

Energy Conservation: MCG (P507834)

Category	General Government	Date Last Modified	12/12/12
Sub Category	County Offices and Other Improvements	Required Adequate Public Facility	No
Administering Agency	General Services (AAGE29)	Relocation Impact	None
Planning Area	Countywide	Status	Ongoing

Total	Thru FY12	Rem FY12	Total 6 Years	FY 13	FY 14	FY 15	FY 16	FY 17	FY 18	Beyond 6 Yrs
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EXPENDITURE SCHEDULE (\$000s)

Planning, Design and Supervision	353	10	145	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	1,121	15	404	702	117	117	117	117	117	117	0
Other	0	0	0	0	0	0	0	0	0	0	0
Total	1,474	25	549	900	150	150	150	150	150	150	0

FUNDING SCHEDULE (\$000s)

Current Revenue: General	4	0	4	0	0	0	0	0	0	0	0
G.O. Bonds	1,470	25	545	900	150	150	150	150	150	150	0
Total	1,474	25	549	900	150	150	150	150	150	150	0

OPERATING BUDGET IMPACT (\$000s)

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

APPROPRIATION AND EXPENDITURE DATA (000s)

Appropriation Request	FY 14	150
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		724
Expenditure / Encumbrances		28
Unencumbered Balance		696

Date First Appropriation	FY 78
First Cost Estimate	
Current Scope	FY 12
Last FY's Cost Estimate	1,547
Partial Closeout Thru	10,140
New Partial Closeout	25
Total Partial Closeout	10,165

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.

Disclosures

Expenditures will continue indefinitely.

Coordination

Energy Conservation Work Program - Energy Star Upgrades, Department of General Services, Department of Environmental Protection