

# Energy Conservation: College (P816611)

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

Date Last Modified: 12/23/13  
 Required Adequate Public Facility: No  
 Relocation Impact: None  
 Status: Ongoing

Total	Thru FY13	Est FY14	Total 6 Years	FY 15	FY 16	FY 17	FY 18	FY 19	FY 20	Beyond 6 Yrs
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### EXPENDITURE SCHEDULE (\$000s)

Planning, Design and Supervision	1,909	1,663	96	150	25	25	25	25	25	25	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	3,118	2,403	115	600	100	100	100	100	100	100	0
Other	132	131	1	0	0	0	0	0	0	0	0
<b>Total</b>	<b>5,218</b>	<b>4,256</b>	<b>212</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	1,994	1,994	0	0	0	0	0	0	0	0	0
Federal Aid	49	49	0	0	0	0	0	0	0	0	0
G.O. Bonds	3,124	2,162	212	750	125	125	125	125	125	125	0
State Aid	51	51	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>5,218</b>	<b>4,256</b>	<b>212</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				-1,670	-910	-960	-1,010	-1,060	1,110	1,160
Maintenance				-620	-340	-360	-380	-400	420	440
<b>Net Impact</b>				<b>-2,290</b>	<b>-1,250</b>	<b>-1,320</b>	<b>-1,390</b>	<b>-1,460</b>	<b>1,530</b>	<b>1,600</b>

### APPROPRIATION AND EXPENDITURE DATA (000s)

Appropriation Request	FY 15	125
Appropriation Request Est.	FY 16	125
Supplemental Appropriation Request		0
Transfer		0
Cumulative Appropriation		4,468
Expenditure / Encumbrances		4,256
Unencumbered Balance		212

Date First Appropriation	FY 81	
First Cost Estimate		
Current Scope	FY 15	5,218
Last FY's Cost Estimate		4,968
Partial Closeout Thru		0
New Partial Closeout		0
Total Partial Closeout		0

## 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.

## Cost Change

Increase due to the addition of FY19 and FY20.

## 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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FY2015 Appropriation: \$125,000 (G.O. Bonds).

FY2016 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 (1/13). This project is also coordinated with the Collegewide Facilities Condition Assessment Update (pending 11/13).

### **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)