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 May 21, 2012 No None On-going

EXPENDITURE SCHEDULE (\$000)

		LAF	LIADITO	VE SOUR		,000					
Cost Element	Total	Thru FY11	Est. FY12	Total 6 Years	FY13	FY14	FY15	FY16	FY17	FY18	Beyond 6 Years
Planning, Design, and Supervision	3,740	1,465	325	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	21,191	9,382	1,687	10,122	1,687	1,687	1,687	1,687	1,687	1,687	0
Other	705	390	45	270	45	45	45	45	45	45	0
Total	25,636	11,237	2,057	12,342	2,057	2,057	2,057	2,057	2,057	2,057	*
		F	UNDING	SCHED	ULE (\$00	0)					
Federal Stimulus	1,624	1,624	0	. 0	0	0	0	0	0	0	0
G.O. Bonds	24,012	9,613	2,057	12,342	2,057	2,057	2,057	2,057	2,057	2,057	0
Total	25,636	11,237	2,057	12,342	2,057	2,057	2,057	2,057	2,057	2,057	0
		OPERA	TING BU	IDGET IN	IPACT (\$	000)					
Maintenance				-3,364	-1,044	-464	-464	-464	-464	-464	
Energy				-3,612	-1,122	-498	-498	-498	-498	-498	
Net Impact				-6,976	-2,166	-962	-962	-962	-962	-962	

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 aviod 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 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. An FY 2011 supplemental appropriation in the amount of \$1.624\$ million was approved to utilize federal grant dollars for energy efficiency and renewable energy related capital projects. An FY 2012 appropriation was approved to continue this project. An FY 2013 appropriation was approved to continue this project. An FY 2013 appropriation was approved to continue the countywide lighting modernization schedule.

OTHER DISCLOSURES

- * Expenditures will continue indefinitely.

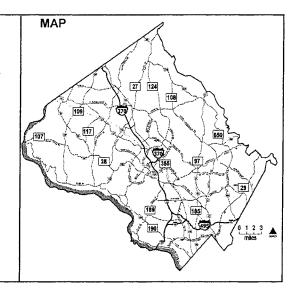
APPROPRIATION AND		
EXPENDITURE DATA		
Date First Appropriation	FY79	(\$000)
First Cost Estimate Current Scope	FY96	8,061
Last FY's Cost Estimate		21,522
Appropriation Request	FY13	2,057
Appropriation Request Est.	FY14	2,057
Supplemental Appropriation Red	. 0	
Transfer		0
Cumulative Appropriation		13,294
Expenditures / Encumbrances		7,570
Unencumbered Balance		5,724
Partial Closeout Thru	FY10	19,208
New Partial Closeout	FY11	0
Total Partial Closeout		19,208

COORDINATION

Montgomery College County Government Comprehensive Facilities Plan Interagency Committee - Energy and Utilities Management MCPS Resource Conservation Plan County Code 8-14a

\$(000) FY13 FY14-18
Salries and Wages: 93 465
Fringe Benefits: 33 165
Workyears: 1.5 7.5

19-6



County Council