



THE CITY OF NEW YORK  
**INDEPENDENT BUDGET OFFICE**

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August 14, 2000

Ms. Noreen Connell  
Executive Director  
Educational Priorities Panel  
225 Broadway, Suite 3101  
New York, NY 10007

Dear Ms. Connell:

In response to your letter of January 31 and our subsequent discussions, the Independent Budget Office (IBO) has calculated updated cost estimates for adding capacity to the New York City public school system. We have also compared the costs of constructing new Board of Education (BOE) schools with the cost of leasing additional space. Finally, we have compiled data quantifying BOE's current usage of leased facilities. Our analysis relies primarily on planning and financial documents obtained from the BOE Division of School Facilities (DSF) and the city's Office of Management Budget (OMB).

Background

In May 1999, following an extensive period of study and review, Chancellor Rudy Crew submitted to the Board an \$11.16 billion five-year capital plan for 2000-2004 that included \$3.65 billion for new capacity. The Chancellor's resolution called for adding 68,100 seats including 53,350 seats by constructing new schools, 13,850 by leasing, and 900 seats by building additions to existing schools. New construction costs averaged \$51,018 per seat, exclusive of site acquisition. The \$3.65 billion for new capacity included a lump sum of \$655 million for site acquisition, but did not specify the costs of acquiring individual project sites.

When the Board rejected the Chancellor's resolution, they replaced it with a \$6.99 billion capital plan for 2000-2004. The adopted plan contains \$1.61 billion for new capacity including \$123 million for site acquisition. The adopted plan calls for adding 32,953 seats including 23,650 seats by constructing new schools, 9,137 by leasing, and 166 from one addition to an existing building. (The adopted plan does not explicitly identify the number of seats to be added via leasing, but IBO derived the number by subtracting seats added through new construction and building additions from total new capacity.) New school construction costs under the adopted plan average \$53,052 per seat. The adopted plan's average cost is slightly higher than the Chancellor's resolution because a greater proportion of its projects will not be completed until 2005 and 2006; BOE factors inflation into its project cost estimates, so the later a project is scheduled, the higher its planned cost.

It should be emphasized that capital project costs presented here come from IBO analysis of planned expenditures, information available about future projects to increase the capacity of the NYC public schools. IBO has not reviewed actual disbursements for recent school construction projects. The Moreland Act Commission's May 2000 report found that BOE capital plans frequently underestimate costs. In

addition, BOE capital plan documents do not provide information about seats expected to be lost during the capital plan period due to school closings and lease expirations. The new seat figures, therefore, reflect the gross number of seats being built, rather than the expected net change in capacity.

It also should be noted that BOE currently does not plan to add capacity by placing temporary classroom buildings and transportable classrooms on school grounds. These lower-cost mechanisms provided one-fourth of the seats added under the amended five-year capital plan for fiscal years 1995-1999. BOE officials have indicated that using temporary and transportable facilities have drawbacks, including the loss of playground space. Moreover, these facilities are not durable and often create an unpleasant instructional environment. Finally, according to the Board, available space to place temporary buildings and transportable units has nearly been exhausted. In recent years, the Board has also tried to economize by purchasing prefabricated modular building additions, but has been dissatisfied with their performance. As a result, BOE is no longer planning modular additions.

#### New Construction Costs by Building Type

The cost of new school construction varies by building type. While every construction project is unique depending upon the site, DSF has developed some standard designs. The most common designs include a 650-seat elementary school, a 900-seat middle school, and an 800-seat high school. The following table of construction costs for standard designs provides the total cost by building type as well as cost per seat and cost per square foot. These costs assume a completion date of June 2004, the last month covered by the current five-year capital plan. Identical projects would cost roughly three percent less if completed one year earlier and three percent more if completed one year later.

In terms of cost per seat, the least expensive project type is an early childhood center (ECC). Constructing a new ECC designed to hold 400 children in pre-kindergarten, kindergarten and grade 1-3 classes, costs around \$45,000 per seat. An ECC houses less space per student than an elementary school, because an ECC generally does not include auditoriums, science labs, and other room types used by higher grades. High school rooms, such as cafeterias and gymnasiums, need to be larger than those rooms serving younger children. High schools thus require more space per student than elementary schools and cost more per seat to build. Constructing a new high school for 800 students in grades 9-12 would cost around \$59,000 per seat. Overall, new school construction ranges from \$345 to \$439 per square foot of gross interior space.

#### **Standard New School Designs with Scheduled Completion in June 2004**

<i>Building Type</i>	<i>Seats</i>	<i>Sq. Ft.</i>	<i>Sq. Ft./Seat</i>	<i>Cost (millions)</i>	<i>Cost/seat</i>	<i>Cost/Sq. Ft.</i>
Early Childhood Center	400	42,777	107	\$18.05	\$45,125	\$422
Elementary School	650	84,004	129	\$32.40	\$49,846	\$386
Middle School	900	112,521	125	\$49.39	\$54,878	\$439
Elementary/Middle	900	NA	NA	\$42.78	\$47,533	NA
High School	800	137,662	172	\$47.55	\$59,438	\$345

Sources: IBO; BOE Five-Year Capital Plan Fiscal Years 2000-2004 (adopted plan 5/12/99; Chancellor's proposed plan 5/5/99); BOE Division of School Facilities, "Standard Program Requirements for Feasibility Studies," 4/5/00-6/12/00.

Note: Project costs exclude site acquisition.

### Leasing vs. New Construction

The Chancellor's \$11.16 billion resolution also included \$236.3 million for capital improvements associated with leasing 13,850 seats (\$17,063 per seat). DSF generally programs less instructional space per student in leased facilities than in its newly constructed buildings, since leased facilities are viewed as a short-term condition. When measuring the potential capacity of a leased site, DSF uses a rule of thumb of 100 square feet per seat. Therefore, capital improvements associated with leasing cost \$171 per square foot on average.

The adopted capital plan includes \$222.0 million for capital improvements associated with leasing 9,137 seats. This equals \$24,299 per seat or \$243 per square foot. It is unclear why the cost per seat is so much higher than under the Chancellor's resolution.

While the planned capital cost of leasing is less than half that of new construction, BOE has to pay rent for its leased facilities. Rent payments for leased school facilities during 2001 to 2004 will cost nearly \$1,200 per seat annually. Rent for leased facilities comes out of the Board's expense budget, where it is partially offset by a savings of nearly \$200 per seat per year in reduced custodial costs, according to OMB data.

When comparing leasing costs with new construction, it is also important to be cognizant of site acquisition costs. For new construction, site acquisition is an additional capital cost. For leasing, landlords capitalize site acquisition costs in the rent they charge BOE.

### Current Leases

In preparing the city's financial plan, OMB's education unit periodically releases backup information on BOE leases. The most recent release indicated \$58.9 million in FY 2000 funding for BOE to lease 170 facilities encompassing 5.3 million square feet. The 170 leases included 47 for the high school division, 73 for community school districts, 29 for citywide special education sites, and 21 for administrative offices.

The financial plan backup for FY 2001 indicates \$69.7 million for an anticipated 191 leases totaling 6.3 million square feet. While the plan for FY 01 calls for a significant increase in leasing over last year, it is uncertain whether DSF will be able to locate a sufficient number of suitable sites. For example, while the January 1999 financial plan anticipated 206 leases for FY 2000, funding was adjusted downward one year later to reflect a smaller number of leases due to a shortage of sites.

### Comparative Costs

For data on comparative school construction costs across the region and across the nation, I recommend two online resources. The National Clearinghouse for Education Facilities <[http://www.edfacilities.org/ir/construction\\_costs.cfm](http://www.edfacilities.org/ir/construction_costs.cfm)> and *American School & University* magazine's annual education construction report <<http://www.asumag.com/research/Construction2000.html>>. The latter lists the 1999 national median cost for new public school construction at \$127 per square foot, including \$119 per foot for elementary schools, \$127 for middle schools, and \$139 for high schools.

I hope this information is useful. If you have any questions, please contact Robert Weiner, Senior Budget and Policy Analyst at (212) 442-0332. Best wishes.

Sincerely,

George V. Sweeting  
Associate Director

GVS: RJW

C: Ms. Leonie Haimson, Class Size Matters Campaign  
Hon. Terri Thomson, Chair, BOE Capital Budget Subcommittee  
Ms. Patricia Zedalis, Chief Executive, BOE Division of School Facilities  
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