

Cluster Coordinator's Guide To Understanding the 2010 CIP

Prepared by:
Steve Augustino
CIP Chair
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Each year, the Board of Education adopts a Capital Budget and a Six-Year Capital Improvements Program (CIP). The Capital Budget is adopted for the upcoming fiscal year, which begins on July 1. For example, the FY 2010 Capital Budget begins July 1, 2009. In odd numbered fiscal years, the Board adopts a six-year CIP. In even numbered fiscal years, the Board considers amendments to the six-year CIP. The FY 2010 process, therefore, considers amendments to the FY 2009-14 CIP.

Clusters generally are familiar with Chapter 4 of the CIP, which discusses the CIP projects by cluster. This guide is intended to provide a high level overview of the other elements in the CIP.

In the final section, I will discuss the specific cost drivers in the 2010 Capital budget. This information will be helpful in evaluating the relative importance of each element in the Board of Education's budget.

PART I – High Level Overview

The CIP covers three principal types of projects: Additions, Modernizations and Countywide projects.

1. **Additions**. Additions include construction projects to increase classroom capacity at a school, new schools, magnet school improvements and certain interior or administrative modifications. Unlike modernizations, every addition is treated as a separate project and has a project description form (PDF) describing the project and its costs. Modernizations and countwide programs do not generate individual PDFs and instead are described in combined PDFs.

All additions are listed individually in the CIP. Expenditures are shown by fiscal year, with the total expenditure for the project and the total within the six-year CIP also reported. New projects or changes in projects are noted in boldface type.

2. **Modernizations**. MCPS periodically renovates schools in order to update aging facilities and to provide equitable learning environments across the county. Due to significant changes in educational approaches and building codes, most of the recent modernizations are more aptly characterized as replacements: new buildings constructed to replace the existing facility rather than to upgrade it. In the long run this is more efficient, but in the short run this approach increases the cost of modernizations and adds to their complexity.

The order of modernizations is determined based on a facilities assessment known as a FACT score. Schools that have been assessed for modernization are listed in Appendix E. Appendix R discusses the FACT criteria used to assess schools for modernization. Assessed schools are separated into two categories for budgeting purposes. “Current replacements/modernizations” lists the cost of projects after a feasibility study is completed and if design of the modernization is to begin in the first two years of the CIP. In essence, Current Replacements/Modernizations represents those projects that have begun the construction process or are about to begin construction. By contrast, “Future Replacements/Modernizations” represent projects that will be funded in the six-year CIP but are not in design in the first two years. (Assessed schools that are not scheduled to begin design in the six year CIP do not have a cost estimate in the CIP.)

As stated, all modernizations are scheduled in the order listed in Appendix E. MCPS (and MCCPTA) have viewed that order as sacrosanct; once a school is placed in the queue, its priority is established. The whole queue may move backward (and sometimes, forward), but individual schools should not be completed in a different order than is listed. In addition, MCPS maintains four holding facilities for elementary school students and one holding school for middle school students to be used while the school is undergoing modernization. Elementary and middle schools on the modernization list are slotted for the holding facilities based on capacity and location. Generally, elementary students spend 12 to 18 months and middle school students spend two years at the holding facility. This creates the possibility that schools may be delayed slightly from the listed priority if the assigned holding facility is not available (due to a delay at the school whose students currently are occupying the facility, for example). The holding facility schedule is listed at p. 3-7 of the Recommendation. MCPS does not have a holding facility for high school modernizations.

Approximately 40 schools have not yet been assessed for modernization and therefore have not been given priority rankings at this time.¹ The FY 2010 budget contains planning funds to assess the remaining schools for modernization. Schools built or modernized in 1985 or thereafter will not be assessed for modernization at this time.

3. Countywide projects. The third category of projects is countywide projects. The principal difference between countywide projects and individual school additions or modernizations is that the projects are grouped (and budgeted) by type of work to be performed. Schools at which the work will be performed are determined on an as-needed basis; individual projects may be re-prioritized during the year.

Over the past few years, MCPS has begun to introduce systemic projects that replace or lessen the need for modernizations. Examples of these projects include HVAC

¹ MCPS reports two different numbers of schools that have yet to be assessed. In Appendix E, MCPS states that 43 elementary and middle schools are yet to be assessed. However, at p. 3-6 of the Recommendation, MCPS states that a total of 41 schools are to be assessed, including one high school. (Here, MCPS describes the schools as 29 elementary schools, 11 middle schools and 1 high school.)

Replacements, Roof Replacements, Restroom Renovations and Planned Life Cycle Asset Replacements (PLAR).

Countywide projects also include funding dedicated to specific purposes, such as disability access (“ADA Compliance”), health/environmental (“Water and Indoor Air Quality,” “Asbestos Abatement”), vehicular and pedestrian safety (“Improved (Safe) Access to Schools”) and technology upgrades (“Technology Modernization”).

In addition, many new initiatives that involve construction of facilities are listed as countywide projects. For example, the effort to add gymnasiums to all elementary schools was listed as a countywide project. More recently, MCPS’ effort to upgrade CCTV systems and visitor management systems was added as a countywide project (“School Security Systems”). MCPS also has a line item to fund building modifications to accommodate specialized programs at schools (“Building Modifications and Program Improvements” (BMPI)).

PART II -- Major Cost Elements in the FY 2010 Budget

The FY 2010 Capital Budget is approximately \$200 million.² At a high level, the amounts are as follows:

Individual School Projects (Additions)	\$52 million (26%)
Current Modernizations	\$81 million (40%)
Countywide Projects	\$66 million (33%)
Total	\$200 million (100%)

For individual cost elements comprising each category, please refer to the chart on p. 1-13 of the Recommendation.

In addition, the following information, culled from various sources, may assist in evaluating each of the elements of the CIP.

1. Additions. In the Recommendation, MCPS lists 28 individual school projects. The total expenditure for FY 2010 is \$52.7 million (52,755). Additions vary in size and scope and therefore vary from project to project. The 19 elementary school additions listed in the Recommendation (excluding Clarksburg ES #8 and Seven Locks ES, which are new schools) average \$9.7 million (9,701). Over the amended six year CIP, MCPS will undertake 22 addition projects, adding an additional 229 classrooms in capacity. (This is an average of 10.4 classrooms per project.)

2. Modernizations. The Recommendation budgets \$81 million (81,273) for current replacements and modernizations. 12 elementary schools, 3 middle schools and 4 high schools are funded in the current replacements/modernizations line item. The amended six year CIP includes 31 modernization projects, 18 of which will be completed within the six year period. Those 18 modernizations will add another 122 classrooms as part of the modernizations. (This is an average of 6.7 additional classrooms per modernization.)

3. Countywide projects. Collectively, the Recommendation budgets \$66 million (66,565) for countywide projects. The countywide projects represent 33.2% of the FY 2010 budget. The most significant countywide projects are described below, in order from highest to lowest budgeted amounts.

² This section refers to the Recommended FY 2010 Capital Budget and Amendments to the FY 2009-14 Capital Improvements Program (released Oct. 29, 2008) periodically. All references to the "Recommendation" refer to this document.

Technology Modernization (\$19.4 million). Technology modernization first appeared in the FY 2003-08 CIP (as a \$600,000 line item) and was expanded in FY 2005. Tech Mod is \$19.4 million in FY 2010; in the three prior fiscal years, MCPS budgeted \$57 million for Tech Mod (\$19.6 million, \$18.8 million and \$18.6 million, respectively).

In its current state, this line item funds technology upgrades on a four year refreshment cycle for classrooms, computer labs, media centers and administrative offices. MCPS targets a ratio of 5 students per computer; administrative computers are allocated “equitably” among the schools in the county.³ For the 2008-09 school year, 44 schools received technology modernization (10 high schools, 11 middle schools, 20 elementary schools and 3 special schools). These schools are listed at p. 3-8 of the Recommendation.

In FY 2009, the Tech Mod budget also supported two new initiatives of MCPS. MCPS planned to use Tech Mod funds to introduce “thin client” devices to three Elementary School Technology Magnet schools.⁴ Second, MCPS planned to use Tech Mod funds to introduce technology to further the Middle School Reform effort. Those schools scheduled for Middle School Reform also would receive funding for building-wide wireless access and interactive whiteboards, projectors and student response systems (the so-called Promethean boards).⁵

HVAC Replacement (\$10 million). The HVAC Replacement line item provides for “orderly replacement of heating, ventilating, air conditioning, control and plumbing systems in facilities that are not on the modernization schedule.” Generally, MCPS will address HVAC issues at schools that are on the modernization schedule as maintenance items, not as capital replacements. Excluding FY 2010, the six year CIP allocates \$5.6 million per year for HVAC replacement. Per MCPS, this level of funding will support 3-5 replacement projects and 3-5 planning and design projects per year.

In FY 2009 (with a \$5.6 million budget), MCPS identified 8 HVAC projects to be funded with this line item. For FY 2010, the Recommendation increases this budget to \$10 million (for one year only). MCPS identifies 12 projects for the year, four of which were previously listed for FY 2009.⁶

³ In the 2008-09 school year, MCPS has just under 140,000 students. At a 5:1 ratio, this would represent approximately 28,000 student accessible computers throughout the county. MCPS reported to the County Council Ed Committee that MCPS has an inventory of 48,940 computers in schools and offices, 2,672 of which are laptops.

⁴ Per materials provided to the County Council Ed Committee in March 2008, the “thin client” devices allow one computer to control four student workstations, at a cost of only \$226 per device. The device was piloted in FY 2007 at Pine Crest and North Chevy Chase elementary schools, and now will be extended to the remaining three (unnamed) Elementary School Technology Magnets. The total cost of this initiative was not specified.

⁵ The total cost of this initiative is not specified by MCPS. In a response to the County Council Ed Committee, MCPS estimated an expenditure of \$1.3 million for technology replacements associated with Middle School Reform. However, this was listed in addition to the \$19.4 million to be expended for Tech Mod and it is unclear in what budget the \$1.3 million appeared.

⁶ It is not clear whether a 13th project – replacement of the chiller at Oak View ES – will be completed in FY 2010 or FY 2011.

Roof Replacements (\$5.8 million). This line item provides for replacement of school roofs that are older than their 20 year life cycle. MCPS has not provided information on the number of roofs replaced per year or the schedule of replacements for future years. In the FY 2009-14 CIP, the Board of Ed requested a budget of \$6.1 million per year, but this budget was cut to \$5.8 million in the approved CIP. These projects are eligible for partial reimbursement from state school construction funds.

Planned Life Cycle Asset Replacement (PLAR) (\$4.4 million). This line item funds “a comprehensive and ongoing plan to replace key facility and site components based on an inventory of their age and conditions.” Beginning in FY 2009, MCPS listed the PLAR projects that were completed in the prior year. This list appears at Appendix Y of the Recommendation.

Per MCPS, PLAR typically includes projects such as replacement of gym floors, replacement of floor coverings, light fixtures (interior and exterior), asphalt replacement, PA systems, emergency generators and interior and exterior doors and windows. Approximately 200 projects are funded each year. In addition, the PLAR project funds replacement of playground equipment at an average of 10 elementary schools per year and of kitchen equipment at 5 schools per year.⁷

Building Modifications and Program Improvements (BMPI) (\$4 million). The BMPI project provides “facility modifications and program improvements to schools that are not scheduled for a modernization or addition project in the foreseeable future.” BMPI was first added in FY 2007 and is scheduled through the current six year CIP. In the first two years (FY 2007-08), a total of \$2.8 million was budgeted, for improvements at 5 schools. The FY 2009 appropriation of \$5 million was requested to fund 15 school projects: science labs at 5 schools, a music/dance studio at 1 school, a digital arts/music lab at another school and assorted building modifications at 8 schools.

School Security Systems (\$1.5 million). This project was added as part of the 2009-14 CIP. The project entails \$9 million in expenditures over six years to install and upgrade security systems at all county schools. The primary effort is to place digital, network recorded CCTV systems in all county middle schools and to replace the high school analogue systems with digital cameras. Although cameras will not be installed in elementary schools, all schools will receive visitor management systems and all elementary schools will receive access control systems as part of this budget item.

MCPS estimates the cost of the security systems as follows: CCTV systems for 24 high schools -- \$150,000 each. CCTV systems for 31 middle schools -- \$75,000 each. Access control at 129 elementary schools -- \$14,000 each. Visitor management systems at 184 schools -- \$2,500 each. Visitor management systems would implement computer-based sign-in and monitoring software. The system would be populated with the Montgomery County Sex Offender Registry and would allow schools to enter data on custody rights

⁷ In 2008-09, MCPS is operating 130 elementary schools. At a pace of 10 school playgrounds per year, MCPS would replace the playground equipment once every 13 years. The replacement may occur more often, if equipment is also funded during elementary school modernizations or additions.

and other student-specific information. At \$1.5 million per year, MCPS would phase in the installation of these systems.

For FY 2009 and 2010, MCPS planned to install CCTV systems and visitor management systems at 12 middle schools, and access control systems and visitor management systems at 26 elementary schools each year. CCTV upgrades to the high schools would be phased in beginning in FY 2011 (2 schools) and be completed in FY 2014 (9 high schools). MCPS did not name the schools scheduled for upgrades in each year.

Water and Indoor Air Quality (\$1.3 million). This project funds mechanical retrofits and building modifications to address schools experiencing indoor air quality (IAQ) problems, as evaluated by MCPS' IAQ assessment teams. Generally, the expenditures include engineering, carpet replacement, environmental upgrades and modifications to HVAC distribution systems.

The funding for the Water and IAQ project has varied from year to year. In FY 2007, the MCPS spent \$3 million on water and IAQ. In FY 2008, MCPS spent \$1.3 million, which included 33 engineering projects, 42 carpet replacements and 9 environmental projects. Funding for 3 environmental safety personnel and one secretary also are included in this project (total cost: \$240,000).

Note: in the Recommendation, the Board proposes an additional \$500,000 Water Compliance project that applies in addition to the IAQ line item. This Water Compliance project addresses new legal requirements for stormwater management systems at schools. At the November 6 worksession, MCPS stated that this amount would only fund the initial assessment of compliance. The cost to bring MCPS systems into compliance was estimated at \$10-15 million.

Improved (Safe) Access to Schools (\$1.2 million). This project funds modifications to improve vehicular and pedestrian access to schools. Typical projects funded under this line item include separating bus loop and parent drop off areas, increasing parking lot areas and creating on-site student drop off areas. In addition, costs of widening streets or roadways, obtaining rights of way and changing entrances or exits to schools may be included in this project.

In FY 2009, \$1.4 million was requested for this line item. The \$1.4 million funded 3 projects. In addition, the project description form for this item states that these expenditures are not eligible for state reimbursement. (In other words, this project must be funded solely with county funds.) I have been unable to locate a list of the projects that would be funded with the FY 2010 expenditure.

Restroom Renovations (\$924,000). This project was begun in FY 2007 based on an assessment of 47 schools conducted in 2004. The project was funded as a four year project, with approximately 10 schools receiving renovations per year. The renovations were prioritized in the order listed in Appendix G. FY 2010 is the final year of the current project.

In the initial project, MCPS assessed schools that were built or renovated before 1985, excluding any schools that were on the modernization list. In the FY 2010 budget, MCPS plans to assess an additional 99 schools for phase two of this project. Funding and the proposed priority for these restroom renovations will be proposed in the next CIP.

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In summary, the following is a breakdown of costs associated with FY 2010 countywide projects:

Total Countywide Projects	\$66.5 million
Technology Modernization	\$19.4 million (29%)
HVAC Replacement	\$10 million (15%)
Roof Replacements	\$5.8 million (9%)
PLAR	\$4.4 million (7%)
BMPI	\$4 million (6%)
ADA/Asbestos/IAQ/Energy Conservation/ Fire Code Upgrades	\$6 million (9%)
School Security Systems	\$1.5 million (2%)
Improved (Safe) Access to Schools	\$1.2 million (2%)
Restroom Renovations	\$0.9 million (1%)