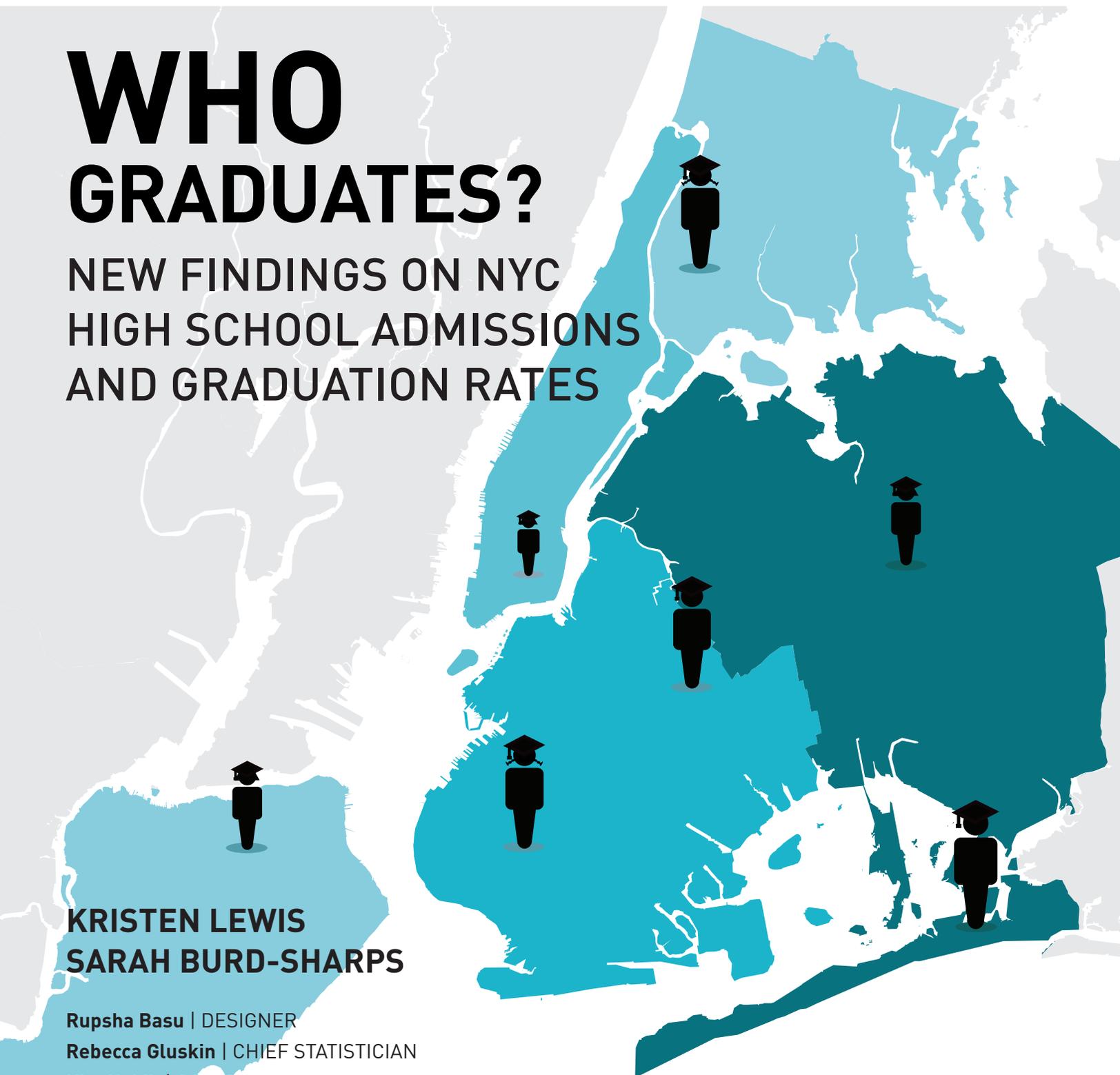




WHO GRADUATES?

NEW FINDINGS ON NYC HIGH SCHOOL ADMISSIONS AND GRADUATION RATES



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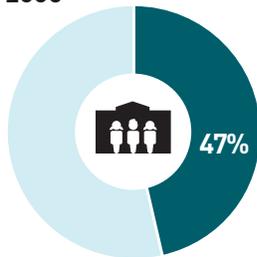


Executive Summary

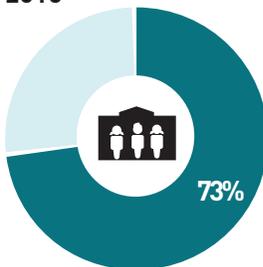
AN ACHIEVEMENT WORTH CELEBRATING

On-time high school graduation rates

2005



2016



Source: New York City Department of Education, 2017.

The on-time high school graduation rate for New York City (NYC) students has risen every year for over a decade, a significant accomplishment of which the city should be proud (see **sidebar**). Yet startlingly wide gaps between different groups of students persist. To address these disparities, it's essential to look beyond the marquee numbers to determine which students are graduating on time, which aren't, and what can be done about it.

The city has tracked disparities in graduation rates between teens from different racial and ethnic groups for many years, and in May 2016, Measure of America released *High School Graduation in New York City: Is Neighborhood Still Destiny?*, an analysis that showed how graduation rates varied by the neighborhoods students called home. This report looks at the question of on-time high school graduation through yet another lens: **the types of high school programs students were admitted to through the mandatory school choice process**. The choice system is a complex, high-stakes process that roughly 80,000 New York City middle schoolers and their families must navigate each year in order to gain admission to high school. It requires all eighth graders to rank their top twelve high school program preferences from over 700 programs in 400-plus public high schools. No neighborhood "default" option exists. Each program uses one of six admissions methods, which vary sharply in terms of competitiveness.

TABLE 1 New York City Public High School Basic Admissions Methods

ADMISSIONS METHOD	DEFINITION	STUDENTS ADMITTED VIA THIS METHOD (%)
Limited Unscreened	Students selected at random; priority given to students who attend an information session (this category also includes 249 students in the unscreened category; these students are selected entirely at random).	23.1
Educational Option	Designed to admit students of diverse academic performance levels; half of offers are to students ranked by school based on multiple criteria, the other half are to randomly selected students in each reading level—high, medium, and low.	22.1
Screened	Students ranked by schools based on academics, attendance, and/or other criteria. May have additional requirements like interviews, essays, or exams.	17.9
Zoned	Local students are either guaranteed admission or given priority. There are currently only 28 zoned high school programs.	9.2
Specialized High School Test	Admission based on Specialized High Schools Admissions Test (SHSAT) scores.	4.9
Audition	Students ranked by schools based on performing arts audition or arts portfolio. Some schools also consider academics and attendance.	3.4

Note: This list includes all admissions methods available to incoming ninth graders for the school year 2011–2012, the year of the dataset used in this paper. The data include each student who participated in the high school choice process for that school year. Some students subsequently chose to attend an NYC charter school or transferred to a different NYC high school. In addition, 19.4% of incoming ninth graders are not included in this dataset because they either did not attend middle school in NYC, came from a private school, applied only to charter schools, or otherwise did not have a DOE ID at the time of entry into high school.

The most common admissions methods in the system are the **limited unscreened** and the **educational option** methods, with 45.2 percent of eighth graders admitted to high school through those two less-competitive admissions methods. Only 8.3 percent of high school students are admitted on the basis of either the **Specialized High School Admissions Test (SHSAT)** or an **audition**, two of the most-competitive methods. See **Table 1** for details on admissions methods.

Our analysis of NYC Department of Education data for the entering 2011–2012 ninth grade class shows that:

A striking 97.4 percent of students admitted to high school based on the SHSAT graduated on time in 2015, compared to only 59.8 percent of those admitted to educational option programs and 68.1 percent of those admitted to limited unscreened programs. Educational option programs and limited unscreened programs together educate nearly 35,000 city teenagers.

Students from different racial and ethnic groups are concentrated in different types of high school programs. Asian Americans were disproportionately accepted into specialized high schools, making up 56.8 percent of students gaining admission to these most-competitive schools, nearly 3.5 times their rate in the student population as a whole. Overall, 16.6 percent of Asian American students were admitted to specialized high schools; only 1.1 percent of black students and 1.1 percent of Latino students were. Well over half of all black and Latino students were admitted to either an educational option or a limited unscreened program, compared to roughly one in five white or Asian students.

Only 59.8 percent of students admitted to educational option programs graduated on time, compared to 97.4 percent of those admitted based on the SHSAT.

BOX 1 High Schools and High School Programs: What's the Difference?

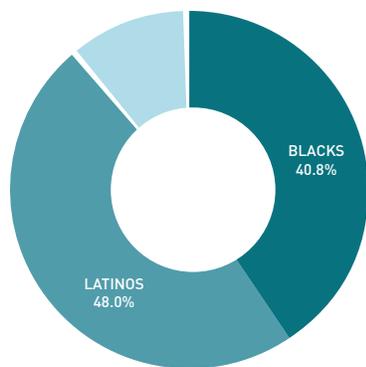
NYC offers over 700 programs in 400-plus public high schools. Each **high school program** has a specific admissions method, but within a single **high school building**, there can be multiple programs. For example, there are six high school programs and four ways to be admitted to Bayside High School in Queens: Bayside residents are guaranteed admission (zoned admissions method), the two arts programs use the audition admissions method, the engineering and humanities programs use the screened method, and the computer programming and sports medicine programs admit students through an educational option method. In short, one high school building can house many different programs, all of which could have different admissions methods and different rates of success in graduating students within four years. An arts program within a high school may have an 87 percent graduation rate, whereas a hospitality program in that same school may have an 80 percent graduation rate.



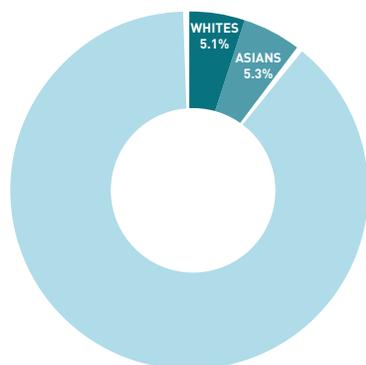
One important caveat is that in many high schools, students from different programs take some of their classes together and benefit from some schoolwide services. As a result, the admissions method and program do not imply an entirely separate high school experience.

Well over half of black and Latino students were admitted via either an educational option or a limited unscreened program, compared to roughly one in five white or Asian students.

Black and Latino students admitted to Limited Unscreened programs



White and Asian students admitted to Limited Unscreened programs



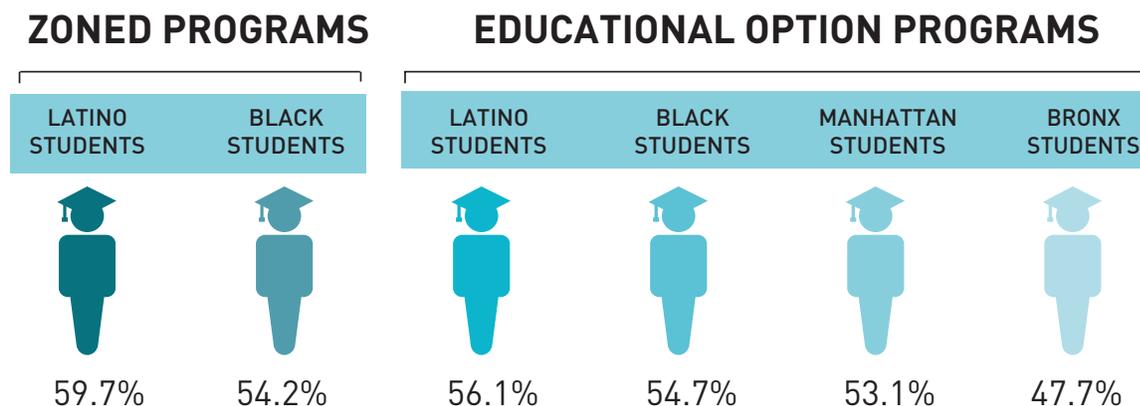
Gaps in graduation rates by **race and ethnicity** were large both in the city as a whole and in different types of high school programs, with the exception of specialized high schools. Citywide, Asian Americans had the highest graduation rate (85.4 percent) and Latinos had the lowest (64.4 percent). But the largest gap by race and ethnicity was in the graduation rates of Native American (52.1 percent) and Asian American (81.6 percent) students assigned to educational options programs.

Graduation rates varied by **borough**. The graduation rate gap between those students who lived in the borough with the highest (Queens, 77.3 percent) and lowest (Bronx, 63.7 percent) graduation rates was 13.6 percentage points. The distance between the highs and lows widened when we added the type of program, ranging from just 3.1 percentage points between Manhattan and Staten Island students admitted to specialized high schools to a 28.9-point difference for zoned programs between students living in the Bronx (47.2 percent) and students living in Staten Island (76.2 percent). The number of zoned schools varies widely by borough. Currently the city has a total of 28 zoned programs, with only two located in the Bronx and none in Manhattan.

In twenty-three of the city's fifty-nine **community districts**, fewer than seven in ten high school students who lived in those districts graduated in four years in 2015. The gap between the district whose students were most likely to graduate, Bayside, Douglaston & Little Neck (92.3 percent), and least-likely to graduate, Hunts Point & Longwood (59.2 percent), was 33.1 percentage points.

This study shows that the high school choice process is working well for a portion of the student body—those who apply and are admitted to the more selective high schools. But it is not working for far too many New York City teenagers. Our analysis shows clearly that certain groups of students are at high risk for not graduating in four years. Fewer than seven in ten black, Latino, or Native American students; students admitted to high school through the educational option and limited unscreened methods; students who lived in the Bronx and Manhattan overall; and students living in twenty-three community districts graduated on time in 2015. In addition, the groups identified in **Figure 1** are at still-higher risk.

FIGURE 1 Groups at a High Risk of Not Graduating in Four Years



Source: Measure of America analysis from NYC DOE data obtained by special agreement.

The study's findings also raise questions about the feasibility of the educational option approach. Its goals are laudable: "ed-opt" programs were designed to bring together students of mixed abilities, a strategy that research has shown engenders greater diversity and better outcomes, particularly for struggling students. But in practice too few high-achievers choose these programs for them to function as they were designed to; strong students prioritize SHSAT schools and screened programs known for academic rigor. This means that ed-opt slots are disproportionately filled by students for whom school is a challenge, creating the very situation this approach was devised to prevent.

New York City has made tremendous strides and is on track to reach its stated goal of a citywide graduation rate of 80 percent by 2026. Its Equity and Excellence for All policies, which include universal pre-K, are making a difference. Speeding this progress is vital, however. Right now, there are simply too few spots in good high schools to go around. Only one in five NYC public high schools has an on-time graduation rate over 90 percent. Black and Latino kids are badly underrepresented in such schools, and eighth graders whose test scores and grades are good but not tip-top are shut out of them altogether. Can we say a choice system works when there aren't enough good choices to go around?

A strong, safe, dynamic NYC depends on everyone having the skills they need to live productive, rewarding, freely chosen lives. Ensuring that more of our young people graduate a high school, the barebones minimum for a secure livelihood in today's knowledge-based economy, is good for all of us. Realizing that goal requires making sure that all young people in the city—not just extraordinary teens whose special talents and uncommon intelligence earn them spots in the city's most competitive schools, but academically average and struggling teens, too—have more good high school options, more guidance in the admissions process, and more support to help them cross the finish line, diplomas in hand.

Educational option programs are disproportionately filled by students for whom school is a challenge.

Introduction

Graduating high school is fundamental to a successful transition to adulthood. A high school diploma is a minimum qualification in today's job market as well as a requirement for higher education. High school graduates are healthier, more financially secure, more likely to delay parenthood, and more satisfied with their lives than those who did not graduate high school.¹ For these and other reasons, the on-time high school graduation rate has emerged as a leading indicator of success for schools, school systems, and indeed the country as a whole.

NYC has made striking progress in boosting the rate of on-time high school graduation. In 2005, less than half of all public school students graduated high school in four years, compared to 72.6 percent of students in 2016—an impressive 26-percentage-point increase over the decade.² Two school reforms in particular, starting in the early 2000s, fueled these gains. The city closed some thirty extremely large high schools with graduation rates below 40 percent, opening in their stead more than 200 smaller schools, a measure that had “a systematic and large impact on graduation rates” for the students who would have otherwise attended the shuttered schools.³ And the city implemented a new system of universal high school choice; it required that all eighth graders select, rank, and apply to up to twelve high school programs from among the 700-plus that the city offered. The idea was to provide students, particularly those living in low-income neighborhoods, avenues to attend better schools in other parts of the city as well as to introduce market competition into the system, a move that architects of the reforms hoped would spur low-performing schools to improve or risk closure. Today, each of the city's roughly 80,000 eighth graders who want to attend public high school in NYC must take part in this process; no neighborhood “default” option exists.



The much-improved on-time high school graduation rate for NYC as a whole is an achievement of which the city is rightly proud; every percentage-point improvement represents hundreds of students with better shots at living rewarding, secure lives. Yet because the city-wide rate is an average of thousands of students, it masks a wide degree of variation. The NYC Department of Education (DOE) reported that, although achievement gaps have narrowed, in 2016, Asian American and white students graduated at far higher rates than black or Latino students; native English speakers graduated at higher rates than English learners; and students without disabilities graduated at higher rates than students with disabilities.⁴

In May 2016, Measure of America released a [study](#) that examined the NYC public high school graduation rates **by the neighborhoods in which students lived**, regardless of where their high schools were located. The purpose of the study was to add to the discourse a new way of looking at high school graduation rates and to explore the stubbornly persistent link between neighborhood socioeconomic conditions and student outcomes in NYC public schools and, indeed, in school districts across the country.

BOX 2 Why Is On-Time High School Graduation So Important?

A high school diploma is the bare-bones minimum required for financial security and self-determination in today's knowledge-based economy. Failing to graduate high school too often closes off many of life's most rewarding and joyful paths and leads to a future of limited horizons and unrealized potential. Compared with adults without high school diplomas, those with them earn more, have higher levels of life satisfaction, enjoy better health, have more stable relationships, and are less likely to be unemployed, go to prison, or become parents as teenagers.⁵

Interestingly, research has shown that a General Educational Development certification (GED) does not confer the same benefits as a regular diploma; the social and economic outcomes of GED holders are similar to those of high school dropouts without GEDs.⁶ The rate of on-time high school graduation also serves as a useful proxy for educational outcomes more broadly, as a child's likelihood of graduating on time is highly influenced by his or her elementary and middle school experiences and achievements. **For these reasons, the rate of on-time high school graduation is a vital educational indicator for society, schools, and students themselves.**

The report, *High School Graduation in New York City: Is Neighborhood Still Destiny?*, presented a new dataset: high school graduation rates by NYC's fifty-nine community districts. This dataset was created by mapping anonymized student data obtained by special agreement from the NYC Department of Education onto NYC community districts. **The report found that disparities by neighborhood dwarfed those by race and ethnicity, with 34 percentage points separating the best- and worst-performing community districts in terms of on-time high school graduation rates.** Nearly all students who set out every weekday to high school from homes in Manhattan's Battery Park City, Greenwich Village, Soho, and Tribeca graduated high school in four years; only about six in ten who lived in Morris Heights, Fordham South, and Mount Hope in the Bronx did. We found a very strong correlation between the child poverty rate in an NYC community district and the on-time high school graduation rate, and likewise very strong correlations between a district's median household income and on-time graduation rates and between the proportion of adults in a district that had a bachelor's degree and on-time high school graduation. Students from neighborhoods where more families were poor and fewer adults were college graduates were much less likely to graduate high school on time than students from neighborhoods where the opposite was true.

This study builds on the work described above to further probe school choice, socioeconomic conditions, race and ethnicity, and student outcomes with a focus on admissions methods. Using data obtained by special permission from the DOE, we explored which types of high school programs students from different boroughs, racial and ethnic groups, and income levels apply to and how likely they are to graduate four years later.

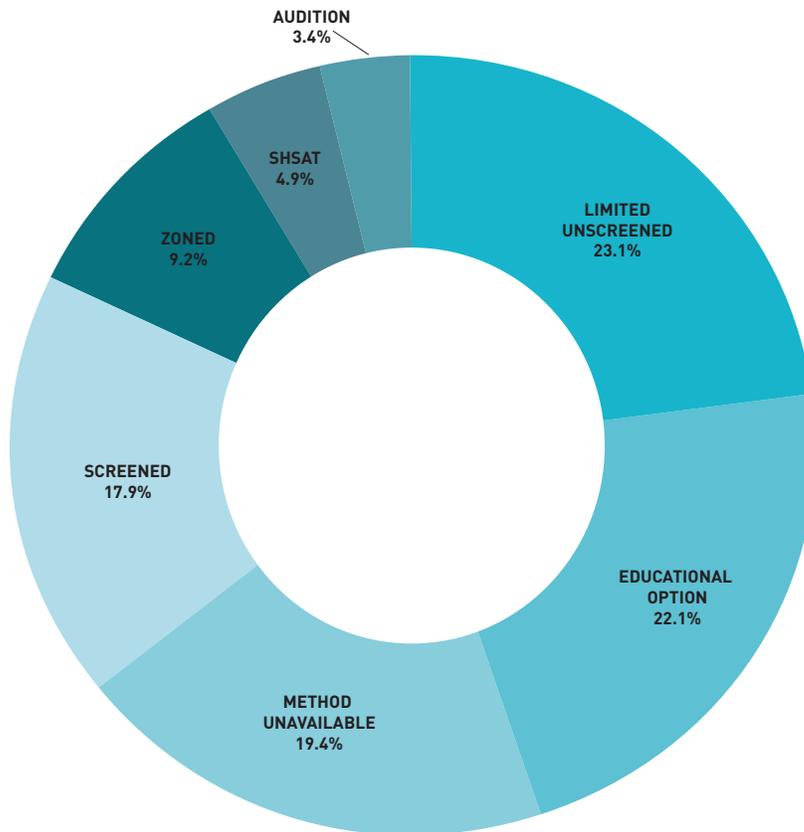
Each high school program has a specific admissions method; there are six, described in **Table 1** above. Two methods, that which uses the **Specialized High School Admissions Test** and that which requires some type of **audition**, are highly competitive and reject the majority of applicants; others, like the **limited unscreened method**, have much higher acceptance rates.

High School Graduation Rates by Admissions Method

The most common admissions methods in the system are the **limited unscreened** and the **educational option** methods, with about one in four (23 percent) eighth graders entering high school through the limited unscreened method and 22 percent by the educational option. Though no doubt many students take tests and audition, only 5 percent of high school students attend a high school program that they got into on the basis of the **Specialized High School Admissions Test (SHSAT)** and only 3 percent based on some type of **audition** (see **Figure 2**).

Measure of America analyzed data obtained by special agreement from the DOE to determine on-time graduation rates by admissions method for the graduating class of 2015. Over 76,000 students entered ninth grade in the 2011–2012 school year. Of those 76,638 students, 54,125 graduated from high school on-time four years later—70.6 percent.

FIGURE 2 Admissions Method, Class of 2015



The most common admissions methods in the system are the **limited unscreened** and the **educational option** methods.

Source: Measure of America analysis from NYC DOE data obtained by special agreement.

Note: Method unavailable represents students who either did not attend middle school in NYC, came from a private school, applied only to charter schools, or otherwise did not have a DOE ID at the time of entry into high school.

As **Table 2** below illustrates, however, the disparities in graduation rates are enormous. On the one hand, nearly every successful SHSAT-taker graduated on time (97.4 percent). On the other, fewer than six in ten of those admitted via the educational option did (59.8 percent). Specialized high schools had the highest graduation rates, and programs that screen students and that require auditions came in second and third.

Admission to an educational option program is based in part on reading scores from the previous year, with designated percentages of students with high, middle, and low reading levels admitted. This deliberate strategy is designed to result in an academically mixed program, which has been shown to benefit lower-performing students; in practice, however, educational option schools face challenges in attracting high-performing students, who tend to prioritize more selective schools.⁷ If too few high-performers choose educational option schools, by default they end up having high concentrations of students who struggle academically.

Nearly every successful SHSAT-taker graduated on time (97.4 percent), but only about six in ten of those admitted via the educational option did (59.8 percent).

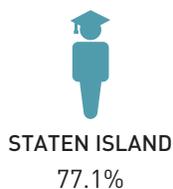
TABLE 2 NYC Public High School Graduation Rates by Admissions Method, Class of 2015

ADMISSIONS METHOD	ON-TIME HS GRADUATION (%)		ON-TIME HS GRADUATION (#)	
	YES	NO	YES	NO
Specialized HS Test	97.4	2.6	3,663	99
Screened	86.1	13.9	11,828	1,907
Audition	82.2	17.8	2,133	461
Zoned	70.7	29.3	4,983	2,068
Limited Unscreened	68.1	31.9	12,033	5,647
Educational Option	59.8	40.2	10,138	6,808
TOTAL	70.6	29.4	54,125	22,513

Source: Measure of America analysis from NYC DOE data obtained by special agreement.

Note: Students for whom data on admissions methods are missing either did not attend middle school in NYC, came from a private school, applied only to charter schools, or otherwise did not have a DOE ID at the time of entry into high school.

On-Time High School Graduation Rate by Borough (%)



Admissions Method by Borough

The admissions methods by which students are admitted to high school vary markedly by borough. **Table 3** below summarizes the rates.

In the class of 2015, the most common admissions method for students who lived in **the Bronx** was the limited unscreened process (39 percent of students). Only 1.2 percent were admitted to high school on the basis of the SHSAT; students from the other four boroughs were about five times as likely as Bronx students to test into specialized high schools. Just 3.4 percent of Bronx eighth graders were admitted to a program that required an audition, higher than the audition method rates for both Queens and Staten Island but lower than the Manhattan and Brooklyn rates. Finally, only 1.5 percent of students were admitted to high school on the basis of being zoned for that school. This low rate is not surprising given that there are currently only two zoned school programs in the Bronx.

In **Brooklyn**, the most popular methods for admittance were the limited unscreened and the educational option methods. As in the Bronx, few students were admitted based on either the SHSAT or an audition, though the rate for the SHSAT was nearly five times that of the Bronx. Brooklyn and Manhattan had the highest rate of admissions for audition programs, 3.9 percent, as compared with 3.1 percent in Queens and only 1.8 percent in Staten Island.

In **Manhattan**, three methods together captured the majority of admissions: screened (24.4 percent), educational option (24.2 percent), and limited unscreened (19.4 percent). Manhattan had the highest rate of screened admissions of the five boroughs. The highest proportion of students were admitted on the basis of the SHSAT out of the five boroughs (7.1 percent), but the rate for this method was not much higher than the rates in Brooklyn (5.9 percent), Queens (6 percent), and Staten Island (6 percent).

The top two admissions methods in **Queens** were educational option and screened. Queens differed considerably from other boroughs in terms of the proportion of students who were admitted to zoned programs or schools. The Queens rate of 14.3 percent of students was far higher than rates in Manhattan (0.6 percent), the Bronx (1.5 percent), and Brooklyn (9.3 percent) and lower only than the Staten Island rate (28.3 percent). Queens has the largest number of zoned programs of the five boroughs: fifteen in all.

Staten Island had the lowest proportion of students admitted on the basis of an audition, only 1.8 percent, less than half the rate of either Brooklyn or Manhattan.

TABLE 3 NYC Admissions Methods by Student’s Home Borough

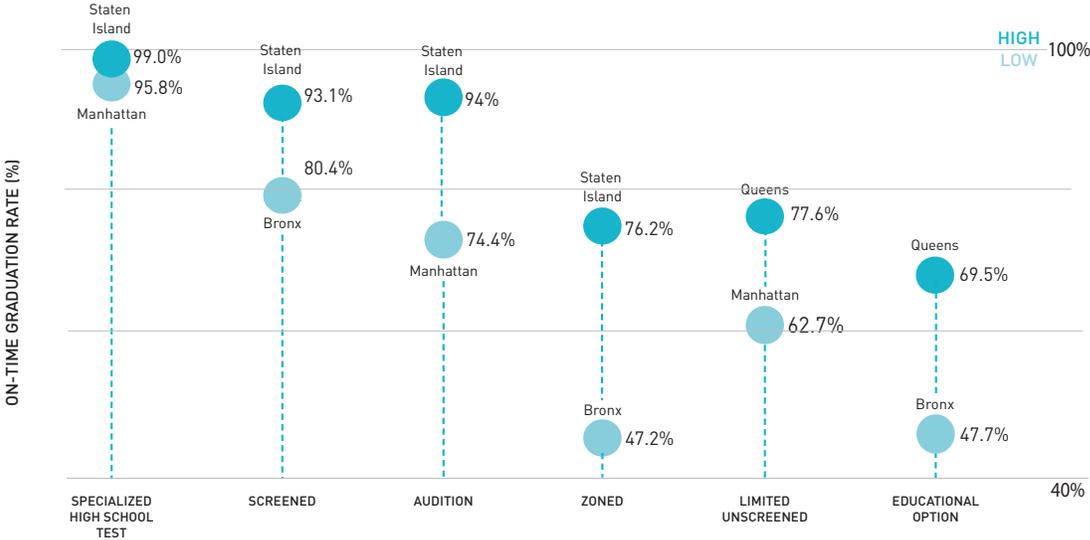
STUDENT'S HOME BOROUGH	LIMITED UNSCREENED (% of students)	EDUCATIONAL OPTION (%)	SCREENED (%)	ZONED (%)	SPECIALIZED - SHSAT (%)	AUCTION (%)	METHOD UNAVAILABLE (%)
Bronx	39.0	21.3	14.1	1.5	1.2	3.4	19.6
Brooklyn	23.7	22.0	18.1	9.3	5.9	3.9	17.2
Manhattan	19.4	24.2	24.4	0.6	7.1	3.9	20.4
Queens	14.0	22.3	19.6	14.3	6.0	3.1	20.7
Staten Island	10.9	20.9	15.3	28.3	6.0	1.8	16.7
NYC	23.1	22.1	17.9	9.2	4.9	3.4	19.4

Source: Measure of America analysis from NYC DOE data obtained by special agreement.
 Note: Not all rows add up to 100% due to rounding.

Graduation Rates by Admissions Method by Borough

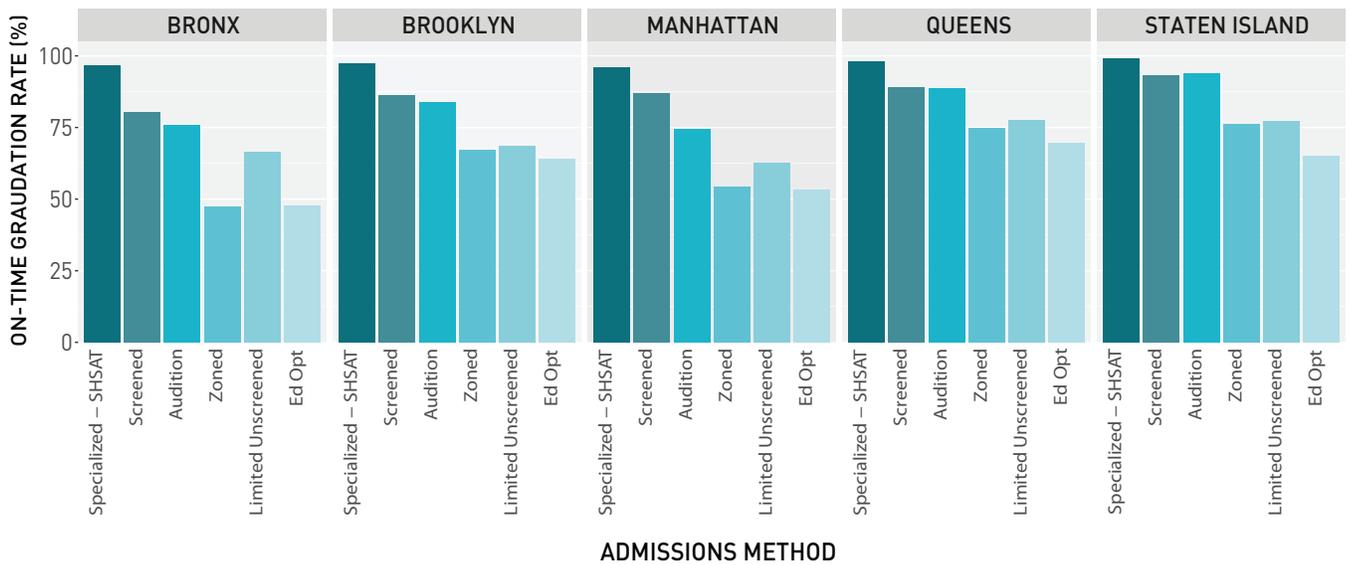
Table 3 above shows huge variation in the types of schools to which students from the different boroughs were admitted. The graduation rates of students based on each admissions method by borough adds another important layer of information. As **Figure 3** below illustrates, the greatest difference between the highest and lowest graduation rates by borough within one admissions method is with the zoned schools; 76.2 percent of Staten Island high schoolers who entered a zoned high school program graduated on-time, as compared to only 47.2 percent of Bronx students, a 29 percentage point difference. Both the availability of zoned schools and zoned school performance vary tremendously by borough. On the other end, there is little range in graduation rates for the SHSAT schools, from Staten Island, where a remarkable 99.0 percent of students graduated on time to Manhattan, still with a very respectable 95.8 percent. The range by borough for each method is shown in **Figure 4**.

FIGURE 3 Range of Graduation Rates by Admissions Method



Source: Measure of America analysis from NYC DOE data obtained by special agreement.

FIGURE 4 Graduation Rates by Borough and Admissions Method



Source: Measure of America analysis from NYC DOE data obtained by special agreement.

Admissions Method and Graduation Rate by Race and Ethnicity

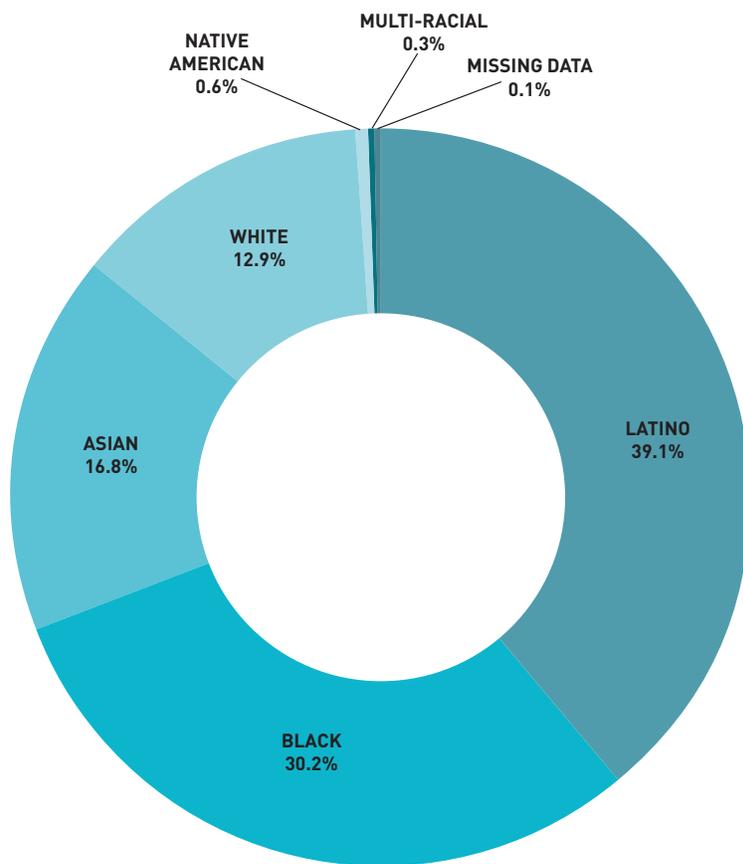
Asian students had the highest on-time graduation rate overall, 85.4 percent. Latino students had the lowest on-time graduation rate, 64.4 percent.

Analysis of data obtained by special permission from the DOE shows that students from different racial and ethnic groups vary significantly in terms of the types of high schools they are admitted to and the rate at which they graduate on time. Asian students had the highest on-time graduation rate overall, 85.4 percent, followed by white, multi-racial, Native American, and black students (see **sidebar on p. 13**). Latino students had the lowest on-time graduation rate, 64.4 percent.

Asian students make up only 16.8 percent of the NYC public high school class of 2015 (see **Figure 5**). Yet well over half of students admitted to high school on the basis of the SHSAT (56.8 percent) were Asian. About one in four students admitted to a zoned school were Asian (students admitted to zoned programs are disproportionately Asian and white). In addition, 14.9 percent of Asian students in the class were admitted through the educational option admissions method, compared to 26.3 percent of Latino students and 25.1 percent of black students.

In terms of graduation rates, Asian students who were admitted to programs based on auditions, the SHSAT, and screened admissions all had graduation rates above 93 percent. In the case of programs with less competitive entrance requirements, Asian graduation rates were lower (85.7 percent for limited unscreened, 81.6 percent for educational option, and 83.2 percent for zoned), but they were still quite high in relation to those of other racial and ethnic groups.

FIGURE 5 Racial and Ethnic Breakdown of High School Class of 2015



Source: Measure of America analysis from NYC DOE data obtained by special agreement.

Black students made up 30.2 percent of the NYC public high school class of 2015, but only about one in sixteen students admitted to high school on the basis of the SHSAT was black. The categories of admissions method that were most common for black students were limited unscreened (31.2 percent), educational option (25.1 percent), and screened (15.9 percent). Few black students (3.4 percent) attend schools zoned for their neighborhoods, in marked contrast to all the other major racial and ethnic groups. As is discussed above, zoned programs are quite unevenly distributed, with none in Manhattan, two in the Bronx, five in Staten Island, six in Brooklyn, and fifteen in Queens.

Black students had an overall on-time graduation rate of 65.6 percent (see **Table 4**). But when it comes to the most competitive programs, they did far better. This is especially true in the case of the SHSAT programs, where black students had a 94.7 percent graduation rate, similar to their Asian and white counterparts. In zoned programs, only slightly over half of black students graduated on-time (54.2 percent), and the educational option programs did not produce much better results (54.7 percent). When they attended audition programs or screened programs, 79.8 percent and 81.7 percent, respectively, graduated on time.

On-Time High School Graduation Rate by Race And Ethnicity (%)



ASIAN
85.4%



WHITE
82.5%



BLACK
65.6%

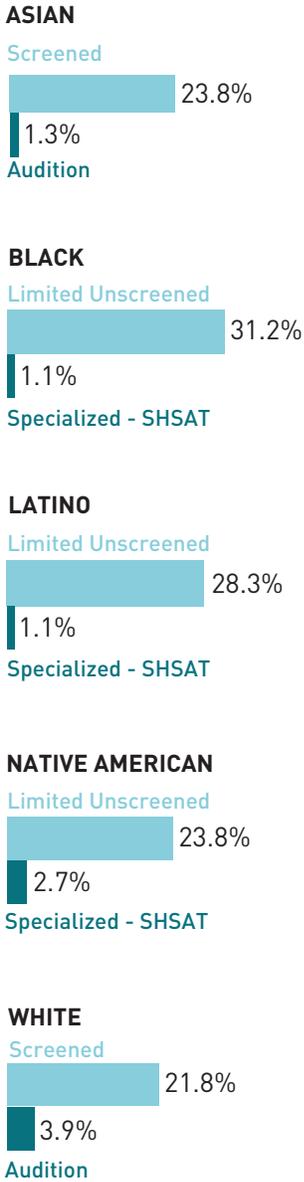


NATIVE AMERICAN
65.6%



LATINO
64.4%

Top and Bottom Admissions Methods for Racial and Ethnic Groups



Over one in three NYC high school students are of **Latino origin** (39.1 percent). Yet only one in twelve students admitted to high school through a successful SHSAT test are Latino. For Latino students, the most common admissions methods were the educational option and the limited unscreened methods. Just under two in three Latino students graduated on-time (64.4 percent). But when they attended the more competitive programs, the rates shot up. The Latino graduation rate was 94.3 percent in SHSAT programs and 81.5 percent in screened programs.

While white children make up about a quarter of the city’s school-aged population, **white students** in the class of 2015 made up only 12.9 percent of the student population, the second-smallest proportion of the five major racial and ethnic groups after Native Americans. Whites are far more likely to attend nonpublic schools than other racial and ethnic groups; more than six in ten students in nonpublic schools are white.⁸ About one-fifth of white students were admitted to a screened program, another fifth to a zoned program, and about one in ten to a school based on SHSAT results.

While 56.8 percent of those attending an SHSAT program were Asian, 26.9 percent were white. The rest were Latino (8.4 percent), black (6.5 percent), or in groups with only about one percent of the full pie: multi-racial and Native American. White students had an overall graduation rate of 82.5 percent, but the rate varied considerably by program, from high rates above 93 percent for the competitive options (audition, screened, and SHSAT programs) to much lower rates for educational option programs (74.4 percent), zoned programs (77.7 percent), and limited unscreened programs (78.3 percent).

There were only 483 **Native American students** in this graduating class, making up 0.6 percent of the total student population. One-fifth of these students were admitted to educational option programs, nearly a quarter to limited unscreened schools, and 13.7 percent to screened schools. Native American students had very low graduation rates, just slightly over the Latino rate. But, like students from other groups, when attending the more competitive programs, Native American students performed well above the group average; 92.3 percent of those admitted based on the SHSAT, 86.7 percent of those admitted to audition programs, and 81.8 percent of those admitted to screened programs graduated on time. For all the other programs, rates were roughly in line with this group’s average (65.6 percent), except in educational option programs, where the rate (52.1 percent) was the lowest of any of the five major racial groups in any program.

TABLE 4 On-Time High School Graduation Rates by Admissions Method and Race/Ethnicity

RACE/ ETHNICITY	GRAD RATE: NYC TOTAL (%)	SPECIALIZED - SHSAT (%)	SCREENED [%]	AUDITION [%]	ZONED [%]	LIMITED UNSCREENED [%]	EDUCATIONAL OPTION [%]	METHOD UNAVAILABLE [%]
Asian	85.4	98.1	93.1	93.8	83.2	85.7	81.6	70.5
White	82.5	97.7	93.7	94.5	77.7	78.3	74.4	73.1
Multi-Racial	71.8	91.7	92.5	N/A	N/A	78.9	75.0	42.9
Black	65.6	94.7	81.7	79.8	54.2	66.9	54.7	61.8
Native American	65.6	92.3	81.8	86.7	63.6	70.4	52.1	59.3
Latino	64.4	94.3	81.5	78.4	59.7	65.9	56.1	56.3

Source: Measure of America analysis from NYC DOE data obtained by special agreement.

Note: N/A means the data are not reliable due to small population size and so must be suppressed.

Poverty, Admissions Programs, and Graduation Rates

Of the approximately 76,000 public high school students in the graduating class of 2015, about seven in every ten are eligible for free or reduced-price meals and Human Resources Administration (HRA) Services. We use the free or subsidized meals and HRA Services indicator as a proxy for poverty.⁹ This proxy is not perfect. Not all students who are eligible for the free or reduced-price meals program participate in it. The form is time-consuming and complicated to fill out; some families may attach a stigma to the program and thus not apply; undocumented families may feel afraid to provide the required information; and some families (and children) may prefer homemade lunches to those provided by the school. In addition, this binary proxy does not allow for analysis of the differences within the eligible group, for instance between students whose families just make the eligibility cut-off for reduced price meals and those whose families are desperately poor.

The share of students eligible for free or reduced price meals was lower among students admitted to the specialized SHSAT programs than in the student body as a whole. Only 53.5 percent of students admitted through this competitive method were eligible, 16 percentage points below the rate for the class overall (69.6 percent). In terms of the least competitive admissions methods and programs, poor students were overrepresented; they made up 69.6 percent of the class but 77.0 percent of students admitted to limited unscreened programs and 75.6 percent of students admitted to educational option programs. For the remaining three programs, poor and non-poor students were admitted in rough proportion to their rates in the student population as a whole.

Poor students made up 69.6 percent of the class but 77.0 percent of students admitted to limited unscreened programs and 75.6 percent of students admitted to educational option programs.

In the highly competitive SHSAT programs, poor and non-poor students were about equally likely to graduate.

How did eligible students fare in terms of graduation from different types of programs as compared to their more affluent peers? In the highly competitive SHSAT programs and in zoned schools, eligible and ineligible students were about equally likely to graduate in four years. For audition and screened programs, eligible students had somewhat lower graduation rates (4.5 percent and 2.7 percent, respectively). Conversely, for educational option and limited unscreened programs, eligible students had a slight edge over their non-eligible classmates (4.4 percent and 3.2 percent better, respectively).

Graduation Rates by Community District

Though this study focuses on the types of high school programs that students from different boroughs and racial and ethnic groups are admitted to and how likely they are to graduate, we also calculated the graduation rates for students based on the community districts they call home. These data, which appear in **Table 5**, are an update to those featured in MOA's May 2016 paper, *High School Graduation in New York City: Is Neighborhood Still Destiny?* Each different cut of the data provides a different lens through which to contemplate the question of who graduates high school on time and why.

The data presented earlier in this paper help shed light on the neighborhood variation below. NYC is highly segregated by race and ethnicity. Latinos and blacks in particular tend to live in racially segregated neighborhoods. These two groups are also disproportionately concentrated in the programs with the lowest graduation rates overall—those that admit students using the limited unscreened and educational option methods—and have lower rates of high school graduation than whites and Asians. Students in the Bronx are also disproportionately concentrated in limited unscreened schools. Given all this, it is not surprising that four of the five districts with the lowest graduation rates are in predominately Latino parts of the Bronx, where these many forms of educational disadvantage converge.

On-Time High School Graduation by Community District in NYC

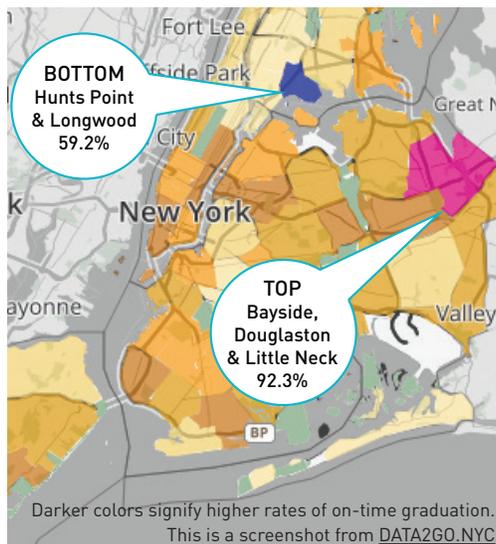


TABLE 5 On-Time High School Graduation Rates by Students' Home Community

RANK OUT OF 59	BOROUGH	COMMUNITY DISTRICT	ON-TIME HIGH SCHOOL GRADUATION (%)	RANK OUT OF 59	BOROUGH	COMMUNITY DISTRICT	ON-TIME HIGH SCHOOL GRADUATION (%)
1	Queens	Bayside, Douglaston & Little Neck	92.3	31	Bronx	Co-op City, Pelham Bay & Schuylerville	71.9
2	Manhattan	Battery Park City & TriBeCa	90.7	32	Brooklyn	Flatbush & Midwood	71.5
3	Manhattan	Upper East Side	89.4	33	Brooklyn	East Flatbush, Farragut & Rugby	71.4
4	Manhattan	Greenwich Village & Soho	88.2	34	Brooklyn	Bushwick	71.0
5	Queens	Forest Hills & Rego Park	88.0	35	Manhattan	Midtown Business District	71.0
6	Staten Island	Tottenville, Great Kills & Annadale	86.1	36	Brooklyn	Crown Heights South, Prospect Lefferts & Wingate	70.3
7	Manhattan	Murray Hill, Gramercy & Stuyvesant Town	85.4	37	Brooklyn	Brighton Beach & Coney Island	69.9
8	Brooklyn	Bay Ridge & Dyker Heights	84.0	38	Staten Island	Port Richmond, Stapleton & Mariner's Harbor	69.7
9	Queens	Sunnyside & Woodside	83.4	39	Brooklyn	Greenpoint & Williamsburg	69.3
10	Queens	Briarwood, Fresh Meadows & Hillcrest	82.7	40	Manhattan	Washington Heights, Inwood & Marble Hill	68.2
11	Brooklyn	Sheepshead Bay, Gerritsen Beach & Homecrest	82.0	41	Queens	Jamaica, Hollis & St. Albans	67.9
12	Brooklyn	Bensonhurst & Bath Beach	81.7	42	Bronx	Wakefield, Williamsbridge & Woodlawn	67.1
13	Queens	Flushing, Murray Hill & Whitestone	81.6	43	Bronx	Bedford Park, Fordham North & Norwood	65.7
14	Manhattan	Upper West Side & West Side	81.2	44	Bronx	Pelham Parkway, Morris Park & Laconia	65.7
15	Brooklyn	Canarsie & Flatlands	80.8	45	Bronx	Castle Hill, Clason Point & Parkchester	65.6
16	Staten Island	New Springville & South Beach	80.3	46	Brooklyn	East New York & Starrett City	65.0
17	Queens	Ridgewood, Glendale & Middle Village	80.2	47	Manhattan	Hamilton Heights, Manhattanville & West Harlem	64.2
18	Queens	Elmhurst & South Corona	80.0	48	Brooklyn	Crown Heights North & Prospect Heights	64.1
19	Queens	Queens Village, Cambria Heights & Rosedale	78.9	49	Queens	Far Rockaway, Breezy Point & Broad Channel	61.9
20	Queens	Howard Beach & Ozone Park	77.2	50	Bronx	Concourse, Highbridge & Mount Eden	61.9
21	Queens	Richmond Hill & Woodhaven	76.9	51	Brooklyn	Bedford-Stuyvesant	61.5
22	Queens	Jackson Heights & North Corona	75.2	52	Manhattan	East Harlem	61.3
23	Brooklyn	Park Slope, Carroll Gardens & Red Hook	74.6	53	Manhattan	Central Harlem	61.2
24	Bronx	Riverdale, Fieldston & Kingsbridge	74.0	54	Bronx	Crotona Park & Morrisania	60.8
25	Brooklyn	Borough Park, Kensington & Ocean Park	73.9	55	Bronx	Morris Heights, Fordham South & Mount Hope	60.7
26	Manhattan	Chelsea & Clinton	73.2	56	Bronx	Melrose & Mott Haven	60.7
27	Queens	Astoria & Long Island City	73.2	57	Brooklyn	Brownsville & Ocean Hill	60.2
28	Brooklyn	Brooklyn Heights & Fort Greene	72.8	58	Bronx	Belmont & East Tremont	60.1
29	Manhattan	Chinatown & Lower East Side	72.6	59	Bronx	Hunts Point & Longwood	59.2
30	Brooklyn	Sunset Park & Windsor Terrace	72.3				

Source: Measure of America analysis of New York State Education Department data, 2015. To access data tables, go to [DATA2GO.NYC](https://data2go.nyc.gov)

A striking 97.4 percent of students admitted to high school based on the SHSAT graduated on time in 2015; specialized high schools succeeded in educating pretty much all the students they accepted.

Conclusion

This analysis presents graduation rates for students admitted to different types of high school programs and living in different boroughs and community districts. It also presents rates for students of different racial and ethnic groups and for students from poor and non-poor families in the city as a whole as well as in the different types of high school programs. With the exception of SHSAT schools, no matter how we sliced the data, the gaps in graduation rates were large.

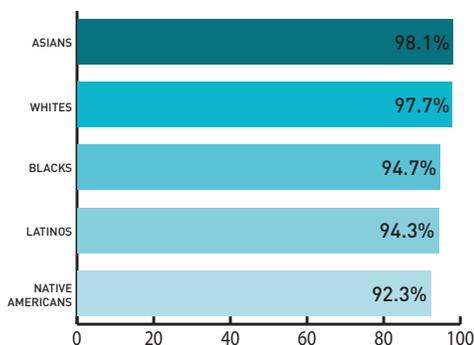
Type of high school program

A striking 97.4 percent of students admitted to high school based on the SHSAT graduated on time in 2015, compared to only 59.8 percent of those admitted to **educational option programs** and 68.1 percent of those admitted to **limited unscreened programs**.

Not only was the overall SHSAT graduation rate very high, but there was also very little variation in the rate by students' home borough, poverty status, or race and ethnicity; specialized high schools succeeded in educating pretty much all the students they accepted. This is not true for other types of high school programs, where race and ethnicity, poverty, and home borough are associated with very different graduation rates.

Why is this so? Specialized high schools are unique in enjoying the full complement of ingredients required for educational success. **Students who have the aptitude, preparation, and familial support to score well enough on the SHSAT to gain entrance to specialized high schools are by and large able to use those same assets to graduate from these demanding programs in four years.** In addition, these schools offer innovative, engaging coursework, attract excellent teachers, surround students with high-achieving peers, and have more resources of various sorts than other NYC public high schools. Unfortunately, this recipe, which ensures great high school educations for the roughly 4,000 students who enter specialized schools each year, is difficult to scale up; by definition, the vast majority of students are not among the top 5 percent of test-takers, few families can match the level of involvement and support required for kids to ace the SHSAT test, and the education system as a whole does not have the resources to create one hundred Bronx Sciences, Stuyvesants, or Brooklyn Latins. In addition, although low-income, black, and Latino students who get into SHSAT schools overwhelmingly graduate on time, they are less likely to get into these schools in the first place due to factors such as household income, parental educational attainment, and neighborhood elementary school quality.

SHSAT Graduation Rates by Race and Ethnicity



Poverty

Somewhat counterintuitively, the smallest gap in graduation rates, 0.1 percentage points, in the city as a whole was between poor and non-poor students, measured by eligibility for free meals—70.6 percent of eligible students graduated on time, compared to 70.5 percent of ineligible students. The narrowness of this gap is largely due to the measure of poverty used—most students in NYC are eligible for reduced-price or free meals, and dividing the student body into poor and non-poor obscures the tremendous variation within each category. We hope in the future to obtain data that will allow for analysis of graduation rates using a more sensitive measure of poverty, such as household income deciles.

Race and ethnicity

Students from different racial and ethnic groups are concentrated in different types of high school programs. Asian Americans disproportionately were admitted to the specialized high schools; they made up 56.8 percent of students at these most-competitive schools, 3.4 times their rate in the student population as a whole. Overall, 16.6 percent of Asian American students were admitted to high school via the SHSAT; only 1.1 percent of black students and 1.1 percent of Latino students were. Well over half of black and Latino students were admitted via either the educational option or limited unscreened methods, compared to roughly one in five white or Asian students.

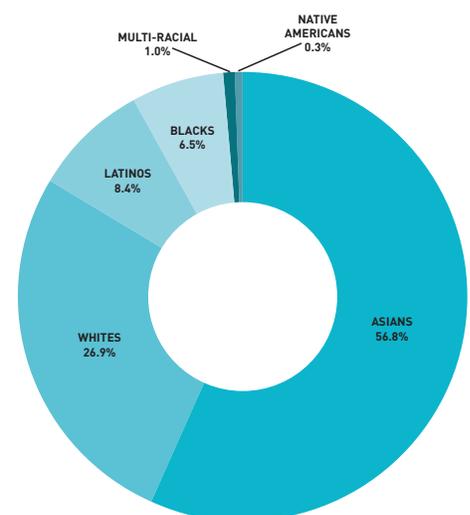
The graduation rate gap between the city’s four largest racial and ethnic groups is 21 percentage points; Asian Americans had the highest rate, 85.4 percent, and Latinos have the lowest, 64.4 percent. The largest gap by race and ethnicity was in the graduation rates of black (54.2 percent) and Asian American (83.2 percent) students attending zoned schools in their own neighborhoods.

Borough

The graduation rate gap between the top (Queens, 77.3 percent) and bottom (Bronx, 63.7 percent) boroughs is 13.6 percentage points. The distance between the highs and lows widens when we add the type of school; the difference ranges from just 3.1 percentage points between Manhattan and Staten Island students in specialized high schools to a 29-point difference for zoned programs between students living in the Bronx (47.2 percent) and students living in Staten Island (76.2 percent).

Students from different racial and ethnic groups are concentrated in different types of high school programs. Asian Americans disproportionately were admitted to the specialized high schools.

SHSAT Admission Rates by Race and Ethnicity



Top and Bottom Community Districts for On-Time Graduation

BAYSIDE, DOUGLASTON & LITTLE NECK



HUNTS POINT & LONGWOOD



The gap between the district whose students were **most likely to graduate**, Bayside, Douglaston & Little Neck (92.3 percent), and **least likely to graduate**, Hunts Point & Longwood (59.2), is 33.1 percentage points.

Community District

In twenty-three community districts, fewer than seven in ten high school students graduated in four years in 2015. The gap between the district whose students were most likely to graduate, Bayside, Douglaston & Little Neck (92.3 percent), and least likely to graduate, Hunts Point & Longwood (59.2 percent), is 33.1 percentage points. Bayside, Douglaston & Little Neck is 41.3 percent Asian American and 42.7 percent white; Hunts Point & Longwood has the highest share of Latinos among all districts, 74.2 percent.

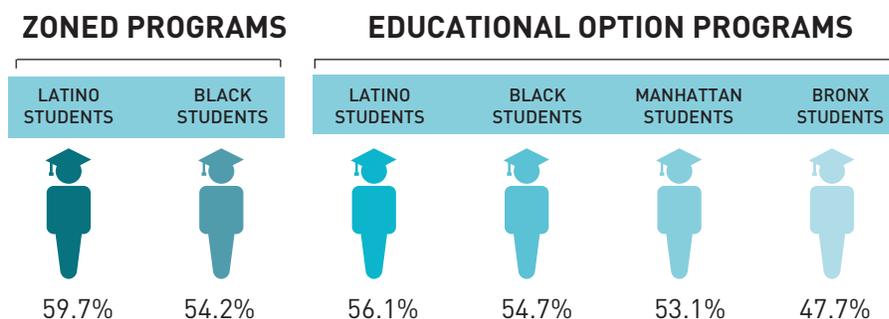
This analysis shows clearly that certain groups of students are at high risk for not graduating in four years. Fewer than seven in ten black, Latino, or Native American students; students admitted to high school through the educational option and limited unscreened methods; students who live in the Bronx and Manhattan overall; and students living in twenty-three community districts graduated on time in 2015 (see **Table 5**).

The NYC Department of Education faces a huge challenge every single year: shepherding more than 76,000 eighth graders, most of them low-income and four in ten speaking a language other than English at home, through the school choice process. Adding to the challenge are deeply entrenched patterns of residential segregation by race and ethnicity as well as by income, which isolate poor students of color and their families, cutting them off from educational resources, information, and opportunities. And making matters still more difficult: the system is chronically underfunded and, as a result, there are too few good schools, especially in parts of town that low-income families call home. Despite all these challenges, the city has managed to increase the graduation rate every year for over a decade, an achievement of families, teachers, school administrators, and the Department of Education that deserves high praise.

Yet pulling up those who are still being left behind is imperative. As tempting as it is to look to the success of specialized high schools for the answer, the “special sauce” of those schools is difficult to replicate, though if all schools had the kind of resources, from buildings to

teachers, that SHSAT schools do, results citywide would surely improve. Although every person is unique and possesses inherent worth and dignity, most of us are average in most respects—average in height, average in looks, average at sports, and average as students. Schools need to work not just for super-stars, but also for kids of average academic ability as well as for those for whom academics are a serious struggle. That isn't happening today; citywide, only one in five public high schools has a graduation rate above 90 percent.

FIGURE 6 Groups at a High Risk of Not Graduating in Four Years



Source: Measure of America analysis from NYC DOE data obtained by special agreement.

This analysis suggests that the city should look closely at educational option programs, which have graduation rates below 60 percent. The philosophy behind the ed-opt approach is that bringing students of different academic abilities together to learn produces better results, and ample evidence supports this view. In practice, however, too few top-performers choose ed-opt programs for them to work as they were designed to. SHSAT and screened programs skim off the the lion's share of high-achievers, leaving comparatively few to fill spots in the educational option programs.

The school system cannot be expected to provide this support on its own; other city agencies, nonprofits, foundations, and businesses have important roles to play in addressing the myriad inequalities NYC families and neighborhoods face. A strong, safe, dynamic NYC depends on everyone having the skills they need to live productive, rewarding, freely chosen lives. Ensuring that more of our young people get their diplomas is good for all of us.

Endnotes

- ¹ "Income of Young Adults," National Center for Education Statistics, <https://nces.ed.gov/fastfacts/display.asp?id=77>; Joan H. Liem, Kara Lustig, and Colleen Dillon, "Depressive Symptoms and Life Satisfaction among Emerging Adults: A Comparison of High School Dropouts and Graduates," *Journal of Adult Development* 17, no. 1 (August 2009): 33–43; Nicholas Freudenberg and Jessica Ruglis, "Reframing School Dropout as a Public Health Issue," *Preventing Chronic Disease* 4, no. 4 (October 2007): 1–11; Adam Isen and Betsey Stevenson, "Women's Education and Family Behavior: Trends in Marriage, Divorce and Fertility," Working Paper (National Bureau of Economic Research, February 2010); "Employment Rates and Unemployment Rates by Educational Attainment," National Center for Education Statistics, May 2015, https://nces.ed.gov/programs/coe/indicator_cbc.asp.
- ² Note that the 2005 rate uses graduation rates from June. The Department of Education standard is to use August graduation rates to measure on-time high school graduation, yet August graduation data for 2005 are not available. Graduation rates measured from June are slightly lower than graduation rates measured from August. NYC Department of Education. "New York City Graduation Rates Class of 2016 (2012 Cohort)," <http://schools.nyc.gov/NR/rdonlyres/04A151BF-F9E4-4960-8881-E1B07AA57DF8/208343/2016GraduationRatesWeb21017.pdf>.
- ³ James J. Kemple, "High School Closures in New York City: Impacts on Students' Academic Outcomes, Attendance, and Mobility," (The Research Alliance for NYC Schools, NYU, November 2015).
- ⁴ NYC Department of Education. "New York City Graduation Rates Class of 2016 (2012 Cohort)," <http://schools.nyc.gov/NR/rdonlyres/04A151BF-F9E4-4960-8881-E1B07AA57DF8/208343/2016GraduationRatesWeb21017.pdf>.
- ⁵ "Income of Young Adults," National Center for Education Statistics, accessed March 23, 2016, <https://nces.ed.gov/fastfacts/display.asp?id=77>; Joan H. Liem, Kara Lustig, and Colleen Dillon, "Depressive Symptoms and Life Satisfaction among Emerging Adults: A Comparison of High School Dropouts and Graduates," *Journal of Adult Development* 17, no. 1 (August 2009): 33–43; Nicholas Freudenberg and Jessica Ruglis, "Reframing School Dropout as a Public Health Issue," *Preventing Chronic Disease* 4, no. 4 (October 2007): 1–11; Adam Isen and Betsey Stevenson, "Women's Education and Family Behavior: Trends in Marriage, Divorce and Fertility," Working Paper (National Bureau of Economic Research, February 2010); "Employment Rates and Unemployment Rates by Educational Attainment," National Center for Education Statistics, May 2015, https://nces.ed.gov/programs/coe/indicator_cbc.asp.
- ⁶ James J. Heckman and Paul A. LaFontaine, "The American High School Graduation Rate: Trends and Levels," *Review of Economics and Statistics* 92, no. 2 (2010): 244–62.
- ⁷ Patrick Wall, "The Problem with 'Ed-Opt Schools,'" *The Atlantic* (2016). <https://www.theatlantic.com/education/archive/2016/01/failure-ed-opt-schools/424398/>.
- ⁸ New York City Independent Budget Office, "How Many Students Attend Nonpublic K-12 Schools in New York City." *New York City By the Numbers* (2014). <http://ibo.nyc.ny.us/cgi-park2/2014/04/how-many-students-attend-nonpublic-k-12-schools-in-new-york-city/>.
- ⁹ Students in families at 130 percent of the federal poverty line are eligible for free meals, and students in families at 185 percent of the poverty line are eligible for reduced-price meals. In practice, this distinction does not matter; NYC provides free meals to both types of students.

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Acknowledgments

We would like to gratefully acknowledge the support of the New York City Department of Education in providing comprehensive data on entering ninth graders for the 2011–2012 school year. We want to thank Matt Herman for his feedback on this paper and Clare McGranahan for her editing assistance.

DATA260.NYC was developed with the support of The Leona M. and Harry B. Helmsley Charitable Trust. The analysis included in this report is that of the authors alone and does not necessarily reflect the views of the Helmsley Charitable Trust.

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