



FY 2026

Analysis of the 2025 November Financial Plan
by the Independent Budget Office

A Slow Start: Limited Progress in First Years Towards Class Size Compliance



December 2025

Table of Contents

Summary	1
Introduction	2
NYC's Compliance with the State Class Size Law.....	2
Planning for New Teachers and New Space	4
IBO Analysis	5
IBO Methodology.....	5
Findings	6
Over-Enrolled Classes	6
Teachers Needed and Hiring Costs	10
Contributing Factors.....	11
Conclusion	16
Appendix	18
Data Notes and Methodology	18
Figures.....	22

Summary

In 2022, New York State enacted a law that placed new limits on the maximum number of students within New York City classes. The law—which applies only to New York City’s traditional public schools, and neither to the City’s charter schools, nor schools statewide—includes grade-specific limits on class size and a mandate that an increasing share of NYC’s classes achieve compliance each year. The City must be in full compliance by 2027-2028 or risk losing a portion of the largest, most flexible source of state funding for school districts—Foundation Aid. As of the 2025-2026 school year, New York City Public Schools (NYCPS) must meet compliance within 60% of its classes. In November 2025, NYCPS [announced](#) that it had met that target, citing 64% of the City’s classes in compliance. That calculation excludes 7% of total classes (10,500 of 150,700 classes citywide) because they received exemptions and thus did not count towards the City’s compliance.

In this report, the Independent Budget Office (IBO) updates [prior analyses](#) to estimate how many NYC classes met the new requirements and how many remained over-enrolled as of the 2023-2024 school year, the most recent year of data available to IBO. IBO also provides new estimates for the number of teachers needed to reach 100% compliance, as well as the estimated cost of hiring those additional teachers. Finally, IBO investigates trends in student enrollment, teacher hiring, and teacher mobility as factors that may impact class size reduction efforts. IBO’s analysis extends across three years (from 2021-2022 to 2023-2024) to provide an independent estimate of teacher need and a benchmark prior to efforts since 2024-2025 by NYCPS to hire new teachers.

Among IBO’s findings:

- In 2023-2024, IBO found that enrollment within 52% of classes citywide met new class size limits. While NYC met the State’s mandated compliance threshold of 20% that year, the share and number of over-enrolled classes had increased since 2021-2022. Compliance decreased, especially in elementary grades: that year, 65% of elementary classes were over-enrolled.
- NYC’s compliance varied by community school district: as of 2023-2024, districts 20 through 31 in Brooklyn and Queens had the highest share of over-enrolled classes.
- While state law requires NYC to prioritize schools with high shares of students in poverty, the share of over-enrolled classes increased across all schools, regardless of poverty levels.
- Based on data from the 2023-2024 school year, IBO estimates that NYCPS must hire 16,300 additional teachers to achieve full compliance. Total annual costs for those additional teachers range from \$1.5 billion to \$1.7 billion, depending on the qualifications of newly hired teachers. Some of that cost has been offset by funds NYCPS has invested in hiring teachers since 2023-2024. After accounting for current and budgeted headcount, IBO estimates the City must budget for an additional 6,900 teachers by 2028, at \$700 million over and above those already budgeted for.

- Between 2021-2022 and 2023-2024, there was no substantial increase in the number of total teachers.
- 8,400, or 13%, of active teachers in 2022-2023 did not return to their previous year's schools for the 2023-2024 school year. Of those teachers, 3,400 left NYCPS entirely, 2,700 began employment at new schools, 1,500 became inactive, and 900 changed their roles, such as to become an assistant principal. This represents a slightly lower share of teachers departing their previous school than those who departed after the 2021-2022 school year (15%).

Introduction

NYC's Compliance with the State Class Size Law

As mandated by the 2022 state education law, New York City Public Schools (NYCPS) must limit the number of students within classes for all traditional public schools (see Figure 1 for new maximums by class type). Previously, the City's contract with the teachers' union, the United Federation of Teachers (UFT), regulated class sizes. Class size limits for 3-K and pre-K students, as well as those for students with disabilities whose individualized education program (IEP) mandates a smaller class size cap, remain the same.¹

State law allows for some exemptions to class size caps, although all exemptions must receive annual approval from the NYC Chancellor, the UFT, and the Council of School Supervisors and Administrators (allowable exemptions include space constraints, over-enrollment, shortages in relevant teacher license area, severe economic distress, and elective and specialty classes; see [additional guidance](#) for criteria). In November 2025, NYCPS [announced](#) 122 schools would receive exemptions this school year for 10,500 classes citywide, or 7% of classes that year.

FIGURE 1

New York State Law Sets Class Size Maximums by Grade and Class Type

Grades or Classes	New Class Size Limit under State Law	Prior Limit under UFT Collective Bargaining Agreement
Kindergarten to 3 rd Grade	20 students	25 students (Kindergarten); 32 students (1st to 3rd grade)
4 th to 8 th Grade	23 students	32 students (4th to 5th grade); 33 students (6th to 8th grade)
9 th to 12 th grade	25 students	34 students
Physical Education and Performing Group Classes	40 students	

SOURCE: NYC Department of Education (DOE), "SY2025 – 2026 (FY2026) Class Size Reduction Plan for NYC Public Schools"

NOTE: In addition to the grade-specific limits listed above, the UFT contract included a class size limit of 30 students for Title I middle schools.

New York City Independent Budget Office

State law also requires the City meet annual compliance thresholds, which increase over time: 20% of NYC classes were required to meet new class size limits in 2023-2024, with an additional 20% of classes in compliance each subsequent year, reaching 100% compliance by 2027-2028. Additionally, the law requires NYCPS to report annually on its class size reduction plan and progress towards compliance. The annual class size reduction plan, finalized in July, must outline how NYCPS plans to meet class size targets for the next school year and the annual implementation report, released in November, must outline the City's use of state funds to meet those goals, as well as other progress indicators, including actual and projected class sizes by schools, and plans for capital improvements (for all requirements, see state law [here](#)).

NYCPS' past three annual class size reduction plan have included estimates for additional teachers needed in total and for school buildings facing space constraints (see next section for further detail). Plans have also included some year-over-year targets: for example, the class size reduction plan for the 2024-2025 school year included a goal of improving district-level compliance by 3% (see class size reduction plans for [2023-2024](#), [2024-2025](#), and [2025-2026](#)). In the most recent annual implementation for the 2025-2026 school year, NYCPS [reported](#) that 64% of classes citywide were at or below class size caps—above the 60% compliance threshold (excluding exempted classes).

State law also required the City submit a financial impact statement by November 2025, in which the State allowed NYCPS a one-time option to recommend a pause of the class size reduction plan. In that [financial statement](#), NYCPS estimated full implementation would require \$949 million for teacher costs if funded as direct allocations to schools and \$1.7 billion if funded through an increase in the Fair Student Funding grade weights. NYCPS has used direct allocations in 2024-2025 and in 2025-2026 to provide funds to schools identified for over-enrolled classes. Alternatively, NYCPS could increase the base weight of the Fair Student Funding formula and thus provide additional funds to all schools: schools could use those funds to meet compliance if needed, or for other purposes if their classes were already in compliance. The financial impact statement also reported an estimate for class size capital costs at \$18 billion. NYCPS did not request a pause of the plan, citing significant progress made to date.

The law stipulates that New York State may withhold state funding—specifically, the Contracts for Excellence set-aside within the state's Foundation Aid—from NYC as a penalty, if the City does not make adequate progress. For the 2025-2026 school year, this set-aside [amounts](#) to \$1.089 billion in state aid.

Research on Class Size

While some studies have shown positive impacts of reduced class size on student achievement, including on long-term outcomes like college enrollment, other studies have identified class size as a higher cost policy than others with greater positive impacts, such as tutoring or additional instructional time.² Students from lower income backgrounds and students of color may benefit from lower class size and particularly in elementary schools, although the experience and quality of teachers hired to lower class sizes can reduce that positive effect.³

Planning for New Teachers and New Space

To fulfill the state mandate, NYC must hire new teachers, or recruit certified teachers from other districts within the state (New York State requires teachers to earn a state certification that can be used throughout the state and a Master's degree within five years of employment). To that end, in April 2025 Mayor Adams [announced](#) \$449 million in new funding to hire 3,700 teachers during the 2025-2026 school year. NYCPS, in collaboration with the UFT and the Council of School Supervisors and Administrators (CSA), [selected 750 schools](#) to receive additional funds to hire those new teachers, after reviewing school-level applications by school principals. School applications were reviewed using criteria [outlined](#) in the class size reduction plan.

In the NYCPS class size reduction plan for 2025-2026, NYCPS [estimated](#) an additional 10,000 to 12,000 new teachers needed, based on 2022-2023 school year data. After accounting for typical teacher turnover, NYCPS estimated a total need of 20,000 additional teachers before the 2028-2029 school year (IBO's estimates do not factor in typical teacher turnover). By November 2025, NYCPS [reported](#) an increase of 6,000 classroom teachers between the 2023-2024 and 2025-2026 school years.

In a recent [report](#), the Independent Budget Office (IBO) found that the salary of a NYC novice teacher with a Master's degree was similar to those across New York State, after adjusting for the local cost of living and the competitiveness of local labor markets. While competitive, NYC teacher salaries alone may not attract new teachers to the City's workforce. NYCPS offers some additional financial incentives: through funding provided by the New York State Education Department (NYSED), new teachers who commit to teach at eligible schools can receive a one-time \$3,400 [award](#), and NYCPS has [increased](#) the new hire stipend offered to teachers who commit early to teach in hard-to-staff districts (\$2,000) and subject areas (\$3,000). Mayor-elect Zohran Mamdani [introduced a proposal](#) during his campaign in October 2025 to provide tuition assistance to high school students and career changers who committed to teaching in NYC public schools.

In addition to the staffing needed to meet compliance, many NYC schools will need to find additional space to host new classes if they do not reduce enrollment. As of the 2025-2026 class size reduction plan, NYCPS [estimated](#) 495 schools were unable to meet full compliance within their current space. In November 2025, NYCPS [reported](#) roughly 7,300 classes across 113 schools would receive exemptions for space constraints because those schools would be positively impacted by planned and sited capital projects.

The School Construction Authority (SCA), a state authority created in 1988, manages education capital planning for NYC schools (in collaboration with NYCPS), which includes siting and construction of new schools, as well as capital improvements to existing schools. SCA has historically identified the need for new capacity projects through an analysis of enrollment and housing trends at the sub-district level for elementary and middle schools, and at the borough level for high schools. To fulfill the new class size mandate, SCA is [shifting](#) its approach, to also identify capacity needs at the school level. SCA and NYCPS have continued to [identify](#) small scale projects, such as the conversion of non-instructional space to new

classrooms, to create additional capacity. In the [November 2025 proposed amendment](#) to the five-year capital plan, SCA estimated opening 12,042 new K-12 seats by September 2028: 8,000 seats funded in the 2020-2024 Five-Year Plan, and 4,000 seats funded in the current 2025-2029 Five-Year Plan. In this report, IBO does not provide an independent estimate of physical capacity needs, focusing instead on the additional teachers needed to staff schools within the new class size limits.

IBO Analysis

At the request of New York State Senator Robert Jackson, IBO [assessed](#) the class size law and its potential impact on the NYC school system. Using data from the 2021-2022 school year, IBO's July 2023 report found that about half of all schools were over-enrolled under the new class size limits. IBO estimated NYC would need to hire 17,700 additional teachers at a cost ranging from \$1.6 billion to \$1.9 billion. IBO also found that a higher share of over-enrolled classes were located in Queens (nearly all of its seven districts), in districts 20 and 21 in southwest Brooklyn, and District 31 in Staten Island.

In this report, IBO updates estimates on the share of over-enrolled classes, the number of teachers needed to meet full compliance, and associated staffing costs, using data from the 2023-2024 school year and a methodology that expands upon that prior work. Because of methodological updates, IBO does not recommend comparing findings across reports. IBO has refined its prior approach through several changes to best capture teacher need: IBO now includes all school types, whereas the prior report excluded some schools with broad grade spans (such as kindergarten through 12th grade); for middle and high school classes, IBO refined our data source to reduce the risk of misidentifying some sections as classes; and IBO now assumes special education teachers can teach across subjects. Within this report, IBO extends this current approach to prior years to allow for year-over-year comparison (see Appendix for further details).

The data within this report are from the first of five years of the phase-in for compliance for class size mandates. IBO also provides additional analyses on factors that may impact efforts to comply with the state law, including trends in student enrollment and teacher hiring—looking at new hires, retention, and movement within the school system.

IBO Methodology

IBO identified over-enrolled classes under the new class size limits by first identifying student enrollment counts within unique classes. IBO examined general education (GE) and integrated co-teaching (ICT) classes and excluded other special education settings. These classes, referred to as self-contained (SC) classes, have class size limits lower than the state law's requirements, as mandated by students' individualized education plans. IBO assumed principals would redistribute students within over-enrolled classes to those with lower enrollment within the same program type (GE or ICT), the same grade if elementary grades, and same subjects if middle or high school grades.

To estimate teacher need in elementary grades, IBO assumed that each additional GE class would require one additional general education teacher and each additional ICT class would

require two teachers: one general education and one special education. To estimate teacher need in middle and high school grades, IBO assumed that every five sections of one subject would require one additional general education teacher. For every five sections of middle and high school ICT classes, IBO assumed two additional teachers are needed: one GE and one SE teacher. IBO's estimate for teachers needed does not factor in additional teachers hired to provide coverage for absent teachers.

IBO replicated this analysis for three school years (2021-2022, 2022-2023, and 2023-2024). IBO's analysis across these three years helps to identify any trends that predated the City's [substantial efforts](#) to reduce class sizes in the 2024-2025 school year.

IBO provides two estimates for teacher costs: one that reflects the minimum teacher salary, as per the UFT contract, for an entry-level teacher and one that reflects average teacher salary for a teacher with less than five years of experience. IBO also factors in a fringe rate—which accounts for health care and pension contributions—of 42%. IBO's analyses employ a different data source and methodology than NYCPS's estimates. For additional details on IBO's methodology, see the Appendix.

Findings

Over-Enrolled Classes

IBO found that in the 2023–2024 school year, approximately 48% of classes citywide were over-enrolled against the new class size caps (see Figure 2). The proportion of over-enrolled classes increased by three percentage points from 45% in 2021–2022 to 48% in 2023–2024. This increase reflects both a decline in total classes by 2,700 (or 1.8%) from 149,400 to 146,700, and an increase in over-enrolled classes by 3,800 (or 5.7%) from 66,800 to 70,600. In other words, class sizes continued to increase into the first year that state law required compliance. While the percentage of over-enrolled classes met the state-mandated compliance threshold of 20% in 2023-2024, the City did not make progress during these years towards the higher compliance thresholds that would soon follow.

While IBO found the citywide over-enrollment rate was 48% in 2023-2024, IBO also explored variation by grade and by community school district. Across the three school years studied, there were higher shares of over-enrolled classes within early elementary grades. And across districts in 2023-2024, IBO found higher over-enrollment rates within Districts 20 through 31 (with the exception of District 23). See Appendix Figure 1 for a map of school districts.

School Level

IBO found significant variation by school level. In elementary grade classes (kindergarten through 5th grade), about 65% of classes exceeded the new caps, with an increase of 11 percentage points since 2021–2022 (see Figure 2). In contrast, middle and high school grade classes had an over-enrollment rate of 46% in 2023–2024, a more modest increase of 3 percentage points over the same period. These findings suggest that compared with middle and high school classes, elementary schools fell further behind in meeting compliance targets through 2023-2024.

FIGURE 2

Number and Share of Over-Enrolled Classes by School Levels

	Citywide Total			Elementary Grades			Middle and High School Grades		
	2021-2022	2022-2023	2023-2024	2021-2022	2022-2023	2023-2024	2021-2022	2022-2023	2023-2024
Classes	149,399	146,579	146,694	14,872	13,844	13,668	134,527	132,735	133,026
Over-Enrolled Classes	66,790	69,911	70,621	8,100	8,671	8,878	58,690	61,240	61,743
Percent Over-Enrolled Classes	44.7%	47.7%	48.1%	54.5%	62.6%	65.0%	43.6%	46.1%	46.4%

SOURCE: IBO analysis of NYC DOE audited register, course and credit, and student demographic data

New York City Independent Budget Office

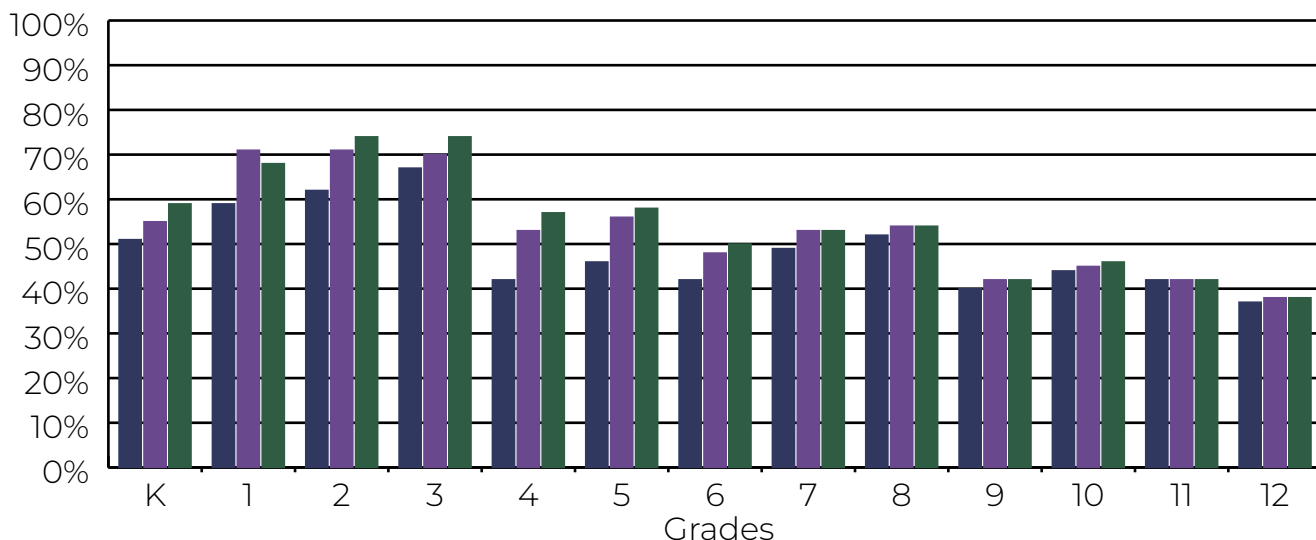
In 2023-2024, 1st through 3rd grade classes were the most over-enrolled, followed by middle and high school grade classes. As shown in Figure 3, the share of over-enrolled classes in 1st–3rd grades approached 70% in 2023-2024 and increased since the 2021–2022 school year. Over-enrollment in 4th and 5th grades also rose substantially, with shares above 55% in 2023-2024. In comparison, over-enrollment in middle and high school classes remained relatively stable at approximately 50% and 40%, respectively, with less year-over-year variation than in elementary grades.

FIGURE 3

Share of Over-Enrolled Classes by Grade and by Year

2021-2022 2022-2023 2023-2024

Share of Over-Enrolled Classes



SOURCES: IBO analysis of NYC DOE audited register, course and credit, and student demographic data

New York City Independent Budget Office

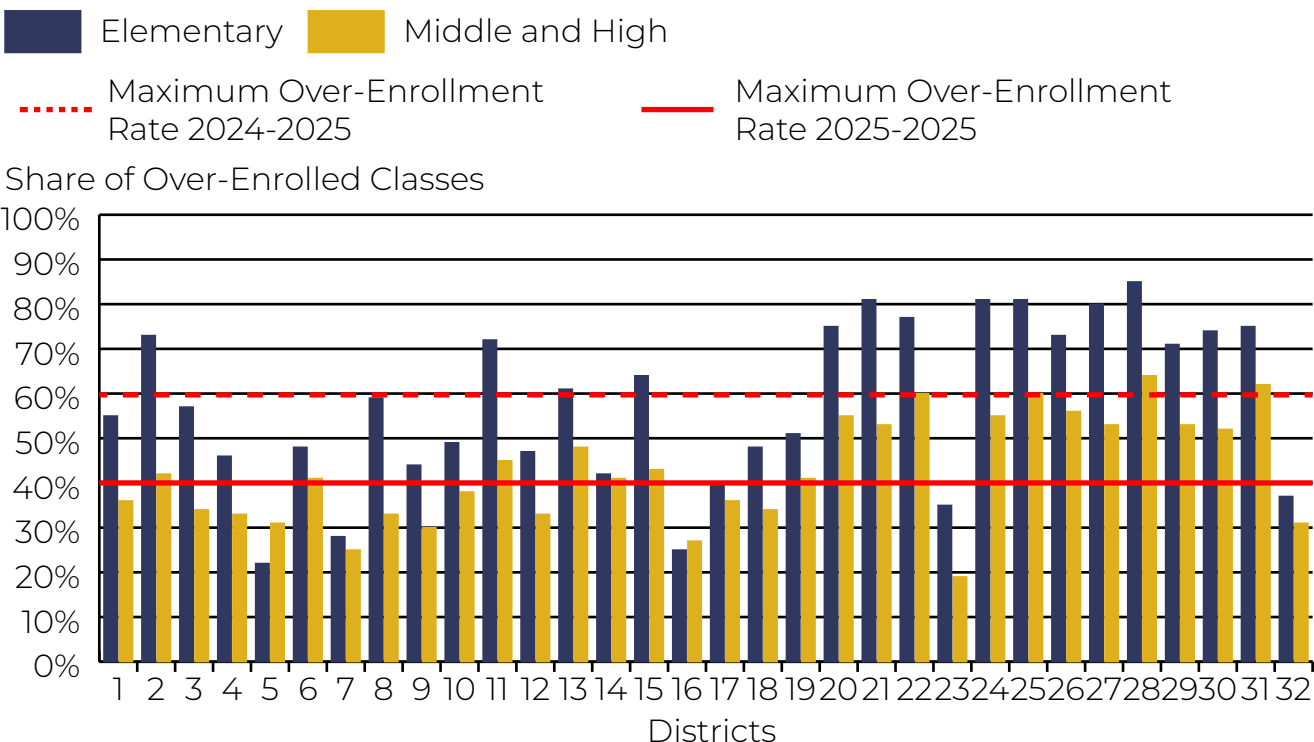
School Districts

Although the state law only mandates compliance at the city level (as defined by share of citywide classes meeting class size limits), IBO also examined over-enrollment rates for each of the 32 community school districts and found that there is wide variation, particularly in elementary school grades. (For a map of school districts, see Appendix Figure 1.) Figure 4 shows over-enrollment rates by district for elementary grades (blue bars) and middle and high school grades (yellow bars) in 2023–2024. For simplicity, the figure presents data for only one year, but IBO found these patterns were consistent across the three years (see Appendix Figure 2 for prior years). The red lines on the figure indicate over-enrollment maximums corresponding to compliance rates for the 2024–2025 and 2025–2026 school years. Note that the maximum decreases from 60% in 2024–2025 to 40% in 2025–2026, as the threshold for classes that must be in compliance (meeting or under class size limits) increases.

Districts 20 through 31 (with the exception of District 23) had the highest over-enrollment rates, with some shares in elementary classes exceeding 60% and reaching as high as 80%. Middle and high school over-enrollment rates in these districts were approximately 60%, substantially higher than the citywide average of 46% (see Figure 2). In contrast, Districts 1 through 19 had over-enrollment rates of roughly 40%, suggesting that many of these districts have already met or are nearing the 2025–2026 compliance targets. However, some districts

FIGURE 4

Percent of Over-Enrolled Classes by Districts, School Year 2023-2024



SOURCES: IBO analysis of NYC DOE audited register, course and credit, and student demographic data

New York City Independent Budget Office

still exceeded 60% in elementary grades. These findings highlight that the citywide average obscures substantial variation across the grades and districts.

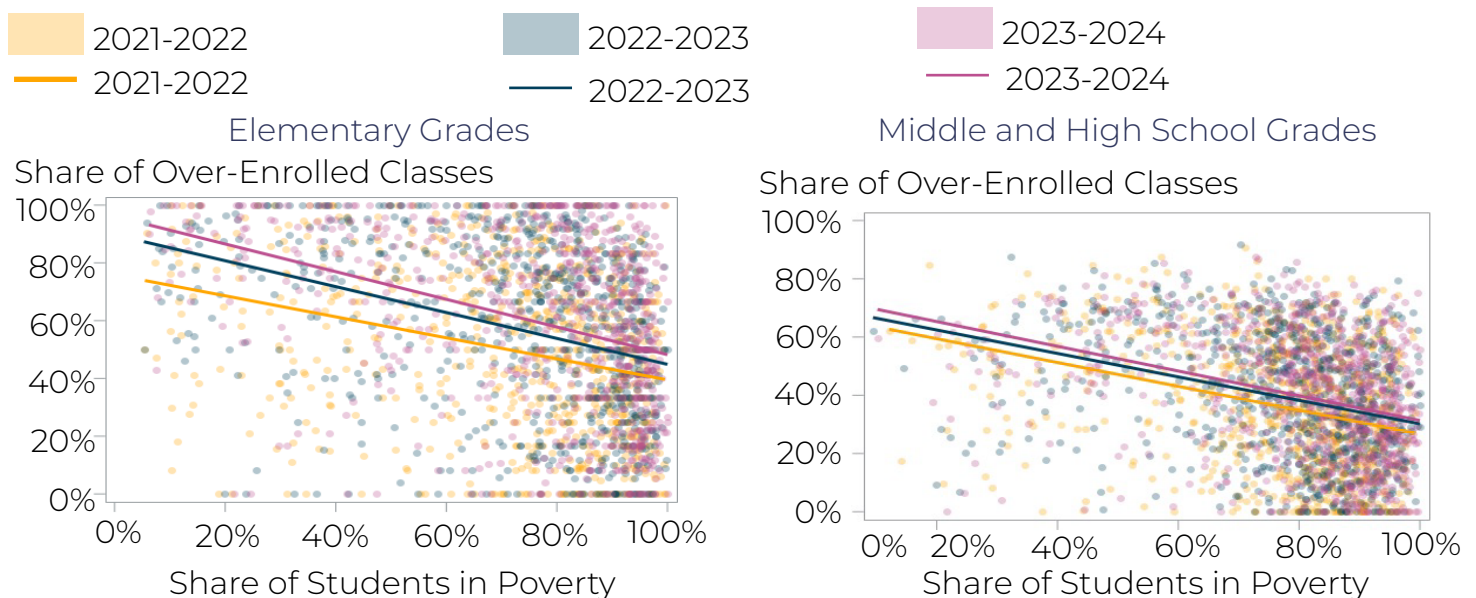
School Poverty Levels

New York State law requires New York City to prioritize schools serving higher shares of students in poverty. According to IBO’s [prior report](#), schools with higher poverty rates had lower over-enrollment across all levels in 2021–2022. This report extends that analysis through 2023–2024. Using NYCPS data, IBO defined school-level poverty rates as the share of students eligible for Human Resources Administration benefits, or free or reduced-price lunch (other measures, such as the True Cost of Living discussed in a [prior IBO report](#), represent a broader definition of what families require to thrive). IBO analyzed relationships between poverty and over-enrollment through scatterplots by school level and year (see Figure 5).

Figure 5 illustrates the relationship between the share of over-enrolled classes and the share of students in poverty. Each point represents one school for one school year; the lines represent the predicted relationship within each school year. Over time, across all grades and poverty levels, the school-level share of over-enrolled classes increased, as indicated by the upward shift in the predicted lines. The slopes of the predicted lines show that schools with higher poverty levels consistently had lower rates of over-enrollment. The relationship between over-enrollment and school poverty, reflected in the slope of the predicted line, remained relatively stable in middle and high school grades over the three years. In elementary grades, however, the relationship became notably steeper in 2023–2024. This shift indicates that lower-poverty schools experienced higher rates of over-enrollment in that school year.

FIGURE 5

Share of Over-Enrolled Classes and Share of Students from Lower-Poverty Families



SOURCES: IBO analysis of NYC DOE audited register, course and credit, and student demographic data

NOTE: Each point represents one school, color-coded by school year. Trend lines represent the predicted relationship between share of over-enrolled classes and share of students from lower-poverty families within each school year.

New York City Independent Budget Office

The state law requires all classes to reach compliance by 2027-2028 and stipulates the City must prioritize schools with higher shares of students in poverty as it works towards that goal. However, once those schools are in compliance, the law requires NYCPS to direct funds towards lower-poverty schools, as well. This has already begun to happen, as NYCPS reported that schools with less student need received larger allocations for new teachers for class size reduction this school year. This trend will likely not only continue but increase in magnitude, particularly for elementary schools.

Teachers Needed and Hiring Costs

As described above, IBO calculated the number of GE and ICT classes required to support students in over-enrolled classes. Based on the number of classes required, IBO then estimated the number of additional teachers needed and the associated staffing costs. In calculating these estimates, IBO considered that each additional GE class would require one teacher licensed to teach general education, while each ICT class would require both a GE teacher and a special education (SE) teacher.

To achieve full compliance, IBO estimated that the City would need a total of 16,300 additional teachers, which includes 12,500 GE and 3,900 SE teachers. In that school year, 2023-2024, there were 69,400 teachers in total (see Figure 9 below). Of the 16,300 additional teachers, IBO estimated 8,300 teachers would be needed for elementary classes and 8,100 for middle and high school classes, assuming class enrollment patterns remain consistent with those of the 2023–2024 school year (see Figure 6). Specifically, to meet full compliance, elementary schools would need an additional 5,600 general education (GE) teachers and 2,600 special education (SE) teachers. For middle and high schools, 6,800 GE teachers and 1,200 SE teachers would be required.

Figure 6 shows estimates for teacher need in school years 2021–2022 and 2022–2023, following this same methodology. IBO’s estimate of the total number of additional teachers needed increased each year from 14,200 in 2021–2022 up to 16,300 in 2023–2024. This trend reflects the rising number of over-enrolled classes described earlier. For total number of teachers within each year, see Figure 9.

FIGURE 6

Estimated Number of General Education (GE) and Special Education (SE) Teachers Needed

New Estimate	2021-2022			2022-2023			2023-2024		
	GE	SE	Total	GE	SE	Total	GE	SE	Total
Elementary Grades	4,709	2,243	6,952	5,411	2,558	7,969	5,640	2,647	8,287
Middle and High School Grades	6,136	1,084	7,220	6,722	1,233	7,955	6,832	1,227	8,059
Total	10,845	3,327	14,172	12,133	3,791	15,924	12,472	3,874	16,346

SOURCE: IBO analysis of NYC DOE audited register, course and credit, and student demographic data

New York City Independent Budget Office

The total annual cost of hiring 12,500 GE teachers and 3,900 SE teachers to meet full compliance by 2027-2028 ranged from \$1.5 billion to \$1.7 billion, including a 42 percent fringe rate to cover benefits such as health insurance and pension contributions (see Figure 7). The lower estimate (\$1.5 billion) reflects the minimum teacher salary for the 2023–2024 school year, \$64,789, as negotiated in the United Federation of

FIGURE 7

Estimated Teacher Hiring Costs as of 2023-2024

	GE	SE
Teachers Needed	12,472	3,874
Average Salary	\$73,149	\$74,252
Minimum Salary	\$64,789	\$64,789
Fringe Rate	0.42	0.42
Expected Total Cost Using Average Salary	\$1,703,948,607	
Expected Total Cost Using Minimum Salary	\$1,503,838,211	

SOURCE: IBO analysis of NYC DOE audited register, course and credit, and pedagogue data, and UFT 2023 Contract for teacher salary schedule

New York City Independent Budget Office

Teachers (UFT) contract. The higher estimate (\$1.7 billion) reflects the average salaries of GE teachers (\$73,149) and SE teachers (\$74,252) with five or fewer years of experience, as some teachers that are hired may have prior teaching experience. These cost estimates depend on contractual salaries, the City’s rate for fringe benefits, and IBO’s assumptions about the level of education and experience of new hires.

To meet full compliance, IBO estimated the City—based on data as of the 2023-2024 school year—would need to hire an additional 16,300 teachers by 2027-2028 at an expected total cost between \$1.5 billion and \$1.7 billion that year, and annually thereafter. This estimate does not account for other potential costs associated with recruiting, hiring, or training this additional workforce. To provide additional context, IBO also provides an estimate of budgetary need as of November 2025 using the Department of Education’s [Financial Status Reports](#) and the City’s financial plans. These financial plans budget for pedagogues, a category for instructional positions that includes teachers, support staff, and leadership positions, as well. Based on this report’s estimate for teacher need, IBO projects the City will require a total budgeted pedagogue headcount of 135,000 pedagogues by fiscal year 2028. As of November 2025, the City has budgeted for 128,000 pedagogues that year. As a result, IBO estimates that the City will need to increase its budget by 6,900 teachers to meet full compliance by 2027-2028. Using the minimum teacher salary, IBO estimates that will amount to an additional \$700 million required by fiscal year 2028.

Contributing Factors

IBO’s analyses suggest that over-enrollment rates can fluctuate from year to year. To better understand this variation, IBO examined potential factors that may influence class size trends, including student enrollment trends, teacher hiring patterns, and movement of teachers within and out of the school system.

Student Enrollment

First, IBO examined trends in student enrollment for grades 5 and below within the same schools analyzed for over-enrolled classes in Figure 2. IBO selected these grades because higher over-enrollment rates and greater year-to-year variation were most notable in the elementary-level classes. These enrollment counts include elementary grades within all schools reported in Figure 2, even those serving higher grades, as well. Additionally, IBO included all elementary-level students to better understand the staffing and space constraints faced by those schools, including 3-K students, pre-K students, and students with disabilities whose IEPs require placement in a SC classroom (self-contained classrooms require small pupil-to-teacher ratios and instruction by a special education teacher, usually with an additional paraprofessional for support). These enrollment counts do not include 3-K and pre-K students enrolled in stand-alone pre-K centers, nor those in community-based organizations.

The City has widely expanded its 3-K and pre-K capacity over the last ten years: the Pre-K for All program became citywide in September 2015 and the 3-K program, which began as a pilot in 2017, became citywide in September 2021 (see IBO's [report](#) on the history of early childhood budgets). The majority of 3-K and pre-K enrollment is within community-based organizations, which host programs outside of district schools. In 2023-2024, 17% of 3-K students and 38% of pre-K students were enrolled within district schools that supported additional elementary grades (see IBO's [report](#) for more information).

A shift in the distribution of program types will likely impact teacher and space needs: for example, ICT classes require one general education and one special education teacher; SC special education classes require stand-alone space for smaller classes. For pre-K classes, other [state regulations](#) cap pre-K classes at 20 students, with one teacher and either one paraprofessional for classes up to 18 students or two paraprofessionals for classes of 19 or 20 students. An expansion in pre-K enrollment within elementary schools will require additional staff and space.

As shown in Figure 8, the total count of students across these grade levels decreased by 1.5%, from 371,000 to 365,400. However, enrollment trends varied by grade level and program type. When accounting only for two grades, 3-K and pre-K, students below kindergarten increased by 2.3%, while students in kindergarten through 5th grade decreased by 1.8%. The total number of students in GE programs declined from 318,800 to 311,200 (-2.4%), while enrollment in ICT programs rose from 32,800 to 33,700 (+3.0%). Enrollment in SC programs also increased, from 19,400 to 20,400 (+5.4%). Notably, ICT and SC programs increased particularly among lower grades, between 3-K and 3rd grade (see blue cells in Figure 8).

The growth in ICT and SC programs in earlier grades—including 3-K and pre-K programs sited within district school buildings—could place additional staffing and space pressure on these schools already at risk of not meeting class size requirements.

FIGURE 8

Trends in Student Enrollment by Grades and Program Type

Grade	Total Students			In GE Program			In ICT Program			In SC Program		
	2021-2022	2023-2024	Percent Change	2021-2022	2023-2024	Percent Change	2021-2022	2023-2024	Percent Change	2021-2022	2023-2024	Percent Change
3-K and Pre-K	29,206	29,869	2.3%	28,871	29,125	0.9%	243	555	128.4%	92	189	105.4%
3-K	6,470	7,311	13.0%	6,316	7,043	11.5%	104	190	82.7%	50	78	56.0%
Pre-K	22,736	22,558	-0.8%	22,555	22,082	-2.1%	139	365	162.6%	42	111	164.3%
K to 5	341,773	335,556	-1.8%	289,955	282,123	-2.7%	32,512	33,183	2.1%	19,306	20,260	4.9%
K	54,911	54,447	-0.8%	49,492	48,048	-2.9%	3,351	3,599	7.4%	2,068	2,800	35.4%
1	55,492	55,239	-0.5%	48,549	47,944	-1.2%	4,187	4,448	6.2%	2,756	2,847	3.3%
2	55,983	56,243	0.5%	47,769	47,641	-0.3%	5,278	5,527	4.7%	2,936	3,075	4.7%
3	56,906	55,732	-2.1%	47,389	45,879	-3.2%	6,050	6,260	3.5%	3,467	3,593	3.6%
4	56,521	56,521	-4.2%	48,285	46,121	-4.5%	6,683	6,496	-2.8%	4,009	3,904	-2.6%
5	59,504	57,384	-3.6%	48,471	46,490	-4.1%	6,963	6,853	-1.6%	4,070	4,041	-0.7%
Total	370,979	365,435	-1.5%	318,826	311,248	-2.4%	32,755	33,738	3.0%	19,398	20,449	5.4%

SOURCE: IBO analysis of NYC DOE audited register data

NOTE: These enrollment counts represent the sample of schools IBO analyzed for over-enrolled classes in Figure 2. As a result, these enrollment counts exclude 3-K and pre-K students enrolled in stand-alone pre-K centers, or in community-based organizations.

New York City Independent Budget Office



FIGURE 9

Number of Teachers (Active and Inactive) by Program Type

	2021-2022		2022-2023		2023-2024	
	Number	Percent	Number	Percent	Number	Percent
Total Teachers	70,963	100%	69,005	100%	69,428	100%
GE Teachers	50,728	71%	48,701	71%	48,816	70%
Continuing Teachers	47,241	67%	46,372	67%	45,845	66%
New Teachers	3,487	5%	2,329	3%	2,971	4%
SE Teachers	20,235	29%	20,304	29%	20,612	30%
Continuing Teachers	18,549	26%	18,633	27%	19,274	28%
New Teachers	1,686	2%	1,671	2%	1,338	2%

SOURCE: IBO analysis of NYC DOE pedagogue data

New York City Independent Budget Office

Teacher Hiring

Second, IBO investigated trends in the number of total teachers and newly hired teachers (see Figure 9). IBO included active and inactive teachers to reflect all potential teachers within the system. IBO identified newly hired teachers as those with less than one year of experience. Between 2021-2022 and 2023-2024, the total number of teachers decreased by roughly 1,500 (or 2.2%) from 71,000 to 69,400. The reduction was primarily driven by a decrease in GE teachers, while the number of SE teachers increased. Furthermore, the number of newly hired teachers decreased. Across those years, the City hired fewer GE teachers (a 14.8% decrease) and SE teachers (a 20.6% decrease) than in previous years.

This decline in GE teachers and in newly hired teachers could be seen as a strategic alignment with decreasing student enrollment in GE programs. However, these trends also suggest that the City could face additional challenges in subsequent years to hire at the scale required to meet the class size law's compliance thresholds.

Teacher Movement

Finally, IBO examined patterns in teacher movement and changes in teacher status among active teachers from 2022-2023 to 2023-2024. Active teachers were defined as those with an active status in the Personnel Management System (PMS), holding regular or special education titles, and assigned to schools, consistent with NYCPS business rules. IBO tracked teachers active in 2022-2023 to identify outcomes the following school year, including if teachers: 1) remained at the same school; 2) transferred to another school; 3) left the NYCPS system; 4) changed roles or became unassigned to any school; or 5) became inactive, such as by taking a leave of absence (see Figure 10).

FIGURE 10

Active Teacher Movement and Status Change

	Total Active Teachers		Continuing Teachers		Newly Hired Teachers	
Total	66,016	100%	62,043	100%	3,973	100%
Same School	57,581	87%	54,413	88%	3,168	80%
Left NYCPS System	3,391	5%	3,039	5%	352	9%
Different School	2,674	4%	2,301	4%	373	9%
Inactive	1,517	2%	1,474	2%	43	1%
Changed Role or Unassigned to Schools	853	1%	816	1%	37	1%

SOURCE: IBO analysis of NYC DOE pedagogue data

New York City Independent Budget Office

IBO found that among 66,000 active teachers in 2022-2023, 57,600 teachers (87%) remained as teachers at the same schools the next school year; 2,700 teachers (4%) moved to teach at different schools; 3,400 teachers (5%) left the NYCPS system entirely; 1,500 teachers (2%) became inactive; and 850 teachers (1%) changed their roles, including 263 teachers who changed positions, such as to assistant principal roles, and 480 teachers who became unassigned to any school (for example, teachers who were excessed from their schools and have not yet found a new position). In total, approximately 13% (8,400) of teachers were no longer teaching in the same school the following year. Movement and status changes were more pronounced among newly hired teachers than continuing teachers. Among newly hired teachers employed in 2022-2023, 80% of teachers remained at the same school; 9% of teachers transferred to different schools; 9% of teachers left the NYCPS system entirely; 1% changed roles or became unassigned to any school; and only 1% of teachers became inactive in 2023-2024. Approximately 20% (or 800) of new teachers did not continue teaching at the same school, either due to a change in location or status. IBO also observed similar patterns in teacher mobility from 2021-2022 to 2022-2023: teachers did not return to their same school at similar rates and newly hired teachers were more likely to move to different schools and leave teaching status than continuing teachers.

These findings highlight a potential challenge in efforts to reduce class sizes. IBO's analysis indicates that a total of 8,400 active teachers (7,600 continuing and 800 newly hired teachers) may transfer, become inactive, or leave teaching positions within a given school year. Even if the City hires new teachers based on class size needs in each school, those newly hired teachers may move to other schools or leave their teaching positions the next year. Schools then may face new vacancies to fill as teachers move within or outside of the system. Therefore, focusing solely on hiring new teachers may be insufficient to achieve and sustain class size reduction goals over time. A more comprehensive strategy might include not only the recruitment of new teachers but also robust monitoring of teacher retention and mobility across the system.

Conclusion

During the 2023-2024 school year, IBO found roughly 52% of NYC classes were within the class size law limits, a greater share than the 20% mandated for compliance that year. However, IBO found that compliance rates varied substantially across grades and by district. Many classrooms in the elementary grades (mostly 1st to 3rd grades) and in districts 20 through 31 (with the exception of District 23) were substantially over-enrolled. Furthermore, IBO found that the citywide over-enrollment rate increased from the 2021-2022 to the 2023-2024 school year. Based on data from the 2023-2024 school year, IBO estimated to comply with state law, the City would need to hire an additional 16,300 teachers by 2027-2028, at a cost ranging from \$1.5 billion to \$1.7 billion that year and annually thereafter. IBO will continue to examine subsequent years as data become available. In the 2024-2025 school year, the total number of teachers increased by about 800 (or 1%) from 2023-2024. Despite the increase, the number of total teachers and the number of GE teachers remained lower than the 2021-2022 level. The number of special education teachers, however, continued to increase. The number of newly hired teachers was almost the same in 2023-2024 and in 2024-2025 (4,300 and 4,300, respectively). These preliminary numbers suggest that progress towards class size reduction may have been minimal in 2024-2025.

The 2025-2026 school year has been a crucial year for the City to meet the 60% compliance threshold. In anticipation of this challenge, the City allocated an additional \$182 million in 2024-2025 and another \$458 million to hire 3,700 new teachers in 2025-2026. However, findings in this report suggest student enrollment and teacher hiring trends may impact the success of this plan. First, IBO's additional analysis found that the number of students in ICT, SC, and pre-K programs has increased year-over-year, while the number of GE students has decreased. Additional ICT classes, which include one general education and one special education teacher, will require twice the number of new teachers. SC classes require specific pupil-to-teacher ratios, as mandated by students' IEPs, and additional class space. For schools already facing high shares of over-enrolled classes, changes in the composition of 3-K and pre-K enrollment within district schools (such as an increase in the number of SC classes) may also require new staff and class space. Overall, schools may face new staffing and space needs if the distribution of programs shift within those schools.

State law requires all NYCPS classes meet class size limits by 2027-2028, but implementation so far has led to perhaps unintended consequences. While the law requires the City prioritize higher-poverty schools, eventually all schools must be in compliance. NYCPS' most [recent class size reduction plan](#) stated that in the 2025–2026 school year, NYCPS awarded more funding for teacher positions to lower-need schools. Because these new vacancies are open to both new and existing NYCPS teachers, such openings could attract current and experienced teachers to move from higher-need schools to newly created positions in lower-need schools. Schools with higher need already [experience](#) higher vacancy rates and lower teacher retention than schools with lower need. In this report, IBO found a substantial number of teachers leave their current schools or change their teaching status year-over-year. When NYCPS awards new funds for teacher positions to meet the 80% compliance threshold for next school year (2026-2027), those funds are likely to go to lower-need schools. As a result, the implementation of the

law may increase teacher mobility across the system. Higher-need schools may find it difficult to hire new teachers and retain existing ones.

This potential impact on teacher mobility may also impact the equitable distribution of teachers citywide. This pattern would mirror the outcomes observed during California’s class size reduction reform, which resulted in the loss of experienced teachers in schools with higher needs.⁴ If this concern were realized, present disparities in teacher experience across schools, identified in a [previous IBO report](#), would worsen. As NYCPS faces higher compliance requirements in subsequent school years, these challenges will likely remain at the forefront of NYC’s implementation of the state class size law.

Appendix

Data and Methodology

This report examined 1) over-enrolled classes for elementary grades (kindergarten to 5th grades) and over-enrolled sections for middle and high school grades (6th to 12th grades); 2) the number of teachers needed and associated hiring costs; 3) student enrollment by program type; and 4) number of teachers and teacher hiring, movement, and change in teaching status across schools identified as needing additional teachers within Districts 1 through 32 from the 2021-2022 through the 2023-2024 school years. IBO utilized student-, teacher-, and school-level data, as well as data on schools' classes and sections, provided through a Memorandum of Understanding with NYCPS.

In this report, IBO updated the methodology established in IBO's July 2023 report. As a result, IBO discourages any comparison of teacher counts or costs across the two reports. IBO replicated this updated approach for three school years from 2021-2022 to 2023-2024 to allow for year-over-year comparisons. Additionally, analysis over multiple years helped identify pre-existing trends before the City made substantial efforts to reduce class sizes in the 2024-2025 school year.

Analysis of Over-Enrolled Classes or Sections

To identify enrollment within classes for elementary grades, IBO used Audited Register data, a snapshot of student enrollment at the end of October. To identify enrollment within sections for middle and high school grades, IBO used course and credit data for the first term of the school year. These data include students who earned a grade in that course (either passing or failing), and so as a result, IBO's analyses exclude students who may have begun a course but did not complete the course that term.

To construct a sample of classes and sections, IBO restricted the sample to include those with reasonable sizes (greater than 5 students and less than 100 students), following a similar NYCPS method for excluding outliers. IBO created datasets that include uniquely identified classes or sections with enrollment numbers by grade, program types (GE or ICT), and subjects for higher grades, and then constructed new variables to determine how many students were over- or under-enrolled compared with the caps required by the class size law. IBO then calculated the share of over-enrolled classes, the number of additional classes needed, and the number of teachers needed to staff those additional classes. IBO assumed principals would redistribute students within over-enrolled classes to those with lower enrollment for classes within the same program type (GE or ICT), the same grade if elementary grades, and same subjects if middle or high school grades. Because of limitations within course data, IBO uses the subject-level categorization of middle and high school sections, such as English, Social Studies, Mathematics, and Science. Based on the new variables, IBO was able to identify the percentage of over-enrolled classes by subgroups, including grades, program

types, schools, districts, and citywide. See end of appendix for additional context on teacher certifications and student course-taking.

For example, an elementary school may currently have three kindergarten classes with enrollments of 18 students, 22 students, and 24 students. The class size limit for kindergarten is 20 students. If all three classes are general education classes, IBO assumes the principal would first redistribute students so that only one additional class is required to meet compliance, rather than two. IBO draws upon this level of detailed student and class data to estimate compliance.

Analysis of the Estimated Number of Teachers Needed and Associated Cost Estimates

IBO reorganized each class or section within a school, moving students from large to small classes, based on the class caps. Because of limitations in this student-level course data, IBO grouped sections at the subject level (such as English, Social Studies, Mathematics, or Science). As a result, this estimate may slightly undercount the number of teachers needed for subjects that require teachers with specific certifications (for example, a Chemistry teacher within the broader subject of Science).

Based on the rebalanced classes or sections data, IBO estimated the number of classes needed by general and ICT education programs. For elementary grade classes, a general education teacher is required for a general education class, and two teachers (a general and a special education teacher) are needed for an ICT class. For the middle and high school sections, IBO assumed that a teacher can teach a maximum of five periods per day, as per the UFT contract, and that none of these teachers can be shared across schools. Therefore, the number of GE teachers needed in these grades was determined by dividing the estimated number of sections within a subject by five. For ICT teachers, IBO divided the estimated number of sections by five, regardless of subject, as those SE teachers can teach within any subject. IBO does not account for any additional teachers required to provide coverage for absent teachers, either as short-term or long-term substitute teachers. IBO then aggregated the estimated number of teachers at the school, district, and city levels.

IBO estimated the cost to hire additional teachers, based on the following factors: 1) the estimated number of teachers; 2) the minimum salary set by the UFT contract (\$64,789) and the average salary of teachers with five or less years of teaching experience (\$73,149 for general education teachers and \$74,252 for special education teachers); and 3) the estimated fringe rate of 42% for costs such as health insurance and pension contributions. Staffing costs were calculated by general and special education teachers separately, by multiplying the estimated number of teachers by the corresponding average or minimum salary by a factor of 1.42 to account for fringe benefits. The total costs included both general and special education teacher costs.

Analysis of Elementary-level Enrollment

To analyze enrollment within grades 5 and below, IBO used the Audited Register data as with earlier elementary grade analyses. IBO included pre-K students and students in self-contained programs within the same schools analyzed for over-enrolled classes in order to examine potential constraints within those schools. The sample was restricted to 5th grade students or younger and to those enrolled in the traditional public schools (districts 1 to 32). IBO determined enrollment by student grade and program type (GE, ICT, and self-contained classes), using related indicators from the data.

Analysis of the Number of Teachers and Teacher Hiring, Movement, and Change in Teaching Status

When analyzing the number of teachers, teacher hiring and movement, and average salary, IBO followed NYCPS business rules for identifying teachers from pedagogue data. These data represent an annual snapshot of the number of school-based staff, taken at the end of October in each school year. To identify active teachers, IBO selected teachers assigned to schools by their New York City Personnel Management System (PMS) status, title codes, and school-based indicators.

First, IBO determined the total number of teachers by GE and SE from 2021-2022 to 2023-2024, regardless of active or inactive status. IBO included inactive teachers to represent the total potential teaching pool. IBO then constructed an indicator within that sample for continuing or new teachers within a school year (new teachers were identified if they had less than one year of experience).

Finally, IBO explored potential outcomes for active teachers the following school year, including: 1) a teaching position at the same school; 2) a teaching position at a different school; 3) a departure from the NYCPS system entirely; 4) a change in status to inactive; and 5) a change in role (such as to an administrator role), or the lack of assignment to any school. Based on these indicators, IBO examined the number or share of teachers by various types.

A Note on Teacher Certifications

NYC teachers must receive a New York State certification to teach and earn a Master's degree within five years of employment. General and special education teachers within elementary grades must hold a "Common Branches" state certification and general education teachers within middle and high school grades must hold grade-level and subject-specific certifications (such as "Social Studies 7-12"). Special education teachers supporting ICT classrooms often support a range of subjects within their grade-level. As a result, principals generally assign teachers in elementary grades by grade, and principals in middle and high school assign general education teachers by subject. IBO's methodology follows these patterns.

A Note on Student Programs

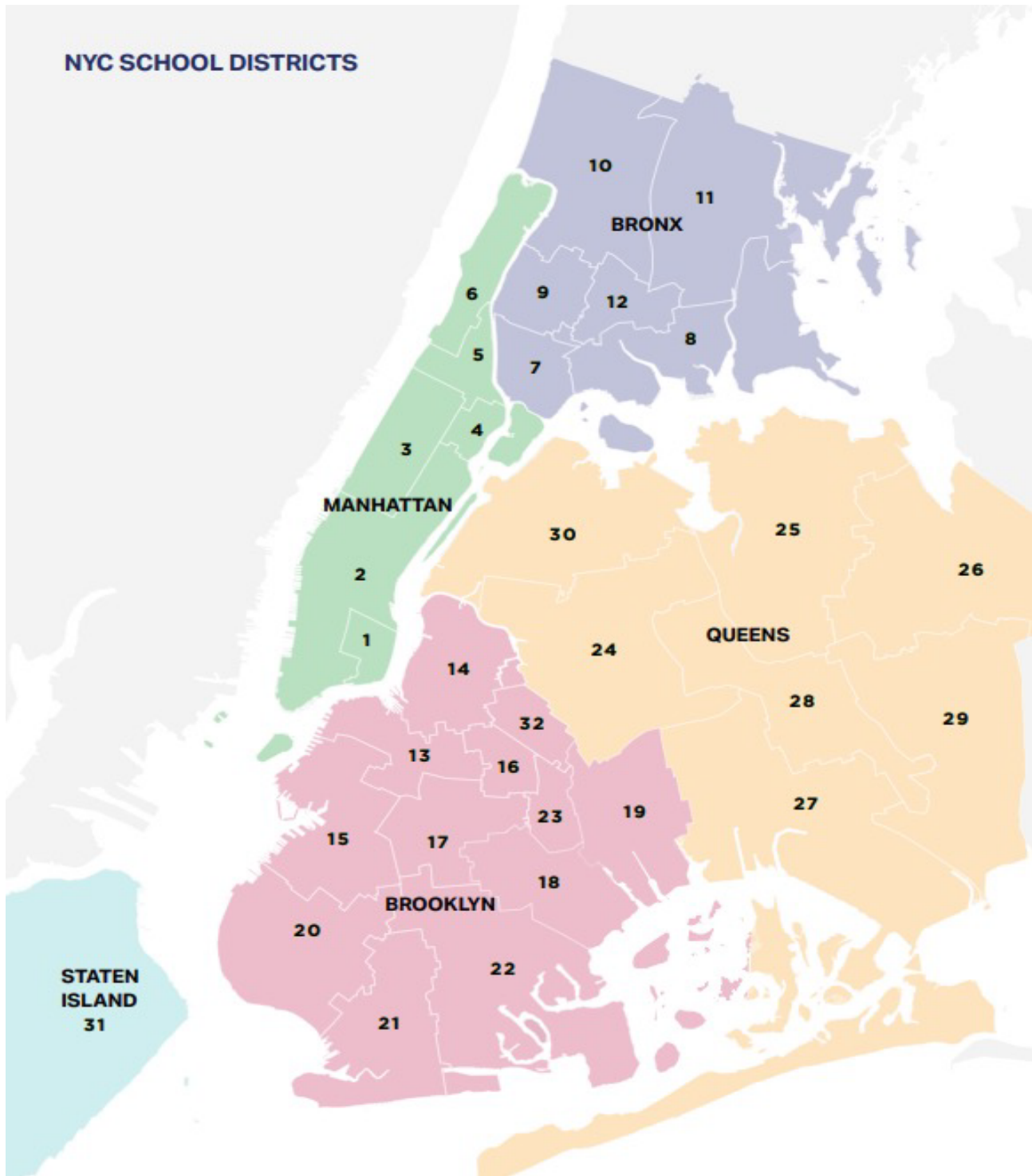
In elementary grades, students take grade-specific classes. In middle and high school grades, students take a mix of subjects, depending on their school's course offerings. Some subjects

are offered each year in sequence (such as English Language Arts, or ELA) and so students typically follow a grade-level progression; others are not specific to any grade (for example, Chemistry). For middle and high school grades, IBO's analysis is sensitive to grade-specific caps, but IBO does not distinguish between grade-specific subjects (for example, 9th grade ELA and 10th grade ELA). As such, IBO's estimates may represent a slight under-estimate for teacher need.



FIGURE A1

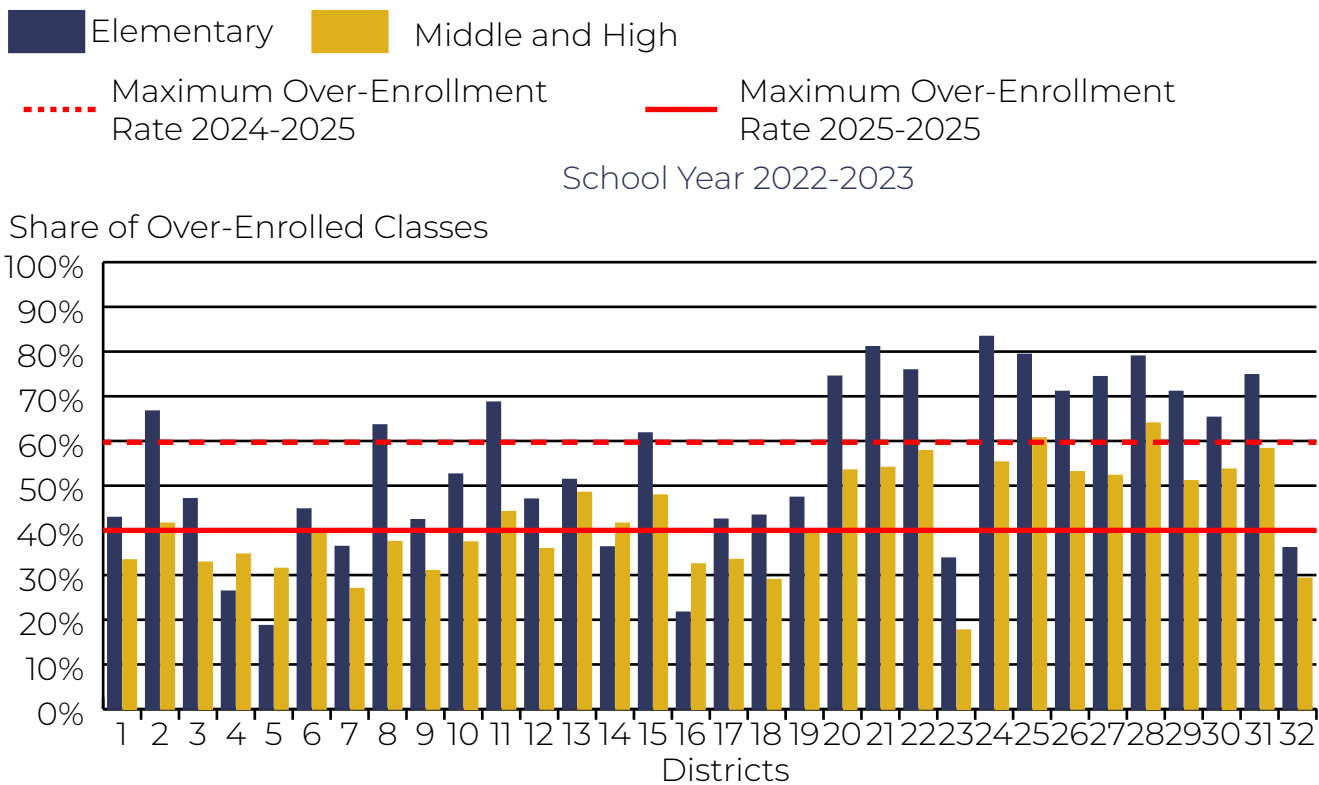
The Map of New York City Community School Districts



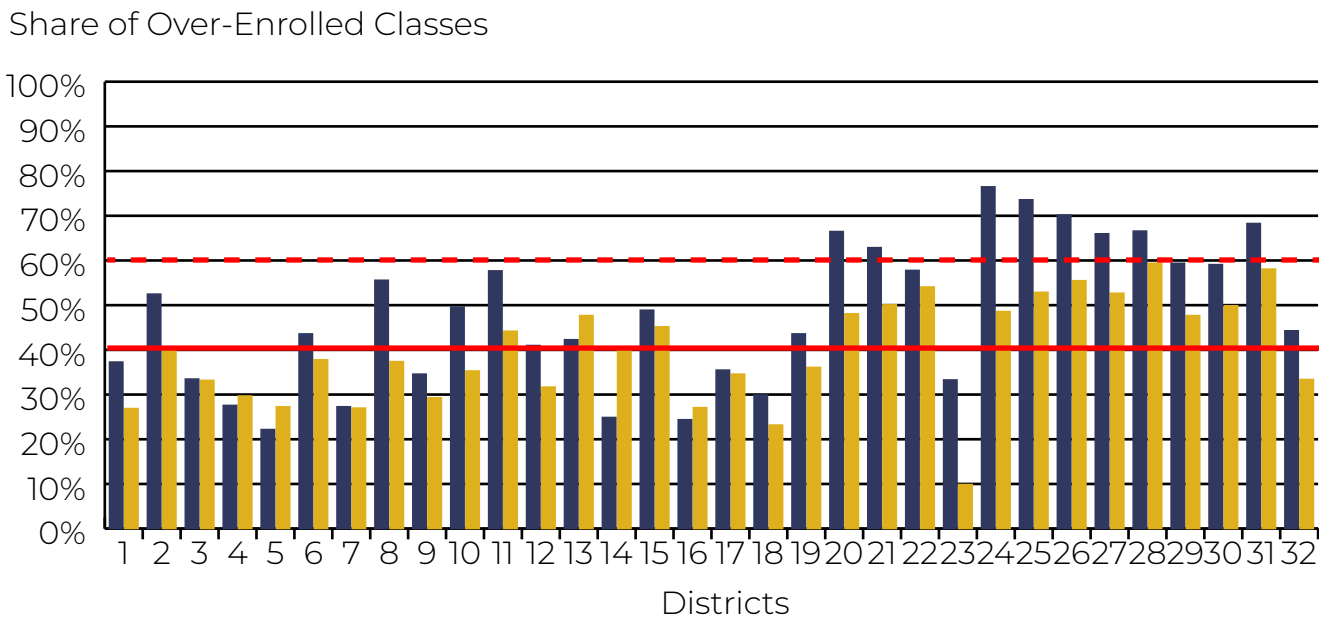
SOURCES: 2025 NYC Public School Admissions Guide (NYCPS, 2025) - 2022 NYC Public Schools Admissions Guide
New York City Independent Budget Office

FIGURE A2

Percent of Over-Enrolled Classes by Districts in Prior Years



School Year 2021-2022



SOURCES: IBO analysis of NYC DOE audited register, course and credit, and student demographic data

New York City Independent Budget Office

Endnotes

- 1 The maximum class size for 3-K is 15 students with one teacher and one paraprofessional. The maximum class size for pre-K is 18 students with one teacher and one paraprofessional, or 20 students with one teacher and two paraprofessionals. For self-contained classes, class size may range from 6 students with one teacher and one paraprofessional to 15 students with one teacher. The individualized education program (IEP) of each student determines the type of placement within self-contained classes.
- 2 Chingos, Matthew M. (Spring 2013). Class Size and Student Outcomes: Research and Policy Implications," *Journal of Policy Analysis and Management* 32, no. 2: 411.
- 3 Krueger, Alan B. (1999). Experimental Estimates of Education Production Functions. *The Quarterly Journal of Economics*, 114(2):497-532; Jepsen, Christopher, & Steven Rivkin (2009). Class Size Reduction and Student Achievement: The Potential Trade-off Between Teacher Quality and Class Size. *Journal of Human Resources* 44(1): 223–250.
- 4 Jepsen, C., & Rivkin, S. (2009). Class Size Reduction and Student Achievement: The Potential Trade-off Between Teacher Quality and Class Size. *Journal of Human Resources* 44(1): 223–50.



IBO's mission is to enhance understanding of New York City's budget, public policy, and economy through independent analysis.

Prepared by:
Julia Konrad
Youngwan Song

Produced by:
Tara V. Swanson



info@ibo.nyc.gov



www.ibo.nyc.gov



Follow IBO
[@nycibo](https://twitter.com/nycibo)

