

# Energy Conservation: MCPS -- No. 796222

Category  
Subcategory  
Administering Agency  
Planning Area

Montgomery County Public Schools  
Countywide  
Public Schools  
Countywide

Date Last Modified  
Required Adequate Public Facility  
Relocation Impact  
Status

December 20, 2010  
No  
None  
On-going

### EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY09	Est. FY10	Total 6 Years	FY11	FY12	FY13	FY14	FY15	FY16	Beyond 6 Years
Planning, Design, and Supervision	3,090	845	295	1,950	325	325	325	325	325	325	0
Land	0	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	0	0	0	0	0	0	0	0	0	0	0
Construction	17,817	4,541	1,530	11,746	3,311	1,687	1,687	1,687	1,687	1,687	0
Other	615	300	45	270	45	45	45	45	45	45	0
<b>Total</b>	<b>21,522</b>	<b>5,686</b>	<b>1,870</b>	<b>13,966</b>	<b>3,681</b>	<b>2,057</b>	<b>2,057</b>	<b>2,057</b>	<b>2,057</b>	<b>2,057</b>	<b>*</b>

### FUNDING SCHEDULE (\$000)

Federal Stimulus	1,624	0	0	1,624	1,624	0	0	0	0	0	0
G.O. Bonds	19,898	5,686	1,870	12,342	2,057	2,057	2,057	2,057	2,057	2,057	0
<b>Total</b>	<b>21,522</b>	<b>5,686</b>	<b>1,870</b>	<b>13,966</b>	<b>3,681</b>	<b>2,057</b>	<b>2,057</b>	<b>2,057</b>	<b>2,057</b>	<b>2,057</b>	<b>0</b>

### OPERATING BUDGET IMPACT (\$000)

Maintenance				-3,480	-348	-696	-1,044	-464	-464	-464	
Energy				-3,738	-374	-748	-1,122	-498	-498	-498	
<b>Net Impact</b>				<b>-7,218</b>	<b>-722</b>	<b>-1,444</b>	<b>-2,166</b>	<b>-962</b>	<b>-962</b>	<b>-962</b>	

#### DESCRIPTION

The MCPS Energy Conservation Program has saved more than \$34 million since the project began in FY 1978. The project has been reviewed by the Interagency Committee on Energy and Utility Management. The program is designed to reduce energy consumption by improving building mechanical systems, retrofitting building lighting and control systems, and controlling HVAC equipment through computer management systems. Computer systems currently control the operation of most MCPS facilities.

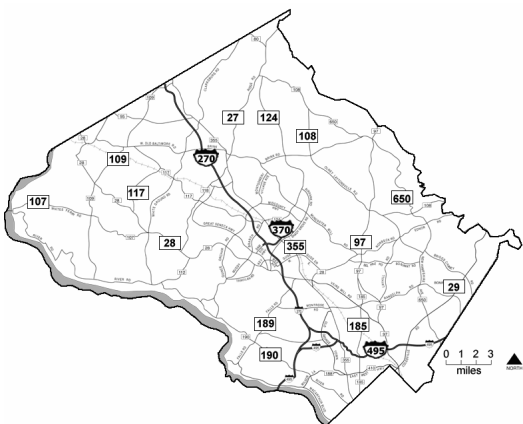
New and modernized schools are built with the latest technological advances to achieve higher levels of energy savings. Energy conservation staff review new construction mechanical guidelines and designs. Staff also inspect and perform computer diagnostics of HVAC installations for operational efficiency and review certain aspects of indoor air quality.

An FY 2005 appropriation was approved to continue this project. The increase in expenditures, beyond the level of effort for this project for FY 2005 and beyond, is due to the need to modernize energy management systems facing obsolescence. Of the over 170 installed energy management systems, many were installed in the 1980s, are approaching the end of their life-cycle, and replacement parts are no longer available. The approved FY 2005 appropriation and the FY 2006 appropriation include \$250K to complete pilot projects and select replacement technologies, including network and web interfaces. The expenditures shown for FY 2007 will achieve an economy of scale by bidding a large package of projects together. Expenditures shown over the six-year period will be used to complete the countywide lighting modernization program at the remaining 31 facilities. Expenditures shown for FY 2008-2010 will be used for the ongoing life-cycle replacement costs of energy management and control systems at over 170 facilities, to support the extension of the program to the remaining facilities, to support a planned program of water conservation projects, and to avoid future backlog in this area. An FY 2006 appropriation was approved to continue this project. An FY 2007 appropriation was approved to continue this project at its current level of effort. An FY 2008 appropriation was approved to continue this project at its current level of effort. An FY 2009 appropriation was approved to continue this project. An FY 2010 appropriation was approved to continue this project at its current level of effort.

An FY 2011 appropriation was approved to continue this project. Energy conservation capital improvements and construction projects are being installed in 20 to 30 schools each year. These projects require additional controls system integration outside the scope of the current budget. Of the 183 energy management system installations, 65 remain to be upgraded or replaced. Expenditures in the six-year period will address the controls system integration, the energy management system upgrades, and continue the countywide lighting modernization schedule.

#### OTHER DISCLOSURES

- \* Expenditures will continue indefinitely.

APPROPRIATION AND EXPENDITURE DATA	COORDINATION																								
<table border="1"> <tr> <td>Date First Appropriation</td> <td>FY79</td> <td>(\$000)</td> </tr> <tr> <td>First Cost Estimate</td> <td>FY96</td> <td>8,061</td> </tr> <tr> <td>Current Scope</td> <td></td> <td></td> </tr> <tr> <td>Last FY's Cost Estimate</td> <td></td> <td>15,036</td> </tr> </table>	Date First Appropriation		FY79	(\$000)	First Cost Estimate	FY96	8,061	Current Scope			Last FY's Cost Estimate		15,036	<p>Montgomery College County Government Comprehensive Facilities Plan Interagency Committee - Energy and Utilities Management MCPS Resource Conservation Plan County Code 8-14a</p> <table border="1"> <tr> <td>\$(000)</td> <td>FY11</td> <td>FY12-16</td> </tr> <tr> <td>Salries and Wages:</td> <td>93</td> <td>465</td> </tr> <tr> <td>Fringe Benefits:</td> <td>33</td> <td>165</td> </tr> <tr> <td>Workyears:</td> <td>1.5</td> <td>7.5</td> </tr> </table>	\$(000)	FY11	FY12-16	Salries and Wages:	93	465	Fringe Benefits:	33	165	Workyears:	1.5
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