

# Energy Conservation: College (P816611)

Category: Montgomery College  
 Sub Category: Higher Education  
 Administering Agency: Montgomery College (AAGE15)  
 Planning Area: Countywide

Date Last Modified: 11/17/14  
 Required Adequate Public Facility: No  
 Relocation Impact: None  
 Status: Ongoing

	Total	Thru FY16	Rem FY16	Total 6 Years	FY 17	FY 18	FY 19	FY 20	FY 21	FY 22	Beyond 6 Yrs
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### EXPENDITURE SCHEDULE (\$000s)

Planning, Design and Supervision	2,342	1,812	50	480	80	80	80	80	80	80	0
Land	0	0	0	0	0	0	0	0	0	0	0
Site Improvements and Utilities	59	59	0	0	0	0	0	0	0	0	0
Construction	2,935	2,646	19	270	45	45	45	45	45	45	0
Other	132	132	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>5,468</b>	<b>4,649</b>	<b>69</b>	<b>750</b>	<b>125</b>	<b>125</b>	<b>125</b>	<b>125</b>	<b>125</b>	<b>125</b>	<b>0</b>

### FUNDING SCHEDULE (\$000s)

Current Revenue: General	2,106	2,010	0	96	16	16	16	16	16	16	0
Federal Aid	49	49	0	0	0	0	0	0	0	0	0
G.O. Bonds	3,262	2,539	69	654	109	109	109	109	109	109	0
State Aid	51	51	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>5,468</b>	<b>4,649</b>	<b>69</b>	<b>750</b>	<b>125</b>	<b>125</b>	<b>125</b>	<b>125</b>	<b>125</b>	<b>125</b>	<b>0</b>

### OPERATING BUDGET IMPACT (\$000s)

Energy				-6,810	-1,010	-1,060	-1,110	-1,160	-1,210	-1,260
Maintenance				-2,580	-380	-400	-420	-440	-460	-480
<b>Net Impact</b>				<b>-9,390</b>	<b>-1,390</b>	<b>-1,460</b>	<b>-1,530</b>	<b>-1,600</b>	<b>-1,670</b>	<b>-1,740</b>
Full Time Equivalent (FTE)					1.0	1.0	1.0	1.0	1.0	1.0

### APPROPRIATION AND EXPENDITURE DATA (000s)

Appropriation Request	FY 18	125
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		4,843
Expenditure / Encumbrances		4,714
Unencumbered Balance		129

Date First Appropriation	FY 81	
First Cost Estimate		
Current Scope	FY 17	5,468
Last FY's Cost Estimate		5,468

## Description

This project provides funding to (1) continue development of a Collegewide energy management program, (2) implement life-cycle cost effective energy conservation measures based upon energy audits, and (3) review new building/renovation designs for compliance with Montgomery County Code, Ch. 8 Building Energy Performance Standards. Typical project activities include retrofits and modifications of lighting, controls, and HVAC equipment; building envelope modifications; solar energy retrofits; computer equipment for equipment control and energy-use monitoring; HVAC system evaluation/balancing studies; long-range energy/utility planning studies; central plant design plans (Germantown, Rockville, Takoma Park/Silver Spring); and waste management studies. Typical payback on lighting, controls, HVAC and solar energy modifications is five to six years. This project includes one staff position for a Utility Analyst which is in response to increased workload associated with the energy and utility functions, but also the design reviews of major projects, planned lifecycle asset replacements, and capital renewals, as well as complying with laws.

## Cost Change

Increase due to the addition of FY21 and FY22.

## Justification

As mandated by Ch. 8 of the County Code and supported by the College, County Council, the Interagency Committee on Energy & Utility Management (ICEUM), and the Citizens Energy Conservation Advisory Committee (ECAC), an energy cost reduction program has been developed. This program consists of energy audits performed by College staff to identify life cycle cost effective retrofits, including a lighting retrofit program, LEED certification, etc.

## Other

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FY2017 Appropriation: \$125,000 (G.O. Bonds). FY2018 Appropriation: \$125,000 (G.O. Bonds). The following fund transfers have been made from this project: \$21,420 to Central Plant Distribution System project (#P886676) (BOT Resolution #90-102, 6/18/90); \$70,000 to Fine Arts Renovation (#P906601) (BOT Resolution #94-114, 9/19/94), \$7,000 to Planning, Design & Construction project (#P906605) (BOT Resolution #01-153, 10/15/01), and \$200,000 to Germantown Bioscience Education Center Project (#P056603)(BOT Resol. #12-06-036, 6/11/12). Beginning in FY98, the portion of this project funded by County Current Revenues migrated to the College's Operating Budget. It is anticipated that migration of this portion of the project will promote a desirable consistency with County budgeting practices and encourage greater competition in an environment of scarce resources. Reflecting the migration of this portion of the project, the College's Operating Budget includes funds for this effort. New construction and building renovation projects under review during FY14-15 include planning for new buildings on the Rockville and Germantown campuses. Campus utilities master plans are currently being updated to conform to the approved Facilities Master Plan Update (1/15). This project is also coordinated with the Collegewide Facilities Condition Assessment Update (12/13).

### **Disclosures**

Expenditures will continue indefinitely.

Montgomery College (A15) asserts that this project conforms to the requirements of relevant local plans, as required by the Maryland Economic Growth, Resource Protection and Planning Act.

### **Coordination**

This project is coordinated with the scheduled building renovations, and the planned construction of new buildings, on the Rockville, Germantown, and Takoma Park/Silver Spring Campuses., ICEUM & ECAC, Facility Planning: College (CIP No. P886686), Planned Lifecycle Asset Replacement: College (CIP No. P926659), Roof Replacement: College (CIP No. P876664)