

# Energy Conservation: MCPS (P796222)

Category: Montgomery County Public Schools  
 Sub Category: Countywide  
 Administering Agency: Public Schools (AAGE18)  
 Planning Area: Countywide

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

|  | Total | Thru FY15 | Est FY16 | Total 6 Years | FY 17 | FY 18 | FY 19 | FY 20 | FY 21 | FY 22 | Beyond 6 Yrs |
|--|-------|-----------|----------|---------------|-------|-------|-------|-------|-------|-------|--------------|
|--|-------|-----------|----------|---------------|-------|-------|-------|-------|-------|-------|--------------|

### EXPENDITURE SCHEDULE (\$000s)

|                                  |               |               |              |               |              |              |              |              |              |              |          |
|----------------------------------|---------------|---------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------|
| Planning, Design and Supervision | 5,040         | 2,765         | 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                     | 27,939        | 16,130        | 1,687        | 10,122        | 1,687        | 1,687        | 1,687        | 1,687        | 1,687        | 1,687        | 0        |
| Other                            | 885           | 570           | 45           | 270           | 45           | 45           | 45           | 45           | 45           | 45           | 0        |
| <b>Total</b>                     | <b>33,864</b> | <b>19,465</b> | <b>2,057</b> | <b>12,342</b> | <b>2,057</b> | <b>2,057</b> | <b>2,057</b> | <b>2,057</b> | <b>2,057</b> | <b>2,057</b> | <b>0</b> |

### FUNDING SCHEDULE (\$000s)

|                  |               |               |              |               |              |              |              |              |              |              |          |
|------------------|---------------|---------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|----------|
| Federal Stimulus | 1,624         | 1,624         | 0            | 0             | 0            | 0            | 0            | 0            | 0            | 0            | 0        |
| G.O. Bonds       | 31,552        | 17,153        | 2,057        | 12,342        | 2,057        | 2,057        | 2,057        | 2,057        | 2,057        | 2,057        | 0        |
| State Aid        | 688           | 688           | 0            | 0             | 0            | 0            | 0            | 0            | 0            | 0            | 0        |
| <b>Total</b>     | <b>33,864</b> | <b>19,465</b> | <b>2,057</b> | <b>12,342</b> | <b>2,057</b> | <b>2,057</b> | <b>2,057</b> | <b>2,057</b> | <b>2,057</b> | <b>2,057</b> | <b>0</b> |

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

|                   |  |  |  |               |             |             |          |          |          |          |
|-------------------|--|--|--|---------------|-------------|-------------|----------|----------|----------|----------|
| Energy            |  |  |  | -996          | -498        | -498        | 0        | 0        | 0        | 0        |
| Maintenance       |  |  |  | -928          | -464        | -464        | 0        | 0        | 0        | 0        |
| <b>Net Impact</b> |  |  |  | <b>-1,924</b> | <b>-962</b> | <b>-962</b> | <b>0</b> | <b>0</b> | <b>0</b> | <b>0</b> |

### APPROPRIATION AND EXPENDITURE DATA (000s)

|                                    |       |        |
|------------------------------------|-------|--------|
| Appropriation Request              | FY 17 | 2,057  |
| Appropriation Request Est.         | FY 18 | 2,057  |
| Supplemental Appropriation Request |       | 0      |
| Transfer                           |       | 0      |
| Cumulative Appropriation           |       | 21,522 |
| Expenditure / Encumbrances         |       | 17,316 |
| Unencumbered Balance               |       | 4,206  |

|                          |             |
|--------------------------|-------------|
| Date First Appropriation | FY 79       |
| First Cost Estimate      |             |
| Current Scope            | FY 96 8,061 |
| Last FY's Cost Estimate  | 29,750      |
| Partial Closeout Thru    | 19,208      |
| New Partial Closeout     | 0           |
| Total Partial Closeout   | 19,208      |

## 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. To date, 197 facilities have energy management system installations; to keep up with advances in computer technology, each is on a schedule for upgrade and/or replacement 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 2014 appropriation was approved to continue this project. An FY 2015 appropriation was approved to continue this level of effort project. An FY 2016 appropriation was approved to continue the upgrades/replacements necessary to reduce energy consumption at MCPS facilities. An FY 2017 appropriation is requested to continue this level of effort project to provide upgrades/replacements of building mechanical systems.

## Disclosures

Expenditures will continue indefinitely.

Public Schools (A18) 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

Montgomery College, County Government, Comprehensive Facilities Plan, Interagency Committee - Energy and Utilities Management, MCPS Resource Conservation Plan, County Code 8-14a FY 2017 -- Salaries and Wages: \$140K, Fringe Benefits: \$65K, Workyears: 1.5 FY 2018-2022 -- Salaries and Wages: \$700K, Fringe Benefits: \$325K, Workyears: 7.5