# Chapter 5

# **Countywide Projects**

Montgomery County Public Schools (MCPS) has many capital projects that are not for one particular school, but rather are programmed to meet the needs of many schools across the county. These projects involve multiyear plans with different schools scheduled each year, and are referred to as countywide projects. The assessment and selection process for many of these projects is carried out through an annual review process that involves school principals, maintenance, planning, and construction staff.

The primary countywide projects that address the physical environment in schools include: compliance with the *Americans with Disabilities Act* (ADA); Asbestos Abatement; Fire Safety Code Upgrades; Heating, Ventilation and Air Conditioning (HVAC); Planned Life-cycle Asset Replacement (PLAR); and Roof Replacement. These projects require an assessment of each school relative to the needs of other schools and the development of schedules based on available funding. Some projects, such as ADA, Asbestos Abatement, and Stormwater Management are driven by mandates that require an evaluation and action plan in order to meet federal, state, and local regulations.

Maintenance and replacement projects are critical to keep aging school facilities operational. As schools age, they are placed on a maintenance and repair ladder, moving from minor repairs to outright replacement of major systems. PLAR and the countywide projects that focus on roof replacements and mechanical system rehabilitations are essential to the preservation of the school systems' infrastructure. Intensive maintenance and rehabilitation efforts to extend the useful life of schools occur through the following projects: HVAC, PLAR, and Roof Replacement.

A brief description of each countywide project follows.

# Americans with Disabilities Act (ADA) Compliance

Funds from this project support compliance with federal and state laws and regulations regarding the accessibility of school facilities for persons with disabilities. The items most frequently provided are ramps, elevators, and wider door openings for wheelchair accessibility. Accessible bathrooms and water fountains also are funded as part of this program. The goal is to provide access to all spaces in MCPS buildings. In some cases, programs have been relocated to accommodate students until full accessibility can be met. Funding for this program will continue beyond the six-year planning period. A comprehensive Accessibility Evaluation of MCPS school facilities has been completed over the past two years. MCPS contracted with an independent engineering firm to assess the facilities and collect data according to requirements of 28 CRF Part 35, the 2010 ADA Design Standards for Accessible Design, and the State of Maryland Building Code sections related to accessibility. Summarized tables of the data collected can be found on the Department of Facilities Management website.

#### **Asbestos Abatement**

Federal and state regulations require the management and ultimately, the removal of asbestos from schools. Funds from this project support compliance with these mandates. As a cost saving measure, a special group of MCPS employees has been trained to remove asbestos in a manner that complies with strict safety requirements. However, projects that are larger than this group can accommodate are competitively bid and are funded through this project. Funding for this program will continue beyond the six—year planning period.

# Building Modifications and Program Improvements

This project provides facility modifications and program improvements to schools that are not scheduled for capital project in the near future.

### **Design and Construction Management**

This project provides funding for the MCPS staff necessary to assure the successful planning, design, and construction of the capital projects contained in the six-year CIP.

### **Early Childhood Centers**

Early childhood programs in MCPS are targeted to children and families affected by poverty, including children with disabilities, and provides them with additional time to acquire literacy, mathematics, and social/emotional skills for success in school and later learning in life. In MCPS, 65 elementary schools have locally funded Prekindergarten and/or federally funded Head Start classes. These programs provide opportunities for children to build school-readiness skills by increasing social interactions, building oral language skills, and fostering vocabulary development. This project provides funding for MCPS to further expand early childhood programs throughout the county.

# Emergency Replacement of Major Building Components

This project will provide funds for the emergency replacement of major building components throughout the school system. These funds will allow projects that are in other countywide systemic projects, such as HVAC Replacement, to maintain their schedules when emergency replacements arise.

### **Facility Planning**

In order to assure the availability of accurate cost estimates for facility construction, a feasibility study process is conducted for additions, new schools and Major Capital projects. An architect is hired to develop and evaluate several feasible options that meet the project's needs. For each option, a cost estimate is prepared and an analysis is performed to determine the most

cost-effective solution. This "preplanning" information is used to develop a budget for submission to the County Council for funding. The feasibility study process helps to produce a clear understanding of the feasibility, scope, and cost for each project.

#### **Fire Safety Code Upgrades**

This project funds building modifications to meet Fire Marshall and life safety code requirements. Facility modifications to be addressed in this project are sprinklers, escape windows, exit signs, fire alarm devices, and exit stairs.

### Heating, Ventilation, and Air Conditioning (HVAC) Mechanical Systems Replacement

This project provides an orderly replacement of heating, ventilation, and air conditioning systems in MCPS facilities not scheduled for revitalization/expansion.

### Improved (Safe) Access to Schools

This project addresses vehicular access to schools. Projects may involve the widening of a street or road, obtaining rights—of—way for vehicular access, or the addition of entrances to school sites. The list of specific school projects is approved annually by the County Council.

#### **Major Capital Projects**

This project includes large-scale renovations of facilities, possibly including programmatic and capacity considerations. There are two master projects—Elementary Major Capital Projects and Secondary Major Capital Projects.

# Materials Management Building Relocation

The MCPS Materials Management Warehouse serves the critical mission of storing and delivering necessary educational materials to all schools and office the building systems and infrastructure is beyond its life-cycle. Funds included in this project will begin the search and design process to relocate this warehouse.

### **Outdoor Play Space Maintenance**

Many school sites, especially at the elementary school level, face site constraints and limitations due to school overutilization, the need to place relocatable classrooms on paved play and field areas, as well as site size and other conditions. Funds included in this project will allow MCPS to more fully integrate outdoor play areas into maintenance practices and create solutions when schools present challenges to a conventional approach. This pilot project will evaluate the outdoor program/play areas at MCPS schools, establish improved maintenance practices for these sites, and identify potential solutions to provide adequate and appropriate outdoor program/play areas, particularly at elementary schools with severely compromised sites.

# Planned Life-cycle Asset Replacement (PLAR)

This project provides funding for the repair or replacement of major site improvements and building systems that have reached the end of their useful life. Some of the items that this project covers are field rehabilitation, exterior resurfacing (including driveways and tennis courts), interior partitions, doors, lighting, windows, security gates, bleachers, communications systems, and flooring. All projects are evaluated, and a six—year plan is in place for the repair of needed items. The list of projects is evaluated annually.

# Rehabilitation and Renovation of Closed Schools (RROCS)

MCPS has retained some closed schools for use as office space, holding schools, or alternative schools. Some of these facilities have reopened as schools. Funds from this project are used to rehabilitate buildings to meet current codes and to provide appropriate educational spaces.

#### **Relocatable Classrooms**

MCPS utilizes relocatable classrooms on an interim basis to accommodate student enrollment in overutilized facilities and for class—size reduction initiatives until a long-term solution is in place. Some are owned by MCPS, some are owned by the State of Maryland, and others are leased. This project provides funding for the relocation, leasing, acquisition, and repair of relocatable classroom units.

#### **Restroom Renovations**

The project provides needed modifications to specific areas of restroom facilities. A study was conducted to evaluate restrooms for all schools that were built or renovated before 1985. A second study was conducted in FY 2010 to provide restroom renovations at additional schools. Schools were rated based on an evaluation method using a preset number scale for the assessment of the existing plumbing fixtures, accessories, and room finish materials.

#### **Roof Replacement**

Roofs that are in need of repair or replacement are funded through this project. The schedule of yearly repairs/replacements is determined according to priority. The roofs are expected to have a life cycle of approximately 20 years.

### **School Security Systems**

This project provides funding for security camera systems at MCPS high school facilities. Currently, all high schools have security systems. At this time, no middle schools have security camera systems. Consideration is being given to install security systems in middle schools.

# Stormwater Discharge and Water Quality Management

This project will provide funding to plan and implement a variety of pollution prevention measures related to stormwater discharge from our school facilities as required by federal and state laws. In addition, this project will provide funding to meet State of Maryland requirements that all industrial sites be surveyed and a plan developed to mitigate stormwater runoff.

#### **Sustainability Initiatives**

Maryland State law (Annotated Code of Maryland, *Education Article*, §5-312.1—School district energy policies) encourages school districts such as MCPS to set targets to reduce the school district's greenhouse gas emissions. This project will provide funds to improve energy and utility use efficiency, reduce greenhouse gas emissions, improve resiliency, and align with other sustainability priorities for MCPS. Initiatives will include: upgrades to building automation systems, building retrofits to improve energy efficiency, solar panel installations, renovating greenhouses, and support towards integrating sustainability features into academics.

#### **Technology Modernization**

This project provides a better student to computer ratio, best practices for dynamic access to information networks, modern methodologies for teacher training, and application of current theory and practice to prepare students for the 21st century.