

## **School Facilities: A Challenge for New Jersey**

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Throughout New Jersey, many school districts are facing a crisis in providing school buildings with enough classrooms and adequate facilities to serve their students. While cost estimates vary widely, the total investment in school capital construction that will be required in the next few years may be one of the largest capital investments ever faced by New Jersey taxpayers. To a great degree, local districts are dealing with these issues without effective assistance from the State government in assessing present school building conditions and future needs; in designing, renovating or constructing new facilities; or in financing the projects. The consequence of ineffective State oversight of school facilities could result in the waste of public funds through unnecessary design and construction costs, instability in regional school districts, and increasing pressure on local property taxpayers. Decisions to improve or to ignore the condition of school facilities during the next few years will have long-term effects on education in New Jersey.

Facilities problems confront both rich and poor districts, and result from a variety of factors: increasing enrollments, delayed maintenance due to budget problems, the requirements for all-day kindergarten and preschool programs, the emphasis on reducing class size, the advent of technology, implementation of new curriculum standards, and the renewed pressure to keep special education students within their home district. In its most recent school financing decision announced May 14, 1997, the Supreme Court of New Jersey reaffirmed the State's constitutional responsibility to provide adequate school buildings: "The State's constitutional obligations towards public education include providing school facilities that have an environment conducive to the achievement of a thorough and efficient education." While the Court was discussing the obligation of the State to confront the deteriorating school facilities in the poorest urban districts, many other suburban and rural districts also are facing the need to provide new space for the increasing school enrollments, and to design and finance school renovations to incorporate new technology for computers, the Internet and other advanced teaching applications. Governor Whitman's new Core Curriculum Content Standards, adopted in May 1996, will require many districts to expand facilities to provide enhanced spaces for art-related activities such as dance and theater, language and science laboratories, and physical education.

### **Availability of Classroom Space**

School buildings are designed to accommodate a finite number of students, based on minimum spatial allotments per pupil for classroom spaces. Elementary school capacities are the direct result of instructional space required per pupil. Middle and high school requirements are more complex, reflecting the need for specialized instruction and utilization factors resulting from scheduling demands. Design capacities, however, do not allow for unequal distribution of students between grade levels - the so-called bulge phenomenon. Thus, a desirable occupancy level, in terms of flexibility, could arbitrarily be assumed to be ninety percent of maximum design capacity. Occupancies above 100 percent of maximum design capacity have no flexibility for enrollment variations or new program development.

School building capacities and enrollment projections submitted to the Department of Education in the 1995 **Long Range Facilities Master Plans** provide rough estimates of the space limitations that have developed around the State. ***It is important to note that the information***

<b>Analysis of School Capacities and Enrollments</b>				
<b>Note: Space requirements for Core Curriculum Standards implementation are not included.</b>				
	<b>Non-Abbott Districts</b>		<b>Abbott Districts</b>	
<b>Year</b>	<b>1995-1996</b>	<b>1999-2000</b>	<b>1995-1996</b>	<b>1999-2000</b>
Number of Districts in Sample	500	500	25*	25*
Percentage of Districts in Sample	88%	88%	89%	89%
Total District Enrollment	860,850	944,830	234,518	248,175
Number of School Buildings	1705	1698	369	363
School Buildings with Occupancies greater than 90% of Design Capacity (percent of total schools)	612 (36%)	740 (44%)	228 (62%)	244 (67%)
School Buildings that Exceed Design Capacity (percent of total schools)	259 (15%)	382 (22%)	161 (44%)	179 (49%)
Source: NJ Department of Education summary information from the 1995 <b>Long Range Facilities Master Plans</b> with calculations by PARI.				
* Jersey City, Vineland, and Paterson were not included in the DOE information. PARI obtained the information from the districts.				

**compiled by local school districts for these Master Plans was completed before the passage of the Core Curriculum Content Standards legislation or the new requirements in the funding formula for preschool and full day kindergarten in districts receiving early childhood program aid.** In the 1995-96 school year, of the 500 non-Abbott districts<sup>1</sup> reporting with a total 1705 schools, 612 schools had an occupancy greater than 90 percent of their design capacity with 259 of those schools exceeding the design capacity. By the school year beginning in 1999, these same districts reported that 740 schools will have an occupancy greater than 90 percent of their design capacity and the number of schools exceeding design capacity would increase to 382. In 25 Abbott districts, 228 schools had an occupancy greater than 90 percent of their design capacity for 1995-96 and 161 of those schools exceeded design capacity. By the year 1999-00, 244 schools will have an occupancy greater than 90 percent of their design capacity and 179 schools will have exceeded design capacity. In other words, by the year 2000, if New Jersey continues on its present course, 49 percent or more of the urban school buildings will be operating in excess of design capacity and will be unable to accommodate the new programs required by the Core Curriculum Content Standards and the state aid funding formula.

The use of average capacity levels for a statewide overview provides only basic trend data and masks serious overcrowding in some districts as well the under-utilization of buildings in other districts. The ranges are extreme in both directions. Not all schools are overcrowded; some districts have significant amounts of excess room. This is particularly true of districts where the enrollment has not increased in the last few years. Many Bergen County districts, especially some high schools, have lots of room to spare. Many of the high schools in Burlington County have extra room, but the Lenape Regional High School District (total 3 high schools) is desperate for space because the eight communities that send students to

<sup>1</sup> Abbott Districts, also called the Special Needs Districts, are New Jersey's 28 poorest urban school districts as identified in the Abbott v. Burke litigation decided by the New Jersey Supreme Court, June 5, 1990. Non-Abbott districts include all other school districts in the State.

these high schools are rapidly growing areas. Nearby Cherry Hill East High School in Camden County has 1,495 extra spaces. Extra capacity is not limited to some suburban buildings. According to the 1995 figures, Newark schools were expected to have an extra capacity of 9,162 or 16 percent for this current 1996-97 school year, well above the average of the other Abbott Districts. Nevertheless, some schools in this large urban district appear to be seriously overcrowded. Distribution problems are a bigger problem in Newark than lack of space and the State Superintendent is presently trying to address this problem. Other Abbott districts, for example Garfield, Camden, East Orange, Orange, Irvington, Union City, and Elizabeth have very serious overcrowding in most buildings.

Overcrowding has been an issue in New Jersey schools and around the nation for the last decade. According to the National Center for Education Statistics<sup>2</sup>, twenty-five years after the baby boom generation set a national record for school enrollment, the record was broken in 1996 with an enrollment of 51.7 million students nationwide.

Demographers call this phenomenon the baby boom echo. The most significant factor, accounting for half of the current growth rate, is a delay in marriage and child-bearing among baby boomers. High birth rates among African-Americans, Hispanic-Americans and other minorities play a significant role. Increased immigration represents another factor. Also, larger numbers of children are enrolled in pre-K and kindergarten and more young people are staying in school to get a high school diploma. This growth

School Year	Total Enrollment	Increase	Percent Change
1989-90	1,076,005		
1990-91	1,089,646	13,641	1.3%
1991-92	1,109,796	20,150	1.8%
1992-93	1,130,560	20,764	1.9%
1993-94	1,151,989	21,429	1.9%
1994-95	1,174,253	22,264	1.9%
1995-96	1,195,729	21,476	1.8%
1996-97	1,218,578	22,849	1.9%
1998-99*	1,254,466	35,888	2.9%
2000-01*	1,281,129	26,663	2.1%
2002-03*	1,299,079	17,950	1.4%
2004-05*	1,303,483	4,404	0.3%

\* Estimate and changes over the 2 year period.  
Source: N. J. Department of Education and U.S. Department of Education

trend is different from the surge in the late 1960s because it is a long, slow, rising wave, and demographers see no immediate fall-off. As shown in the table, New Jersey's enrollments follow national trends and will continue to rise well into the next decade. After 2005, New Jersey might see a slight decline in total statewide enrollment, but high school enrollments will continue to grow.

### No Statewide Needs Assessment of School Buildings

**Notes about the Data from the 1995 Long Range Facilities Master Plans...**

The raw data, as received on disk, was reviewed for accuracy; double entries and obvious key stroke errors were deleted. Because no supporting information was available, listings for district offices were eliminated even if it appeared that some classes may be housed in the office buildings. Plainfield and Neptune Township were included with the non-Abbott Districts due to the change of classification. The resulting pool of information represents approximately 88 percent of the operating school districts in the State. The number of schools in the sample varied slightly over the five year period due to the construction of new schools and/or the consolidation of buildings.

The New Jersey State Department of Education has played only a minor role in needs assessment on a statewide or regional level, basically ignoring previous mandates by the Legislature to maintain a statewide inventory of facilities and estimates of need. Even the strategic planning process completed in 1995 by the State Board of Education, essentially ignored the issue of facilities. The widely quoted \$6 billion statewide school facility needs estimate is based on reports from

1985 and 1990 **Long Range Facilities Master Plans**. The 1995 information used for this study represents the only statistics available on the state level for reviewing capacity requirements to house pupils. No information is available in State government offices on the physical condition of school buildings. The **Long Range Facilities Master Plans** were

<sup>2</sup> "A Back to School Special Report: The Baby Boom Echo", U.S. Department of Education, August 21, 1996.

designed "to help local school districts identify future facilities needs and develop a plan which ensures the provision of suitable facilities for all pupils." The three-part 1995 reports provide projected enrollments, school building capacities, and dollar amounts of projects planned for the 1995-00 period. The third part, the projected dollar amounts, was not used for this research study because these capital expenditure estimates reflect only plans in progress and not the actual needs of the district based on capacities, physical conditions, educational requirements, or health and safety concerns.

The most recent Abbott v. Burke ruling directing the Commissioner of Education to review facilities needs in the Abbott districts by the end of this year could provide an impetus for a much-needed statewide assessment. The value of a statewide facilities inventory and needs assessment goes well beyond merely defining the size of the problem; it is an initial first step directed at a solution. An initial comprehensive inventory should document the number, size, age, and capacity of every building in the State, together with the condition and life expectancy of the major building subsystems (structural, mechanical, roofs, windows, and doors, etc.). More complex evaluations, such as operating efficiency, adaptability to technology, adequacy for Core Curriculum Content Standard implementation, and allowances for future flexibility can then be layered over this essential data. Gathering and storing this information as an electronic database would provide an invaluable tool for use by districts to proactively manage their existing facilities while planning for future needs, and for the State to target assistance most effectively.

Paterson, one of three State-operated school districts, has already laid the ground work for a statewide electronic facilities needs assessment. Recently, Paterson, with the assistance of a group of architects, completed a comprehensive Five-Year Long Range Facility Plan<sup>3</sup> with a demographic assessment of enrollments, capacity and an evaluation of the physical conditions of each structure. Each building was evaluated on four levels:

1. Health, safety and code compliance
2. Operational and maintenance deficiencies
3. General and cosmetic issues
4. Deficiencies related to implementation of education programs and technology.

The report establishes immediate priorities and a long term action plan. Although the greatest urgency of need exists in many of the Abbott districts, a statewide facilities assessment using the Paterson model would indicate the degree to which facilities problems are shared with many districts across the state.

### **The Age of School Buildings**

Information assembled by the DOE in 1992 provides a limited overview of the age of State's school buildings. New Jersey's 2,279 school buildings range in age from 0 to 141 years, with an average age of 47 years. Two percent or 49 of the school buildings are 100 years or older, 41 percent are older than 50 years. Six counties in the northern third of the state have more than half of their buildings over 50 years old. In the Abbott districts, 64% of the buildings are over 50 years old.

Old school buildings are not necessarily obsolete. The inherent educational value and institutional character in historic buildings has long been recognized by some of this nation's most acclaimed public and private institutions, and trustees have committed adequate funds for periodic maintenance and renovations. Many older public school buildings are community landmarks whose architectural and historical significance have a positive economic impact on declining cities or town centers. Citizens who attended school in an older school building identify it as a tangible manifestation of the community. Broader environmental concerns such as the preservation of materials and energy invested in existing buildings, as well as the utility infrastructure and transportation systems already in place to

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<sup>3</sup> "5 Year Long Range Facility Plan for the Paterson Public Schools", EduFac, June 1, 1997.

service them, provide additional reasons to preserve facilities. The age of a building alone is often blamed for its current problems, instead of the true culprit - deterioration resulting from deferred maintenance. Still, local boards of education and administrators often find weighing the emotional attachments of district residents, the economic impact, and environmental issues as extraneous burdens on a public school district's core educational mission.

Building performance specialists suggest that direct economic benefits can be derived from a more careful analysis of older buildings. Their analysis is based on a dynamic definition of a building as a group of systems performing specific functions (structure, enclosure,

lighting, environ-mental control systems) working together to satisfy the building's overall program.<sup>4</sup> In order to respond to technological advances and changing program needs, many elements within buildings, including room-dividing partitions, wiring, lighting, and mechanical systems, need to be reconfigured on much shorter cycles than the building shell, i.e. the structure and exterior enclosure. This more dynamic approach encourages better design of new buildings that are more easily adaptable to alternative future needs. It also suggests that the high quality shells found in many older buildings have indefinite lifespans if properly maintained and can assume increased value as a framework in which less permanent systems are housed.<sup>5</sup> In fact, many older buildings are more adaptable to current uses than more recent ones. For example, the generous floor-to-floor clearances of pre-war buildings provide ample room for technical and mechanical upgrades. Although the cost of renovation can approach the cost of new construction, the lifespan of a renovated structure many be longer than that a typical new building.

#### Age of Public School Buildings

- 2,279 public school buildings used statewide in 1991-92
- Range in age for all buildings is 0 - 141 years
- Average age of all buildings is 47 years
- 49 buildings 100 years and older...2% total
- 35 century old buildings are in Abbott Districts
- 934 buildings are older than 50 years...**41% of total**
  - 64% of Abbott District buildings are over 50 years
  - 36% of other district buildings are over 50 years old
- 6 counties, the northern third of the state, have more than half of their buildings over 50 years

Source: NJ Dept. of Education, Division of Finance, Dec. 1992

State aid funding formulas for school facilities should be designed to encourage the most cost effective decisions regarding the replacement or reuse of an existing building. State aid provisions have had a strong impact on school building reuse decisions in Maryland where a 1995 law providing increased levels of aid for renovation of school buildings more than 41 years old has caused school renovation to increase from 18% to 88% of total school construction spending. Preliminary versions of the New Jersey's **Comprehensive Plan for Educational Improvement and Financing** proposed that building age be a factor in determining the level of state aid available to districts. Districts replacing a facility older than fifty years could qualify for funds for new construction, but should a district decide to renovate the old facility, the amount of aid for renovation would decrease by a factor related to age. Thus, the formula would have discouraged salvaging older structures. These proposals were not included in **CPEIF**, as enacted in December 1996. State aid for facilities was removed and placed in the New Jersey State Budget with the provision that criteria for the aid be developed by the DOE by 1998. Although it remains to be seen if such provisions concerning building age will be included, such initial suggestions by the state's leading education agency point to the need for further exploration of appropriate criteria for determining the viability of existing schools and avoiding the disposal of valuable capital assets. Age alone as a criterion for determining the viability of a building is inadequate. More specific and

<sup>4</sup> Ezra D. Ehrenkrantz, FAIA, *Architectural Systems, A Needs, Resources, and Design Approach* McGraw-Hill Publishing Company, 1989.

<sup>5</sup> Vivian Loftness, Jack J. Bickering, P.E., William L. Miller, Ph.D., and Arthur Rubin, Ph.D., "Re-Valuing Buildings: Investing Inside Buildings to Support Organizational and Technological Change Through Appropriate Spatial, Environmental and Technical Infrastructures". Report of a Workshop on Building Renovation Sponsored by Steelcase, Inc., November 1993.

comprehensive criteria beyond physical conditions are required, such as operating efficiency, flexibility to respond to current and future program requirements, value to the local community, and adaptability to technical upgrades.

### **The Department of Education's Role in Facilities**

In New Jersey, the Department of Education's responsibility for facilities is defined in N.J.A.C. Title 6, Chapter 22, entitled School Facility Planning Service. These responsibilities include: (1) the review and approval of a district's building plans and specifications for new buildings, additions, and alternations, (2) the approval of acquisition and disposal of land for school sites, (3) approval of the acquisition and closing of existing of school buildings by districts, (4) the approval of private and state operated school facilities for handicapped (sic) pupils, (5) temporary approval for operation of substandard facilities on an emergency basis, (6) approval of district long-range (five-year) facility plans, and (7) reviewing appeals from districts seeking exemptions.

Until this past year, the basis for approval of building plans and specifications by the DOE's Bureau of Facility Planning Service was for conformance with the educational specifications (an educational program description for a school building prepared for each project by the district or its consultants), for educational adequacy as defined by compliance with the educational facilities standards contained in 6:22 itself and, in addition, compliance with the State's Uniform Construction Code (U.C.C.) covering more general building design, structural, and life safety issues. In the course of performing these reviews, the Bureau staff offered considerable technical assistance to the districts and their consultants during the design process, primarily as interpretations of codes and standards.

In a reorganization that occurred at the beginning of 1997, the bulk of the Bureau of Educational Facilities Planning staff was transferred to the Department of Community Affairs. The purview of the DCA unit has been limited to enforcement of the U.C.C. that occurs once a project design is substantially complete. This leaves little technical assistance available to districts as the projects develop. More significantly, the reorganization appears to have left the DOE with a limited capacity to carry out its remaining authority regarding school facilities projects: site approvals, the review of educational specifications, and ensuring educational adequacy as defined by the education facility standards. These standards are comprised of specific design requirements such as plan dimensions, ceiling heights, lighting levels, and equipment for all instructional and support spaces found in a school building, and are intended to ensure that school buildings support the educational programs that should take place within them. The importance of such oversight in ensuring that New Jersey's school construction dollars are spent wisely can hardly be overstated.

### **Potential Benefits of a More Active State Role**

During the years in which New Jersey has been avoiding the growing school facilities problem, the private sector has made great strides in improving the management of facilities and realizing the economic benefits that result. The private sector has begun to view buildings as assets to an organization, so that expenditures on facilities maintenance and improvements are seen as investments rather than expenses. Modern facilities management comprises a coordinated program of inventory, maintenance, timely building system replacement, and the planning of renovations, additions, and new facilities. Understanding the life-cycle cost implications of facility decisions through careful investment in building improvements can achieve significant cost savings and more productive environments. Other states appear to be far ahead of the Garden State in easing the burden of school facilities management on local school districts. Because of their small size and constrained budgets, it is difficult for many school districts to develop and maintain comprehensive facilities management expertise and benefit from innovative methods. This lack of staff expertise can leave school facilities expenditures without a strong advocate in the budget process, resulting in the decline in value of facilities assets in an illusory attempt to save money. In recent

years, a number of districts have out-sourced facilities maintenance services, partly in order to obtain management expertise unavailable to them individually.

Enhanced State-level facilities support could ensure a higher level of performance by districts in building construction and management, especially in maintenance. The Commission of Business Efficiency of the Public Schools, in the summer of 1990, contracted with the New Jersey Institute of Technology's Center for Architecture and Building Science to conduct a study of the maintenance of public school buildings. The resulting report cataloged a backlog in building maintenance of over \$600 million for New Jersey's school buildings. The study identified numerous proactive methods employed by such states as Florida and Maryland that could serve as models for New Jersey. Prominent among these were requirements that individual districts maintain buildings properly in order to qualify for state facilities aid. New Jersey has taken a small step in this direction with the requirement imposed by **CEIFA** that the Commissioner of Education set criteria for maintenance by 1998 as a prerequisite for debt service aid for new construction projects.

Innovative methods of contracting for building design, construction, and construction management have been developed in the private sector in recent years and have come into use in the public sector as well. A few states have made these approaches available to school districts, generally by working through a state agency familiar with these methods. For example, in New York City (a school district with an enrollment as large as all of New Jersey's districts), the School Construction Authority, an independent finance and management agency, was established in response to the City's school facilities crisis. In order to save time and construction costs, the SCA was exempted from New York State's Wickes Law which requires retaining at least four prime contractors for each project. Similar multi-prime contracting requirements exist in New Jersey and other states in order to protect individual trades from making forced concessions to general contractors after a public contract is awarded. However, the lack of a single prime contractor with complete responsibility for a project can cause coordination problems and delays, and thus results in higher costs and additional management burdens on the district. Several states, most notably Massachusetts, have adopted special bidding procedures that offer school districts the project control afforded by a single general contractor while also protecting the rights of subcontractors. The New Jersey Legislature currently is debating a single-prime option for public projects ( Assembly Bill 2505 and Senate Bill 1742). New York's SCA also commissioned prototype school designs that are composed of functional modules (classroom, administration, gyms, etc.) which can be combined to form configurations that respond to specific building site and program requirements. This approach can save design costs and potentially save construction costs once builders gain experience from previous projects.

School districts in Florida have begun to employ the design-build method of building procurement through Florida's State Division of Building and Construction. In design-build, the district retains an architect to prepare preliminary design and performance specifications for a project. Construction contractors bid on these documents, working with their own consultants to determine the most cost-effective building methods during the bid process. After the award, the team completes the design and constructs the building, often on a fast-track basis. In New Jersey, the General Services Administration's Division of Property Management and Construction has used design-build for several major new State-owned projects, including the new Trenton Forensic Center and the State Correctional Facility in Bridgeton. School districts generally lack the technical expertise and professional experience that would be required to manage this type of project on their own and services such as those offer by the Division of Property Management and Construction are presently unavailable to school districts. Making the services of a statewide agency available to school districts would help them to be better clients, allowing them to benefit directly from the experience gained from projects in other districts, and increasing their leverage in the marketplace.

Because of the New Jersey tradition of strong home rule, state intervention or oversight is frequently a topic of debate. Any State program in order to be successful must

avoid undercutting the authority of local districts and undermining their ability to respond efficiently and economically to local concerns. Florida and Massachusetts school districts are able to contract with their state's building construction agency on a fee basis to develop school buildings. Districts are given the option of using the State's significant purchasing power and professional expertise without being required to do so. In turn, the state agency must be responsive and efficient in order to compete in the open market.

### Funding for School Facilities in New Jersey - Assuming Debt

Undertaking a capital project, whether new construction or renovation is a lengthy process requiring school administrators and boards of education to weigh multiple options to guarantee funding. Once the need for the project has been established, the initial architectural sketches completed and cost estimates obtained, securing the funding requires hours of analysis and debate. The level of debt a community is able to sustain must be considered. An estimate of the level of debt service aid a community can reasonably expect from the State has to be factored into the amount of funding necessary. The impact of the tax burden on the citizens of the community is a major consideration with the most critical issue being the willingness of taxpayers to accept a tax increase.

<b>Debt Level Guidelines</b>	
<b>School Districts</b>	<b>Allowable Percentage of Equalized Property Values</b>
Kindergarten-6	2.5%
Kindergarten-8	3.0%
Kindergarten-12	4.0%
Grades 7-12	3.5%
Grades 9-12	3.0%
Newark	8.0%

State law provides that a school district can issue debt in the form of general obligation or full faith and credit bonds in an amount up to a fixed percentage of the three-year arithmetic average of the community's equalized property value. If a district's proposed expenditures for a capital project exceed the fixed percentage set in the debt guidelines, the Department of Education must review the debt level. Up until that fixed percentage is reached, a local school board can assume any debt level deemed appropriate. Type II school districts (elected Boards of Education) must obtain voter approval in order to issue bonds. Type I districts (appointed Boards of Education) must receive approval from the municipal government to increase indebtedness. Voter approval is necessary only if the amount exceeds state guidelines.

School districts have the option of using a lease purchase arrangement for new construction or renovations to facilities. With lease purchase, the school district is basically paying rent for the new facilities until the term of the lease expires and the school district takes title to the facility. Voter approval is not required, but permission must be obtained from the Commissioner of Education and DCA's Local Finance Board. Repayment of the funds is subject to annual appropriations by the school district, is treated as debt service, and is outside of the cap limits. However, the obligation is not considered debt and does not affect the debt limitations of the district. Starting with the 1997-98 school year, school districts eligible for debt service aid are also eligible for aid on lease purchase arrangements. Since New Jersey's Department of Education now recognizes lease purchase as eligible for debt service aid, there are no longer any real disadvantages to using the lease purchase method for capital funding. If a district's credit standing is good, cost comparisons between the funding methods are often quite similar.

The more important question for a Type II Board of Education in need of funds for new facilities is whether to seek voter approval to issue bonds or go the route of lease purchase. If the Board seeks voter approval for bonding and is turned down, a subsequent lease purchase is bound to upset some voters and might affect future budget votes and board elections. A lease purchase arrangement initially could be the best funding option if

local voters can be persuaded during the two required public hearings of the expediency of lease purchase and savings resulting from avoidance of election expenditures.

Many communities are simply unable to assume the levels of debt necessary to upgrade school facilities without state help. Communities such as Pleasantville, Gloucester City, and Irvington, have exceeded both municipal and school district debt limits. Eight other communities, all with Abbott designation, are at or above debt level guidelines for either the municipality or the school district. But the poorest urban districts are not the only ones with problems in assuming new debt; 50% of Gloucester County communities are above, or within one point, of maximum debt level. Even if a school district has some remaining debt capacity according to State guidelines, the amount of money that could be borrowed is often well below the level of need. For example, Paterson's school facility needs are estimated at \$443 million and the remaining debt capacity is only \$90 million. Newark's latest estimate of **immediate** school facilities needs, not including the upgrades necessary for new educational requirements or adaptations for technology, is \$263 million dollars. With a remaining debt capacity of only \$274 million, this district will not be able to consider improvements beyond basic necessities without getting state approval.

The most significant component of the ability of a local or school district to fund new capital projects is the value of a community's property. Wealthier communities have a greater debt capacity because their property worth is higher. In simple terms, many communities, particularly the poorer urban cities, have lost much of their property tax base and have had to tax remaining property owners more heavily just to continue to maintain basic services. Additional payments in the form of debt service or rent for lease purchase would add to the already high tax burdens shouldered by local citizens. High property tax rates cause more citizens to default on their tax payments and further erode the ability of a community to revitalize depressed areas. Eleven of the Abbott Districts rank among the top 15 communities when classified by municipal property tax rates. East Orange led the way with a 1996 equalized tax rate of \$5.33 per \$100 of equalized property value, over twice the State average of \$2.48.

Even suburban, non-Abbott communities are struggling to build or upgrade current facilities because citizens are increasingly reluctant to commit to higher property tax levels. In the 1996-97 school year, significant numbers of school district bond referenda were defeated. In seven Gloucester County districts, a total of 13 bond questions were on ballots; voters rejected all but two, one of the questions was passed on the second try after major reductions in cost. Cape May fared no better. A question in Wildwood was defeated twice, one of two questions passed in Upper Township, and Ocean City's high school addition proposal failed. Three districts in suburban Essex County passed four ballot questions for school renovations, but West Orange voters turned down a \$21 million bond referendum. Somerset County's Somerville and North Plainfield Districts have had multiple referenda failures, so has High Bridge in Hunterdon County.

In a previous PARI study<sup>6</sup>, the authors found that voter sentiment against further property tax increases in the form of debt service payments is so pervasive that even the stability of long established regional districts is threatened. Few communities are willing to pay for new construction and, then, only if it is for schools within their own boundaries. Serious problems have arisen in some regional districts where growth in one community has outstripped other communities, causing school enrollments to grow beyond present school building capacities. The most recent example is in the Black Horse Pike Regional School District where voters rejected a \$47.5 million bond issue in September. The smaller communities that make up this Camden County regional district are now exploring ways to secede. Uneven community growth patterns present problems in maintaining existing regional districts and in encouraging any future consolidation of school districts. Sending/receiving relationships also can be strained when a receiving district has to expand or build new

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<sup>6</sup> "Reducing the Number of New Jersey School Districts: Regionalization and Consolidation Options" by Donald Linky and Joan M. Ponessa, April, 1996.

facilities to accommodate the growing enrollments from the sending district. As long as New Jersey depends on the property tax as the major source of operating funds for the public school system, solutions will have to be designed to deal with the disparities in resources between districts. At present, the only way to adjust for these disparities between communities is state aid.

### **The State's Role in Funding Facilities - A 25 Year Debate**

While some states have placed a high priority on maintaining school buildings, New Jersey has continued to debate the role of the State for over 25 years. The **Robinson v. Cahill** decision in 1973 contended that facilities were part of the constitutional requirement for a "thorough and efficient" education. In response to this decision, the New Jersey Legislature mandated that the Department of Education conduct a statewide inventory of public school facilities and estimate the cost of local district facility needs. In 1977, the DOE contracted with Uniplan, a professional association of architects, engineers, and planners to survey all operating schools in the state. This survey was designed to be a snapshot of existing conditions and provide a basis to determine the building needs for renovations and additions. The process resulted in a statewide cost estimate of over \$2 billion for school district facility needs and \$280 million in voter-approved bonds for capital construction projects. In the 1980s, limited aid for facilities was afforded to schools through debt service/capital outlay aid (ranging from 4.2% down to 2.5% of total state education aid) based on the district's entitlement to equalization aid.

The **Abbott v. Burke** decision in 1990 essentially restated the **Robinson v. Cahill** concerns: "The State's obligation includes (funds for) the capital expenditures without which the required educational opportunity could not be provided. That obligation has not been fulfilled; the lack is so great that under the present funding plan sufficient capital investment cannot be provided." The passage of the Quality Education Act a few weeks before the **Abbott** decision did little to help the situation. To a reduced level of debt service aid, the QEA added provisions for funding school facilities through foundation aid for 375 districts, but did not mandate that the facilities component of additional foundation aid be spent on facilities. Significantly, the total debt service aid, plus the additional aid for capital expenditures, was less than provided to local districts before QEA. The most recent opinion of the State Supreme Court in the **Abbott v. Burke** case, released May 14, 1997, concluded that the new funding formula for state aid to education failed to address the documented inadequacies of facilities in the plaintiffs' districts and also failed to meet the State's constitutional obligations.

In 1992, the DOE estimated that the school district facility needs had grown to approximately \$6 billion and that number has continued to be quoted as the level of statewide need. This estimate has been increasingly controversial, not only because the calculation which is based on information submitted in the 1985 and 1990 Five Year **Long Range Facilities Master Plans** is outdated, but district estimates often paint a rosy picture of plans or, conversely, do not include all the needs due to the inability to fund the projects. Either way, conclusions drawn from these documents are only a sketchy estimate of the true facility needs around the state. Other estimates, for example, **The Assessment of Infrastructure Needs to 2010** prepared in 1992 by the State Planning Commission for the New Jersey State Development and Redevelopment Plan, project a much higher level of need. This analysis outlined a total of \$16.4 billion in potential school facility costs. Some of the disparities in estimates stem from a major difference in the assessment methodologies. According to the Office of State Planning, "Backlog and rehabilitation costs, because of their probable magnitude, require more definitive estimates than was possible from the 5-year facility plans". At the present time, it is probably safe to say that the DOE's 1992 estimate of \$6 billion is on the low side.

A token attempt to address the growing problem was unveiled by Governor Florio and legislative leaders in February, 1993. The **New Jersey Works for Schools** rebuilding programs provided for \$50 million in one-time grants for ready-to-go capital improvement

projects in Abbott Districts. Bridgeton, an Abbott District in Cumberland County, was one of the districts able to benefit from this program. An additional \$250 million was designed for loans to school districts. By August 1993, the loans had been distributed by the Economic Development Authority to 131 districts who had projects targeted to begin and a revolving fund was established for repayment of the loans.

In 1994, Governor Whitman's Education Funding Review Commission recommended that the Department of Education determine an effective funding mechanism to be implemented by the Legislature. No such funding mechanism has been identified by the DOE, much less implemented. The Whitman Administration's level of commitment to funding the construction and upgrading of school district facilities came under serious question last year

School Year	District	Net Debt Service	Debt Service Aid P	Debt Service Aid	Actual Percent of Debt Service Aid
1993-94	Type I	\$68,296,456	\$27,104,445	\$19,440,553	71.70%
	Type II	\$208,317,459	\$65,233,402	\$46,788,404	71.70%
1994-95	Type I	\$68,612,589	\$27,290,396	\$19,883,267	72.90%
	Type II	\$231,795,316	\$72,895,991	\$53,110,630	72.90%
1995-96	Type I	\$79,811,610	\$32,480,447	\$19,890,568	61.20%
	Type II	\$276,579,076	\$86,058,205	\$52,700,836	61.20%
1996-97	Type I	\$77,786,788	\$31,659,830	\$18,482,821	58.40%
	Type II	\$293,991,958	\$86,977,623	\$50,777,026	58.40%
1997-98	Type I	\$58,882,988	\$30,564,582	\$15,183,595	49.70%
	Type II	\$249,693,576	\$97,664,707	\$48,516,998	49.70%
1997-98	Lease Purchase*	\$30,708,208	\$10,177,383	\$5,055,828	49.70%
1997-98	New Appropriation as of June 26, 1997			\$25,000,000	
1997-98	Total Debt Service Aid Appropriation and Percent Aid			\$95,248,000	68.80%

\* Lease Purchase Aid is new under P.L. 1996, Chapter 138  
Source: New Jersey Department of Education

when the \$20.5 million of interest payments scheduled to be repaid to the revolving fund for school facilities established in 1993 was transferred to the State's general fund budget. The proposed State budget for FY 1998 also uses these repayments to supplement the State's general fund but designates the money for school technology.

The State has supported the construction and upgrading of school district facilities through debt service aid and through occasional grant and loan programs, but, historically, facility needs have rested primarily on the shoulders of local taxpayers. The recently enacted school funding formula requires no new funding for facilities and the present level of debt service aid had been frozen until the recent FY1998 State budget appropriation increase of \$25 million. Even with the new money added to the State budget for debt service aid, districts are only receiving 68.8 percent of entitlement. As more districts are eligible for the aid and lease purchase commitments are added to the pool, the total availability for each district becomes less. This continuing failure to fully fund the debt service aid commitment causes an increasing burden on property taxpayers. In June, 1997, 18 Gloucester County school districts announced that they would sue the State of New Jersey, contending that the State has failed to provide adequate debt service aid for capital improvement projects. Gloucester City, Camden County, also has threatened to file a suit with similar allegations.

In 1996, Assembly leaders attempted to increase the cigarette tax by \$0.25/pack hoping to generate \$135 million annually for school facilities. When serious questions were raised by the Treasury about the accuracy of the revenue predictions, the measure failed to gain Senate support. Presently, Senator John Ewing has introduced a bill, S1063, to establish a \$550 million Educational Facilities and Technology Loan and Grant Program in the Educational Facilities. Of the total \$550 million, 50% would be available for special needs districts (90% as grants and 10% as loans); 35% would be designated for comprehensive school districts (60% as grants and 40% as loans). Any loan or grant would be subject to a review by the Commissioner of Education to determine if the project is necessary to provide a thorough and efficient education. Assemblymen John Rocco and Rudy Garcia also have

sponsored a bill, A-906, authorizing \$250 million in bonds for school facilities which is now pending before the Assembly Education Committee.

### A Look at Other States

In 1995 and 1996, the United States General Accounting Office completed a series of six reports on school facilities for members of the US Congress. According to the GAO, nearly all states now have some role in school facilities construction, renovation, and major maintenance, but only 13 states have established comprehensive facilities programs. State philosophies vary as to the appropriate level of state involvement in facilities issues with some states having a long history of assistance to local districts and others considering school facilities primarily a local responsibility. Beginning in the 1970s, litigation in many states, including New Jersey, highlighted disparities in school districts' ability to raise money for public education. Although most of the court decisions pertained mainly to the state's role in providing funding for instruction, state involvement in facilities-related matters have also increased. By 1991, state funding for school facilities around the country totaled more than \$3 billion or about 20 percent of all funds used for public school construction and renovation.

The GAO characterized 13 states as having comprehensive facilities programs: Alabama, Alaska, Florida, Georgia, Hawaii, Kentucky, Maryland, Massachusetts, Minnesota, North Carolina, Ohio, South Carolina, and West Virginia. Programs were considered comprehensive if the state has a facilities program framework in place that provided ongoing funding, conducted a variety of technical assistance and compliance review activities, maintained current information on the condition of school buildings statewide, and had one or more full-time staff working on facilities matters. At present, New Jersey's only funding program is in the form of debt service aid. This level of monetary assistance to local districts is considerably less than 24 other states, as shown in the table. A minimum of

Rank	State	State Funding for Grants and Loans	State Funding per Pupil
1	Alaska	\$273,956,043	\$2,254
2	Hawaii	\$133,088,000	\$740
3	Florida	\$579,182,541	\$290
4	Connecticut	\$137,541,140	\$281
5	Delaware	\$29,373,300	\$275
6	Maine	\$43,500,000	\$203
7	North Carolina	\$219,506,574	\$195
8	Massachusetts	\$170,000,000	\$193
9	New York	\$451,000,000	\$167
10	Vermont	\$16,400,000	\$163
16	Maryland	\$87,000,000	\$113
17	Pennsylvania	\$184,000,000	\$105
19	Virginia	\$108,800,000	\$104
<b>25</b>	<b>New Jersey</b>	<b>\$69,945,000</b>	<b>\$61</b>

Source: U.S. General Accounting Office report, "School Facilities, States' Financial and Technical Support Varies", November, 1995

technical assistance and compliance review is provided to school districts through the New Jersey Department of Education and the Department of Community Affairs, but, as highlighted above, no statewide data are available on the conditions of local facilities.

Florida has been providing financial assistance for school facilities since 1947 and currently has eight programs to aid local districts. Its eight funding programs for facilities assistance are funded from gross receipts from utility taxes and motor vehicle licensing tax revenues. Two programs are based on district enrollment growth relative to enrollment growth statewide; a third program provides funding for maintenance based on the square footage and age of a district's buildings plus building replacement costs. The remaining programs target projects such as joint-use facilities, vocational-technical centers, and projects to assist districts using modified school calendars. One program targets funding to districts with limited ability to raise local revenues for facilities.

To expand and modernize New York's aging school facilities, Governor George Pataki and the New York State lawmakers have pledged to seek voter approval at the November, 1997 election for a \$2.4 billion bond package. In 1996, the New York State Education Department evaluated the facilities needs around the state and developed a series of recommendations, including enhanced services from the Education Department's Office of Facilities Planning. A requirement to establish maintenance reserve funds is under review.

California seriously neglected its educational system after Proposition 13 was passed in 1978. The resulting property tax restrictions were not made up in state aid and expenditures per student dropped dramatically in the next decade. In recent years, the Golden State has had enrollment increases over twice the national average and, presently, has the most crowded classrooms in the nation. But, the citizens have begun to face the implications of neglect. A \$2.4 billion bond issue received a 71 percent positive vote in April, 1997. Between 1986 and the middle of 1996, the California voters approved \$8.8 billion in state general obligation bonds to fund K-12 school facilities programs. Passage of a state bond requires a 50 percent majority. Governor Pete Wilson is supporting a \$2 billion statewide bond initiative to be placed on the June 1998 ballot. One billion dollars of the bond would be targeted for facilities needs related to class size reduction and the other half would be dedicated for growth and modernization. In California, funding for school facilities is a state and local partnership. The State provides much of the money for school districts to buy land and to construct, reconstruct or modernize school buildings. Eligibility for State funds is based on the number of unhoused children in a district. Applications are processed in a chronological manner, with priority given to school districts that provide 50 percent of the cost of the project and meet specified year-round education requirements. Efforts are being made to redesign the State funding program to move for more local control. The resulting process appears to be in almost direct opposition to New Jersey where local control has been paramount.

### **Conclusions**

At present, there is inadequate information on the physical conditions of school buildings in New Jersey to ensure that new capital construction projects will be developed with the most efficient use of state and local government funds. From the most recent reports submitted to the Department of Education, it is evident that many school districts lack the capacity in their existing school buildings to house currently enrolled students and to accommodate the enrollment increases which will occur during the rest of this decade and into the next decade. Implementation of the Core Curriculum Content Standards and pre-school and all-day kindergarten space requirements will place further stress on available space. Given the age of many school buildings in the Garden State and delayed maintenance, it is apparent that billions of dollars will be required to support the upgrading of school buildings and new construction. This is occurring at the same time as taxpayers are becoming more adamant about the level of their property taxes. But, money alone will not solve all the school facilities problems in New Jersey. By enhancing the quality of technical resources at the State level, local school districts could be more effective in school facilities management and planning, and save taxpayers millions of dollars in construction costs.

## Recommendations

1. The State Department of Education should complete a needs assessment of all school facilities in the state based on the present physical condition of the buildings and projections of enrollments. The implications of the Core Curriculum Content Standards implementation and pre- and all-day kindergarten must be factored into the estimates for space requirements, and into the design and cost estimates for new school construction and renovations.
2. The role of the State should be expanded to provide technical assistance for facilities. This should include identification of innovative designs for new curriculum and technology applications, as well as the commissioning of prototypes for school design. The most efficient construction practices should be explored and necessary legislation and code adopted.
3. The potential savings to be achieved through regional approaches for developing and sharing facilities or programs should be explored.
4. The Department of Education and the Legislature must review the process for financing school capital needs. School boards and administrators should have more definitive information about bonding and lease purchase financing, the level of state aid available, and the potential for state loans or grants before making decisions that will affect a district's financial status well into the next decade.
5. The Legislature and Governor must develop a statewide funding program for **long-term** support of school facilities to ease the critical infrastructure needs, guarantee a thorough and efficient education for all students in New Jersey, and provide for less dependence on local property tax.

The Public Affairs Research Institute of New Jersey and the New Jersey Institute of Technology's Center for Architecture and Building Science completed this joint project to provide State and local policymakers with the background information necessary to begin a dialogue on school facilities needs and remedies. This study is by no means exhaustive and should be the beginning of a comprehensive analysis of New Jersey's role in providing the necessary school infrastructure for our students as we move into the next century.