

Operations and Maintenance Summary

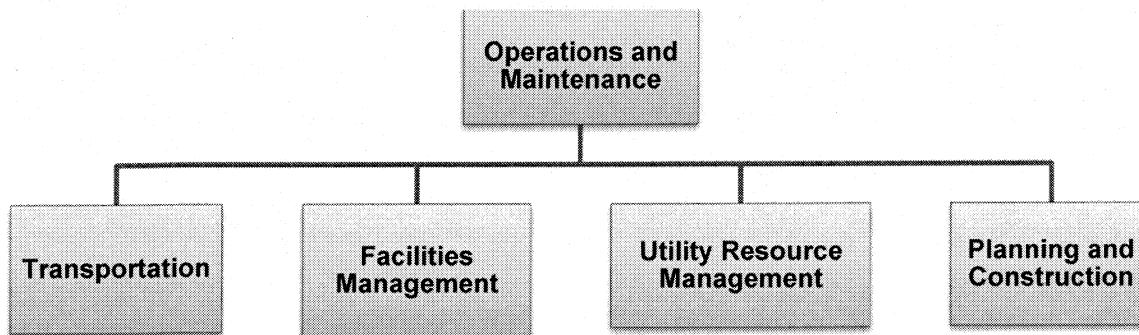
Program Overview

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 High Student Achievement.

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



	FY09 Actual	FY10 Actual	FY11 Actual	FY11 Budget	Change FY11- FY12	FY12 Budget
OPERATIONS AND MAINTENANCE	\$ 62,421,156	\$ 63,226,575	\$ 65,543,076	\$ 67,804,399	\$ (135,342)	\$ 67,669,057
Transportation	\$ 27,236,467	\$ 27,602,898	\$ 29,553,223	\$ 29,948,613	\$ 1,211,557	\$ 31,160,170
Facilities	\$ 19,543,932	\$ 20,404,451	\$ 20,843,806	\$ 21,687,181	\$ (312,217)	\$ 21,374,964
Utility Resource Management	\$ 14,616,125	\$ 14,313,039	\$ 14,258,946	\$ 15,215,271	\$ (942,383)	\$ 14,272,888
Purchasing	\$ 1,024,632	\$ 906,187	\$ 887,101	\$ 953,334	\$ (92,299)	\$ 861,035

Summary Operations and Maintenance

By Object Code	FY10 Actual	FY11 Actual	FY11 Budget	11 - 12 Change	FY12 Budget
Salaries	\$22,098,703	\$22,218,788	\$23,072,763	(\$271,455)	\$22,801,308
Contracted Services	\$24,447,709	\$25,982,294	\$26,409,204	\$1,076,291	\$27,485,495
Supplies	\$3,402,893	\$4,122,004	\$3,978,851	\$14,557	\$3,993,408
Other Charges	\$13,070,448	\$13,040,195	\$14,128,038	(\$954,735)	\$13,173,303
Equipment	\$206,821	\$179,794	\$215,543	\$0	\$215,543
Total	\$63,226,574	\$65,543,075	\$67,804,399	(\$135,342)	\$67,669,057

Budgeted Full Time Equivalent Positions				
	FY10	FY11	Change	FY12
Admin/Supv/Assist Supv	12.0	13.0	-1.0	12.0
Assistant Supervisor	2.0	1.0	0.0	1.0
Bus Attendant	80.0	85.0	3.0	88.0
Bus Driver	91.0	97.4	3.0	100.4
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	323.0	328.0	6.0	334.0
Director	2.0	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	10.0	11.0	0.0	11.0
Total	628.0	644.4	11.0	655.4

By State Category	FY10 Actual	FY11 Actual	FY11 Budget	11 - 12 Change	FY12 Budget
FY12 FTE: 211.4	STUDENT TRANSPORTATION				
Salaries	\$5,692,163	\$5,867,124	\$5,942,063	\$105,021	\$6,047,084
Contracted Services	\$20,553,429	\$21,848,918	\$22,074,167	\$1,102,000	\$23,176,167
Supplies	\$857,880	\$1,229,694	\$1,114,250	\$0	\$1,114,250
Other Charges	\$15,517	\$29,673	\$28,265	\$0	\$28,265
Equipment	\$844	\$5,739	\$7,500	\$0	\$7,500
TOTAL STUDENT TRANSPORTATION	\$27,119,833	\$28,981,149	\$29,166,245	\$1,207,021	\$30,373,266
FY12 FTE: 340.0	OPERATION OF PLANT				
Salaries	\$10,761,480	\$10,602,704	\$11,038,324	(\$171,475)	\$10,866,849
Contracted Services	\$1,915,916	\$1,724,803	\$1,906,751	(\$20,929)	\$1,885,822
Supplies	\$1,065,123	\$1,296,708	\$1,279,589	(\$298,443)	\$981,146
Other Charges	\$13,032,847	\$12,986,830	\$14,059,702	(\$954,735)	\$13,104,967
Equipment	\$55,199	\$35,739	\$58,593	\$0	\$58,593
TOTAL OPERATION OF PLANT	\$26,830,565	\$26,646,783	\$28,342,959	(\$1,445,582)	\$26,897,377
FY12 FTE: 103.0	MAINTENANCE OF PLANT				
Salaries	\$5,382,157	\$5,420,583	\$5,711,903	(\$205,001)	\$5,506,902
Contracted Services	\$1,978,365	\$2,408,574	\$2,378,286	(\$4,780)	\$2,373,506

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.

Accomplishments – FY 2010

- Once again, all HCPS drivers and attendants experienced a behind the wheel evaluation, exceeding the 50% COMAR mandate. (Board Goal 3 & 4)
- Reduction of emissions around all schools was realized by continuing to enforce an anti-idling policy. (Board Goal 4)
- Maintained an environment on HCPS school buses that was conducive to learning by conducting an anti-bullying campaign which substantially reduced the number of Federal filings. (Board Goal 4)
- Reduced the number of preventable accidents by 20% from the prior year. (Board Goal 4)

Goals – FY 2012

- Reduce the number of preventable accidents by 10% through continuing skills in-service-training focusing on safety. (Board Goal 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 Goal 3 & 4)

Objectives – FY 2012

- 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%

Transportation

FY 2012 Funding Adjustments

The changes for FY 2012 include:

Base Budget Adjustments for (\$424,000):

- Transfer funds to Transportation, Supplies - Grounds Equipment account, \$30,000, from Facilities Management, Repairs/Maintenance - Building and Grounds Supplies account.
- Transfer funds to Supplies - Repairs/Maintenance - Vehicle account, \$20,500, from Supplies - Fuel/Oil account, (\$20,500).
- Transfer funds from Transportation, Contracted Services - Science account, (\$3,000), to Regular Programs, Supplies - Other Supplies account.
- Transfer funds from Transportation, Equipment - Music account, (\$1,000), to Facilities Management, Contracted Services - Music account.
- To properly classify Maintenance Supplies for HCPS vehicles and grounds equipment from Other Supplies account (\$258,000) to Maintenance of Plant, Other Supplies account \$258,000; and,
- Reversal of one time fiscal 2011 year end transfer, (\$450,000).

Cost of Doing Business of \$1,635,557:

- 3.0 FTE Bus Drivers and 3.0 FTE Bus Attendants for newly ordered Special Education buses, 105,021;
- Contracted bus service rate increase of \$1,450,000;
- Additional contractor bus for the International Baccalaureate Magnet Program, \$53,000;
- Additional contractor bus for the Natural Resources Magnet Program, \$53,000; and,
- Salary variance adjustment of (\$25,464).

Transportation Department funding increased \$1,211,557 for fiscal 2012.

Transportation

By Object Code	FY10 Actual	FY11 Actual	FY11 Budget	11 - 12 Change	FY12 Budget
Salaries	\$5,842,532	\$6,000,768	\$6,102,175	\$79,557	\$6,181,732
Contracted Services	\$20,599,995	\$21,903,230	\$22,210,167	\$1,102,000	\$23,312,167
Supplies	\$1,125,613	\$1,592,686	\$1,578,750	\$30,000	\$1,608,750
Other Charges	\$15,517	\$29,673	\$28,265	\$0	\$28,265
Equipment	\$19,241	\$26,865	\$29,256	\$0	\$29,256
Total	\$27,602,898	\$29,553,223	\$29,948,613	\$1,211,557	\$31,160,170

Budgeted Full Time Equivalent Positions				
	FY10	FY11	Change	FY12
Admin/Supv/Assist Supv	3.0	3.0	0.0	3.0
Bus Attendant	80.0	85.0	3.0	88.0
Bus Driver	91.0	97.4	3.0	100.4
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	10.0	11.0	0.0	11.0
Total	196.0	208.4	6.0	214.4

By State Category	FY10 Actual	FY11 Actual	FY11 Budget	11 - 12 Change	FY12 Budget
FY12 FTE: 211.4 STUDENT TRANSPORTATION					
Salaries	\$5,692,163	\$5,867,124	\$5,942,063	\$105,021	\$6,047,084
Contracted Services	\$20,553,429	\$21,848,918	\$22,074,167	\$1,102,000	\$23,176,167
Supplies	\$857,880	\$1,229,694	\$1,114,250	\$0	\$1,114,250
Other Charges	\$15,517	\$29,673	\$28,265	\$0	\$28,265
Equipment	\$844	\$5,739	\$7,500	\$0	\$7,500
TOTAL STUDENT TRANSPORTATION	\$27,119,833	\$28,981,149	\$29,166,245	\$1,207,021	\$30,373,266
FY12 FTE: 0.0 OPERATION OF PLANT					
Supplies	\$174,061	\$228,386	\$278,500	(\$278,500)	\$0
TOTAL OPERATION OF PLANT	\$174,061	\$228,386	\$278,500	(\$278,500)	\$0
FY12 FTE: 3.0 MAINTENANCE OF PLANT					
Salaries	\$150,370	\$133,644	\$160,112	(\$25,464)	\$134,648
Contracted Services	\$46,567	\$54,313	\$136,000	\$0	\$136,000
Supplies	\$93,671	\$134,605	\$186,000	\$308,500	\$494,500
Equipment	\$18,396	\$21,125	\$21,756	\$0	\$21,756
TOTAL MAINTENANCE OF PLANT	\$309,004	\$343,687	\$503,868	\$283,036	\$786,904
Grand Total	\$27,602,898	\$29,553,223	\$29,948,613	\$1,211,557	\$31,160,170
FTE FY12: 214.4					

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 2010

- Recycling program resulted in \$114,000 reduction in refuse cost. (Board Goal 4)
- Continued to implement EPA Tools for Schools at all locations. (Board Goal 4)
- Replaced centralized food storage equipment with more energy efficient units. (Board Goal 4)
- Completed resurfacing at 5 locations. (Board Goal 4)
- Indoor bleacher replacement at 2 locations. (Board Goal 4)
- Fire alarm upgrades at 2 locations. (Board Goal 4)
- Removal of 7 underground storage tanks at 5 locations. (Board Goal 4)
- Comprehensive storm water management. (Board Goal 4)
- Infrared testing throughout Harford County Public Schools. (Board Goal 4)
- Preventive Maintenance across multiple trades. (Board Goal 4)

Goals – FY 2012

- 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)

Objectives – FY 2012

- 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; planned and unplanned. (Board Goal 4)

Facilities Management

FY 2012 Funding Adjustments

The changes for FY 2012 include:

Base Budget Adjustments net change (\$28,000):

- Transfer funds to Facilities Management, Contracted Services - Music Repairs account, \$2,000, from the Regular Programs, Equipment - Music account and Transportation, Equipment, Music account;
- Transfer funds from Operations Care & Upkeep - Fuel/Oil (\$20,500), to Maintenance of Plant - Repairs/Maintenance of Vehicle \$20,500;
- Transfer funds from Facilities Management, Repairs/Maintenance - Building and Grounds Supplies account, (\$30,000) to Transportation, Supplies - Grounds Equipment account; and,
- To properly classify Maintenance Supplies to repair Art Equipment from Contracted Services, Art account (\$500) to Supplies, Art account, \$500.

Cost of Doing Business of (\$304,274):

- 6.0 FTE Custodians Custodial Staff for Red Pump Elementary School, \$156,027;
- Property insurance adjustment, \$19,439;
- Reduce custodial substitute funding to provide 6.0 FTE Custodians Custodial Staff for Red Pump Elementary School , (\$249,200);
- Salary variance adjustment of (\$165,540);
- Savings on refuse disposal due to recycling initiatives, (\$25,000);
- Savings on air conditioning contracted services, (\$20,000); and,
- Savings on septic tank and pumping expense, (\$20,000).

Red Pump Elementary School expenses of \$20,057:

- Additional custodial supplies for Red Pump, \$10,057;
- Additional refuse disposal expense for Red Pump, \$6,000; and,
- Preventative maintenance supplies for Red Pump, \$4,000.

Facilities Management funding decreased (\$312,217) for fiscal 2012.

Facilities Management

By Object Code	FY10 Actual	FY11 Actual	FY11 Budget	11 - 12 Change	FY12 Budget
Salaries	\$15,188,487	\$15,286,827	\$16,052,418	(\$258,713)	\$15,793,705
Contracted Services	\$2,602,598	\$2,625,898	\$2,785,686	(\$57,500)	\$2,728,186
Supplies	\$2,164,195	\$2,441,921	\$2,299,601	(\$15,443)	\$2,284,158
Other Charges	\$265,842	\$348,492	\$368,105	\$19,439	\$387,544
Equipment	\$183,327	\$140,667	\$181,371	\$0	\$181,371
Total	\$20,404,451	\$20,843,806	\$21,687,181	(\$312,217)	\$21,374,964

Budgeted Full Time Equivalent Positions				
	FY10	FY11	Change	FY12
Admin/Supv/Assist Supv	3.0	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	323.0	328.0	6.0	334.0
Executive Director	1.0	1.0	0.0	1.0
Facilities/Maintenance	74.0	74.0	0.0	74.0
Technician	10.0	11.0	0.0	11.0
Total	417.0	424.0	6.0	430.0

By State Category	FY10 Actual	FY11 Actual	FY11 Budget	11 - 12 Change	FY12 Budget
FY12 FTE: 338.0	OPERATION OF PLANT				
Salaries	\$10,484,838	\$10,450,291	\$10,897,204	(\$171,475)	\$10,725,729
Contracted Services	\$1,048,223	\$790,082	\$1,005,377	(\$39,000)	\$966,377
Supplies	\$793,217	\$991,049	\$908,589	(\$19,943)	\$888,646
Other Charges	\$260,959	\$337,800	\$358,087	\$19,439	\$377,526
Equipment	\$54,576	\$35,306	\$57,776	\$0	\$57,776
TOTAL OPERATION OF PLANT	\$12,641,812	\$12,604,528	\$13,227,033	(\$210,979)	\$13,016,054
FY12 FTE: 91.0	MAINTENANCE OF PLANT				
Salaries	\$4,467,182	\$4,549,687	\$4,774,741	(\$87,238)	\$4,687,503
Contracted Services	\$1,554,376	\$1,835,816	\$1,780,309	(\$18,500)	\$1,761,809
Supplies	\$1,255,265	\$1,334,705	\$1,251,012	\$4,500	\$1,255,512
Other Charges	\$4,884	\$10,692	\$10,018	\$0	\$10,018
Equipment	\$128,751	\$105,361	\$123,595	\$0	\$123,595
TOTAL MAINTENANCE OF PLANT	\$7,410,458	\$7,836,261	\$7,939,675	(\$101,238)	\$7,838,437
FY12 FTE: 1.0	COMMUNITY SERVICES				
Salaries	\$236,467	\$286,849	\$380,473	\$0	\$380,473
Supplies	\$115,713	\$116,168	\$140,000	\$0	\$140,000
TOTAL COMMUNITY SERVICES	\$352,180	\$403,017	\$520,473	\$0	\$520,473
Grand Total	\$20,404,451	\$20,843,806	\$21,687,181	(\$312,217)	\$21,374,964
FTE FY12: 430.0					

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 2010

- Secured grants in excess of \$1,200,000 through MSDE and MEA to fund energy reduction construction projects and solar photovoltaic sites at six of our schools. (Board Goal 4)
- Received over \$260,000.00 in BGE Smart Energy Rebates. (Board Goal 4)
- Participated in BGE Load Response Program for A. A. Roberty Building, yielding \$7,500 in electric credits. (Board Goal 4)
- Installed occupancy light sensors in multiple schools. (Board Goal 4)
- Installed HVAC occupancy sensors in all portable classroom units. (Board Goal 4)
- Continued the change out of T12 ballasts and light bulbs at six remaining schools with more energy efficient T8 ballasts and light bulbs. (Board Goal 4)
- Installed hand dryers in three of our buildings to reduce paper towel usage and waste removal. (Board Goal 4)
- Energy Conservation strategies and initiatives are largely responsible for the approximate \$400,000 of funds that were redirected from Operations to assist the Special Education Program. These funds were available in spite of HCPS ever growing square footage and increase in the use of new energy consuming technologies. (Board Goal 4)

Goals – FY 2012

- 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)

Objectives – FY 2012

- Install energy efficient equipment. (Board Goal 4)
- Participate in Utility sponsored credit and rebate programs. (Board Goal 4)
- Upgrade lighting. (Board Goal 4)
- Investigate alternative sources of clean energy, i.e. solar and wind. (Board Goal 4)
- Establish a yearly training agenda and schedule for school based personnel. (Board Goal 3)

Utility Resource Management

ENERGY COST SAVING INITIATIVES

HCPS has implemented Energy and Resource Conservation Initiative designed to support educational goals and objectives, improve financial management systems and recognize savings while improving building operations and maintenance programs. HCPS coordinates all conservation initiatives through various conservation strategies.

- **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 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 Custodians to improve communication on energy and resource conservation issues.

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 2012 Funding Adjustments

The changes for FY 2012 include:

Cost of Doing Business of (\$1,128,383):

- Annual escalation of Johnson Controls Performance maintenance contracts, \$18,071;
- Increase in annual service agreements for energy management systems and performance contracts, \$13,720;
- A 6.7% decrease in electricity rate, due to a combination of a lower fixed rate block prices and lower capacity prices, (\$601,212);
- Savings in electricity, gas, and oil expenses due to the implementation of a comprehensive energy program focusing on the installation of energy program efficient equipment and lighting, (\$400,000);
- Electricity savings realized as a result of the Pilot Energy Program, (\$81,862); and,
- Electricity savings due to the installation of solar panels at six schools, (\$77,100).

Red Pump Elementary School expenses of \$186,000:

- Utility expenses for Red Pump Elementary School; Electricity \$154,000; Natural Gas \$26,000 and Water \$6,000.

Utility Resource Management funding decreased (\$943,383) for fiscal 2012.

Utility Resource Management

By Object Code	FY10 Actual	FY11 Actual	FY11 Budget	11 - 12 Change	FY12 Budget
Salaries	\$276,643	\$152,413	\$141,120	\$0	\$141,120
Contracted Services	\$1,166,040	\$1,379,798	\$1,279,219	\$31,791	\$1,311,010
Supplies	\$97,845	\$77,273	\$92,500	\$0	\$92,500
Other Charges	\$12,771,889	\$12,649,030	\$13,701,615	(\$974,174)	\$12,727,441
Equipment	\$623	\$433	\$817	\$0	\$817
Total	\$14,313,039	\$14,258,946	\$15,215,271	(\$942,383)	\$14,272,888

Budgeted Full Time Equivalent Positions				
	FY10	FY11	Change	FY12
Assistant Supervisor	2.0	1.0	0.0	1.0
Technician	2.0	1.0	0.0	1.0
Total	4.0	2.0	0.0	2.0

By State Category	FY10 Actual	FY11 Actual	FY11 Budget	11 - 12 Change	FY12 Budget
FY12 FTE: 2.0	OPERATION OF PLANT				
Salaries	\$276,643	\$152,413	\$141,120	\$0	\$141,120
Contracted Services	\$867,693	\$934,721	\$901,374	\$18,071	\$919,445
Supplies	\$97,845	\$77,273	\$92,500	\$0	\$92,500
Other Charges	\$12,771,889	\$12,649,030	\$13,701,615	(\$974,174)	\$12,727,441
Equipment	\$623	\$433	\$817	\$0	\$817
TOTAL OPERATION OF PLANT	\$14,014,692	\$13,813,869	\$14,837,426	(\$956,103)	\$13,881,323
FY12 FTE: 0.0	MAINTENANCE OF PLANT				
Contracted Services	\$298,347	\$445,076	\$377,845	\$13,720	\$391,565
TOTAL MAINTENANCE OF PLANT	\$298,347	\$445,076	\$377,845	\$13,720	\$391,565
Grand Total	\$14,313,039	\$14,258,946	\$15,215,271	(\$942,383)	\$14,272,888
FTE FY12: 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 2010

- Completed Phase III for Bel Air High Replacement School (Demolition & Site Improvements). (Board Goal 4)
- Completed Edgewood High Replacement School. (Board Goal 4)
- Completed Deerfield Elementary Replacement School. (Board Goal 4)
- Completed roof replacement project at Ring Factory Elementary School. (Board Goal 4)
- Completed patio project at Fallston High School. (Board Goal 4)

Goals – FY 2012

- Complete design and construction of roof replacement at North Bend Elementary School. (Board Goal 4)
- Complete design and construction of Bel Air MS Front Entrance Canopy Roof Replacement. (Board Goal 4)
- Complete design and construction of Wakefield ES Front Entrance Canopy Roof Replacement. (Board Goal 4)
- Complete design and Phase 1 of Havre de Grace High School HVAC systemic renovation. (Board Goal 4)
- Complete construction of the Waste Water Treatment Plant serving Harford Technical High School and the John Archer School. (Board Goal 4)

Objectives – FY 2012

- 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 2012 Funding Adjustments

The changes for FY 2012 include:

Wage Adjustments of (\$92,299):

- Reduce 1.0 FTE Assistant Supervisor Planning and Construction, (\$92,299).

Planning and Construction funding decreased (\$92,299) for fiscal 2012.

Planning and Construction

By Object Code	FY10 Actual	FY11 Actual	FY11 Budget	11 - 12 Change	FY12 Budget
Salaries	\$791,041	\$778,779	\$777,050	(\$92,299)	\$684,751
Contracted Services	\$79,076	\$73,369	\$134,132	\$0	\$134,132
Supplies	\$15,240	\$10,124	\$8,000	\$0	\$8,000
Other Charges	\$17,200	\$12,999	\$30,053	\$0	\$30,053
Equipment	\$3,630	\$11,830	\$4,099	\$0	\$4,099
Total	\$906,187	\$887,101	\$953,334	(\$92,299)	\$861,035

Budgeted Full Time Equivalent Positions				
	FY10	FY11	Change	FY12
Admin/Supv/Assist Supv	6.0	6.0	-1.0	5.0
Clerical	2.0	2.0	0.0	2.0
Director	1.0	0.0	0.0	0.0
Planning/Construction	2.0	2.0	0.0	2.0
Technician	0.0	0.0	0.0	0.0
Total	11.0	10.0	-1.0	9.0

By State Category	FY10 Actual	FY11 Actual	FY11 Budget	11 - 12 Change	FY12 Budget
FY12 FTE: 9.0	MAINTENANCE OF PLANT				
Salaries	\$764,605	\$737,252	\$777,050	(\$92,299)	\$684,751
Contracted Services	\$79,076	\$73,369	\$84,132	\$0	\$84,132
Supplies	\$6,370	\$7,630	\$8,000	\$0	\$8,000
Other Charges	\$17,200	\$12,999	\$30,053	\$0	\$30,053
Equipment	\$3,630	\$11,000	\$4,099	\$0	\$4,099
TOTAL MAINTENANCE OF PLANT	\$870,880	\$842,249	\$903,334	(\$92,299)	\$811,035
FY12 FTE: 0.0	CAPITAL OUTLAY				
Salaries	\$26,436	\$41,528	\$0	\$0	\$0
Contracted Services	\$0	\$0	\$50,000	\$0	\$50,000
Supplies	\$8,870	\$2,494	\$0	\$0	\$0
Equipment	\$0	\$831	\$0	\$0	\$0
TOTAL CAPITAL OUTLAY	\$35,307	\$44,852	\$50,000	\$0	\$50,000
Grand Total	\$906,187	\$887,101	\$953,334	(\$92,299)	\$861,035
FTE FY12: 9.0					