	\$ (112,733)	\$ 14,052,655
Planning and Construction	\$ 887,101	\$ 813,109	\$ 867,285	\$ (10,585)	\$ 856,700

Summary Report Operations and Maintenance

By Object Code <i>Operations and Maintenance</i>	FY11 Actual	FY12 Actual	FY12 Budget	12 - 13 Change	FY13 Budget
Salaries	\$22,218,788	\$22,794,243	\$23,170,659	\$288,764	\$23,459,423
Contracted Services	\$25,982,294	\$27,142,136	\$27,481,495	\$256,296	\$27,737,791
Supplies	\$4,122,004	\$4,309,498	\$4,003,408	(\$53,250)	\$3,950,158
Other Charges	\$13,117,570	\$12,980,557	\$13,268,303	(\$69,721)	\$13,198,582
Equipment	\$179,794	\$440,896	\$215,543	(\$117,707)	\$97,836
Total	\$65,620,450	\$67,667,329	\$68,139,408	\$304,382	\$68,443,790

Full Time Equivalent Positions - Budgeted				
<i>Operations and Maintenance</i>	FY11	FY12	Change	FY13
Admin/Supv/Assist Supv	13.0	12.0	0.0	12.0
Assistant Supervisor	1.0	1.0	0.0	1.0
Bus Attendant	85.0	88.0	3.0	91.0
Bus Driver	97.4	100.4	3.0	103.4
Bus Technician	4.0	4.0	0.0	4.0
Clerical	11.0	11.0	0.0	11.0
Custodial Coordinator	1.0	1.0	0.0	1.0
Custodian	328.0	336.9	0.0	336.9
Director	1.0	1.0	0.0	1.0
Dispatcher	2.0	2.0	0.0	2.0
Executive Director	1.0	1.0	0.0	1.0
Facilities/Maintenance	74.0	74.0	0.0	74.0
Planning/Construction	2.0	2.0	0.0	2.0
Technician	13.0	13.0	0.0	13.0
Vehicle Mechanic	11.0	11.0	0.0	11.0
Total	644.4	658.3	6.0	664.3

By State Category <i>Operations and Maintenance</i>	FY11 Actual	FY12 Actual	FY12 Budget	12 - 13 Change	FY13 Budget	FY13 FTE
STUDENT TRANSPORTATION						
Salaries	\$5,867,124	\$6,271,532	\$6,169,672	\$125,125	\$6,294,797	
Contracted Services	\$21,848,918	\$22,832,267	\$23,166,167	\$369,933	\$23,536,100	
Supplies	\$1,229,694	\$1,311,630	\$1,124,250	(\$52,250)	\$1,072,000	
Other Charges	\$107,048	\$33,272	\$123,265	(\$93,813)	\$29,452	
Equipment	\$5,739	\$3,717	\$7,500	(\$4,059)	\$3,441	
TOTAL	\$29,058,524	\$30,452,419	\$30,590,854	\$344,936	\$30,935,790	217.4
OPERATION OF PLANT						
Salaries	\$10,602,704	\$10,841,406	\$11,061,537	\$129,349	\$11,190,886	
Contracted Services	\$1,724,803	\$1,713,333	\$1,885,822	(\$124,600)	\$1,761,222	
Supplies	\$1,296,708	\$1,092,526	\$981,146	\$0	\$981,146	
Other Charges	\$12,986,830	\$12,927,359	\$13,104,967	\$33,992	\$13,138,959	
Equipment	\$35,739	\$248,360	\$58,593	(\$31,825)	\$26,768	
TOTAL	\$26,646,783	\$26,822,985	\$27,092,065	\$6,916	\$27,098,981	342.9
MAINTENANCE OF PLANT						
Salaries	\$5,420,583	\$5,425,348	\$5,558,352	\$29,673	\$5,588,025	
Contracted Services	\$2,408,574	\$2,555,256	\$2,379,506	\$10,963	\$2,390,469	
Supplies	\$1,476,940	\$1,788,210	\$1,758,012	(\$1,000)	\$1,757,012	
Other Charges	\$23,691	\$19,925	\$40,071	(\$9,900)	\$30,171	
Equipment	\$137,486	\$188,639	\$149,450	(\$81,823)	\$67,627	
TOTAL	\$9,467,273	\$9,977,378	\$9,885,391	(\$52,087)	\$9,833,304	103.0
COMMUNITY SERVICES						
Salaries	\$286,849	\$255,956	\$381,098	\$4,617	\$385,715	
Supplies	\$116,168	\$117,132	\$140,000	\$0	\$140,000	
TOTAL	\$403,017	\$373,088	\$521,098	\$4,617	\$525,715	1.0

By State Category	FY11	FY12	FY12	12 - 13	FY13	FY13
<i>Operations and Maintenance</i>	Actual	Actual	Budget	Change	Budget	FTE
CAPITAL OUTLAY						
Salaries	\$41,528	\$0	\$0	\$0	\$0	
Contracted Services	\$0	\$41,280	\$50,000	\$0	\$50,000	
Supplies	\$2,494	\$0	\$0	\$0	\$0	
Equipment	\$831	\$180	\$0	\$0	\$0	
TOTAL	\$44,852	\$41,460	\$50,000	\$0	\$50,000	0.0
Grand Total	\$65,620,450	\$67,666,983	\$68,139,408	\$304,382	\$68,443,790	664.3

Transportation

Program Overview

The mission of the Transportation Department is to provide transportation to eligible students enrolled in Harford County Public Schools. In planning and carrying out this mission, major consideration is given to the safety of the children transported, to maintaining effective and efficient service that takes children to and from school in an environment that is conducive to learning, and to providing co-curricular and extra-curricular transportation for a multitude of projects.

Approximately 36,000 students are provided direct transportation to and from school in accordance with policies established by the Board of Education. Additionally, thousands of runs for co-curricular, extra-curricular, special programs and field trips are provided through out, what is now, a twelve-month school year.

The McKinney-Vento Homeless Assistance Act requires schools to identify children and youth in homeless situations and provide appropriate services. One such service is providing students with transportation to their school of origin. The McKinney-Vento Act is an unfunded federal mandate. Under this Act, HCPS has transported students that were housed as far as 75 miles away from their school of origin. In FY 2011, HCPS spent over \$85,000 to provide services in accordance with the McKinney-Vento Act.

Accomplishments – FY 2011

- The number of preventable accidents reduced by 34% from the previous year. (Board Goal 4)
- Recipient of the Dr. Linda Bluth & Ms Betsy Eisman Grant to fund student field trips. (Board Goal 4)
- Continued to reduce fuel consumption by reducing deadhead miles and implementing efficiencies in extra-curricular and athletic field trip buses. (Board Goal 4)
- Provided accident investigation training to all departments using HCPS vehicles. (Board Goal 4)
- Provided Defensive Driver training to Pupil Personnel Workers in the County. (Board Goal 4)

Goals – FY 2013

- Reduce the number of preventable accidents by 10% through continuing skills in-service-training focusing on safety. (Board Goals 3 & 4)
- Create a healthier environment around all HCPS through the installation of particle reduction emission devices on all eligible special needs buses. (Board Goal 4)
- Eliminate fuel consumption by reducing deadhead miles and creating greater efficiencies on transportation of extra-curricular and athletic field trip buses. (Board Goal 4)
- Conduct a refresher review, with all drivers using the revised Defensive Driving course offered by the National Safety Council. (Board Goals 3 & 4)

Objectives – FY 2013

- To develop and implement bus routes that deliver students to and from school and extra-curricular activities, in a safe and efficient manner. (Board Goal 4)
- Educate, train and evaluate all drivers. (Board Goal 3)
- Train and supervise bus contractors. (Board Goal 3)
- Successfully resolve and mediate parental, school and public concerns. (Board Goal 4)
- Comply with all Federal, State and local laws. (Board Goal 4)
- Successfully administer and supervise the operation and maintenance of system-owned vehicles. (Board Goal 4)
- Monitor the operation and maintenance of contractor owned vehicles. (Board Goal 4)

Transportation

HCPS buses travel an average ...



...42,778 miles per school day!

Transportation Facts					
	2007	2008	2009	2010	2011
Number of School Buses	431	437	481	487	494
Miles Traveled Annually	7.0 Million	7.2 Million	7.5 Million	7.4 Million	7.7 Million
Number of Bus Accidents	63	74	75	60	69
# Preventable Accidents	37	35	44	35	23
% Preventable Accidents to Total	59%	47%	59%	58%	33%

FY 2013 Funding Adjustments

The changes for fiscal 2013 include:

- Net salary adjustments totaling \$128,678;
- Increase in contracted services, \$369,933;
- Decrease in supplies and materials, (\$52,250);
- Decrease in other charges, (\$93,813); and,
- Decrease in equipment expense, (\$4,059).

The net increase in expenditures from the fiscal 2012 budget for Transportation is \$348,489.

Transportation

By Object Code	FY11 Actual	FY12 Actual	FY12 Budget	12 - 13 Change	FY13 Budget
Salaries	\$6,000,768	\$6,408,055	\$6,306,195	\$128,678	\$6,434,873
Contracted Services	\$21,903,230	\$22,894,674	\$23,302,167	\$369,933	\$23,672,100
Supplies	\$1,544,291	\$1,691,531	\$1,508,750	(\$52,250)	\$1,456,500
Other Charges	\$107,048	\$33,272	\$123,265	(\$93,813)	\$29,452
Equipment	\$5,739	\$3,717	\$7,500	(\$4,059)	\$3,441
Total	\$29,561,078	\$31,031,249	\$31,247,877	\$348,489	\$31,596,366

Full Time Equivalent Positions - Budgeted

	FY11	FY12	Change	FY13
Admin/Supv/Assist Supv	3.0	3.0	0.0	3.0
Bus Attendant	85.0	88.0	3.0	91.0
Bus Driver	97.4	100.4	3.0	103.4
Bus Technician	4.0	4.0	0.0	4.0
Clerical	4.0	4.0	0.0	4.0
Director	1.0	1.0	0.0	1.0
Dispatcher	2.0	2.0	0.0	2.0
Technician	1.0	1.0	0.0	1.0
Vehicle Mechanic	11.0	11.0	0.0	11.0
Total	208.4	214.4	6.0	220.4

By State Category	FY11 Actual	FY12 Actual	FY12 Budget	12 - 13 Change	FY13 Budget	FY13 FTE
STUDENT TRANSPORTATION						
Salaries	\$5,867,124	\$6,271,532	\$6,169,672	\$125,125	\$6,294,797	
Contracted Services	\$21,848,918	\$22,832,267	\$23,166,167	\$369,933	\$23,536,100	
Supplies	\$1,229,694	\$1,311,630	\$1,124,250	(\$52,250)	\$1,072,000	
Other Charges	\$107,048	\$33,272	\$123,265	(\$93,813)	\$29,452	
Equipment	\$5,739	\$3,717	\$7,500	(\$4,059)	\$3,441	
TOTAL	\$29,058,524	\$30,452,419	\$30,590,854	\$344,936	\$30,935,790	217.4
OPERATION OF PLANT						
Supplies	\$228,386	\$144	\$0	\$0	\$0	
TOTAL	\$228,386	\$144	\$0	\$0	\$0	0.0
MAINTENANCE OF PLANT						
Salaries	\$133,644	\$136,523	\$136,523	\$3,553	\$140,076	
Contracted Services	\$54,313	\$62,407	\$136,000	\$0	\$136,000	
Supplies	\$86,211	\$379,756	\$384,500	\$0	\$384,500	
TOTAL	\$274,167	\$578,686	\$657,023	\$3,553	\$660,576	3.0
Grand Total	\$29,561,078	\$31,031,249	\$31,247,877	\$348,489	\$31,596,366	220.4

Facilities Management

Program Overview

The mission of the Facilities Management Department is to provide the best learning environment for students of Harford County Public Schools. This is in addition to our vision to provide clean and optimally maintained buildings. We strive to accomplish our mission and vision by providing the technical skills and expertise to establish and deliver a comprehensive maintenance program for all school facilities, as well as, develop and provide a Preventive Maintenance Program to ensure the efficient operation of building systems and to extend the useful life of these systems. The Facilities Management Department develops and administers a long range Capital Improvements program to ensure that equipment such as boilers, rooftop units, environmental issues, parking lots and roadways, grounds improvement, and all aspects of school facilities building systems are replaced or repaired in a timely manner.

Included in the operations of our department are the custodians, who are needed to maintain the schools and central office in a clean and healthy environment. Over 6,000,000 square feet of floors must be cleaned, most of which is done on a daily basis. Custodians also change lighting tubes, provide lawn maintenance, clear snow and ice from sidewalks, move furniture within the building for assemblies and special programs, remove trash, clean the cafeteria between lunch periods, and operate the heating and air conditioning system.

Additionally, school buildings are an extension of the community. Schools are used for over 2,500 activities by outside groups each year. Activities such as Parks and Recreation, Boys and Girls Scouts, community association meetings, cultural events, before school and after school daycare, general and primary elections, church services, and other civic events are held in the public school facilities.

Accomplishments – FY 2011

- Bleacher replacements at Aberdeen, Bel Air and Southampton Middle Schools. (Board Goal 4)
- Locker replacements in locker rooms at Joppatowne High School. (Board Goal 4)
- Fire alarm replacement at Havre de Grace Middle School. (Board Goal 4)
- Carpet replacement in media centers at Bel Air Middle and Dublin Elementary School. (Board Goal 4)
- Resurfacing at Magnolia Elementary, Aberdeen and Bel Air Middle Schools and C. Milton Wright High School. (Board Goal 4)
- Replaced training and mechanic's buildings at Hickory Annex damaged by blizzard. (Board Goal 4)
- Installed backflow prevention at Patterson Middle/High School (football field) and Riverside and Wakefield Elementary Schools. (Board Goal 4)

Goals – FY 2013

- Active participation in EPA's Tools for Schools across HCPS. (Board Goal 4)
- Inspection of all school buildings. (Board Goal 4)
- Continue to reduce underground storage tank inventory at dual fuel sites. (Board Goal 4)
- Continue with Phase 3 of Performance Contracting. (Board Goal 4)
- Evaluation of site/ building conditions to include for program adequacy. (Board Goal 4)
- Partnership with Harford County to utilize portable generators and improve communication network. (Board Goal 4)

Objectives – FY 2013

- Provide an environment where every child feels comfortable going to school. (Board Goal 4)
- Obtain and optimize use of adequate resources. (Board Goal 4)
- Improve operational efficiency and effectiveness. (Board Goal 4)
- Recruit and retain a high quality diverse work force. (Board Goal 3)
- Provide a diverse, highly trained, skilled work force to apply modern technologies to building systems, contributing to the quality of instruction and student achievement. (Board Goal 3)
- Provide advice, resources, and consultation to all the stakeholders of the school system. (Board Goal 2)
- Develop a maintenance program that evaluates and prioritizes the needs of each facility to include structural, mechanical integrity, energy efficiency, operational and maintenance efficiencies to meet health and safety requirements. (Board Goal 4)
- Provide modern aesthetically pleasing facilities. (Board Goal 4)
- Minimize operating/utility costs via an efficient work force and providing modern efficient building systems (all aspects of physical plant). (Board Goal 4)
- Establish a program that addresses emergencies, both planned and unplanned. (Board Goal 4)

Facilities Management

FY 2013 Funding Adjustments

The changes for fiscal 2013 include:

- Net salary adjustments totaling \$159,906;
- Increase in contracted services, \$1,000;
- Decrease in supplies and materials, (\$1,000);
- Increase in other charges, \$30,392; and,
- Decrease in equipment expense, (\$111,087).

The net increase in expenditures from the fiscal 2012 budget for Facilities Management is \$79,211.

Facilities Management

By Object Code	FY11 Actual	FY12 Actual	FY12 Budget	12 - 13 Change	FY13 Budget
Salaries	\$15,286,827	\$15,565,825	\$16,029,843	\$159,906	\$16,189,749
Contracted Services	\$2,774,829	\$2,869,136	\$2,844,186	\$1,000	\$2,845,186
Supplies	\$2,490,316	\$2,520,055	\$2,394,158	(\$1,000)	\$2,393,158
Other Charges	\$348,492	\$384,240	\$387,544	\$30,392	\$417,936
Equipment	\$161,792	\$435,124	\$203,127	(\$111,087)	\$92,040
Total	\$21,062,257	\$21,774,381	\$21,858,858	\$79,211	\$21,938,069

Full Time Equivalent Positions - Budgeted

	FY11	FY12	Change	FY13
Admin/Supv/Assist Supv	4.0	4.0	0.0	4.0
Clerical	5.0	5.0	0.0	5.0
Custodial Coordinator	1.0	1.0	0.0	1.0
Custodian	328.0	336.9	0.0	336.9
Executive Director	1.0	1.0	0.0	1.0
Facilities/Maintenance	74.0	74.0	0.0	74.0
Technician	11.0	11.0	0.0	11.0
Total	424.0	432.9	0.0	432.9

By State Category	FY11 Actual	FY12 Actual	FY12 Budget	12 - 13 Change	FY13 Budget	FY13 FTE
OPERATION OF PLANT						
Salaries	\$10,450,291	\$10,699,036	\$10,917,917	\$127,128	\$11,045,045	
Contracted Services	\$939,013	\$905,354	\$1,076,377	\$0	\$1,076,377	
Supplies	\$991,049	\$1,001,968	\$888,646	\$0	\$888,646	
Other Charges	\$337,800	\$381,081	\$377,526	\$33,992	\$411,518	
Equipment	\$35,306	\$248,312	\$57,776	(\$31,508)	\$26,268	
TOTAL	\$12,753,459	\$13,235,751	\$13,318,242	\$129,612	\$13,447,854	340.9
MAINTENANCE OF PLANT						
Salaries	\$4,549,687	\$4,610,833	\$4,730,828	\$28,161	\$4,758,989	
Contracted Services	\$1,835,816	\$1,963,782	\$1,767,809	\$1,000	\$1,768,809	
Supplies	\$1,383,099	\$1,400,955	\$1,365,512	(\$1,000)	\$1,364,512	
Other Charges	\$10,692	\$3,160	\$10,018	(\$3,600)	\$6,418	
Equipment	\$126,486	\$186,812	\$145,351	(\$79,579)	\$65,772	
TOTAL	\$7,905,781	\$8,165,541	\$8,019,518	(\$55,018)	\$7,964,500	91.0
COMMUNITY SERVICES						
Salaries	\$286,849	\$255,956	\$381,098	\$4,617	\$385,715	
Supplies	\$116,168	\$117,132	\$140,000	\$0	\$140,000	
TOTAL	\$403,017	\$373,088	\$521,098	\$4,617	\$525,715	1.0
Grand Total	\$21,062,257	\$21,774,381	\$21,858,858	\$79,211	\$21,938,069	432.9

Utility Resource Management

Program Overview

The Office of Utility Resource Management has developed a multi-faceted approach to managing energy resources. This approach provides for energy resource optimization through the coordination of administration and policy between the central office management team and the individual facility managers; through improvements to the operation and maintenance of the equipment; and through capital improvements.

The overall goal is to manage energy use without adversely affecting the indoor air quality, the comfort and safety of our building occupants and the security of our buildings. This is currently being accomplished through the collection and analysis of energy consumption data using utility tracking and accounting software. We are also working with administrators, teachers, students and custodial personnel to promote energy management awareness, and are controlling and monitoring heating and air conditioning systems via computerized energy management programs.

Accomplishments – FY 2011

- Alternative Energy installations:
 - Solar Electric Project incorporated 6 large scale photovoltaic sites.
 - Wind Turbine Project at Harford Glen Environmental Center.
- Lighting upgrades of energy efficient equipment at the following schools:
 - William S. James
 - William Paca Elementary
 - Old Post Elementary
 - Prospect Mill Elementary
 - Fallston Middle School
 - Aberdeen Middle School
- Efficiency upgrades reduced consumption resulting in cost avoidance of over \$160,000. (Board Goal 4)
- Received \$267,058 in BGE Smart Energy Rebates.
- Participated in the Load Response Program for five of six sites resulting in an anticipated savings of over \$66,000.
- Over 85 hand dryers in the school buildings to reduce paper towel usage and operational costs. (Board Goal 4)
- Training workshops for custodians and other operations staff. (Board Goal 3)
- Conservation presentations to students in elementary, middle, and high schools. (Board Goal 4)

Goals – FY 2013

- Continue to install energy efficient equipment. (Board Goal 4)
- Continue to participate in Utility sponsored credit and rebate programs. (Board Goal 4)
- Continue to upgrade lighting. (Board Goal 4)
- Investigate and implement water conservation technology. (Board Goal 4)
- Establish a yearly training agenda and schedule for school based personnel. (Board Goal 3)

Objectives – FY 2013

- Reduce operational cost without adversely affecting the comfort and safety of our building occupants. (Board Goal 4)
- Partner with other agencies to expand sustainability initiatives. (Board Goal 4)
- Improve the learning environment. (Board Goal 4)

Utility Resource Management

ENERGY COST SAVING INITIATIVES

HCPS is entering the third year of their Energy and Resource Conservation Initiative. The program is titled Harford Environmental Leadership Program (HELP). The goal is to support educational objectives, improve financial management systems by eliminating inefficiencies and recognize savings while improving building operations and maintenance programs. HCPS coordinates all conservation initiatives through various conservation strategies.

1. **Innovative Policies and Procedures:** In June of 2008, HCPS approved a comprehensive energy management plan. The goal of the plan was to reduce resource and energy consumption while creating a more environmentally sustainable organization. Through this plan HCPS adopted new policies and procedures which established specific criteria and requirements relating to energy use, conservation, and sustainability at all levels of the HCPS operations. Through this initiative HCPS established an Energy and Resource Committee to identify short and long-term opportunities, and respond to the needs of the schools. Temporary subcommittees are formed to investigate and address sustainability issues. The Resource Conservation Manager is responsible for implementing the energy conservation program, working closely with the committee and site teams and providing training and education to the students, faculty and staff. The Resources Conservation Manager also works with Resource Conservation Administrators at every school to increase conservation awareness, support training, and provide on-going guidance.
- **Behavior Modification and Training: “Grass Roots” Energy Conservation Initiative:** HCPS is aware that no conservation effort will be successful without Ownership, Pride, Participation and, Cooperation of the building occupants, users and all stakeholders. HCPS also acknowledges the need to have programs that enhance the opportunities for success and savings. Linking energy conservation efforts to teaching and instruction is a priority. Resource conservation activities are designed to include each local school, teacher and student and have a focus on establishing and strengthening partnerships with organizations internal and external to our HCPS for the purpose of educating our staff and students as we continue to improve the efficient use of our resources through the following initiatives:
 - Twenty-two HCPS schools have joined the Maryland Green Schools program. Additional schools are actively engaged in obtaining similar accreditation status.
 - Energy and Resource Conservation Policy & Procedures were developed concurrent with development of the Harford Environmental Leadership Program (HELP). The goal of the program is to emphasize behavior modification to conserve energy and other resources.
 - Provide ongoing training workshops for Leadership in Energy and Environmental Design (LEED) for the Facilities and Planning and Construction departments.
 - The Resource Conservation Committee works in tandem with the Earth & Environmental Science programs to focus on sustainability issues inside the school buildings and provide real world problem solving opportunities for our students.
 - Conduct demonstrations and training with the Building Engineers and Chief

Utility Resource Management

ENERGY COST SAVING INITIATIVES (cont.)

- **Water Conservation Efforts:** Conserve water usage through various improvements to school building and grounds (i.e. fixtures, synthetic turf). Include water conservation methods on all capital projects through design standards.
- **Energy Procurement Strategies:** Participate in the purchasing consortium with the Baltimore Regional Purchasing Cooperative in which school districts and municipalities jointly procure natural gas and electricity to maximize savings. Currently utilizes Harford County Government propane gas contract to reduce per gallon cost of product.
- **Improved Practices:** HCPS developed a centralized data base to track and evaluate all utility bills, a green cleaning program with guidelines and training for our custodial staff, a sustainability review process for our new construction programs to insure that we are critically analyzing our new facilities during the design and construction phase, and implemented a full scale single stream recycling program and centralized data base to track and evaluate all waste disposal bills.

FY 2013 Funding Adjustments

The changes for fiscal 2013 include:

- Net salary adjustments totaling \$2,221;
- Decrease in contracted services, (\$114,637); and
- Decrease in equipment expense, (\$317).

The net decrease in expenditures from the fiscal 2012 budget for Utility Resource Management is (\$112,733).

Utility Resource Management

By Object Code <i>Utility Resource Management</i>	FY11 Actual	FY12 Actual	FY12 Budget	12 - 13 Change	FY13 Budget
Salaries	\$152,413	\$142,370	\$143,620	\$2,221	\$145,841
Contracted Services	\$1,230,866	\$1,269,480	\$1,201,010	(\$114,637)	\$1,086,373
Supplies	\$77,273	\$90,414	\$92,500	\$0	\$92,500
Other Charges	\$12,649,030	\$12,546,279	\$12,727,441	\$0	\$12,727,441
Equipment	\$433	\$47	\$817	(\$317)	\$500
Total	\$14,110,014	\$14,048,591	\$14,165,388	(\$112,733)	\$14,052,655

Full Time Equivalent Positions - Budgeted

<i>Utility Resource Management</i>	FY11	FY12	Change	FY13
Assistant Supervisor	1.0	1.0	0.0	1.0
Technician	1.0	1.0	0.0	1.0
Total	2.0	2.0	0.0	2.0

By State Category <i>Utility Resource Management</i>	FY11 Actual	FY12 Actual	FY12 Budget	12 - 13 Change	FY13 Budget	FY13 FTE
OPERATION OF PLANT						
Salaries	\$152,413	\$142,370	\$143,620	\$2,221	\$145,841	
Contracted Services	\$785,790	\$807,978	\$809,445	(\$124,600)	\$684,845	
Supplies	\$77,273	\$90,414	\$92,500	\$0	\$92,500	
Other Charges	\$12,649,030	\$12,546,279	\$12,727,441	\$0	\$12,727,441	
Equipment	\$433	\$47	\$817	(\$317)	\$500	
TOTAL	\$13,664,938	\$13,587,089	\$13,773,823	(\$122,696)	\$13,651,127	2.0
MAINTENANCE OF PLANT						
Contracted Services	\$445,076	\$461,502	\$391,565	\$9,963	\$401,528	
TOTAL	\$445,076	\$461,502	\$391,565	\$9,963	\$401,528	0.0
Grand Total	\$14,110,014	\$14,048,591	\$14,165,388	(\$112,733)	\$14,052,655	2.0

Planning and Construction

Program Overview

The purpose of the Planning and Construction Department is to plan, construct, modernize, and improve educational facilities for the students and staff of the Harford County Public Schools. The department utilizes demographic data and other pertinent information to plan new facilities or expansions to accommodate a growing student population. In addition, this department plans for and constructs improvements, modernizations, and additions to existing facilities that are old and obsolete, and that do not meet current educational program requirements.

Through the development of the annual Capital Improvement Program, the Planning and Construction Department analyzes population trends, birth numbers, student enrollment patterns, and residential growth in Harford County and assists in the planning of new school facilities to accommodate student enrollment.

The development of a sound educational program, coupled with a modern physical environment is translated into a community school building at either the elementary, middle, or secondary level.

Accomplishments – FY 2011

- Completed construction of the new Red Pump Elementary School and obtained Certificate of Occupancy. (Board Goal 4)
- Completed construction of the wastewater treatment plant serving Fallston Middle School and Fallston High School. (Board Goal 4)
- Completed design and started construction of the wastewater treatment plant serving Harford Technical High, John Archer and Prospect Mill Elementary School. (Board Goal 4)

Goals – FY 2013

- Complete design and construction of roof replacement at Havre de Grace High School. (Board Goal 4)
- Complete design and installation of air conditioning at Youth's Benefit Elementary School – Primary building. (Board Goal 4)
- Complete design and installation of air conditioning at William Paca Elementary School. (Board Goal 4)
- Complete design and Phase II of Havre de Grace High School HVAC systemic renovation. (Board Goal 4)
- Complete design and Phase I at Jarrettsville Elementary School Comprehensive HVAC systemic replacement project. (Board Goal 4)
- Complete Site Master Planning and Scope Study for Havre de Grace High School. (Board Goal 4)
- Complete design and construction of Stadium Upgrades at Havre de Grace High School. (Board Goal 4)
- Complete design and installation of HVAC retrofit at Hall's Cross Roads Elementary School. (Board Goal 4)
- Complete design and installation of replacement of Ice Storage Chiller at Emmorton Elementary School. (Board Goal 4)
- Complete design and installation of central cooling plant up-grade to include chiller replacement and boiler room controls update and retrofit at Havre de Grace Elementary School. (Board Goal 4)
- Complete design and installation of central cooling plant up-grade to include chiller replacement at Church Creek Elementary School. (Board Goal 4)
- Complete design and construction of the waste water treatment plant off-site sewer hook-up at Red Pump Elementary School. (Board Goal 4)

Objectives – FY 2013

- The development of a sound educational program, coupled with a modern physical environment is translated into a community school building at either the elementary, middle, or secondary level. (Board Goal 4)
- Facilities are designed and constructed to provide a safe, secure, and healthy teaching and learning environment. (Board Goal 4)
- Facilities are designed and constructed that are attractive, affordable, and flexible in their design to accommodate differentiated teaching and learning styles as required. (Board Goal 4)
- Facilities are designed and constructed to allow students, teachers, and staff the opportunity to access the most current advances in technology. (Board Goal 4)
- Design and construction quality school facilities within budget and on schedule. (Board Goal 4)

Planning and Construction

SUSTAINABLE DESIGN STRATEGIES

HCPS uses Sustainable Design Strategies in the design and construction of our new school buildings. The following list highlights some of the sustainable design strategies used in the modernization of Edgewood High School.

SITE

- The building occurred on the existing school campus, negating the need for additional land procurement and development.
- Existing pavement base to be re-used at Middle School.
- Specimen trees saved where possible.
- Did not disturb sensitive areas such as the Chesapeake Bay Critical Area.
- High reflective concrete at pedestrian paths and plaza help reduce heat islands.
- Joint use of site with Parks and Recreation eliminating unnecessary "dual development".
- Bike racks installed on site to encourage "green transportation."

BUILDING

- The 3-story classroom area creates a compact footprint, minimizing site disturbance.
- The compact clusters provide an exterior wall building occurred on the existing school campus, negating the need for additional land procurement and development.
- Classroom ceilings are sloped to exterior wall to admit more daylight.
- A low sloped roof covered with a highly reflective white chip aggregate.

ENERGY EFFICIENCY/ INDOOR AIR QUALITY

- Use of total energy heat recovery wheels to capture and reuse waste heat to precondition outside air for the aerobics room, weight room, locker rooms, gymnasium and auditorium.
- Use of independent energy recovery units utilizing total energy recovery wheels to precondition outside air for areas of high exhaust including main street corridors and first floor area C.
- Use of a flat plate and frame heat exchanger capturing waste heat from the condenser water system to provide free summer reheat when needed for dehumidification.
- Use of multiple high efficiency water cooled chillers using dual variable speed compressors.
- Use of premium efficiency motors for all mechanical equipment.
- Variable supply air flow for assembly spaces to match space loads as determined by the number of occupants (dining, auditorium, gym).
- Air flow measurement of outdoor air, supply air and return air for all systems.
- Use of flat plate sensible heat recovery device for free reheat/dehumidification control for the locker room, weight room, and aerobic room for air handling systems.

Planning and Construction

SUSTAINABLE DESIGN STRATEGIES

ENERGY EFFICIENCY/ INDOOR AIR QUALITY (continued)

- Use of multiple high efficiency water cooled chillers using dual variable speed compressors.
- Lighting control through the ems for site lights, corridor lights, stairwell lights and dining area lights.
- Heating water supply temperature reset based on outdoor air temperature.
- Low flow plumbing fixtures.
- Complete automation of building systems performance while minimizing energy consumption.
- Measuring and monitoring of cooling BTU's, heating BTU's, building energy consumption in KW and metering of makeup water for all HVAC systems.

RECYCLING

- During construction/demolition - Recycling of demolished rubble for use on site as fill.
- Post occupancy – Recycling dumpster utilized.

LIGHTING AND POWER

- Multi-level switching of lamps is used in fixtures for classrooms, conference rooms and office applications.
- Full automatic shutoff of lighting systems using a combination of interior occupancy sensors and the Energy Management System auto-off of site lighting and interior public spaces.
- Daylight sensors are used with fixtures adjacent to windows and clerestory glazing.

WATER CONSERVATION

- Native and drought resistant plants that reduce the need for an irrigation system or extensive watering planted in appropriate area around the building perimeter.

FY 2013 Funding Adjustments

The changes for fiscal 2013 include:

- Net salary adjustments totaling (\$2,041);
- Decrease in other charges, (\$6,300); and,
- Decrease in equipment expense, (\$2,244).

The net decrease in expenditures from the fiscal 2012 budget for Planning and Construction is (\$10,585).

Planning and Construction

By Object Code	FY11	FY12	FY12	12 - 13	FY13
Planning and Construction	Actual	Actual	Budget	Change	Budget
Salaries	\$778,779	\$677,993	\$691,001	(\$2,041)	\$688,960
Contracted Services	\$73,369	\$108,845	\$134,132	\$0	\$134,132
Supplies	\$10,124	\$7,498	\$8,000	\$0	\$8,000
Other Charges	\$12,999	\$16,766	\$30,053	(\$6,300)	\$23,753
Equipment	\$11,830	\$2,007	\$4,099	(\$2,244)	\$1,855
Total	\$887,101	\$813,109	\$867,285	(\$10,585)	\$856,700

Full Time Equivalent Positions - Budgeted				
Planning and Construction	FY11	FY12	Change	FY13
Admin/Supv/Assist Supv	6.0	5.0	0.0	5.0
Clerical	2.0	2.0	0.0	2.0
Director	0.0	0.0	0.0	0.0
Planning/Construction	2.0	2.0	0.0	2.0
Total	10.0	9.0	0.0	9.0

By State Category	FY11	FY12	FY12	12 - 13	FY13	FY13
Planning and Construction	Actual	Actual	Budget	Change	Budget	FTE
MAINTENANCE OF PLANT						
Salaries	\$737,252	\$677,993	\$691,001	(\$2,041)	\$688,960	
Contracted Services	\$73,369	\$67,565	\$84,132	\$0	\$84,132	
Supplies	\$7,630	\$7,498	\$8,000	\$0	\$8,000	
Other Charges	\$12,999	\$16,766	\$30,053	(\$6,300)	\$23,753	
Equipment	\$11,000	\$1,827	\$4,099	(\$2,244)	\$1,855	
TOTAL	\$842,249	\$771,649	\$817,285	(\$10,585)	\$806,700	9.0
CAPITAL OUTLAY						
Salaries	\$41,528	\$0	\$0	\$0	\$0	
Contracted Services	\$0	\$41,280	\$50,000	\$0	\$50,000	
Supplies	\$2,494	\$0	\$0	\$0	\$0	
Equipment	\$831	\$180	\$0	\$0	\$0	
TOTAL	\$44,852	\$41,460	\$50,000	\$0	\$50,000	0.0
Grand Total	\$887,101	\$813,109	\$867,285	(\$10,585)	\$856,700	9.0