

School Crowding in New York City: Progress, Problems and Projections

Introduction

This report describes current school overcrowding and the progress the school system is making in building new seats. The Public Advocate and Independent Budget Office's recent studies of class crowding in elementary grades highlight the importance of creating new seats in the most overcrowded parts of the city.

The current five-year capital program for school construction was formulated in 1999. Since then, the demographics of the student population have changed in some neighborhoods. The growing cost of school construction and budget cuts have caused many planned projects to be dropped from the current capital program. This report looks at how the current capital program meets the actual needs of overcrowded districts today. The report also makes recommendations to the Department of Education on actions it should take to address tomorrow's overcrowding.

The Current School Construction Plan

Overcrowding has been a chronic problem in New York City's public schools through most of the 1990s and continues today. The Department of Education (DOE) recognizes the problem and developed an ambitious capital program to build new schools. By law, DOE creates a five-year plan, which is implemented by the School Construction Authority (SCA).

In May 1999, the current capital plan was adopted. At that time, it was estimated that 75,000 new seats were needed:

- to relieve existing overcrowding;
- to accommodate then-projected enrollment growth;
- to provide sufficient seats to allow class size reduction in the early grades;
- to accommodate pre-kindergarten classes.

One of the priorities of DOE's current five-year capital plan is the creation of 58,143 new seats through new construction and leasing. If all of these seats are built, the school system would still be short approximately 16,800 seats at the end of the five-year period in mid-2004.

The five-year capital plan is now in its fourth year. Because of increased costs and budget cuts, a number of new schools will not be built within the time frame projected in the plan. A total of 12,303 new seats were completed this fall and another 17,285 seats are in construction.¹ A report by the Independent Budget Office (IBO) on the new school program stated that DOE's December 2001 amendment to its capital plan funded construction for 18,928 seats and deferred construction on another 11,072 seats. IBO now reports that another 7,421 seats, previously funded for construction, will now be deferred for a total of 18,493 seats with no funding in this capital plan. This report examines how the loss of new building projects affects overcrowding.

¹ Information from SCA Line Project Status Report, July 2002, and DOE Five Year Capital Plan summary.

1. Causes and Impacts of Overcrowding

To understand the complexities of the New York City public school system and its overcrowding problem, it is necessary to look at city-wide enrollment figures and how they change over time. New York City experienced high birth rates from the late 1980s into the 1990s as well as increased immigration; both of these factors account for the explosive growth in enrollment through most of the decade with the greatest one year increase of 23,109 students in 1995. High birth rates have an effect on enrollment for approximately thirteen years. Very high kindergarten enrollments translate over time into larger middle school and high school enrollments as these students advance through the public school system.

The impact of overcrowding on student performance is documented only for the early grades. As expectations for elementary students have increased with the introduction of standards, the lack of appropriate facilities to reduce class size has a direct impact on performance. But overcrowding affects students at all levels. High schools with double sessions because of overcrowding must reduce the school day due to lack of space; our students should be in the classrooms more time not less. Overcrowding also robs students of specialty rooms, such as art rooms and resource rooms for small group instruction, because they have been converted into classrooms. Play yards disappear because they are occupied by temporary buildings and classrooms in trailers.

Where is the Overcrowding?

Crowding varies from district to district. For the 2001/02 school year, the number of students enrolled in the Department of Education's facilities was 1,051,309.² At a local level, eight community school districts and the high schools in three boroughs were overcrowded. Queens had the worst overcrowding: four of its seven community school districts were overcrowded. One of them, District 24, is the most overcrowded in the city. At the high school level, Queens also had the worst overcrowding at 117% of capacity. Last year every borough except Staten Island had some level of overcrowding. Additionally, within under-utilized districts, there is spot overcrowding in individual schools because of barriers such as major roadways. Schedule 1, prepared by the DOE's Division of School Facilities, summarizes the need for 35,165 new seats in these eleven areas based on last year's enrollment numbers.

Schedule 1				
List of Overutilized Districts and Borough Overloads-As of October 2001				
District	Enrollment	Capacity	Overload	Utilization
6	28,339	26,561	1,778	107%
Total Manhattan Overload			1,778	
10*	43,868	41,677	2,191	105%
11	31,365	29,233	2,132	107%
78X	49,637	43,652	5,985	114%
Total Bronx Overload			10,308	
20	30,044	28,020	2,024	107%
78K	83,683	80,033	3,650	105%
Total Brooklyn Overload			5,674	
24	37,686	33,887	3,799	111%
27	34,952	33,848	1,104	103%
29	26,780	25,722	1,058	104%
30	29,271	28,978	293	101%
78Q	76,040	64,889	11,151	117%
Total Queens Overload			17,405	
Total Citywide Overload			35,165	
Source: Department of Education				

² The total student enrollment for 2001/02 was 1,098,832. The difference reflects the students not housed in DOE facilities, such as night school students, pre-K students in programs provided by outside providers, etc.

The audited enrollment numbers for the current school year will not be available for a few months but projections provided by DOE suggest that enrollment in DOE facilities is flat at 1,052,621. Nine of the eleven areas overcrowded last year are projected to continue to be overcrowded this year. One additional area is now suffering from overcrowding: Staten Island high schools now exceed 100%.

The worst overcrowding persists in Queens, where approximately 50% of the city-wide need for additional seats is located. Overcrowding at Queens high schools has worsened to 119%. Schedule 2, prepared by DOE, summarizes the current overcrowding situation. We should remember that at the start of the new school year, 12,067 new seats were added to the school system. These new seats are taken into account in DOE's analysis.

Schedule 2				
Projected 2002 Over Utilized Districts and High Schools				
District	Enrollment	Capacity	Overload	Utilization
6	27,694	26,797	897	103%
Total Manhattan Overload	27,694	26,797	897	103%
10	43,329	42,039	1,290	103%
11	31,262	29,349	1,913	107%
78X	50,385	43,652	6,733	115%
Total Bronx Overload	124,976	115,040	9,936	109%
20	30,055	29,638	417	101%
78K	83,665	80,698	2,967	104%
Total Brooklyn Overload	113,720	110,336	3,384	103%
24	37,749	35,652	2,097	106%
29	26,373	26,262	111	100%
78Q	77,616	65,063	12,553	119%
Total Queens Overload	141,738	126,977	14,761	112%
78R	15,992	15,645	347	102%
Total Citywide Overload	424,120	394,795	29,325	107%
Source: Department of Education				

Increased Overcrowding at Middle and High School Levels

The projections provided by DOE for the 2002/03 school year assume significant decreases in enrollment in many community school districts. If these projections do not prove to be correct, particularly in over-utilized districts, overcrowding will be worse than the analysis in Schedule 2. For example, District 6 in upper Manhattan, which has suffered from chronic overcrowding, needed 1,778 seats in 2001. For this new school year, a total of 236 seats have been added (116 for September and 120 seats later in the fall) but its overload fell to 897 seats. If District 6's enrollment were flat, it would still need 1,542 seats this year. The difference in the numbers is attributed to a projected drop in enrollment at the elementary level of 700 students with a small increase of 55 students at the middle school level.

DOE's projections generally show growth in the community school districts at only the middle school level. The students who started school in 1995, the year with the largest enrollment growth in recent history, are now in middle school. About half of the districts are projected to increase their middle school enrollments with seven districts projected to be overcrowded at the middle school level.³ There is very little growth projected for the elementary school level; only District 24, the most overcrowded community school district in the city, expects an increase of 540 students in its elementary schools.

Schedule 2 shows that the overcrowding persists and is, in fact, worsening at the high school level. City-wide high school enrollment is projected to grow by 2,391 students in just one year and, as noted earlier, this year high schools in Staten Island are projected to be overcrowded.

³ Districts 6, 10, 11, 20, 22, 24 and 29 are projected to be in need of new seats at the middle school level this year. Three of these 7 districts are projected to be below 100% capacity at the elementary level: 20, 22 and 29.

More Seats, More Crowding

This fall, 12,303 new seats were added to the system (12,067 in September plus two small projects adding another 236 seats in October). This should have reduced the over-all need for additional seats from 35,165 to 22,862 (See Schedule 1). However, Schedule 2 projects the need for additional seats today as 29,325 seats.

With relatively flat enrollment figures city-wide, what explains this discrepancy? If new seats are not built in the overcrowded areas (shown in Schedules 1 and 2), then they will not count against this overcrowding.

Examining the new seats created for this September, not all are located in the overcrowded areas identified in Schedule 1. In fact, 2,637 of the new seats are located in districts that were not overcrowded. Schedule 3 (attached at end) identifies the location of these new seats and provides some information on each district. Deleting these 2,637 seats from the 12,303 new seats leaves only 9,666 of the new seats located in the eleven overcrowded areas listed in Schedule 1.

Longer Term Overcrowding: 2006 and Beyond

Using DOE out year projections, many areas that are currently overcrowded will remain in that condition into 2006. Growth is minimal at the elementary level in most districts with a few exceptions—District 24 is expected to increase its elementary population significantly. Middle school enrollments continue to grow in some districts although that growth has slowed by 2006 except in a few districts such as District 27. At the high school level Manhattan is now projected to be over 100%; Bronx, Queens and Staten Island remain overcrowded.

Enrollments are projected to grow in the high schools, worsening existing overcrowding in Bronx and Staten Island. Queens remains significantly overcrowded but its overcrowding will be lessened only if planned capital projects occur. If DOE's projections are accurate for 2006, the overcrowding in Bronx high schools will worsen significantly from a need for 5,985 seats

in 2001 to a need for 10,466 seats in 2006. Staten Island is projected to have the largest percentage growth at the high school level between 2001 and 2006 at 13.4% which translates into a need for approximately 1900 seats.

While DOE's enrollment projections for 2011 may be less reliable for planning purposes, a significant factor in its analysis of space needs is the continued phase-in of class-size reduction in the early grades. Reducing the number of students in a classroom increases the need for additional classrooms. DOE is projecting capacity reductions in all of the community school districts presumably due to implementation of class-size reduction.

2. The Need for New Schools

This year there are projected increases in enrollment in the middle schools and high schools while the elementary schools are experiencing a decrease in students. As student populations grow, appropriate facilities must be provided. Students at different grade levels have specific educational curricula and need different facilities. It is not possible to use an elementary school, for example, for high school students without converting the building to meet high school curricula requirements, such as providing science labs. Creating new seats, particularly high school seats, must remain a high priority for the school system.

As the school system develops its educational agenda, the challenge of creating facilities to meet this agenda may worsen overcrowding temporarily. For example, the Chancellor's initiative transforming existing, zoned high schools into smaller academies will result in buildings with a smaller number of students. Educationally, smaller high schools are universally rated as far superior to the 2,000- to 3,000-student high schools which have been the norm in New York City and this is the direction that should be taken. Many of the new small high schools recently created are located in former large high schools, such as Martin Luther King Jr., Taft, and Theodore Roosevelt high schools.

How Does the Current Building Plan Meet Projected Overcrowding?

In December 2001, DOE amended its capital plan, making significant changes to the new school program due to insufficient funding, largely the result of the high cost of construction:

- Eighteen new schools, three additions and a number of lease projects are funded for construction. Some of these projects are already in construction. In testimony before the City Council in March 2002, the then Deputy Chancellor for Operations said that the decision to move forward with these projects was based on overcrowding. It should be noted that three of these eighteen new schools, two of which are already in construction, are in District 27, which is no longer projected to be overcrowded.

- Another eight new schools, two additions, one building conversion and various leased facilities, were funded for scope and design only in the December amendment. Of the new schools and additions, two are in areas currently projected to be over capacity.
- Postponing projects has serious consequences in a number of overcrowded areas. The IBO reports that DOE will be deferring another 7,421 seats that were funded for construction in this capital plan: seven new schools, two additions and new seats to be provided through leases in Manhattan and District 24.

Schedule 4 (2002 Overcrowding/New Seat Analysis) summarizes the needs of the overcrowded districts for this school year and the status of the new seats scheduled for these districts in the capital plan. The estimated need is 29,325 seats; 10,173 seats are currently in construction and another 8,887 seats are funded for construction for a total of 19,343 seats. Another 8,898 seats are no longer funded. If all of the seats funded are built as planned, six areas would still be short seats, most significantly Bronx and Queens high schools.⁴

High School Crowding Crisis in Bronx and Queens

If DOE's projections are correct, Queens needs approximately 12,500 high school seats to solve the overcrowding problem. With 800 to 1,000 students as the average size of a new high school today, 13 to 16 new high schools are needed in Queens alone. The Bronx is short approximately 6,700 seats; that translates into a need of seven or eight new high schools.

The urgency of creating new seats is obvious. The new seats created this September (Schedule 3) include only 232 seats for Queens high schools and no seats for Bronx high schools. In the recent capital plan summary provided by DOE, there are only three planned high school projects for the Bronx for a total of 1,700 seats: two new buildings and one lease. One new building is under construction and will be completed over the coming year. If DOE is successful in completing all three projects, there will still be a need for 5,000 more high school seats in the Bronx if the existing overcrowding does not worsen.

⁴ The six areas are: Districts 6 and 11, Bronx, Brooklyn, Queens and Staten Island high schools.

The situation is similar for Queens high schools. More projects are proposed (and the overcrowding is worse) but one of these projects is now deferred. If all of the funded projects are built and the existing overcrowding does not worsen, Queens high schools will still be short approximately 1,700 seats.

Schedule 4					
Districts Projected to be Overcrowded in 2002/New Seats Analysis					
District	Projected Utilization	Projected Seats Needed	Number of New Seats in Construction	Number of New Seats Funded for Construction	Number of New Seats Deferred
6 (note1)	103%	897	0	0	1,004
10	103%	1,290	1,104	318	0
11	107%	1,913	966	400	1,300
20	101%	417	0	0	900
24 (note 2)	106%	2,097	2,579	297	1,650
29 (note 2)	100%	111	2,141	0	704
78X (note 3)	115%	6,733	800	911	0
78K (note 4)	104%	2,967	600	1,200	2,140
78Q (note 2)	119%	12,553	1,983	5,761	1,200
78R	102%	347	0	0	0
	Totals	29,325	10,173	8,887	8,898
1. There are 527 new seats to be provided by leases for the Borough of Manhattan that are deferred.					
2. There are 2,221 new seats to be provided by leases for the borough of Queens that are deferred.					
3. Additional seats for Bronx high schools are funded through the Mayor City Council funds. No specific number of seats is available.					
4. There are 1,044 new seats to be for the Borough of Brooklyn that are deferred.					
Note: PS 499Q with 534 seats is currently in construction. It is a borough wide school and its new capacity is not included in this sched					
Source: Department of Education, Independent Budget Office					

New Construction Outside Crowded Districts

Another 6,578 new seats are under construction in seven districts that are not currently projected to be overcrowded. Additional projects in Districts 2, 19 and 31 are funded for construction, although these projects are funded by Mayor City Council funds, not DOE's capital plan. Schedule 5 (Underutilized Districts 2002: New Seat Analysis) provides a summary for these ten areas. At least two districts, 27 and 30, were overcrowded in the 2001/02 school year (Schedule 1) but are not projected to be overcrowded this year.

Schedule 5					
Districts Projected to be Under Capacity in 2002/New Seats Analysis					
District	Utilization	Projected Available Seats	Number of New Seats in Construction	Number of New Seats Funded for Construction	Number of New Seats Deferred
2(78M) (note1)	81%(98%)	5,177(872)	0	533	0
78M (note 1)	98%	872	678	0	1,200
18 (note 2)	95%	1,077	904	0	0
19 (note 2)	86%	4,004	0	400 (note 3)	0
22 (note 2)	97%	832	1,002	0	300
25 (note 4)	89%	2,975	0	0	630
26 (note 4)	96%	724	700	0	300
27* (note 4)	95%	1,829	1,408	0	520
30* (note 4)	97%	841	901	0	1,200
31 (note 5)	94%	2,878	985	0	947
Total Seats			6,578	933	5,097
1. The project which is funded by Mayor City Council funds, will create 533 for high schools but the school is under District 2 control. There are 527 new seats to be provided through leases in Manhattan that are deferred.					
2. There are 1,044 new seats to be provided through leases in Brooklyn that are deferred.					
3. This project is funded with Mayor City Council Funds.					
4. There are 2,221 new seats to be provided through leases in Queens that are deferred.					
5. Staten Island will receive Mayor City Council funds for additions; no project information is available.					
*Both of these districts were overcrowded in the 2001/02 school year.					
Source: Department of Education, Independent Budget Office					

Construction in District 27 added approximately 2,900 new seats this September. These new seats, combined with a projected decrease in elementary school enrollment from last year, are the reasons this district is no longer listed as overcrowded, yet there is a projected significant increase in the middle school enrollment. In District 30, there are small projected decreases at both the elementary and middle school levels, with the decrease more significant at the elementary level. With the small addition of 304 new seats this year District 30's utilization is projected to drop from 101% to 97%. Both of these districts currently have new schools in construction.

As noted earlier, in response to reduced financial resources, the DOE amended its capital plan and revised schedules for a significant number of new schools. With the additional deferred seats which now total 18,493 seats, approximately 8,900 new seats remain funded.⁵ Another 17,285 seats are currently in construction for a total of approximately 26,200 seats.

Issues in Planning New Schools

Creating this number of new seats would seem to approach a solution to the overcrowding need this year of approximately 29,000 seats except for four factors:

- This assumes the current overcrowding remains constant; no new districts will become overcrowded and the existing overcrowding will not worsen. As already discussed, enrollment figures cannot be expected to remain unchanged. For example, DOE projects continued growth at the high school level in four of the five boroughs through 2006, thus worsening the overcrowding in the high schools.
- All of these new seats would have to be built only in the overcrowded areas listed in Schedule 2. Schedules 4 and 5 identify where these new seats are. Some projects are in areas that were formerly more overcrowded when the capital plan was adopted in May, 1999.

⁵ This number does not include the seats to be created by the Mayor City Council funds except for Frank Sinatra High School nor does it include the seats for the schools to be leased at the Metropolitan Avenue site.

- It is not clear whether the space needs for *all* new educational initiatives have been included in the current analysis of capacity needs provided by DOE for the current school year. For example, early grade class-size reduction has not been uniformly implemented across the city. According to a recent report by the Independent Budget Office, average class-size in the early grades is now 22.2. However, District 24 in Queens, the most overcrowded district and the only one projected to have an increase in its elementary student population this year, has the highest average class in the early grades of 24.6 students. Construction planning must include all educational initiatives that DOE is implementing or contemplating. If pre-kindergarten remains funded and high school restructuring continues, then DOE must have a well-developed facilities plan for these programs.
- Many of our school buildings are not being used appropriately due to overcrowding. Gyms now house classrooms in many schools. Specialty rooms are being used for general education classes and not the purpose for which they were built. There does not appear to be a plan to eliminate temporary uses, such as temporary buildings, transportables and inappropriate room conversions. DOE should plan for the removal of temporary uses and the return of gyms, libraries, art rooms and other school spaces from classroom uses to their original intended purpose. This is important if New York City is to have a public school system that provides appropriate resources to all of its students.

Recommendations

Overcrowding remains a serious problem in New York City's public schools. Significant progress has been made; the addition of 12,067 seats this September has made a real impact in some areas. But with the need for new seats at close to 30,000, which does not appear to include seats needed for all planned educational initiatives and removal of temporary uses, the Department of Education should take a number of actions immediately:

1. No Delays

DOE identified the new schools that have funding through construction. DOE and School Construction Authority (SCA) must ensure that these new schools are not delayed.

2. Construction Cost Control

DOE must ensure that SCA has a plan to control construction costs. Higher costs are immediately translated into fewer projects. SCA must immediately provide an analysis of what has happened to construction costs over the last year and release its plan to control costs. As part of this report, SCA must issue updated projections for construction costs for the balance of this capital plan, which ends in fiscal year 2004. Given all of the critical needs in DOE's capital program, there must be assurance that funded projects will happen and that they are built on schedule.

3. Build in Overcrowded Districts

DOE should immediately establish its priorities for building new schools. There has been a decline in enrollment in some districts. When combined with recently constructed seats, this would appear to have improved the space situation significantly in some areas. If a new school is planned for a district that is not overcrowded, DOE should publicly explain why this project should be a priority. DOE must guarantee that new seats are built in areas of the city suffering from chronic overcrowding.

4. Plan for the Future

DOE must begin planning for its new five year Capital Plan. As part of its planning process, DOE must include:

- **Build to Meet Educational Initiatives**

A plan to quantify the space needs for all educational initiatives it intends to implement and how the needs of all of these initiatives will be met. In re-examining its priorities as called for in Recommendation 3, DOE must be clear on what the basis for building a new school is—does it include educational initiatives or not.

- **Return Schools to Normalcy**

A plan to return overcrowded schools to normalcy: to eliminate all temporary buildings and trailers, to return gyms, art rooms, libraries, resource rooms and offices to their original intended uses. A school that is currently listed at a utilization of 100% may have no resource rooms for small group instruction, no art room, no library and no gym because of overcrowding. If this is the case, the school remains seriously overcrowded. Restoring buildings by removing temporary uses must be an important goal of the school system.