Seattle Public Schools

2020
Facilities Master Plan

Seattle School Board

Cheryl Chow, President
Michael DeBell, Vice President
Mary Bass
Sherry Carr
Peter Maier
Harium Martin-Morris
Steve Sundquist

Maria Goodloe-Johnson, Ph.D.
Superintendent

Prepared by:
Paul Wozniak
Facilities Department

March 2008

Levy / Bond Impacts Over Time

Prior to 1992 the District went to the voters to approve 2-year building levies that averaged about $15,000,000 per year. However, from 1992 to 1998, voters did not approve the building levy requests. This caused many major projects and repairs to be deferred.

In response to identified increasing deficiencies, voter's approval in 1992 a $150,000,000 Buildings, Technology, and Academics Levy program (BTA) which addressed long term replacement needs. Of that $150,000,000 levy approximately 40 percent ($60,000,000) was allocated for the "Building" portion of the levy or $10,000,000 per year which was spent mainly on roof replacements.

In 2005, the voters approve a new BTA levy for $178,000,000 with the "Building" portion being 53 percent ($94,340,000) or approximately $15,723,000 per year. This levy for the first time since 1992 that the District was able to start addressing the interior deferred maintenance issues of the schools along with continued exterior building needs and roof replacements.

- The building component of the BTA levy includes roof replacements, mechanical systems / air quality, life safety / ADA improvements, internal finishes / floor coverings, playground repair and furniture replacement.
- The technology component of the BTA levy includes student information system expansion, computer replacements, purchase and replace technology teaching tools, install servers at schools, special educational systems, library resources and on-line learning, library systems, replace obsolete systems, implement business systems improvements, and updating District-wide software.
- The academics of the BTA levy include art/music, and auditorium facility improvements, library improvements, science facility improvements, and athletic improvements.

Strategy to Reduce the Backlog Using Capital Funds

Increased funding of the "B" portion of the BTA levy would help resolve a lack of levy funding, a severe reduction in maintenance staffing couple with a backlog of maintenance work orders when there has not been a significant reduction in the number of buildings, and construction materials inflation. Thus, since before 1998, the levy budget has been consistently about the same over the years causing the District to have less buying power and increased deferred maintenance.

Prioritization of Projects

Items that may represent immediate safety or code related issues or emergency situations been dealt with by the District in an on-going Capital Eligible Programs (CEP) funding program. To better facilitate the prioritization of projects as part of the BTA / CEP process, the following guidelines are suggested:

Table 10-7 **Facility Condition Assessment Category/Funding Source**

Facility Condition Assessment (FCA) Category / Funding Source		Examples
Category 1 Capital Eligible Programs (CEP) / Emergency	**Needs Immediate Action** - stop deterioration or correct a hazard.	Fire alarm improvements exhaust issues, smoke hatches for stages, intercom improvements, electrical issues, emergency lights, and exit signs.
Category 2 Capital Eligible Programs (CEP) / Emergency	**Urgent** - needs action within 1 or 2 years to prevent further deterioration.	Electrical service, electrical distribution, ventilation issues, aged boilers, acoustics issues, irrigation improvements, clock system improvements, surge protection, intercom system, paving.
Category 3 General Fund and Building, Technology, and Academics (BTA)	**Needs Action** - within 3 to 5 years to preclude deterioration or down time.	HVAC improvements, site drainage, exterior doors, exterior lighting, A/C for offices/computer rooms, painting, carpet, VCT, gym flooring, casework, windows, interior doors, replace operable walls, replace select exterior wall components, ceilings, roofing.
Category 4 Building, Technology, and Academics (BTA)	**Recommend** - Items that make a sensible improvement to the facility.	Fire sprinklers, A/C, plumbing component enhancements and fixtures, electrical enhancements.
Category 5 Building, Technology, and Academics (BTA)	Does not meet current codes/standards.	American Disabilities Act toilet room improvements, bubblers (drinking fountains), and circulation/access improvements.
Category 6 Building, Technology, and Academics (BTA)	Beyond rated life but still serviceable.	Replace aged portables, replace interior doors and hardware.
Category 7 Building, Technology, and Academics (BTA)	Hazardous material contained and managed in place.	Asbestos abatement

Although the "Facility Condition Assessment Category of Importance" is an important measure in determining which projects should be funded under the BTA program, the following factors should also be part of the BTA funding determination process:

1. Recommendations from the Superintendent's Office

Based on a review and initial findings and program requirements.

2. Condition of School Buildings
   Based on the facility assessment renovation or replacements needs which were identified.
3. Availability of Site
   The phasing of facilities is dependant on the availability of temporary school facilities to house students.
4. Combination of Elementary, Middle and High Schools
   It is suggested that each phase of BTA funding include elementary school, middles school and high school projects based on the condition of the facilities.
5. Ability to Finance Projects
   Not all projects can be accomplished at the same time based on the availability of resources. Therefore, the number of projects in each phase will be limited.
6. Spreading projects around the City
   Each phase should have projects spread around the District for three reasons. First, it is easier to stage projects if they are not located all in one area (i.e. where to locate students). Second, this permits each area of the District to be re-evaluated between phases to examine potential demographic changes. Third, each area of the District will benefit from the elimination of deficiencies.

Strategies to Reduce the Backlog Using General Funds

The procedures and allocations of resources for managing the public' s built assets—influenced by a variety of financial and political pressures as well as technical requirements—are failing to protect these assets, and the potential costs of correcting past neglect are measured in billions of dollars. These procedures and allocations must be changed to recognize the full costs of ownership of these assets and to support appropriate maintenance activities.

Additional In-house Maintenance Personnel:

The best method of putting a "dent" in the backlog is to implement the Zone Crews (3 Crews Total) back into our annual maintenance strategy. A single zone crew consists of a (1) General Foreperson, (1) Brick mason, (2) Carpenters, (1) Painter, (1) Electrician, (1) Plumber, (1) Machinist, and (1) Laborer. The three crews would be split into geographical locations and would perform non-emergency building repairs. The crew's primary responsibility would be to complete deferred regular and preventative maintenance tasks. Each Zone Crew would cost approximately $684,12800 (2008 dollars (Total Cost of $2,052,384.00 (FTE's) per year)) plus $800,000 per crew which includes one time expenses for equipment and vehicles. The majority of backlog maintenance items would be addressed during each Zone Crew visit (2 visits per year).

Restructure the Maintenance Budget:

Under funding is a widespread and persistent problem that undermines maintenance and repair (M&R) of public buildings. To overcome this problem, M&R budgets should be structured to identify explicitly the expenditures associated with routine M&R requirements and activities to reduce the backlog of deferred deficiencies. An appropriate budget allocation for routine M&R for a substantial inventory of facilities will typically be in the range of 2 to 4 percent of the aggregate current replacement value (CRV) of those facilities (excluding land and major associated infrastructure). In the absence of specific information upon which to base an M& R budget, this funding level should be used as an absolute minimum value. Where neglect of maintenance has caused a backlog of needed repairs to accumulate, spending must exceed this minimum level until the backlog has been eliminated.

Maintain Up to Date Condition Assessment:

Periodic condition assessment is an essential step in effective facilities management. Formal condition assessment programs should be implemented by the Maintenance Department. These programs will initially serve as the basis for establishing appropriate levels of funding required to reduce and eventually eliminate backlogs. Once a backlog is eliminated and a steady-state performance is achieved, the condition assessment becomes a management tool for monitoring the effectiveness of M&R activities. Condition assessment programs require trained technicians and managers and should be standardized to control their cost and to ensure consistency of results.

Adequate Management and Oversight:

While adequate M&R funding based on recognition of the full costs of ownership is a prerequisite for protection of the Districts' assets, effective maintenance management is also required to realize the full benefit of the funds made available. The district should make specific assignments of responsibility for M&R to qualified and trained staff and managers. Activities such as minor alterations and improvements that may be disguised as M&R should be clearly identified and not permitted to divert resources from legitimate M&R functions. Education, training, and recognition of staff members responsible for M&R are needed, along with a firm commitment to effective management of our built assets.

CHAPTER 11
CRITERIA USED IN ANALYSIS OF CAPITAL PROJECTS

The FMP is the fundamental document used to develop guidelines to support future Capital Improvement Programs. To develop consistency in project selection and to have the capital program support the academic mission of the District, the District has developed nine criteria to be used in future evaluation and planning. The criteria relate to the most important considerations in planning facilities that will meet future needs and educational targets. The below criteria reflect the goals and assumptions and were developed through a multidisciplinary team of educators, planners and facility staff:

1. ***Student characteristics***. Facility design provides additional support to students with greater needs. The resulting rank tells what schools need additional space for this support, and additional operations funding. Indicators included from the "Facility Educational Adequacy Table 11-1" in this chapter include: Configuration
2. ***Capacity of schools***. Provide capacity for demand of student populations in terms of variation from the capacity of each school. The results show what schools need additional space in the future and which need less. The goal is to correct inefficiencies. Indicators included from the "Facility Educational Adequacy Table 11-1" in this chapter include: Capacity
3. ***Geographic consideration.*** Capacity under Student Assignment of each school in a cluster in relation to the projected population (variation from capacity). The resultant score provides a ranking of the cluster space needs in relation to others. Indicators included from the "Facility Educational Adequacy Table 11-1" in this chapter include: Capacity
4. ***Essential facilities for instructional program.*** Facilities need to be in line with program student enrollment. The essential facility rankings from the FMP are also considered. The ranking score provides a measure of which schools have too much space and which have too little per student, both requiring action. Indicators included from the "Facility Educational Adequacy Table 11-1" in this chapter include: Capacity and Configuration
5. ***Useful life for educational use.*** In 2006, the Building Conditions Survey assigned useful life to buildings based on building systems. The criterion addresses how long a school will be able to be used for education without significant improvements / renovation. The result is a priority listing of schools needing the most attention in this regard. Indicators included from the "Facility Educational Adequacy Table 11-1" in this chapter include: Configuration and Environment
6. ***Facility condition***. The need for renovation / replacement of a school in order to remedy physical building deficiencies needs to be identified. The result is a

ranking of schools by worst condition / greatest need for action. This criterion should be viewed in relation to useful life and essential facilities. Indicators included from the "Facility Educational Adequacy Table 11-1" in this chapter include: Capacity and Configuration

7. ***Safety and fire protection.*** Student security needs is based practices nation wide for K-12 campus security. Safety also includes the life of systems, adequacy of fire protection and structural deficiencies. The result is a ranking of schools by greatest threat to safety. The ranking should show priorities. Indicators included from the "Facility Educational Adequacy Table 11-1" in this chapter include: Environment
8. ***Educational program adequacy.*** The ability of a school to house the educational program as established by Seattle Public Schools. The score relate to both the adequacy of the current building to house the program and the amount of work required to make the building house the program. Indicators included from the "Facility Educational Adequacy Table 11-1" in this chapter include: Capacity, Configuration, and Environment
9. ***Building environment.*** The ability of a school to provide a beneficial learning environment in term of comfort. The ranking is based on the deficiencies in the building and the efforts required for construction the solution. Indicators included from the "Facility Educational Adequacy Table 11-1" in this chapter include: Configuration and Environment

Facility Adequacy

Each of the facilities will be assessed for its ability to support the current and/or planned educational programs for that site. This assessment will look at the current overall building as well as specific primary program areas and evaluate the above noted criteria. For this assessment the District's educational specifications will review the critical goals and objectives and program space definitions summarized and used as a standard against with each facility is compared.

Each of the facilities overall as well as the individual program spaces will be scored on a scale of 1 to 5 with 1 representing excellent conditions, meeting and/or exceeding District standards, with 5 representing marginally functional conditions warranting major upgrade in order to meet standards. In addition to the evaluation of the current conditions, this assessment will also evaluate the ease of implementation for bringing the overall school and well as the individual spaces up to current standards. These scored likewise represent a range of 1 to 5 with 1 representing the need for little or no work and 5 representing the need for major work or complete replacement in order to meet standards. These scores are then presented for the overall building as well as presented for individual program spaces and ultimately averaged for the overall school based on the percentage amount of area in the school for each of the program areas.

It is the intention of the District to the Building Condition Survey, Educational Adequacy Survey, and seismic reports every 6-years or as necessary for capital program planning so that up to date data will be used.

Educational Scoring Criteria

Assessment scores should be assigned to both the overall facility, as well as to specific program spaces within each school (e.g. administration, PE/Athletics, Library, etc.). These scores should use a 1-5 scale, with 1 being the highest condition, and 5 being the lowest. These scores should further be defined for each criterion, based on the most recent Seattle Public Schools Facilities Design Standards, as well the Seattle Public Schools Educational Specifications.

In general these current condition scores are defined as:

1 – Excellent well above District Standards
2 – Comfortable at District Standard
3 – Slightly below District Standards
4 – Well below District Standards
5 – Severely lacking or non existent

And for implementation (ease of necessary improvements):

1 – Minimal work required
2 – Minor cosmetic work with finishes, furnishing, and equipment and minor plan changes within spaces
3 – Plan changes throughout – but with existing overall envelope
4 – Major reconfiguration, including building envelope and main systems
5 – Total reconfiguration and / or new.

Seattle Public Schools Facility Design Objective

The following definitions, excerpted directly from the Seattle Public Schools standards will be used for the overall educational adequacy evaluation:

Table 11-1

FACILITY EDUCATIONAL ADEQUACY

Indicators	Indicator Component	Indicator Definition	Evaluation
Capacity	Size	This school is adequately sized for the proposed enrollment	1 - Excellent: Well above District Size Standards 2 - Comfortable: At District Size Standards 3 - Slightly Below District Size Standards 4 - Well Below District Size Standards 5 - Severely lacking in space with dependence on portables and other facilities
	Quality Program Spaces	The school has adequate quality and appropriate types of spaces for the various programs - both general as well as specialized programs in conformance with educational specification standards	1 - Excellent: All program spaces well met 2 - Most program spaces well met. 3 - Most basic program space met, but lacking some specialized spaces. 4 - Lacking some basic spaces as well as specialized spaces. 5 - Severely lacking appropriate spaces for both basic and specialized programs.
Configuration	Configuration	Spaces are well configured with appropriate adjacencies and clear and adequate circulation. Spaces are appropriately scaled in height and volume.	1 - Excellent: configuration throughout 2 - Most spaces well located and configured. Appropriate scale. 3 - Most basic spaces well configured with some specialized spaces requiring reconfiguration or relocation. Meets, but lacking some specialized spaces. 4 - Some important basic spaces require reconfiguration or relocation. 5 - Most spaces poorly configured and located. Inappropriate heights and volumes.

FACILITY EDUCATIONAL ADEQUACY

Indicators	Indicator Component	Indicator Definition	Evaluation
Configuration	Educational Priorities:	The building provides spaces for interdisciplinary learning to occur.	1 - Excellent. Multiple size spaces for students and teachers
	Learner-Centered	The building design enables small learning communities to operate within	2 - Good opportunities for interdisciplinary or small group work, but some minor configuration could improve access between spaces.
	Personalizing	The building provides individualized support services for students, including metal, physical, social, and academic	3 - School has some flexible learning spaces with standard classrooms, but could use more smaller and larger flexible spaces.
	Collaboration		4 - School has only a few opportunities for collaborative or small group learning.
			5 - The school has no small group or large group spaces, with no means to adapt space.