

Needs Assessment Update & Project Selection Methodology

SMART Project Methodology Glossary of Terms

(Document is for the Workshop - August 5, 2014 - Presentation)

Note: Broward County Public Schools is referred to as the District or BCPS throughout this glossary of terms.

General Terms

SMART Initiative:

General Obligation Bond Referendum:

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Assessment Status: Budget Update

Comprised of three assessments: facility condition, educational adequacy, and technology.

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Assessment Status: Schedule Update

This project is focused on an objective assessment of all school facilities with the District with the express purpose of determining the total needs of each school. The process of assessing each facility requires on site visual inspections to both quantify and rate the condition of the various components of each facility. The facility condition assessment is one of the three assessments that make up the Needs Assessment of the District.

CAD: Computer Aided Drafting. This refers to the drawings or documents used to assess and evaluate the school facilities. For the purposes of this assessment CAD work was limited to printing of existing drawings (FISH) to provide to field assessors for reference.

Educational Framework: This framework is comprised of the Broward County Public Schools educational guideline specifications. These guideline specifications include the standard space requirements, furniture, fixtures and equipment (FFE) that an educational space (e.g., science lab or media center) should ideally be made up of. This framework or guideline is the standard which the project prioritization methodology used to evaluate the educational adequacy of all instructional school spaces.

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Findings: Portfolio Level Summary

Comprised of the results of three assessments and represents the total Capital Needs of the District currently and for the next 5 years.

Educational Adequacy: This assessment assesses both the conditions of the existing educational spaces, and the absence of specific educational spaces that a school should ideally have as compared to the District's guideline specifications (see educational framework).

Technology Assessment: The technology assessment is part of the District's Strategic Technology Plan and comprises all aspects of technology including but not limited to computers, wireless access points, MDF equipment, peripherals, etc. The technology assessment does not include infrastructure such as power distribution and fiber optic cabling which is included in the facility condition assessment.

Combination Schools: Schools which have K to 6, 8, or to 12 grade structures.

Portfolio: In this context it refers to the collections of all facilities and grounds within the school District.

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Findings: Drivers of the District's Needs:

This amount represents the annual capital dollars required to maintain the overall condition of the portfolio of facilities. In order to improve the overall condition of the facility portfolio the annual capital investment would need to exceed this amount.

Deferred Capital Investments: Of note is that the deferred capital investments were not a choice made by BCPS, but rather a position the District was put into as a result of a decrease in millage and lower property values that occurred during the recession.

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Overview: Capital Program Methodology

SMART Capital Improvement Program/SMART Capital Projects: These two terms refer to the totality of projects proposed to be included in the 5 year capital program.

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Step 2: Reinvestment Analysis-Building Condition ^{1,2}

This analysis comprises a series of steps to ensure that **buildings** are good candidates for capital improvements based upon industry best practices and all available solutions/resources that BCPS has available. In an extremely resource constrained environment the discipline of this analysis ensures that the limited resources are deployed in a manner that maximizes the impact on students' educational environments.

Facility Condition Index: Also abbreviated as FCI, is the total cost of the renovations of a building divided by the total replacement cost of the building to yield a percentage. The industry standard for when a reinvestment through a capital renovation in a building may no longer be economically the best long term investment in those buildings with an FCI greater than 65%.

Candidate for Reinvestment: These are buildings which have a facility condition index that is less than 65% of the replacement cost of the building. These buildings become part of the prioritization process that follows the reinvestment analysis.

Capacity Required for Utilization: This level of analysis refers to the impact of the building in poor condition if it was not part of the school capacity. If the function of the facility (such as cafeteria) cannot be accommodated in other available space at the school or if the absence of this building would cause the utilization of the school to exceed 100 percent, then the building review continues. If the building (in poor condition) does not have one of these two impacts to the schools operation then it is referred to the processes within Policy 5000. Of note here is that this analysis is conducted based upon gross capacity with a clear understanding that the outcome of this analysis can never suggest moving students from permanent capacity (even that which is in poor condition) to temporary capacity.

Policy 5000: The policy speaks to the management processes of overcrowded and under-enrolled schools. The reinvestment analysis is designed to inform and support the various processes within the policy and specifically does make any determination of schools or the buildings that comprise a school.

Maintain Enrollment: The outcome of the residing analysis to ensure that capacity is not added for programs without boundaries, which are enrolling students beyond their District approved enrollment. As such, the maintain enrollment process is designed to ensure school programs such as magnets maintain their current approved enrollment cap.

Adjacent Vacancy: This evaluation is based upon the available capacity of schools with adjoining boundaries to the school with the building in poor condition to be evaluated for reinvestment. This analysis specifically does not include any available vacancy within a school boundary that does not directly adjoin the school being evaluated (sometimes referred to as domino boundary changes). This analysis also does not include capacity at adjoining schools that are not the same type of facility (i.e., different grade configuration)

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Step 4: Reinvestment Analysis – Capacity

To be a candidate for capacity replacement the building must have been evaluated on all the preceding levels of the reinvestment analysis. This analysis demonstrates that all other possible solutions to costly replacements have been considered in order to maximize the limited resources available to BCPS.

Temporary Capacity: This refers to relocatable and portable classrooms which were deployed as an interim solution to meet the immediate student capacity needs of the school.

Permanent Capacity: This refers to buildings that were designed and purpose built to provide long term capacity for the school campus.

Balanced District Capacity: This refers to BCPS having District-wide excess student seat capacity less than 5% of the total District enrollment. The purpose of this measure is to ensure that the District seeks to maximize the use of all of its resources before adding high cost new permanent capacity to the portfolio.

Area School: This refers to the need to construct a new school to relieve systemic overcrowding in an area that cannot be addressed by any other means as demonstrated by the reinvestment analysis.

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Step 5: Renovations Project Prioritization

This refers to all repairs and replacements made to existing buildings. Renovations which ensure the continuity of school operations are the highest priority and the list of renovation categories is ordered accordingly.

ADA: Americans with Disabilities Act. In the context of facilities refers to construction Accessibility Guidelines (ADAAG), which were developed as standards to make facilities, such as Schools, accessible to people with a variety of disabilities. Accessibility improvements are integrated into every project the District will execute under the SMART Capital Program.

Student Accommodation Allowance: This is a program wide allowance designed to complement the accessibility improvements integrated into each and every project. The allowance will be responsive to specific student needs that are not being met through accessibility improvements in other renovation projects.

IAQ: Indoor Air Quality refers to the priority to ensure that the indoor environment of the school is safe for students and faculty. The work required to ensure IAQ is properly maintained may include remediation and building envelope, interior finish, plumbing, and mechanical repairs.

Code Compliance: This refers to all building codes applicable to public schools in the State of Florida and all other applicable building codes.

Life Safety Systems: This category refers to life safety and security systems which are minimally required to occupy the building such as fire alarms, emergency lighting.

Building Envelope: This category is comprised of the shell of a building including roofs, windows, and exterior walls and doors.

HVAC: Heating, Ventilation, and Air Conditioning also commonly known as mechanical systems.

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Step 6: Technology Project Prioritization

Computer Refresh: This project refers to replacing existing outdated computers at schools with new ones.

Computer Additions: This refers to the addition of computers to a school to bring it line with the steps of the District's Strategic Technology Plan. Student 3.5:1 refers to the first goal of adding computers to schools to bring each up to a standard of 1 computer for every 3.5 students at the school.

WAP: Wireless Access Points, which are needed to provide access to the internet for student and staff wireless devices within the school. The 1:1 WAP to classroom refers to having one wireless access point for each classroom within the school.

Core Infrastructure Upgrade: The core infrastructure refers to the equipment and service connection required to provide a specific speed of connection for the computers in use by the school. The increasing number followed by gb (gigabyte) refers to the increased connection speed and capacity of the network to support more users and content.

VoIP: Voice over Internet Protocol. This refers to the project to move to a new phone system which is internet based instead of land lines.

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Step 7: Educational Adequacy Project Prioritization

Q1, Median, Q3, and Q4: These refer to the quartile which a school falls into relative to its educational spaces meeting the District's standards to provide the specified program or function. A school in Q4 would most resemble the guideline specification and a school in Q1 would be the least similar to the guidelines specification. This type of statistical analysis is used to focus efforts on those schools whose lack of educational spaces has the greatest deviation from the guideline (those in Q1).

School Prioritization Projects: This is the process by which each school in the District receives an equal amount of funding to support a school based prioritization of an improvement to the condition of an educational space at the school. As schools have unique programming and instructional needs, this school based process is an effective method for delivering unique educational enhancements to each and every school within BCPS. This process is led by the school in collaboration with parent groups and within guidelines established by the District.

STEM Labs: Science, Technology, Engineering and Mathematics Labs. These labs directly align with the District's Strategic Plan by supporting math and science instruction.

Media Centers: Also referred to as modernized school libraries. The capital improvements to these spaces directly align with the District's Strategic Plan by supporting literacy through reading and writing instruction.

Assembly: Spaces including auditoriums and multipurpose rooms.

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Step 8: 5 Year Capital Program

This is the totality of projects that are prioritized within the total available funding sources projected for the District over the next five years. The capital program project selection is prioritized from those projects prioritized under each of the four prioritized groups: Renovation, Capacity, Technology and Educational Adequacy. Note that the prioritized groups closest to the SMART Capital Projects are the highest priority.

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Step 9: Program Sequencing

This process refers to the requirement to organize the prioritized needs into projects and then into an executable program. This includes grouping needs into projects and scheduling the projects within the available internal and external resources.

Plan-Do-Check-Act: This four step process is a way to implement a continuous improvement process. The check step refers to monitoring the process and the act step refers to taking actions to improve the process based upon the findings of the check step.

Best Practices: Phased renovation refers to the process by which renovations to a building are prioritized based upon completing life safety deficiencies first, followed by the exterior of building such as roof and windows, then address deficiencies within the shell of the facility. Economies of scale, sequencing and packaging refer to organizing the individual school projects into a program plan in a manner to gain advantageous schedule, quality, and cost results for the District.

Internal Resources: These are resources which are directly controlled by the district including staff, consultants, funding, and vendors that are part of the process of supplying completed projects to schools.

External Resources: These are market conditions which can affect the execution of the SMART Capital Projects and need to be monitored to ensure the limited resources of the District are maximized in achieving positive outcomes for students and their school environment.

Annual Review: The annual review is needed to make continuous improvements to the SMART Capital Program based upon changed conditions or lessons learned during the execution of the program. Actions developed to improve the program will be done so maintaining alignment with the project prioritization methodology.