

Energy Conservation: MCG -- No. 507834

Category
Subcategory
Administering Agency
Planning Area

General Government
County Offices and Other Improvements
General Services
Countywide

Date Last Modified
Required Adequate Public Facility
Relocation Impact
Status

January 05, 2012
No
None.
On-going

EXPENDITURE SCHEDULE (\$000)

Cost Element	Total	Thru FY11	Est. FY12	Total 6 Years	FY13	FY14	FY15	FY16	FY17	FY18	Beyond 6 Years
Planning, Design, and Supervision	388	35	155	198	33	33	33	33	33	33	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	1,159	38	419	702	117	117	117	117	117	117	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	1,547	73	574	900	150	150	150	150	150	150	*

FUNDING SCHEDULE (\$000)

Current Revenue: General	4	0	4	0	0	0	0	0	0	0	0
G.O. Bonds	1,543	73	570	900	150	150	150	150	150	150	0
Total	1,547	73	574	900	150	150	150	150	150	150	0

OPERATING BUDGET IMPACT (\$000)

Maintenance				-42	-7	-7	-7	-7	-7	-7	-7
Energy				-258	-43	-43	-43	-43	-43	-43	-43
Net Impact				-300	-50	-50	-50	-50	-50	-50	-50

DESCRIPTION

This program provides for profitable energy conservation retrofits in County-owned buildings. Retrofits to lighting systems, building envelopes, heating and cooling controls, and boiler efficiency upgrades are provided through this project. A central Energy Management and Control System (EMS) will be installed to monitor major buildings. Energy audits have been conducted to identify and prioritize energy conservation projects throughout the 105 largest buildings. Advanced energy-saving technologies are introduced into County facilities as they become economical and reliable. Retrofits are performed during off hours and do not disrupt services at affected buildings. For new construction and renovation projects, energy design guidance is provided to contractors, and energy budgets are developed and enforced. Utility costs for County facilities are monitored in a computer database.

The project scope includes replacement, upgrading and conversion of the automatic temperature control (ATC) and building automation system (BAS) from existing non-reliable pneumatic controls and drives to integrated direct digital control (DDC) system. This will include electronic damper/valve drives for air ducts and hydronic loops and remote control and monitoring capability from 1301 Seven Locks Road.

JUSTIFICATION

This program is part of the County's cost-containment program. The projects pay for themselves in a short time, generally one to ten years. The County then continues to benefit for many years through lower utility costs. The program is environmentally responsible in reducing the need for utility power plants and decreasing greenhouse gas emissions. The project fulfills the County's voluntary commitment to reduce energy use in all its buildings under the EPA Energy Star Buildings Program. The project is necessary to fulfill the mandate of Montgomery County Code Section 8-14A, Building Energy Design Standards. Improvements in lighting and HVAC controls also improve employee comfort and productivity. Major retrofits of these energy technologies will be made at all County facilities not presently scheduled for renovation. Future maintenance costs are also reduced.

Additional benefits include energy conservation, improved system control and response, improved indoor ambient conditions, improved system reliability and availability, and avoiding unavailability and obsolescence of the repair parts for the existing systems.

OTHER

Scheduled Upgrades:

FY13: Lighting Upgrade - Germantown Library, Public Safety Communications Center

FY13: Planning and Design Controls Upgrade - Potomac Library, Kensington Library. Construction and Implementation - Chevy Chase Library, Little Falls Library

FY14: Construction and Implementation - Potomac Library, Kensington Library.

OTHER DISCLOSURES

- * Expenditures will continue indefinitely.

APPROPRIATION AND EXPENDITURE DATA		
Date First Appropriation	FY78	(\$000)
First Cost Estimate		
Current Scope	FY12	1,547
Last FY's Cost Estimate		1,547
Appropriation Request	FY13	150
Appropriation Request Est.	FY14	150
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		647
Expenditures / Encumbrances		156
Unencumbered Balance		491
Partial Closeout Thru	FY10	10,140
New Partial Closeout	FY11	0
Total Partial Closeout		10,140

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