### **Crowded classes** How 4th, 5th and 6th Graders are Left Behind

#### **Executive Summary**

The Office of the Public Advocate conducted an analysis of classroom sizes in New York City public schools from Kindergarten to the  $6^{th}$  grade using data obtained from the Independent Budget Office (IBO). The Public Advocate examined the progress made in reducing class sizes between October 1998 and October 2001. The report finds that despite state and federal funding for K to  $3^{rd}$  grade class size reduction, many early grade classes are still overcrowded because school building are filled to capacity, or are over capacity.

In 1998 the state and federal government allocated hundreds of millions of dollars to New York City for the purpose of reducing K to 3<sup>rd</sup> grade class size. The majority of the money went to the hiring of new teachers and creating additional classes. However, since many school buildings in New York City are already over capacity and there is no place to put any additional classes, class sizes in some locations have remained high.

The report also finds that average class size has gone down slightly since 1998, particularly in the early grades. Part of this reduction can be attributed to the creation of new classes, but some of it is due to the overall drop in enrollment throughout all community school districts. Furthermore, many K-3 classes still have upwards of 25 students and a few have 30 or more.

The Public Advocate's Office also examined class size data for upper elementary grades. Class sizes increase progressively from grade to grade in K-3. Class size increases dramatically between the 3<sup>rd</sup> and 4<sup>th</sup> grades, and increases steadily in each subsequent grade. While *slight* increases in class size for upper grade students are acceptable, the degree to which this occurs in New York City schools is alarming. In the study period, average 4<sup>th</sup> to 6<sup>th</sup> grade class size has come down slightly, but this is largely the result of the drop in enrollment.

The report recommends that the city build more schools in crowded districts to house additional children in classes funded by the state and federal government. The report also recommends that the 4<sup>th</sup> to 6<sup>th</sup> grade be given an equal amount of attention in the effort to reduce class sizes.

### Introduction

In 1998, the New York State Department of Education established its class size initiative. Since then, municipalities in New York state, including New York City, have received hundreds of millions of state and federal dollars to create new classes that reduce overall class size. The state's goal in this class size reduction initiative is to cap K to 3<sup>rd</sup> grade classes 20. The federal government's K to 3<sup>rd</sup> grade class size goal is 18.

The Public Advocate requested that the Independent Budget Office (IBO) provide data on class sizes in New York City public schools, and measure the progress that has been made over the past few years in reducing class size. The Public Advocate's Office conducted further analysis on the data to determine the impact that state and federal funding has had on class size since 1998.

This report outlines the results of our analysis in three separate sections. Section one interprets average class sizes in each grade level now in comparison to three years ago. Sections two and three offer the results of our analysis of class size distribution for early grades and upper grades, respectively.

After conducting a full examination of class size in public elementary schools, the report sets forth recommendations that the Public Advocate's Office believes will help the City achieve smaller class sizes.

### I. Class Size Average

Although overall class size has decreased, much of this change is due to citywide enrollment reduction and not the creation of additional classes. In the 4<sup>th</sup> to 6<sup>th</sup> grade, even though average class has decreased, we still have school districts operating over their current capacity.

Every school district in the city saw some kind of decrease in average class size from 1998 to 2001. The decrease varies from district to district, but overall the average K to 3<sup>rd</sup> grade class size in public schools is 21.8 students, a decrease of 2.9 pupils per class since 1998. In the 4<sup>th</sup> to 6<sup>th</sup> grade, average class size is 26.8, a 1.6 students per class decrease since 1998 (see Charts #1 and 2 in Appendix).

These figures indicate that there has been improvement in class crowding. However, this is only in part due to the creation of additional classes. A significant portion of the decrease can be explained by a decrease in enrollment. Even without the creation of new classes, class size averages would have decreased slightly.

### Spending money to create new classes can only be effective if there is space to put them in. Some of the districts with the highest average class size are also operating above capacity.

Even districts that saw some of the biggest drops in average class size remain overcrowded and operate over capacity. For instance, District 24 in Queens reduced average K to 3<sup>rd</sup> grade class size from 26.8 in 1998 to 24.4 in 2001. Despite the improvement, an average of 24.4 is well above the target for early grade classes. This district is still running above its capacity by 13%. In fact, seven out of the nine districts with the highest K to 3<sup>rd</sup> grade average class size were also above their capacity (see Table 1 in Appendix).

School capacity levels help explain why class sizes, while improved, are still too large in certain districts. District 24, as well as every other school district in the city, was given state and federal funds to hire new teachers and create more classes. However, if there are already 13% more students in a district than there are seats, where can these new classes go? Creating new classes can only solve the problem if there is space to put new teachers.

## **II.** Class Size Distribution: K to 3<sup>rd</sup> Grade

The goal of the class size reduction initiative was to establish a *limit* as opposed to an *average* of 20 students in early elementary grades in order to ensure that all students would be able to achieve academically. New York City schools have so far fallen short of the goal.

The level of analysis that can be done by looking at averages is limited. While averages are helpful in gaining a general perspective of what public school classes look like, a deeper analysis is needed to fully understand the problem. To this end, we examined exactly what individual classrooms look like in New York City. We found that, averages notwithstanding, every district still has far too many classes well above the cap of 20.

Research on class size and achievement has shown that "the major benefits from reduced class size are obtained as the size is reduced below 20."<sup>1</sup> Indeed in 1998 the Public Advocate's report on class size set 20 at the cap for K to 3<sup>rd</sup> grade class size. The data indicates that the vast majority (74.7%) of classes in this grade range are still operating at more than 20 students per class and in fact a significant portion (29.4%) of early grade classes contain more than 25 students (see Table 3 in Appendix). In the 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> grades, the percentage of classes with 25 or more students is 27.5%, 31.4% and 38.0% respectively. To put this into

<sup>&</sup>lt;sup>1</sup> Glass, Gene and Smith, Mary Lee; "Meta-analysis of Research on Class Size and Achievement," *Educational Evaluation and Policy Analysis*, 1979.

perspective, this translates into 360,857 K to 3<sup>rd</sup> graders sitting in 14,542 classes of at least 25 students.

In districts with particularly bad overcrowding problems, the data is even more alarming. In District 24 in Queens, for example, 37.4% of kindergarten classes, 63.8% of 1<sup>st</sup> grade classes, 63% of 2<sup>nd</sup> grade classes, and 62.8% of third grade classes have over 25 students. A small number of classes in this district (and a number of other districts as well) have at least 30 students.

### **III.** Class Size Distribution, 4<sup>th</sup> to 6<sup>th</sup> Grades

# Without the decrease in enrollment, 4<sup>th</sup> to 6<sup>th</sup> grade class sizes would have grown on average since 1998.

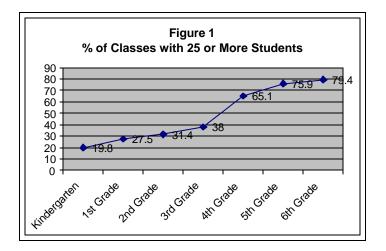
While K to 3<sup>rd</sup> grade class size has gotten the most attention in research, 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> graders also benefit from smaller classes and should not be overlooked. The data indicates that citywide, 4<sup>th</sup> to 6<sup>th</sup> grade class size averages 26.8. This is only a decrease of .8 students per class since 1998. This decrease is due only to the enrollment drop, without which average class would have *increased* by .8 to 27.6 students per class. Class sizes have benefited slightly over the past three years due a drop in enrollment; however, if the trend reverses, classes will become larger unless we have more teachers and more classroom space.

Although average 4<sup>th</sup> to 6<sup>th</sup> grade class size is 26.8, the data shows that a significant portion of students sit in classes with far more than the average number of students. For example, 33% of classes have at least 30 students. In total, this means that 83,267 4<sup>th</sup> to 6<sup>th</sup> graders in 2,632 classes of 30 or more students.

# There is an overall trend of increasing class sizes with each progressive grade level, and a sharp increase between the $3^{rd}$ and $4^{th}$ grade.

While analyzing this data, we noted a disturbing trend, which further added to concern over 4<sup>th</sup> to 6<sup>th</sup> grade class sizes. There is a dramatic increase in class size between the 3<sup>rd</sup> and 4<sup>th</sup> grades. Citywide, 38% of 3<sup>rd</sup> grade classes had more than 25 students, and 65.1% of 4<sup>th</sup> grade classes have 25 or more students. The percentage of 3<sup>rd</sup> grade classes with more than 30 students is only 3.3%, but the percentage of 4<sup>th</sup> grade classes with over 30 students is 24.1%.

The dramatic increase is followed by a continuous trend upward in class size from year to year. Figure 1 below shows that  $4^{th}$  to  $6^{th}$  grade classes are substantially more crowded than K to  $3^{rd}$ . In fact, 84,688, or 79.1%, of 6th grade students are in classes of over 25. Even more disturbing, 30,0386 or 40.6% of  $6^{th}$  graders are in classes of over 30.



A number of education experts have set the ideal upper elementary class size limit at 24-25 students; however, the Department of Education has no stated policy goal for 4<sup>th</sup> to 6<sup>th</sup> grade class size. Reducing the size of upper grade classes should be brought to the forefront of the class size policy debate.

While an analysis of the data on a citywide level is important, it is equally helpful to examine this issue on a community school district level. Using District 29 in Queens as an example lends a clearer picture of the extent of overcrowding. Forty-five fourth grade classes in District 29(43.7%) have between 30 and 34 students. Nine of these teachers have 33 or 34 students in their classrooms. Conversely, only 14 4<sup>th</sup> grade classes have only 20 and 25 students. By the time District 29 students get to the 6<sup>th</sup> grade, 612 of them (nearly half the 6<sup>th</sup> graders in the district) are in classes of 30 to 36 students.

### Conclusion

Overall, we found that K to 3<sup>rd</sup> grade class size has improved. However, the goal of keeping all classes below 20 students has not yet been met. Today there are still far too many early grade classes with 25 or more students. Despite the many millions of dollars that New York City has received from the state and federal government to create new classes and reduce early grade class sizes, classes are still unacceptably large, particularly in districts that are overcapacity.

The data for the 4<sup>th</sup> to 6<sup>th</sup> grade is more thought provoking. Classes in this grade range have seen virtually no improvement in class size reduction. Students in the 4<sup>th</sup> to 6<sup>th</sup> grade have a good chance of being assigned to a classroom with over 30 students.

Smaller classes are an important part of improving the learning conditions of students. In order for New York City schools to reach a higher level of academic achievement, students must be given all the tools necessary for success. The results of many years of research shows

that smaller classes contribute to higher levels of achievement. The Public Advocate's Office makes the following recommendations to address this problem.

## Recommendations

#### We must provide new schools in districts that are currently over capacity.

School districts that are running over capacity should be a top priority for the School Constriction Authority. Nationwide, smaller early grade classes have been an educational priority and a substantial amount of funding has been dedicated to this goal. New York City should not allow a shortage of classroom space to prevent it from benefiting more from such aid.

### Funding should be provided to decrease 4<sup>th</sup> to 6<sup>th</sup> grade class sizes.

Reducing upper level class sizes should become a priority. To demonstrate that all elementary school children deserve the benefit of smaller classes, additional funds should be made available from the state and federal government for upper grade class size reduction. The purpose of this funding is twofold. First, research should be conducted on upper grade class size and its relationship to achievement, focusing on setting an ideal limit for 4<sup>th</sup> to 6<sup>th</sup> grade classes. Then, funding should be used to hire new teachers, build new schools and create new classes specifically for upper grade elementary school students.